FULL BOARD MEETING
Thursday, August 18, 2016

Hilton Sacramento Arden West
2200 Harvard Street
Sacramento, CA 95815

STATE OF CALIFORNIA
DEPARTMENT OF CONSUMER AFFAIRS

BUSINESS, CONSUMER SERVICES, AND HOUSING AGENCY • GOVERNOR EDMUND G. BROWN JR.
DENTAL BOARD OF CALIFORNIA
2005 Evergreen Street, Suite 1550, Sacramento, CA 95815
P (916) 263-2300 F (916) 263-2140 | www.dbc.ca.gov

BOARD MEETING AGENDA
August 18, 2016
Hilton Sacramento Arden West
2200 Harvard Street, Sacramento, CA 95815
916-604-3993 (Hotel) or 916-263-2300 (Board Office)

Members of the Board
Steven Morrow, DDS, MS, President
Judith Forsythe, RDA, Vice President
Steven Afriat, Public Member, Secretary

Fran Burton, MSW, Public Member
Yvette Chappell-Ingram, Public Member
Katie Dawson, RDH
Kathleen King, Public Member
Ross Lai, DDS
Huong Le, DDS, MA
Meredith McKenzie, Public Member
Thomas Stewart, DDS
Bruce Whitcher, DDS
Debra Woo, DDS

During this two-day meeting, the Dental Board of California will consider and may take action on any of the agenda items, unless listed as informational only. It is anticipated that the items of business before the Board on the first day of this meeting will be fully completed on that date. However, should an item not be completed, it may be carried over and heard beginning at 9:00 a.m. on the following day. Anyone wishing to be present when the Board takes action on any item on this agenda must be prepared to attend the two-day meeting in its entirety.

Public comments will be taken on agenda items at the time the specific item is raised. All times are approximate and subject to change. Agenda items may be taken out of order to accommodate speakers and to maintain a quorum. The meeting may be cancelled without notice. Time limitations for discussion and comment will be determined by the President. For verification of the meeting, call (916) 263-2300 or access the Board's website at www.dbc.ca.gov. This Board meeting is open to the public and is accessible to the physically disabled. A person who needs a disability-related accommodation or modification in order to participate in the meeting may make a request by contacting Karen M. Fischer, MPA, Executive Officer, at 2005 Evergreen Street, Suite 1550, Sacramento, CA 95815, or by phone at (916) 263-2300. Providing your request at least five business days before the meeting will help to ensure availability of the requested accommodation.

While the Board intends to webcast this meeting, it may not be possible to webcast the entire open meeting due to limitations on resources or technical difficulties that may arise.

Thursday, August 18, 2016

9:00 A.M. FULL BOARD MEETING – OPEN SESSION

1. Call to Order/Roll Call/Establishment of Quorum.

CLOSED SESSION – FULL BOARD
Deliberate and Take Action on Disciplinary Matters
The Board will meet in closed session as authorized by Government Code §11126(c)(3).

CLOSED SESSION – LICENSING, CERTIFICATION, AND PERMITS COMMITTEE

A. Issuance of New License(s) to Replace Cancelled License(s)
   The Committee will meet in closed session as authorized by Government Code §11126(c)(2) to deliberate on applications for issuance of new license(s) to replace cancelled license(s)

RETURN TO OPEN SESSION – FULL BOARD (Estimated start time 10:00am)

2. Licensing, Certification and Permits Committee Report on Closed Session
   The Board may take action on recommendations regarding applications for issuance of new license(s) to replace cancelled license(s).

3. Approval of the May 11-12, 2016 Board Meeting Minutes.

4. Welcome by Board President.

5. Report by Jayanth V. Kumar, DDS, MPH, California Dental Director.

6. Budget Report.

7. Discussion and Possible Action Regarding 2017 Board Meeting Dates.

8. Update on the Dental Board of California's 2017-2020 Strategic Plan Development.

9. Discussion and Possible Action Regarding Adoption of the Revisions to the Board Member Administrative Procedure Manual.

10. Discussion and Possible Action Regarding Withdrawal of the Appointment of Shannon Chavez, MD, to the Southern California Diversion Evaluation Committee and; Recommendations for the Appointment of a Southern California Diversion Evaluation Committee Member.

11. Discussion and Possible Action Regarding the Draft Report to the Legislature Regarding the California Portfolio Pathway to Licensure Program in Accordance with Business and Professions Code Section 1632.6(a).

12. Examinations:
    A. Western Regional Examination Board (WREB) Update
    B. Staff Update on Portfolio Pathway to Licensure

13. Licensing, Certifications and Permits:
    A. Review of Dental Licensure and Permit Statistics

14. Enforcement:
    A. Enforcement – Statistics and Trends
    B. Review of Third Quarter Performance Measures from the Department of Consumer Affairs
    C. Diversion Program Report and Statistics

CONVENE JOINT MEETING OF THE DENTAL BOARD AND DENTAL ASSISTING COUNCIL – SEE ATTACHED AGENDA
**The purpose of this joint meeting is to allow the Board and the Dental Assisting Council to interact with each other, ask questions and participate in discussions.*

RETURN TO FULL BOARD OPEN SESSION

RECESS

CLOSED SESSION

OPEN SESSION
FULL BOARD

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MEMORANDUM

DATE	July 20, 2016
TO	Dental Board of California
FROM	Linda Byers, Executive Assistant
SUBJECT	**Agenda Item 2:** Report from the Licensing, Certification and Permits Committee Regarding Closed Session

Dr. Morrow, Chair of the Licensing, Certification and Permits Committee, will provide recommendations to the Board based on the outcome of the Closed Session meeting to grant a new license(s) to replace a cancelled license(s).

BOARD MEETING MINUTES
May 11-12, 2016
Wyndham Anaheim Garden Grove
12021 Harbor Boulevard, Garden Grove, CA 92840
DRAFT

Members Present
Steven Morrow, DDS, MS, President
Judith Forsythe, RDA, Vice President
Steven Afriat, Public Member, Secretary
Fran Burton, MSW, Public Member
Luis Dominicis, DDS
Kathleen King, Public Member
Ross Lai, DDS
Huong Le, DDS, MA
Thomas Stewart, DDS
Bruce Whitcher, DDS
Debra Woo, DDS

Members Absent
Katie Dawson, RDH
Yvette Chappell-Ingram, Public Member
Meredith McKenzie, Public Member

Wednesday, May 11, 2016

8:00 A.M. FULL BOARD MEETING – OPEN SESSION

1. **Call to Order/Roll Call/Establishment of Quorum.**
   Dr. Steven Morrow, President, called the meeting to order at 8:04am. Mr. Steve Afriat, Secretary, called the roll and a quorum was established.

   The Board immediately went into Closed Session.

CLOSED SESSION – FULL BOARD

CLOSED SESSION – LICENSING, CERTIFICATION, AND PERMITS COMMITTEE

RETURN TO OPEN SESSION – FULL BOARD

2. **Licensing, Certification and Permits Committee Report on Closed Session The Board may take action on recommendations regarding applications for issuance of new license(s) to replace cancelled license(s) and whether or not to grant, deny or request further evaluation for a Conscious Sedation Permit as it Relates to an Onsite Inspection and Evaluation Failure**
   Dr. Bruce Whitcher, Chair of the Licensing, Certification and Permits (LCP) Committee reported that the committee made the following recommendations:

   GA/CS candidate M. M. – Deny permit – Repeat the Inspection.

   DDS candidate A. S. – Approve replacement upon completion of the Law and Ethics training.

RDA candidate S. B. - Approve replacement upon completion of the Law and Ethics training.

RDA candidate L. G. - Approve replacement upon completion of the Law and Ethics training.

RDA candidate M. P. - Approve replacement upon completion of the Law and Ethics training.

Motioned/Seconded (M/S) (Afriat/Dominicis) to accept the committee recommendations.

Support: Morrow, Forsythe, Afriat, Burton, Dominicis, King, Lai, Le, Stewart, Whitcher, Woo. **Oppose:** 0 **Abstain: 0**

The motion passed.

3. **Approval of the March 3-4, 2016 Board Meeting Minutes.**
M/S (Burton/Woo) to approve the March 3-4, 2016 minutes.

Support: Morrow, Forsythe, Burton, Dominicis, King, Lai, Le, Stewart, Whitcher, Woo. **Oppose:** 0 **Abstain:** Afriat

The motion passed.

4. **Welcome by Board President.**
Dr. Morrow, President, gave an overview of the information provided. Suzie Dault, Dental Specialties, made a comment about the amount of debt her husband incurred going through Dental school later in life. She appreciates the thought of more mobility.

5. **Executive Officer's Report.**
Karen Fischer, Executive Officer, provided a report of her activities since the last meeting.

6. **Discussion and Possible Action Regarding an Appointment to the Dental Assisting Council.**
Ms. Fischer gave an overview of the information provided.

M/S (Burton/Forsythe) to continue recruitment for an RDAEF member of the Dental Assisting Council until such time as additional applications are received; and that the outreach be expanded to include recruitment notifications being mailed to licensees, associations, and RDAEF school programs.

Support: Morrow, Forsythe, Afriat, Burton, Dominicis, King, Lai, Le, Stewart, Whitcher, Woo. **Oppose:** 0 **Abstain:** 0

The motion passed.

DRAFT

JOINT MEETING OF THE DENTAL BOARD AND DENTAL ASSISTING COUNCIL

RETURN TO FULL BOARD OPEN SESSION

LEGISLATIVE AND REGULATORY COMMITTEE MEETING

RETURN TO FULL BOARD OPEN SESSION

RECESS

Thursday May 12, 2016

8:00 A.M. OPEN SESSION – FULL BOARD

7. **Call to Order/Roll Call/Establishment of Quorum.**
   Dr. Steven Morrow, President, called the meeting to order at 8:04am. Mr. Steve Afriat, Secretary, called the roll and a quorum was established.

8. **Report of Dental Hygiene Committee of California (DHCC) Activities by DHCC Executive Officer.**
   Lori Hubble, Executive Officer of the DHCC, introduced past DHCC President, Dr. Michelle Hurlbutt. Dr. Hurlbutt gave an overview of DHCC activities since the last Dental Board meeting.

9. **Examinations:**
   A. **Western Regional Examination Board (WREB) Update**
   There was no update given.

   B. **Staff Update on Portfolio Pathway to Licensure**
   Dr. Ross Lai gave a report regarding the site visit to the University of California San Francisco (UCSF) Department of Dentistry. Dr. Woo reported her experience at the University of the Pacific Dental Program.

   C. **American Dental Association (ADA) – Other Regional Dental Examinations**
   Dr. Morrow gave an overview of the information provided.

10. **Licensing, Certifications and Permits:**
    A. Review of Dental Licensure and Permit Statistics
    Sarah Wallace, Assistant Executive Officer, gave an overview of the information provided.

    B. Update Regarding Pediatric Dental Anesthesia Research per Senator Jerry Hill's Request
    Karen Fischer, Executive Officer, gave an overview of the information provided. Gayle Mathe, California Dental Association (CDA), thanked the Dental Board for its thoughtful and complete approach to this matter.

DRAFT

11. **Enforcement:**

A. Enforcement – Statistics and Trends

Teri Lane, Enforcement Chief, reported that they were unable to verify the current statistics.

B. Review of Second Quarter Performance Measures from the Department of Consumer Affairs

Ms. Lane gave an overview of the information provided.

C. Diversion Program Report and Statistics

Ms. Lane gave an overview of the information provided.

D. Presentation by Theresa Lane, Enforcement Chief – Violations of the Dental Practice Act

Ms. Lane provided a presentation regarding different violations of the Dental Practice Act and how to avoid them.

12. **Budget Report.**

Ms. Fischer gave an overview of the information provided.

13. **Discussion and Possible Action to Initiate a Rulemaking to Amend California Code of Regulations, Title 16 Sections 1021 and 1022, Dentistry and Dental Assisting Licensing and Permitting Fee Increase.**

Lusine Sarkisyan, Legislative and Regulatory Analyst, gave an overview of the information provided. There was discussion surrounding which fee to use.

M/S (Afriat/Forsythe) to approve staff's recommendation to accept the proposed regulatory language, using the $650 initial dentistry licensure fees, relative to Dentistry and Dental Assisting Licensing and Permitting Fee Increase, and direct staff to take all steps necessary to initiate the formal rulemaking process, including noticing the proposed language for 45-day public comment, setting the proposed language for a public hearing, and authorize the Executive Officer to make any non-substantive changes to the rulemaking package. If after the close of the 45-day public comment period and public regulatory hearing, no adverse comments are received, authorize the Executive Officer to make any non-substantive changes to the proposed regulations before completing the rulemaking process, and adopt the proposed amendments to California Code of Regulations, Title 16, Sections 1021 and 1022 as noticed in the proposed text.

Support: Morrow, Forsythe, Afriat, Burton, Chappell-Ingram, Dominicis, King, Lai, Le, McKenzie, Stewart, Whitcher, Woo. **Oppose:** 0 **Abstain: 0**

The motion passed.

14. **Discussion and Possible Action to Initiate a Rulemaking to Implement, Interpret, and Make Specific California Code of Regulation, Title 16, Sections 1001.1 and 1001.2 Relating to the Defining of "Discovery" and "Filing".**

Ms. Sarkisyan gave an overview of the information provided.

M/S (Afriat/Whitcher) to accept staff's recommendation to accept the proposed regulatory language relative to defining of "Discovery" and "Filing", and direct staff

to take all steps necessary to initiate the formal rulemaking process, including noticing the proposed language for 45-day public comment, setting the proposed language for a public hearing, and authorize the Executive Officer to make any non-substantive changes to the rulemaking package. If after the close of the 45-day public comment period and public regulatory hearing, no adverse comments are received, authorize the Executive Officer to make any non-substantive changes to the proposed regulations before completing the rulemaking process, and adopt the proposed amendments to California Code of Regulations, Title 16, Sections 1001.1 and 1001.2 as noticed in the proposed text.

Support: Morrow, Forsythe, Afriat, Burton, Chappell-Ingram, Dominicis, King, Lai, Le, McKenzie, Stewart, Whitcher, Woo. **Oppose:** 0 **Abstain: 0**

The motion passed.

15. **Discussion and Possible Action Regarding Adoption of the Revisions to the Board Member Administrative Procedure Manual.**
Judith Forsythe, Vice President, gave an overview of the information provided. There was considerable discussion regarding many proposed additions and changes. Dr. Morrow recommended bringing this item back at the August meeting with the proposed revisions.

16. **Discussion and Possible Action Regarding the California Society of Periodontists Request for the Dental Board of California's Endorsement of their Efforts in the Creation of a Periodontal Disease Awareness Month.**
Dr. Nicolas Kaplanis, President Elect of the California Society of Periodontists, reviewed the information provided. He stated that they would like an acknowledgment of any month as Periodontal Disease Awareness Month. They would also like to see that acknowledgment put on the Dental Board's website as well as the State website. They are also seeking a proclamation from the Governor's office. He stated that they would like to create a National campaign and the Dental Board of California's endorsement would add legitimacy. Lisa Okamoto, California Dental Hygienists Association commented that they support this. Dr. Morrow requested that this item be brought back at the August meeting after further review and consideration.

17. **Report on the April 20, 2016 Meeting of the Elective Facial Cosmetic Surgery Permit Credentialing Committee; Discussion and Possible Action to Accept Committee Recommendations for Issuance of Permits.**
Dr. Whitcher gave an overview of the information provided.

M/S (Whitcher/Chappell-Ingram) to accept the committee's report and recommendation to issue Slim Bouchoucha, DDS, an EFCS Permit a permit for unlimited Category I and Category II privileges.

Support: Morrow, Forsythe, Afriat, Burton, Chappell-Ingram, Dominicis, King, Lai, Le, McKenzie, Stewart, Whitcher, Woo. **Oppose:** 0 **Abstain: 0**

The motion passed.

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18. **<u>Legislative and Regulatory Committee Report</u>**.
Fran Burton, Chair, gave a report on the Legilative and Regulatory Committee meeting.

M/S (Afriat/Whitcher) to accept the committee's recommendation to continue to watch: AB 1707, AB 2331, SB 482, SB 1033 and SB 1217.

Support: Morrow, Forsythe, Afriat, Burton, Chappell-Ingram, Dominicis, King, Lai, Le, McKenzie, Stewart, Whitcher, Woo. **Oppose:** 0 **Abstain: 0**

The motion passed.

M/S (Afriat/Whitcher) to accept the committee's recommendation for AB 2235 to take a position of "Support in Concept with Suggested Amendments" on this bill. The amendments include the following: Change the timeframe of researching incident reports from 2011 through 2016 to 2010 through 2015; and change "shall include" to "if available" relating to the collection of anonymized demographic data for each incident for the past five years.

Support: Morrow, Forsythe, Afriat, Burton, Chappell-Ingram, Dominicis, King, Lai, Le, McKenzie, Stewart, Whitcher, Woo. **Oppose:** 0 **Abstain: 0**

The motion passed.

M/S (Afriat/Whitcher) to accept the committee's recommendation for AB 2859 to direct staff to communicate with the author's office regarding the committee's concern with this bill.

Support: Morrow, Forsythe, Afriat, Burton, Chappell-Ingram, Dominicis, King, Lai, Le, McKenzie, Stewart, Whitcher, Woo. **Oppose:** 0 **Abstain: 0**

The motion passed.

M/S (Burton/Le) to accept the committee's recommendation for SB 1039 to take a "support if amended" position on this bill and send a letter to the author. The amendment related to the addition of prior proposed language relating to the Board's ability to approve foreign dental schools.

Support: Morrow, Forsythe, Afriat, Burton, Chappell-Ingram, Dominicis, King, Lai, Le, McKenzie, Stewart, Whitcher, Woo. **Oppose:** 0 **Abstain: 0**

The motion passed.

M/S (Afriat/Burton) to accept the committee's recommendation to watch SB 1348.

Support: Morrow, Forsythe, Afriat, Burton, Chappell-Ingram, Dominicis, King, Lai, Le, McKenzie, Stewart, Whitcher, Woo. **Oppose:** 0 **Abstain: 0**

The motion passed.

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M/S (Afriat/Burton) to accept the committee's recommendation to watch SB 1444.

Support: Morrow, Forsythe, Afriat, Burton, Chappell-Ingram, Dominicis, King, Lai, Le, McKenzie, Stewart, Whitcher, Woo. **Oppose:** 0 **Abstain: 0**

The motion passed.

M/S (Burton/Afriat) to accept the committee's recommendation for SB 1478 to support on the parts of the bill that pertain to the Dental Board.

Support: Morrow, Forsythe, Afriat, Burton, Chappell-Ingram, Dominicis, King, Lai, Le, McKenzie, Stewart, Whitcher, Woo. **Oppose:** 0 **Abstain: 0**

The motion passed.

19. **Public Comment on Items Not on the Agenda.**
Lisa Okamoto, California Dental Hygienists Association (CDHA), commented that CDHA had sent a lettr to the Dental Board and the Dental Hygiene Committee of California (DHCC) on behalf of consumers that they had talked to who were having trouble locating information on their provider on the website.

20. **Board Member Comments on Items Not on the Agenda.**
Kathleen King commented that she would like to discuss the 1115 waiver regarding access to Medi-cal at a future meeting.

21. **Adjournment.**
Dr. Morrow adjourned the meeting at 2:48pm.

DRAFT

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MEMORANDUM

DATE	June 21, 2016
TO	Dental Board of California
FROM	Dr. Steven Morrow, President, Dental Board of California
SUBJECT	**Agenda Item 4:** Presidents Report.

The President of the Dental Board of California, Steven G. Morrow, DDS, will provide a verbal report.

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MEMORANDUM

DATE	July 20, 2016
TO	Dental Board of California
FROM	Linda Byers, Executive Assistant
SUBJECT	**Agenda Item 5:** Report by Jayanth V. Kumar, DDS, MPH, California Dental Director

On June 5, 2015, Governor Jerry Brown appointed Jayanth V. Kumar, DDS, MPH, to serve as California's new state dental director. The establishment of this position is a major achievement for the state's oral health program and access to care planning goals.

Dr. Kumar comes to the California Department of Public Health (CDPH) with more than 25 years of experience in the New York State Bureau of Dental Health. He has held the positions of state dental director and acting director since 2009 and is responsible for developing the first comprehensive state oral health plan for New York.

Under Dr. Kumar's leadership, New York's oral health program experienced significant success and is recognized as one of the finest in the nation. His excellent grasp of the serious challenges our state faces in reducing barriers to dental care, and his knowledge of effective disease prevention programs and federal funding opportunities, will be a tremendous asset to California.

According to the CDPH, Dr. Kumar will direct and manage the oral health program in the CDPH and, in collaboration with the Department of Health Care Services, provide leadership in developing and implementing innovative strategies and policies to reduce oral health disparities in California. In addition to a state oral health plan, Dr. Kumar will also be responsible for establishing prevention and oral health education projects and working to secure funding for prevention-focused oral health programs, particularly for children.

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MEMORANDUM

DATE	August 1, 2016
TO	Dental Board Members
FROM	Sarah Wallace, Assistant Executive Officer
SUBJECT	**Agenda Item 6:** Budget Report

The Board manages two separate funds: 1) Dentistry Fund, and 2) Dental Assisting Fund. The funds are not comingled. The following is intended to provide a summary of expenses for the fourth quarter of fiscal year (FY) 2015-16 for the Dentistry and Dental Assisting funds.

Dentistry Fund Overview

Fourth Quarter Expenditure Summary for Fiscal Year 2015-16

The fourth quarter expenditures are based upon the budget report released by the Department of Consumer Affairs (DCA) in late-July 2016. This report reflects actual expenditures for July 1, 2015 through June 30, 2016. The Board spent roughly $10.5 million or 81% of its total Dentistry Fund appropriation for FY 2015-16. Of that amount, approximately $5.4 million of the expenditures were for Personnel Services and $5.6 million were for Operating Expense & Equipment (OE&E) for this fiscal year.

For comparison purposes, last year at this time the Board spent roughly $10.7 million or 86% of its FY 2014-15 Dentistry Fund appropriation. Approximately 50% of the expenditures were Personnel Services and approximately 50% of the expenditures were OE&E.

Fund Title	Appropriation	Expenditures Through 6-30-16
Dentistry Fund	$13,016,000	$10,545,089

Attachment 1 displays year-to-date expenditures for the Dentistry Fund.

Analysis of Fund Condition

Attachment 1a displays an analysis of the State Dentistry Fund's condition including expenditures for the BreEze system. Without fee increases, the State Dentistry Fund is heading towards insolvency for FY 2018-19. Months in reserve are decreasing and will go negative in FY 2018-19.

Dental Assisting Fund Overview

Fourth Quarter Expenditure Summary for Fiscal Year 2015-16

The third quarter expenditures are based upon the budget report released by the Department of Consumer Affairs (DCA) in late-July 2016. This report reflects actual expenditures for July 1, 2015 through June 30, 2016. The Board spent roughly $2 million or 80% of its total Dental Assisting Fund appropriation for FY 2015-16. Of that amount, approximately $653,000 of the expenditures was for Personnel Services and $1.4 million were for OE&E for this fiscal year.

For comparison purposes, last year at this time the Board spent roughly $1.7 million or 85% of its FY 2014-15 Dental Assisting Fund appropriation. Approximately 30% of the expenditures were Personnel Services and approximately 55% of the expenditures were OE&E.

Fund Title	Appropriation	Expenditures Through 6-30-16
Dental Assisting Fund	$2,564,000	$2,058,184

Attachment 2 displays year-to-date expenditures for the Dental Assisting Fund.

Analysis of Fund Condition

Attachment 2a displays the Dental Assisting Fund's condition including expenditures for the BreEze system. Without fee increases, the State Dentistry Fund is heading towards insolvency for FY 2018-19. Months in reserve are decreasing and will go negative in FY 2018-19.

Governor's Budget with BreEze Release 2

Attchment 3 displays the Dentistry Fund Analysis illustrating the impact of BreEze Release 2.

Attachment 3a displays the Dental Assisting Program Fund Analysis illustrating the impact of BreEze Release 2.

DENTAL BOARD - FUND 0741
BUDGET REPORT
FY 2015-16 EXPENDITURE PROJECTION

FM 12

OBJECT DESCRIPTION	FY 2014-15 ACTUAL EXPENDITURES (MONTH 13)	FY 2014-15 PRIOR YEAR EXPENDITURES 6/30/2015	FY 2015-16 BUDGET STONE 2015-16	FY 2015-16 CURRENT YEAR EXPENDITURES 6/30/2016	FY 2015-16 PERCENT SPENT	FY 2015-16 PROJECTIONS TO YEAR END	FY 2015-16 UNENCUMBERED BALANCE
PERSONNEL SERVICES							
Salary & Wages (Staff)	3,423,184	3,421,543	**4,001,000**	3,281,479	82%	**3,743,862**	257,138
Statutory Exempt (EO)	104,411	104,411	**96,000**	108,581	113%	**108,581**	(12,581)
Temp Help (Expert Examiners)	0	0	**40,000**	0	0%	**0**	40,000
Physical Fitness Incentive			**0**			**0**	0
Temp Help Reg (907)	152,995	147,174	**199,000**	138,544	70%	**153,000**	46,000
Temp Help (Exam Proctors)	0	0	**45,000**	0	0%	**0**	45,000
BL 12-03 Blanket	33,224	33,224		64,215		**64,215**	(64,215)
Board Member Per Diem (901, 920)	20,474	19,974	**46,314**	16,100	35%	**16,100**	30,214
Committee Members (911)	4,000	3,400	**58,686**	3,400	6%	**4,000**	54,686
Overtime	16,262	16,262	**25,000**	35,963	144%	**35,963**	(10,963)
Staff Benefits	1,744,941	1,741,522	**2,170,000**	1,804,708	83%	**2,059,004**	110,996
TOTALS, PERSONNEL SVC	5,499,491	5,487,510	**6,681,000**	**5,452,990**	**82%**	**6,184,725**	496,275
OPERATING EXPENSE AND EQUIPMENT							
General Expense	144,462	137,053	**59,000**	86,571	147%	**94,000**	(35,000)
Fingerprint Reports	16,343	15,216	**26,000**	14,375	55%	**16,000**	10,000
Minor Equipment	45,199	45,199	**6,000**	3,699	62%	**3,699**	2,301
Printing	48,239	47,501	**42,000**	74,710	178%	**75,900**	(33,900)
Communication	41,183	40,383	**33,000**	28,224	86%	**31,000**	2,000
Postage	68,234	66,964	**59,000**	54,094	92%	**59,000**	0
Insurance	6,211	6,211	**2,000**	8,056	403%	**8,056**	(6,056)
Travel In State	161,046	148,283	**109,000**	143,200	131%	**156,000**	(47,000)
Travel, Out-of-State	3,125	3,125	**0**	263		**0**	0
Training	3,352	3,002	**7,000**	5,964	85%	**5,964**	1,036
Facilities Operations	408,859	408,859	**361,000**	412,853	114%	**483,359**	(122,359)
C & P Services - Interdept.	50,097	324,797	**77,000**	7,886	10%	**44,700**	32,300
C & P Services - External	215,793	347,474	**268,000**	275,983	103%	**383,083**	(115,083)
DEPARTMENTAL SERVICES:							
OIS Pro Rata	783,624	801,928	**1,091,000**	1,091,000	100%	**1,091,000**	0
Admin/Exec	740,436	740,436	**796,000**	796,000	100%	**796,000**	0
Interagency Services	0	0	**1,000**	0	0%	**1,000**	0
IA w/ OPES	36,722	36,722	**0**	61,551		**61,551**	(61,551)
DOI-ProRata Internal	19,659	22,786	**22,000**	22,000	100%	**22,000**	0
Public Affairs Office	22,799	22,799	**51,000**	51,000	100%	**51,000**	0
PPRD	25,979	26,799	**0**	0		**0**	0
INTERAGENCY SERVICES:							
Consolidated Data Center	21,621	18,931	**18,000**	29,396	163%	**30,000**	(12,000)
DP Maintenance & Supply	15,166	15,166	**11,000**	21,802	198%	**23,800**	(12,800)
Central Admin Svc-ProRata	582,361	582,361	**607,000**	607,194	100%	**607,000**	0
EXAMS EXPENSES:							
Exam Supplies	0	0	**43,291**	0	0%	**0**	43,291
Exam Freight	0	0	**166**	0	0%	**0**	166
Exam Site Rental	0	0	**196,586**	0	0%	**0**	196,586
C/P Svcs-External Expert Administration	103,913	102,913	**6,709**	76,774	1144%	**80,000**	(73,291)
C/P Svcs-External Expert Examiners	0	0	**238,248**	0	0%	**0**	238,248
C/P Svcs-External Subject Matter	4,846	4,846		45,352		**45,352**	(45,352)
Other Items of Expense	2,934	2,934	**1,000**	7,491	749%	**7,491**	(6,491)
Tort Pymts-Punitive				56,427		**56,427**	(56,427)
ENFORCEMENT:							
Attorney General	1,117,956	1,117,956	**1,778,000**	1,056,501	59%	**1,195,000**	583,000
Office Admin. Hearings	331,993	331,993	**407,000**	225,853	55%	**332,000**	75,000
Court Reporters	31,418	18,318		9,215		**13,000**	(13,000)
Evidence/Witness Fees	453,715	411,715	**244,000**	302,058	124%	**307,000**	(63,000)
DOI - Investigative			**0**			**0**	0
Vehicle Operations	36,460	32,160	**5,000**	43,846	877%	**43,846**	(38,846)
Major Equipment	155,332	155,332	**36,000**	0	0%	**0**	36,000
TOTALS, OE&E	5,699,077	6,040,162	**6,602,000**	5,619,338	85%	**6,124,228**	477,772
TOTAL EXPENSE	11,198,568	11,527,672	**13,283,000**	11,072,328	167%	**12,308,953**	974,047
Sched. Interdepartmental							0
Sched. Reimb. - Fingerprints	(15,296)	(15,296)	**(53,000)**	(15,863)	30%	**(53,000)**	0
Sched. Reimb. - Other	(9,400)	(9,400)	**(214,000)**	(8,000)	4%	**(214,000)**	0
Unsched. Reimb. - External/Private	(48,311)	(48,311)		(25,313)			0
Unsch Reimb - Finger Print Fees	0						0
Probation Monitoring Fee - Variable	(110,914)	(110,914)		(115,886)			0
Invest Cost Recover FTB Collection	(1,383)	(1,383)					0
Unsched. - DOI ICR Civil Case Only							0
Unsched. - Investigative Cost Recovery	(296,399)	(296,399)		(362,177)			0
NET APPROPRIATION	10,716,865	11,045,970	**13,016,000**	10,545,089	81%	**12,041,953**	**974,047**
						SURPLUS/(DEFICIT):	**7.5%**

0741 - Dental Board of California
Analysis of Fund Condition

8/1/2016

(Dollars in Thousands)

2016 Budget Act

		*PY 2015-16	Budget Act CY 2016-17	BY 2017-18	BY + 1 2018-19
BEGINNING BALANCE		$ 5,635	$ 6,137	$ 3,471	$ 529
Prior Year Adjustment		$ -	$ -	$ -	$ -
Adjusted Beginning Balance		$ 5,635	$ 6,137	$ 3,471	$ 529
REVENUES AND TRANSFERS					
Revenues:					
125600	Other regulatory fees	$ 62	$ 72	$ 72	$ 72
125700	Other regulatory licenses and permits	$ 997	$ 966	$ 966	$ 966
125800	Renewal fees	$ 10,247	$ 9,582	$ 9,582	$ 9,582
125900	Delinquent fees	$ 71	$ 70	$ 70	$ 70
131700	Misc. Revenue from Local Agencies	$ -	$ -	$ -	$ -
141200	Sales of documents	$ -	$ -	$ -	$ -
142500	Miscellaneous services to the public	$ 34	$ -	$ -	$ -
150300	Income from surplus money investments	$ 27	$ 10	$ 2	$ -
150500	Interest Income From Interfund Loans	$ -	$ -	$ -	$ -
160100	Settlements and Judgements	$ -	$ -	$ -	$ -
160400	Sale of fixed assets	$ -	$ -	$ -	$ -
161000	Escheat of unclaimed checks and warrants	$ 5	$ -	$ -	$ -
161400	Miscellaneous revenues	$ 2	$ -	$ -	$ -
164300	Penalty Assessments	$ -	$ -	$ -	$ -
Totals, Revenues		$ 11,445	$ 10,700	$ 10,692	$ 10,690
Totals, Revenues and Transfers		$ 11,445	$ 10,700	$ 10,692	$ 10,690
Totals, Resources		$ 17,080	$ 16,837	$ 14,163	$ 11,219
EXPENDITURES					
Disbursements:					
0840 State Controller (State Operations)		$ -	$ -	$ -	$ -
8880 Financial Information System of California (State Operations)		$ 23	$ 17	$ 17	$ 17
1110 Program Expenditures (State Operations)		$ 10,920	$ -	$ -	$ -
1111 Program Expenditures (State Operations)		$ -	$ 13,349	$ 13,616	$ 13,888
Total Disbursements		$ 10,943	$ 13,366	$ 13,634	$ 13,906
FUND BALANCE					
Reserve for economic uncertainties		$ 6,137	$ 3,471	$ 529	$ -2,687
Months in Reserve		5.5	3.1	0.5	-2.3

NOTES:

A. ASSUMES WORKLOAD AND REVENUE PROJECTIONS ARE REALIZED IN BY+1 AND ON-GOING.

B. ASSUMES APPROPRIATION GROWTH OF 2% PER YEAR BEGINNING IN BY+1

C. ASSUMES INTEREST RATE AT 0.3%.

D. BASED ON PRELIMINARY FISCAL MONTH 13*

DENTAL ASSISTING PROGRAM - FUND 3142
BUDGET REPORT
FY 2015-16 EXPENDITURE PROJECTION

FM 12

OBJECT DESCRIPTION	FY 2014-15 ACTUAL EXPENDITURES (MONTH 13)	FY 2014-15 PRIOR YEAR EXPENDITURES 6/30/2015	FY 2015-16 BUDGET STONE 2015-16	FY 2015-16 CURRENT YEAR EXPENDITURES 6/30/2016	FY 2015-16 PERCENT SPENT	FY 2015-16 PROJECTIONS TO YEAR END	FY 2015-16 UNENCUMBERED BALANCE
PERSONNEL SERVICES							
Salary & Wages (Staff)	329,737	329,737	**497,000**	390,798	79%	**400,000**	97,000
Statutory Exempt (EO)			**0**			**0**	0
Temp Help (Expert Examiners)			**0**				0
Temp Help (Consultants)			**0**				0
Temp Help Reg (907)	19,981	19,981	**0**			**0**	0
Temp Help (Exam Proctors)			**0**			**0**	0
Board Member Per Diem (901, 920)	3,900	3,400	**0**	3,200		**4,000**	(4,000)
Overtime	6,938	6,938	**0**	1,922		**3,000**	(3,000)
Staff Benefits	238,182	238,182	**301,000**	257,393	86%	**263,454**	37,546
TOTALS, PERSONNEL SVC	598,738	598,238	**798,000**	**653,313**	**82%**	**670,454**	127,546
OPERATING EXPENSE AND EQUIPMENT							
General Expense	9,122	9,119	**36,000**	7,042	20%	**7,600**	28,400
Fingerprint Reports	0	0	**8,000**	54	1%	**54**	7,946
Minor Equipment			**0**	6,369		**6,369**	(6,369)
Printing	6,650	6,650	**20,000**	5,573	28%	**7,000**	13,000
Communication	30	30	**13,000**	30	0%	**30**	12,970
Postage	23,965	23,965	**37,000**	16,659	45%	**18,000**	19,000
Insurance			**0**			**0**	0
Travel In State	52,084	47,963	**49,000**	39,647	81%	**43,000**	6,000
Training	0	0	**4,000**	0	0%	**0**	4,000
Facilities Operations	45,546	45,546	**64,000**	82,327	129%	**82,327**	(18,327)
Utilities			**1,000**	0	0%		1,000
C & P Services - Interdept.	0	0	**288,000**	0	0%	**0**	288,000
C & P Services - External	3,000	16,723	**15,000**	0	0%	**0**	15,000
DEPARTMENTAL SERVICES:							
OIS ProRata	344,648	358,213	**586,000**	586,000	100%	**586,000**	0
Admin/Exec	103,661	103,661	**135,000**	135,000	100%	**135,000**	0
Interagency Services	0	0	**73,000**	0	0%	**73,000**	0
IA w/ OPES			**0**			**0**	0
DOI-ProRata Internal	2,685	3,112	**4,000**	4,000	100%	**4,000**	0
Public Affairs Office	3,115	3,115	**9,000**	9,000	100%	**9,000**	0
PPRD	3,008	3,103	**0**	0		**0**	0
INTERAGENCY SERVICES:							0
Consolidated Data Center	0	0	**3,000**	0	0%	**0**	3,000
DP Maintenance & Supply	0	0	**1,000**	909	91%	**1,000**	0
Statewide ProRata	85,731	85,731	**92,000**	91,663	100%	**92,000**	0
EXAMS EXPENSES:							
Exam Supplies	17,071	17,071	**3,708**	15,232	411%	**15,232**	(11,524)
Exam Site Rental - State Owned	39,729	39,729		37,685		**37,685**	(37,685)
Exam Site Rental - Non State Owned	36,710	36,710	**69,939**	42,560	61%	**42,560**	27,379
C/P Svcs-External Expert Administration	2,827	2,827	**30,877**	2,983	10%	**3,000**	27,877
C/P Svcs-External Expert Examiners	0	0	**47,476**	0	0%	**0**	47,476
C/P Svcs-External Expert Examiners			**0**			**0**	0
C/P Svcs-External Subject Matter	150,469	145,469	**0**	204,934		**204,934**	(204,934)
Other Items of Expense	0	0	**0**			**0**	0
ENFORCEMENT:							
Attorney General	128,138	116,970	**173,000**	113,670	66%	**130,000**	43,000
Office Admin. Hearings	0	0	**3,000**	0	0%	**0**	3,000
Evidence/Witness Fees	23,964	23,964	**0**	4,619		**24,000**	(24,000)
Major Equipment			**16,000**	568		**568**	15,432
TOTALS, OE&E	1,082,153	1,089,671	**1,782,000**	1,406,524	79%	**1,522,359**	259,641
TOTAL EXPENSE	1,680,891	1,687,909	**2,580,000**	2,059,837	161%	**2,192,813**	387,187
Sched. Reimb. - Fingerprints	(1,078)	(1,078)	**(13,000)**	(948)	7%	**(1,421)**	(11,579)
Sched. Reimb. - Other	(705)	(705)	**(3,000)**	(705)	24%	**(705)**	(2,295)
NET APPROPRIATION	1,679,108	1,686,126	**2,564,000**	2,058,184	80%	**2,190,687**	**373,313**
						SURPLUS/(DEFICIT):	**14.6%**

3142 - Dental Assisting Program
Analysis of Fund Condition

8/1/2016

(Dollars in Thousands)

2016 Budget Act

		*PY 2015-16	Budget Act CY 2016-17	BY 2017-18	BY + 1 2018-19
BEGINNING BALANCE		$ 2,840	$ 2,643	$ 1,627	$ 561
Prior Year Adjustment		$ -	$ -	$ -	$ -
Adjusted Beginning Balance		$ 2,840	$ 2,643	$ 1,627	$ 561
REVENUES AND TRANSFERS					
Revenues:					
125600	Other regulatory fees	$ 13	$ 18	$ 18	$ 18
125700	Other regulatory licenses and permits	$ 456	$ 278	$ 278	$ 278
125800	Renewal fees	$ 1,297	$ 1,270	$ 1,270	$ 1,270
125900	Delinquent fees	$ 76	$ 69	$ 69	$ 69
141200	Sales of documents	$ 1	$ -	$ 1	$ 1
142500	Miscellaneous services to the public	$ 3	$ -	$ -	$ -
150300	Income from surplus money investments	$ 12	$ 3	$ 2	$ -
160400	Sale of fixed assets	$ -	$ -	$ -	$ -
161000	Escheat of unclaimed checks and warrants	$ 1	$ -	$ -	$ -
161400	Miscellaneous revenues	$ 12	$ 12	$ 12	$ 12
164300	Penalty Assessments	$ -	$ -	$ -	$ -
Totals, Revenues		$ 1,871	$ 1,650	$ 1,650	$ 1,648
Totals, Revenues and Transfers		$ 1,871	$ 1,650	$ 1,650	$ 1,648
Totals, Resources		$ 4,711	$ 4,293	$ 3,277	$ 2,209
EXPENDITURES					
Disbursements:					
0840 State Controller (State Operations)		$ -	$ -	$ -	$ -
8880 Financial Information System for CA (State Operations)		$ 3	$ 3	$ -	$ -
1110 Program Expenditures (State Operations)		$ 2,065	$ -	$ -	$ -
1111 Program Expenditures (State Operations)		$ -	$ 2,663	$ 2,716	$ 2,771
Total Disbursements		$ 2,068	$ 2,666	$ 2,716	$ 2,771
FUND BALANCE					
Reserve for economic uncertainties		$ 2,643	$ 1,627	$ 561	$ -562
Months in Reserve		11.9	7.2	2.4	-2.4

NOTES:

A. ASSUMES WORKLOAD AND REVENUE PROJECTIONS ARE REALIZED IN BY+1 AND ONGOING.

B. ASSUMES APPROPRIATION GROWTH OF 2% PER YEAR BEGINNING IN BY+1.

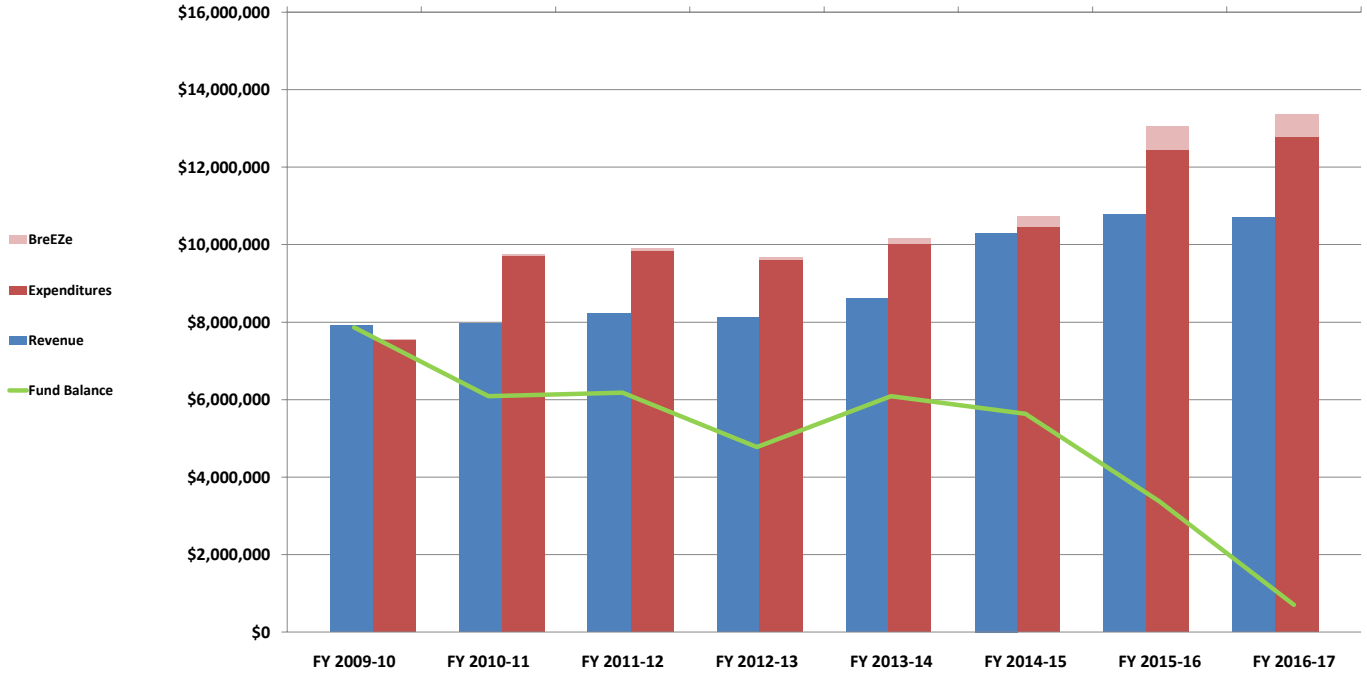
C. ASSUMES INTEREST RATE AT 0.3%.

D. BASED ON PRELIMINARY FISCAL MONTH 13*

Attachment 3

Dental Board of California
Fund Analysis: 2016-17 Governor's Budget w/BreEZe SPR 3.1
Release 2

	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
	Actual						Projected*	
Beginning Fund Balance (Incl. Prior Year Adj.)	$ 7,498,000	$ 7,885,000	$ 6,160,000	$ 6,313,000	$ 4,963,000	$ 6,058,000	$ 5,635,000	$ 3,370,000
Total Revenue	$ 7,920,000	$ 7,955,000	$ 8,226,000	$ 8,121,000	$ 8,597,000	$ 10,303,000	$ 10,774,000	$ 10,700,000
Transfers/General Fund Loans	$ -	$ -	$ 1,700,000	$ -	$ 2,700,000	$ -	$ -	$ -
Total Expenditures	$ 7,553,000	$ 9,753,000	$ 9,906,000	$ 9,662,000	$ 10,175,000	$ 10,726,000	$ 13,039,000	$ 13,366,000
BreEZe Cost	$ 9,412	$ 47,782	$ 77,332	$ 56,614	$ 144,378	$ 277,414	$ 596,457	$ 573,193
Expenditures (less BreEZe)	$ 7,543,588	$ 9,705,218	$ 9,828,668	$ 9,605,386	$ 10,030,622	$ 10,448,586	$ 12,442,543	$ 12,792,807
Ending Fund Balance	$ 7,865,000	$ 6,087,000	$ 6,180,000	$ 4,772,000	$ 6,085,000	$ 5,635,000	$ 3,370,000	$ 704,000
Months in Reserve	9.7	7.4	7.7	5.6	6.8	5.2	3.0	0.6



* Projected years assume full budget appropriation is expended

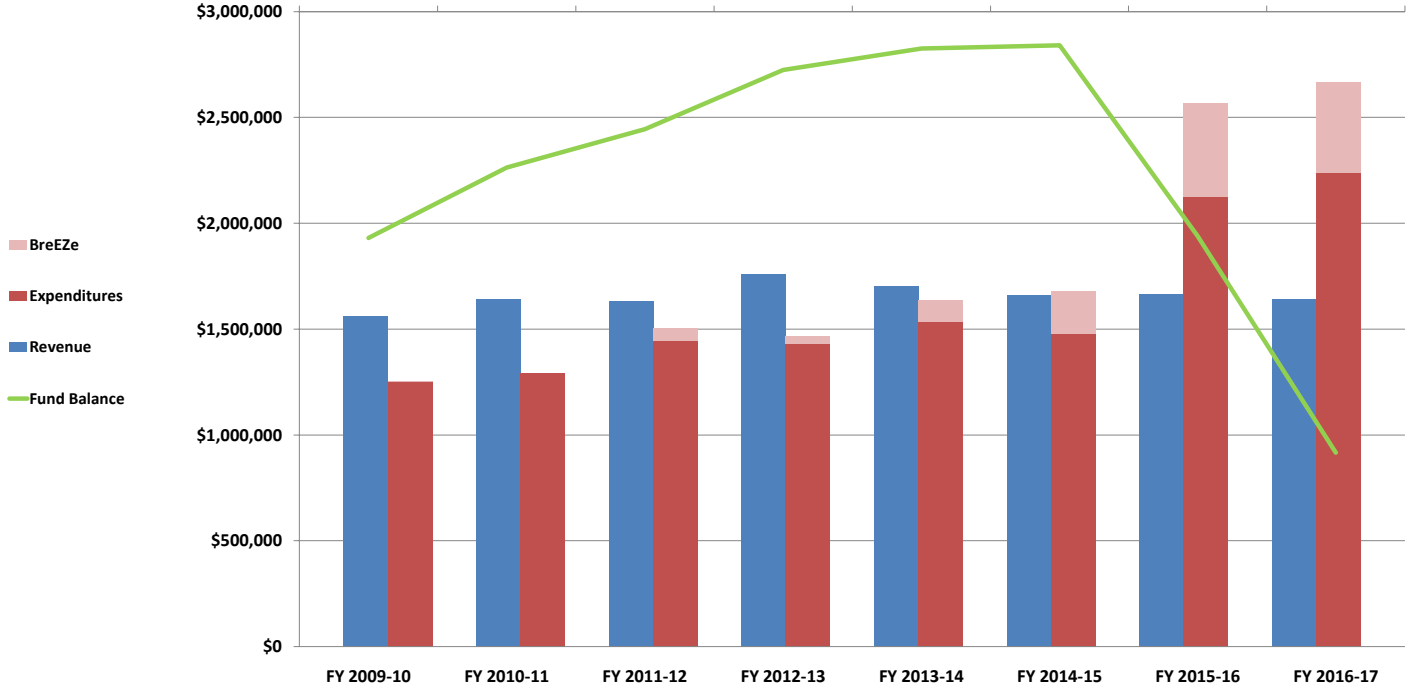
Highlights

- o Renewal Fee increase via statute effective January 1, 2015. Conducting fee analysis of all fee categories
- o Budget Augmentations:
  - o FY 2010-11 - Consumer Protection Enforcement Initiative (CPEI): 12.5 positions, $1.276 million (ongoing);
  - o FY 2014-15 - SB 562 staffing: 0.5 position, $54,000 (three-year limited term)
  - o FY 2016-17 - Enforcement Support Staff: 2.0 positions

Attachment 3a

Dental Assisting Program
Fund Analysis: 2016-17 Governor's Budget w/BreEZe SPR 3.1
Release 2

	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
	Actual						Projected*	
Beginning Fund Balance (Incl. Prior Year Adj.)	$ 1,619,000	$ 1,913,000	$ 2,312,000	$ 2,434,000	$ 2,759,000	$ 2,859,000	$ 2,840,000	$ 1,939,000
Total Revenue	$ 1,564,000	$ 1,641,000	$ 1,634,000	$ 1,758,000	$ 1,703,000	$ 1,662,000	$ 1,666,000	$ 1,644,000
Transfers/General Fund Loans	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Expenditures	$ 1,252,000	$ 1,291,000	$ 1,501,000	$ 1,468,000	$ 1,636,000	$ 1,681,000	$ 2,567,000	$ 2,666,000
BreEZe Cost	$ 3,334	$ -	$ 57,386	$ 37,568	$ 101,409	$ 201,974	$ 442,161	$ 425,365
Expenditures (less BreEZe)	$ 1,248,666	$ 1,291,000	$ 1,443,614	$ 1,430,432	$ 1,534,591	$ 1,479,026	$ 2,124,839	$ 2,240,635
Ending Fund Balance	$ 1,931,000	$ 2,263,000	$ 2,445,000	$ 2,724,000	$ 2,826,000	$ 2,840,000	$ 1,939,000	$ 917,000
Months in Reserve	17.9	18.1	20.0	20.0	20.2	13.3	8.7	4.1



* Projected years assume full budget appropriation is expended

Highlights

- o Conducting fee analysis of all fee categories
- o Budget Augmentations:
  - o FY 2012-13 - Current Year AG Augmentation: $105,000 (one-time)
  - o FY 2015-16 - AB 1174 Staffing Augmentation: $180,000 (ongoing)

STATE OF CALIFORNIA
DEPARTMENT OF CONSUMER AFFAIRS

BUSINESS, CONSUMER SERVICES, AND HOUSING AGENCY • GOVERNOR EDMUND G. BROWN JR.
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MEMORANDUM

DATE	June 27, 2016
TO	Dental Board of California
FROM	Linda Byers, Executive Assistant
SUBJECT	**Agenda Item 7:** Discussion and Possible Action Regarding 2017 Board Meeting Dates

The Board will need to set the 2017 meeting schedule in order for Board members to plan accordingly and enable staff ample time to negotiate contracts for future meeting space locations. A 2017 calendar is attached for your reference.

Pursuant to Business and Professions Code, Section 1607, the Board shall meet regularly once each year in San Francisco and once each year in Los Angeles and at such other times and places as the Board may designate, for the purpose of transacting its business. Historically, the Board meets quarterly.

Staff has taken into account holidays, association meetings and legislative and legal deadlines.

As such, the following are dates for your consideration:

FEBRUARY/MARCH	MAY
Thursday-Friday February 23-24 March 2-3	Thursday-Friday May 11-12 18-19
AUGUST	**NOVEMBER**
Thursday-Friday August 3-4 10-11	Thursday-Friday November 2-3 9-10

January 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 New Year's Day	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16 M L King Day	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14 Valentine's Day	15	16	17	18
19	20 Presidents' Day	21	22	23	24	25
26	27	28				

March 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18 **ADEA Annual Session** →
19 **ADEA Annual Session** →	20	21	22	23	24	25
26	27	28	29	30	31	

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April 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14 Good Friday	15
16 Easter	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

May 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4 **CDA Presents in Anaheim** →	5	6
7	8	9	10	11	12	13
14 Mother's Day	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29 Memorial Day	30	31			

June 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18 Father's Day	19	20	21	22	23	24
25	26	27	28	29	30	

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July 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4 Independence Day	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

August 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24 **CDA Presents San Francisco**	25	26
27	28	29	30	31		

September 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4 Labor Day	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

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October 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9 Columbus Day	10	11	12	13	14
15	16	17	18	19 **ADA Annual Convention**	20	21
22 **ADA Annual Convention**	23	24	25	26	27	28
29	30	31 Halloween				

November 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11 Veterans Day
12	13	14	15	16	17	18
19	20	21	22	23 Thanksgiving Day	24	25
26	27	28	29	30		

December 2017

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25 Christmas	26	27	28	29	30
31						

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MEMORANDUM

DATE	August 1, 2016
TO	Members, Dental Board of California
FROM	Karen Fischer, Executive Officer
SUBJECT	**Agenda Item 8:** Update on the Dental Board of California's 2017-2020 Strategic Plan Development

The Dental Board has begun the process of updating the Strategic Plan (Plan), last adopted in 2012. Strategic planning is a process whereby an organization develops a roadmap for the future – looking out two years or more. When developing this roadmap, analysis of the organization and its environment as it currently exists, and how it may develop in the future, is important.

The SOLID Planning Solutions team (SOLID) within the Department of Consumer Affairs is assisting the Board with updating its strategic plan for 2017-2020; and will be facilitating the strategic planning process. Part of this process includes telephone interviews with Board and Council members prior to the planning session to help shape the framework and agenda.

As a Board or Council member, your participation in the interview process is valuable in helping SOLID understand how the Dental Board of California is doing and where it is headed. These 45 minute telephone interviews were conducted between July 25 and August 12th. During the interview, the Strengths, Weaknesses, Opportunities and Threats (SWOT) pertaining to strategic goals were discussed.

External stakeholder groups will be asked to participate in the SWOT analysis via SurveyMonkey; Dental Board staff will be participating in focus group discussions. Data collected from the Board/Council telephone interviews will be compiled with data collected from external stakeholders and Dental Board staff into a report referenced as the "environmental scan". This report will be distributed to Board and Council members prior to a strategic planning session which is scheduled on October 13 and 14 in Sacramento.

For further information about the Strategic Plan Roadmap and Schedule, please refer to the attachments. Staff anticipates the draft Plan will be ready for discussion and possible action at the December meeting of the Board and Dental Assisting Council.

STRATEGIC PLAN DEVELOPMENT ROADMAP

Average Time to Complete Each Phase

1 Week — Preliminary Meeting & Set-up

- Preliminary meeting with client
- Introduce facilitators
- Set schedule and decide dates
- Decide roles
- Define process
- Create customized development plan for client

8 Weeks — SWOT, Environmental Analysis Scan

- Conduct Focus Group
- Survey stakeholders
- Conduct Board/Bureau member interviews
- Compile and format data
- Analyze data
- Review findings with client

2 Weeks — Board Meeting Planning Session

- Create Facilitation plan
- Conduct Planning Session(s)
- Review Accomplishments
- Discover Vision
- Determine Mission
- Develop Values
- Review SWOT/Scan
- Establish Goals and Objectives

5 Weeks — Create & Finalize Plan

- Solid drafts plan
- Review plan with client and make adjustments
- Board/Bureau approves and adopts plan at future Board meeting
- Post plan to website

2 Weeks — Action Planning

- Prioritize Objectives
- Establish timeframes
- Determine metrics
- Assign responsibilities
- Draft action plan
- Review plan with client and make adjustments

Before Strategic Planning Session:

- *10 weeks required for preparation*

After Strategic Planning Session:

- *6 weeks required to finalize plan for Approval/Adoption*

solid planning solutions

Dental Board of California Strategic Plan Schedule

Task		Due Date
Preliminary Meeting/Overview Presentation	SOLID met with Dental Board Executive Team to gather information about the strategic planning process and gather necessary information (i.e. strategic planning date, location, stakeholders etc.).	**July 14, 2016**
Meeting Date, Time and Location Selected	Once the meeting date, time and location is selected, SOLID will reserve the appropriate room, (if applicable) and send meeting invitations to the appropriate people.	**July 22, 2016**
Determine stakeholders	DBC Executive Team to determine stakeholders and identify stakeholder email addresses. DBC Executive Team to collaborate with strategic planner re: survey distribution plan.	**July 22, 2016**
Contact list	EO to provide SOLID with a contact list of Board and Council member names, numbers and email addresses.	**July 22, 2016**
Board/Council Member Email Invitation	SOLID will send an email invitation to each DBC Board/Council member and EO to schedule the individual phone interviews.	**July 25, 2016**
Board/Council Member Phone Interviews	SOLID will schedule individual phone interviews with Board/Council members. These interviews are 45 minutes to 1 hour in length and will cover the climate of the profession as well as their views on the DBC's strategic focus for the upcoming plan.	**August 1-August 12, 2016**
Approve Stakeholder Survey	SOLID will develop an online stakeholder survey. AEO and Enforcement Chief to approve survey by no later than August 3 for distribution.	**August 3, 2016** ***Need to get link to OIS by Aug 3**
Stakeholder Survey Period	SOLID will use an online survey at surveymonkey.com to obtain input from your stakeholders. We will send a message with instructions and a link to this survey for you to distribute to the contacts we determined.	**August 8, 2016-September 2, 2016**
Staff Focus Group	SOLID will facilitate four **4-hour meetings** with your staff to discuss internal and external program threats and opportunities as well as gather their views on the DBC's strategic focus for the upcoming plan.	**Aug 9 & 10 (staff)** **Aug 11 (managers)** **8:30-12:30** **Orange Location:** **Aug 17 12:30-4:30**
Compiled Results to EO for Review	Upon completion of interviews and survey(s), SOLID will compile and analyze the data and produce an environmental scan document to use with our presentation materials. This material will be sent to the EO for review and approval. The final environmental scan document will be discussed during the Strategic Planning Session.	**September 30, 2016**
Reminder Email sent to Board members and staff	SOLID will send a reminder email regarding the date, time and location of the meeting. Lunch arrangements will be finalized as well. **If at SOLID's facilities, instruct participants to dress in layers due to the fluctuating room temperature*	**Week of October 3, 2016**
Pre-Session Meeting with EO	This meeting, usually held at least 1 week before the planning session, is designed for the facilitator and EO to discuss the game plan for the planning session. The facilitator will review all planned materials and PowerPoint with the EO and make any adjustments requested. All logistics and remaining details will be discussed and finalized as well.	**Week of October 3, 2016**
Strategic Planning Session – 2 days	SOLID will facilitate the strategic plan development session with team. Through discussion our purpose is to highlight recent accomplishments of	**October 13 and 14, 2016**

	the DBC, review trends identified from the surveys, interviews, focus groups and establish a Vision, Mission, Values, Goals and Objectives for the new plan.	**HQ2 –SOLID Training Center, Emerald Room**
Update Strategic Plan	SOLID will use the information gathered at the planning session to create the DBC strategic plan. A comprehensive draft will be sent to you for review by the October 14, 2016.	**October 21, 2016**
DBC Approves/adopts Strategic Plan	Strategic plan is approved by Board members.	**December 1-2, 2016**
Action Planning Session	After DBC approves strategic plan, SOLID will facilitate a meeting with the Dental Board Executive Team to create an action plan to guide completion of strategic objectives by establishing due dates, identifying major tasks, and assigning responsible parties.	**December 2016 or January 2017**

STATE OF CALIFORNIA
DEPARTMENT OF CONSUMER AFFAIRS
BUSINESS, CONSUMER SERVICES, AND HOUSING AGENCY • GOVERNOR EDMUND G. BROWN JR.
DENTAL BOARD OF CALIFORNIA
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MEMORANDUM

DATE	June 29, 2016
TO	Dental Board of California
FROM	Linda Byers, Executive Assistant
SUBJECT	**Agenda Item 9:** Discussion and Possible Action Regarding Adoption of the Revisions to the Dental Board of California Policy and Procedure Manual

The Dental Board of California (DBC) Policy and Procedure Manual is designed for members as a reference of the Department of Consumer Affairs (DCA) and Board policies, the intent of which is to guide the actions of the Board, Committee and Dental Assisting Council members and ensure the Board functions effectively and efficiently.

The manual was last adopted by the Board February 28, 2014. A draft of this document was distributed to Board Members in March 2016 for review and comment. Comments received are underlined in red; deletions indicated by strikethrough.

At the May Board meeting there were additional changes suggested. The members voted to incorporate the additional changes and bring the manual back for review and acceptance at the August 2016 Board meeting.

New changes and additions are double-underlined in bold italics.

Action: Staff recommends adoption of the revised manual.

Dental Board of California

Policy and Procedure Manual

Adopted by the Board
~~2/28/2014~~

Dental Board of California
2005 Evergreen Street, Ste 1550
Sacramento, CA 95815-3831
www.dbc.ca.gov

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CHAPTER 1. INTRODUCTION

Overview

The Dental Board of California (DBC) was created by the California Legislature in 1885. Today the DBC is one of the boards, bureaus, commissions, and committees within the Department of Consumer Affairs (DCA), Business, Consumer Services, and Housing Agency. DBC's highest priority is protection of the public while exercising its licensing, regulatory, and disciplinary functions. If protection of the public is inconsistent with other interests sought to be promoted, the protection of the public shall be paramount.

The DBC is presently comprised of 15 members. The composition of the Board is defined in Business and Professions Code Sections 1601 and 1603 and includes eight dentists appointed by the Governor, one of whom must be a member of a faculty of any California dental college and one shall be a dentist practicing in a nonprofit community clinic; five public members, three appointed by the Governor, one by the Speaker of the Assembly and one by the Senate Rules Committee; one licensed dental hygienist appointed by the Governor; and one licensed dental assistant appointed by the Governor. Board members may serve up to two four-year terms. Board members serve without a salary, but are compensated $100 per day for each meeting day and are reimbursed for travel expenses (B&P Code § 103).

This policy and procedure manual is provided to Board members as a reference for important laws, regulations, DCA policies, and Board policies to help guide the actions of the Board members and ensure Board effectiveness and efficiency.

Definitions:

BPC	Business and Professions Code
CCR	California Code of Regulation
CLEAR	Council on Licensure Enforcement and Regulations
DCA	Department of Consumer Affairs
EO	Executive Officer
SAM	State Administrative Manual
President	Where the term "President" is used in this manual, it will be assumed to include "his or her designee"

General Rules of Conduct:

Board members shall not speak or act for the Board without proper authorization.

Board members shall maintain the confidentiality of confidential documents and information.

Board members shall commit the time necessary to prepare for Board responsibilities.

Each Board member shall recognize the equal role and responsibilities of all Board members.

Board members shall act fairly, be nonpartisan, impartial and unbiased in their role of protecting the public.

Board members shall treat all applicants and licensees in a fair and impartial manner.

Board members' actions shall serve to uphold the principle that the Board's primary mission is to protect the public.

Board members shall not use their positions on the Board for personal, familial or financial gain.

Board members shall refrain from working on personal and/or non-Board related business during Board meetings. If necessary, members shall leave the dais, ***being mindful of a quorum, to address personal and/or non-Board related business***.

CHAPTER 2. BOARD***, COUNCIL AND COMMITTEE*** MEETING PROCEDURES

Frequency of Meetings
(BPC Section 101.7)

Boards shall meet at least three times each calendar year. Boards shall meet at least once each calendar year in Northern California and once each calendar year in southern California in order to facilitate participation by the public and its licensees.

Special meetings may be held at such times as the board may elect or on the call of the president of the board, or of not less than four members thereof. (BPC Section 1608)

Notice of each meeting and the time and place thereof shall be given in accordance with the Bagley-Keene Open Meeting Act (Gov. Code § 11120 et seq).

Board***, Council and Committee*** Member Attendance at Board Meetings
(Board Policy)

Members shall attend each meeting. If a member is unable to attend, he or she must contact the Board President or the Executive Officer and request to be excused from the meeting.

Board***, Council and Committee*** Meetings
(Government Code Section 11120 et seq.)

Meetings are subject to all provisions of the Bagley-Keene Open Meeting Act. This act governs meetings of the state regulatory boards and meetings of committees of those boards where the committee consists of more than two members. It specifies meeting notice and agenda requirements and prohibits discussing or taking action on matters not included in the agenda.

Communications
*(Bagley-Keene Open Meeting Act**, Government Code Section 11122.5(b)**)*

A majority of the members of the Board, a committee or Council shall not, outside of a Board meeting, use a series of communications of any kind, directly or through intermediaries, to discuss, deliberate, or take action on any item of business that is within the subject matter of the state body.

(Bagley-Keene Open Meeting Act - Section II. C. Board and Committee Meetings [Restriction on Attendance at Committee Meetings])

Council members not serving as a member of the Board shall not participate in matters under consideration by the Board during a meeting, unless there is a joint meeting of the Board and Council.

Committees
(Board Policy, BPC 1601.1)

The Board shall be organized into standing committees pertaining to examinations, enforcement, and other subjects the Board deems appropriate.

Committees meet when they have issues to be considered in order to make recommendations to the full Board.

The Board President ***and/or Committee Chair, in consultation with the Executive Officer,*** may appoint a two-person subcommittee at any time ***as*** deemed necessary.

Dental Assisting Council
(BPC Section 1742)

The Dental Assisting Council (Council) will consider all matters relating to dental assistants in California and will make appropriate recommendations to the Board and the standing Committees of the Board. The members of the Council shall include the registered dental assistant member of the Board, another member of the Board, and five registered dental assistants.

Council Member Comments During a Board meeting
(Bagley-Keene Open Meeting Act ***Section II. C. Board and Committee Meetings [Restriction on Attendance at Committee Meetings]***)

Council members not serving as a member of the Board shall not participate in matters under consideration by the Board during a meeting, unless there is a joint meeting of the Board and Council.

Public Participation
(Board Policy)

Public participation is encouraged throughout the public portion of the meetings. The chairs of the respective committees, as well as the Board President, acknowledge comments from the audience during general discussion of agenda items. In addition, each Board agenda includes public comment as a standing item of the agenda. This standing agenda item allows the public to request items to be placed on future agendas.

If the agenda contains matters that are appropriate for closed session, the agenda shall cite the particular statutory section and subdivision authorizing the closed session.

Quorum
(BPC Section 1610)

Eight Board members constitute a quorum of the Board for the transaction of business; four members for the council; four members for the Diversion Evaluation Committee (DAC); and three members for the Elective Facial Cosmetic Surgery Permit Credentialing Committee (EFCS). Ad Hoc

committee quorums would be a simple majority of appointed members.

- ***Members shall be mindful of the quorum before temporarily exiting the discussion.***

Agenda Items
(Board Policy)

Board meetings generally involve:
- Board policy
- Legislation that may be relevant to the practice of dentistry
- Content and administration of examinations
- Adoption or repeal ~~deletion~~ of regulations
- Approval of fee schedules
- Appeals of Board actions

Board Procedures/Operations
- Enforcement issues such as, adoption or non-adoption ~~acceptance/denial~~ of Administrative Law Judge proposed decisions, stipulated settlements, ~~stipulations~~ and ~~advancement~~ referral of cases to the Office of Administrative Hearings
- Committee meetings
- ~~Acceptance or rejection~~ Consideration of committee recommendations

Any Board member may submit, for consideration, items for a Board meeting agenda to the Board President and Executive Officer 30 days prior to the meeting. The Board President and Executive Officer, in consultation with legal counsel, will review and, if appropriate, approve items submitted for consideration.

Closed Session
(Government Code Sections 11126(c)(2) and 11126(c)(3))

The Board shall meet in Closed Session to deliberate and take action on disciplinary matters, litigation and personnel matters.
- ***Stipulations and Proposed Decisions will be distributed to Board members for a mail vote.***
- ***Two Board members are required to hold a decision for discussion in Closed Session at a future Board meeting. If only two members hold for discussion and one of those members is unable to attend the meeting, the Boards action will revert to the majority vote on that decision.***
- ***Effective July 1, 2016, Surrenders and Revocations are automatically accepted by the Executive Officer without Board member vote per CCR, Title 16, Section 1001).***

Notice of Meetings
(Government Code Section 11120 et seq.)

According to the Open Meeting Act, meeting notices must include the agenda and shall be sent to persons on the Board's mailing list at least 10 calendar days in advance. The notice shall include a staff person's name, work address and

work telephone number who can provide further information prior to the meeting.

Notice of Meetings to be Posted on the Internet
(Government Code Section 11125)

Notice and the agenda shall also be made available on the Internet at least 10 days in advance of the meeting, and shall include the name, address, and telephone number of any person who can provide further information prior to the meeting, but need not include a list of witnesses expected to appear at the meeting. The written notice shall additionally include the address of the Internet site where notices are available.

Record of Meetings
(Board Policy)

The minutes are a summary, not a transcript, of each Board***, Council and Committee*** meeting. They shall be prepared by Board staff and submitted for review by the Board members at the next Board meeting. Board minutes shall be approved at the next scheduled meeting of the Board. When approved, the minutes shall serve as the official
record of the meeting.

Board meetings are webcast in real time when webcasting resources are available. Archived copies of the webcast are available on the Board's website approximately 30 days after the meeting is held.

Recording
(Board Policy)

Public meetings are recorded for staff purposes. Recordings may be erased upon Board approval of the minutes or 30 days after the recording. CD copies are available, upon request, for Board members not able to attend a meeting.

Meeting Rules
(16 CCR § 1002)

Board***, Council and Committee*** meetings are conducted following Robert's Rules of Order, to the extent that it does not conflict with state law (e.g., Bagley-Keene Open Meeting Act), as a guide when conducting the meetings.

Use of Electronic Devices During Meetings
(Bagley-Keene)

Board members should not text or email one another during a meeting on any matter within the Board's jurisdiction. Using electronic devices to communicate secretly in such a manner would violate the Open Meeting Act. Where laptop computers or tablets are used by the Board members at the meeting because the Board provides materials electronically, the Board President shall make an announcement at the beginning of the meeting as to the reason for the use of laptop computers or tablets.

CHAPTER 3. TRAVEL AND SALARY POLICIES AND PROCEDURES

Travel Approval
(DCA Memorandum 96-01)

Board***, Council and Committee*** members shall have Board President approval for all travel except for regularly scheduled Board and committee meetings to which the Board member is assigned.

Travel Arrangements
(Board Policy)

Board***, Council and Committee*** members are encouraged to coordinate with the Executive Assistant on travel arrangements and lodging accommodations.

Out-of-State Travel
(SAM Section 700 et seq.)

For out-of-state travel, Board members will be reimbursed for actual lodging expenses, supported by vouchers, and will be reimbursed for meal and supplemental expenses. Out-of-state travel for all persons representing the State of California is controlled and must be approved by the Governor's Office.

Travel Claims
(SAM Section 700 et seq. and DCA Memorandum 96-01)

Rules governing reimbursement of travel expenses for Board members are consistent with rules that apply to ~~the same as for~~ management-level state staff. All expenses shall be claimed on the appropriate travel expense claim forms. The Executive Assistant maintains these forms and completes them as needed. It is advisable for Board members to submit their travel expense forms immediately after returning from a trip and not later than two weeks following the trip.

In order for the expenses to be reimbursed, Board members shall follow the procedures contained in DCA Departmental Memoranda which are periodically disseminated by the Director and are provided to Board members.

Per Diem Salary
(BPC Section 103)

BPC Section 103 regulates compensation in the form of per diem salary and reimbursement of travel and other related expenses for Board members.
This section provides for the payment of per diem salary for Board members "for each day actually spent in the discharge of official duties," and provides that the Board member "shall be reimbursed for traveling and other expenses necessarily incurred in the performance of official duties."

Per Diem Salary
(Board Policy)

The following general guidelines shall apply to the payment of per diem salary, or reimbursement for travel:

1. No per diem salary or reimbursement for travel-related expenses shall be paid to Board members except for attendance at official Board or committee meetings. Attendance at gatherings, events, hearings, conferences or meetings other than official Board or committee meetings shall be approved in advance by the Board President. The Executive Officer shall be notified of the event and approval shall be obtained from the Board President prior to Board member's attendance.

2. The term "day actually spent in the discharge of official duties" shall mean such time as is expended from the commencement of a Board meeting or committee meeting to the conclusion of that meeting.

   Where it is necessary for a Board member to leave early from a meeting, the Board President shall determine if the member has provided a substantial service during the meeting and, if so, shall authorize payment of salary per diem and reimbursement for travel-related expenses.

   For Board-specified work, Board members will be compensated for actual time spent performing work authorized by the Board President. That work includes, but is not limited to, authorized attendance at gatherings, events, meetings, hearings, or conferences, and committee work. That work does not include preparation time for Board or committee meetings. Board members cannot claim per diem salary for time spent traveling to and from a Board or committee meeting.

CHAPTER 4. SELECTION OF OFFICERS AND COMMITTEE/LIAISON APPOINTMENTS

Officers of the Board
(BPC Section 1606)

The Board shall elect from its members a President, a Vice President, and a Secretary.

Election of Officers
(Board Policy)

It is board policy to elect officers at the final meeting of the calendar year for service during the next calendar year, unless otherwise decided by the board. The newly elected officers shall assume the duties of their respective offices on January 1st of the New Year.

Board members serving their "Grace " period are not eligible for Officer or Chair of Standing Committee.

Procedure for Nomination
(Board Policy)

Board Members interested in running for President, Vice-President, and Secretary shall independently submit their name to the Executive Officer ***No later than 30 days before the final scheduled meeting of the calendar year.***

Election Process
(Board Policy)

The Board's legal counsel shall conduct the election of officers and shall set the general election procedure.

Officer Vacancies
(Board Policy)

If an office becomes vacant during the year, an election shall be held at the next meeting. If the office of the President becomes vacant, the Vice President shall assume the office of the President. Elected officers shall then serve the remainder of the term.

Absence of Officers
(Board Policy)

If an officer is absent from two consecutive meetings, the Board may consider whether it wishes to vacate that position. If the office is that of the President, the Vice President shall assume the office of the President. ***If the office is that of the Vice President, the Secretary shall assume the office of the Vice President.*** A vacancy in the office of the Secretary shall be voted on by Board members. Officers shall then serve the remainder of the term.

Committee/Liaison Appointments
(Board Policy)

The President shall establish committees, whether standing or special, as he or she deems necessary. The composition of the committees and the appointment of the members shall be determined by the Board President in consultation with the Vice President, Secretary and the Executive Officer. When committees include the appointment of non-Board members, all affected parties should be considered. The Board President shall strive to appoint board members to a minimum of one standing committee.

Attendance at Committee Meetings
(Board Policy)

If a Board member wishes to attend a meeting of a committee of which he or she is not a member, that Board member cannot participate or vote during the committee meeting, and must not sit on the Dais.

Roles and Responsibilities of Board Officers/Committee Chairs/Liaisons
(Board Policy)

President

- Acts as spokesperson for the Dental Board (attends legislative hearings and testifies on behalf of the Board, attends meetings with stakeholders and Legislators on behalf of Board, talks to the media on behalf of the Board, and signs letters on behalf of the Board).
- Meets and/or communicates with the Executive Officer (EO) on a regular basis.
- Provides oversight to the Executive Officer in performance of the EO duties.
- Approves leave requests, verifies accuracy and approves timesheets, approves travel and signs travel expense claims for the EO.
- Coordinates the EO annual evaluation process including contacting DCA Office of Human Resources to obtain a copy of the Executive Officer Performance Evaluation Form, distributes the evaluation form to members, and collates the ratings and comments for discussion.
- Authors a president's message for every board meeting and published newsletters.
- Approves Board Meeting agendas. Chairs and facilitates Board Meetings. Chairs the Executive Committee.
- Signs specified full board enforcement approval orders.
- Establishes Committees and appoints Chairs and members.
- Establishes 2-Person subcommittees and /or task forces to research policy questions when necessary.
- Attends Dental Hygiene Committee of California meetings

Vice President

- ~~Is the Back-up for~~ May assume the duties above in the President's absence.
- Is a member of Executive Committee.

- Coordinates the revision of the Board's Strategic Plan.
- ***Coordinates the revision of the Board's Policy and Procedure Manual.***

Secretary

- Calls the roll at each Board meeting and reports that a quorum has been established.
- ***Calls the roll for each action item.***
- Is a member of Executive Committee.

Committee Chair

- Reviews agenda items with EO and Board President prior to Committee meetings.
- Approves the Committee agendas.
- Chairs and facilitates Committee meetings.
- ***Calls the roll or appoints a member to call the roll for each action item.***
- Reports the activities of the Committee to the full Board.

Liaisons

Members acting as liaisons to Committees are responsible for keeping the Board informed regarding emerging issues and recommendations made at the Committee level.

Creation of Task Forces
(Board Policy)

It is the policy of the Board that:

1) task forces will be appointed sparingly as the exception rather than the rule and only when the Board finds it cannot address a specific and well defined issue through the existing committee structure;

2) task force members may be appointed by the Board President but must be approved by the full Board;

3) the charge given to the task force will be clear, specific, in writing and presented to the Board at the time of appointment;

4) task forces, of three or more members, appointed by the Board are subject to the same open meeting laws as the Board (as required by Government Code Section 11121);

5) all task forces shall give staff at least 20 days advance notice of the time, place and general agenda for any task force meeting;

6) task forces will meet and report regularly and provide the Board with minutes after every meeting;

7) no task force recommendation will be the basis for Board action in the absence of a formal written report from the task force to the Board.

CHAPTER 5. BOARD ADMINISTRATION AND STAFF

Board Administration
(DCA Reference Manual)

Board members should be concerned primarily with formulating decisions on Board policies rather than decisions concerning the means for carrying out a specific course of action. It is inappropriate for Board members to become involved in the details of program delivery. Strategies for the day-to-day management of programs and staff shall be the responsibility of the Executive Officer.

Board Budget
(Board Policy)

The Executive Officer shall serve as the Board's budget liaison with staff and shall assist staff in the monitoring and reporting of the budget to the Board. The Executive Officer or the Executive Officer's designee will attend and testify at legislative budget hearings and shall communicate all budget issues to the Administration and Legislature.

Strategic Planning
(Board Policy)

The Executive Committee shall have overall responsibility for the Board's Strategic Planning Process. The Vice President shall serve as the Board's strategic planning liaison with staff and shall assist staff in the monitoring and reporting of the strategic plan to the Board. The Board will conduct periodic strategic planning sessions and may utilize a facilitator to conduct the strategic planning process.

Legislation
(Board Policy)

When time constraints preclude Board action, the Board delegates the authority to the Executive Officer and the Chair of the Legislative Committee to take action on legislation that would change the Dental Board of California's Dental Practice Act, or which impacts a previously established Board policy or affects the public's health, safety or welfare. Prior to taking a position on legislation, the Executive Officer shall consult with the Board President and Legislative Committee Chair. The Board shall be notified of such action as soon as possible.

Communications with Other Organizations and Individuals
(Board Policy)

The official spokesperson for the Dental Board of California is the President. The President may designate the Executive Officer, the Chief of Enforcement, other board members, or staff to speak on behalf of the Board.

It is the policy of the Dental Board of California to accommodate speaking requests from all organizations, schools, consumer groups, or other interested groups, whenever possible. If the Board representative is addressing a dental

school or group of potential candidates for licensure, the program must be open to all interested parties. The President may authorize board members to speak to schools, organizations, consumer groups, or other interested groups upon request by members or written requests from said schools, organizations or groups.

Media Inquiries
(Board Policy)

If a member of the Board receives a media call, the Member should promptly refer the caller to the Department of Consumer Affairs Public Information Officer who is employed to interface with all types of media on any type of inquiry. It is required that members make this referral as the power of the Board is vested in the Board itself and not with an individual Board Member. Expressing a personal opinion can be misconstrued as a Board policy or position and may be represented as a position that the Board has taken on a particular issue when it has not.

A Board Member who receives a call should politely thank the caller for the call, but state that it is the Board's policy to refer all callers to the Public Information Officer. The Board Member should then send an email to the Executive Officer indicating they received a media call and relay any information supplied by the caller.

Service of Lawsuits
(Board Policy)

Board Members may receive service of a lawsuit against themselves and the Board pertaining to a certain issue (e.g. a disciplinary matter, a complaint, a legislative matter. etc.). To prevent a confrontation, the Board Member should accept service. Upon receipt, the Board Member should notify the Executive Officer of the service and indicate the name of the matter that was served and any pertinent information. The Board Member should then mail the entire package that was served to the Executive Officer as soon as possible. The Board's legal counsel will provide instructions to the Board Members on what is required of them once service has been made. The Board Members may be required to submit a request for representation to the Board to provide to the Attorney General's Office.

Executive Officer Evaluation
(Board Policy)

The Board shall evaluate the performance of the Executive Officer annually.

Executive Officer Vacancy
(Board Policy)

In the event the Executive Officer position becomes vacant, the Board may, at its discretion, appoint the Assistant Executive Officer or another employee of the Board as the Acting Executive Officer or Interim Executive Officer. An Acting Executive Officer is only entitled to his or her current salary. If an Interim Executive Officer is appointed, the Board shall set his or her salary at an amount within the

Executive Officer's salary range.

DCA's Human Resources Division will provide assistance with the temporary appointment process and the process for the search for a new Executive Officer.

Board Staff
(DCA Reference Manual)

Employees of the Board, with the exception of the Executive Officer, are civil service employees. Their employment, pay, benefits, discipline, termination, and conditions of employment are governed by a myriad of civil service laws and regulations and often by collective bargaining labor agreements. Because of this complexity, it is most appropriate that the Board delegate all authority and responsibility for management of the civil service staff to the Executive Officer. Consequently, the Executive Officer shall solely be responsible for all day-to-day personnel transactions.

Business Cards
(Board Policy)

Business cards will be provided to each Officer of the Board with the Board's office address, telephone and fax number, and Web site address. A Board Officer's business address, telephone and fax number, and e-mail address may be listed on the card at the member's request.

CHAPTER 6. OTHER POLICIES AND PROCEDURES

Availability
(Board Policy)

It is recommended that Board members who will be unavailable for a period longer than three consecutive days, notify the Executive Officer and the Board President.

Mandatory Training
(DCA Policy)

State law requires board members within the Department of Consumer Affairs to complete training in several important areas, including ethics, conflict of interest laws, sexual harassment prevention and Board Member Orientation Training.

Ethics Orientation
http://www.dcaboardmembers.ca.gov/training/ethics_orientation.shtml
(Government Code §53234)

California law requires all appointees to take an ethics orientation within the first six months of their appointment and to repeat this ethics orientation every two years throughout their term.

The training includes important information on activities or actions that are inappropriate or illegal. For example, generally public officials cannot take part in decisions that directly affect their own economic interests. They are prohibited from misusing public funds, accepting free travel and accepting honoraria. There are limits on gifts.

An online, interactive version of the training is available on the Attorney General's Web site at http://oag.ca.gov/ethics. An accessible, text-only version of the materials is also available at the Attorney General's Web site.

Conflict of Interest
http://www.dcaboardmembers.ca.gov/member_info/conflict_interest.shtml
(Government Code §81000)(California Code of Regulations, §18730)

The Department of Consumer Affairs will make and retain a copy of the statements from members of the boards, commission, committees and subcommittees and make them available for public inspection. It will forward the original statement to the Fair Political Practices Commission. Information on specific topics can be found at:
http://www.dcaboardmembers.ca.gov/member_info/conflict_interest.shtml

Sexual Harrassment Prevention
http://www.dcaboardmembers.ca.gov/training/harassment_prevention.shtml
(Government Code §12950.1)

All new board members are required to attend at least two hours of classroom or other interactive training and education regarding sexual harassment prevention within six months of their appointment. The Equal Employment

Opportunity (EEO) Office is responsible for ensuring that all board members complete their required training. A copy of your certificate of proof of training must be sent to the EEO Office. Please identify which Board/Committee/Commission you serve on.

For information on how to receive Sexual Harassment Prevention Training contact:

Equal Employment Opportunity Office
1625 N. Market Blvd, Ste N330
Sacramento, CA 95834
(916) 574-8280 (916) 574-8604 Fax

Board Member Orientation
(BPC Section 453)

Every newly appointed and reappointed board member is required to complete a training and orientation program offered by the Department of Consumer Affairs (DCA) within one year of assuming office. The training covers the functions, responsibilities and obligations that come with being a member of a DCA board.

For more information and assistance with scheduling training, please contact:

SOLID Training Solutions
1747 North Market Blvd, Ste. 270
Sacramento, CA 95834
(916) 574-8316
SOLID@dca.ca.gov

Board Member Disciplinary Actions
(Board Policy)

The Board may censure a member if, after a hearing before the Board, the Board determines that the member has acted in an inappropriate manner.

The President of the Board shall sit as President of the hearing unless the censure involves the President's own actions, in which case the Vice President of the Board shall sit as President. In accordance with the Open Meeting Act, the censure hearing shall be conducted in open session.

Removal of Board Members
(BPC Section 1605)

The Governor has the power to remove from office at any time any member of any Board appointed by him or her for continued neglect of duties required by law or for incompetence or unprofessional or dishonorable conduct. The Governor may also remove from office a Board member whom directly or indirectly discloses examination questions to an applicant for examination for licensure. That member would also be subject to a misdemeanor violation (B&P Code 123).

Resignation of Board Members
(Government Code Section 1750)

In the event that it becomes necessary for a Board member to resign, a letter shall be sent to the appropriate appointing authority (Governor, Senate Rules Committee, or Speaker of the Assembly) with the effective date of the resignation. State law requires written notification. A copy of this letter shall also be sent to the director of the Department, the Board President, and the Executive Officer.

Conflict of Interest
(Government Code Section 87100)

No Board member may make, participate in making or in any way attempt to use his or her official position to influence a governmental decision in which he or she knows or has reason to know he or she has a financial interest. Any Board member who has a financial interest shall disqualify him or herself from making or attempting to use his or her official position to influence the decision. Any Board member who feels he or she is entering into a situation where there is a potential for a conflict of interest should immediately consult the Executive Officer or the Board's legal counsel.

Honoraria Prohibition
(Government Code Section 89502)

As a general rule, members of the Board should decline honoraria for speaking at, or otherwise participating in, professional association conferences and meetings. A member of a state Board is precluded from accepting an honorarium from any source, if the Board member would be required to report the receipt of income or gifts from that source on his or her statement of economic interest.

There are limited exceptions to the honoraria prohibition. The acceptance of an honorarium is not prohibited under the following circumstances: (1) when a honorarium is returned to the donor (unused) within 30 days; (2) when an honorarium is delivered to the State Controller within thirty days for donation to the General Fund (for which a tax deduction Is not claimed); and (3) when an honorarium is not delivered to the Board member, but is donated directly to a bona fide charitable, educational, civic, religious, or similar tax exempt, non-profit organization.

In light of this prohibition, Board members should report all offers of honoraria to the Board President, so that he or she, in consultation with the EO and staff counsel, may determine whether the potential for conflict of interest exists.

Paid Travel to Attend Meeting Unrelated to Board Business
(Government Code Section 89506)

In general, payments by a third party for a public official's travel are considered a gift, subject to the per year gift limit and must be reported by the official on his or

her statement of economic interests; however, there are exceptions to this rule. Pursuant to *Government Code Section 89506, p*ayments, advances, or reimbursements, for travel, including actual transportation and related lodging and subsistence that is reasonably related to a legislative or governmental purpose, or to an issue of state, national, or international public policy, are not prohibited and are not subject to the per year gift limit if either of the following apply:

(1) The travel is in connection with a speech given by the elected state officer, local elected officeholder, candidate for elected state office or local elected office, an individual specified in Section 87200, **member of a state board or commission**, or designated employee of a state or local government agency, the lodging and subsistence expenses are limited to the day immediately preceding, the day of, and the day immediately following the speech, and the travel is within the United States.

(2) The travel is provided by a government, a governmental agency, a foreign government, a governmental authority, a bona fide public or private educational institution, as defined in Section 203 of the Revenue and Taxation Code, a nonprofit organization that is exempt from taxation under Section 501(c)(3) of the Internal Revenue Code, or by a person domiciled outside the United States which substantially satisfies the requirements for tax-exempt status under Section 501(c)(3) of the Internal Revenue Code.

Keep in mind that the rules regarding financial conflicts of interest are complex, and, therefore, Board members should contact the DCA Ethics Officer at (916) 574-8220 for assistance.

Contact with Candidates
(Board Policy)

Board members shall not intervene on behalf of a candidate for licensure for any reason. They should forward all contacts or inquiries to the Executive Officer or Board staff.

Gifts from Candidates
(Board Policy)

Gifts of any kind to Board members or the staff from candidates for licensure with the Board shall not be permitted.

Request for Records Access
(Board Policy)

No Board member may access the file of a licensee or candidate without the Executive Officer's knowledge and approval of the conditions of access. Records or copies of records shall not be removed from the DBC's office.

Ex Parte Communications
(Government Code Section 11430.10 et seq.)

The Government Code contains provisions prohibiting *ex parte* communications.

An “ex parte” communication is a communication to the decision-maker made by one party to an enforcement action without participation by the other party. While there are specified exceptions to the general prohibition, the key provision is found in subdivision (a) of section 11430.10, which states:

> “While the proceeding is pending, there shall be no communication, direct or indirect, regarding any issue in the proceeding to the presiding officer from an employee or representative of an agency that is a party or from an interested person outside the agency, without notice and an opportunity for all parties to participate in the communication.”

Board members are prohibited from an *ex parte* communication with Board enforcement staff while a proceeding is pending.

Occasionally an applicant who is being formally denied licensure, or a licensee against whom disciplinary action is being taken, will attempt to directly contact Board members. If the communication is written, the person should read only far enough to determine the nature of the communication. Once he or she realizes it is from a person against whom an action is pending, they should reseal the documents and send them to the Chief of Enforcement.

If a Board member receives a telephone call from an applicant or licensee against whom an action is pending, he or she should immediately tell the person they cannot speak to them about the matter. If the person insists on discussing the case, he or she should be told that the Board member would be required to excuse him or herself from any participation in the matter. Therefore, continued discussion is of no benefit to the applicant or licensee.

If a Board member believes that he or she has received an unlawful *ex parte* communication, he or she should contact the Board’s legal counsel.

STATE OF CALIFORNIA
DEPARTMENT OF CONSUMER AFFAIRS
BUSINESS, CONSUMER SERVICES, AND HOUSING AGENCY • GOVERNOR EDMUND G. BROWN JR.
DENTAL BOARD OF CALIFORNIA
2005 Evergreen Street, Suite 1550, Sacramento, CA 95815
P (916) 263-2300 F (916) 263-2140 | www.dbc.ca.gov

MEMORANDUM

DATE	August 1, 2016
TO	Members, Dental Board of California
FROM	Karen Fischer, Executive Officer
SUBJECT	**Agenda Item 10:** Discussion and Possible Action Regarding Withdrawal of the Appointment of Shannon Chavez, MD, to the Southern California Diversion Evaluation Committee and; Recommendations for the Appointment of a Southern California Diversion Evaluation Committee Member

Dr. Shannon Chavez was appointed by the Board in March 2016 to fill the vacancy as a public member of the Southern Diversion Evaluation Committee (S-DEC). Board staff sent her the employment paperwork immediately after the March meeting. During an initial discussion with Dr. Chavez, she expressed concern when filling out the employment paperwork that compensation for this appointment might interfere with her disability retirement. She was asked to look into it with her accountant and to notify me of her decision. Since that conversation, I have tried to contact Dr. Chavez by telephone and email and she has not responded. She has not returned the employment paperwork.

Our legal counsel advises that the Board will need to withdraw the appointment before considering a replacement.

The Southern DEC completed interviews and recommends Dr. John Philip Bradford to fill the public member vacancy created with the withdrawal of the Chavez appointment. Dr. Bradford has satisfactorily established that he has the experience and knowledge in the evaluation and/or management of persons who have an alcohol or drug abuse impairment. His application is attached.

Thomas Stewart, DDS, the Board's Diversion Evaluation Program Liaison conducted a telephone interview with Dr. Bradford and will be able to speak to this recommendation.

<u>Action Requested</u>

1. Withdraw the Chavez appointment to the Southern DEC
2. Accept or reject the recommendation to appoint John Philip Bradford, DDS to fill the public member vacancy on the Southern DEC.

STATE OF CALIFORNIA
dca
DEPARTMENT OF CONSUMER AFFAIRS

STATE AND CONSUMER SERVICES AGENCY • GOVERNOR EDMUND G. BROWN JR.
Dental Board of California
2005 Evergreen Street, Suite 1550, Sacramento, California 95815
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DIVERSION EVALUATION COMMITTEE APPLICATION

(This form is a public record, but subject to the protection of the Information Practices Act)

Please Print or Type

Name John Philip Bradford
Address [redacted]
Phones (work) [redacted] (home) [redacted] (cell) [redacted]
Email [redacted]
Category for which you are applying:
[x] Dentist [ ] Dental Auxiliary [ ] Physician/Psychologist [ ] Public Member
Committee you wish to be on: [ ] Northern DEC [x] Southern DEC
California License Number: 44657 SSN [redacted]
(except for public member applicants)

In the space below, briefly summarize your professional, educational, and/or personal experience which documents your expertise:

I have extensive experience with the recovering community. I have participated with the recovering dental population for years both as a participant and as a volunteer. My years as a participant in the diversion program gives me unique insight into those who are active diversion members. I believe I can lend a balanced perspective to the DEC, considering the need to protect the public, preserve the integrity of the profession and help the participant see a path out of troubles related to addictive behavior.

I would consider it an honor to help out.

In the space below, give your philosophical beliefs relative to the treatment of chemical dependency.

I believe chemical dependency is a disease, progressive and chronic in nature. It can have a slow progression with periods of remission but inevitably returns aggressively unless arrested with a program centered on abstinence, participation in a recovering community and regular appraisal of self. Part of an effective recovery program is taking responsibility of for actions taken under the influence. As the saying goes, "We don't get in trouble for being crazy, just acting crazy." The diversion program is one way to account for inappropriate behavior.

The disease of addiction is real and must be treated honestly and thoroughly. The process of doing so can save the addict from future troubles while protecting those served by the dental community.

I HAVE READ AND UNDERSTAND THE REPONSIBILITIES, TIME COMMITMENTS, AND REIMBURSEMENT OF DIVERSION EVALUATION COMMITTEE MEMBERS.

Signature _____ Date 9-30-15

SUBMIT COMPLETED APPLICATION AND RESUME TO:

Lori Reis
Dental Board of California
2005 Evergreen Street, Suite 1550
Sacramento, CA 95815

INFORMATION COLLECTION AND ACCESS

The information requested herein is mandatory and is maintained by Executive Officer, Dental Board of California, 2005 Evergreen Street, Suite 1550, Sacramento, CA 95815, 916-263-2300, in accordance with Business & Professions Code, §1600 et seq. Except for Social Security numbers, the information requested will be used to determine eligibility. Failure to provide all or any part of the requested information will result in the rejection of the application as incomplete. Disclosure of your Social Security number is mandatory and collection is authorized by §30 of the Business & Professions Code and Pub. L 94-455 (42 U.S.C.A. §405(c)(2)(C)). Your Social Security number will be used exclusively for tax enforcement purposes, for compliance with any judgment or order for family support in accordance with Section 17520 of the Family Code, or for verification of licensure or examination status by a licensing or examination board, and where licensing is reciprocal with the requesting state. If you fail to disclose your Social Security number, you may be reported to the Franchise Tax Board and be assessed a penalty of $100. The official responsible for information maintenance is the Executive Officer (916) 263-2300, 2005 Evergreen Street, Suite 1550, Sacramento, California 95815.To comply each individual has the right to review the personal information maintained by the agency unless the records are exempt from disclosure. Your name and address listed on this application will be disclosed to the public upon request if and when you become licensed.

STATE OF CALIFORNIA
DEPARTMENT OF CONSUMER AFFAIRS

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MEMORANDUM

DATE	August 2, 2016
TO	Dental Board of California
FROM	Tina Vallery, Licensing Analyst
SUBJECT	**Agenda Items 11:** Discussion and Possible Action Regarding the Draft Report to the Legislature Regarding the California Portfolio Pathway to Licensure Program in Accordance with Business and Professions Code Section 1632.6(a).

Pursuant to Business and Professions Code Section 1632.6, the Dental Board of California (Board) is required to review the Portfolio Examination to ensure compliance with the requirements of Business and Professions Code Section 139 and to certify that the Portfolio Examination meets those requirements. If the Board determines that the Portfolio Examination fails to meet those requirements, the Portfolio Examination will cease to be implemented and it will no longer be an option for applicants. The Board's review and certification or determination is required to be completed and submitted to the Legislature and the Department of Consumer Affairs by December 1, 2016.

Pursuant to Business and Professions Code Section 139 establishes the requirements for the Department of Consumer Affairs to develop a policy regarding examination development and validation, and occupational analysis. Additionally, Section 139 requires that every regulatory board and bureau within the Department of Consumer Affairs is required to submit to the Director on or before December 1st annually, its method for ensuring that every licensing examination administered by or pursuant to the contract with the board is subject to periodic evaluation. The evaluation is required to include a description of the occupational analysis serving as the basis for the examination, sufficient item analysis data to permit a psychometric evaluation of the items, an assessment of the appropriateness of prerequisites for admittance to the examination, an estimate of the costs and personnel required to perform these functions. The evaluation may be conducted by the Board, program, or bureau, the Department of Consumer Affairs' Office of Professional Examination Services, or pursuant to a contract with a qualified private testing firm. A board, program, or bureau that provides for the development or administration of a licensing examination pursuant to contract with a public or private entity may rely on an occupational analysis or item analysis conducted by that entity.

Board staff has drafted the following report for the Board's review and consideration.

Please note that the report references the following attachments:

1. “Alternative Pathways for Initial Licensure for General Dentists, Final Report”, Prepared by Comira, February 9, 2009

2. “Portfolio Examination to Qualify for California Dental Licensure”, Prepared by Comira, December 1, 2009

3. Assembly Bill 1524 (Chapter 446, Statutes of 2010)

4. “Development and Validation of a Portfolio Examination for Initial Dental Licensure”, Prepared by PSI Services LLC, May 10, 2013

5. California Code of Regulations, Title 16, Sections 1028 through1036.01

In the interest of conserving paper resources due to their volume, these attachments will only be included in the electronic meeting materials. The attachments will not be included in the hard copy meeting materials.

Action Requested:
Staff requests that the Board review and consider the attached draft of the report.

DENTAL BOARD OF CALIFORNIA

REPORT ON THE PORTFOLIO EXAMINATION AS PROVIDED BY BUSINESS AND PROFESSIONS CODE SECTION 1632.6

Draft – August 2, 2016

DENTAL BOARD OF CALIFORNIA

Steven Morrow, DDS, President

Judith Forsythe, RDA, Vice President

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Thomas Stewart, DDS

Bruce L. Whitcher, DDS

Debra Woo, DDS

EXECUTIVE OFFICER

Karen M. Fischer

Report Prepared by:
The Dental Board of California
2005 Evergreen Street, Suite 1550
Sacramento, CA 95815
Telephone: (916) 263-2300
FAX: (916) 263-2140

Introduction

Pursuant to Business and Professions Code Section 1632.6, the Dental Board of California (Board) is required to review the Portfolio Examination to ensure compliance with the requirements of Business and Professions Code Section 139 and to certify that the Portfolio Examination meets those requirements. If the Board determines that the Portfolio Examination fails to meet those requirements, the Portfolio Examination will cease to be implemented and it will no longer be an option for applicants. The Board's review and certification or determination is required to be completed and submitted to the Legislature and the Department of Consumer Affairs by December 1, 2016.

Business and Professions Code Section 139 establishes the requirements for the Department of Consumer Affairs to develop a policy regarding examination development and validation, and occupational analysis. Additionally, Section 139 requires that every regulatory board and bureau within the Department of Consumer Affairs submit to the Director on or before December 1st annually, its method for ensuring that every licensing examination administered by or pursuant to the contract with the board is subject to periodic evaluation. The evaluation is required to include a description of the occupational analysis serving as the basis for the examination, sufficient item analysis data to permit a psychometric evaluation of the items, an assessment of the appropriateness of prerequisites for admittance to the examination, and an estimate of the costs and personnel required to perform these functions. The evaluation may be conducted by the Board, program, or bureau, the Department of Consumer Affairs' Office of Professional Examination Services, or pursuant to a contract with a qualified private testing firm. A board, program, or bureau that provides for the development or administration of a licensing examination pursuant to contract with a public or private entity may rely on an occupational analysis or item analysis conducted by that entity.

The Board is submitting this report on the Portfolio Examination pursuant to Business and Professions Code (Code) Section 1632.6 (Assembly Bill 1524, Chapter 446, Statutes of 2010). The statute requires a report to be submitted by December 1, 2016.

Examination Validation & Development

In 2008, the Board began considering alternative pathways for initial licensure for dentists and contracted with Comira, a psychometric consulting company, to explore the feasibility of those pathways. The Board had concerns about existing clinical examinations, especially in terms of validity of the content tested and the reliability of judgments made on examinee performance. Comira identified four alternatives to initial licensure based on interviews, observations, and documentation; those alternatives were: (1) Curriculum Integrated Format (CIF), (2) Objective Standardized Clinical Examination (OSCE), (3) traditional portfolio, and (4) a hybrid portfolio examination. The hybrid portfolio examination was an alternative based upon the synthesis of the traditional portfolio and test cases (or competency cases) used in the dental schools for competency evaluations.

Comira studied the feasibility of these alternative pathways in consultation with the Board-approved pre-doctoral dental schools located in California. In February 2009,

Comira prepared a report for the Board entitled *Alternative Pathways for Initial Licensure for General Dentists, Final Report, February 9, 2009* which provided findings and evidence to support the feasibility of an additional examination for the Board to add as a pathway to initial licensure. The report supported the conclusion that the hybrid portfolio examination model satisfied the criteria identified by the Board and the psychometric consultants. Minimum competence could be built into standardized rating scales and extensive calibration and re-calibration of the examiners would address psychometric issues such as reliability and validity. Psychometric issues of validity and reliability could be addressed through careful specification of standards, criteria and scoring guides, and thorough calibration and training of designated examiners. The Board would be responsible for final approval of portfolio information, conducting site visits, and performing periodic audits of detailed portfolio documentation.

Comira concluded that the most noticeable strength of the Board-approved pre-doctoral dental schools located in California was the thoroughness of their clinical training and the commitment of their faculty to the students. The faculty understood the distinction between their role as a mentor and as an examiner in that there was no intervention during any competency examination unless the patient was in danger of being harmed. All of the dental school's programs had extensive training to calibrate their examiners, including detailed PowerPoint presentations, trial grading sessions, and training and mentorship of new examiners with experienced examiners. There were rating systems in place at each of the schools which evaluated the same competencies; however, the rating systems for key competencies would require standardization across schools in order to interpret the scores derived from the competency examinations on a common metric. Calibration to these rating systems would need to be implemented as well. The involvement of independent parties to make decisions about minimum competence could ensure fairness of ratings if faculty from other departments within the school and/or faculty from other schools are used in the rating process.

Comira also noted that there are important advantages of using actual patients of record within the dental schools instead of simulated (manikin) patients. First, procedures are performed as part of treatment thereby eliminating circumstances fostering commercial procurement of patients, particularly the cost of such patients. Second, the safety and protection of patients is ensured because procedures are performed in the course of treatment. Third, candidates would be treated similarly at all of the dental schools in a manner that allows communication of examination logistics and results.

Subsequently, Comira prepared an additional report for the Board entitled *Portfolio Examination to Qualify for California Dental Licensure, December 1, 2009* which defined the competencies to be tested in the portfolio examination and provided background research for the examination's implementation process. Comira had conducted focus groups of key faculty from the Board-approved pre-doctoral dental schools located in California to identify the competencies to be assessed in a systematic way beginning with an outline of major competency domains and ending with a detailed account of major and specific competencies organized in outline fashion. All participants provided input in a systematic, iterative fashion, until consensus was achieved. The competencies

identified from this report served as the framework for the evaluation system, training and calibration procedures for examiners, and audit procedures for evaluating the efficacy of the final process.

Using the findings of these two reports, the Board sponsored legislation, Assembly Bill 1524, during the 2009-2010 Legislative Session. Assembly Bill 1524 was authored by Assembly Member Mary Hayashi and eliminated the clinical and written examination administered by the Board and replaced it with a portfolio examination of an applicant's competence to enter the practice of dentistry, to be conducted while the applicant is enrolled in a Board-approved dental school located in California. The bill required the portfolio examination to utilize uniform standards of clinical experiences and competencies as approved by the Board. The bill provided that at the end of that dental school program, the passage of a final assessment of the applicant's portfolio was required, subject to certification by his or her dean and payment of a $350 application fee. The bill specified that the portfolio examination could not be conducted until the Board adopted regulations to implement the portfolio examination. The bill required the Board to oversee the portfolio examination and final assessment process, and required the Board to biennially review each dental school with regard to the standardization of the portfolio examination. The bill also set forth specified examination standards, including direction for the Board to consult with the Board-approved dental schools located in California to approve portfolio examination competencies and the minimum number of clinical experiences necessary for the successful completion of the portfolio examination. The bill specified that the Board would require and verify successful completion of competency examinations that were performed on a patient of record of the dental school, including, but not limited to, the following: (1) comprehensive oral diagnosis and treatment planning, (2) periodontics, (3) direct restorations, (4) indirect restorations, (5) removable prosthodontics, and (6) endodontics. On September 29, 2010, Governor Arnold Schwarzenegger signed Assembly Bill 1524 (Chapter 446, Statutes of 2010), enacting the portfolio examination pathway to dentistry licensure in California.

Once the Board received its statutory authority to implement the portfolio examination via Assembly Bill 1524, the Board once again contracted with the same psychometric consultants, who moved from Comira to PSI Services LLC, to work with the Board-approved dental schools located in California to develop the final framework and write the report entitled *Development and Validation of a Portfolio Examination for Initial Dental Licensure, May 1, 2013* for the Board to utilize in the development of proposed regulations to implement the portfolio examination. The Board-approved dental schools located in California include: (1) Loma Linda University, (2) University of California, Los Angeles, (3) University of California, San Francisco, (4) University of the Pacific, (5) University of Southern California, and (6) Western University of Health Sciences. Using the information contained in the report, proposed regulatory language was developed and the Board voted to initiate the rulemaking process on August 26, 2013.

Implementation

At its August 2013 meeting, the Dental Board of California (Board) approved proposed regulatory language relative to the Portfolio Examination Requirements and directed staff to initiate the rulemaking. Board staff filed the initial rulemaking documents with the Office of Administrative Law (OAL) on Tuesday, October 29th and the proposal was published in the California Regulatory Notice Register on Friday, November 8, 2013. The 45-day public comment period began on Friday, November 8, 2013 and ended on Monday, December 23, 2013. The Board held a regulatory hearing in Sacramento on Monday, January 6, 2014.

The Board received notification that the regulatory package was signed by the Secretary of State on November 5, 2014 and became effective immediately.

The Board-approved dental schools located in California were notified in December 2014 that they could begin the implementation of the Portfolio pathway to licensure and the calibration of the examiners at their schools. The schools received a reference binder that included a copy of the applicable legislation, the Candidate and Examiner Handbooks, the regulatory requirements, and all applicable forms. The schools also received a compact disc that included everything that was in the reference binder as well as the Board-approved calibration courses.

In June 2015 the Board received its first applications from candidates that had completed the requirements to obtain their license through the Board's Portfolio Examination pathway.

Table 1 illustrates the number of applications submitted to the Board in 2015 and 2016. It also indicates how many were received from each of the participating schools.

In 2015, seven (7) applicants applied for a license through the portfolio pathway. One (1) application was received from the University of California, San Francisco. Six (6) applications were received from the University of the Pacific.

In 2016, thirty (30) applicants applied for a license through the portfolio pathway. Twelve (12) applications were received from the University of California, San Francisco. Sixteen (16) applications were received from the University of the Pacific. Two (2) applications were received from the University of Southern California.

Table 1: Persons applying for a license through the Portfolio pathway

Application Status	2015	2016
Total Applications Received	**7**	**30**
Loma Linda University	0	0
University of California, Los Angeles	0	0
University of California, San Francisco	1	12
University of the Pacific	6	16
University of Southern California	0	2

Western University of Health Sciences	0	0

Table 2 illustrates the number of licenses issued by the Board during 2015 and 2016 to the applicants that applied through the Board's Portfolio Examination pathway.

In 2015, seven (7) licenses were issued to applicants applying through the Board's Portfolio Examination pathway to licensure. One (1) license was issued to a graduate of the University of California, San Francisco. Six (6) licenses were issued to graduates of the University of the Pacific.

Please note: Board staff is processing the last remaining Portfolio Examination applications received in 2016. All applications are expected to be processed by the beginning of September. Once final licensing numbers may be tabulated, staff will update Table 2 with the 2016 statistics.

Table 2: Licenses Issued by the Board to persons that applied through the Portfolio pathway

	2015	2016
Total Number of Licenses Issued	**7**	
Loma Linda University	0	
University of California, Los Angeles	0	
University of California, San Francisco	1	
University of the Pacific	6	
University of Southern California	0	
Western University of Health Sciences	0	

Materials Relied Upon (Attachments)

1. "Alternative Pathways for Initial Licensure for General Dentists, Final Report", Prepared by Comira, February 9, 2009
2. "Portfolio Examination to Qualify for California Dental Licensure", Prepared by Comira, December 1, 2009
3. Assembly Bill 1524 (Chapter 446, Statutes of 2010)
4. "Development and Validation of a Portfolio Examination for Initial Dental Licensure", Prepared by PSI Services LLC, May 10, 2013
5. California Code of Regulations, Title 16, Sections 1028 through1036.01

Findings

The Board's Portfolio Examination is in compliance with Business and Professions Code Section 139 in that the current examination requirements are based on the report entitled "Development and Validation of a Portfolio Examination for Initial Dental Licensure, May 10, 2013", prepared by PSI Services LLC, a psychometric contractor hired by the Board

to conduct the analysis and evaluation. This report included the basis for the Portfolio Examination, item analysis to permit a psychometric evaluation of the items, and an assessment of the appropriateness of the prerequisites for admittance to the examination. The Board implemented these requirements provided in the report via regulations. The regulations prescribe the following requirements for the Board's Portfolio Examination:

- Portfolio Examination eligibility requirements;
- Requirements for the demonstration of clinical experience;
- Requirements for clinical experiences and competency examinations for Oral Diagnosis and Treatment Planning;
- Requirements for clinical experiences and competency examinations for Direct Restorations;
- Requirements for clinical experiences and competency examinations for Indirect Restorations;
- Requirements for clinical experiences and competency examinations for Removable Prosthodontics;
- Requirements for clinical experiences and competency examinations for Endodontics;
- Requirements for clinical experiences and competency examinations for Periodontics;
- Qualification requirements for Portfolio Examination competency examiners;
- Training requirements for Portfolio Examination competency examiners;
- General procedures and policies for the Portfolio Examination;
- Portfolio competency examination grading requirements; and,
- Remedial education requirements for Portfolio competency examinations.

Certification/Evaluation

The Board certifies that its Portfolio Examination pathway to dental licensure is in compliance with Business and Professions Code Section 139 and recommends the continuance of the pathway as a viable option for candidates seeking dental licensure in the State of California. Additionally, the Board will continue an ongoing evaluation of the Portfolio Examination by performing examination audits and maintaining current and relevant examiner calibration.

ALTERNATIVE PATHWAYS FOR INITIAL LICENSURE FOR GENERAL DENTISTS

SUBMITTED TO

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California Department of Consumer Affairs
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FINAL REPORT

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SECTION 1: INTRODUCTION

BACKGROUND

The Dental Bureau of California is considering alternative pathways to initial licensure, and, in 2008, the Bureau contracted with Comira to explore the feasibility of those pathways. There have been many concerns about existing clinical examinations, particularly in terms of validity of the content tested and reliability of the judgments made about candidate performance. Chambers (2004a) cites the difficulties of "one-shot" clinical examinations in terms of cost effectiveness, fairness, reliability and validity despite efforts to improve them. He states that "one-shot" examinations have unknown validity, expose the public to an unnecessary level of risk, and fail to sample the full range of competencies. The California Dental Association has adopted a policy in 2005 that "supports elimination of human subjects/patients in the clinical licensure process with the exception of the alternative methods of licensure examinations that are carried out within the dental schools' curricula."

Based on interviews, observations, and documentation, four alternatives to initial licensure were identified. They were Curriculum Integrated Format (CIF), Objective Standardized Clinical Examination (OSCE), traditional portfolio, and a hybrid portfolio examination. The hybrid portfolio examination is an alternative based upon the synthesis of the traditional portfolio and test cases (or competency cases) used in the dental schools for competency evaluations.

Two formats in particular, portfolio and the OSCE have been used successfully in Canada and the United Kingdom for credentialing medical and dental professionals. Chambers (2004a, 2004b) and others advocate the use of clinical portfolios because portfolios provide a more fair, less costly method for assessment. Moreover, portfolios use more data, more diverse data, and data of a higher quality than is currently used. Chambers (2004b) states that "because attempts to improve initial licensure examinations have not been founded in measurement theory, partial and inadequate remedies have led to a cycle of refutations, defenses and political polarization (p. 173)." The OSCE is becoming more widely used in dentistry, particularly for summative assessments in coursework at institutions such as the Royal London School of Medicine and Dentistry and Leeds Dental Institute. The National Dental Examining Board of Canada (NDEB) began to include OCSE as part of the certification process in 1994. To this day, the NDEB uses the OSCE in lieu of actual patients for clinical assessments.

PURPOSE OF THE STUDY

The purpose of the study is to explore alternative pathways to initial licensure and make recommendations as to their merits.

CRITERIA FOR SUCCESS

The following criteria, some of which have been identified by the California Dental Association (CDA, 2008) and Webb, Endacott, Gray, Jasper, McMullan & Scholes (2003) are critical elements for implementing an alternative pathway for initial licensure:

1. Oversight maintained by the Dental Bureau/Board of California

2. Built-in system for auditing the process

3. Does not require additional resources from the students, schools, or the Dental Bureau/Board of California

4. Must be instituted within the current systems of student evaluation

5. Must be considered an examination that meets all professional testing standards

6. Meets psychometric standards, relevant to current practice, and designed for minimum competence

7. Is designed to cover the full continuum of competence

8. Evaluation of competence is within the course of treatment plan for patients of record

9. Evaluators are regularly calibrated for consistent implementation of the alternative examination

10. Has policies and procedures that treat licensure candidates fairly and professionally, with timely and complete communication of examination logistics and results

PSYCHOMETRIC STANDARDS

The Standards for Educational and Psychological Testing (1999) set forth by the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education serve as the standards for evaluating all aspects of credentialing, including professional and occupational credentialing. The Standards are used by the measurement profession as the psychometric standards for validating all examinations, including licensing and certification examinations.

SECTION 2: RESEARCH STRATEGY

GENERAL APPROACH

In order for the study to be thorough and objective, it was necessary to contact deans, associate deans, and key faculty at the five Bureau-approved dental schools to gain an understanding of their predoctoral programs for general dentists. Comira conducted interviews with the deans and key faculty in charge of competency examinations by telephone and/or met with them at their schools. Comira also extensively reviewed written documentation regarding the examinations to gain insights into the procedures used in competency examinations and associated scoring systems.

ASSUMPTIONS

The occupational analysis conducted by the Office of Examination Resources at the California Department of Consumer Affairs identified the competencies of general dentists and served as the basis for the Board's examination program. The Board requires individuals seeking licensure to pass written and clinical examinations in order to become licensed in California.

Discussion of existing pathways, such as PGY-1, Western Regional Examining Board (WREB), programs for internationally-trained practitioners, or the Dental Bureau's clinical examination were not included as part of this report.

TERMINOLOGY

A "competency examination" differs from a laboratory practical exercise or a clinical examination conducted as part of coursework, in that the competency examination is performed without intervention by faculty. The job of faculty is to determine the student's competence through a procedure and stop the examination only if the patient would be harmed.

A "test case" or "evaluation case" refers to the patients used within each school's competency examinations. The student dentist is required to follow strict guidelines in selecting patients for competency examinations, and cannot proceed with any treatment without faculty approval.

APPLICABLE PSYCHOMETRIC STANDARDS

The Standards for Educational and Psychological Testing (1999) use the term "test" broadly and include credentialing procedures as well as actual examinations.

Standard 14.8 states:

"Evidence of validity based on test content requires a thorough and explicit definition of the content domain of interest. For selection, classification, and promotion, the characterization of the domain should be based on a job analysis (p. 160)."

Standard 14.9 states:

"When evidence of validity based on test content is a primary source of validity evidence in support of the use of a test in selection or promotion, a close link between test content and job content should be demonstrated (p. 160)."

Standard 14.10 states:

"When evidence of validity based on test content is presented, the rationale for defining and describing a specific job content domain in a particular way (e.g., in terms of tasks to be performed or knowledge, skills, abilities or other personal characteristics) should be stated clearly (p. 160)."

Standard 14.13 states:

"When decision makers integrate information from multiple tests or integrate test and nontest information, the role played by each test in the decision process should be clearly explicated, and the use of each test or test composition should be supported by validity evidence (p. 161)."

Standard 14.14 states:

"The content domain to be covered by a credentialing test should be defined clearly and justified in terms of the importance of the content for credential-worthy performance in an occupation or profession. A rationale should be provided to support the claim that the knowledge or skills being assessed are required for credential-worthy performance in an occupation and are consistent with the purpose for which the licensing or certification program was instituted (p. 161)."

TASKS ACCOMPLISHED

There were four tasks performed as part of the present study:

(a) Perform background research and literature review of material related to alternative pathways and their psychometric characteristics;

(b) Interview SMEs, observe school practices and examinations at Bureau-approved dental schools;

(c) Identify competency statements in Bureau-approved dental schools; and,

(d) Identify underlying constructs and compare clinical competencies tested in Bureau-approved dental schools according to those constructs.

SECTION 3: ALTERNATIVE PATHWAYS

CURRICULUM INTEGRATED FORMAT

Definition. The curriculum integrated format (CIF) is described on page 5 of "Information for the New Graduate" (American Dental Association, 2008) as:

"…clinical examinations that use simulated patients (manikins). The CIF examinations are administered to senior dental students of record beginning with the simulated examinations early in the senior year and the restorative and periodontal examinations early in the second semester of the senior year. It allows dental students to take the examination in sections spread out across their last year of dental school, instead of taking all four parts at the very end of senior year. Candidate scores are reported to their dental school administration for the purpose of student remediation. Students can be eligible for licensure by the time of graduation, which means that they can begin planning their transition out of dental school several weeks earlier than those whose exams are near graduation and have to wait eight weeks for scores. As of fall 2006, all schools in the Central Regional Dental Testing Services (CRDTS), Northeast Regional Board of Dental Examiners (NERB), and Council of Interstate Testing Agencies (CITA) utilize CIF in their clinical licensure examination….Students often have three opportunities to pass the CIF before graduation."

All states and jurisdictions that use the CRDTS or NERB examinations use CIF examinations.

Disadvantages of CIF. Elliot (2008) states that the use of manikins, as in the CIF, provides standardization of the level of treatment difficulty. However, manikins present the same dilemma as actual patients in traditional clinical examinations because only a narrow range of examination procedures are performed.

OBJECTIVE STRUCTURED CLINICAL EXAMINATION

Definition. The Objective Structured Clinical Examination (OSCE) requires candidates to rotate through a series of stations in which they must perform specific tasks such as review information supplied in a specified period of time, e.g., case history, photographs, radiographs, casts, models) and answer extended matching type questions. Each extended matching type question involves up to 15 questions and one or more correct answers. Some stations require the candidate to write a prescription for a patient, based on information about a specific case. There are no actual patients used at any of the stations. One organization (Accreditation Council for Graduate Medical Education, 2000) describes the OSCE as very useful to measure specific

clinical skills and abilities, but difficult to create and administer and cost effective only when many candidates are to be examined in one administration.

Disadvantages of OSCE. Zartman, McWhorter, Seale, and Boone (2002) use the OSCE format to assess the effectiveness of their pediatric dentistry program at the Baylor College of Dentistry. They indicated that during their transition into the OSCE format, there were several changes that were necessary for format to work.

First, the logistics of developing and administering the examination were time consuming. There were considerations that had to be made for the size of group to be assessed, the amount of space available, and the time limits for administration. Second, there were modifications that had to be made to the curriculum based on the feedback they received from students regarding what were considered basic concepts. Third, there was a great deal of student anxiety about the impending changes in curriculum format. Faculty responded to the students' anxiety by creating modules similar to the OSCE format within the curriculum. Fourth, the candidate data from the OSCE stations were scored by a number of scorers. In a number of cases, the faculty had to develop a standardized methodology to score the examinations.

Nonetheless, there have been studies exploring psychometric qualities of the OSCE. Gerrow, Murphy, Boyd, and Scott (2003) explored the reliability of the written and OSCE components of the certification process for 2,317 graduating dental students in Canada. Candidate data from the examinations were entered into a database along with their year of graduation, school, and performance in the final year. They found statistically significant correlation coefficients between the written and OSCE examinations, but the correlations only explained 20% of the variation in class rankings.

TRADITIONAL PORTFOLIO

Definition. Portfolios in the arts or humanities-based education often include evidence of self-assessment; however, when used for regulatory purposes, the definition is much narrower. For example, Reckase (1995, p. 12) defines a portfolio as a "purposeful collection of student work that exhibits to the student and/or others the student's efforts, progress, or achievement in (a) given area(s). This collection must include student participation in selection of portfolio content, criteria for selection, criteria for judging merit, and, evidence of student self-reflection." He notes that this definition is intended to develop a hypothetical application of portfolio assessment.

By contrast, a clinical portfolio assesses performance in contexts that simulate clinical settings. Challis (2001) points out that "if portfolio is to be used for assessment; there should be total clarity on the part of the learner and assessor as to the purpose of the portfolio, why this method is being used, and what criteria the assessors will be using to make judgments about the portfolio. Achieving this clarity will require a climate of trust and partnership between learners and assessors, whilst still accepting that judgments will need to made about learner progress and achievement (p. 438-439)."

The portfolio is often organized by competencies, unlike the portfolios used in non-clinical settings, e.g., undergraduate education in the arts or humanities. The Accreditation Council on Graduate Medical Education describes portfolios as tools to measure competence according to six outcomes: patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice (Jarvis, O'Sullivan, McClain, & Clardy, 2004).

Lettus, Mosessner, and Dooley (2001) define a portfolio as a collection of work or materials that demonstrates growth over time and a file or collection of original work or documents that support the work. Its strength is its ability to capture learning over time, to allow for a genuine link to clinical situations, and to provide a framework for students to assess their strengths and weaknesses. These authors acknowledge that the development of some standard portfolio requirements for registered nurses with well-trained reviewers can alleviate the challenges posed by the need to evaluate student work within the educational setting.

Another definition of a portfolio was recently proposed by the Dental Bureau of California (2007) as a collection of verified clinical experiences based on results of competency examinations in diagnosis and treatment planning, periodontics, direct and indirect restorative, prosthodontics, and endodontics. Each candidate who wishes to obtain initial licensure by competency would be required to have performed a specific number of clinical experiences prior to submitting a portfolio. Each portfolio would be evaluated by a team of examiner-auditors from the Bureau and a team of clinical competency evaluators/instructors from the schools.

Elliott (2008) describes portfolios as "the use of live patients in a third-party evaluation developed during the educational process. In a portfolio, students provide examples of evidence (patient experiences) to support and document their claims of clinical competency, based on their institutional program's competencies.

<u>Psychometric issues relating to the use of portfolios.</u> If used for summative rather than formative purposes, the portfolio must meet stringent psychometric requirements that include standardization, rater training with structured guidelines for making decisions, and large numbers of examiners to average out rater effects (Driessen, van der Vleuten, Schuwirth, Tartwijk & Vermunt, 2005, p. 215; Davis & Ponnamperuma, 2005, Friedman Ben-David, Davis, Harden, Howie, Ker, & Pippard, 2001). Friedman Ben-David et al. note that the validity of the inferences made about the portfolio depend on the reliability of the test. If the test scores or ratings suffer from low inter-rater agreement or poor sampling, inferences cannot be made. Moreover, there should be a clear definition of the purpose of the portfolio and identification of the competencies to be assessed. Webb, et al (2003) and McMullan (2003) cite several criteria that should be used to evaluate portfolio assessments, namely, explicit grading criteria, evidence from a variety of sources, internal quality assurance processes, and external quality assurance processes.

Content validity is also important in developing an examination for initial licensure (Chambers, 2004a) such that there should be a validation process that inquires whether tasks being evaluated should be representative of tasks critical to safe and effective practice. A recent paper by Patterson, Ferguson, and Thomas (2008) in Medical Education also calls for validation of the process in terms of using a job analysis to identify core and specific competencies.

A recent paper entitled "Point/Counterpoint: Do portfolio assessments have a place in dental licensure?" addresses many of these issues specifically as they pertain to the purpose of licensure rather than education in general (Hammond & Buckendahl, 2006; Ranney & Hambleton, 2006).

Hammond and Buckendahl do not support the use of portfolios for dental licensure. Two issues are important in considering portfolio assessments. First, standardizing the training and evaluation across a broad range of locations would be difficult. Second, demonstrations of abilities in past records would need to be verified so that there is an evaluation of the current range of competencies. These authors contend that the portfolio does not provide an assessment of minimum skills that is administered *independent* of the training program to support licensure decisions; and therefore, provides no external validation and verification of the students' competence. Moreover, there may be measurement error, or low reliability, within the system as a result of errors in content sampling, number of observations of performance, number of examiners rating the candidate's performance, assumptions of unidimensional relationships between items, lack of inter-rater agreement, and reliance on pairs rather than triads of examiners for all candidates.

On the other hand, Ranney and Hambleton (2006) support the use of portfolios for dental licensure. According to these authors, testing agencies have published little or no data to allow an assessment of reliability of validity of their examinations. Variability in the reliability of clinical licensure examinations and pass rates among testing agencies may reflect lack of reliability or validity in the examination process, and, omission of skills necessary to practice safely at the entry level, not just changes in candidate populations. Furthermore, there is great dissatisfaction amongst dental school deans connected with the use of patients. The authors recognize that several criteria would need to be met before portfolio assessment could be implemented. The most important of these criteria are: administration by independent parties, inclusion of a full continuum of candidate competencies for comprehensive evaluation, and, evaluating competence within the context of a treatment plan designed to meet the patient's oral health care needs. In their discussion, the authors believe that portfolio assessments could work if the developers considered which tasks to measure, how the tasks would be scored, calibration protocols for examiners, and how performance expectations would be set.

Faculty concerns regarding portfolio process. Lettus et al. (2001) cite several faculty concerns regarding the portfolio process. First, was the structure and process of the portfolio. Second, was the students' ability to develop written portfolios that met

expected professional standards. Third, was the accuracy and legitimacy of the documentation. Fourth, was the inter-rater reliability of the examiners. These concerns are addressed by providing a structure and framework for the portfolio, a means to verify the authenticity of the information presented, and a well-defined rating system for use by examiners.

Student perceptions of portfolio process. Davis, Ponnamperuma and Ker (2009) identified and analyzed medical student attitudes in the United Kingdom to the portfolio process over time. They administered a questionnaire to Scottish medical students over a five-year period. They found that students perceived the portfolio heightened their understanding of learning outcomes and allowed them to reflect on their work. They concluded that the downside of portfolios was the excessive amount of paper evidence required. Davis, et al.'s findings concur with those of previous research (e.g., Spicuzza, 1996) that cite portfolio assessments as excellent tools to assess professional growth and instructional goals; however, they are difficult to score, not readily comparable, problematic in terms of reliability and validity, and time consuming.

Organizational research regarding portfolio. Pavlova, Tsiachristas, Vermaeten, and Groot (2008) conducted a pilot study of portfolios at a public hospital in the Netherlands and found potential barriers to the adoption of portfolio. First, the relative nature of the portfolio matrix should be interpreted such that there was a clear rationale for including or not including specific services in the portfolio and defined cut-off points for each service. Second, the strategic importance of information systems, which can affect an effective benchmarking process and improve the reliability of the information derived. Third, there needs to be a balance between simplicity and validity of the data collection. Fourth, the organizational culture may prevent immediate acceptance of the methodology and the overall adoption of portfolio. The authors cite that organizations may take a long time to understand portfolio and recognize its value.

Disadvantages. The portfolio may not address a student's current competence as an unsupervised practitioner, unless the competencies can be demonstrated independently at about the time the student wishes to enter practice.

HYBRID PORTFOLIO EXAMINATION MODEL

Definition. What are the distinguishing characteristics of the hybrid portfolio examination? First, it is considered a performance examination which assesses candidates' skills in commonly encountered clinical situations. Second, it includes components of clinical examination administered by the Bureau/Board or regional examining entity. Third, candidates' performance is measured according to the information provided in competency evaluations conducted in the schools by clinical faculty within the predoctoral program of education. Thus, the hybrid portfolio examination involves hands-on performance evaluations of clinical skills as evaluated within the candidates' program of dental education.

The hybrid portfolio model is designed to use the structure for student evaluation that currently exists within the schools to assess minimum competence. The faculty would observe the treatment provided and evaluate candidates according to consistent criteria developed by a consensus of key faculty from all of the dental schools. Each candidate would prepare a portfolio of documentation that provides proof of completion of competency evaluations for specific procedures such as amalgam/composite restoration, endodontics, fixed prosthetics, oral diagnosis and treatment planning, periodontics, radiography, and removable prosthodontics.

The hybrid model captures the strength of the traditional portfolio process but with the advantage of being integrated within the current educational process. During visits to the dental school clinics and interviews with faculty, it was clear that the dental schools were consistent in their methodology for assessing students' clinical skills. The faculty were calibrated and re-calibrated to ensure consistency in their evaluation of the student competencies and the processes used by the dental schools for assessing competencies was very similar. In every case, minimum competency was built into the rating scales used to evaluate students in their competency examinations.

Instead of developing a portfolio and having the portfolio evaluated, the hybrid portfolio model requires documentation of the test cases (or competency cases) which are competency evaluations assembled in either a paper or electronic format. The faculty examiners would have to attest to the ratings achieved by the students. The hybrid portfolio is built and evaluated in real time. The documentation for the portfolio is submitted in paper or electronic format. Each procedure is documented by type of procedure (e.g., periodontics, endodontics, prosthodontics, restorative).

The Dental Bureau would have access to the completed hybrid portfolios in order to complete audits of the documentation. The hybrid portfolio examination could serve as an alternative pathway based upon implementation of the issues described below in the next section (Section 5: Key Findings).

<u>Specific features</u>. The hybrid portfolio examination model addresses the criteria for success described in Section 1.

1. Oversight maintained by the Dental Bureau/Board of California

   The Dental Board/Bureau has the lawful responsibility to ensure that dentists who are licensed possess the competencies to practice safely and that responsibility cannot be delegated.

2. Built-in system for auditing the process

   Upon implementation, a system must be in place to audit the alternative pathway examination. The auditing system must be part of the design requirement of the alternative pathway examination. The auditing system must be designed such that

the Bureau/Board and the evaluators have defined responsibilities to ensure that the candidates who are successful are competent.

3. Does not require additional resources from the students, schools, or the Bureau/Board of California

   There are systems and procedures already in place in the dental schools. The structure of the systems and procedures are quite suitable for evaluating candidates' competence. The systems and procedures are very similar among the dental schools and, with collaboration among the schools, could create a common system.

4. Must be instituted within the current systems of student evaluation

   The standards and criteria for successful performance must be fully established by the schools and consistent application of the standards and criteria would take into account the tremendous amount of work undertaken to comprehensively evaluate the candidates' clinical skills in a variety of clinical situations.

5. Must be considered an examination and meet all professional testing standards

   Any method or system that evaluates performance and classifies candidates within a licensing context is considered an examination by professional testing standards and case law.

6. Meets psychometric standards, relevant to current practice, and designed for minimum competence

   Because the alternative pathway is an examination, it must meet legal standards as explicated in Sections 12944, Section 139, guidelines promulgated by the California Department of Consumers Affairs, and psychometric standards for examinations set forth by the Standards for Educational and Psychological Testing (1999).

7. Is designed to cover the full continuum of competence

   The alternative pathway examination must assess competencies throughout the course of treatment including oral diagnosis and treatment planning, follow-up and ongoing care, restorative (amalgam and composite restoration, fixed prosthetics), endodontics, periodontics, radiography, and removable prosthodontics.

8. Evaluation of competence is within the course of treatment plan for patients of record

   The competency of the candidates must be evaluated in the course of treatment of a client. The evaluation of competence should not be in an artificial or contrived situation as may be true when the services are solely for the purpose of training.

9. Evaluators are regularly calibrated for consistent implementation of the examination

   The evaluators who participate in the alternative pathway examination must be trained and calibrated to ensure that the standards and criteria do not vary across candidates. Each candidate must have a standardized examination experience.

10. Has policies and procedures that treat licensure candidates fairly and professionally, with timely and complete communication of examination logistics and results

    The alternative pathway examination must be designed such that candidates are knowledgeable of standards to which they are being held accountable and the procedures that they should follow in order to maximize success.

SECTION 4: CLINICAL COMPETENCIES ASSESSED

CLINICAL COMPETENCY STATEMENTS OF EACH SCHOOL

Key faculty from relevant departments at each of the schools were interviewed regarding the clinical dimensions of practice assessed in competency examinations within their predoctoral programs. All of the schools provided copies of their competency statements that were part of the documentation submitted to evaluators from the Commission on Dental Accreditation at the time of their accreditation site visits. As expected, all of the schools included competencies which met minimum standards set forth by the Commission on Dental Accreditation for predoctoral dental education programs (2007, p. 15): "At a minimum graduates must be competent in providing oral health care with the scope of general dentistry, as defined by the school, for the child, adolescent, adult, and geriatric patient, including:

a) Patient assessment and diagnosis;
b) Comprehensive treatment planning;
c) Health promotion and disease prevention;
d) Informed consent;
e) Anesthesia, and pain and anxiety control;
f) Restoration of teeth;
g) Replacement of teeth;
h) Periodontal therapy;
i) Pulpal therapy;
j) Oral mucosal disorders;
k) Hard and soft tissue surgery;
l) Dental emergencies;
m) Malocclusion and space management; and,
n) Evaluation of the outcomes of treatment.

Competency statements for each school are presented in Tables 1-5 organized in according to common themes:

a) Ethical and professional behavior;
b) Comprehensive assessment
c) Diagnosis, treatment planning, comprehensive treatment
d) Medical and dental emergencies
e) Pain and/or anxiety control
f) Communication; and,
g) Infection control.

Table 1 – Competency statements in California dental schools: UCSF

Dimension	Competency statement
1. Ethical and professional behavior	• Demonstrate ethical and professional behavior in interactions with patients and colleagues
2. Comprehensive assessment	• Determine need for, order, obtain, and interpret radiographs and apply oral and maxillofacial radiology safely and effectively • Evaluate medical status of patients and determine their ability to tolerate treatment
3. Diagnosis, treatment planning, comprehensive treatment	• Assess outcomes of comprehensive dental care in student dental practice • Develop appropriate differential diagnoses and diagnostic plans for management of oral diseases of dentition, jaw, oral mucosa, and salivary glands and treat and refer as necessary • Diagnose complete and partial edentulism and provide fixed or removable prostheses and referral as necessary • Diagnose dental disease of child and adolescent patients and provide prevention, monitoring, treatment, and referral as necessary • Diagnose endodontic disease and provide systematic evaluation, case selection, non-surgical treatment, and referral as necessary • Diagnose indications for dentoalveolar surgery and provide treatment and referral as necessary • Diagnose malocclusions and provide monitoring, treatment, and referral as necessary • Evaluate, diagnose, and develop treatment and/or referral plans appropriate to the unique characteristics of each patient • Provide adult caries management including prevention and appropriate intracoronal and extracoronal restoration
4. Medical and dental emergencies	• (addressed in monitoring and treatment in “Diagnosis, treatment planning, comprehensive treatment”; also addressed in coursework that covers medical emergencies, local anesthesia difficulties, etc.)
5. Pain and/or anxiety control	• Provide appropriate level of pain and anxiety control in comprehensive dental care
6. Communication	• Communicate with and educate patients in ways that are both knowledgeable and effective
7. Infection control	• Follow universal infection control guidelines in clinical procedures

Table 2 – Competency statements in California dental schools: UOP

Dimension	Competency statement
1. Ethical and professional behavior	• Assume active responsibility for one's lifelong learning • Determine and consider patient's dental, medical, and personal situations in evaluating the range of dental theories appropriate for that individual • Develop philosophy of practice • Diagnose and treat only within one's competence • Direct services of dental auxiliaries • Evaluate oral health care delivery and payment systems in terms of impact on patients, dental practices, and profession • Evaluate scientific, lay, and trade information and claims about new products and procedures • Function as patient's primary and comprehensive oral health care provider • Participate in activities designed to improve health of communities • Participate in organized dentistry • Practice four-handed dentistry • Practice with sound business principles and legal requirements and regulations • Prepare and use accurate records • Recognize moral weakness, uncertainty, and dilemmas in dental practice in accordance with normative ethical principles • Recognize signs of abuse and neglect, and take appropriate action • Think critically, solve problems, and base dental decisions on evidence and theory • Use information technology for dental practice
2. Comprehensive assessment	• Interpret findings from complete patient work-up and present them in a standardized format • Perform a complete patient work-up, to include history and physical, laboratory, and radiographic examinations
3. Diagnosis, treatment planning, comprehensive treatment	• Address simple cosmetic concerns • Assess results of periodontal treatment • Combine diagnostic and prognostic data with science base and patient's values to form an individualized, comprehensive, sequenced treatment plan • Determine differential, provisional, and definitive diagnoses • Develop a plan incorporating dental practice management principles • Fabricate nightguard applicants to protect dentition • Involve caregivers, guardians, and other health and social service professionals in managing oral health of patients • Make referrals to dental and medical colleagues, and, in conjunction with them, manage patients' care • Modify ongoing treatment plans based on changed circumstances • Oversee long term care for patients with dental prostheses • Participate in quality assurance systems • Perform simple and surgical tooth and root extractions • Perform treatment for children in a manner that incorporates consideration of expected growth and development • Perform uncomplicated endodontic therapy on permanent teeth • Prevent and treat pulpal inflammations using direct and indirect procedures • Recognize and refer dental malocclusions and disturbances in development of detention

Dimension	Competency statement
	• Recognize and treat or refer moderate to severe chronic periodontitis, aggressive periodontitis, and other conditions requiring complicated periodontal therapy • Recognize oral health care needs, refer, and ensure follow-up treatment for patients with complex disabilities and medical conditions • Restore single teeth for therapeutic reasons • Treat patients who have missing teeth with simple, fixed, removable, and implant-supported prostheses • Treat patients with special needs who do not require hospital adjunctive care as part of treatment • Treat plaque-induced gingivitis, mild chronic periodontitis, and other conditions requiring uncomplicated periodontal therapy • Treat simple, and recognize and refer complex complications related to intraoral surgical procedures • Treat simple, and refer complex oral bony abnormalities • Treat simple, and refer complex oral mucosal abnormalities • Use preventive strategies to help patients maintain and improve their oral health • Work with commercial laboratory support associated with restorative treatment
4. Medical and dental emergencies	• Perform CPR • Recognize and respond to medical emergencies occurring in the dental office • Recognize and respond to intraoral emergencies
5. Pain and/or anxiety control	• Administer and prescribe medications commonly used in dentistry, including local anesthesia, and manage their complications
6. Communication	• Communicate with patients, staff, and others in an empathetic and culturally competent manner • Counsel patients on lifestyle habits that affect oral health • Discuss treatment plans with patients and caregivers, including presentation of findings, alternatives, risks and benefits, and obtain informed consent from them • Establish and maintain patient rapport
7. Infection control	• Use current infection and hazard control measures

Table 3 – Competency statements in California dental schools: UCLA

Dimension	Competency statement
1. Ethical and professional behavior	• Apply ethical principles to professional practice • Evaluate scientific literature and other sources of information to make decisions about dental treatment • Understand principles necessary for developing, managing, and evaluating a general practice
2. Comprehensive assessment	• Interpret and correlated findings from history, clinical and radiographic examination and other diagnostic tests, and develop problem list • Perform comprehensive examination that collects patient history; chief complain; biological, psychological, behavioral, and social information; and acquire all appropriate records needed to evaluate medical and oral condition for patients of all ages
3. Diagnosis, treatment planning, comprehensive treatment	• Develop comprehensive, properly sequenced treatment plan based on all diagnostic data, and develop alternative treatment plans as appropriate to achieve patient satisfaction • Diagnose developmental or acquired occlusal and/or skeletal abnormalities • Direct laboratory fabrication of restorations and prostheses and modify them, if necessary • Modify treatment plans, when indicated, based on regular evaluation, unexpected circumstances, or special patient needs • Perform preventive and restorative procedures that preserve tooth structure, prevent hard tissue disease, and promote soft tissue health • Prescribe and monitor effects of pharmacotherapeutic agents used to prevent oral diseases • Restore single defective teeth • Treat an manage patients with oral esthetic needs • Treat and manage caries • Treat and manage conditions requiring reparative surgical procedures on hard and soft tissues • Treat and manage diseases of pulpal and periadciular origin • Treat and manage partial or complete edentualism • Treat and manage periodontal disease • Treat and manage temporomandibular disease and chronic orofacial pain • Treat or manage non-odontogenic oral diseases or disorders
4. Medical and dental emergencies	• Prevent, treat, and manage dental and medical emergency situations encountered in the practice of general dentistry
5. Pain and/or anxiety control	• Treat and manage acute orofacial discomfort and psychological distress
6. Communication	• Demonstrate ability to communicate professional knowledge verbally and in writing • Discuss findings, diagnosis, and treatment options with the patient or parent/guardian and obtain informed consent for delivery of mutually accepted treatment • Educate patients concerning etiology and prevention of oral disease and encourage them to assume responsibility for their oral health
7. Infection control	• Understand what is necessary to protect, promote and restore oral health in his/her community

Table 4 – Competency statements in California dental schools: USC

Dimension	Competency statement
1. Ethical and professional behavior	• Apply ethical, legal, and regulatory concepts and principles to the provision and/or support of oral health care services • Improve oral health of individuals from diverse, disadvantaged, and "at risk" populations through diagnosis, treatment, and education in a variety of practice settings • Provide empathic care for all patients without discrimination • Regularly assess one's knowledge and skills, and seek additional information to correct deficiencies and enhance performance • Understand principles, regulations and procedures necessary to manage and lead a contemporary dental practice
2. Comprehensive assessment	• Assess patient goals, values and concerns to establish rapport, guide patient care, maintain oral health, and monitor therapeutic outcomes • Perform comprehensive diagnostic evaluation based on application of scientific principles and current literature, with consultations as appropriate • Recognize normal range of clinical findings and significant deviations that reflect oral pathology and require monitoring, treatment, or management • Recognize oral manifestations of systemic disorders, as well as systematic complications of oral disease, and seeking consultations as needed
3. Diagnosis, treatment planning, comprehensive treatment	• Combine clinical and supporting data, with individual patient's goals and values, and integrate multiple disciplines into individual, comprehensive, sequenced treatment plans with appropriate diagnoses, prognoses, and treatment alternatives • Recognize indications for oral surgical procedures, treating uncomplicated conditions, and referring complicated surgical procedures • Recognize needs for orthodontic treatment, performing uncomplicated procedures and referring complicated ones • Recognize patients with chronic orofacial pain and dysfunction (including temporomandibular joint disorders), treating uncomplicated conditions, and referring complicated surgical procedures • Recognize periodontal disease, treating uncomplicated conditions, and referring complicated periodontal procedures • Recognize pulpal and periadicular disease, treating uncomplicated conditions, and referring complicated endodontic procedures • Restore edentulous paces to optimal form, function, and esthetics using fixed partial dentures, removable partial dentures, complete dentures, or implant supported restorations • Restore single defective teeth to optimal form, function, and esthetics using direct and indirect restorations • Understand differences between various models of oral health care delivery
4. Medical and dental emergencies	• Anticipate, detect, and provide initial treatment and follow-up management for complications and medical emergencies that may occur during or as a result of dental treatment • Select and administer or prescribe pharmacological agents in the treatment of dental patients
5. Pain and/or anxiety control	• Manage patients with pain or anxiety using non-pharmacological methods • Recognize and manage pain, hemorrhage, trauma, and infection of the orofacial complex
6. Communication	• Communicate effectively, both orally and in writing, with colleagues, practitioners, staff, patients, and the public • Provide patient education and preventive procedures to maximize oral health
7. Infection control	• Implement and monitor infection control and environmental

Table 5 – Competency statements in California dental schools: LLU

Dimension	Competency statement
1. Ethical and professional behavior	• Apply ethical principles to professional practice and personal life • Function as a leader in a multicultural work environment and manage a diverse patient population • Perform clinical decision making that is supported by foundational knowledge and evidence-based rationales • Understand basic principles important in developing, managing and evaluating a general dental practice • Understand importance of maintaining physical, emotional, financial, and spiritual health in one's personal life
2. Comprehensive assessment	• Conduct comprehensive examination to evaluate general and oral health of patients of all ages within the scope of general dentistry
3. Diagnosis, treatment planning, comprehensive treatment	• Analyze continuously the outcomes of patient treatment to improve treatment • Assess and manage maxillary and mandibular skeleta0dental discrepancies, including space maintenance, as represented in early, mixed and permanent dentitions • Determine diagnosis by interpreting and correlating findings from examination • Develop a comprehensive treatment plan and alternatives • Evaluate and manage diseases of pulpal origin and subsequent periradicular disease • Evaluate and manage treatment of periodontal diseases • Manage restoration of individual teeth and replacement of missing teeth for proper form, function, and esthetics • Promote, improve, and maintain oral health in patient-centered and community settings • Provide basic surgical care • Recognize and manage pathologic changes in tissues of the oral cavity and head and neck area • Recognize and manage problems related to occlusal stability
4. Medical and dental emergencies	• Manage dental emergencies and medical emergencies that may be encountered in dental practice
5. Pain and/or anxiety control	• Manage pain and anxiety with pharmacologic and non-pharmacologic methods
6. Communication	• Apply behavioral and communication skills in the provision of patient care
7. Infection control	• Provide appropriate preventive and/or treatment regimens for patients with various dental carious states using appropriate medical and surgical treatments

CLINICAL COMPETENCIES TESTED

Rating scales. All of the schools had slightly different formats, but similar rating criteria for their competency examinations. Below are *examples* of competencies tested in periodontics, indirect restoration, composite restoration, and endodontics (Tables 6-9). While the exact wording of the criteria and the structure of each school's rating system is not identical, the minimum criteria address the same concepts.

Table 6 – Examples of rating scales for periodontic scaling/root planing

	Examples of minimum criteria	Rating system
UCSF	• Distances from CEJ to gingival margin within 1 mm • Furcation measurements accurate • Mobility measurements accurate	• P/F grading
UOP	• Complete periodontal charting (pocket depths) • Pocket probing depths satisfactory • Mobility and furcations satisfactory	• Grade of 5-7 is passing (scale of 1-9)
UCLA	• Assess and record pocket depths • Assess and record furcation invasions • Assess and record tooth mobility	• P/F grading
USC	• Charting measurements do not vary more than 1 mm from faculty's measurements • Recession, furcation involvement, mobility, plaque • and calculus indices recorded	• $\geq$ 75% out of 100
LLU	• Subgingival calculus correctly identified and properly removed • Charting is accurate and complete	• $\geq$ 70 points and above is passing (100 points possible)

Table 7 – Examples of rating scales for indirect restoration

	Examples of minimum criteria	Rating system
UCSF	• Caries removed • Occlusal reduction sufficient • Gingival depth/margin position sufficient • Axial contours adequate (no over contours) • Soft tissue has slight laceration or no laceration	• Satisfactory grade (8) (scale of 1-10)
UOP	• Occlusal reduction uniform (1.5 to 1.5 mm) • Supragingival chamfer finish line .5-1 mm • Supragingival shoulder finish line 0.5 – 1 mm • Slight soft tissue damage or no damage (untouched)	• Minor, slight, or moderate is passing, no deductions for uncorrectable or significant errors
UCLA	• Occlusal reduction with minor, slight, or moderate deviations • Axial reduction with with minor, slight, or moderate deviations • Draw and taper with minor, slight, or moderate deviations • Contours with minor, slight, or moderate deviations	• Minor, slight, or moderate quality is passing
USC	• Caries removed • Axial walls are tapered for maximum retention • Finish lines are smooth and free of irregularities	• Grade of S is passing
LLU	• Caries completely removed • Margins/finish line of prep are appropriately placed, smooth, well defined and uniform or have slight/moderate deviations • Slight or moderate soft tissue trauma or no trauma	• Grade of Satisfactory is passing

Table 8 – Examples of rating scales for composite restoration

	Examples of minimum criteria	Rating system
UCSF	• Caries removed • Enamel surface beveled sufficiently or with slight under- or overextensions • Contours reproduced appropriately or with slight deviations • Slight, reversible soft tissue trauma or no trauma	• Satisfactory grade (8) (scale of 1-10)
UOP	• Caries removed • Existing restorative material removed • Surface is smooth and polished to smoothness of adjacent tooth structure, not rough to explorer • Normal occlusion present • Minor pits or voids can be repaired	• Satisfactory rating is passing
UCLA	• Caries removal • Occlusal anatomy of composite has minor, slight, or moderate deviations • Outline (shape/dimensions) with minor, slight, or moderate deviations • Surface finish with minor, slight, or moderate deviations • Facial contours with minor, slight, or moderate deviations	• Minor, slight, or moderate quality is passing
USC	• Outline includes enamel decalcification contiguous with area of caries, restoration or tooth structure, overextensions less than .5 mm • Sufficient depth to identify and remove caries or existing restorative material or less than .25 mm of health dentin or enamel • Finish on enamel margins optimal or within slight deviation of optimal • Surface is free of pits or voids, or minimal deviations from optimal	• Grade of S is passing
LLU	• Outline and extension appropriate with all decalcification, caries, and fissured grooves removed • Margins appropriate, no excess or deficiency • Finish is smooth with no pits, voids or irregularities or with slight/moderate surface pitting, voids or irregularities • No damage to hard or soft tissue	• Minor, slight, or moderate quality is passing

Table 9 – Examples of rating scales for endodontic

	Examples of minimum criteria	Rating system
UCSF	• Canal shape is appropriate • Pulp chambers and canals visible on radiograph • Canal appropriately obturated (fill, density, shape)	• Grade of 3-4 is passing (scale of 1-8)
UOP	• Access outline/dentin preparation satisfactory • Last apical file goes to full working length • Canal vertically compacted • Canal obturated to working length without voids	• Grade of 5-7 is passing (scale of 1-9)
UCLA	• Access cavity adequate • Canal prep and master apical file adequate • Master cone fit adequate • Initial condensation adequate	• Grade of Adequate is passing (scale is excellent, adequate, inadequate, very poor)
USC	• Caries completely removed • Access acceptable • Canal orifice flared • Gutta percha not overfilled	• Grade of S is passing
LLU	• Caries completely removed • Adequate canal flare • Correct working length • Root canal space completely obturated	• P/F grading on each criteria

Competencies tested. Table 10 summarizes the competencies assessed in the five dental schools tested. Since each competency examination was timed, practice management was implied through all the schools. Details of the competency examinations are presented in Tables 11-16.

UCSF had separate competency examinations for instrument identification and instrument sharpening, caries risk assessment and caries management, emergency, medical/dental history taking, pediatric, and infection control; however, these competencies were embedded within the competency examinations of in other schools.

UOP did not provide a competency examination for oral diagnosis and treatment planning, oral surgery, or, prosthodontics, however, much of this information was included throughout the students' clinical experiences to medically manage complex patients. LLU did not have a competency examination for oral surgery, although the topic was thoroughly covered in clinical experiences.

Radiography was typically embedded within various competency examinations. At UOP, students' radiographic competence was tested in endodontic and periodontic competency examinations. At UCLA, radiographic competence was tested in preventive, fixed removable, and endodontic competency examinations.

It should be noted that the endodontics department at UCLA has an established system in place that incorporates course examinations and competency examinations into a portfolio.

Table 10 – Summary of competencies assessed

Competency	UCSF	UOP[1]	UCLA[2]	USC	LLU
1. Amalgam and composite restoration	X	X	X	X	X
2. Endodontics	X	X	X	X	X
3. Fixed prosthetics	X	X	X	X	X
4. Oral diagnosis and treatment planning	X	--	X	X	X
5. Oral surgery	X	--	X	X	--
6. Periodontics	X	X	X	X	X
7. Radiography	X	--	--	X	X
8. Removable prosthodontics	X	--	X	X	X

[1] Radiographic technique specifically assessed in as part of endodontic and peridontal competencies.
[2] Radiographic technique specifically assessed in preventive dentistry, fixed removable, and endodontic competencies. Endodontic competency examinations were part of an existing portfolio system.

Table 11 – Competency examinations at UCSF

Type	Competency assessed
1. Amalgam and composite restoration	(1) Class I amalgam (2) Class II interproximal posterior amalgam (3) Class I composite or preventive resin restoration (4) Class II interproximal posterior composite (5) Interproximal anterior composite (6) Class V smooth surface composite/glass ionomer, or amalgam
2. Endodontics	(1) Single-rooted case (2) Multi-rooted case
3. Fixed prosthetics	Cast restoration
4. Oral diagnosis and treatment planning	(1) OSCE stations; Slides of clinical findings from charts, radiographs, and or pictures (2) Develop treatment plan on a patient including phasing of care, sequencing, continuity of care (3) Assess patients' risk for caries as measured by bacterial testing, saliva flow rates, risk factors from patient questionnaire (4) Review of chart and health history, radiography, evaluation of soft tissue, occlusion, caries risk assessment, treatment plan, restorative plan (pediatric case) (5) Caries risk management
5. Oral surgery	Perform hard and soft tissue surgery, e.g., extraction, including medical history, diagnostic work-up, anesthetic technique, patient management
6. Periodontics	Periodontal scaling and root planning, calculus detection
7. Radiography	(1) Radiographs evaluated in terms of presence of technical errors, anatomic variations, patient reaction (2) Film layout for mounting
8. Removable prosthodontics	Complete denture procedure including master impression, occlusal records, wax try-in

Table 12 – Competency examinations at UOP

Type	Competency assessed
1. Amalgam and composite restoration	(1) Final impression (2) Direct restorative – case management, preparation, restoration
2. Endodontics	(1) Endodontic radiographic technique - anterior or posterior tooth (2) Coronal access - anterior (3) Coronal access - posterior (4) Cleaning and shaping single canal – anterior or posterior (5) Obturation, single canal – anterior or posterior
3. Fixed prosthetics	(included in coursework and clinical experiences to medically manage complex patients)
4. Oral diagnosis and treatment planning	(Performed within various competency examinations)
5. Oral surgery	(not specifically addressed, students perform simple extractions in their training)
6. Periodontics	(1) Oral diagnosis and treatment planning including radiographic interpretation, periodontal charting, occlusal analysis, plaque index, diagnosis, etiology, prognosis, tentative treatment plan (2) Periodontal re-evaluation (3) Calculus detection, scaling and root planning (4) Periodontal instrument sharpening (5) Root planning and diagnosis
7. Radiography	(Performed within various competency examinations)
8. Removable prosthodontics	(included in the coursework and clinical experiences to manage medically complex patients)

Table 13 – Competency examinations at UCLA

Type	Competency assessed
1. Amalgam and composite restoration	(1) Restorative treatment planning (set of radiographs and patient scenarios) (2) Troubleshooting and basic knowledge (radiographs) (3) Diagnosis and treatment (radiographs and tooth on typodont) including full gold crown, mesial decay, occlusal restoration, mesioocclusal restoration, anterior periapical, distoocclusal, PFM crown, root canal (4) Anatomy, contacts, margin integrity and surface finish of restorations
2. Endodontics	Portfolio based competency evaluation including documentation of endodontic diagnosis and treatment planning, radiographic technique, endodontic technique, canal preparation, obturation, provisionalization, infection control
3. Fixed prosthetics	(1) Foundation restoration (2) Full gold veneer restoration including cementation (3) Gold partial veneer or inlay (4) PFM restoration including cementation (5) Bonded ceramic restoration including cementation
4. Oral diagnosis and treatment planning	(1) Fast track treatment planning includes simple to intermediate periodontal needs, operative (2) Advanced treatment planning clinic includes bridges/partials, TMD, significant attrition, more than four fixed units, non-ideal occlusion (3) Oral diagnosis including review of systems, dental history psychosocial history, family medical history (4) Clinical evaluation (5) Head and neck examination
5. Oral surgery	(not specifically addressed)
6. Periodontics	(1) Periodontal diagnosis and treatment plan (2) Periodontal instrumentation (3) Re-evaluation of Phase I therapy (4) Periodontal surgery
7. Radiography	(addressed in various competency examinations)
8. Removable prosthodontics	Reline/rebase treatment/removable partials on approved RPD designs from oral diagnosis and treatment planning

Table 14 – Competency examinations at USC

Type	Competency assessed
1. Amalgam and composite restoration	(1) Amalgam restorations (patient or extracted tooth) (2) Composite restorations including Class II and Class III preparations, impressions, provisionals
2. Endodontics	(1) Endodontic bench examination (one molar access in a typodont) (2) Endodontic bench examination (two teeth in a typodont)
3. Fixed prosthetics	(1) Indirect cast restoration (preparation, impression, provisional) (2) Cementation examination
4. Oral diagnosis and treatment planning	(1) Diagnosis and treatment planning (2) Simulated patient (OSCE) examination (3) Special patients evaluation
5. Oral surgery	Management of medical emergency scenario, clinical patient evaluations and treatment including consultation, exodontia/minor dentoalveolar surgery, post-op management
6. Periodontics	(1) Periodontal diagnosis and treatment planning (2) Periodontic scaling and root planing (3) Use of ultrasonic instrumentation for scaling
7. Radiography	(1) Radiographic technique (2) Radiographic interpretation
8. Removable prosthodontics	Treatment/interim partial dentures including prognostic aids, RPD design

Table 15 – Competency examinations at LLU

Type	Competency assessed
1. Amalgam and composite restoration	(1) Class II amalgam (2) Class II composite (3) Class II and IV composite
2. Endodontics	(1) Diagnosis (2) Pre-treatment (3) Access (4) Canal preparation (5) Fitting master cone (6) Obturation (6) Post-treatment evaluation
3. Fixed prosthetics	(1) All ceramic anterior preparation – manikin (OSCE) (2) Indirect veneer – manikin (OSCE) (3) Ceramic veneer – manikin (OSCE)
4. Oral diagnosis and treatment planning	(1) Comprehensive oral evaluation assessment including professional and general evaluation, documentation data collection, extra-dental examination, dental examination, caries diagnosis and treatment plan, diagnosis, treatment plan and alternatives (2) Oral hygiene instruction with manikin (3) Oral prophylaxis on another student
5. Oral surgery	(not specifically addressed in competency examinations)
6. Periodontics	(1) Three oral health care examinations including periodontal risk and disease assessment (2) Multiple scaling and root planing examinations including pre-treatment calculus, post-treatment calculus (3) Periodontal instrument sharpening (OSCE) (4) Periodontal hand instrumentation on a typodont (OSCE)
7. Radiography	(1) Radiology FMX (2) Radiology interpretation
8. Removable prosthodontics	(1) Full partial denture – manikin (OSCE) (2) Complete denture including casts, vertical dimension of occlusion, occlusion, festooning, neatness

SECTION 5: KEY FINDINGS FROM INTERVIEWS/SITE VISITS

Importance of difficulty rather than numbers of procedures performed. The deans and faculty at the dental schools addressed the idea of numbers of procedures performed as a prerequisite for any alternative pathway. They indicated that because treatment for each patient is unique, the difficulty of the procedure was the overriding factor in determining competence. There are well-specified criteria, such as the American Association of Endodontics Guidelines, for assigning level of case difficulty (see Appendix A). Thus, the number of procedures performed was not relevant to the quality of services provided.

Challis (2001) addresses this very issue in her research on the use of portfolios for assessment purposes. She states that the trick to resolving the tensions in designing a portfolio is to engage learners in the process of development and only assesses those dimensions which are not better assessed in another way (p. 438). There is no purpose served in insisting on a review of already assessed material, or, on certain items, if skills and knowledge are not necessarily demonstrated.

Concern regarding resources. The deans and faculty at the dental schools also indicated that the focus of the alternative pathway could be thought of in terms of an accreditation model, in which there are requirements that need to be fulfilled prior to an audit, rather than a set of procedures for which schools would be required to expend additional resources and faculty effort to comply with new procedures. There was great concern that considerable effort has already been expended to incorporate existing procedures around the clinical curriculum; consequently, any new procedure cannot take additional resources and create additional demands on the faculty.

Concern about similarity of competencies assessed on simulated vs. real patients. Some deans and faculty expressed a concern regarding the use of simulated (manikin) patients because candidates would be treating real, not simulated, patients in actual practice whose cases span a continuum of care. They were concerned that candidates could learn to achieve competency with simulated patients without being able to perform the same skills competently on an actual patient and manage that patient's condition after the procedure was performed.

Use of designated examiners. One school (LLU) indicated that only full-time faculty who understood the examination process were allowed to function as examiners for competency examinations. They also indicated that it was not uncommon for faculty from nearby schools to familiarize themselves with the rating system and participate in competency examinations as examiners.

Dissimilarity of clinic management software. Most of the patient data is maintained in sophisticated clinic management software to maintain a database of patient records; however, some patient charts are still in paper form. All of the schools are in the process of completing a transition to paperless charting with the idea that records created prior to a specific year would not be converted to electronic media. The type of database software used by each school was not universal for all of the schools. The clinic management software used by UCSF and USC is AxiUm. UOP uses Denticon, LLU used General Systems Design with Chairside Data Entry. UCLA uses Software of Excellence, Int.

Confidentiality of records. Full documentation, which contains confidential patient information from each school's clinic management software, is not readily available in redacted form.

Similarity of content in competency examinations. Since each Bureau-approved school (University of California, San Francisco – UCSF; University of the Pacific – UOP; University of California, Los Angeles – UCLA; University of Southern California – USC; and Loma Linda University - LLU) was accredited by the Commission on Dental Education, coursework and competency examinations were similar in content but implemented in ways that were unique to the school and its patient populations. Two schools, USC and LLU, specifically mentioned in their clinical competency statements the notion of diversity and at risk patient populations.

Scheduling of individual competency examinations. Each school required students to perform numerous examinations on actual patients in their clinical experiences; however, competency examinations were scheduled on demand by students when they felt that they were ready to be examined without intervention or guidance from faculty. In all cases, faculty were given the authority to stop any competency examination from proceeding if there was any procedure that would harm or endanger the subject patient. All competency examinations were performed during the course of treatment for which there was complete documentation of a patient of record, e.g., clinical work-up, diagnosis, treatment plan.

Calibration of examiners. At all schools, faculty who served as examiners for student competency examinations were provided extensive training and calibration prior to performing duties as an examiner. Faculty were required to access hands-on material, detailed slide presentations (PowerPoint), sample cases, and sample documentation each term and participate in calibration sessions to hone their skills. Prior to participating in actual grading of competency examinations, newer faculty were mentored by experienced faculty.

At all the schools, two examiners must concur on failing grades, and if there is disagreement between the two examiners, a third examiner was asked to grade the student. One school specifically mentioned that examiners were designated full-time faculty who were familiar with the grading criteria and the logistics of competency examinations. When faculty were asked if they could remain objective during grading

of students that they knew, they clearly indicated that they understood the difference between being an examiner and being a supportive mentor.

Best practices. The best practice (Albino, et al, 2008, p. 1425; Swanick & Chana, 2005) is to rely on multiple data sources, rather than single sources. These authors describe this practice as "triangulation." Triangulation involves three elements: *process* (human factors such as communication, organization, ethical behavior), *product* (outcomes of patient care), and *procedure* (technical skills necessary to provide patient care). These data sources can be derived from methods such as longitudinal observations, portfolios, and case-based multiple-choice questions.

SECTION 6: OTHER FINDINGS

OCCUPATIONAL ANALYSIS AND EXISTING CLINICAL EXAMINATIONS

The occupational analysis outlines fifteen content areas of practice which appear to focus on topical content rather than underlying processes such as oral diagnosis and treatment planning. Major content was covered in the occupational analysis; however, some areas were given the same level of importance as others when they were not generally considered major areas of subject matter to be assessed.

The 15 content areas cited in the occupational analysis were described as follows:

I. Evaluation – Conduct medical and dental evaluation to develop comprehensive dental treatment plan.
II. Endodontics – Diagnose patient's endodontic condition, develop a treatment plan and perform endodontic therapy.
III. Indirect restoration – Diagnose patient's restorative needs, develop a treatment plan and perform an indirect restoration.
IV. Direct restoration - Diagnose patient's restorative needs, develop a treatment plan and perform a direct restoration.
V. Prophylaxis – Perform prophylactic procedures and provide oral hygiene instructions to patients.
VI. Periodontics - Diagnose patient's periodontal needs, develop a treatment plan and perform periodontal therapy.
VII. Fixed partial denture - Diagnose patient's restorative needs, develop a treatment plan and perform a fixed partial denture.
VIII. Removable partial denture - Diagnose patient's restorative needs, develop a treatment plan and fabricate a removable partial denture.
IX. Complete denture - Diagnose patient's restorative needs, develop a treatment plan and fabricate a complete denture.
X. Oral surgery - Diagnose patient's oral condition, develop a treatment plan and perform oral surgical procedures.
XI. Teeth whitening - Perform teeth whitening procedures on a patient.
XII. Splint therapy – Determine patient's need for splint therapy and perform splint therapy procedures.
XIII. Safety and sanitation – Prevent injury and spread of diseases in dental services by following Board regulations on safety, sanitation, and sterilization.
XIV. Ethics – Comply with ethical standards for dentistry, including scope of practice and professional conduct.

XV. Law – Comply with legal obligations, including patient confidentiality, professional conduct, and information management.

Existing clinical examinations used in California did not appear to have a direct relationship to the content areas in the occupational analysis. For example, one area, diagnosis, should have been designated as an area of its own, or included as part of oral diagnosis and treatment planning, which should be a standard part of the comprehensive assessment, diagnosis, and treatment planning process. There are tasks addressing diagnosis included in the analysis, however, the tasks marginalize diagnosis of the patient as a holistic entity who has a medical, dental, pharmacological, and psychosocial history that may impact treatment.

Some areas are not the primary focus of the practice of general dentistry and distort the major areas of subject matter in general dentistry. For example, tooth whitening is a part of cosmetic dentistry. Splint therapy focuses on specific types of removable orthotic appliances. Prophylaxis is limited in this analysis to conventional or ultrasonic scaling, fluoride, sealants and oral hygiene instruction, and could be considered part of periodontics (e.g., scaling).

Other content areas were part of a larger set of procedures. For example, fixed partial denture, removable partial denture, and complete denture are considered prosthodontic procedures; and indirect and direct restoration are considered restorative procedures. Likewise, procedures specified in evaluation are part of comprehensive oral assessment, and, oral diagnosis and treatment planning. Comprehensive assessment and many aspects of diagnosis, treatment planning, or aftercare are embedded within multiple areas such as evaluation, endodontics, indirect restoration, direct restoration, periodontics, fixed partial denture, removable partial denture, complete denture, oral surgery, and splint therapy.

REQUIREMENTS FOR LICENSURE IN THE U.S. AND CANADA

In their 2001 review of dental education and licensure, the Council on Dental Education of the American Dental Association (ADA) compared practices for initial dental licensure in the United States and Canada. Their findings indicate that initial licensure in the United States and Canada are very similar; however, Canada relies on the use of the OSCE, which requires candidates to answer multiple-choice questions about radiographs, case histories, and/or models in a series of stations. In the OSCE, simulated patients (manikins) rather than actual patients are used as subjects for examination procedures.

Table 16 – Comparison of practices in U. S. and Canada for initial licensure

Requirement	United States	Canada
Graduation from an accredited program	Yes; program is accredited by the ADA Commission on Dental accreditation	Yes; program is accredited by the Commission on Dental Accreditation of Canada
Written examination	Yes: National Dental Board Examinations (NDBE) Parts I and II	Yes; National Dental Examining Board of Canada Written Examination (NDEB)
Clinical examination	• Regionally administered clinical examinations (Central Regional Testing Services; Northeast Regional Examining Board, Southern Regional Testing Agency, Western Regional Examining Board) offered once to multiple times, depending on the testing agency • 10 states (CA, DE, FL, HI, IN, LA, MS, NC, NV plus Puerto Rico and the Virgin Islands) offer state administered examinations • Each state determines which clinical examination results are accepted for the purpose of licensure • All states require completion of both written and clinical examinations before being eligible for licensure • Some states also require additional criteria such as proof of malpractice insurance, certification in Basic Life Support, or a jurisprudence examination	• OSCE offered three times a year • Quebec requires an NDEB certificate or a provincial examination. • Some provinces require completion of an ethics examination

NUMBER OF GRADUATES PER YEAR

Each of the five schools graduates 100-140 students each year. Thus, there may be as many as 700 students graduating from the five Bureau-approved schools, and, more students would be graduating every year once the newly formed sixth dental school is underway. The number of graduates would have a great impact on the feasibility of any alternative pathway to initial licensure.

SECTION 7: CONCLUSIONS

Several conclusions can be drawn from the observations and information provided in interviews and documentation obtained from the five Bureau-approved dental schools.

1. The hybrid portfolio examination model satisfies the criteria identified by the California Dental Association, the Dental Bureau of California, and the psychometric consultants. Minimum competence would be built into standardized rating scales and extensive calibration and re-calibration of the examiners would address psychometric issues such as reliability and validity.

2. The traditional portfolio is not feasible as originally described by the Bureau. However, if there were no specific numbers of procedures and the portfolio process is integrated into the predoctoral curriculum, it would be feasible. The process should incorporate sensitivities to confidentiality of patient records, diversity of clinic management software used, and difficulty of cases used for competency examinations. The actual logistics would need to be vetted by all the schools in terms of what documents should be provided and how faculty were designated as examiners.

3. Psychometric issues of validity and reliability can still be addressed through careful specification of standards, criteria and scoring guides, and thorough calibration and training of designated examiners. The Bureau could have the responsibility for making final approval of portfolio information, conducting site visits, and performing periodic audits of detailed portfolio documentation.

4. The OSCE and the CIF are not the best venues for licensure examinations because there are more authentic means available for assessing candidates' competence (actual patients). Therefore, the OSCE or the CIF are well suited for preclinical training but not as a licensure examination.

5. The most noticeable strength of the five predoctoral training programs was the thoroughness of their clinical training and the commitment of their faculty to the students. The faculty understood the distinction between their role as a mentor and as an examiner in that there was no intervention during any competency examination unless the patient was in danger of being harmed.

6. All five predoctoral training programs had extensive training programs to calibrate their examiners. Training included detailed PowerPoint presentations, trial grading sessions, and training and mentorship of new examiners with experienced examiners.

7. There are rating systems in place at each of the five schools which evaluate the same competencies; however, the rating systems for key competencies would require standardization across schools in order to interpret the scores derived from the competency examinations on a common metric. Calibration to these rating systems would need to be implemented as well.

8. The involvement of independent parties to make decisions about minimum competence could ensure fairness of ratings if faculty from other departments within the school and/or faculty from other schools are used in the rating process.

9. There are important advantages of using actual patients of record within the schools instead of simulated (manikin) patients. First, procedures are performed as part of treatment thereby eliminating circumstances fostering commercial procurement of patients, particularly the cost of such patients. Second, the safety and protection of patients is ensured because procedures are performed in the course of treatment. Third, candidates would be treated similarly at all of the dental schools in a manner that allows communication of examination logistics and results.

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APPENDIX A – AAE LEVELS OF DIFFICULTY

The American Association of Endodontics designed the Endodontic Case Difficulty Assessment Form for use in endodontic curricula. Conditions listed below should be considered potential risk factors that may complicate treatment and adversely affect the outcome.

Levels of difficulty are sets of conditions that may not be controllable by the dentist. There are risk factors that can influence the dentist's ability to provide care at a consistently predictable level and impact the appropriate provision of care and quality assurance.

MINIMAL DIFFICULTY	Preoperative condition indicates routine complexity (uncomplicated). These types of cases would exhibit only those factors listed in the MINIMAL DIFFICULTY category. Achieving a predictable treatment outcome should be attainable by a competent practitioner with limited experience.
MODERATE DIFFICULTY	Preoperative condition is complicated, exhibiting one or more patient or treatment factors listed in the MODERATE DIFFICULTY category. Achieving a predictable treatment outcome will be challenging for a competent, experienced practitioner.
HIGH DIFFICULTY	Preoperative condition is exceptionally complicated, exhibiting several factors listed in the MODERATE DIFFICULTY category or at least one in the HIGH DIFFICULTY category. Achieving a predictable treatment outcome will be challenging for even the most experienced practitioner with an extensive history of favorable outcomes.

PORTFOLIO EXAMINATION TO QUALIFY FOR CALIFORNIA DENTAL LICENSURE

SUBMITTED TO

Dental Board of California
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December 1, 2009

EXECUTIVE SUMMARY

This report describes the procedures used by psychometric consultants at Comira to define the competencies to be tested in the portfolio examination and provide background research that may affect the implementation process. Because the portfolio is an examination, it must meet the Standards for Educational and Psychological Testing (1999) to ensure that it is fair, unbiased, and legally defensible. The purpose of applying the Standards to the validation process is to ensure that the portfolio examination can provide evidence that entry-level dentists possess the minimum competencies necessary to protect public health and safety.

The most important step in establishing the validity of the portfolio examination is to define the competencies to be tested in the examination. Separate focus groups of key faculty from five Board-approved dental schools were convened to identify for oral diagnosis and treatment planning, direct and indirect restoration, removable prosthodontics, endodontics, and periodontics. Basically, focus group participants identified the competencies to be assessed in a systematic way beginning with an outline of major competency domains and ending with a detailed account of major and specific competencies organized in outline fashion. All participants provided input in a systematic, iterative fashion, until consensus is achieved. The competencies identified from this process will serve as the framework for the evaluation system, training and calibration procedures for examiners, and audit procedures for evaluating the efficacy of the process.

- Section 5 lists the major competencies and the subcomponents within each competency (to include in statute)

- Section 6 describes the specific content to be covered within each subcomponent (to be included in regulation upon implementation)

- Section 7 describes basis for the evaluation system and procedures required to design it (to be included in regulation upon implementation)

- Section 8 describes the procedures that will be used to train and calibrate examiners (to be included in regulation upon implementation)

- Section 9 describes procedures that will be used to establish audit procedures for ensuring that the examination accomplishes its objectives (to be included in regulation upon implementation)

The foundation of the portfolio examination is already in place at the dental schools. All five dental schools---University of Pacific, University of California San Francisco, Loma Linda, University of Southern California, and University of California Los Angeles---had a great deal of consistency in their evaluation system. They used very similar criteria to evaluate students' performance and used similar procedures to calibrate their faculty

according to performance criteria. This finding has important implications for the implementation phase of the portfolio examination because the evaluation systems currently used by the dental schools will not require major changes. The only difference between the current systems and the portfolio examination is that the competencies and the system to evaluate them would be standardized across schools. Therefore, the portfolio examination process can be implemented within the dental schools without additional resources. It is anticipated that the students will find the portfolio examination as a reasonable alternative for initial licensure.

In summary, the dental schools were able to reach consensus in identifying critical competencies to be measured in the portfolio examination, thereby standardizing the competencies to be measured and providing the framework for the evaluation system, training and calibration procedures for examiners, and audit procedures for evaluating the efficacy of the process. Active involvement from the five current dental schools will be required to standardize the evaluation system, calibrate examiners, and establish protocols for auditing the examination. Since the foundation of the evaluation system and calibration processes is already embedded in the curriculum, no additional resources will be required.

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SECTION 1 – INTRODUCTION

OVERVIEW

Comira approached the portfolio examination with the understanding that the outcome would directly impact predoctoral dental education at every dental school in California and could provide the framework for evaluating predoctoral dental competencies in dental schools across the nation.

The overarching principle for development of the portfolio examination pathway was consumer protection. Comira worked closely with dental school faculty to derive the framework and content of the examination; moreover, procedures were conducted in an objective and impartial manner with the public's health, safety, and welfare as the most important concern.

First, Comira met with deans and dental school faculty who represented major domains of practice as well as legislative sponsors from the California Dental Association to present the portfolio examination concept and answer faculty questions regarding impact on their respective programs. Second, we conducted focus groups with representative faculty from each of the Board-approved dental schools to individually present the concept and discuss their concerns. Third, we conducted discipline-specific focus groups, i.e., comprehensive oral diagnosis and treatment planning, direct and indirect restoration, removable prosthodontics, endodontics, and periodontics, to develop the content for the examination.

From these meetings, we gained an understanding of the predoctoral dental competencies that were critical to development of the portfolio examination and creating supporting documentation that would be used in the formulation of Assembly Bill 1524. We also conducted an extensive review of written documentation of each school's competency examinations to gain insights into the procedures used in competency examinations and associated scoring systems.

UTILIZATION OF EXPERTS

Deans, section chairs, department chairs and/or other faculty who were knowledgeable in the content domains of interest, e.g., comprehensive oral diagnosis and treatment planning, direct and indirect restoration, removable prosthodontics, periodontics, endodontics, were consulted throughout the process to provide expertise regarding the competencies acquired in their respective programs and the competencies that should be assessed in the examination. Focus groups were conducted face-to-face or via videoconference link between conference rooms at the University of the Pacific and at the University of Southern California.

PSYCHOMETRIC STANDARDS

The Standards for Educational and Psychological Testing (1999) set forth by the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education serve as the standards for evaluating all aspects of credentialing, including professional and occupational credentialing. The Standards are used by the measurement profession as the psychometric standards for validating all examinations, including licensing and certification examinations.

Whenever applicable, specific Standards will be cited as they apply to definition of examination content, rating scales, calibration of raters, and auditing procedures to link the particulars of the portfolio examination to psychometric practice.

SECTION 2 – BACKGROUND

EXISTING PATHWAYS

The Dental Board of California (hereafter, the Board) currently offers three pathways that predoctoral dental students may choose to obtain initial licensure:

- A clinical and written examination developed by the Board,
- A clinical and written examination administered by the Western Regional Examining Board, or,
- A minimum of 12 months of a general practice residency or advanced education in general dentistry program approved by the American Dental Association's Commission on Dental Accreditation.

All applicants are required to successfully complete the written examinations of the National Board Dental Examination of the Joint Commission on National Dental Examinations and an examination in California law and ethics.

PORTFOLIO EXAMINATION PATHWAY

Assembly Bill 1524, introduced in February 2009, would eliminate the clinical and written examination currently offered by the Board. Provisions of the bill would allow the Board to offer the portfolio examination as an alternative to initial licensure for general dentists in addition to other pathways available to students graduating from dental schools in California, i.e., the Western Regional Examining Board (WREB) examination and "Licensure by Credential" (PGY-1).

> *"…The bill would abolish the clinical and written examination administered by the board. The bill would replace the examination with an assessment process in which an applicant is assessed while enrolled at an in-state dental school utilizing uniform standards of minimal clinical experiences and competencies and at the end of his or her dental program."*

REQUIREMENTS FOR PORTFOLIO EXAMINATION

Section 3 of the Business and Professions Code is amended to read:

> *1632. (a) The board shall require each applicant to successfully complete the written examinations of the National Board Dental Examination of the Joint Commission on National Dental Examinations.*
>
> *1632. (b) The board shall require each applicant to successfully complete an examination in California law and ethics developed and administered by the board. The board shall provide a separate application for this examination…..the only other requirement for taking this examination shall be certification from the dean of the qualifying dental school attended by the applicant that the applicant has graduated, or will graduate, or is expected to graduate.*
>
> *1632. (c) The board shall require each applicant to have taken and received a passing score ……on the portfolio assessment (examination) of the applicant's fitness to practice dentistry while the applicant is enrolled in a dental school program at a board-approved school in California. This assessment shall utilize uniform standards minimal clinical experiences and competencies. The applicant shall pass a final assessment at the end of his or her dental school program.*

OTHER REQUIREMENTS

Students who participate in the portfolio examination pathway must:

(a) Be in good academic standing in their institution at the time of portfolio examination and be signed off by the dean of their respective schools.

(b) Have no pending ethical issues at the time of the portfolio examination and must be signed off by the dean of their respective schools.

SECTION 3 –THE PORTFOLIO EXAMINATION MODEL

DEFINITION

Albino, Young, Neumann, Kramer, Andrieu, Henson, Horn, and Hendricson (2008, p. 164) define clinical competency examinations as performance examinations in which students perform designated tasks and procedures on a patient without instructor assistance. The process of care and the products are assessed by faculty observers typically guided by rating scales.

Here, the portfolio examination can be conceptualized as a series of examinations administered in a series of patient encounters in several competency domains. Students are rated according to standardized rating scales by faculty examiners who are formally trained in their use.

CHARACTERISTICS

The distinguishing characteristics of the portfolio examination fulfill psychometric requirements for classifying the portfolio as an examination.

First, the portfolio examination is considered a performance examination that assesses students' skills in commonly encountered clinical situations. There are multiple clinical situations that allow for an evaluation of the full continuum of competency.

Second, it includes components of clinical examination administered by a regulatory board or regional examining entity.

Third, students' performance is measured according to the information provided in competency evaluations conducted in the schools by clinical faculty within the predoctoral program of education.

Fourth, it produces documented data for outcomes assessment of results, thereby allowing for verification of the validity evidence.

Thus, a portfolio examination involves hands-on performance evaluations of clinical skills as evaluated within the students' program of dental education.

The portfolio examination model is designed to use the structure for student evaluation that currently exists within the schools to assess minimum competence. The faculty would observe the treatment provided and evaluate students according to consistent criteria developed by a consensus of key faculty

from all of the dental schools. Each student would prepare a portfolio of documentation that provides proof of completion of competency evaluations for specific procedures such as amalgam/composite restoration, endodontics, fixed prosthetics, oral diagnosis and treatment planning, periodontics, radiography, and removable prosthodontics.

A portfolio examination model captures the strength of traditional portfolios used to assess learning progress and have the additional advantage of being integrated within the current educational process and within the context of a treatment plan of a patient of record. Instead of developing a traditional portfolio and having it evaluated, the portfolio examination model requires documentation of the test cases (or competency cases) which are competency evaluations assembled in either paper or electronic format. The faculty examiners would attest to the ratings achieved by the students. A portfolio examination would be built and evaluated in real time during students' clinical training. Documentation for the portfolio examination would be submitted in paper or electronic format for the required procedures, e.g., periodontics, endodontics, prosthodontics, restorative).

UNIQUE FEATURES

The portfolio examination has several unique features:

1. ***Oversight maintained by the Board.***

   The Board has the lawful responsibility to ensure that dentists who are licensed possess the competencies to practice safely and that responsibility cannot be delegated.

2. ***Built-in system for auditing the process***.

   Upon implementation, a system must be in place to audit the alternative pathway examination. The auditing system must be part of the design requirement of the alternative pathway examination. The auditing system must be designed such that the Board and the examiners have defined responsibilities to ensure that the students who are successful are competent.

3. ***Does not require additional resources from the students, schools, or the Board.***

   There are systems and procedures already in place in the dental schools. The structure of the systems and procedures are quite suitable for evaluating students' competence. The systems and procedures are very similar among the dental schools and, with collaboration among the schools, could create a common system.

4. ***Must be instituted within the current systems of student evaluation***.

   The standards and criteria for successful performance must be fully established by the schools and consistent application of the standards and criteria would take into account the tremendous amount of work undertaken to comprehensively evaluate the students' clinical skills in a variety of clinical situations.

5. ***Must be considered an examination and meet all professional testing standards.***

   Any method or system that evaluates performance and classifies students within a licensing context is considered an examination by professional testing standards and case law.

6. ***Meets psychometric standards, relevant to current practice, and designed for minimum competence.***

   Because the portfolio pathway is an examination, it must meet legal standards as explicated in Sections 12944, Section 139, guidelines of the Business and Professions Code and psychometric standards for examinations set forth by the Standards for Educational and Psychological Testing (1999).

7. ***Is designed to cover the full continuum of competence***.

   The alternative pathway examination must assess competencies throughout the course of treatment including oral diagnosis and treatment planning, follow-up and ongoing care, restorative (amalgam and composite restoration, fixed prosthetics), endodontics, periodontics, radiography, and removable prosthodontics.

8. ***Evaluation of competence is within the course of treatment plan for patients of record.***

   The competency of the students must be evaluated in the course of treatment of a patient. The evaluation of competence should not be in an artificial or contrived situation as may be true when the services are solely for the purpose of training.

9. ***Examiners are regularly calibrated for consistent implementation of the examination***.

   The examiners who participate in the alternative pathway examination must be trained and calibrated to ensure that the standards and criteria do not vary

across students. Each student must have a standardized examination experience.

10. ***Has policies and procedures that treat licensure students fairly and professionally, with timely and complete communication of examination logistics and results***.

    The alternative pathway examination must be designed such that students are knowledgeable of standards to which they are being held accountable and the procedures that they should follow in order to maximize success.

SECTION 4 – CONTENT VALIDATION

APPLICABLE STANDARDS

Since criterion-related evidence is generally not available for use in making licensure decisions, validation of licensure and certification tests rely mainly on expert judgments that the test adequately represents the content domain of the occupation or specialty. Here, content-related validity evidence from a job analysis supports the validity of the portfolio examination as a measure of clinical competence. The Standards contain extensive discussion of validity issues.

> *"Test design generally starts with an adequate definition of the occupation or specialty, so that persons can be clearly identified as engaging in the activity." (p. 156)*
>
> *"Often a thorough analysis is conducted of the work performed by people in the profession or occupation to document the tasks and abilities that are essential to practice. A wide variety of empirical approaches is used, including delineation, critical incidence techniques, job analysis, training needs assessments, or practice studies and surveys of practicing professionals. Panels of respected experts in the field often work in collaboration with qualified specialists in testing to define test specifications, including the knowledge and skills needed for safe, effective performance, and an appropriate way of assessing that performance." (p. 156)*
>
> *"Credentialing tests may cover a number of related but distinct areas. Designing the testing program includes deciding what areas are to be covered, whether one or a series of tests is to be used, and how multiple test scores are to be combined to reach an overall decision." (p. 156-157)*

There are also specific standards that address the use of job analysis to define the competencies to be tested in the portfolio examination.

Standard 14.8 "Evidence of validity based on test content requires a thorough and explicit definition of the content domain of interest. For selection, classification, and promotion, the characterization of the domain should be based on a job analysis." (p. 160)

Standard 14.14 "The content domain to be covered by a credentialing test should be defined clearly and justified in terms of the importance of the content for credential-worthy performance in an occupation or profession. A rationale should be provided to support the claim that the knowledge or skills being assessed are required for credential-worthy performance in an occupation and are consistent with the purpose for which the licensing or certification program was instituted" (p. 161)

METHODOLOGY

The methodology used to validate the content of the competency examinations comprising the portfolio examination is a commonly used psychometric procedure called job (aka practice) analysis. Job analysis data is typically obtained through multiple sources including interviews, observations, survey questionnaires, and/or focus groups.

For the portfolio examination, we relied on information obtained from focus groups comprised of participants representing different content domains of practice. This methodology has been used extensively in the measurement field and is described in detail in many publications in the psychometric literature as a "table-top job analysis", e.g., Department of Energy (1994). Basically, focus group participants identify the competencies to be assessed in a systematic way beginning with an outline of major competency domains and ending with a detailed account of major and specific competencies organized in outline fashion. All participants provide input in a systematic, iterative fashion, until consensus is achieved.

PROCESS

Separate focus groups from the five Board-approved dental schools were convened to define the content for the portfolio examinations for six competency domains to be assessed in the portfolio examination: comprehensive oral diagnosis and treatment planning, direct and indirect restoration, removable prosthodontics, periodontics, and endodontics.

The content was developed at two levels of analysis. The first level of analysis was to develop a consensus at a broad level regarding the major competencies to be assessed. The faculty indicated that the competencies were acceptable to the schools as the basis for the portfolio examination. They further understood that the major competencies were likely to be included in proposed legislation in order to implement the portfolio examination. The second level of analysis produced detailed procedures for measuring specific subcomponents within each of the six competency domains. The detailed procedures will be used to develop the portfolio examinations.

PROCEDURE

The procedure was conducted systematically in several steps:

Step 1 *Orient focus group*	• Present participants with an outline of topics to be covered for a given competency domain • Orient participants as to the goal of the process and how the results will be used
Step 2 *Review subject matter*	• Have participants explain how their program currently conducts competency examinations • Review the topics involved in a given competency domain, e.g., periodontics, endodontics, etc.
Step 3 *Identify major competencies*	• Identify major competencies to be assessed • Discuss implications of the competencies at each participant's program until consensus is reached
Step 4 *Identify specific competencies*	• Identify specific competencies within each content domain to be assessed • Discuss implications of the competencies at each participant's program until consensus is reached
Step 5 *Sequence competencies*	• Sequence the competencies until consensus is reached
Step 6 *Develop competency statements*	• Rephrase each competency in terms of a consistent format that includes an action verb and direct object (c. f., Chambers & Gerrow, 1994)
Step 7 *Refine competencies*	• Make final edits to the wording of the competencies until consensus is reached
Step 8 *Re-evaluate competencies*	• Discuss the list of major and specific competencies until consensus is reached

SECTION 5 – JOB-RELATED CONTENT OF PORTFOLIO

The portfolio examination is comprised of performance examinations in six competency domains identified by the focus groups using a "table-top job analysis" methodology described in Section 4. The competencies and their subcomponent competencies provide the most fundamental type of validity evidence for the portfolio examination, that is, *content*. The subcomponents of each major competency domain are presented below.

Table 1 – Major competencies and subcomponents

Comprehensive oral diagnosis and treatment planning	I. Collect medical and dental history II. Perform comprehensive examination III. Evaluate data to identify problems IV. Work up problems and develop tentative treatment plan V. Develop final treatment plan VI. Prepare documentation according to risk management standards
Direct restoration	I. Restore tooth containing primary carious lesions to optimal form, function and esthetics with Class II amalgam or composite II. Restore tooth containing primary carious lesions to optimal form, function and esthetics with Class III or IV composite III. Restore tooth containing primary carious lesions to optimal form, function and esthetics with Class V glass ionomer, composite or amalgam IV. Select case based on minimum criteria for direct restorations
Indirect restoration	I. Restore tooth to optimal form, function and esthetics with crown or onlay according to approved procedures and materials for indirect restorations II. Select case based on minimum criteria for indirect restorations
Removable prosthodontics	I. Develop diagnosis and determine treatment options and prognosis for removable prosthesis II. Restore edentulous spaces with removable prostheses III. Manage tooth loss transition with immediate or transitional prostheses IV. Manage prosthetic problems V. Direct and evaluate laboratory services for prosthesis
Endodontics	I. Apply case selection criteria for endodontic cases II. Demonstrate pretreatment preparation for endodontic treatment III. Perform access opening IV. Perform shaping and cleaning techniques V. Perform obturation techniques VI. Demonstrate completion of endodontic case VII. Provide recommendations for post-endodontic treatment
Periodontics	I. Perform comprehensive periodontal examination II. Determine diagnosis and develop periodontal treatment plan III. Perform nonsurgical periodontal therapy IV. Perform periodontal re-evaluation

SECTION 6 – ANNOTATED OUTLINE OF COMPETENCIES

For each major competency and subcomponent competency domain, focus group participants were asked to provide additional details to specify the scope of the competencies being measured. Below are the competency domains, subcomponent competencies, and specific content to be covered within each subcomponent.

AREA 1: COMPREHENSIVE ORAL DIAGNOSIS AND TREATMENT PLANNING

I. Collect medical and dental history
   A. Evaluate medical history, e.g., past illnesses and conditions, family history, current illnesses and medications, medications and their effect on dental condition
   B. Obtain dental history, e.g., age of previous prostheses, existing restorations, prior history of orthodontic/periodontic treatment, oral hygiene habits/adjuncts
   C. Determine chief complaint
   D. Determine psychosocial issues
   E. Determine behavioral issues that affect relationship with patient

II. Perform comprehensive examination
   A. Interpret radiographic series
   B. Perform caries risk assessment
   C. Determine periodontal condition
   D. Perform head and neck examination
   E. Screen for temporomandibular disorders
   F. Assess vital signs
   G. Perform clinical examination of dentition
   H. Perform occlusal examination

III. Evaluate data to identify problems
   A. List chief complaint
   B. List medical problems
   C. List stomatognathic problems
   D. List psychosocial problems

IV. Work up problems and develop tentative treatment plan
   A. Define each problem, e.g., severity/chronicity, classification
   B. Determine if any additional diagnostic tests are needed
   C. Develop differential diagnosis
   D. Recognize need for referral(s)
   E. Address pathophysiology of problem
   F. Address short term needs
   G. Address long term needs

H. Determine interactions of problems
I. Develop treatment options
J. Determine prognosis
K. Prepare patient information for informed consent

V. Develop final treatment plan
A. Establish rationale for treatment
B. Address all problems (any condition that puts the patient at risk in the long term)
C. Determine sequencing within the following framework
1. Systemic: medical issues of concern, medications and their effects, effect of diseases on oral condition, precautions, treatment modifications
2. Urgent: Acute pain/infection management, urgent esthetic issues, further exploration/additional information, oral medicine consultation, pathology
3. Preparatory: Preventive interventions, orthodontic, periodontal (Phase I, II), endodontic treatment, oral surgical treatment, TMD treatment, caries control, other temporization
4. Restorative: operative, fixed, removable prostheses, occlusal splints, implants
5. Elective: Esthetic (veneers, etc.), any procedure that is not clinically necessity, replacement of sound restoration for esthetic purposes, bleaching
6. Maintenance: Periodontic recall, radiographic interval, periodic oral examination, caries risk management

VI. Prepare documentation according to risk management standards

AREA 2: DIRECT RESTORATION

I. Restore tooth containing primary carious lesions to optimal form, function and esthetics with Class II amalgam or composite
II. Restore tooth containing primary carious lesions to optimal form, function and esthetics with Class III or IV composite
III. Restore tooth containing primary carious lesions to optimal form, function and esthetics with Class V glass ionomer, composite or amalgam
IV. Select case based on minimum criteria for direct restorations
    A. Class II – Any permanent posterior tooth
        1. Treatment needs to be performed in the sequence described in the treatment plan
        2. More than one test procedure can be performed on a single tooth; teeth with multiple lesions may be restored at separate appointments
        3. Caries as shown on either of the two required films on an unrestored proximal surface must extend to the dentoenamel junction
        4. Tooth to be treated must be in occlusion
        5. Must have an adjacent tooth to be able to restore a proximal contact; proximal surface of the dentition adjacent to the proposed restoration must be either natural tooth structure or a permanent restoration; provisional restorations or removable partial dentures are not acceptable adjacent surfaces
        6. Tooth must be asymptomatic with no pulpal or periapical pathology; cannot be endodontically treated or in need of endodontic treatment
        7. Tooth with bonded veneer is not acceptable
        8. The lesion is not acceptable if it is in contact with circumferential decalcification

    B. Class III/IV – Any permanent anterior tooth
        1. Treatment needs to be performed in the sequence described in the treatment plan
        2. More than one test procedure can be performed on a single tooth. Teeth with multiple lesions may be restored at separate appointments.
        3. Caries as shown on the required film on an unrestored proximal surface must extend to the dentoenamel junction
        4. Must have an adjacent tooth to be able to restore a proximal contact; proximal surface of the dentition adjacent to the proposed restoration must be either natural tooth structure or a permanent restoration; provisional restorations or removable partial dentures are not acceptable adjacent surfaces
        5. Tooth must be asymptomatic with no pulpal or periapical pathology; cannot be endodontically treated or in need of endodontic treatment
        6. The lesion is not acceptable if it is in contact with circumferential decalcification

7. Approach must be appropriate for the tooth
8. Tooth with bonded veneer is not acceptable

C. Class V – Any permanent tooth
   1. Tooth must have a carious lesion that is clinically evident.
   2. Treatment needs to be performed in the sequence described in the treatment plan
   3. More than one test procedure can be performed on a single tooth; teeth with multiple lesions may be restored at separate appointments
   4. Tooth must be asymptomatic with no pulpal or periapical pathology; cannot be endodontically treated or in need of endodontic treatment; the lesion is not acceptable if it is in contact with circumferential decalcification
   5. New restoration must be separate from any existing restoration on the tooth

AREA 3: INDIRECT RESTORATION

I. Restore tooth to optimal form, function and esthetics with crown or onlay according to approved procedures and materials for indirect restorations.
   A. Ceramic restoration must be onlay or more extensive
   B. Partial gold restoration must be onlay or more extensive
   C. Metal ceramic restoration
   D. Full gold restoration
   E. Facial veneer is not acceptable

II. Select case based on minimum criteria for indirect restorations.
   A. Treatment needs to be performed in the sequence described in the treatment plan.
   B. Tooth must be asymptomatic with no pulpal or periapical pathology; cannot be in need of endodontic treatment. Endodontically treated teeth must follow standard of care.
   C. Tooth must have opposing occlusion that is stable.
   D. Must have an adjacent tooth to be able to restore a proximal contact; proximal surface of the tooth adjacent to the planned restoration must be either an enamel surface or a permanent restoration; temporary restorations or removable partial dentures are not acceptable adjacent surfaces
   E. Tooth must require an indirect restoration at least the size of the onlay or greater.
   F. Cannot replace existing or temporary crowns
   G. Buildups may be completed ahead of time, if needed. Teeth with cast posts are not allowed.
   H. Restoration must be completed on the same tooth and same patient by the same student
   I. Validated lab or fabrication error will allow a second delivery attempt starting from a new impression or modification of the existing crown.
   J. Digital media cannot be used to capture impressions.

AREA 4: REMOVABLE PROSTHODONTICS

I. Develop diagnosis and determine treatment options and prognosis for removable prosthesis
   A. Obtain patient history, e.g., medical, dental, psychosocial
   B. Evaluate chief complaint
   C. Obtain radiographs and photographs
   D. Perform clinical examination, e.g., hard/soft tissue charting, endodontic evaluation, occlusal examination, skeletal/jaw relationship, VDO, CR, MIP
   E. Evaluate existing prosthesis and patient concerns
   F. Obtain and mount diagnostic cast
   G. Determine complexity of case, e.g., ACP classification
   H. Present treatment options and prognosis assessment, e.g., complete denture, partial denture, overdenture, implant options, FPD
   I. Analyze risks/benefits
   J. Apply critical thinking and make evidence-based treatment decisions
II. Restore edentulous spaces with removable prostheses
   A. Develop diagnosis and treatment plan for removable prosthesis
   B. Obtain diagnostic casts
   C. Perform diagnostic wax-up/survey framework design
   D. Determine need for preprosthetic surgery and make necessary referral
   E. Perform tooth modification and/or survey crowns
   F. Obtain master impressions and casts
   G. Obtain occlusal records
   H. Try-in and evaluate trial dentures
   I. Insert prosthesis
   J. Provide post-insertion care
   K. Apply standards of care, e.g., infection control, informed consent
III. Manage tooth loss transition with immediate or transitional prostheses
   A. Develop diagnosis and treatment plan – tooth salvage/extraction decisions
   B. Educate patient regarding healing process, denture experience, future treatment needs, etc
   C. Plan surgical and prosthetic phases
   D. Obtain casts, e.g., preliminary/final impressions
   E. Obtain occlusal records
   F. Perform diagnostic wax-up
   G. Try-in and evaluate trial dentures
   H. Manage and coordinate surgical phase
   I. Insert immediate or transitional prosthesis
   J. Provide post insertion care including adjustments, relines, patient counseling
   K. Apply standards of care, e.g., infection control, informed consent
IV. Manage prosthetic problems
   A. Assess real or perceived patient problems

B. Evaluate existing prosthesis
C. Perform uncomplicated repair, reline, re-base, re-set or re-do
D. Determine need for specialty referral
E. Obtain impression/record/information for laboratory use
F. Communicate needed prosthetic procedure to laboratory technician
G. Insert prosthesis and provide follow-up care
H. Perform in-office maintenance, e.g., prosthesis cleaning, clasp tightening, occlusal adjustment

V. Direct and evaluate laboratory services for prosthesis
A. Complete laboratory prescription
B. Communicate with laboratory technician
C. Evaluate laboratory work product, e.g., frameworks, processed dentures

AREA 5: ENDODONTICS

I. Apply case selection criteria for endodontic cases
   A. Meet AAE case criteria for minimum difficulty
      1. Treat simple morphologies of all teeth
      2. Treat teeth that include signs and symptoms of swelling and acute inflammation
      3. Treat teeth without previous complete or partial endodontic therapy
   B. Determine endodontic diagnosis
   C. Perform charting and diagnostic testing
   D. Take and interpret radiographs
   E. Determine pulpal diagnosis within approved parameters
      1. Within normal limits
      2. Reversible pulpitis
      3. Irreversible pulpitis
      4. Necrotic pulp
   F. Determine periapical diagnosis within approved parameters
      1. Within normal limits
      2. Asymptomatic apical periodontitis
      3. Symptomatic apical periodontitis
      4. Acute apical abscess
      5. Chronic apical abscess
   G. Develop endodontic treatment plans including referral, trauma, and management of emergencies
II. Demonstrate pretreatment preparation for endodontic treatment
   A. Manage pain control
   B. Remove caries and failed restorations
   C. Determine restorability
   D. Achieve isolation
III. Perform access opening
   A. Create indicated outline form
   B. Create straight line access
   C. Maintain structural integrity
   D. Complete unroofing of pulp chamber
   E. Identify all canal systems
IV. Perform shaping and cleaning techniques
   A. Maintain canal integrity
   B. Preserve canal shape and flow
   C. Apply protocols for establishing working length
   D. Manage apical control
   E. Apply disinfection protocols
V. Perform obturation techniques
   A. Apply obturation protocols
      1. Select and fit master cone
      2. Determine canal conditions before obturation

3. Verify sealer consistency and adequacy of coating

B. Demonstrate length control of obturation

C. Achieve dense obturation of filling material

D. Demonstrate obturation to a clinically appropriate coronal height

VI. Demonstrate completion of endodontic case

A. Achieve coronal seal to prevent re-contamination

B. Create diagnostic, radiographic and narrative documentation

VII. Provide recommendations for post-endodontic treatment

A. Recommend final restoration alternatives

B. Provide recommendations for outcomes assessment and follow-up

AREA 6: PERIODONTICS

I. Perform comprehensive periodontal examination
   A. Review medical and dental history
   B. Interpret radiographs
   C. Perform extra- and intra-oral examination
   D. Perform comprehensive periodontal data collection
      1. Evaluate plaque index, probing depths, bleeding on probing, suppuration, cementoenamel junction-gingival margin, clinical attachment level and furcations
      2. Perform occlusal assessment
   E. Evaluate periodontal etiology/risk factors (local and systemic)

II. Determine diagnosis and develop periodontal treatment plan
   A. Determine periodontal diagnosis
   B. Formulate initial periodontal treatment plan
      1. Determine whether to treat or refer to periodontist
      2. Discuss with patient etiology, benefits of treatment, specific risk factors, alternatives and patient-specific oral hygiene instructions
      3. Determine nonsurgical periodontal therapy including management of contributing factors of periodontitis
      4. Determine need for re-evaluation
      5. Determine recall interval (if no re-evaluation needed)

III. Perform nonsurgical periodontal therapy
   A. Detect supra- and subgingival calculus
   B. Perform periodontal instrumentation
      1. Remove calculus
      2. Remove plaque
      3. Remove stains
   C. Minimize tissue trauma
   D. Provide effective anesthesia

IV. Perform periodontal re-evaluation
   A. Evaluate effectiveness of oral hygiene care
   B. Assess periodontal outcomes
      1. Review medical and dental history
      2. Review radiographs
      3. Perform comprehensive periodontal data collection (e.g., evaluate plaque index, probing depths, bleeding on probing, suppuration, cementoenamel junction-gingival margin, clinical attachment level, furcations, tooth mobility)
   C. Discuss with patient etiology, benefits of treatment, alternatives, patient-specific oral hygiene instructions, and modification of specific risk factors
   D. Determine further periodontal needs including need for referral to a periodontist and periodontal surgery
   E. Establish recall interval for periodontal treatment

SECTION 7 – EVALUATION SYSTEM

A standardized evaluation system will be used as the tool to evaluate students' performance in the competency examinations. To implement the portfolio examination, the competencies and their subcomponents defined in Section 5 will provide the framework for the evaluation system that will assess the students' competencies in the procedures. Faculty from all Board-approved dental schools must be involved in the process so that the final evaluation system represents rating criteria applicable to students regardless of their predoctoral programs.

The evaluation system is intended to be used for *summative* decisions (high-stakes, pass/fail decisions) rather than formative decisions (compilation of daily work with faculty feedback for learning purposes). The evaluation system provides quantitative validity evidence for determining clinical competence in terms of numeric scores.

APPLICABLE STANDARDS

The evaluation system must meet psychometric criteria to provide the measurement opportunity for success for all students.

Standard 3.20 "The instructions presented to test takers should contain sufficient detail so that test takers can respond to a task in the manner that the test developer intended. When appropriate, sample material, practice or sample questions…should be provided to test takers prior to the administration of the test or included in the testing material as part of the standard administration instructions." (p. 47)

Standard 3.22 "Procedures for scoring and, if relevant, scoring criteria should be presented by the test developer in sufficient detail and clarity to maximize the accuracy of scoring. Instructions for using rating scales or for deriving scores obtained by coding, scaling, or classifying constructed responses should be clear." (p. 47)

Standard 14.17 "The level of performance required for passing a credentialing test should depend on the knowledge and skills necessary for acceptable performance in the occupation or profession and should not be adjusted to regulate the number or proportion of persons passing the test." (p. 162)

BEHAVIORALLY ANCHORED RATING SCALES

Behaviorally anchored rating scales have unique measurement properties which have been used extensively in medical and dental education as a tool to assess performance. They rely on critical incidents of behavior which may be classified into dimensions unique and independent of each other in their meaning. Each performance dimension is arrayed on a continuum of behaviors and examiners must select the behaviors that most closely describe the student's performance.

There are several steps to develop behaviorally anchored rating scales for the portfolio examination evaluation system:

1. Use the competencies and their associated subcomponents defined by the table-top job analysis discussed in Section 5 as the framework for the evaluation system, e.g., comprehensive oral diagnosis and treatment planning, direct restoration, indirect restoration, removable prosthodontics, endodontics, periodontics

2. Generate critical incidents of ineffective and effective behavior

3. Create performance dimensions that describe the qualities of groups of critical incidents

4. Define performance dimensions in terms of numeric ratings, e.g., 1 to 5, 1 to 7, 1 to 9

5. Retranslate (reclassifying) the critical incidents to ensure that the incidents describe the performance dimensions

6. Identifying six to seven incidents for each performance dimension

7. Refine standardized criteria for each of the competency domains and their subcomponent competencies

8. Establish minimum acceptable competence criteria (passing criteria) for competency examinations

MINIMUM COMPETENCE

The passing standard for all of the competency examinations will be built into the rating scales when the rating criteria are developed. The rating criteria for minimum competence is best developed by representative faculty who have a solid conceptual understanding of standardized rating criteria and how the criteria will be applied in an operational setting.

Table 2 – Non-inclusive examples of quality evaluation criteria for casting preparations[1]

Rating	Outline	Internal	Retention	Marginal Finish
5	• Outline fulfills all criteria for proper extension • Margins terminate exactly where specified • Margins terminate on smooth, clean, finshable tooth structure	• Optimal reduction to allow for proper contour, strength and esthetics of completed restoration • Indicated bases and/or build-up properly placed	• Maximum length of axial first plane walls and internal walls compatible with periodontal health, pulpal health and strength of tooth. • Secondary retentive features placed as indicated with maximum length, property depth, parallel with path of insertion,	• Enamel walls supported by dentin • Margins terminate with proper angulation • Finish lines are smooth and free of irregularities • Finish lines are continuous • Preparation is isolated to allow for evaluation
4	• Outline form does not fulfill all criteria for proper extension in one area but is still acceptable and does not require alteration • Minimal abrasion of the adjacent tooth in one area that requires smoothing	• Deviates from ideal in one area but still within acceptable range; allows for fabrication of a satisfactory restoration	• Retention adequate but not optimal in an isolated area	• Deviates from the ideal in one area but is still within acceptable range and will allow for fabrication of satisfactory restoration
3	• Outline form does not fulfill all criteria for proper extension in multiple areas but is acceptable and does not require alteration	• Deviates from ideal in multiple areas but still within acceptable range	• Retention adequate but not optimal in multiple areas	• Deviates from the ideal in multiple areas but is still within acceptable range and will allow for fabrication of satisfactory restoration
2	• Outline form does not fulfill the criteria for proper extensions and is unacceptable requiring alteration of preparation • Cutting the adjacent tooth requires recontouring adjacent tooth	• Deviates from the acceptable range and will not allow for fabrication without modification • Caries remaining in preparation	• Retention is not satisfactory and requires modification	• Deviates from the ideal in more than one area and requires modification to fabricate an acceptable restoration
1	• Outline form does not fulfill all criteria for proper extension and requires alteration of the preparation • Cuts the adjacent tooth • Damages the periodontium	• Severely deviates from acceptable in one area and deviates from acceptable in multiple areas • Mechanical exposure of pulp or perforation of root	• Retention severely inadequate and requires extensive modification	• Severely deviates from the ideal in one or more areas and requires modifications to fabricate an acceptable restoration

[1] Adapted from University of Southern California quality evaluation criterion for casting preparations. Not all anchors from the criteria were used.

SECTION 8 – EXAMINER TRAINING AND CALIBRATION

In order to meet the standard required for psychometrically sound examinations, training and calibration procedures must be linked back to the competencies defined by a job analysis and to the evaluation system. All the schools must calibrate their faculty to the same rating criteria. Again, faculty from all Board-approved dental schools must be involved in the process to ensure those faculty apply the same standards to students' performance. It is very important for the Board to be aware of threats to the validity of the examination that arise from improper training and calibration. If the examiners are improperly trained and calibrated, the examiners would compromise the portfolio examination's ability to produce results that warrant valid conclusions about students' clinical competence.

APPLICABLE STANDARDS

Standard 5.1 "Test administrators should follow carefully the standardized procedures for administration and scoring as specified by the test developer, unless the situation or a test taker's disability dictates an exception should be made." (p. 63)

Standard 5.8 "Test scoring services should document the procedures that were followed to assure accuracy of scoring. The frequency of scoring errors should be monitored and reported to users of the service on reasonable request. Any systematic source of scoring errors should be corrected." (p. 64)

Standard 5.9 "When test scoring involves human judgment, scoring rubrics should specify criteria for scoring. Adherence to established scoring criteria should be monitored and checked regularly. Monitoring procedures should be documented." (p. 65)

EXAMINER SELECTION CRITERIA

Examiners will be dental school faculty trained to use a standardized evaluation system through didactic and experiential methods. Each examiner will be required to submit credentials to document their qualifications and experience in conducting examinations in an objective manner.

During hands-on training, examiners will be provided feedback about their performance and how their scoring varies from their fellow examiners. Examiners whose error rate exceeds a prespecified percentage error will be re-

calibrated. If any examiner is unable to be re-calibrated, the Board would dismiss the examiner from the portfolio examination process.

PROCESS

Examiners will be asked to review a variety of materials, e.g. online overview of process, examiner training manuals, slide presentations (Powerpoint), sample cases, sample documentation, DVD, etc., prior to participating in the actual rating of students.

Training activities will have multiple examples of performance that clearly relate to the specific judgments that examiners are expected to provide during the competency examinations. Hands-on training sessions should include an overview of the rating process, clear examples of rating errors, examples of how to mark the grading forms, a series of several sample cases for examiners to hone their skills, and numerous opportunities for training staff to provide feedback to individual examiners.

There are several steps in the process:

1. Establish agreement among all the schools as to the level of performance represented by the competencies represented in the evaluation
2. Train all faculty from all the dental schools involved in portfolio examination to use standardized criteria to agreed upon set standards for interrater reliability
3. Build in a process for faculty from other schools to participate in evaluating students in competency examinations
4. Develop an evaluation system and calibration process that is iterative and involves individual feedback so that mid-course modifications can be made to improve the system as necessary
5. Conduct calibration regularly to maintain common standards as a ongoing process

TYPES OF RATING ERRORS

The competency examinations have the potential to introduce error to the score that is unrelated to the reliability of the examination. Several common rating errors can interfere with the rating process by diminishing the accuracy, effectiveness and fairness of the ratings (Cascio, 1992). Rating errors can be avoided by developing scoring criteria that clearly define acceptable and unacceptable performance.

- Halo effect: Inappropriate generalization from one aspect of an individual's performance to all areas of the person's performance

- Contrast effect: Tendency to rate persons in comparison to others

- Stereotyping: Tendency to generalize, favorably or unfavorably, across groups and ignore individual differences

- Central tendency: Inclination to rate students in the middle of the rating scale even when student performance merits higher or lower ratings

- Negative/positive skew: Inclination to rate students higher or lower than their performance warrants

- Recency effect: Tendency to discount events that occurred early in the rating period and overemphasize those that occurred later.

CROSS-TRAINING OF EXAMINERS

Training sessions will be conducted on an ongoing basis in both northern and southern California, with the expectation that examiners participating in the portfolio examination process will have ample opportunities to participate in competency examinations conducted at a school other than their own. It may not be necessary to have examiners from other schools rate each and every student; however, periodic participation of examiners from outside schools can strengthen the credibility of the process and ensure objectivity of ratings.

SECTION 9 – AUDIT PROCESS

The purpose of the audit should be to determine if the schools are following the procedures established for the evaluation system and calibration process. The design of the evaluation system and the calibration process will be sufficiently robust to ensure that only the students who meet the passing criteria would be issued a license. The Dental Board should oversee the auditing process and establish standards necessary for public protection in cooperation with dentists who are knowledgeable of the portfolio examination and licensing standards.

During an audit, in-depth information is obtained about the administrative and psychometric aspects of the portfolio examination, much like the accreditation process. An audit team comprised of faculty from the dental schools and persons designated by the Board would verify compliance with accepted professional testing standards, e.g., Standards for Educational and Psychological Testing, as well as verify whether the portfolios have been implemented according to the goals of the portfolio process.

APPLICABLE STANDARDS

Standard 3.15 "When using a standardized testing format to collect structured behavior samples, the domain, test design, test specifications and materials should be documented as for any other test. Such documentation should include a clear definition of the behavior expected of the test takers, the nature of expected responses, and any materials or directions that are necessary to carry out the testing." (p. 46)

PROCESS

There are several steps in the process:

1. Develop documents for evaluating the schools compliance with the evaluation system and calibration process
2. Train auditors in the evaluation system and calibration process
3. Develop criteria for auditors to apply in reviewing schools' compliance with the evaluation system and calibration process
4. Select auditors who can maintain the principle of independence
5. Develop self-assessment protocols and schedules for schools to complete

ROLE OF AUDITORS

The audit team is responsible for verification of the examination process and examination results, and, collection and evaluation of specific written documentation which respond to a set of standardized audit questions and summarizing the findings in a written report. A site visit can be conducted to verify portfolio documentation and clear up unresolved questions.

The audit team would be comprised of persons who can remain objective and neutral to the interests of the school being audited. The audit team should be knowledgeable of subject matter, psychometric standards, psychometrics and credentialing testing.

The audit team should be prepared to evaluate the information provided in a written report that documents the strengths and weaknesses of each school's administrative process and provides recommendations for improvement.

DOCUMENTATION FOR VALIDITY EVIDENCE

Each student will have a portfolio of completed, signed rating (grade) sheets which provide evidence that clinical competency examinations in the six areas of practice have been successfully completed.

In addition to the signed rating (grade) sheets, there is content-specific documentation that must be provided. A list of acceptable documentation is presented on the following page.

Table 3 – Content-specific documentation

COMPREHENSIVE ORAL DIAGNOSIS AND TREATMENT PLANNING	• Full workup of case
DIRECT RESTORATION	• Restorative diagnosis and treatment plan • Preoperative radiographs, e.g., original lesion in Class II, III, IV • Postoperative radiographs including final fill
INDIRECT RESTORATION	• Restorative diagnosis and treatment plan • Preoperative radiographs • Postoperative radiographs including successfully cemented crown or onlay
REMOVABLE PROSTHODONTICS	• Removable prosthodontic diagnosis and treatment plan • Preoperative radiographs illustrating treatment condition • Preoperative and postoperative intraoral photographs of finished appliance
PERIODONTICS	• Periodontal diagnosis and treatment plan • Charted pocket readings • Preoperative radiographs including subgingival calculus • Postoperative radiographs • Follow-up report
ENDODONTICS	• Endodontic diagnosis and treatment plan • Preoperative radiographs of treatment site • Postoperative radiographs of treatment site

SECTION 10 – RESEARCH FINDINGS

PSYCHOMETRIC ISSUES

Several researchers comment that if portfolios are used for summative rather than formative purposes, it must meet stringent psychometric requirements including standardization, rater training with structured guidelines for making decisions, and large numbers of examiners to average out rater effects (Driessen, van der Vleuten, Schuwirth, Tartwijk & Vermunt, 2005, p. 215; Davis & Ponnamperuma, 2005, Friedman Ben-David, Davis, Harden, Howie, Ker, & Pippard, 2001).

Friedman et al. (2001) note that the validity of the inferences made about the portfolio depend on the reliability of the test. If the test scores or ratings suffer from low interrater agreement or poor sampling, inferences cannot be made. Moreover, there should be a clear definition of the purpose of the portfolio and identification of the competencies to be assessed. Webb, Endacott, Gray, Jasper, McMullan and Scholes (2003) and McMullan (2003) cite several criteria that should be used to evaluate portfolio assessments, namely, explicit grading criteria, evidence from a variety of sources, internal quality assurance processes, and external quality assurance processes.

Content validity is important in developing an examination for initial licensure (Chambers, 2004) such that there should be a validation process that inquires whether tasks being evaluated should be representative of tasks critical to safe and effective practice. A recent paper by Patterson, Ferguson, and Thomas (2008) calls for validation by using a job analysis to identify core and specific competencies.

A recent paper entitled “Point/Counterpoint: Do portfolio assessments have a place in dental licensure?” addresses many of these issues specifically as they pertain to the purpose of licensure rather than education (Hammond & Buckendahl, 2006; Ranney & Hambleton, 2006).

Hammond and Buckendahl do not support the use of portfolios for dental licensure. They cite two issues as important in considering the use of portfolio assessments for licensure purposes. First, standardizing the training and evaluation across a broad range of locations would be difficult. Second, demonstrations of abilities in past records would need to be verified so that there is an evaluation of the current range of competencies. These authors contend that the portfolio does not provide an assessment of minimum skills that is administered ***independent*** of the training program to support licensure decisions;

and therefore, provides no external validation and verification of the students' competence. Moreover, there may be measurement error, or low reliability, within the system as a result of errors in content sampling, number of observations of performance, number of examiners rating the student's performance, assumptions of unidimensional relationships between items, lack of interrater agreement, and reliance on pairs rather than triads of examiners for all students.

In an opposing point of view in the same article, Ranney and Hambleton (2006) support the use of portfolios for dental licensure. According to these authors, testing agencies have published little or no data to allow an assessment of reliability of validity of their examinations. Variability in the reliability of clinical licensure examinations and pass rates among testing agencies may reflect lack of reliability or validity in the examination process, and, omission of skills necessary to practice safely at the entry level, not just changes in student populations. The authors recognize that several criteria would need to be met before portfolio assessment could be implemented. The most important of these criteria are: administration by independent parties, inclusion of a full continuum of student competencies for comprehensive evaluation, and, evaluating competence within the context of a treatment plan designed to meet the patient's oral health care needs. In their discussion, the authors believe that portfolio assessments could work if the developers considered which tasks to measure, how the tasks would be scored, calibration protocols for examiners, and how performance expectations would be set.

INITIAL LICENSURE REQUIREMENTS IN OTHER JURISDICTIONS

According to the American Association of Dental Examiners "Composite" issued in January 2009, virtually all states and U. S. territories require applicants to pass an examination administered by the National Board of Dental Examiners.

- Forty-seven jurisdictions accepted a regional clinical examination, e.g., WREB, SRTA, CRDTS or national clinical, e.g., ADEX, ADLEX.
- Four jurisdictions, other than California, administered a state clinical examination
- Forty-three jurisdictions administered a jurisprudence examination
- Four states, other than California, granted licensure after completion of an accredited, 12-month, postgraduate residency program
- Six states allow applicants to take any state or regional clinical examination; Virginia explicitly states that the clinical examination must use live patients
- Two states (Montana and Utah) accept California's clinical examination

Table 4 – Summary of existing requirements for initial licensure[2]

State	National Board	Regional clinical	State clinical	Jurisprudence	Other
AL	Y	N	Y	Y	
AK	Y	Y (WREB)	N	Y	
AZ	Y	Y (WREB)	N	Y	
AR	Y	Y (SRTA)	N	Y	
CA	Y	Y (WREB)	Y	Y	PGY-1
CO	Y	Y (CRTDS)	N	Y	
CT	Y	Y (NERB OR DSCE)	N	N	PGY-1
DE	Y	N	Y	Y	DOR
District of Columbia	Y	Y	Y	Y	
FL	Y	N	Y	Y	
GA	Y	Y (CRDTS)	N	Y	
HI	Y	N	N	N	ADEX
ID	Y	Y (WREB, CRDTS)	N	Y	ADEX
IL	Y	N	N	N	ADEX
IN	Y	Y (WREB, SRTA, CRDTS, NERB)	N	Y	
IA	Y	Y (CRDTS, WREB)	N	Y	ADEX
KS	Y	Y (WREB, SRTA, CRDTS, NERB, CITA)	Y	Y	
KY	Y	Y (SRTA, WREB, CRDTS, NERB)	N	Y	ADEX not accepted
LA	Y	Y (CITA, CRDTS, NERB, SRTA, WREB)	N	Y	ADEX
ME	Y	Y (NERB)	N	Y	
MD	Y	Y (NERB)	N	Y	
MA	Y	Y	N	Y	
MI	Y	Y (NERB, DSCE)	--	--	
MN	Y	Y (NDEB, WREB)	N	Y	PGY-1, ADLEX, ADEX
MS	Y	Y	N	Y	
MO	Y	Y (Any state or regional examination)	N	Y	

[2] Examination acronyms for states which specified regional examinations: ADEX = American Board of Dental Examiners; ADLEX = American Dental Licensing Examination; CITA = Council of Interstate Testing Agencies; CRTDS = Central Regional Dental Testing Service; DOR = Dental Operating Rooms at Naval dental facilities; DSCE = Dental Simulated Clinical Examination; NERB = North East Regional Board; NDEB = National Dental Examining Board of Canada; SRTA = Southern Regional Testing Agency; WREB = Western Regional Examining Board

State	National Board	Regional clinical	State clinical	Jurisprudence	Other
MT	Y	Y (WREB, CRDTS, WREB, SRTA, NERB)	N	Y	State clinical examinations from CA, DE, FL, and NV
NE	Y	Y (CRDTS, NERB)	N	Y	
NV	Y	N	--	Y	ADEX; no licensure by credential
NH	Y	Y (NERB)	N	Y	
NJ	Y	Y (NERB)	N	Y	ADEX
NM	Y	Y (WREB, CRDTS)	N	Y	
NY	Y	N	N	N	CDA approved residency; one-time jurisprudence examination
NC	Y	Y (CITA)	N	Y	Sterilization/infection control examination
ND	Y	Y (NERB, CRDTS)	N	Y	ADEX
OH	Y	Y (CRDTS, SRTA, WREB, NERB)	N	Y	
OK	Y	Y (WREB)	N	Y	
OR	Y	Y	N	Y	Accepts any state or regional examination
PA	Y	Y (NERB)	N	N	ADLEX
Puerto Rico	Y	CITA	Y	Y	CITA in lieu of state clinical examination
RI	Y	Y (NERB)	N	N	
SC	Y	Y (SRTA, CRDTS)	N	Y	ADLEX
SD	Y	Y (CRDTS, WREB)	N	Y	Accepts any state or regional examination for licensure by credential
TN	Y	Y (SRTA, WREB)	N	N	
TX	Y	Y	--	Y	Accepts any state or regional examination for licensure by credential
UT	Y	Y (WREB, SRTA, NERB, CRDTS)	N	N	California state examination, Hawaii examination
VT	Y	Y (NERB, WREB, SRTA, CRDTS, CITA)	N	Y	

State	National Board	Regional clinical	State clinical	Jurisprudence	Other
VA	Y	Y (SRTA, WREB, DRDTS, NERGE, CITA)	--	Y	Accepts any state or regional examination for licensure by credential (only if live patients used)
U. S. Virgin Islands	--	--	--	--	
WA	Y	Y	N	Y	PGY-1; Accepts any state or regional examination
WV	Y	Y	N	Y	Any state or regional examination
WI	Y	Y (CRDTS, WREB, NERB)	N	Y	ADEX I and II
WY	Y	Y (CRDTS, WREB, NERB)	N	Y	Part IV of ADEX

COMPARISON OF REQUIREMENTS IN THE U.S. AND CANADA

In their 2001 review of dental education and licensure, the Council on Dental Education of the American Dental Association (ADA) compared practices for initial dental licensure in the United States and Canada. Their findings indicate that initial licensure in the United States and Canada are very similar; however, Canada relies on the use of the OSCE, which requires students to answer multiple-choice questions about radiographs, case histories, and/or models in a series of stations. In the OSCE, simulated patients (manikins) rather than actual patients are used as subjects for examination procedures.

Table 5 – Comparison of practices in U. S. and Canada for initial licensure

Requirement	United States	Canada
Graduation from an accredited program	Yes; program is accredited by the ADA Commission on Dental accreditation	Yes; program is accredited by the Commission on Dental Accreditation of Canada
Written examination	Yes: National Dental Board Examinations (NDBE) Parts I and II	Yes; National Dental Examining Board of Canada Written Examination (NDEB)
Clinical examination	• Regionally administered clinical examinations Central Regional Testing Services (CRTS); Northeast Regional Examining Board (NERB), Southern Regional Testing Agency (SRTA), Western Regional Examining Board (WREB) offered once to multiple times, depending on the testing agency • 10 states (CA, DE, FL, HI, IN, LA, MS, NC, NV plus Puerto Rico and the Virgin Islands) offer state administered examinations • Each state determines which clinical examination results are accepted for the purpose of licensure • All states require completion of both written and clinical examinations before being eligible for licensure • Some states also require additional criteria such as proof of malpractice insurance, certification in Basic Life Support, or a jurisprudence examination	• OSCE offered three times a year • Quebec requires an NDEB certificate or a provincial examination. • Some provinces require completion of an ethics examination

EXISTING COMPETENCY EXAMINATIONS

As expected, all of the California schools included competencies which met minimum standards set forth by the Commission on Dental Accreditation for predoctoral dental education programs (2008, Standard 2-25, p. 15): "At a minimum graduates must be competent in providing oral health care with the scope of general dentistry, as defined by the school, for the child, adolescent, adult, and geriatric patient, including:

a) Patient assessment and diagnosis;
b) Comprehensive treatment planning;
c) Health promotion and disease prevention;
d) Informed consent;
e) Anesthesia, and pain and anxiety control;
f) Restoration of teeth;
g) Replacement of teeth;
h) Periodontal therapy;
i) Pulpal therapy;
j) Oral mucosal disorders;
k) Hard and soft tissue surgery;
l) Dental emergencies;

m) Malocclusion and space management; and,
n) Evaluation of the outcomes of treatment.

Key faculty from each of the five Board-approved schools were interviewed regarding the clinical dimensions of practice assessed in competency examinations within their predoctoral programs. All of the schools provided a list of the clinical competencies assessed during predoctoral training. A list of each school's competency examination is presented in the Tables 6, 7, 8, 9 and 10.

Table 6 – Competency examinations: Loma Linda University

Comprehensive diagnosis and treatment planning	• Oral diagnosis examination • Radiology interpretation (FMX pathology) • Radiology interpretation (Normal and errors) • Radiology techniques
Direct restoration	• Class II composite resin • Class II amalgam • Class III composite
Indirect restoration	• Full gold crown, partial coverage crown, full coverage ceramic crown, fixed partial denture *or* multiple tooth restoration
Removable prosthodontics	• Rest seat preparation • RPD design • CD setup
Periodontics	• Preclinical OSCE (5) • Scaling and root planning (2) • Oral health care (2)
Endodontics	• Endodontic qualifying examination (to treat patients in clinic) • Endodontic section of Fall mock board • Endodontic qualifying examination (to take WREB)

Table 7 – Competency examinations: University of California Los Angeles

Comprehensive diagnosis and treatment planning	• Oral diagnosis • Head and neck examination • Treatment planning • Caries management by risk assessment
Direct restoration	• Class II amalgam (2) • Class II composite (1) • Class III composite or Class V composite (2) • Two buildups (core, pin, prefabricated post and core, *or* dowel core)
Indirect restoration	• Two restorations (PFM, bonded ceramic, full gold crown *or* partial veneer crown)
Removable prosthodontics	• Complete denture • Immediate full denture • Removable partial denture • Reline
Periodontics	• Periodontal diagnosis and treatment plan • Periodontal instrumentation • Re-evaluation of Phase I therapy • Periodontal surgery
Endodontics	• Endodontic case portfolio

Table 8 – Competency examinations: University of California San Francisco

Comprehensive diagnosis and treatment planning	• Medical/dental history taking • Infection control • Practice management • Oral diagnosis and treatment planning OSCE • Caries risk assessment • Complete oral examination/treatment planning • Radiology • Emergency • Baseline skills attainment • Pediatric comprehensive oral examination • Outcomes of care
Direct restoration	• Class I composite or preventive resin restoration • Class I amalgam • Class II amalgam • Class II composite • Class III or IV composite • Class V composite, glass ionomer *or* amalgam • Pediatric restorative
Indirect restoration	• Mounted diagnostic cast • Die trimming • Casting (PFM, all gold, *or* all ceramic crown)
Removable prosthodontics	• Removable prosthodontics (partial *or* full denture)
Periodontics	• Instrument sharpening • Instrument identification and adaptation • Scaling and root planning
Endodontics	• Single-root root canal • Multi-root root canal on typodont

Table 9 – Competency examinations: University of the Pacific

Comprehensive diagnosis and treatment planning	• Oral diagnosis and treatment planning
Direct restoration[3]	• Class I resin • Class II resin • Class II amalgam • Class III resin • Class V resin
Indirect restoration	• All cases evaluated for case management, buildup (if needed), preparation and temporization • Crown preparation and crown (FVM, PFM <u>or</u> all ceramics) • CIMOE (cementation) • Impression
Removable prosthodontics	• Complete denture, immediate complete denture <u>or</u> other removable prosthestic device
Periodontics	• Periodontal oral diagnosis and treatment planning • Periodontal diagnostic competency • Calculus detection and root planing • Instrument sharpening • Periodontal re-evaluation
Endodontics	• Endodontic radiographic technique • Cleaning and shaping (single canal) • Coronal access anterior • Coronal access posterior • Obturation (single canal)

[3]All direct restoration cases are evaluated for case management, preparation and restoration. Typically Class III and Class V resins are performed in the anterior segments; several posterior Class II restorations are completed including a mandatory mock board scenario—mixed between amalgam and resin

Table 10 – Competency examinations: University of Southern California

Competency domain	Specific competencies
Comprehensive diagnosis and treatment planning	• Oral radiology (OSCE in radiology) • Physical evaluation • Ultrasonic instrumentation/ultrasonic scaler • OSCE in vital signs, extra- and intraoral examination and infection control
Direct restoration	• Class II amalgam • Composite restoration (Class II, III, IV, *or* V)
Indirect restoration	• Crown preparation (PFM, full gold, partial veneer gold, *or* ceramic) • Crown cementation (PFM, full gold, partial veneer gold, *or* ceramic)
Removable prosthodontics	• Preliminary Impression • Outline tray(s)/ custom tray(s) • Final impression(s) • Final survey • Framework try-in (retention/occlusion) • Jaw record(s)/ tooth selection • Teeth try-in/ remount jig • Prosthesis placement/ clinical remount • Final adaptation and articulation
Periodontics[4]	• Diagnosis and comprehensive treatment planning • Ultrasonic instrumentation for scaling and root planning • Scaling and root planning • Mock board examination (WREB compatible)
Endodontics	• Access • Instrumentation • Obturation

CALIBRATION OF EXAMINERS

During visits to the dental school clinics and interviews with faculty, it was clear that the dental schools did an exceptional job in calibrating their examiners and were consistent in their methodology to ensure that common criteria were used to evaluate students' performance on competency examinations. The faculty were calibrated and re-calibrated to ensure consistency in their evaluation of the student competencies and the processes used by the dental schools for assessing competencies was very similar. In every case, minimum competency was built into the rating scales used to evaluate the students in their competency examinations.

The general rule was that two examiners must concur on failing grades. If there is disagreement between the two examiners, a third examiner was asked to grade the student. One school specifically mentioned that examiners were designated full-time faculty who were familiar with the grading criteria and the logistics of competency examinations. Other schools mentioned that their examiners (part-time and full-time faculty) were provided extensive materials to

[4] Diagnosis and comprehensive treatment planning, ultrasonic instrumentation, scaling and root planing are performed in the junior year; mock board examination performed in the senior year

read and review prior to hands-on training with experienced examiners. These materials included detailed examiner training manuals, detailed slide presentations (PowerPoint), sample cases, and sample documentation. Hands-on training and calibration sessions were conducted to ensure that the examiners understood the evaluation system and how to use it.

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APPENDIX A – CONSULTANT BACKGROUND

NORMAN R. HERTZ, PH.D.
DIRECTOR OF PSYCHOMETRIC SERVICES

Dr. Hertz is the Director of Psychometric Services at Comira. He is a licensed psychologist with more than 25 years of experience in the measurement field. He received his Bachelor of Arts degree from Baylor University in psychology, and his Master of Science degree in psychology and his Ph.D. in industrial-organizational psychology from the University of Memphis.

He was the managing partner of HZ Assessments, a private psychometric consulting firm that he co-founded after his retirement from the California Department of Consumer Affairs in 2001. He has provided psychometric expertise to national and international organizations and has developed licensing and certification examinations for several western states including California, Washington, Oregon, and Arizona. He has extensive experience in private industry and government settings and has conducted validation studies, developed licensing and certification examinations, and established cut scores for more than 50 professions, ranging from the construction trades to medical specialties. He specializes in conducting psychometric audits of examination programs.

Prior to HZ Assessments and Comira, Dr. Hertz was the Chief of the Office of Examination Resources at the California Department of Consumer Affairs for 15 years. During his tenure at Consumer Affairs, he handled the most sensitive aspects of examination programs for more than 30 boards including expert witness testimony for legislative committees.

He has chaired and presented at the annual meetings of the Council on Licensure, Enforcement and Regulation and the National Council on Measurement in Education and has also co-authored several technical papers and journal articles. He is a member of the American Psychological Association, the Society for Industrial Organizational Psychology, the American Educational Research Association, the National Council on Measurement in Education, and the Council on Licensure, Enforcement and Regulation.

ROBERTA N. CHINN, PH.D
SENIOR PSYCHOMETRIC SPECIALIST

Dr. Roberta Chinn is the Senior Psychometric Specialist at Comira. She has more than 19 years of experience in the measurement field. She received her Bachelor of Science degree from the University of California at Davis in psychology, her Master of Arts degree from the University of the Pacific in experimental psychology, and her Ph.D. in experimental and cognitive psychology from Louisiana State University.

She was a general partner in HZ Assessments, a private psychometric consulting firm that she co-founded in 2001. Prior to HZ Assessments and Comira, Dr. Chinn was a senior psychometric consultant at the Office of Examination Resources at the California Department of Consumer Affairs for over 11 years. During her tenure at Consumer

Affairs, she handled sensitive aspects of examination programs for more than 30 boards and was instrumental in the development of standardized practical examinations, applied law and ethics examinations, and standardized oral examinations.

She has developed licensing and certification examinations for several western states (e.g., California, Colorado, Washington, Oregon, Arizona) as well as for national credentialing organizations (e.g., Commission on Dietetic Registration of the American Dietetic Association, Appraisal Qualifications Board). She has extensive experience in government settings and has conducted validation studies, developed licensing and certification examinations, and/or established cut scores for over 50 professions including commercial and residential appraisers, court reporters, predoctoral and postgraduate dentists, dental auxiliaries, specialty dietitians, structural engineers, engineering geologists, environmental site assessors, fiduciaries, hydrogeologists, pest control personnel, clinical psychologists, ship pilots, pharmacists, clinical psychologists, speech-language pathologists and veterinarians. She specializes in the development of multiple-choice, performance and oral examinations and has developed innovative methods to streamline procedures for job analyses and examination development.

She has chaired and presented at the annual meetings of the Council on Licensure, Enforcement and Regulation and the National Council on Measurement in Education and has also co-authored several technical papers and journal articles. She is a member of the American Psychological Association, the American Educational Research Association, the National Council on Measurement in Education, and the Council on Licensure, Enforcement and Regulation.

Assembly Bill No. 1524

CHAPTER 446

An act to amend Sections 1630 and 1632 of, to add Sections 1632.1 and 1632.6 to, and to repeal Section 1631 of, the Business and Professions Code, relating to dentistry.

[Approved by Governor September 29, 2010. Filed with Secretary of State September 29, 2010.]

LEGISLATIVE COUNSEL'S DIGEST

AB 1524, Hayashi. Dentistry: examination requirements.

The Dental Practice Act provides for the licensure and regulation of dentists and associated professions by the Dental Board of California within the Department of Consumer Affairs. Existing law requires an applicant for a license to practice dentistry to complete various examinations, including the National Board Dental Examination, an examination in California law and ethics developed by the board, and a clinical and written examination administered either by the board or the Western Regional Examining Board. Existing law prescribes the maximum amount of fees to be charged for examination, licensure, and renewal, for deposit into the State Dentistry Fund.

This bill would abolish the clinical and written examination administered by the board. The bill would instead replace that examination with a portfolio examination of an applicant's competence to enter the practice of dentistry, which would be conducted while the applicant is enrolled in a dental school program at a board-approved dental school. The bill would require this examination to utilize uniform standards of clinical experiences and competencies, as approved by the board. At the end of that dental school program, the bill would then require the passage of a final assessment of the applicant's portfolio, subject to certification by his or her dean and payment of a $350 fee. Under the bill, the portfolio examination would not be conducted until the board adopts regulations to implement the portfolio examination. The bill would require the board to provide specified notice on its Internet Web site and to the Legislature and the Legislative Counsel when these regulations have been adopted by the board. The bill would require the board to oversee the portfolio examination and final assessment process, and would require the board to biennially review each dental school with regard to the standardization of the portfolio examination. The bill would also set forth specified examination standards.

The bill would also, as part of the ongoing implementation of the portfolio examination, require the board, by December 1, 2016, to review the examination to ensure compliance with certain requirements applicable to all board examinations under the department's jurisdiction. The bill would

provide that the examination shall cease to be an option for applicants if the board determines the examination fails to meet those requirements. The bill would require the board to submit its review and certification or determination to the Legislature and the department, by December 1, 2016.

The people of the State of California do enact as follows:

SECTION 1. Section 1630 of the Business and Professions Code is amended to read:

1630. The examination of applicants for a license to practice dentistry in this state, as described in Section 1632, shall be sufficiently thorough to test the fitness of the applicant to practice dentistry, and both questions and answers shall be written in the English language.

SEC. 2. Section 1631 of the Business and Professions Code is repealed.

SEC. 3. Section 1632 of the Business and Professions Code is amended to read:

1632. (a) The board shall require each applicant to successfully complete the Part I and Part II written examinations of the National Board Dental Examination of the Joint Commission on National Dental Examinations.

(b) The board shall require each applicant to successfully complete an examination in California law and ethics developed and administered by the board. The board shall provide a separate application for this examination. Applicants shall submit this application and required fee to the board in order to take this examination. In addition to the aforementioned application, the only other requirement for taking this examination shall be certification from the dean of the qualifying dental school attended by the applicant that the applicant has graduated, or will graduate, or is expected to graduate. Applicants who submit completed applications and certification from the dean at least 15 days prior to a scheduled examination shall be scheduled to take the examination. Successful results of the examination shall, as established by board regulation, remain valid for two years from the date that the applicant is notified of having passed the examination.

(c) Except as otherwise provided in Section 1632.5, the board shall require each applicant to have taken and received a passing score on one of the following:

(1) A portfolio examination of the applicant's competence to enter the practice of dentistry. This examination shall be conducted while the applicant is enrolled in a dental school program at a board-approved school located in California. This examination shall utilize uniform standards of clinical experiences and competencies, as approved by the board pursuant to Section 1632.1. The applicant shall pass a final assessment of the submitted portfolio at the end of his or her dental school program. Before any portfolio assessment may be submitted to the board, the applicant shall remit to the board a three hundred fifty dollar ($350) fee, to be deposited into the State Dentistry Fund, and a letter of good standing signed by the dean of his or

her dental school or his or her delegate stating that the applicant has graduated or will graduate with no pending ethical issues.

(A) The portfolio examination shall not be conducted until the board adopts regulations to carry out this paragraph. The board shall post notice on its Internet Web site when these regulations have been adopted.

(B) The board shall also provide written notice to the Legislature and the Legislative Counsel when these regulations have been adopted.

(2) A clinical and written examination administered by the Western Regional Examining Board, which board shall determine the passing score for that examination.

(d) Notwithstanding subdivision (b) of Section 1628, the board is authorized to do either of the following:

(1) Approve an application for examination from, and to examine an applicant who is enrolled in, but has not yet graduated from, a reputable dental school approved by the board.

(2) Accept the results of an examination described in paragraph (2) of subdivision (c) submitted by an applicant who was enrolled in, but had not graduated from, a reputable dental school approved by the board at the time the examination was administered.

In either case, the board shall require the dean of that school or his or her delegate to furnish satisfactory proof that the applicant will graduate within one year of the date the examination was administered or as provided in paragraph (1) of subdivision (c).

SEC. 4. Section 1632.1 is added to the Business and Professions Code, to read:

1632.1. (a) With regard to the portfolio examination specified in paragraph (1) of subdivision (c) of Section 1632, the board shall independently monitor and audit the standardization and calibration of dental school competency instructors at least biennially to ensure standardization and an acceptable level of calibration in the grading of the examination. Each dental school's competency examinations shall be audited biennially by the board.

(b) The board shall oversee all aspects of the portfolio examination process specified in paragraph (1) of subdivision (c) of Section 1632 and under this section, but shall not interfere with the dental school authority to establish and deliver an accredited curriculum. The board shall determine an end-of-year deadline, in consultation with the current board-approved dental schools, to determine when the portfolio examinations shall be completed and submitted to the board for review by the board's examiners.

(c) The board, in consultation with the current board-approved dental schools, shall approve portfolio examination competencies and the minimum number of clinical experiences required for successful completion of the portfolio examination.

(d) The board shall require and verify successful completion of competency examinations that were performed on a patient of record of a board-approved dental school, including, but not limited to, the following:

(1) Comprehensive oral diagnosis and treatment planning.

(2) Periodontics.
(3) Direct restorations.
(4) Indirect restorations.
(5) Removable prosthodontics.
(6) Endodontics.

SEC. 5. Section 1632.6 is added to the Business and Professions Code, to read:

1632.6. (a) As part of the ongoing implementation of paragraph (1) of subdivision (c) of Section 1632, the board shall review the portfolio examination to ensure compliance with the requirements of Section 139 and to certify that the portfolio examination process meets those requirements. If the board determines that the portfolio examination fails to meet those requirements, paragraph (1) of subdivision (c) of Section 1632 shall cease to be implemented and the portfolio examination will no longer be an option for applicants. The board's review and certification or determination shall be completed and submitted to the Legislature and the department by December 1, 2016.

(b) A report to the Legislature pursuant to this section shall be submitted in compliance with Section 9795 of the Government Code.

(c) This section shall become inoperative on December 1, 2020, pursuant to Section 10231.5 of the Government Code.

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DEVELOPMENT AND VALIDATION OF A PORTFOLIO EXAMINATION FOR INITIAL DENTAL LICENSURE

Submitted to:

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EXECUTIVE SUMMARY

This report describes major aspects of the Portfolio Examination that are essential to implementation for six subject matter areas: oral diagnosis and treatment planning, direct restoration, indirect restoration, removable prosthodontics, endodontics and periodontics.

The report includes the procedures used to define the competencies to be tested, provides background research that underlies the Portfolio Examination, describes the establishment of minimum clinical experiences and development of clinical competency examinations. Because the portfolio is an examination, it must meet the Standards for Educational and Psychological Testing (1999) to ensure that it is fair, unbiased, and legally defensible. The purpose of applying the Standards to the validation process is to ensure that the Portfolio Examination can provide evidence that entry level dentists possess the minimum competencies necessary to protect public health and safety.

The most important step in establishing the validity of the Portfolio Examination was to define the competencies to be tested in the examination. Separate focus groups of key faculty from six Board approved dental schools were convened to identify minimum clinical experiences and clinical competency examination content for oral diagnosis and treatment planning, direct and indirect restoration, removable prosthodontics, endodontics, and periodontics. Basically, focus group participants identified the competencies to be assessed in a systematic way beginning with an outline of major competency domains and ending with detailed rating (grading) scales for evaluating candidate performance. All participants provided input in a systematic, iterative fashion, until consensus is achieved. The competencies identified from this process served as the framework for the training and calibration procedures for examiners and audit procedures for evaluating the efficacy of the process.

- Section 6 lists the major competencies and the subcomponents within each competency.

- Section 7 describes basis for the evaluation system and procedures required to design it.

- Sections 8, 9, 10, 11, 12, and 13 describe the minimum clinical experiences, patient parameters and scoring (rating) criteria.

- Section 14 describes the procedures for training and calibrating examiners.

- Section 15 describes procedures that for establishing audit procedures for ensuring that the examination accomplishes its objectives.

The foundation of the Portfolio Examination is already in place at the dental schools. All six dental schools---University of Pacific, University of California San Francisco, Loma

Linda, University of Southern California, University of California Los Angeles and Western University of Health Sciences---had a great deal of consistency in their evaluation system. The schools use similar criteria to evaluate students' performance and use similar procedures to calibrate their faculty according to performance criteria. This finding had important implications for the implementation of the Portfolio Examination because the evaluation systems currently used by the dental schools will not require major changes.

The only difference between the current systems and the Portfolio Examination is that the competencies and the system to evaluate them would be standardized across schools. Therefore, the Portfolio Examination process will be implemented within the dental schools without additional resources. It is anticipated that the students will find the Portfolio Examination as a reasonable alternative pathway for initial licensure.

In summary, the dental schools reached consensus in identifying critical competencies to be measured in the Portfolio Examination, thereby standardizing the competencies to be measured, providing the framework for the evaluation (grading) system, training and calibration procedures for examiners, and audit procedures for evaluating the efficacy of the process.

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SECTION 1 – INTRODUCTION

OVERVIEW

The Portfolio Examination captures the strength of traditional portfolios used to assess learning progress and has the additional advantage of being integrated within the current educational process and within the context of a treatment plan of a patient of record. Instead of developing a traditional portfolio and having it evaluated, the Portfolio Examination requires documentation of clinical cases which are competency evaluations of required procedures assembled in either paper or electronic format. Candidates are evaluated in real time during the normal course of patient treatment and normal course of clinical training.

The Portfolio Examination was approached with the understanding that the outcome would directly impact predoctoral dental education at every dental school in California and could provide the framework for evaluating predoctoral dental competencies in dental schools across the nation.

The overarching principle for development of the Portfolio Examination pathway was consumer protection. The consultants worked closely with dental school faculty to derive the framework and content of the examination; moreover, procedures were conducted in an objective and impartial manner with the public's health, safety, and welfare as the most important concern.

First, consultants met with deans and dental school faculty who represented major domains of practice as well as legislative sponsors from the California Dental Association to present the Portfolio Examination concept and answer faculty questions regarding impact on their respective programs. Second, consultants conducted separate face-to-face meetings with representative faculty from each of the Board approved dental schools to individually present the concept and discuss their concerns. Third, consultants conducted discipline-specific focus groups of faculty[1], e.g., oral diagnosis and treatment planning, direct and indirect restoration, removable prosthodontics, periodontics, and endodontic, to develop the content for the examination.

From these meetings, consultants gained an understanding of the predoctoral dental competencies that were critical to development of the Portfolio Examination and creating supporting documentation that would be used in the formulation of Assembly Bill 1524. The consultants also conducted an extensive review of written documentation of each school's competency examinations to gain insights into the procedures used in competency examinations and associated scoring systems.

[1] Face-to-face focus groups were conducted at the University of the Pacific, the University of California San Francisco, the University of Southern California, and Western University of Health Sciences.

UTILIZATION OF EXPERTS

Committees of subject matter experts knowledgeable in the six subject areas, including section chairs, department chairs and/or other faculty who were knowledgeable in the six subject areas of interest, were consulted throughout the process to provide expertise regarding the competencies acquired in their respective programs and the competencies that should be assessed in the examination.

PSYCHOMETRIC STANDARDS

The Standards for Educational and Psychological Testing (1999) set forth by the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education serve as the benchmark for evaluating all aspects of credentialing, including professional and occupational credentialing. The Standards are used by the measurement profession as the psychometric standards for validating all examinations, including licensing and certification examinations.

Whenever applicable, specific Standards will be cited as they apply to definition of examination content, rating scales, calibration of raters, and auditing procedures to link the particulars of the Portfolio Examination to psychometric practice.

LEGAL STANDARDS

Because the Portfolio Examination is a state licensure examination, it must also meet legal standards as explicated in Sections 12944 of the California Government Code and Section 139 of the California Business and Professions Code. Section 12944 relates to establishment of qualifications for licensure that do not adversely affect any class by virtue of race, creed, color, national origin/ancestry, sex, gender, gender identity, gender expression, age, medical condition, genetic information, physical disability, mental disability, or sexual orientation. Section 139 of the California Business and Professions Code states occupational licensure examination programs must be based upon occupational (job/practice) analyses and examination validation studies.

SECTION 2 – HISTORY

EXISTING PATHWAYS

The Dental Board of California (hereafter, the Board) currently offers two pathways that predoctoral dental students may choose to obtain initial licensure:

- A clinical and simulation examination administered by the Western Regional Examining Board, or,

- A minimum of 12 months of a general practice residency (GPR) or advanced education in general dentistry (AEGD) program approved by the American Dental Association's Commission on Dental Accreditation.

All applicants are required to successfully complete the written examinations of the National Board Dental Examination of the Joint Commission on National Dental Examinations and an examination in California law and ethics.

AUTHORIZATION OF THE PORTFOLIO EXAMINATION PATHWAY

Assembly Bill 1524, introduced in February 2009, eliminated the clinical and written examination offered by the Board. Provisions of the bill allow the Board to offer the portfolio examination as an alternative to initial licensure for general dentists in addition to other pathways available to students graduating from dental schools in California, i.e., the Western Regional Examining Board (WREB) examination and "Licensure by Credential" (PGY-1).

> *"…The bill would abolish the clinical and written examination administered by the Board. The bill would replace the examination with an assessment process in which an applicant is assessed while enrolled at an in-state dental school utilizing uniform standards of minimal clinical experiences and competencies and at the end of his or her dental program."*

REQUIREMENTS FOR PORTFOLIO EXAMINATION

Section 3 of the Business and Professions Code is amended to read:

> *1632. (a) The Board shall require each applicant to successfully complete the written examinations of the National Board Dental Examination of the Joint Commission on National Dental Examinations.*

1632. (b) The Board shall require each applicant to successfully complete an examination in California law and ethics developed and administered by the Board. The Board shall provide a separate application for this examination…..the only other requirement for taking this examination shall be certification from the dean of the qualifying dental school attended by the applicant that the applicant has graduated, or will graduate, or is expected to graduate.

1632. (c) The Board shall require each applicant to have taken and received a passing score ……on the portfolio assessment (examination) of the applicant's fitness to practice dentistry while the applicant is enrolled in a dental school program at a Board approved school in California. This assessment shall utilize uniform standards minimal clinical experiences and competencies. The applicant shall pass a final assessment at the end of his or her dental school program.

OTHER REQUIREMENTS

Students who participate in the portfolio examination pathway must:

(a) Be in good academic standing in their institution at the time of portfolio examination and be signed off by the dean of their respective schools.

(b) Have no pending ethical issues at the time of the portfolio examination and must be signed off by the dean of their respective schools.

SECTION 3 – BACKGROUND RESEARCH

PSYCHOMETRIC ISSUES

Use of Portfolio as an examination. Portfolio assessment can provide a powerful approach to assessing a range of curriculum outcomes not easily assessed by other methods and provides a more in-depth picture of student competence than the snapshot obtained in a traditional examination (Davis, Friedman Ben-David, Harden, Howie, Ker, McGhee, Pippard & Snadden, 2001, p. 364). Furthermore, the real value of portfolio assessment is that it provides a basis for judgment of the student's professional fitness to practice (p. 364).

Some researchers comment that if portfolios are used for *summative* (examination) rather than formative (learning) purposes, the portfolios must meet stringent psychometric requirements including standardization, rater training with structured guidelines for making decisions, and large numbers of examiners to average out rater effects (Driessen, van der Vleuten, Schuwirth, Tartwijk & Vermunt, 2005, p. 215). Davis and Ponnamperuma (2005, p. 282) note that the one of the advantages of portfolio is that it can be standardized and used in summative assessment.

Validity of inferences made. Friedman Ben-David, Davis, Harden, Howie, Ker, and Pippard (2001) note that the validity of the inferences made about the portfolio depend on the reliability of the test. If the test scores or ratings suffer from low interrater agreement or poor sampling, inferences cannot be made. Moreover, there should be a clear definition of the purpose of the portfolio and identification of the competencies to be assessed. Webb, Endacott, Gray, Jasper, McMullan and Scholes (2003) and McMullan (2003) cite several criteria that should be used to evaluate portfolio assessments, namely, explicit grading criteria, evidence from a variety of sources, internal quality assurance processes, and external quality assurance processes.

Content validation by job analysis. Content validity is important in developing an examination for initial licensure (Chambers, 2004) such that there should be a validation process that inquires whether tasks being evaluated should be representative of tasks critical to safe and effective practice. A recent paper by Patterson, Ferguson, and Thomas (2008) calls for validation by using a job analysis to identify core and specific competencies.

Use in dental licensure. A recent paper entitled "Point/Counterpoint: Do portfolio assessments have a place in dental licensure?" addresses many of these issues specifically as they pertain to the purpose of licensure rather than education (Hammond & Buckendahl, 2006; Ranney & Hambleton, 2006).

Hammond and Buckendahl do not support the use of portfolios for dental licensure. They cite two issues as important in considering the use of portfolio assessments for licensure purposes. First, standardizing the training and evaluation across a broad range of locations would be difficult. Second, demonstrations of abilities in past records would need to be verified so that there is an evaluation of the current range of competencies. These authors contend that the portfolio does not provide an assessment of minimum skills that is administered ***independent*** of the training program to support licensure decisions; and therefore, provides no external validation and verification of the students' competence. Moreover, there may be measurement error, or low reliability, within the system as a result of errors in content sampling, number of observations of performance, number of examiners rating the student's performance, assumptions of unidimensional relationships between items, lack of interrater agreement, and reliance on pairs rather than triads of examiners for all students.

In an opposing point of view in the same article, Ranney and Hambleton (2006), support the use of portfolios for dental licensure. According to these authors, testing agencies have published little or no data to allow an assessment of reliability of validity of their examinations. Variability in the reliability of clinical licensure examinations and pass rates among testing agencies may reflect lack of reliability or validity in the examination process, and, omission of skills necessary to practice safely at the entry level, not just changes in student populations. The authors recognize that several criteria would need to be met before portfolio assessment could be implemented. The most important of these criteria are: administration by independent parties, inclusion of a full continuum of student competencies for comprehensive evaluation, and, evaluating competence within the context of a treatment plan designed to meet the patient's oral health care needs. In their discussion, the authors believe that portfolio assessments could work if the developers considered which tasks to measure, how the tasks would be scored, calibration protocols for examiners, and how performance expectations would be set.

INITIAL LICENSURE REQUIREMENTS IN OTHER JURISDICTIONS

According to the American Association of Dental Examiners "Composite" issued in January 2009, virtually all states and U. S. territories require applicants to pass an examination administered by the National Board of Dental Examiners.

- Forty-seven jurisdictions accepted a regional clinical examination, e.g., WREB, SRTA, CRDTS or national clinical, e.g., ADEX, ADLEX.
- Four jurisdictions, other than California, administered a state clinical examination.
- Forty-three jurisdictions administered a jurisprudence examination.
- Four states, other than California, granted licensure after completion of an accredited, 12-month, postgraduate residency program.
- Six states allow applicants to take any state or regional clinical examination. Virginia explicitly states that the clinical examination must use live patients.

- Two states (Montana and Utah) accept California's (former) clinical examination.

Table 1 – Summary of existing requirements for initial licensure[2]

State	National Board	Regional clinical	State clinical	Jurisprudence	Other
AL	Y	N	Y	Y	
AK	Y	Y (WREB)	N	Y	
AZ	Y	Y (WREB)	N	Y	
AR	Y	Y (SRTA)	N	Y	
CA	Y	Y (WREB)	Y	Y	PGY-1
CO	Y	Y (CRTDS)	N	Y	
CT	Y	Y (NERB OR DSCE)	N	N	PGY-1
DE	Y	N	Y	Y	DOR
District of Columbia	Y	Y	Y	Y	
FL	Y	N	Y	Y	
GA	Y	Y (CRDTS)	N	Y	
HI	Y	N	N	N	ADEX
ID	Y	Y (WREB, CRDTS)	N	Y	ADEX
IL	Y	N	N	N	ADEX
IN	Y	Y (WREB, SRTA, CRDTS, NERB)	N	Y	
IA	Y	Y (CRDTS, WREB)	N	Y	ADEX
KS	Y	Y (WREB, SRTA, CRDTS, NERB, CITA)	Y	Y	
KY	Y	Y (SRTA, WREB, CRDTS, NERB)	N	Y	ADEX not accepted
LA	Y	Y (CITA, CRDTS, NERB, SRTA, WREB)	N	Y	ADEX
ME	Y	Y (NERB)	N	Y	
MD	Y	Y (NERB)	N	Y	
MA	Y	Y	N	Y	
MI	Y	Y (NERB, DSCE)	--	--	
MN	Y	Y (NDEB, WREB)	N	Y	PGY-1, ADLEX, ADEX
MS	Y	Y	N	Y	
MO	Y	Y (Any state or regional examination)	N	Y	
MT	Y	Y (WREB, CRDTS, WREB, SRTA, NERB)	N	Y	State clinical examinations from CA, DE, FL, and NV

[2] Examination acronyms for states which specified regional examinations: ADEX = American Board of Dental Examiners; ADLEX = American Dental Licensing Examination; CITA = Council of Interstate Testing Agencies; CRTDS = Central Regional Dental Testing Service; DOR = Dental Operating Rooms at Naval dental facilities; DSCE = Dental Simulated Clinical Examination; NERB = North East Regional Board; NDEB = National Dental Examining Board of Canada; SRTA = Southern Regional Testing Agency; WREB = Western Regional Examining Board

State	National Board	Regional clinical	State clinical	Jurisprudence	Other
NE	Y	Y (CRDTS, NERB)	N	Y	
NV	Y	N	--	Y	ADEX; no licensure by credential
NH	Y	Y (NERB)	N	Y	
NJ	Y	Y (NERB)	N	Y	ADEX
NM	Y	Y (WREB, CRDTS)	N	Y	
NY	Y	N	N	N	CDA approved residency; one-time jurisprudence examination
NC	Y	Y (CITA)	N	Y	Sterilization/infection control examination
ND	Y	Y (NERB, CRDTS)	N	Y	ADEX
OH	Y	Y (CRDTS, SRTA, WREB, NERB)	N	Y	
OK	Y	Y (WREB)	N	Y	
OR	Y	Y	N	Y	Accepts any state or regional examination
PA	Y	Y (NERB)	N	N	ADLEX
Puerto Rico	Y	CITA	Y	Y	CITA in lieu of state clinical examination
RI	Y	Y (NERB)	N	N	
SC	Y	Y (SRTA, CRDTS)	N	Y	ADLEX
SD	Y	Y (CRDTS, WREB)	N	Y	Accepts any state or regional examination for licensure by credential
TN	Y	Y (SRTA, WREB)	N	N	
TX	Y	Y	--	Y	Accepts any state or regional examination for licensure by credential
UT	Y	Y (WREB, SRTA, NERB, CRDTS)	N	N	California state examination, Hawaii examination
VT	Y	Y (NERB, WREB, SRTA, CRDTS, CITA)	N	Y	
VA	Y	Y (SRTA, WREB, DRDTS, NERGE, CITA)	--	Y	Accepts any state or regional examination for licensure by credential (only if live patients used)
U. S. Virgin Islands	--	--	--	--	

State	National Board	Regional clinical	State clinical	Jurisprudence	Other
WA	Y	Y	N	Y	PGY-1; Accepts any state or regional examination
WV	Y	Y	N	Y	Any state or regional examination
WI	Y	Y (CRDTS, WREB, NERB)	N	Y	ADEX I and II
WY	Y	Y (CRDTS, WREB, NERB)	N	Y	Part IV of ADEX

COMPARISON OF REQUIREMENTS IN THE U.S. AND CANADA

In their 2001 review of dental education and licensure, the Council on Dental Education of the American Dental Association (ADA) compared practices for initial dental licensure in the United States and Canada. Their findings indicate that initial licensure in the United States and Canada are very similar; however, Canada relies on the use of the Objective Structured Clinical Examination (OSCE), which requires students to answer multiple-choice questions about radiographs, case histories, and/or models in a series of stations. In the OSCE, simulated patients (manikins) rather than actual patients are used as subjects for examination procedures.

Table 2 – Comparison of practices in U. S. and Canada for initial licensure

Requirement	United States	Canada
Graduation from an accredited program	Yes; program is accredited by the ADA Commission on Dental accreditation	Yes; program is accredited by the Commission on Dental Accreditation of Canada
Written examination	Yes: National Dental Board Examinations (NDBE) Parts I and II	Yes; National Dental Examining Board of Canada Written Examination (NDEB)
Clinical examination	• Regionally administered clinical examinations Central Regional Testing Services (CRTS); Northeast Regional Examining Board (NERB), Southern Regional Testing Agency (SRTA), Western Regional Examining Board (WREB) offered once to multiple times, depending on the testing agency • 10 states (CA, DE, FL, HI, IN, LA, MS, NC, NV plus Puerto Rico and the Virgin Islands) offer state administered examinations • Each state determines which clinical examination results are accepted for the purpose of licensure • All states require completion of both written and clinical examinations before being eligible for licensure • Some states also require additional criteria such as proof of malpractice insurance, certification in Basic Life Support, or a jurisprudence examination	• OSCE offered three times a year • Quebec requires an NDEB certificate or a provincial examination. • Some provinces require completion of an ethics examination

EXISTING COMPETENCY EXAMINATIONS

As expected, all of the California schools included competencies which met minimum standards set forth by the Commission on Dental Accreditation for predoctoral dental education programs (2008, Standard 2-25, p. 15): "At a minimum graduates must be competent in providing oral health care with the scope of general dentistry, as defined by the school, for the child, adolescent, adult, and geriatric patient, including:

a) Patient assessment and diagnosis;
b) Comprehensive treatment planning;
c) Health promotion and disease prevention;
d) Informed consent;
e) Anesthesia, and pain and anxiety control;
f) Restoration of teeth;
g) Replacement of teeth;
h) Periodontal therapy;
i) Pulpal therapy;
j) Oral mucosal disorders;
k) Hard and soft tissue surgery;
l) Dental emergencies;
m) Malocclusion and space management; and,
n) Evaluation of the outcomes of treatment."

Key faculty from five Board approved schools[3] were interviewed regarding the clinical dimensions of practice assessed in competency examinations within their predoctoral programs. All of the schools provided a list of the clinical competencies assessed during predoctoral training. A list of each school's competency examination is presented in the Tables 3, 4, 5, 6 and 7.

Table 3 – Competency examinations: Loma Linda University

Comprehensive diagnosis and treatment planning	• Oral diagnosis examination • Radiology interpretation (FMX pathology) • Radiology interpretation (normal and errors) • Radiology techniques
Direct restoration	• Class II composite resin • Class II amalgam • Class III composite
Indirect restoration	• Full gold crown, partial coverage crown, full coverage ceramic crown, fixed partial denture *or* multiple tooth restoration
Removable prosthodontics	• Rest seat preparation • RPD design • CD setup
Periodontics	• Preclinical OSCE (5) • Scaling and root planning (2) • Oral health care (2)
Endodontics	• Endodontic qualifying examination (to treat patients in clinic) • Endodontic section of Fall mock board • Endodontic qualifying examination (to take WREB)

[3] When the Portfolio process began, there were five Board approved dental schools.

Table 4 – Competency examinations: University of California Los Angeles

Comprehensive diagnosis and treatment planning	• Oral diagnosis • Head and neck examination • Treatment planning • Caries management by risk assessment
Direct restoration	• Class II amalgam (2) • Class II composite (1) • Class III composite or Class V composite (2) • Two buildups (core, pin, prefabricated post and core, *or* dowel core)
Indirect restoration	• Two restorations (PFM, bonded ceramic, full gold crown *or* partial veneer crown)
Removable prosthodontics	• Complete denture • Immediate full denture • Removable partial denture • Reline
Periodontics	• Periodontal diagnosis and treatment plan • Periodontal instrumentation • Re-evaluation of Phase I therapy • Periodontal surgery
Endodontics	• Endodontic case portfolio

Table 5 – Competency examinations: University of California San Francisco

Comprehensive diagnosis and treatment planning	• Medical/dental history taking • Infection control • Practice management • Oral diagnosis and treatment planning OSCE • Caries risk assessment • Complete oral examination/treatment planning • Radiology • Emergency • Baseline skills attainment • Pediatric comprehensive oral examination • Outcomes of care
Direct restoration	• Class I composite or preventive resin restoration • Class I amalgam • Class II amalgam • Class II composite • Class III or IV composite • Class V composite, glass ionomer *or* amalgam • Pediatric restorative
Indirect restoration	• Mounted diagnostic cast • Die trimming • Casting (PFM, all gold, *or* all ceramic crown)
Removable prosthodontics	• Removable prosthodontics (partial *or* full denture)
Periodontics	• Instrument sharpening • Instrument identification and adaptation • Scaling and root planning
Endodontics	• Single-root root canal • Multi-root root canal on typodont

Table 6 – Competency examinations: University of the Pacific

Comprehensive diagnosis and treatment planning	• Oral diagnosis and treatment planning
Direct restoration[4]	• Class I resin • Class II resin • Class II amalgam • Class III resin • Class V resin
Indirect restoration	• All cases evaluated for case management, buildup (if needed), preparation and temporization • Crown preparation and crown (FVM, PFM *or* all ceramics) • CIMOE (cementation) • Impression
Removable prosthodontics	• Complete denture, immediate complete denture *or* other removable prosthestic device
Periodontics	• Periodontal oral diagnosis and treatment planning • Periodontal diagnostic competency • Calculus detection and root planing • Instrument sharpening • Periodontal re-evaluation
Endodontics	• Endodontic radiographic technique • Cleaning and shaping (single canal) • Coronal access anterior • Coronal access posterior • Obturation (single canal)

[4]All direct restoration cases are evaluated for case management, preparation and restoration. Typically Class III and Class V resins are performed in the anterior segments; several posterior Class II restorations are completed including a mandatory mock board scenario—mixed between amalgam and resin

Table 7 – Competency examinations: University of Southern California

Competency domain	Specific competencies
Comprehensive diagnosis and treatment planning	• Oral radiology (OSCE in radiology) • Physical evaluation • Ultrasonic instrumentation/ultrasonic scaler • OSCE in vital signs, extra- and intraoral examination and infection control
Direct restoration	• Class II amalgam • Composite restoration (Class II, III, IV, *or* V)
Indirect restoration	• Crown preparation (PFM, full gold, partial veneer gold, *or* ceramic) • Crown cementation (PFM, full gold, partial veneer gold, *or* ceramic)
Removable prosthodontics	• Preliminary Impression • Outline tray(s)/ custom tray(s) • Final impression(s) • Final survey • Framework try-in (retention/occlusion) • Jaw record(s)/ tooth selection • Teeth try-in/ remount jig • Prosthesis placement/ clinical remount • Final adaptation and articulation
Periodontics[5]	• Diagnosis and comprehensive treatment planning • Ultrasonic instrumentation for scaling and root planning • Scaling and root planning • Mock board examination (WREB compatible)
Endodontics	• Access • Instrumentation • Obturation

CALIBRATION OF CLINIC EXAMINERS IN SCHOOLS

During visits to the dental school clinics and interviews with faculty, it was clear that the dental schools did an exceptional job in calibrating their examiners and were consistent in their methodology to ensure that common criteria were used to evaluate students' performance on competency examinations. The faculty were calibrated and re-calibrated to ensure consistency in their evaluation of the student competencies and the processes used by the dental schools for assessing competencies was very similar. In every case, minimum competency was built into the rating scales used to evaluate the students in their competency examinations.

The general rule was that two examiners must concur on failing grades. If there is disagreement between the two examiners, a third examiner was asked to grade the student. One school specifically mentioned that examiners were designated full-time faculty who were familiar with the grading criteria and the logistics of competency examinations. Other schools mentioned that their examiners (part-time and full-time faculty) were provided extensive materials to read and review prior to hands-on training with experienced examiners. These materials included detailed examiner training manuals, detailed slide

[5] Diagnosis and comprehensive treatment planning, ultrasonic instrumentation, scaling and root planing are performed in the junior year; mock board examination performed in the senior year

presentations (Powerpoint), sample cases, and sample documentation. Hands-on training and calibration sessions were conducted to ensure that the examiners understood the evaluation system and how to use it.

SECTION 4 – THE PORTFOLIO EXAMINATION

DEFINITION

Albino, Young, Neumann, Kramer, Andrieu, Henson, Horn, and Hendricson (2008, p. 164) define clinical competency examinations as performance examinations in which students perform designated tasks and procedures on a patient without instructor assistance. The process of care and the products are assessed by faculty observers typically guided by rating scales.

Here, the Portfolio Examination can be conceptualized as a series of examinations administered in a multiple patient encounters in six subject areas. Candidates are rated according to standardized rating scales by faculty examiners who are formally trained in their use.

The Portfolio Examination is a performance examination that assesses skills in commonly encountered situations, which includes components of the clinical examination administered by a traditional testing agency. Performance is measured during competency evaluations conducted in the schools by calibrated examiners who are members of the dental school faculty. Thus, the Portfolio Examination involves hands-on performance evaluations of clinical skills as evaluated within the candidate's program of dental education.

PREMISE

The Portfolio Examination is an alternative examination that each individual school may elect at any time to implement or decline to implement.

The Portfolio Examination allows candidates to build a portfolio of completed clinical experiences and clinical competency examinations in six subject areas over the normal course of clinical training. Both clinical experiences and clinical competency examinations are performed on patients of record within the normal course of treatment. The primary difference between clinical experiences and clinical competency examinations is that the clinical competency examinations are performed independently without faculty intervention unless patient safety issues are imminent.

The Portfolio Examination is conducted while the applicant is enrolled in a dental school program at a California Board approved dental school. A student may elect to begin the Portfolio Examination process during the clinical training phase of their dental education, with the approval of his/her clinical faculty.

The Portfolio Examination follows a similar structure for candidate evaluation that currently exists within the schools to assess minimum competence. The faculty observes the treatment provided and evaluates candidates according to

standardized criteria developed by a consensus of key faculty from all of the dental schools. Each candidate prepares and submits a portfolio of documentation that provides proof of completion of competency evaluations for specific procedures in six subject areas: oral diagnosis and treatment planning, direct restoration (amalgam/composite), indirect restoration (fixed prosthetics), removable prosthodontics, endodontics and periodontics.

If a candidate fails to pass any of the six Portfolio competency examinations after three (3) attempts, the applicant is not eligible for re-examination in that competency until he or she has successfully completed the minimum number of required remedial education hours in the failed competency. The remedial course work content may be determined by his or her school and may include didactic, laboratory or clinical patients to satisfy the Board requirement for remediation before an additional Portfolio competency examination may be taken. When a candidate applies for re-examination he or she must furnish evidence of successful completion of the remedial education requirements for re-examination to the examiner. The remediation form must be signed and presented prior to re-examination.

DISTINGUISHING CHARACTERISTICS

There are 10 distinguishing characteristics of the Portfolio Examination:

- *First*, the Portfolio Examination is considered a performance examination that assesses candidates' skills in commonly encountered clinical situations. Consequently, the Portfolio Examination must meet legal standards (Sections 12944 of the Government Code, Section 139 of the Business and Professions Code) and psychometric standards set forth by the Standards for Educational and Psychological Testing.

- *Second*, the Portfolio Examination is a *summative* assessment of a candidate's competence to practice independently. Therefore, candidates perform clinical procedures without faculty intervention in the competency examinations. If a candidate commits a critical error at any time during a competency examination, the examination is terminated immediately in the interests of patient safety.

- *Third*, it includes components of clinical examinations similar to other clinical examinations, *and*, is administered in a manner that is similar to other clinical examinations encountered in the candidates' course of study. The multiple clinical examinations allow for an evaluation of the full continuum of competence. No additional resources are required from candidates, schools or the Board.

- *Fourth*, treatments for candidates' clinical experience and competency examinations are rendered on patients of record. This means that candidates' competence is not evaluated in an artificial or contrived situation, but on patients who require dental interventions as a normal course of treatment and

their progress can be monitored beyond the scope of the clinical experiences or competency examinations.

- *Fifth*, candidates must complete a minimum number of clinical experiences as required for each of six competency domains.

- *Sixth*, readiness for the Portfolio competency examinations is determined by the clinical faculty at the institution where the candidate is enrolled.

- *Seventh*, each of the schools will designate faculty as Portfolio competency examiners and is responsible for administering a Board approved standardized calibration training course for said examiners. The schools are also responsible for the calibration of Portfolio examiners' performance to ensure consistent implementation of the examination and a standardized examination experience for all candidates.

- *Eighth*, candidates' performance is measured according to the information provided in competency evaluations conducted in the schools by clinical faculty within the predoctoral program of education.

- *Ninth*, it produces documented data for outcomes assessment of results, thereby allowing for verification of validity evidence. The data provides the foundation of periodic audits of each school conducted by the Board to ensure that each school is implementing the Portfolio Examination according to the standardized procedures.

- *Tenth*, there are policies and procedures in place to treat candidates fairly and professionally, with timely and complete communication of examination results.

RE-EXAMINATION

If a candidate fails to pass any of the six Portfolio competency examinations after three (3) attempts, the applicant is not eligible for re-examination in that competency until he or she has successfully completed the minimum number of required remedial education hours in the failed competency. The remedial course work content may be determined by his or her school and may include didactic, laboratory or clinical patients to satisfy the Board requirement for remediation before an additional Portfolio competency examination may be taken. When a candidate applies for re-examination he or she must furnish evidence of successful completion of the remedial education requirements for re-examination to the examiner. The remediation form must be signed and presented prior to re-examination.

ROLE OF THE BOARD

Oversight of the Portfolio Examination is maintained by the Board. The Portfolio Examination includes a mechanism to administer the program and grant the

license, as well as maintain authority to monitor school compliance with the standardized examination process.

ROLE OF THE SCHOOLS

Schools are responsible for selection and calibration of Portfolio examiners. Faculty who wish to become a Portfolio examiner will be required to submit credentials to document their qualifications and experience in conducting examinations in an objective manner. Faculty who are selected as Portfolio examiners are required to participate in Board approved calibration training courses for the competency domain of interest, e.g., oral diagnosis and treatment planning, endodontics, etc.

Schools are also responsible to maintaining the calibration of Portfolio examiners by regularly providing opportunities for re-calibration as needed.

SECTION 5 – CONTENT VALIDATION PROCESS

APPLICABLE STANDARDS

Since criterion related evidence is generally not available for use in making licensure decisions, validation of licensure and certification tests rely mainly on expert judgments that the test adequately represents the content domain of the occupation or specialty. Here, content related validity evidence from a job analysis supports the validity of the Portfolio Examination as a measure of clinical competence. The Standards contain extensive discussion of validity issues.

> *"Test design generally starts with an adequate definition of the occupation or specialty, so that persons can be clearly identified as engaging in the activity." (p. 156)*
>
> *"Often a thorough analysis is conducted of the work performed by people in the profession or occupation to document the tasks and abilities that are essential to practice. A wide variety of empirical approaches is used, including delineation, critical incidence techniques, job analysis, training needs assessments, or practice studies and surveys of practicing professionals. Panels of respected experts in the field often work in collaboration with qualified specialists in testing to define test specifications, including the knowledge and skills needed for safe, effective performance, and an appropriate way of assessing that performance." (p. 156)*
>
> *"Credentialing tests may cover a number of related but distinct areas. Designing the testing program includes deciding what areas are to be covered, whether one or a series of tests is to be used, and how multiple test scores are to be combined to reach an overall decision." (p. 156-157)*

There are also specific standards that address the use of job analysis to define the competencies to be tested in the Portfolio Examination.

Standard 14.8 "Evidence of validity based on test content requires a thorough and explicit definition of the content domain of interest. For selection, classification, and promotion, the characterization of the domain should be based on a job analysis." (p. 160)

Standard 14.14 "The content domain to be covered by a credentialing test should be defined clearly and justified in terms of the importance of the content for credential-worthy performance in an occupation or profession. A rationale should be provided to support the claim that the knowledge or skills being assessed are required for credential-worthy performance in an occupation and are consistent with the purpose for which the licensing or certification program was instituted" (p. 161)

METHODOLOGY

The methodology used to validate the content of the competency examinations comprising the Portfolio Examination is a commonly used psychometric procedure called job (aka practice) analysis. Job analysis data is typically obtained through multiple sources including interviews, observations, survey questionnaires, and/or focus groups.

This methodology has been used extensively in the measurement field and is described in detail in many publications in the psychometric literature as a "table-top job analysis," e.g., Department of Energy (1994). Basically, focus groups identify the competencies to be assessed in a systematic way beginning with an outline of major competency domains and ending with a detailed account of major and specific competencies organized in outline fashion. All participants provide input in a systematic, iterative fashion, until consensus is achieved.

PROCESS

Separate focus groups of subject matter experts from six Board approved dental schools were convened to define the content for the Portfolio Examinations for six competency domains to be assessed in the Portfolio Examination: oral diagnosis and treatment planning, direct and indirect restoration, removable prosthodontics, endodontics, and periodontics.

The content was developed at two levels of analysis. The first level of analysis was to develop a consensus at a broad level regarding the major competencies to be assessed. The faculty indicated that the competencies were acceptable to the schools as the basis for the Portfolio Examination. They further understood that the major competencies were likely to be included in proposed legislation in order to implement the Portfolio Examination.

The second level of analysis produced detailed procedures for measuring specific subcomponents within each of the six competency domains. The detailed procedures were used to develop the Portfolio Examination.

PROCEDURE

The procedure was conducted systematically in several steps:

Step 1 ***Orient focus group***	• Present participants with an outline of topics to be covered for a given competency domain • Orient participants as to the goal of the process and how the results will be used
Step 2 ***Review subject matter***	• Have participants explain how their program currently conducts competency examinations • Review the topics involved in a given competency domain, e.g., periodontics, endodontics, etc.
Step 3 ***Identify major competencies***	• Identify major competencies to be assessed • Discuss implications of the competencies at each participant's program until consensus is reached
Step 4 ***Identify specific competencies***	• Identify specific competencies within each content domain to be assessed • Discuss implications of the competencies at each participant's program until consensus is reached
Step 5 ***Sequence competencies***	• Sequence the competencies until consensus is reached
Step 6 ***Develop competency statements***	• Rephrase each competency in terms of a consistent format that includes an action verb and direct object (c. f., Chambers & Gerrow, 1994)
Step 7 ***Refine competencies***	• Make final edits to the wording of the competencies until consensus is reached
Step 8 ***Re-evaluate competencies***	• Discuss the list of major and specific competencies until consensus is reached

SECTION 6 – MAJOR COMPETENCIES ASSESSED

The Portfolio Examination is comprised of performance examinations in six competency domains identified by the focus groups using a "table-top job analysis" methodology described in Section 5. The competencies and their subcomponent competencies provide the most fundamental type of validity evidence for the Portfolio Examination, that is, *content validity*. The subcomponents of each major competency domain are presented below.

Table 8 – Major competencies and subcomponents to be assessed

ORAL DIAGNOSIS AND TREATMENT PLANNING	I. Medical issues that impact dental care II. Treatment modifications based on medical conditions III. Patient concerns/chief complaint IV. Dental history V. Significant radiographic findings VI. Clinical findings VII. Risk level assessment VIII. Need for additional diagnostic tests/referrals IX. Findings from mounted diagnostic casts X. Comprehensive problem list XI. Diagnosis and interaction of problems XII. Overall treatment approach XIII. Phasing and sequencing of treatment XIV. Comprehensiveness of treatment plan XV. Treatment record
DIRECT RESTORATION	I. Case presentation II. Outline and extensions III. Internal form IV. Operative environment V. Anatomical form VI. Margins VII. Finish and function
INDIRECT RESTORATION	I. Case presentation II. Preparation III. Impression IV. Provisional V. Candidate evaluation of laboratory work VI. Pre-cementation VII. Cementation and finish

REMOVABLE PROSTHODONTICS	I. Patient evaluation II. Treatment plan and sequencing III. Preliminary impressions IV. RFP design (if applicable) V. Tooth modification (if applicable) VI. Border molding and final impressions VII. Framework try-in VIII. Jaw relation records IX. Trial dentures X. Insertion of removable prosthesis XI. Post insertion (1 week) XII. Laboratory services for prosthesis
ENDODONTICS	I. Pretreatment clinical testing and radiographic imaging II. Endodontic diagnosis III. Endodontic treatment plan IV. Anesthesia and pain control V. Caries removal, removal of failing restorations, evaluation of restorability, site isolation VI. Access opening VII. Canal preparation technique VIII. Master cone fit IX. Obturation technique X. Completion of case
PERIODONTICS	I. Review medical and dental history II. Radiographic findings III. Comprehensive periodontal data collection IV. Evaluate periodontal etiology/risk factors V. Comprehensive periodontal diagnosis VI. Treatment plan VII. Calculus detection VIII. Effectiveness of calculus removal IX. Periodontal re-evaluation

SECTION 7 – EVALUATION SYSTEM

A standardized evaluation system was developed to evaluate candidates' performance in the competency examinations. The competencies and their subcomponents defined in Section 6 provided the framework for the evaluation system that assesses the candidates' competencies in the procedures. Faculty from six Board approved dental schools were involved in the process so that the final evaluation system represented rating criteria applicable to candidates regardless of predoctoral programs.

The evaluation system is designed to be used for *summative* decisions (high stakes, pass/fail decisions) rather than formative decisions (compilation of daily work with faculty feedback for learning purposes). The evaluation system provides quantitative validity evidence for determining clinical competence in terms of numeric scores.

APPLICABLE STANDARDS

The evaluation system must meet psychometric criteria to provide the measurement opportunity for success for all candidates.

Standard 3.20 "The instructions presented to test takers should contain sufficient detail so that test takers can respond to a task in the manner that the test developer intended. When appropriate, sample material, practice or sample questions…should be provided to test takers prior to the administration of the test or included in the testing material as part of the standard administration instructions." (p. 47)

Standard 3.22 "Procedures for scoring and, if relevant, scoring criteria should be presented by the test developer in sufficient detail and clarity to maximize the accuracy of scoring. Instructions for using rating scales or for deriving scores obtained by coding, scaling, or classifying constructed responses should be clear." (p. 47)

Standard 14.17 "The level of performance required for passing a credentialing test should depend on the knowledge and skills necessary for acceptable performance in the occupation or profession and should not be adjusted to regulate the number or proportion of persons passing the test." (p. 162)

BEHAVIORALLY ANCHORED RATING SCALES

Behaviorally anchored rating scales have unique measurement properties which have been used extensively in medical and dental education as a tool to assess performance. They rely on critical incidents of behavior which may be classified into dimensions unique and independent of each other in their meaning. Each performance dimension is arrayed on a continuum of behaviors and examiners must select the behaviors that most closely describe the candidate's performance.

There were several steps to develop behaviorally anchored rating scales for the Portfolio Examination evaluation system:

1. Use the competencies and their associated subcomponents defined by the table-top job analysis discussed in Section 5 as the framework for the evaluation system, e.g., comprehensive oral diagnosis and treatment planning, direct restoration, indirect restoration, removable prosthodontics, endodontics, periodontics.

2. Generate critical incidents of ineffective and effective behavior.

3. Create performance dimensions that describe the qualities of groups of critical incidents (Flanagan, 1954).

4. Define performance dimensions in terms of numeric ratings, e.g., 1 to 5, 1 to 7, 1 to 9.

5. Retranslate (reclassify) the critical incidents to ensure that the incidents describe the performance dimensions.

6. Identifying several incidents for each performance dimension.

7. Refine standardized criteria for each of the competency domains and their subcomponent competencies.

8. Establish minimum acceptable competence criteria (passing criteria) for competency examinations.

MINIMUM COMPETENCE

The passing standard for all of the competency examinations is built into the rating scales when the grading criteria are developed. The rating criteria for minimum competence was developed by representative faculty who have a solid conceptual understanding of standardized rating criteria and how the criteria will be applied in an operational setting.

SECTION 8 – ORAL DIAGNOSIS /TREATMENT PLANNING

PURPOSE

The competency examination for oral diagnosis and treatment planning (ODTP) is designed to assess the candidate's ability to identify and evaluate patient data and clinical findings; formulate diagnoses; and plan treatment interventions from a multidisciplinary perspective.

MINIMUM CLINICAL EXPERIENCES

The documentation of oral diagnosis and treatment planning clinical experiences will include a minimum of 20 patient cases.

Clinical experiences for ODTP include:

- Comprehensive oral evaluations,
- Limited (problem-focused) oral evaluations, and,
- Periodic oral evaluation

Each examination, ODTP clinical experience requires medical and dental history, identified problem(s), diagnoses, treatment plans, and informed consent.

OVERVIEW

- Fifteen (15) scoring factors.
- Initiation and completion of one (1) <u>multidisciplinary</u> Portfolio competency examination.
- Treatment plan must involve at least three (3) of the following six disciplines:

  > Periodontics
  > Endodontics
  > Operative (direct and indirect restoration)
  > Fixed and removable prosthodontics
  > Orthodontics
  > Oral surgery

PATIENT PARAMETERS

- Maximum of ASA II.
- Missing or will be missing two or more teeth, NOT including third molars.
- At least moderate periodontitis (probing depths of 5 mm or more).

SCORING

Scoring points for ODTP are defined as follows:

- A score of 0 is unacceptable; candidate exhibits a critical error
- A score of 1 is unacceptable; major deviations that are correctable
- A score of 2 is acceptable; minimum competence
- A score of 3 is adequate; less than optimal
- A score of 4 is optimal

ELEMENTS OF THE ODTP PORTFOLIO

The ODTP portfolio may include, but is not limited to the following:

a) Medical history for dental treatment provided to patients. The medical history must include: an evaluation of past illnesses and conditions, hospitalizations and operations, allergies, family history, social history, current illnesses and medications, and their effect on dental condition.

b) Dental history for dental treatment provided to clinical patients. The dental history must include: age of previous prostheses, existing restorations, prior history of orthodontic/periodontic treatment, and oral hygiene habits/adjuncts.

c) Documentation of a comprehensive examination for dental treatment provided to patients includes:

    (1) Interpretation of radiographic series
    (2) Performance of caries risk assessment
    (3) Determination of periodontal condition
    (4) Performance of a head and neck examination, including oral cancer screening.
    (5) Screening for temporomandibular disorders
    (6) Assessment of vital signs
    (7) Performance of a clinical examination of dentition
    (8) Performance of an occlusal examination

d) Documentation the candidate evaluated data to identify problems. The documentation of the data evaluation includes:

    (1) Chief complaint
    (2) Medical problem
    (3) Stomatognathic problems
    (4) Psychosocial problems

e) Documentation the candidate worked up the problems and developed a tentative treatment plan. The documentation of the work-up and tentative treatment plan includes:

(1) Problem definition, e.g., severity/chronicity and classification
(2) Determination if additional diagnostic tests are needed
(3) Development of a differential diagnosis
(4) Recognition of need for referral(s)
(5) Pathophysiology of the problem
(6) Short term needs
(7) Long term needs
(8) Determination interaction of problems
(9) Development of treatment options
(10) Determination of prognosis
(11) Patient information regarding informed consent

f) Documentation the candidate developed a final treatment plan. The documentation includes:

(1) Rationale for treatment.
(2) Problems to be addressed, or any condition that puts the patient at risk in the long term.
(3) Determination of sequencing with the following framework:

- Systemic: medical issues of concern, medications and their effects, effect of diseases on oral condition, precautions, treatment modifications
- Urgent: Acute pain/infection management, urgent esthetic issues, further exploration/additional information, oral medicine consultation, pathology
- Preparatory: Preventive interventions, orthodontic, periodontal (Phase I, II), endodontic treatment, caries control, other temporization
- Restorative: operative, fixed, removable prostheses, occlusal splints, implants
- Elective: esthetic (veneers, etc.) any procedure that is not clinically necessary, replacement of sound restoration for esthetic purposes, bleaching
- Maintenance: periodontic recall, radiographic interval, periodic oral examination, caries risk management

ODTP SCORING CRITERIA

FACTOR 1: MEDICAL ISSUES THAT IMPACT DENTAL CARE

4	3	2	1	0
• Identifies and evaluates all medical issues • Explains dental implications of systemic conditions • Identifies and assesses patient medications	• Misses one item that would NOT cause harm	• Misses two items that would NOT cause harm	• Misses more than two items that would cause potential harm	Critical errors include: • Misses medical or medication items that would cause potential harm

FACTOR 2: TREATMENT MODIFICATIONS BASED ON MEDICAL CONDITIONS

4	3	2	1	0
• Identifies all treatment modifications	• Misses one item that would NOT cause harm	• Misses two items that would NOT cause harm	• Misses more than two items that would cause potential harm	Critical errors include: • Misses treatment modifications that would cause potential harm

FACTOR 3: PATIENT CONCERNS/CHIEF COMPLAINT

4	3	2	1	0
• Identifies all patient concerns including chief complaint	• Identifies chief complaint but misses one patient concern	• Identifies chief complaint but misses two patient concerns	• Identifies chief complaint but misses more than two patient concerns	Critical errors include: • Chief complaint NOT identified

FACTOR 4: DENTAL HISTORY

4	3	2	1	0
• Identifies all parameters in dental history	• Misses one parameter in dental history	• Misses two parameters in dental history	• Misses more than two parameters in dental history	Critical errors include: • Neglects to address dental history

FACTOR 5: SIGNIFICANT RADIOGRAPHIC FINDINGS

4	3	2	1	0
• Identifies all radiographic findings	• Misses one radiographic finding that does NOT substantially alter treatment plan	• Misses two radiographic findings that do NOT substantially alter treatment plan	• Misses more than two radiographic findings that do NOT substantially alter treatment plan	Critical errors include: • Misses radiographic findings that substantially alters treatment plan

FACTOR 6: CLINICAL FINDINGS

4	3	2	1	0
• Identifies all clinical findings	• Misses one clinical finding that does NOT substantially alter treatment plan	• Misses two clinical findings that do NOT substantially alter treatment plan	• Misses more than two clinical findings that do NOT substantially alter treatment plan	Critical errors include: • Misses clinical findings that substantially alter treatment plan

FACTOR 7: RISK LEVEL ASSESSMENT

4	3	2	1	0
• Risk level (risk factors/indicators and protective factors) identified • Relevance of risk level identified	• Risk level and relevance of risk level identified but misses one item (risk factors/ indicators and protective factors)	• Risk level and relevance of risk level identified but misses two items (risk factors/indicators and protective factors)	• Risk level identified but misses more than two items (risk factors/indicators and protective factors) • Relevance of risk level NOT identified	Critical errors include: • Risk level NOT identified

FACTOR 8: NEED FOR ADDITIONAL DIAGNOSTIC TESTS/REFERRALS

4	3	2	1	0
• Prescribes/acquires all clinically necessary diagnostic test and referrals with comprehensive rationale	• Identifies need for clinically necessary diagnostic tests and referrals with limited rationale	• Identifies need for additional diagnostic tests and referrals without rationale	• Identifies need for additional diagnostic tests and referrals without rationale and prescribes non-contributory test or referrals	Critical errors include: • Does NOT identify clinically necessary diagnostic tests or referrals

FACTOR 9: FINDINGS FROM MOUNTED DIAGNOSTIC CASTS

4	3	2	1	0
• Casts and mounting reflect patient's oral condition • Identifies all diagnostic findings from casts	• Casts and mounting reflect patient's oral condition • Misses one diagnostic finding that does NOT substantially alter treatment plan	• Casts and mounting reflect patient's oral condition but misses two diagnostic findings that do NOT substantially alter treatment plan	• Casts and mounting reflect patient's oral condition but misses more than two diagnostic findings that do NOT substantially alter treatment plan	Critical errors include: • Casts and mounting do NOT reflect patient's oral condition • Misses diagnostic cast findings that substantially alter treatment plan

FACTOR 10: COMPREHENSIVE PROBLEM LIST

4	3	2	1	0
• All problems listed	• One problem NOT identified without potential harm to patient	• Two problems NOT identified without potential harm to patient	• Two or more problems NOT identified without potential harm to patient	Critical errors include: • Problems with potential for harm to patient NOT identified

FACTOR 11: DIAGNOSIS AND INTERACTION OF PROBLEMS

4	3	2	1	0
• All diseases correctly diagnosed • All interactions identified	• One missed diagnosis or interaction without potential harm to patient	• Two missed diagnoses or interactions without potential harm to patient	• More than two missed diagnoses or interactions without potential harm to patient	Critical errors include: • Missed diagnosis or interaction resulting in potential harm to patient

FACTOR 12: OVERALL TREATMENT APPROACH

4	3	2	1	0
• All treatment options identified within standard of care; provides rationale which is optimal	• All treatment options identified within standard of care; provides acceptable rationale	• All treatment options identified within standard of care and lacks sound rationale for treatment	• Incomplete treatment options and lacks sound rationale for treatment	Critical errors include: • Treatment options presented are NOT within standard of care

FACTOR 13: PHASING AND SEQUENCING OF TREATMENT

4	3	2	1	0
• Treatment optimally phased and sequenced	• Treatment phased correctly but one procedure out of sequence with no harm to patient	• Treatment phased correctly but two procedures out of sequence with no harm to patient	• Treatment NOT phased correctly but no potential harm to patient	Critical errors include: • Treatment NOT phased nor sequenced with potential harm to patient

FACTOR 14: COMPREHENSIVENESS OF TREATMENT PLAN

4	3	2	1	0
• Treatment plan addresses all problems • All treatment procedures are indicated	• One treatment procedure that is NOT indicated but will NOT result in harm to patient but treatment plan addresses all problems	• Two or more treatment procedures that are NOT indicated but reflect problem list but treatment plan addresses all problems	• Two or more treatment procedures that are NOT indicated and do NOT reflect problem list • Treatment plan is incomplete but does NOT cause harm to patient	Critical errors include: • Treatment plan is incomplete and causes potential harm to patient • Treatment procedures included that are NOT indicated resulting in harm to patient • Treatment procedures are missing from treatment plan resulting in harm to patient

FACTOR 15: TREATMENT RECORD

4	3	2	1	0
• Summarizes all data collected, diagnoses, and comprehensive rationale for treatment options • Documents presentation of risks and benefits of all treatment options	• Summarizes all data collected, diagnoses, and treatment options, documents presentation of risks and benefits of all treatment options and provides limited rationale	• Summarizes all data collected, diagnoses, and treatment options, documents presentation of risks and benefits of all treatment options but provides no rationale	• Summarizes all data collected, diagnoses, and treatment options, and documents presentation of risks and benefits only for preferred option	Critical errors include: • Does NOT summarize all data collected, diagnoses and/or treatment options • Does NOT document presentation of risks and benefits of all treatment options

SECTION 9 – DIRECT RESTORATION

PURPOSE

The competency examinations for direct restoration are designed to assess the candidate's independent ability to restore teeth with interproximal primary carious lesions to optimal form, function and esthetics.

MINIMUM CLINICAL EXPERIENCES

The documentation of direct restorative clinical experiences includes 60 restorations.

The restorations completed in the clinical experiences may include any restoration on a permanent or primary tooth using standard restorative materials including:

- Amalgams,
- Composites,
- Crown buildups,
- Direct pulp caps, and,
- Temporizations.

OVERVIEW

- Seven (7) scoring factors.
- Two (2) restorations:
  - > Class II amalgam or composite; maximum one slot preparation, and,
  - > Class III or IV composite
- Restoration can be performed on an interproximal lesion on one interproximal surface in an anterior tooth that does not connect with a second interproximal lesion which can be restored separately.
- Requires a case presentation for which the proposed treatment is appropriate for patient's medical and dental history, is in appropriate treatment sequence, and treatment consent is obtained.
- Requires patient management. Candidate must be familiar with patient's medical and dental history.
- Medical conditions must be managed appropriately.

PATIENT PARAMETERS

Class II – Any permanent posterior tooth

- Treatment needs to be performed in the sequence described in the treatment plan.
- More than one test procedure can be performed on a single tooth; teeth with multiple lesions may be restored at separate appointments.
- Caries as shown on either of the two required radiographic images of an unrestored proximal surface must extend to or beyond the dento-enamel junction.
- Tooth to be treated must be in occlusion.
- Must have an adjacent tooth to be able to restore a proximal contact; proximal surface of the dentition adjacent to the proposed restoration must be either natural tooth structure or a permanent restoration; provisional restorations or removable partial dentures are not acceptable adjacent surfaces.
- Tooth must be asymptomatic with no pulpal or periapical pathology; cannot be endodontically treated or in need of endodontic treatment.
- Tooth with bonded veneer is not acceptable.

Class III/IV – Any permanent anterior tooth

- Treatment needs to be performed in the sequence described in the treatment plan.
- Caries as shown on the required radiographic image of an unrestored proximal surface must extend to or beyond the dento-enamel junction.
- Carious lesions must involve the interproximal contact area.
- Must have an adjacent tooth to be able to restore a proximal contact; proximal surface of the dentition adjacent to the proposed restoration must be either natural tooth structure or a permanent restoration; provisional restorations or removable partial dentures are not acceptable adjacent surfaces.
- Tooth must be asymptomatic with no pulpal or periapical pathology; cannot be endodontically treated or in need of endodontic treatment.
- Approach must be appropriate for the tooth.
- Tooth with bonded veneer is not acceptable.

SCORING

Scoring points for direct restorations are defined as follows:

- A score of 0 is unacceptable; candidate exhibits a critical error
- A score of 1 is unacceptable; multiple major deviations that are correctable
- A score of 2 is unacceptable; one major deviation that is correctable
- A score of 3 is acceptable; minimum competence
- A score of 4 is adequate; less than optimal
- A score of 5 is optimal

ELEMENTS OF THE DIRECT RESTORATION PORTFOLIO

The Direct Restoration portfolio may include, but is not limited to the following:

a) Documentation of the candidate's competency to perform a class II direct restoration on a tooth containing primary carious lesions to optimal form, function and esthetics using amalgam or composite restorative materials.

   The case selection must be based on minimum direct restoration criteria for any permanent posterior tooth. The treatment performed should follow the sequence of the treatment plan(s). More than one procedure can be performed on a single tooth; teeth with multiple lesions may be restored at separate appointments. Each procedure may be considered a case. The tooth being restored must have caries that are evident on either of the two required radiographs.

   The tooth involved in the restoration must have caries which penetrate the dento-enamel junction and must be in occlusion. Proximal caries must be in contact with at least one adjacent tooth, a natural tooth surface or a permanent restoration; provisional restorations or removal partial dentures are not acceptable adjacent surfaces. The tooth must be asymptomatic with no pulpal or periapical pathosis and cannot be endodontically treated or in need of endodontic treatment.

b) Documentation of the candidate's competency to perform a class III/IV direct restoration on a tooth containing primary carious lesions to optimal forms, function and esthetics using composite restorative material. The case selected must be on any permanent anterior tooth and treatment needs to be performed in the sequence described in the treatment plan.

   More than one procedure can be performed on a single tooth; teeth with multiple lesions may be restored at separate appointments. Each procedure may be considered a case. The tooth being restored must have caries that are evident on either of the two required radiographs. The tooth involved in the restoration must have caries which penetrate the dento-enamel junction.

   The tooth to be restored must have an adjacent tooth to be able to restore a proximal contact. Proximal surface of the dentition adjacent to the proposed restoration must be natural tooth structure or a permanent restoration, provisional restorations or removable partial dentures are not acceptable adjacent surfaces. The tooth involved in the restoration must be asymptomatic with no pulpal or periapical pathosis and cannot be endodontically treated or in need of endodontic treatment. The lesion is not acceptable if it is in contact with circumferential decalcification. The approach must be appropriate for the tooth. Teeth with bonded veneers are not acceptable.

DIRECT RESTORATION SCORING CRITERIA

FACTOR 1: CASE PRESENTATION

5	4	3	2	1	0
• Obtains informed consent • Presents a comprehensive review of medical and dental history • Provides rationale for restorative procedure • Proposes initial design of preparation and restoration • Demonstrates full understanding of the procedure	• Slight deviation from optimal case presentation	• Moderate deviation from optimal case presentation	• Major deviation from optimal case presentation	• Multiple major deviations from optimal case presentation	• Critical errors in assessing patient's medical and/or dental history • Unable to justify treatment • Proposed treatment would cause harm to patient • Proposed treatment not indicated • Misses critical factors in medical and/or dental review that affect treatment or patient well being

FACTOR 2: OUTLINE AND EXTENSIONS

5	4	3	2	1	0
• Optimal outline and extensions <u>such as</u>: > Smooth, flowing > Does not weaken tooth > Includes the lesion > Breaks proximal contacts as appropriate > Appropriate cavosurface angles > Optimal treatment of fissures > No damage to adjacent teeth > Optimal extension for caries/ > decalcification > Appropriate extension requests	• Slight deviation(s) from optimal; minimal impact on treatment	• Moderate, clinically acceptable deviation(s) from optimal; minimal impact on treatment	• Major deviation from optimal <u>such as</u>: > Irregular outline > Outline weakens the tooth > Does not include the lesion > Contacts not broken where appropriate > Proximal extensions excessive > Inappropriate cavosurface angle(s) > Inappropriate treatment of fissures > Adjacent tooth requires major recontouring > Inappropriate extension requests	• <u>Multiple</u> major deviations from optimal <u>including</u>: > Irregular outline > Outline weakens the tooth > Does not include the lesion > Contacts not broken where appropriate > Proximal extensions excessive > Inappropriate cavosurface angle(s) > Inappropriate treatment of fissures > Adjacent tooth requires major recontouring > Inappropriate extension requests	• Critical errors in outline and extensions • Deviations from optimal that are irreversible and have a significant impact on treatment • Damage to adjacent tooth that requires restoration

FACTOR 3: INTERNAL FORM

5	4	3	2	1	0
• Optimal internal form such as: > Optimal pulpal and axial depth > Optimal wall relationships > Optimal axio-pulpal line angles > Optimal internal refinement > All previous restorative material removed > Optimal caries removal > Preparation is clean and free of fluids and/or debris > Appropriate liners and bases > Appropriate extension requests	• Slight deviation(s) from optimal	• Moderate, clinically acceptable deviation(s) from optimal	• Major deviation from optimal such as: > Excessive or inadequate pulpal or axial depth > Inappropriate wall relationships > Inappropriate internal line angles > Rough or uneven internal features > Previous restorative material present > Inappropriate caries removal > Fluids and/or debris present > Inappropriate handling of liners and bases > Inappropriate extension requests	• Multiple, major deviations from optimal including: > Excessive or inadequate pulpal or axial depth > Inappropriate wall relationships > Inappropriate internal line angles > Rough or uneven internal features > Previous restorative material present > Inappropriate caries removal > Fluids and/or debris present > Inappropriate handling of liners and bases > Inappropriate extension requests	• Critical errors from optimal internal form • Noncarious pulp exposure

FACTOR 4: OPERATIVE ENVIRONMENT

5	4	3	2	1	0
• Soft tissue free of unnecessary damage • Proper patient comfort/pain management • Optimal isolation • Correct teeth isolated • Dam fully inverted • Clamp stable with no tissue damage • No leakage • Preparation can be accessed and visualized	• Slight deviation(s) from optimal	• Moderate, clinically acceptable deviation(s) from optimal	• Major deviation from optimal <u>such as</u>: > Incorrect teeth isolated > Dam not inverted, causing leakage that may compromise the final restoration > Clamp is not stable or impinges on tissue > Preparation cannot be accessed or visualized to allow proper placement of restoration > Major tissue damage	• <u>Multiple</u> major deviations from optimal <u>including</u>: > Incorrect teeth isolated > Dam not inverted, causing leakage that may compromise the final restoration > Clamp is not stable or impinges on tissue > Preparation cannot be accessed or visualized to allow proper placement of restoration > Major tissue damage	• Critical errors from optimal in operative environment • Gross soft tissue damage • Gross lack of concern for patient comfort

FACTOR 5: ANATOMICAL FORM

5	4	3	2	1	0
• Optimal anatomic form such as: > Harmonious and consistent with adjacent tooth structure > Interproximal contour and shape are proper > Interproximal contact area and position are properly restored > Contact is closed > Height and shape of marginal ridge is appropriate	• Slight deviation(s) from optimal	Moderate, clinically acceptable deviation(s) from optimal	• Major deviation from optimal such as: > Inconsistent with adjacent tooth structure > Interproximal contour and shape are inappropriate > Height and shape of marginal ridge is inappropriate	• Multiple major deviations from optimal including: > Inconsistent with adjacent tooth structure > Interproximal contour and shape are inappropriate > Height and shape of marginal ridge is inappropriate	• Critical errors that require restoration to be redone

FACTOR 6: MARGINS

5	4	3	2	1	0
• Optimal margins • No deficiencies or excesses	• Slight deviation(s) from optimal	• Moderate, clinically acceptable deviation(s) from optimal	• Major deviation from optimal such as: > Open margin, submarginal, and/or excess restorative material	• Multiple major deviations from optimal	• Critical errors that require restoration to be redone

FACTOR 7: FINISH AND FUNCTION

5	4	3	2	1	0
• Optimal finish and function <u>such as</u>: > Smooth with no pits, voids or irregularities in restoration > Occlusion is properly restored with no interferences > No damage to hard or soft tissue	• Slight deviation(s) from optimal	Moderate, clinically acceptable deviation(s) from optimal	• Major deviation from optimal <u>such as</u>: > Significant pits, voids or irregularities in the surfaces > Severe hyper-occlusion or hypo-occlusion > Moderate damage to hard or soft tissue	• <u>Multiple</u> major deviations from optimal	• Critical errors that require restoration to be redone • Procedure is not completed within allotted time • Unnecessary, gross damage to hard and soft tissue as related to finishing procedure

SECTION 10 – INDIRECT RESTORATION

PURPOSE

The competency examination for indirect restoration is designed to assess the candidate's independent ability to restore teeth requiring an indirect restoration to optimal form, function and esthetics with a full or partial coverage ceramic, metal or metal-ceramic indirect restoration.

MINIMUM CLINICAL EXPERIENCES

The documentation of indirect restorative clinical experiences will include a minimum of 14 restorations.

The restorations completed in the clinical experiences may be a combination of the following procedures:

- Inlays,
- Onlays,
- Crowns,
- Abutments,
- Pontics,
- Veneers,
- Cast posts,
- Overdenture copings, or,
- Dental implant restorations.

OVERVIEW

- Seven (7) scoring factors.
- One (1) indirect restoration which may be a combination of the following procedures:

  > Ceramic restoration must be onlay or more extensive
  > Partial gold restoration must be onlay or more extensive
  > Metal ceramic restoration (PFM)
  > Full gold restoration

- Requires a case presentation for which the proposed treatment is appropriate for patient's medical and dental history, is in appropriate treatment sequence, and treatment consent is obtained.

- Requires patient management; candidate must be familiar with the patient's medical and dental history.
- Medical conditions must be managed appropriately.

PATIENT PARAMETERS

- Treatment needs to be performed in the sequence described in the treatment plan.
- Tooth must be asymptomatic with no pulpal or periapical pathosis; cannot be in need of endodontic treatment.
- Tooth must be in occlusal contact with a natural tooth or a permanent restoration. Occlusion with a full or partial denture is not acceptable.
- The restoration must include at least one cusp.
- Must have an adjacent tooth to be able to restore a proximal contact; proximal surface of the tooth adjacent to the planned restoration must be either an enamel surface or a permanent restoration; temporary restorations or removable partial dentures are not acceptable adjacent surfaces.
- The candidate may not have performed any portion of the crown preparation in advance.
- Direct restorative materials which are placed to contribute to the retention and resistance form of the final restoration (buildups) may be completed ahead of time, if needed.
- Restoration must be completed on the same tooth and same patient by the same candidate.
- Validated lab or fabrication error will allow a second delivery attempt starting from a new impression or modification of the existing crown.

SCORING

Scoring points for indirect restoration is defined as follows:

- A score of 0 is unacceptable; candidate exhibits a critical error
- A score of 1 is unacceptable; multiple major deviations that are correctable
- A score of 2 is unacceptable; one major deviation that is correctable
- A score of 3 is acceptable; minimum competence
- A score of 4 is adequate; less than optimal
- A score of 5 is optimal

ELEMENTS OF THE INDIRECT RESTORATION PORTFOLIO

The indirect restoration portfolio may include, but is not limited to the following:

a) Documentation of the candidate's competency to complete a ceramic onlay or more extensive indirect restorations. The treatment needs to be performed in the sequence in the treatment plan. The tooth must be asymptomatic with no pulpal or periapical pathosis and cannot be in need of endodontic treatment. The tooth selected for restoration, must have opposing occlusion that is stable. The tooth selected for restoration must have an adjacent tooth to be able to restore a proximal contact. The proximal surface of the tooth adjacent to the planned restoration must be either an enamel surface or a permanent restoration. Temporary restorations or removable partial dentures are not acceptable adjacent surfaces. The tooth selected must require an indirect restoration at least the size of the onlay or greater. The tooth selected cannot replace existing or temporary crowns. Buildups may be completed ahead of time, if needed. Teeth with cast post are not allowed. The restoration must be completed on the same tooth and same patient by the same candidate.

b) Documentation of the candidate's competency to complete a partial gold restoration must be an onlay or more extensive indirect restoration. The treatment must be performed in the sequence of the treatment plan. The tooth must be asymptomatic with no pulpal or periapical pathosis; cannot be in need of endodontic treatment. The tooth selected for restoration must have opposing occlusion that is stable. The tooth selected for restoration must have an adjacent tooth to be able to restore a proximal contact. The proximal surface of the tooth adjacent to the planned restoration must be either an enamel surface or a permanent restoration. Temporary restorations or removable partial dentures are not acceptable adjacent surfaces. The tooth selected must require an indirect restoration at least the size of an onlay or greater. The tooth selected cannot replace existing or temporary crowns. Buildups may be completed ahead of time, if needed. Teeth with cast post are not allowed. The restoration must be completed on the same tooth and same patient by the same candidate.

c) Documentation of the candidate's competency to perform a full gold restoration. The treatment must be performed in the sequence of the treatment plan. The tooth must be asymptomatic with no pulpal or periapical pathosis; cannot be in need of endodontic treatment. The tooth selected for restoration must have opposing occlusion that is stable. The tooth selected for restoration must have an adjacent tooth to be able to restore a proximal contact. The proximal surface of the tooth adjacent to the planned restoration must be either an enamel surface or a permanent restoration. Temporary restorations or removable partial dentures are not acceptable adjacent surfaces. The tooth selected must require an indirect restoration at least the size of an onlay or greater. The tooth selected cannot replace existing or temporary crowns. Buildups may be completed ahead

of time, if needed. Teeth with cast post are not allowed. The restoration must be completed on the same tooth and same patient by the same candidate.

d) Documentation of the candidate's competency to perform a metal-ceramic restoration. The treatment must be performed in the sequence of the treatment plan. The tooth must be asymptomatic with no pulpal or periapical pathosis: cannot be in need of endodontic treatment. The tooth selected for restoration must have opposing occlusion that is stable. The tooth selected for restoration must have an adjacent tooth to be able to restore a proximal contact. The proximal surface of the tooth adjacent to the planned restorations must be either an enamel surface or a permanent restoration. Temporary restorations or removable partial dentures are not acceptable adjacent surfaces. The tooth selected must require an indirect restoration at least the size of an onlay or greater. The tooth selected cannot replace existing or temporary crowns. Buildups may be completed ahead of time, if needed. Teeth with cast post are not allowed. The restoration must be completed on the same tooth and same patient.

e) A facial veneer is not acceptable documentation of the candidate's competency to perform indirect restorations.

INDIRECT RESTORATION SCORING CRITERIA

FACTOR 1: CASE PRESENTATION

5	4	3	2	1	0
• Obtains informed consent • Presents a comprehensive medical and dental review • Provides rationale for restorative procedure • Proposes initial design of restoration • Provides method for provisionalization • Demonstrates full understanding of the procedure • Sequencing of treatment follows standards of care	• Slight deviations from optimal case presentation	• Moderate deviations from optimal case presentation	• Major deviation from optimal case presentation • Provides inappropriate justification for treatment • Sequencing of treatment does not follow standards of care	• Multiple major deviations from optimal case presentation	• Critical errors in assessing patient's medical and/or dental history • Unable to justify treatment • Proposed treatment would cause harm to patient • Proposed treatment not indicated • Misses critical factors in medical and dental review that affect treatment or patient well being

FACTOR 2: PREPARATION

5	4	3	2	1	0
• Meets all accepted criteria for optimal preparation: a) Occlusal /incisal reduction b) Axial reduction c) Finish lines d) Caries removal e) Pulpal protection f) Soft tissue management g) No damage to soft and hard tissues h) Resistance and retention i) Debridement	• Slight deviations from optimal; minimal impact on treatment	• Moderate, clinically acceptable deviations from optimal; minimal impact on treatment	• Major deviation from optimal but correctable without significantly changing the procedure	• Multiple major deviations from optimal preparation	• Critical errors that are irreversible and have a significant impact on treatment • Critical errors that require major modifications of the proposed treatment such as: a) Onlay that must change to full crown b) Overextension requiring crown lengthening

FACTOR 3: IMPRESSION

5	4	3	2	1	0
• Achieves optimal, clinically acceptable impression achieved in one attempt a) Impression extends beyond finish lines b) Detail of preparation and adjacent teeth captured accurately c) Free of voids in critical areas d) No aspect of impression technique that would result in inaccuracy e) Interocclusal record is accurate, if needed	• Achieves clinically acceptable impression in second attempt	• Achieves clinically acceptable impression more than two attempts	• Major deviation that require retaking impression <u>such as</u>: > Lack of recognition of unacceptable impression or interocclusal relationship	• <u>Multiple</u> major deviations from optimal in impression <u>including</u>: > Lack of recognition of unacceptable impression or interocclusal relationship	• failure to achieve a clinically acceptable impression after five (5) attempts • Critical errors in impression procedure cause unnecessary tissue damage that require corrective treatment procedures

FACTOR 4: PROVISIONAL

5	4	3	2	1	0
• Meets all accepted criteria for optimal provisional: a) Occlusal form and function b) Proximal contact c) Axial contours d) Marginal fit e) External surfaces smooth and polished without pits, voids, or debris f) Optimal internal adaptation g) Retention h) Esthetics	• Slight deviations from optimal have minimal impact on treatment	• Moderate deviations from accepted criteria have minimal impact on treatment	• Major deviation from optimal that can be corrected <u>such as</u>: > Lack of recognition of major deviation that can be corrected	• <u>Multiple</u> major deviations that have significant impact on treatment <u>including</u>: > Lack of recognition of major deviation that can be corrected	• Critical errors that are clinically unacceptable

FACTOR 5: CANDIDATE EVALUATION OF LABORATORY WORK

5	4	3	2	1	0
• Verifies that restoration meets all accepted criteria • Verifies errors in restoration and proposes changes, if needed	• Lack of recognition of slight deviations from accepted criteria and minimal impact on treatment	• Lack of recognition of moderate deviations from accepted criteria with minimal impact on treatment	• Lack of recognition of major deviation from optimal that can be corrected	• Lack of recognition of <u>multiple</u> major deviations from optimal	• Critical errors that require restoration to be redone

FACTOR 6: PRE-CEMENTATION

5	4	3	2	1	0
• Meets all accepted criteria for pre-cementation: a) Occlusal form and function b) Proximal contact c) Axial contours d) Marginal fit e) External surfaces smooth and polished without pits, voids, or debris f) Optimal internal adaptation g) Retention h) Esthetics i) Patient acceptance	• Lack of recognition of slight deviations from accepted criteria and minimal impact on treatment	• Lack of recognition of moderate deviations from accepted criteria with minimal impact on treatment	• Lack of recognition of major deviation that can be corrected	• Lack of recognition of <u>multiple</u> major deviations from optimal	• Lack of recognition of critical errors which <u>cannot</u> be corrected

FACTOR 7: CEMENTATION AND FINISH

5	4	3	2	1	0
• Meets all accepted criteria for optimal cementation a) Occlusal form and function b) Proximal contact c) Axial contours d) Marginal fit e) External surfaces smooth and polished without pits, voids, or debris f) Optimal internal adaptation g) Retention h) Esthetics i) All excess cement removed j) No unnecessary tissue trauma k) Appropriate postoperative instructions	• Slight deviations from optimal; minimal impact on treatment	• Moderate deviations from accepted criteria; minimal impact on treatment	• Major deviation from accepted that can be corrected	• Multiple major deviations from optimal	• Critical errors which require restoration to be redone • Procedure is not completed within allotted time • Unnecessary, gross damage to hard and soft tissue as related to finishing

SECTION 11 – REMOVABLE PROSTHODOTICS

PURPOSE

The competency examination for removable prosthodontics is designed to assess the candidate's ability to demonstrate clinical skills in all aspects of a prosthesis from diagnosis and treatment planning to delivery of the prosthetic device and post-insertion follow-up.

MINIMUM CLINICAL EXPERIENCES

The documentation of oral of removable prosthodontic clinical experiences shall include five (5) prostheses.

One of the five prostheses may be used as a Portfolio competency examination provided that it is completed in an independent manner with no faculty intervention.

A prosthesis is defined to include any of the following:

- Full denture,
- Partial denture (cast framework),
- Partial denture (acrylic base with distal extension replacing a minimum number of three posterior teeth),
- Immediate treatment denture, or,
- Overdenture retained by natural or dental implants.

OVERVIEW

- Twelve (12) scoring factors.
- One (1) of the following prosthetic treatments from start to finish on the same patient:
  - > Denture or overdenture for a single edentulous arch, or,
  - > Cast metal framework removable partial denture (RPD) for a single Kennedy Class I or Class II partially edentulous arch
- An immediate or interim denture.
- No patient sharing; cannot split patients between candidates
- Requires patient management. Candidate must be familiar with patient's medical and dental history.
- Medical conditions must be managed appropriately.
- Case complexity is not a criteria.

PATIENT PARAMETERS

Procedures may be performed on patients with supported soft tissue, implants or natural tooth retained overdentures.

SCORING

Scoring points for removable prosthodontics are defined as follows:

- A score of 1 is unacceptable with gross errors
- A score of 2 is unacceptable with major errors
- A score of 3 is minimum competence with moderate errors that do not compromise outcome
- A score of 4 is acceptable with minor errors that do not compromise outcome
- A score of 5 is optimal with no errors evident

ELEMENTS OF THE REMOVABLE PROSTHODONTICS PORTFOLIO

a) Documentation the candidate developed a diagnosis, determined treatment options and prognosis for the patient to receive a removable prosthesis. The documentation may include, but is not limited to the following:

- Evidence the candidate obtained a patient history, (e.g. medical, dental and psychosocial).
- Evaluation of the patient's chief complaint.
- Radiographs and photographs of the patient.
- Evidence the candidate performed a clinical examination, (e.g. hard/soft tissue charting, endodontic evaluation, occlusal examination, skeletal/jaw relationship, VDO, DR, MIP).
- Evaluation of existing prosthesis and the patient's concerns.
- Evidence the candidate obtained and mounted a diagnostic cast.
- Evidence the candidate determined the complexity of the case based on ACP classifications.
- Evidence the patient was presented with treatment plan options and assessment of the prognosis, (e.g. complete dentures, partial denture, overdenture, implant options, FPD).
- Evidence the candidate analyzed the patient risks/benefits for the various treatment options.
- Evidence the candidate exercised critical thinking and made evidence –based treatment decisions.

b) Documentation of the candidate's competency to successfully restore edentulous spaces with removable prosthesis. The documentations may include but is not limited to the following:

- Evidence the candidate developed a diagnosis and treatment plan for the removable prosthesis.
- Evidence the candidate obtained diagnostic casts.
- Evidence the candidate performed diagnostic wax-up/survey framework designs.
- Evidence the candidate performed an assessment to determine the need for pre-prosthetic surgery and made the necessary referral.
- Evidence the candidate performed tooth modifications and/or survey crowns, when indicated.
- Evidence the candidate obtained master impressions and casts.
- Evidence the candidate obtained occlusal records.
- Evidence the candidate performed a try-in and evaluated the trial dentures.
- Evidence the candidate inserted the prosthesis and provided the patient with post-insertion care.
- Documentation the candidate followed established standards of care in the restoration of the edentulous spaces, (e. g. informed consent, and infection control).

c) Documentation of the candidate's competency to manage tooth loss transitions with immediate or transitional prostheses. The documentation may include, but is limited to the following:

- Evidence the candidate developed a diagnosis and treatment plan that identified teeth that could be salvaged and or teeth that needed extraction.
- Evidence the candidate educated the patient regarding the healing process, denture experience, and future treatment need.
- Evidence the candidate developed prosthetic phases which included surgical plans.
- Evidence the candidate obtained casts (preliminary and final impressions).
- Evidence the candidate obtained the occlusal records.
- Evidence the candidate did try-ins and evaluated trial dentures.
- Evidence the candidate competently managed and coordinated the surgical phase.
- Evidence the candidate provided the patient post insertion care including adjustment, relines and patient counseling.
- Documentation the candidate followed established standards of care in the restoration of the edentulous spaces, (e. g. informed consent, and infection control).

d) Documentation of the candidate's competency to manage prosthetic problems. The documentation may include, but is not limited to the following:

- Evidence the candidate competently managed real or perceived patient problems.

- Evidence the candidate evaluated existing prosthesis.
- Evidence the candidate performed uncomplicated repairs, relines, re-base, re-set or re-do, if needed.
- Evidence the candidate made a determination if specialty referral was necessary.
- Evidence the candidate obtained impressions/records/information for laboratory use.
- Evidence the candidate competently communicated needed prosthetic procedure to laboratory technician.
- Evidence the candidate inserted the prosthesis and provided the patient follow-up care.
- Evidence the candidate performed in-office maintenance, (e.g. prosthesis cleaning, clasp tightening and occlusal adjustments).

e) Documentation the candidate directed and evaluated the laboratory services for the prosthesis. The documentation may include, but is not limited to the following:

- Complete laboratory prescriptions sent to the dental technician.
- Copies of all communications with the laboratory technicians.
- Evaluations of the laboratory work product, (e.g. frameworks, processed dentures).

REMOVABLE PROSTHODONTICS SCORING CRITERIA

FACTOR 1: PATIENT EVALUATION AND DIAGNOSIS

5	4	3	2	1
• Evaluation and diagnosis is comprehensive and discriminating • Recognizes significant diagnostic implications of all findings	• Recognizes significant diagnostic implications but misses some findings that do NOT affect diagnosis	• Recognizes significant findings <u>but</u> there are errors in findings or judgment that do NOT compromise diagnosis	• Does NOT recognize significant findings or diagnostic implications • Diagnosis is jeopardized	• <u>Gross</u> errors in evaluation or judgment • <u>Gross</u> errors in diagnosis

FACTOR 2: TREATMENT PLAN AND SEQUENCING

5	4	3	2	1
• Presents/ formulates all treatment options and understands clinical nuances of each option • Presents comprehensive treatment plan based on clinical evidence, patient history and direct examination • Performs risk-based analysis to present appropriate treatment options and prognosis • Demonstrates critical thinking as evidenced in steps in treatment plan • No errors in planning and sequencing	• Presents/formulates most treatment options and understands rationale of each option • Treatment plan is appropriate some contributing factors NOT considered • <u>Minor</u> errors that do NOT affect planning and sequencing	• Presents/formulates appropriate treatment options with less than ideal understanding of chief complaint, diagnosis, and prognosis • <u>Moderate</u> errors that do NOT compromise planning and sequencing	• Does NOT address patient's chief complaint • Treatment plan NOT based on diagnosis • <u>Major</u> errors in evidenced based, critical thinking, risk-based, and prognostic assessment • Treatment sequence inappropriate	• Treatment plan NOT based on diagnostic findings or prognostic information • Treatment plan grossly inadequate • Treatment sequence grossly inappropriate

FACTOR 3: PRELIMINARY IMPRESSIONS

5	4	3	2	1
• Perform and recognize adequate capture of anatomy; free of distortions and voids	• Performs impression with minor errors that do NOT affect final outcome	• Performs impression with moderate errors that do NOT compromise final outcome	• Performs impression with major errors, or fails to recognize that final outcome is compromised	• Inadequate capture of anatomy or gross distortion/voids • Fails to recognize that subsequent steps are impossible

FACTOR 4: RPD DESIGN (IF APPLICABLE)

5	4	3	2	1
• Design demonstrates understanding of biomechanical and esthetic principles • Casts are surveyed accurately • Design is drawn with detail	• Design demonstrates understanding of biomechanical and esthetic principles with minor errors • Minor errors in cast survey and design	• Design is functional but includes rests, clasp assembly or major connector that are NOT first choices • Moderate errors in survey and design • Moderate errors in understanding of RPD design principles	• Demonstrates lack of understanding of biomechanical or esthetic principles • Major errors in cast survey and design	• Design is grossly inappropriate • Inaccurate survey • Illegible drawing

FACTOR 5: TOOTH MODIFICATION (IF APPLICABLE)

5	4	3	2	1
• Parallel guiding planes • Optimal size and location of rest preparations • Conservative recontouring of abutment teeth for optimal location of clasp and to optimize occlusal plane • Survey crowns as needed	• Minor deficiencies in tooth modification; RPD fit and service unaffected	• Moderate deficiencies in tooth modifications but no compromise in RPD fit and service	• Major errors in tooth modifications leading to compromised RPD fit and service • Tooth modifications may require restorations	• RPD abutment teeth are grossly over-prepared

FACTOR 6: BORDER MOLDING AND FINAL IMPRESSIONS

5	4	3	2	1
• Obtain optimal vestibular extension and peripheral seal • Perform and recognize adequate capture of anatomy • Impression free of distortions/voids	• Border molding and/or impression have minor errors that do NOT affect final outcome	• Border molding and/or impression have moderate deviations that do NOT compromise final outcome	• Border molding and/or impression have major errors that affect final outcome	• Border molding and/or impression do NOT adequately capture of anatomy or gross distortion/voids so that final outcome impossible

FACTOR 7: FRAMEWORK TRY-IN (IF APPLICABLE)

5	4	3	2	1
• Perform and recognize functional and occlusal adjustment • Complete seating of framework is achieved • Determine sequence for establishing denture-base support	• Minor deficiencies in ability to recognize and correct minor discrepancies in framework fit but do NOT affect RPD service	• Moderate deficiencies in ability to recognize or correct discrepancies in framework fit but no significant compromise to RPD service	• Major errors in framework fit NOT recognized • Errors in judgment regarding sequence of correction	• Gross errors in framework fit NOT recognized • Unable to determine sequence of correction

FACTOR 8: JAW RELATION RECORDS

5	4	3	2	1
• Smooth record bases with appropriate peripheral extensions/ thickness • Smoothly contoured wax rim establishes esthetic parameters • Vertical dimension is physiologically appropriate • Accurately captures centric relation • Relates opposing casts without interference	• Minor discrepancies in jaw relation records that do NOT adversely affect prosthetic service	• Moderate discrepancies in jaw relation records that do NOT compromise prosthetic service; records do NOT require repeating	• Major errors in jaw relation records that adversely affect prosthetic service; records should be redone	• Gross errors in jaw relation records with poor understanding and judgment; records should be redone

FACTOR 9: TRIAL DENTURES

5	4	3	2	1
• Recognizes optimal esthetic (midline, incisal length, tooth mold and shade, arrangement), occlusal (MIP=CR, VDO < VDR, bilateral posterior contact), speech and contour aspects of trial dentures • Deviations from the optimal are corrected or managed appropriately	• Minor deficiencies in ability to recognize and correct discrepancies in esthetics, vertical dimension, occlusion, phonetics and contour	• Moderate deficiencies in ability to recognize or correct discrepancies in esthetics, vertical dimension, occlusion and phonetics which do NOT compromise final outcome	• Major errors in ability to recognize or correct discrepancies in esthetics, vertical dimension, occlusion and phonetics which adversely affect final outcome	• Demonstrates inability to recognize or correct gross errors which will result in failure of final outcome

FACTOR 10: INSERTION OF REMOVABLE PROSTHESIS

5	4	3	2	1
• Optimize definitive prosthesis, recognizing errors and correcting if necessary, including the following: > Tissue fit > Prosthetic support, stability and retention > RPD extension base tissue support > Vestibular extension and bulk > Occlusion; clinical remount required > Phonetics > Contours and polish > Patient home care instructions	• Minor discrepancies in judgment and/or performance of optimizing prosthesis fit and function; no adverse affect on prosthesis service	• Moderate discrepancies in judgment and performance of optimizing prosthesis fit/function; no compromise on prosthesis service	• Major errors in judgment and performance of optimizing prosthesis fit/function • Prosthesis service adversely affected; may require significant correction of prosthesis	• Gross errors in judgment and performance results in failure of prosthesis with no possibility to correct; prosthesis must be redone

FACTOR 11: POST-INSERTION (1 WEEK)

5	4	3	2	1
• Perform an appropriate recall sequence to evaluate and diagnose prosthesis problem and make adjustments until patient is satisfied with fit, form and function of new prosthesis • Enroll patient in maintenance program • Demonstrate familiarity with common prosthesis complications and solutions	• Minor discrepancies in ability to evaluate and solve prosthesis problems; no affect on patient comfort and function	• Moderate discrepancies in ability to evaluate and solve prosthesis problems that do NOT compromise patient comfort and function	• Major errors in ability to evaluate and solve prosthesis problems that adversely affect patient comfort and function	• Gross errors in ability to evaluate and solve prosthesis problems • Patient confidence is compromised

FACTOR 12: LABORATORY SERVICES FOR PROSTHESIS

5	4	3	2	1
• Prescription clearly communicates desired laboratory work and materials • Complies with infection control protocols between clinic and laboratory environments • Accurately evaluates laboratory work products	• Prescription, or management of laboratory services has minor errors that do NOT adversely affect prosthesis	• Prescription, or management of laboratory services has moderate discrepancies that do NOT compromise prosthesis	• Prescription, or management of laboratory services, has major errors that adversely affect prosthesis	• Prescription, or management of laboratory services has gross errors that result in prosthesis failure

SECTION 12 – ENDODONTICS

PURPOSE

The competency examination for endodontics is designed to assess the candidate's independent ability to demonstrate clinical skills in all aspects of a case from diagnosis to completion of conventional nonsurgical endodontic interventions.

MINIMUM CLINICAL EXPERIENCES

- Ten (10) scoring factors.
- One (1) clinical case.
- Requires patient management; therefore, candidate must be familiar with the patient's medical and dental history.
- Medical conditions must be managed appropriately.

OVERVIEW

The documentation of endodontic clinical experiences on patients must include five (5) canals or any combination of canals in three separate teeth.

PATIENT PARAMETERS

- Any tooth to completion by the same candidate clinician on the same patient.
- Completed case is defined as a tooth with an acceptable and durable coronal seal.

SCORING

Scoring points for endodontics are defined as follows:

- A score of 0 is unacceptable; candidate exhibits a critical error
- A score of 1 is unacceptable; major deviations that are correctable
- A score of 2 is acceptable; minimum competence
- A score of 3 is adequate; less than optimal
- A score of 4 is optimal

ELEMENTS OF THE ENDODONTICS PORTFOLIO

The Endodontics portfolio may include, but is not limited to the following:

a) Documentation the candidate applied case selection criteria for endodontic cases. The Portfolio must contain evidence the cases selected met American Association of Endodontics case criteria for minimum difficulty such that treated teeth have uncomplicated morphologies, have signs and symptoms of swelling and acute inflammation and have not had previous complete or partial endodontic therapy.

- Candidates determine a diagnostic need for endodontic therapy.
- Candidates performed charting and diagnostic testing.
- Candidates took and interpreted radiographs of the patient oral condition.
- Candidates made a pulpal diagnosis within approved parameters. Evidence the candidate considered the following in his/her determination the pulpal diagnosis was within approved parameters (within normal limits, reversible pulpitis, irreversible pulpitis, necrotic pulp).
- Candidates make a periapical diagnosis within approved parameters. Evidence the candidate considered the following in his/her determination the periapical diagnosis was within approved parameters (within normal limits, asymptomatic apical periodontitis, symptomatic apical periodontitis, acute apical abscess, chronic apical abscess).
- Evidence the candidate developed an endodontic treatment plan that included trauma treatment, management of emergencies and referrals when indicated.

b) Documentation the candidate performed pretreatment preparation for endodontic treatment. Documentation may include, but is not limited to the following:

- Evidence the candidate competently managed the patient's pain.
- Evidence the candidate removed caries and failed restorations.
- Evidence the candidate determined the tooth restorability.
- Evidence the candidate achieved isolation.

c) The candidate competently performed access opening. Documentation may include, but is not limited to the following:

- Evidence the candidate created the indicated outline form.
- Evidence the candidate created straight line access.
- Evidence the candidate maintained structural integrity.
- Evidence the candidate completed un-roofing of pulp chamber.
- Evidence the candidate identified all canal systems.

d) Documentation the candidate performed proper cleaning and shaping techniques. Documentation may include, but is not limited to the following:

- Evidence the candidate maintained canal integrity.
- Evidence the candidate preserved canal shape and flow.
- Evidence the candidate applied protocols for establishing working length.
- Evidence the candidate managed apical control.
- Evidence the candidate applied disinfection protocols.

e) Documentation the candidate performed proper obturation protocols. Documentation may include, but is not limited to evidence the candidate applied obturation protocols, including selection and fitting of master cone, determination of canal condition before obturation, and verification of sealer consistency and adequacy of coating.

f) Documentation the candidate demonstrated proper length control of obturation, including achievement of dense obturation of filling material, obturation achieved to a clinically appropriate coronal height.

g) Documentation the candidate competently completed the endodontic case including evidence that the candidate achieved coronal seal to prevent re-contamination and the candidate created diagnostic, radiographic and narrative documentation.

h) Documentation the candidate provided recommendations for post-endodontic treatment, including evidence that the candidate recommended final restoration alternatives and provided the patient with recommendations for outcome assessment and follow-up.

ENDODONTICS SCORING CRITERIA

FACTOR 1: PRETREATMENT CLINICAL TESTING AND RADIOGRAPHIC IMAGING

4	3	2	1	0
• Clinical tests and radiographic imaging completed and recorded accurately • Radiographic images are of diagnostic quality	• Clinical tests and radiographic imaging completed and recorded accurately with minor discrepancies	• Some clinical tests and radiographic images are lacking <u>but</u> diagnosis can be determined	• Some clinical tests and radiographic images are lacking <u>and</u> diagnosis is questionable	Critical errors <u>include</u>: • Clinical tests and radiographic images are lacking and diagnosis CANNOT be determined • Radiographic images are missing or are NOT of diagnostic quality

FACTOR 2: ENDODONTIC DIAGNOSIS

4	3	2	1	0
• Establishes correct pulpal and periapical diagnosis with accurate interpretation of clinical tests and radiographic images	• Establishes correct pulpal and periapical diagnosis with accurate interpretation, <u>but</u> missing <u>one</u> clinical test and/or radiographic image	• Establishes correct pulpal and periapical diagnosis with adequate interpretation, <u>but</u> missing <u>multiple</u> clinical tests and radiographic images that do NOT impact diagnosis	• Establishes inaccurate pulpal or periapical diagnosis, <u>and</u> missing <u>multiple</u> clinical tests and radiographic images that impact diagnosis	Critical errors <u>include</u>: • Demonstrates lack of understanding of endodontic diagnosis • No clinical tests were done

FACTOR 3: ENDODONTIC TREATMENT PLAN

4	3	2	1	0
• Prognosis of treatment outcomes determined • Comprehensive evaluation of medical and dental history • Selects appropriate treatments based on clinical evidence • Understands complexities of the case such that all treatment risks identified • Informed consent obtained including alternative treatments	• Prognosis of treatment outcomes determined and adequate evaluation of medical and dental history • Selects appropriate treatment(s) • Significant treatment risks identified • Informed consent obtained	• Prognosis of treatment outcomes determined and minimal evaluation of one of the following: > Medical or dental history > Appropriate treatment(s) selected, > Most treatment risks identified, >Informed consent obtained	• Prognosis of treatment outcomes unclear • Inadequate evaluation of medical and dental history despite appropriate treatments selected • Key treatment risks NOT identified	Critical errors include: • Demonstrates lack of evaluation of relevant medical and dental history • Inappropriate treatment planning • No treatment risks identified • No informed consent obtained • Demonstrates inappropriate case selection • Prognosis of treatment outcomes NOT determined

FACTOR 4: ANESTHESIA AND PAIN CONTROL

4	3	2	1	0
• Thorough knowledge of technique and materials used • Monitors vital signs and patient response throughout anesthesia • Anesthesia administration effective	• Thorough knowledge of technique • Profound anesthesia achieved • Monitors patient response throughout anesthesia	• Can proceed with treatment without faculty assistance • Adequate anesthesia achieved	• Elements of anesthesia or pain control absent but patient care NOT compromised	Critical errors include: • Incorrect anesthetic technique • Inadequate pain control and patient care is compromised • Requires faculty assistance

FACTOR 5: CARIES REMOVAL, REMOVAL OF FAILING RESTORATIONS, EVALUATION OF RESTORABILITY, SITE ISOLATION

4	3	2	1	0
• Complete removal of visible caries • Removal of failing restoration • Establishes complete structural restorability • Achieves complete isolation with rubber dam	• No visible caries and failing restorations removed • Establishes significant aspects of structural restorability and achieves effective isolation with rubber dam	• No visible caries present • Establishes likely restorability and achieves adequate isolation with rubber dam	• Caries removal compromised that potentially impacts procedure • Compromised coronal seal	Critical errors include: • Gross visible caries • Failing restoration present • Nonrestorable excluding medical indications • Ineffective isolation

FACTOR 6: ACCESS OPENING

4	3	2	1	0
• Optimum outline and access form with no obstructions • All canals identified • Roof and pulp horns removed	• Slight underextension of outline form but walls smooth but all canals identified and roof and pulp horns removed	• Moderate under- or overextension of outline form, minor irregularities for wall smoothness but all canals identified and roof and pulp horns removed	• Crown integrity compromised by overextension but tooth remains restorable • All canals identified but minor roof and pulp horns remain	Critical errors include: • Tooth is NOT restorable after access procedure or perforation • Structural compromise • Canal(s) missed or unidentified

FACTOR 7: CANAL PREPARATION TECHNIQUE

4	3	2	1	0
• Optimum canal length determination and preparation within 0.5-1.0 mm of radiographic apex • Maintenance of original canal position and integrity	• Adequate canal length determination and preparation within 1.5 mm short of radiographic apex • Mild deviations of original canal shape	• Acceptable canal length determination and preparation within 2 mm short of working length • Moderate deviations of original canal shape	• Canal length and preparation shorter than original working length • Canal length > 2 mm short or 1 mm long of radiographic apex • Severe deviations of original canal shape but treatable • Separated instrument that does NOT prevent canal preparation	Critical errors <u>include</u>: • Working length determination > 2 mm short or long of radiographic apex • Sodium hypochlorite accident • Canal perforated or NOT treatable • Separated instrument preventing canal preparation

FACTOR 8: MASTER CONE FIT

4	3	2	1	0
• Optimum cone fit and length verified within 0.5-1.0 mm of radiographic apex • Maintenance of canal position and integrity as demonstrated in cone fit	• Adequate cone fit and length verified within 1.5 mm short of radiographic apex • Mild deviations of original canal shape	• Acceptable cone fit and length verified within 2 mm short radiographic apex • Moderate deviations of original canal shape • Achieves tugback before lateral obturation	• Cone length determination > 2 mm short or long from radiographic apex • Cone fit > 2 mm short or > 1 mm long of radiographic apex	Critical errors <u>include</u>: • Master cone too small or too large and/or cone fit >2 mm short or long of radiographic apex

FACTOR 9: OBTURATION TECHNIQUE

4	3	2	1	0
• Achieves dense fill within 0.5-1.0 mm short of radiographic apex • None or minor overextension of sealer • No solid core material overextended	• Achieves dense fill within the apical two-thirds and less than 1.5 mm short of radiographic apex • Less than 1 mm of sealer extruded	• Achieves dense fill in apical third without voids • Solid core material 1.5- 2.0 mm short or 1 mm long of radiographic apex • 1-2 mm of sealer extruded	• Apical third has slight to moderate voids • Solid core material 2-3 mm short or 1-2 mm long • More than 2 mm of sealer extruded	Critical errors <u>include</u>: • Solid core material greater than 3 mm short or greater than 2 mm long of radiographic apex and/or significant voids throughout fill

FACTOR 10: COMPLETION OF CASE

4	3	2	1	0
• Optimum coronal seal placed prior to permanent restoration • Optimum evidence of documentation; e.g., radiographs, clinical notes, assessment of outcomes • Evidence of comprehensive and inclusive post-operative instructions	• Effective coronal seal placed prior to permanent restoration • Thorough evidence of documentation; e.g., radiographs, clinical notes, assessment of outcomes <u>and</u> evidence of post-operative instructions	• Acceptable durable coronal seal placed • Acceptable documentation; e.g., radiographs, clinical notes, assessment of outcomes <u>and</u> evidence of post-operative instructions	• Acceptable coronal seal placed with limited longevity • Evidence of incomplete documentation • Evidence of incomplete post-operative instructions	Critical errors <u>include</u>: • Poor coronal seal • Prognosis likely impacted by iatrogenic treatment factors • Improper or no documentation • No evidence of post-operative instruction

SECTION 13 – PERIODONTICS

PURPOSE

The competency examination for periodontics is designed to assess the candidate's ability to demonstrate clinical skills in all aspects of a case from treatment planning to patient management.

MINIMUM CLINICAL EXPERIENCES

The documentation of periodontal clinical experiences shall include 25 cases.
A periodontal experience may include, but is not limited to:

- An adult prophylaxis,
- Treatment of periodontal disease such as scaling and root planning,
- Any periodontal surgical procedure, and,
- Assisting on a periodontal surgical procedure when performed by a faculty or an advanced dental education candidate in periodontics

The combined clinical periodontal experience must include a minimum of five (5) quadrants of scaling and root planing procedures.

OVERVIEW

- Nine (9) scoring factors.
- One (1) case to be scored in three parts:
  - Part A. Review medical and dental history, radiographic findings, comprehensive periodontal data collection, evaluate periodontal etiology/risk factors, comprehensive periodontal diagnosis, treatment plan
  - Part B. Calculus detection, effectiveness of calculus removal
  - Part C. Periodontal re-evaluation
- Ideally, all three parts are to be performed on the same patient.
- In the event that the patient does not return for periodontal re-evaluation, Part C may be performed on a different patient.

PATIENT PARAMETERS

a) Examination, diagnosis and treatment planning
   - Minimum twenty (20) natural teeth with at least 4 molars.

- At least one probing depth of 5 mm or greater must be present on at least four (4) of the teeth, excluding third molars, with at least two of these teeth with clinical attachment loss of 2 mm or greater.
- Full mouth assessment or examination.
- No previous periodontal treatment at this institution, and no nonsurgical or surgical treatment within past 6 months.

b) Calculus detection and periodontal instrumentation (scaling and root planing)

- Minimum of six (6) natural teeth in one quadrant, with at least two (2) adjacent posterior teeth in contact, one of which must be a molar.
- Third molars can be used but they must be fully erupted.
- At least one probing depth of 5 mm or greater must be present on at least two (2) of the teeth that require scaling and root planing.
- Minimum of six (6) surfaces of clinically demonstrable subgingival calculus must be present in one or two quadrants. Readily clinically demonstrable calculus is defined as easily explorer detectable, heavy ledges. At least four (4) surfaces of the subgingival calculus must be on posterior teeth. Each tooth is divided into four surfaces for qualifying calculus: mesial, distal, facial, and lingual.
  If additional teeth are needed to obtain the required calculus and pocket depths two quadrants may be used.

c) Re-evaluation

- Candidate must be able to demonstrate a thorough knowledge of the case.
- Candidate must perform at least two (2) quadrants of scaling and root planing on the patient being reevaluated.
- Candidate must perform at least two documented oral hygiene care (OHC) instructions with the patient being reevaluated 4-6 weeks after scaling and root planing is completed. The scaling and root planing should have been completed within an interval of 6 weeks or less.
- Minimum twenty (20) natural teeth with at least four (4) molars
- Baseline probing depth of at least 5 mm on at least four (4) of the teeth, excluding third molars.

SCORING

Scoring points for periodontics are defined as follows:

- A score of 0 is unacceptable; candidate exhibits a critical error
- A score of 1 is unacceptable; major deviations that are correctable
- A score of 2 is acceptable; minimum competence
- A score of 3 is adequate; less than optimal
- A score of 4 is optimal

ELEMENTS OF THE PERIODONTICS PORTFOLIO

a) Documentation the candidate performed a comprehensive periodontal examination. The comprehensive periodontal examination may include, but is not limited to the following:

(1) Evidence the candidate reviewed the patient's medical and dental history.
(2) Evidence the candidate evaluated the patient's radiographs.
(3) Evidence the candidate performed extra- and intra-oral examinations of the patient.
(4) Evidence the candidate performed comprehensive periodontal data collection.
- Evidence the candidate evaluated the patient's plaque index, probing depths, bleeding on probing, suppurations, cementoenamel junction to the gingival margin (CEJ-GM), clinical attachment level tooth mobility and furcations
- Evidence the candidate performed an occlusal assessment

b) Documentation the candidate diagnosed and developed a periodontal treatment plan that documents the following:

(1) The candidate determined the periodontal diagnosis.
(2) The candidate formulated an initial periodontal treatment plan that demonstrated the candidate:

- Determined to treat or refer the patient.
- Discussed with patient the etiology, periodontal disease, benefits of treatment, consequences of no treatment, specific risk factors, and patient-specific oral hygiene instructions.
- Determined non-surgical periodontal therapy.
- Determined need for re-evaluation.
- Determined recall interval.

c) Documentation the candidate performed nonsurgical periodontal therapy that he/she:

(1) Detected supra- and subgingival calculus
(2) Performed periodontal instrumentation:
- Removed calculus
- Removed plaque
- Removed stains

(3) Demonstrated that the candidate did not inflict excessive soft tissue trauma
(4) Demonstrated that the candidate provided the patient with anesthesia

d) Documentation the candidate performed periodontal re-evaluation

(1) Evidence the candidate evaluated effectiveness of oral hygiene
(2) Evidence the candidate assessed periodontal outcomes:
- Reviewed the medical and dental history
- Reviewed the patient's radiographs
- Performed comprehensive periodontal data collections (e. g. , evaluation of plaque index, probing depths, bleeding on probing, suppurations, cementoenamel junction to the gingival margin (CEJ-GM), clinical attachment level, furcations, and tooth mobility

(3) Evidence the candidate discussed with the patient his/her periodontal status as compared to the baseline, patient-specific oral hygiene instructions and modifications of specific risk factors
(4) Evidence the candidate determined further periodontal needs including need for referral to a periodontist and periodontal surgery.
(5) Evidence the candidate established a recall interval for periodontal treatment.

PERIODONTICS SCORING CRITERIA

FACTOR 1: REVIEW MEDICAL AND DENTAL HISTORY (Part A)

4	3	2	1	0
• Demonstrates complete knowledge and understanding of implications to dental care • Provides clear presentation of case	• Demonstrates complete understanding of implications to dental care but presentation could be improved	• Recognizes significant findings • Misses some information but minimal impact on patient care	• Recognizes medical conditions but fails to place in context of dental care • Unaware of medications or required precautions for dental appointment • Lack of information compromises patient care	Critical errors include: • Lacks current information • Endangers patient • Does NOT include vital signs • Leaves questions regarding medical or dental history unanswered • Does NOT identify need for medical consult

FACTOR 2: RADIOGRAPHIC FINDINGS (Part A)

4	3	2	1	0
• Identifies and interprets all radiographic findings	• Identifies and interprets significant radiographic findings	• Interprets radiographic findings with minor deviations that do NOT substantially alter treatment	• Misses significant radiographic findings	Critical errors include: • Grossly misinterprets radiographic findings • Fails to identify non-diagnostic radiographs • Presents with outdated radiographs

FACTOR 3: COMPREHENSIVE PERIODONTAL DATA COLLECTION (Part A - applies to one quadrant selected by examiner)

4	3	2	1	0
• Provides accurate assessment of all parameters in quadrant	• Deviations of pocket depth up to 1 mm • Correctly identifies all furcations • Correctly identifies all tooth mobility • Correctly identifies gingival recession • Correctly identifies areas with no attached gingiva	• Not more than one deviation of 2 mm or more in pocket depth • Correctly identifies Class II or III furcations involvement • Incorrectly identifies tooth mobility by one step in no more than one tooth • Over/underestimates gingival recession by ≤ 1 mm on any surface • Recognizes concept of clinical attachment level and differentiate from probing pocket depth	• More than one deviation of 2 mm or more in pocket depth • Fails to correctly identify Class II or III furcations involvement • Fails to identify areas with no attached gingiva • Overestimates Class 0 and 1 furcations • Over/underestimates tooth mobility by two steps on any tooth • Fails to correctly identify Grade 2 or 3 mobility • Over/underestimates gingival recession by more than 2 mm on any surface • Performs incomplete periodontal examination • Fails to recognize concept of clinical attachment level and differentiate from probing pocket depth	Critical errors include: • Performs periodontal examination which has no diagnostic value • Provides inaccurate assessment of key parameters

FACTOR 4: EVALUATE PERIODONTAL ETIOLOGY/RISK FACTORS (Part A)

4	3	2	1	0
• Identifies all systemic, local etiologic and risk factors	• Misses one risk factor	• Misses two risk factors but treatment is NOT substantially impacted	• Misses risk factors which compromise treatment planning and patient care	Critical errors include: • Fails to identify all risk factors

FACTOR 5: COMPREHENSIVE PERIODONTAL DIAGNOSIS (Part A)

4	3	2	1	0
• Provides accurate and complete diagnosis based on comprehensive clinical examination and findings • Demonstrates comprehensive understanding of periodontal diagnosis	• Provides accurate and complete diagnosis based on clinical examination and findings pertinent to the case	• Differentiates between periodontal health, gingivitis and periodontitis • Makes acceptable diagnosis with minimal deviations from ideal but treatment NOT impacted	• Fails to diagnose periodontitis • Makes diagnosis with critical deviations from optimal • Provides a diagnosis which lacks rationale	Critical errors include: • Fails to make a diagnosis • Provides diagnosis which is grossly incorrect

FACTOR 6: TREATMENT PLAN (Part A)

4	3	2	1	0
• Provides comprehensive and clinically appropriate treatment plan including clear description of etiology, benefits of treatment, alternatives, and risk factors	• Provides comprehensive and clinically appropriate treatment plan including clinically appropriate alternative treatment plan (if any) • Provides adequate description of risks and benefits of treatment and alternatives	• Provides clinically appropriate treatment plan but fails to address some factors that are unlikely to affect outcome • Does NOT provide clear description of risks and benefits of treatment and alternatives	• Provides treatment plan which fails to address relevant factors which are likely to affect outcome • Provides incomplete periodontal treatment plan that is below the standard of care and adversely affects outcome	Critical errors include: • Provides clinically inappropriate treatment plan which could harm the patient

FACTOR 7: CALCULUS DETECTION (Part B)

4	3	2	1	0
• Demonstrates complete detection of all subgingival calculus present in quadrant(s)	• Incorrectly identifies absence or presence of one area of clinically demonstrable subgingival calculus	• Incorrectly identifies absence or presence two areas of clinically demonstrable subgingival calculus	• Misses three areas of clinically demonstrable subgingival calculus	Critical errors include: • Misses or incorrectly identifies four or more areas of clinically demonstrable subgingival calculus

FACTOR 8: EFFECTIVENESS OF CALCULUS REMOVAL (Part B)

4	3	2	1	0
• Demonstrates complete removal of all calculus plaque and stains from tooth surfaces • Does NOT cause any tissue trauma • Does NOT cause any patient discomfort	• Demonstrates complete removal of all other deposits except for stains in pits and fissures • Minimizes patient discomfort	• Misses <u>one</u> area of clinically demonstrable subgingival calculus • Demonstrates removal of all other deposits <u>but</u> some remaining minor stains on accessible surfaces • Provides sufficient pain management for treatment	• Misses <u>two</u> areas of clinically demonstrable subgingival calculus • Causes major tissue trauma • Leaves moderate plaque and supragingival calculus • Inadequate pain management	Critical errors <u>include</u>: • Misses three areas of clinically demonstrable subgingival calculus • Leaves heavy stain, plaque, supragingival calculus • No pain management

FACTOR 9: PERIODONTAL RE-EVALUATION (Part C)

4	3	2	1	0
• Identifies all clinical changes of periodontal condition and describes the biological basis of changes • Evaluates patient's oral hygiene, provides patient-specific oral hygiene instruction, and educates patient on the significance of plaque removal and periodontal disease treatment • Evaluates and determines all of the patient's specific periodontal needs with detailed rationale for further periodontal procedures	• Identifies all clinical changes of periodontal condition • Evaluates and determines specific needs for periodontal care with rationale for further periodontal procedures • Accurately assesses all of patient's oral hygiene problems • Provides oral hygiene instructions that addresses all of patient's needs • Evaluates and determines all of the patient's specific periodontal needs without detailed rationale	• Identifies most clinical changes of periodontal condition but fails to identify minor changes • Accurately assesses most of patient's oral hygiene problems • Provides oral hygiene instructions that only address most of the patient's needs • Evaluates and determines general needs for periodontal care including recall intervals and referral, if indicated	• Fails to identify persistent signs and symptoms of periodontal disease • Fails to present an oral hygiene plan • Makes recommendation for further periodontal treatment that is inappropriate and demonstrates lack of understanding of patient's periodontal needs	Critical errors include: • Fails to recognize any clinical change in periodontal condition • Did NOT assess patient's oral hygiene care or needs • Has NOT evaluated and/or determined patient's periodontal needs • Fails to recognize need for referral

SECTION 14 – EXAMINER TRAINING AND CALIBRATION

In order to meet the standard required for psychometrically sound examinations, training and calibration procedures must be linked back to the competencies defined by a job analysis and to the evaluation system. All the schools must calibrate their faculty to the same rating criteria. Again, faculty from six Board approved dental schools must be involved in the process to ensure those faculty apply the same standards to candidates' performance. It is very important for the Board to be aware of threats to the validity of the examination that arise from improper training and calibration. If the examiners are improperly trained and calibrated, the examiners would compromise the Portfolio Examination's ability to produce results that warrant valid conclusions about candidates' clinical competence.

APPLICABLE STANDARDS

Standard 5.1 "Test administrators should follow carefully the standardized procedures for administration and scoring as specified by the test developer, unless the situation or a test taker's disability dictates an exception should be made." (p. 63)

Standard 5.8 "Test scoring services should document the procedures that were followed to assure accuracy of scoring. The frequency of scoring errors should be monitored and reported to users of the service on reasonable request. Any systematic source of scoring errors should be corrected." (p. 64)

Standard 5.9 "When test scoring involves human judgment, scoring rubrics should specify criteria for scoring. Adherence to established scoring criteria should be monitored and checked regularly. Monitoring procedures should be documented." (p. 65)

EXAMINER SELECTION CRITERIA

The Board has outlined a process for selection of dental school faculty who wish to serve as a portfolio examiner. Each portfolio examiner is required to undergo calibration training in the Board's standardized evaluation system through didactic and experiential methods:

a) At the beginning of each school year, each school submits the names, credentials and qualifications of the dental school faculty to be appointed by the Board as Portfolio examiners. Documentation of qualifications must include but

is not limited to, evidence the dental school faculty examiner satisfies the dental school criteria and standards established by his/her school to conduct Portfolio competency examinations. The school faculty examiner must have documented experience in conducting examinations in an objective manner.

b) In addition to the names, credentials and qualifications, the Board approved school must submit documentation the appointed dental school faculty examiners have been trained and calibrated in compliance with the Board's requirements. Changes to the list of school faculty examiners must be reported to the Board. The school must provide the Board an annual updated list of their faculty examiners.

c) The Board reserves the right to approve or disapprove dental school faculty who wish to serve as Portfolio examiners.

STANDARDIZED TRAINING PROCESS

Examiners are required to attend standardized, Board approved training "calibration" sessions offered at their schools. Each training course will be presented by designated Portfolio examiners at their respective schools and require the prospective examiners to participate in both didactic and hands-on activities.

Didactic training component. During didactic training, designated Portfolio examiners will present an overview of the examination and its evaluation (grading) system through lecture, review of examiner training manual, slide presentations (Powerpoint), sample documentation, sample cases, etc., prior to participating in the actual rating of candidates.

Hands-on component. Training activities have multiple examples of performance that clearly relate to the specific judgments that examiners are expected to provide during the competency examinations. Hands-on training sessions includes an overview of the rating process, clear examples of rating errors, examples of how to mark the grading forms, a series of several sample cases for examiners to hone their skills, and numerous opportunities for training staff to provide feedback to individual examiners.

Monitoring calibration of examiners. Calibration of examiners will be conducted regularly to maintain common standards as an ongoing process. Examiners are provided feedback about their performance and how their scoring varies from their fellow examiners. Examiners whose error rate exceeds a prespecified percentage error will be re-calibrated. If any examiner is unable to be re-calibrated, the Board would dismiss the examiner from the Portfolio Examination process.

TYPES OF RATING ERRORS

Rating errors are systematic biases which may affect the examiner's ability to provide a fair and objective evaluation of candidates. Several common rating errors can interfere with the rating process by diminishing the accuracy, effectiveness and fairness of the ratings (Cascio, 1992).

Rating errors can be avoided by systematically applying the established grading criteria that clearly define acceptable and unacceptable performance. Basically, examiners should use their professional judgment in applying the grading criteria for each grading factor and rate the candidates' performance accordingly.

1. FIRST IMPRESSIONS. First impressions can have a lasting and troublesome effect on the evaluation process. During the first few minutes of the examination, the examiner may form a favorable or unfavorable impression of the candidate. The end result is that the examiner may distort or ignore various aspects of candidates' performance.

2. HALO/HORN EFFECT. Halo or horn effect is a broader example of the type of influence which occurs during first impressions. Halo refers to positive overgeneralization based on a positive aspect of performance. Horn refers negative overgeneralization based on a negative aspect of performance. Thus, if the candidate exhibits good or poor performance for one grading factor, the ratings for all factors are distorted.

3. STEREOTYPING. Stereotyping refers to unfair bias towards a candidate without being aware of the bias. There is a tendency to generalize, favorably or unfavorably, across groups and ignore individual differences. Examiners should be aware of individual differences of candidates rather than generalizations about a group of people.

4. SIMILARITY EFFECTS. Similarity effects are the tendency of examiners to rate candidates more favorably if because the candidates perform tasks in the same style or use the same process as they do.

5. CONTRAST EFFECTS. Contrast effects are the result of evaluating the candidate relative to other candidates rather than applying the established grading criteria.

6. CENTRAL TENDENCY. Central tendency is the inclination to "play it safe" and rate candidates in the middle even when candidate performance merits higher or lower ratings.

7. NEGATIVE AND POSITIVE LENIENCY. Leniency (level) error is the tendency of an examiner to rate candidates lower or higher on a consistent basis rather than base ratings on the candidate's performance.

8. FRAME OF REFERENCE. Frame of reference error occurs when examiners compare candidate performance to their personal standards of care.

9. RECENCY EFFECT. Recent information is better remembered and receives greater weight in forming a judgment that earlier presented information.

CROSS TRAINING OF EXAMINERS

Training sessions will be conducted on an ongoing basis in both northern and southern California, with the expectation that examiners participating in the Portfolio Examination process will have ample opportunities to participate in competency examinations conducted at a school other than their own. It may not be necessary to have examiners from other schools rate each and every candidate; however, periodic participation of examiners from outside schools can strengthen the credibility of the process and ensure objectivity of ratings.

SECTION 15 – AUDIT PROCESS

This Audit Process is designed to serve multiple purposes. First it will provide information for auditors who will conduct site visits on behalf of the Dental Board of California (Board). The purpose of the site visits is to determine if the participating dental schools are following the procedures established for the evaluation and calibration system set forth by the Board for the Portfolio Examination. Second, it will provide information on which participating dental schools can conduct a self-assessment of its adherence to the Board's examination procedures. Third, it will provide a protocol for collecting documentation that will serve as validity evidence for the examination.

During an audit, in-depth information is obtained about the administrative and psychometric aspects of the Portfolio Examination, much like the accreditation process. An audit team comprised of faculty from the dental schools and persons designated by the Board would verify compliance with accepted professional testing standards, e.g., Standards for Educational and Psychological Testing, as well as verifying that the portfolios have been implemented according to the goals of the portfolio process.

APPLICABLE STANDARDS

Standard 3.15 "When using a standardized testing format to collect structured behavior samples, the domain, test design, test specifications and materials should be documented as for any other test. Such documentation should include a clear definition of the behavior expected of the test takers, the nature of expected responses, and any materials or directions that are necessary to carry out the testing." (p. 46)

ROLE OF THE BOARD

The Board has several responsibilities with regard to the audit of the examination:

- Oversight of audit process.
- Establishment of grading standards necessary for public protection.
- Developing audit protocols and criteria for assessing schools' compliance with the evaluation system and calibration process.
- Hands-on training for auditors in the evaluation system.

- Selecting auditors who can maintain the independence between themselves and the Portfolio Examination process.

ROLE OF AUDIT TEAM

The audit team is responsible for verification of the examination process and examination results, and, collection and evaluation of specific written documentation which respond to a set of standardized audit questions and summarizing the findings in a written report. A site visit can be conducted to verify portfolio documentation and clear up unresolved questions.

The audit team would be comprised of persons who can remain objective and neutral to the interests of the school being audited. The audit team should be knowledgeable of subject matter, psychometric standards, psychometrics and credentialing testing.

The audit team should be prepared to evaluate the information provided in a written report to the Board that documents the strengths and weaknesses of each school's administrative process.

DOCUMENTATION FOR VALIDITY EVIDENCE

Each candidate will have a portfolio of completed, signed rating (grade) sheets which provide evidence that clinical competency examinations in the six areas of practice have been successfully completed.

In addition to the signed rating (grade) sheets, there is content-specific documentation that must be provided. A list of acceptable documentation is presented on the following page.

It is anticipated that audit team will be presented with a representative sample of documentation from the candidate competency examinations.

Table 9 – Content-specific documentation

ORAL DIAGNOSIS AND TREATMENT PLANNING	• Full workup of case
DIRECT RESTORATION	• Restorative diagnosis and treatment plan • Preoperative radiographs, e.g., original lesion in Class II, III, IV • Postoperative radiographs including final fill
INDIRECT RESTORATION	• Restorative diagnosis and treatment plan • Preoperative radiographs • Postoperative radiographs including successfully cemented crown or onlay
REMOVABLE PROSTHODONTICS	• Removable prosthodontic diagnosis and treatment plan • Preoperative radiographs illustrating treatment condition • Preoperative and postoperative intraoral photographs of finished appliance
PERIODONTICS	• Periodontal diagnosis and treatment plan • Charted pocket readings • Preoperative radiographs including subgingival calculus • Postoperative radiographs • Follow-up report
ENDODONTICS	• Endodontic diagnosis and treatment plan • Preoperative radiographs of treatment site • Postoperative radiographs of treatment site

SCHEDULE FOR AUDITS

For the first two years, the Board will send audit teams to each of the participating dental schools and conduct an audit of Portfolio competency examinations or until the Board is satisfied that the schools are in compliance with the standardized processes of the Portfolio Examination.

In subsequent years, the Board will conduct audits of the Portfolio competency examinations every two years (biennially).

AUDIT CHECKLIST

RESOURCES	• Who is responsible for training Board approved Portfolio examiners? • Who is responsible for training dental school staff to assign final scaled scores and prepare final score reports and other required documentation to the Board? • What quality control procedures are in place to ensure that the final scaled scores and score reports are accurate?
NAMES AND QUALIFICATIONS OF EXAMINERS	• What is the process for identifying faculty to serve as Portfolio examiners? • What are the qualifications of Board approved Portfolio examiners?
TRAINING AND CALIBRATION OF EXAMINERS	• What procedures are used to train Portfolio examiners? • Are scoring benchmarks clearly established during training? • What procedures are used to maintain calibration of Portfolio examiners? • How are disagreements between examiners handled?
TEST SECURITY	• What procedures are in place to permit auditors to view patient information for the purposes of the audit? • What procedures are in place to maintain the security of the Portfolio examination materials before, during and after each competency examination? • What procedures are in place to maintain security of final scoring procedures and final scores?
QUALITY OF DOCUMENTATION	• Is the quality of the documentation consistent with accepted standards of care for each type of competency examination? • Are comments routinely available on the grading worksheets to justify an examiner's ratings?
PERFORMANCE STATISTICS	• What procedures are in place to produce reliability statistics for Portfolio examiners? • What procedures are in place to maintain pass/fail statistics?
INCIDENT REPORTS	• What procedures are in place to handle incidents that may arise during the implementation of competency examinations of the Portfolio Examination?
UNSUCCESSFUL CANDIDATES	• What procedures are in place for candidates who fail a competency examination and who wish to pursue the Portfolio Examination pathway to initial licensure?

AUDIT SITE VISIT REPORT

Following each audit site visit, the Board's audit team will prepare a formal report of its findings. The report is confidential and will be shared only with the

participating school whose Portfolio competency examinations were the focus of the report.

The intent of the audit site visit report is to determine if the participating schools are following the standardized procedures of the Portfolio Examination and provide feedback with regard to implementation of the competency examinations.

The audit site visit report may be structured to include:

- Audit objectives and scope
- Period of time included in the audit
- Audit methods
- Auditors' findings
- Auditor recommendations

SECTION 16 - REFERENCES

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APPENDIX A - CONSULTANT BACKGROUND

ROBERTA N. CHINN, PH.D
PSYCHOMETRICIAN

Dr. Roberta Chinn is a psychometrician at PSI. She has more than 23 years of experience in the measurement field. She received her Bachelor of Science degree from the University of California at Davis in psychology, her Master of Arts degree from the University of the Pacific in experimental psychology, and her Ph.D. in experimental and cognitive psychology from Louisiana State University.

Prior to joining PSI in 2011, Dr. Chinn was the Assistant Director of Psychometric Services at Comira, a general partner at HZ Assessments, a private psychometric consulting firm that she co-founded in 2001, and a senior measurement consultant at the Office of Examination Resources at the California Department of Consumer Affairs for nearly 12 years. During her tenure at Consumer Affairs, she handled sensitive aspects of examination programs for more than 30 boards and was instrumental in the development of standardized practical examinations, applied law and ethics examinations, and standardized oral examinations.

She has developed licensing and certification examinations in Arizona, California, Colorado, District of Columbia, Oregon, and Washington as well as for national credentialing organizations (e.g., Commission on Dietetic Registration of the Academy of Nutrition and Dietetics, Appraisal Qualifications Board, National Council of Architect Registration Boards). She has extensive experience in government settings and has conducted validation studies, developed licensing and certification examinations, and/or established cut scores for over 60 professions including commercial and residential appraisers, court reporters, predoctoral and postdoctoral dentists, dental auxiliaries, specialist dietitians, structural engineers, engineering geologists, environmental site assessors, fiduciaries, hydrogeologists, pest control personnel, clinical psychologists, ship pilots, pharmacists, clinical psychologists, speech-language pathologists and veterinarians. She specializes in the development of multiple-choice, performance and oral examinations and has developed innovative methods to streamline procedures for job (practice) analyses and examination development. Her research on alternative item types for competency assessment was recently published in Evaluation in the Health Professions and research on practice analysis was recently published in the Journal of Enteral and Parental Nutrition.

She has chaired and presented at the annual meetings of the Council on Licensure, Enforcement and Regulation and the National Council on Measurement in Education and has also co-authored several technical papers and journal articles. She is a member of the American Psychological Association, the American Educational Research Association, the National Council on Measurement in Education, and the Council on Licensure, Enforcement and Regulation.

NORMAN R. HERTZ, PH.D.
APPLIED PSYCHOLOGIST

Dr. Hertz is an Applied Psychologist at Progeny Systems Corporation. He is a licensed psychologist with over 30 years of experience in the measurement field. He received his Bachelor of Arts degree from Baylor University in psychology, his Master of Science degree in psychology and his Ph.D. in industrial-organizational psychology from the University of Memphis.

Prior joining Progeny in 2011, he was the Director of Psychometric Services at Comira, the managing partner of HZ Assessments, a private psychometric consulting firm that he co-founded after his retirement from the California Department of Consumer Affairs in 2001, and the Chief of the Office of Examination Resources at the California Department of Consumer Affairs. He has provided psychometric expertise to national and international organizations and has developed licensing and certification examinations for several western states including Arizona, California, Colorado, District of Columbia, Oregon and Washington. He has extensive experience in private industry and government settings and has conducted validation studies, developed licensing and certification examinations, and established cut scores for more than 60 professions, ranging from the construction trades to medical specialties. He has provided litigation support for numerous examinations including legal document preparers, court reporters, and ship pilots. His service on the psychometric oversight committee for the American Institute of Certified Public Accountants was incorporated into the examination development and scoring processes used in the present day.

During his 15-year tenure at the California Department of Consumer Affairs, he handled the most sensitive aspects of examination programs for more than 30 boards including expert witness testimony for state legislative committees, state regulatory boards, and consultant-auditor for national organizations such as the National Council of State Boards of Nursing, National Council of Architect Registration American Institute of Certified Public Accountants, Boards, National Association of Boards of Pharmacy, National Board of Examiners in Optometry.

He has chaired and presented at the annual meetings of the Council on Licensure, Enforcement and Regulation and the National Council on Measurement in Education and has also co-authored several technical papers and journal articles. He is a member of the American Psychological Association, the Society for Industrial Organizational Psychology, the American Educational Research Association, the National Council on Measurement in Education, and the Council on Licensure, Enforcement and Regulation.

Title 16. Dental Board of California
Department of Consumer Affairs

California Code of Regulations - Portfolio Examination Pathway

§ 1028. Application for Licensure.
(a) An applicant for licensure as a dentist shall submit an “Application for Licensure to Practice Dentistry” (WREB) Form 33A-22W (Revised 11/06), which is hereby incorporated by reference, or “Application for Determination of Licensure Eligibility (Portfolio)” Form 33A-22P (New 11/2014), which are hereby incorporated by reference,

(b) Applications for licensure shall be accompanied by the following information and fees:

(1) The application and examination(s) fees as set by Section 1021;

(2) Satisfactory evidence that the applicant has met all applicable requirements in Sections 1628 and 1632 of the Code;

(3) The applicant shall furnish two classifiable sets of fingerprints or submit a Live Scan inquiry to establish the identity of the applicant and to permit the Board to conduct a criminal history record check. The applicant shall pay any costs for furnishing the fingerprints and conducting the criminal history record check;

(4) Where applicable, a record of any previous dental practice and certification of license status in each state or jurisdiction in which licensure as a dentist has been attained;

(5) Applicant's name, social security number, address of residency, mailing address if different from address of residency, date of birth, telephone number, and gender of applicant;

(6) Information as to whether the applicant has ever taken the California Law and Ethics written examination;

(7) Any request for accommodation pursuant to the Americans with Disabilities Act;

(8) A 2-inch by 2-inch passport style photograph of the applicant, submitted with the “Application for Licensure to Practice Dentistry (WREB)” Form 33A-22W (Revised 11/06), or “Application for Determination of Licensure Eligibility (Portfolio)” Form 33A-22P (New 11/2014);

(9) Information regarding applicant's education including dental education and postgraduate study, if applicable;

(10) Certification from the dean of the qualifying dental school attended by the applicant to certify the date the applicant graduated;

(11) Information regarding whether the applicant has any pending or had in the past any charges filed against a dental license or other healing arts license;

(12) Information regarding any prior disciplinary action(s) taken against the applicant regarding any dental license or other healing arts license held by the applicant including actions by the United States Military, United States Public Health Service or other federal government entity. “Disciplinary action” includes, but is not limited to, suspension, revocation, probation, confidential discipline, consent order, letter of reprimand or warning, or any other restriction or action taken against a dental license. If an applicant answers “yes”, he or she shall provide the date of the effective date of disciplinary action, the state where the discipline occurred, the date(s), charges convicted of, disposition and any other information requested by the board;

(13) Information as to whether the applicant is currently the subject of any pending investigation by any governmental entity. If the applicant answers “yes,” he or she shall provide any additional information requested by the board;

(14) Information regarding any instances in which the applicant was denied a dental license, denied permission to practice dentistry, or denied permission to take a dental board examination. If the applicant answers “yes”, he or she shall provide the state or country where the denial took place, the date of the denial, the reason for denial, and any other information requested by the board;

(15) Information as to whether the applicant has ever surrendered a license to practice dentistry in another state or country. If the applicant answers “yes,” additional information shall be provided including state or country of surrender, date of surrender, reason for surrender, and any other information requested by the board;

(16) Information as to whether the applicant has ever been convicted of any violation of the law in this or any other state, the United States, or other country, omitting traffic infractions under $1,000 not involving alcohol, dangerous drugs, or controlled substances. For the purposes of this section, “conviction” means a plea or verdict of guilty or a conviction following a plea of nolo contendere or “no contest” and any conviction that has been set aside or deferred pursuant to Sections 1000 or 1203.4 of the Penal Code, including infractions, misdemeanors, and felonies;

(17) Information as to whether the applicant is in default on a United States Department of Health and Human Services education loan pursuant to Section 685 of the Code; and

(18) A certification, under the penalty of perjury, by the applicant that the information on the application is true and correct.

(c) In addition to complying with the applicable provisions contained in subsections (a) through (b) above, an applicant submitting an “Application for Licensure to Practice Dentistry” (WREB) Form 33A-22W (Revised 11/06), for licensure as a dentist upon passage of Western Regional Examining Board (“WREB”) examination shall also furnish evidence of having successfully passed, on or after January 1, 2005, the WREB examination.

(d) In addition to complying with the applicable provisions contained in subsections (a) through (b) above, an applicant submitting an “Application for Determination of Licensure Eligibility (Portfolio)” Form 33A-22P (New 11/2014) shall also furnish certification from the dean of the qualifying dental school attended by the applicant to certify the applicant has graduated with no pending ethical issues;

(e) An “Application for Determination of Licensure Eligibility (Portfolio)” Form 33A-22P (New 11/2014) may be submitted prior to graduation, if the application is accompanied by a certification from the school that the applicant is expected to graduate. The Board shall not issue a license, until receipt of a certification from the dean of the school attended by the applicant, certifying the date the applicant graduated with no pending ethical issues on school letterhead.

(1) The earliest date upon which a candidate may submit their portfolio for review by the board shall be within 90 days of graduation. The latest date upon which a candidate may submit their portfolio for review by the board shall be no more than 90 days after graduation.

(2) The candidate shall arrange with the dean of his or her dental school for the school to submit the completed portfolio materials to the Board.

(3) The Board shall review the submitted portfolio materials to determine if it is complete and the candidate has met the requirements for Licensure by Portfolio Examination.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1628, 1628.5 and 1632, Business and Professions Code.

§ 1028.2. Application for Determination of Licensure Eligibility Pursuant to Section 1634.1.

(a) An applicant for licensure as a dentist pursuant to Section 1634.1 of the Code shall submit an “Application for Determination of Licensure Eligibility (Residency)” (Rev. 07/08) that is incorporated herein by reference and shall be accompanied by certification of graduation by the dean of the qualifying dental school attended by the applicant, a letter from WREB certifying that the applicant has not failed the WREB clinical exam within the last five years and the applicable fees as set by Section 1021.

(b) Following review, the board shall notify the applicant of the eligibility determination. Upon a finding that the applicant is eligible, the applicant shall file an Application for

Issuance of License Number and Registration of Place of Practice, as set forth in Section 1028.4.

Note: Authority cited: Sections 1614 and 1634.2(c), Business and Professions Code. Reference: Section 1634.1, Business and Professions Code.

§ 1028.3. Certification of Clinical Residency Program Completion Pursuant to Section 1634.2(c).
An applicant for licensure as a dentist pursuant to Section 1634.1 of the Code shall submit to the board a “Certification of Clinical Residency Completion” (Rev. 07/08) that is incorporated herein by reference, and shall be signed by the current director of the residency program.

Note: Authority cited: Sections 1614 and 1634.2(c), Business and Professions Code. Reference: Sections 1634.1 and 1634.2, Business and Professions Code.

§ 1028.4. Application for Issuance of License Number and Registration of Place of Practice Pursuant to Section 1650.
Upon being found eligible for licensure, the applicant shall file an “Application for Issuance of License Number and Registration of Place of Practice,” (Rev. 11-07) that is incorporated herein by reference, and shall be accompanied by the licensure fee as set by Section 1021.

Note: Authority cited: Sections 1614 and 1634.2(c), Business and Professions Code. Reference: Section 1650, Business and Professions Code.

§ 1028.5. Application for California Law and Ethics Examination Pursuant to Section 1632(b).
Application for the California law and ethics examination shall be made on an “Application for Law and Ethics Examination” (Rev. 12/07) that is incorporated herein by reference.

Note: Authority cited: Sections 1614 and 1634.2(c), Business and Professions Code. Reference: Section 1632, Business and Professions Code.

§ 1029. Approval of Applications.
Permission to take an examination shall be granted to those applicants who have paid the necessary fees and whose credentials have been approved by the executive officer. Nothing contained herein shall be construed to limit the board's authority to seek from an applicant such other information as may be deemed necessary to evaluate the applicant's qualifications.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Section 1628 and 1628.5, Business and Professions Code.

§ 1030. Theory Examination.
An applicant shall successfully complete the National Board Dental Examinations of the Joint Commission on National Dental Examinations and shall submit confirmation thereof to the board prior to submission of the “Application for Issuance of License Number and Registration of Place of Practice,” (Rev. 11-07).

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632 and 1634.1, Business and Professions Code.

§ 1031. Supplemental Examinations in California Law and Ethics.
Prior to issuance of a license, an applicant shall successfully complete supplemental written examinations in California law and ethics.

(a) The examination on California law shall test the applicant's knowledge of California law as it relates to the practice of dentistry.

(b) The examination on ethics shall test the applicant's ability to recognize and apply ethical principles as they relate to the practice of dentistry.

(c) A candidate shall be deemed to have passed the examinations if his/her score is at least 75% in each examination.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632 and 1634.1, Business and Professions Code.

§ 1032. Portfolio Examination: Eligibility.
The portfolio examination shall be conducted while the candidate is enrolled in a Board-approved dental school located in California. A student may elect to begin the portfolio examination process during the clinical training phase of their dental education.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630 and 1632, Business and Professions Code.

§ 1032.1. Portfolio Examination: Definitions.
As used in this Article, the following definitions shall apply:

(a) “Candidate” means a dental student who is taking the examination for the purpose of applying to the Board for licensure.

(b) “Case” means a dental procedure which satisfies the required clinical experiences.

(c) “Clinical experiences” means procedures, performed with or without faculty intervention, that the candidate must complete to the satisfaction of his or her clinical faculty prior to submission of his or her portfolio examination application. Clinical experiences have been determined as a minimum number in order to provide a candidate with sufficient understanding, knowledge, and skill level to reliably demonstrate competency.

(d) “Competency examination” means a candidate's final assessment in a portfolio examination competency, performed without faculty intervention and graded by competency examiners registered with the Board.

(e) “Critical error” means a gross error that is irreversible or may impact the patient's safety and wellbeing.

(f) “Patient management” means the interaction between patient and candidate from initiation to completion of treatment, including any post-treatment complications that may occur.

(g) “Portfolio” means the cumulative documentation of clinical experiences and competency examinations submitted to the Board.

(h) “Portfolio competency examiner” means the dental school faculty examiner. The portfolio competency examiner shall be a faculty member chosen by the school, registered with the Board, and shall be trained and calibrated to conduct and grade the portfolio competency examinations.

(i) “School” means a Board-approved dental school located in California.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Section 1632, Business and Professions Code.

§ 1032.2. Portfolio Examination: Requirements for Demonstration of Clinical Experience.

(a) Each candidate shall complete at least the minimum number of clinical experiences in each of the competencies prior to submission of their portfolio to the Board. All clinical experiences shall be performed on patients under the supervision of school faculty and shall be included in the portfolio submitted to the Board. Clinical experience shall be performed at the dental school clinic, an extramural dental facility or a mobile dental clinic approved by the Board. The portfolio shall contain documentation that the candidate has completed the minimum number of clinical experiences as follows:

(1) Oral diagnosis and treatment planning (ODTP) clinical experiences shall include a minimum of twenty (20) patient cases. Clinical experiences for ODTP include: comprehensive oral evaluations, limited (problem-focused) oral evaluations, and periodic oral evaluation.

(2) Direct restorative clinical experiences shall include a minimum of sixty (60) restorations. The restorations completed in the clinical experiences may include any restoration on a permanent or primary tooth using standard restorative materials including: amalgams, composites, crown build-ups, direct pulp caps, and temporizations.

(3) Indirect restorative clinical experiences shall include a minimum of fourteen (14) restorations. The restorations completed in the clinical experiences may be a combination of the following procedures: inlays, onlays, crowns, abutments, pontics, veneers, cast posts, overdenture copings, or dental implant restorations.

(4) Removable prosthodontic clinical experiences shall include a minimum of five (5) prostheses. One of the five prostheses may be used as a portfolio competency examination provided that it is completed in an independent manner with no faculty intervention. A prosthesis shall include any of the following: full denture, partial denture (cast framework), partial denture (acrylic base with distal extension replacing a minimum number of three posterior teeth), immediate treatment denture, or overdenture retained by a natural tooth or dental implants.

(5) Endodontic clinical experiences on patients shall include five (5) canals or any combination of canals in three separate teeth.

(6) Periodontal clinical experiences shall include a minimum of twenty-five (25) cases. A periodontal experience shall include the following: An adult prophylaxis, treatment of periodontal disease such as scaling and root planing, any periodontal surgical procedure, and assisting on a periodontal surgical procedure when performed by a faculty or an advanced education candidate in periodontics. The combined clinical periodontal experience shall include a minimum of five (5) quadrants of scaling and root planning procedures.
(b) Completion of all required clinical experiences shall be certified by the director of the school's clinical education program on the “Portfolio Examination Certification of Clinical Experience Completion” Form 33A-23P (New 08/13), which is hereby incorporated by reference, and shall be included in the candidate's portfolio.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632, and 1632.1, Business and Professions Code.

§ 1032.3. Portfolio Examination: Oral Diagnosis and Treatment Planning (ODTP).
(a) The portfolio examination shall contain the following documentation of the minimum ODTP clinical experiences and documentation of ODTP portfolio competency examination:

(1) Evidence of successful completion of the ODTP clinical experiences shall be certified by the director of the school's clinical education program on the “Portfolio Examination Certification of Clinical Experience Completion” Form 33A-23P (New 08/13), which is hereby incorporated by reference, and shall be maintained in the candidate's portfolio.

(2) Documentation providing proof of satisfactory completion of a final assessment in the ODTP competency examination. For purpose of this section, satisfactory proof means the ODTP competency examination has been approved by the designated dental school faculty.

(b) Competency Examination Requirements: The candidate shall have the approval of his or her clinical faculty prior to beginning the competency examination. The ODTP competency examination shall include:

(1) Fifteen (15) scoring factors:

(A) Medical Issues That Impact Dental Care;

(B) Treatment Modifications Based on Medical Conditions;

(C) Patient Concerns/Chief Complaint;

(D) Dental History;

(E) Significant Radiographic Findings;

(F) Clinical Findings;

(G) Risk Level Assessment;

(H) Need for Additional Diagnostic Tests/Referrals;

(I) Findings From Mounted Diagnostic Casts;

(J) Comprehensive Problem List;

(K) Diagnosis and Interaction of Problems;

(L) Overall Treatment Approach;

(M) Phasing and Sequencing of Treatment;

(N) Comprehensiveness of Treatment Plan; and

(O) Treatment Record.

(2) Initiation and completion of one (1) multidisciplinary portfolio competency examination.

(3) The treatment plan shall involve at least three (3) of the following six disciplines: periodontics, endodontics, operative (direct and indirect restoration), fixed and removable prosthodontics, orthodontics, and oral surgery.

(4) Patient's Medical History: The medical history shall include: an evaluation of past illnesses and conditions, hospitalizations and operations, allergies, family history, social history, current illnesses and medications, and their effect on dental condition.

(5) Patient's Dental History: The dental history shall include: age of previous prostheses, existing restorations, prior history of orthodontic/periodontic treatment, and oral hygiene habits/adjuncts.

(6) Documentation of a comprehensive examination of patient's current oral health condition and vital signs. The documentation shall include:

(A) Interpretation of radiographic series;

(B) Performance of caries risk assessment;

(C) Determination of periodontal condition;

(D) Performance of a head and neck examination, including oral cancer screening;

(E) Screening for temporomandibular disorders;

(F) Assessment of vital signs;

(G) Performance of a clinical examination of dentition; and

(H) Performance of an occlusal examination.

(7) Documentation the candidate evaluated data to identify problems. The documentation shall include:

(A) Chief complaint;

(B) Medical problem;

(C) Stomatognathic problems; and

(D) Psychosocial problems.

(8) Documentation the candidate worked-up the problems and developed a tentative treatment plan. The documentation shall include:

(A) Problem definition, e.g., severity/chronicity and classification;

(B) Determination if additional diagnostic tests are needed;

(C) Development of a differential diagnosis;

(D) Recognition of need for referral(s);

(E) Pathophysiology of the problem;

(F) Short term needs;

(G) Long term needs;

(H) Determination interaction of problems;

(I) Development of treatment options;

(J) Determination of prognosis; and

(K) Patient information regarding informed consent.

(9) Documentation the candidate developed a final treatment plan. The documentation shall include:

(A) Rationale for treatment;

(B) Problems to be addressed, or any condition that puts the patient at risk in the long term; and

(C) Determination of sequencing with the following framework:

(i) Systemic: medical issues of concern, medications and their effects, effect of diseases on oral condition, precautions, treatment modifications;

(ii) Urgent: Acute pain/infection management, urgent esthetic issues, further exploration/additional information, oral medicine consultation, pathology;

(iii) Preparatory: Preventive interventions, orthodontic, periodontal (Phase I, II), endodontic treatment, caries control, other temporization;

(iv) Restorative: operative, fixed, removable prostheses, occlusal splints, implants;

(v) Elective: esthetic (veneers, etc.) any procedure that is not clinically necessary, replacement of sound restoration for esthetic purposes, bleaching; and

(vi) Maintenance: periodontic recall, radiographic interval, periodic oral examination, caries risk management.

(c) Acceptable Patient Criteria for ODTP Competency Examination. The patient used for the competency examination shall meet the following criteria:

(1) Maximum of ASA II, as defined by the American Society of Anesthesiologists (ASA) Physical Status Classification System;

(2) Missing or will be missing two or more teeth, not including third molars; and

(3) At least moderate periodontitis with probing depths of 5 mm or more.

(d) Competency Examination Scoring: The scoring system used for the ODTP competency examination is defined as follows:

(1) A score of 0 is unacceptable; candidate exhibits a critical error.

(2) A score of 1 is unacceptable; major deviations that are correctable

(3) A score of 2 is acceptable; minimum competence

(4) A score of 3 is adequate; less than optimal

(5) A score of 4 is optimal

A score rating of “2” shall be deemed the minimum competence level performance.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632 and 1632.1, Business and Professions Code.

§ 1032.4. Portfolio Examination: Direct Restoration.
(a) The portfolio examination shall contain the following documentation of the minimum direct restoration clinical experiences and documentation of the direct restoration portfolio competency examination:

(1) Evidence of successful completion of the direct restoration clinical experiences shall be certified by the director of the school's clinical education program on the “Portfolio Examination Certification of Clinical Experience Completion” Form 33A-23P (New 08/13), which is hereby incorporated by reference, and shall be maintained in the candidate's portfolio.

(2) Documentation providing proof of satisfactory completion of a final assessment in the direct restoration competency examination. For purpose of this section, satisfactory proof means the direct restoration competency examination has been approved by the designated dental school faculty.

(b) Competency Examination Requirements: The candidate shall have the approval of his or her clinical faculty prior to beginning the competency examination. The direct restoration portfolio shall include documentation of the candidate's clinical competency to perform a direct restoration on teeth containing primary carious lesions to optimal form, function and esthetics using amalgam or composite restorative materials. The case selection shall be based on minimum direct restoration criteria for any permanent anterior or posterior teeth. Each procedure may be considered a clinical experience. The direct restoration competency examination shall include:

(1) Seven (7) scoring factors:

(A) Case Presentation;

(B) Outline and Extensions;

(C) Internal Form;

(D) Operative Environment;

(E) Anatomical Form;

(F) Margins; and

(G) Finish and Function.

(2) Two (2) restorations: One (1) Class II amalgam or composite, maximum one slot preparation; and one (1) Class III/IV composite.

(3) Restoration can be performed on an interproximal lesion on one interproximal surface in an anterior tooth that does not connect with a second interproximal lesion which can be restored separately.
(4) A case presentation for which the proposed treatment is appropriate for patient's medical and dental history, is in appropriate treatment sequence, and treatment consent is obtained.

(5) Patient Management. The candidate shall be familiar with the patient's medical and dental history.

(6) Implementation of any treatment modifications needed that are consistent with the patient's medical history.

(c) Acceptable Criteria for Direct Restoration Examination: The tooth used for each of the competency examinations shall meet the following criteria:

(1) A Class II direct restoration shall be performed on any permanent posterior tooth.

(A) The treatment shall be performed in the sequence described in the treatment plan.

(B) More than one test procedure shall be performed on a single tooth; teeth with multiple lesions may be restored at separate appointments.

(C) Caries as shown on either of the two required radiographic images of an unrestored proximal surface shall extend to or beyond the dento-enamel junction.

(D) The tooth to be treated shall be in occlusion.

(E) The restoration shall have an adjacent tooth to be able to restore a proximal contact; proximal surface of the dentition adjacent to the proposed restoration shall be either natural tooth structure or a permanent restoration; provisional restorations or removable partial dentures are not acceptable adjacent surfaces.

(F) The tooth shall be asymptomatic with no pulpal or periapical pathology; cannot be endodontically treated or in need of endodontic treatment.

(G) Any tooth with bonded veneer is not acceptable.

(2) A Class III/IV direct restoration shall be performed on any permanent anterior tooth.

(A) The treatment shall be performed in the sequence described in the treatment plan.

(B) Caries as shown on the required radiographic image of an unrestored proximal surface shall extend to or beyond the dento-enamel junction.

(C) Carious lesions shall involve the interproximal contact area.

(D) The restoration shall have an adjacent tooth to be able to restore a proximal contact; proximal surface of the dentition adjacent to the proposed restoration shall be either natural tooth structure or a permanent restoration; provisional restorations or removable partial dentures are not acceptable adjacent surfaces.

(E) The tooth shall be asymptomatic with no pulpal or periapical pathology; cannot be endodontically treated or in need of endodontic treatment.

(F) The lesion shall not be acceptable if it is in contact with circumferential decalcification.

(G) Procedural approach shall be appropriate for the lesion on the tooth.

(H) Any tooth with bonded veneer is not acceptable.

(d) Competency Examination Scoring. The scoring system used for the direct restoration competency examination is defined as follows:

(1) A score of 0 is unacceptable; candidate exhibits a critical error.

(2) A score of 1 is unacceptable; multiple major deviations that are correctable.

(3) A score of 2 is unacceptable; one major deviation that is correctable.

(4) A score of 3 is acceptable; minimum competence.

(5) A score of 4 is adequate; less than optimal.

(6) A score of 5 is optimal.
A score rating of “3” shall be deemed the minimum competence level performance.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 16327 and 1632.1, Business and Professions Code.

§ 1032.5. Portfolio Examination: Indirect Restoration.
(a) The portfolio examination shall contain the following documentation of the minimum indirect restoration clinical experiences and documentation of the indirect restoration portfolio competency examination:

(1) Evidence of successful completion of the indirect restoration clinical experiences shall be certified by the director of the school's clinical education program on the “Portfolio Examination Certification of Clinical Experience Completion” Form 33A-23P (New 08/13), which is hereby incorporated by reference, and shall be maintained in the candidate's portfolio.

(2) Documentation providing proof of satisfactory completion of a final assessment in the indirect restoration competency examination. For purpose of this section, satisfactory proof means the indirect restoration competency examination has been approved by the designated dental school faculty.

(b) Competency Examination Requirements: The candidate shall have the approval of his or her clinical faculty prior to beginning the competency examination. The indirect restoration competency examination shall include documentation of the candidate's competency to complete a ceramic onlay or more extensive, a partial gold restoration onlay or more extensive, a metal-ceramic restoration, or full gold restoration. The indirect restoration competency examination shall include:

(1) Seven (7) scoring factors:

(A) Case Presentation;

(B) Preparation;

(C) Impression;

(D) Provisional;

(E) Candidate Evaluation of Laboratory Work;

(F) Pre-Cementation

(G) Cementation and Finish.

(2) One (1) indirect restoration which may be any of the following procedures.

(A) Ceramic restoration shall be onlay or more extensive;

(B) Partial gold restoration shall be onlay or more extensive;

(C) Metal ceramic restoration; or

(D) Full gold restoration.

(3) A case presentation for which the proposed treatment is appropriate for patient's medical and dental history, is in appropriate treatment sequence, and treatment consent is obtained.

(4) Patient Management. The candidate shall be familiar with the patient's medical and dental history.

(5) Implementation of any treatment modifications needed that are consistent with the patient's medical history.
(c) Acceptable Criteria for Indirect Restoration Examination: The tooth used for the competency examination shall meet the following criteria:

(1) Treatment shall be performed in the sequence described in the treatment plan.

(2) The tooth shall be asymptomatic with no pulpal or periapical pathosis; cannot be in need of endodontic treatment.

(3) The tooth selected for restoration, shall have opposing occlusion that is stable.

(4) The tooth shall be in occlusal contact with a natural tooth or a permanent restoration. Occlusion with a full or partial denture is not acceptable.

(5) The restoration shall include at least one cusp.

(6) The restoration shall have an adjacent tooth to be able to restore a proximal contact; proximal surface of the tooth adjacent to the planned restoration shall be either an enamel surface or a permanent restoration; temporary restorations or removable partial dentures are not acceptable adjacent surfaces.

(7) The tooth selected shall require an indirect restoration at least the size of an onlay or greater. The tooth selected cannot replace existing or temporary crowns.

(8) The candidate shall not perform any portion of the crown preparation in advance.

(9) The direct restorative materials which are placed to contribute to the retention and resistance form of the final restoration may be completed in advance, if needed.

(10) The restoration shall be completed on the same tooth and same patient by the same candidate.

(11) A validated lab or fabrication error will allow a second delivery attempt starting from a new impression or modification of the existing crown.

(12) Teeth with cast post shall not be allowed.

(13) A facial veneer is not acceptable documentation of the candidate's competency to perform indirect restorations.

(d) Competency Examination Scoring. The scoring system used for the indirect restoration competency examination is defined as follows:

(1) A score of 0 is unacceptable; candidate exhibits a critical error

(2) A score of 1 is unacceptable; multiple major deviations that are correctable

(3) A score of 2 is unacceptable; one major deviation that is correctable

(4) A score of 3 is acceptable; minimum competence

(5) A score of 4 is adequate; less than optimal

(6) A score of 5 is optimal
A score rating of “3” shall be deemed the minimum competence level of performance.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632, and 1632.1, Business and Professions Code.

§ 1032.6. Portfolio Examination: Removable Prosthodontics.
(a) The portfolio examination shall contain the following documentation of the minimum removable prosthodontic clinical experiences and documentation of the removable prosthodontic portfolio competency examination:

(1) Evidence of successful completion of the removable prosthodontic clinical experiences shall be certified by the director of the school's clinical education program on the “Portfolio Examination Certification of Clinical Experience Completion” Form 33A-23P (New 08/13), which is hereby incorporated by reference, and shall be maintained in the candidate's portfolio.

(2) Documentation providing proof of satisfactory completion of a final assessment in the removable prosthodontic competency examination. For purpose of this section, satisfactory proof means the removable prosthodontic competency examination has been approved by the designated dental school faculty.

(b) Competency Examination Requirements. The candidate shall have the approval of his or her clinical faculty prior to beginning the competency examination. The removable prosthodontic competency examination shall include:

(1) One (1) of the following prosthetic treatments from start to finish on the same patient:

(A) Denture or overdenture for a single edentulous arch; or

(B) Cast metal framework removable partial denture (RPD) for a single Kennedy Class I or Class II partially edentulous arch.

(2) Scoring factors on prosthetic treatments for denture or overdenture for a single edentulous arch or scoring factors on prosthetic treatments for cast metal framework removable partial denture (RPD) for a single Kennedy Class I or Class II partially endentulous arch, as follows:

(A) Nine (9) scoring factors on prosthetic treatments for denture or overdenture for a single edentulous arch, as follows:

(i) Patient Evaluation and Diagnosis

(ii) Treatment Plan and Sequencing

(iii) Preliminary Impressions

(iv) Border Molding and Final Impressions

(v) Jaw Relation Records

(vi) Trial Dentures

(vii) Insertion of Removable Prosthesis

(viii) Post-Insertion

(ix) Laboratory Services for Prosthesis

(B) Twelve (12) scoring factors on prosthetic treatments for cast metal framework removable partial denture (RPD) for a single Kennedy Class I or Class II partially endentulous arch, as follows:

(i) Patient Evaluation and Diagnosis

(ii) Treatment Plan and Sequencing

(iii) Preliminary Impressions

(iv) RPD Design

(v) Tooth Modification

(vi) Border Molding and Final Impressions

(vii) Framework Try-in

(viii) Jaw Relation Records

(ix) Trial Dentures

(x) Insertion of Removable Prosthesis

(xi) Post-Insertion
(xii) Laboratory Services for Prosthesis

(3) Documentation the candidate developed a diagnosis, determined treatment options and prognosis for the patient to receive a removable prosthesis. The documentation shall include:

(A) Evidence the candidate obtained a patient history, (e.g. medical, dental and psychosocial).

(B) Evaluation of the patient's chief complaint.

(C) Radiographs and photographs of the patient.

(D) Evidence the candidate performed a clinical examination, (e.g. hard/soft tissue charting, endodontic evaluation, occlusal examination, skeletal/jaw relationship, VDO, DR, MIP).

(E) Evaluation of existing prosthesis and the patient's concerns.

(F) Evidence the candidate obtained and mounted a diagnostic cast.

(G) Evidence the candidate determined the complexity of the case based on ACP classifications.

(H) Evidence the patient was presented with treatment plan options and assessment of the prognosis, (e.g. complete dentures, partial denture, overdenture, implant options, FPD).

(I) Evidence the candidate analyzed the patient risks/benefits for the various treatment options.

(J) Evidence the candidate exercised critical thinking and made evidence based treatment decisions.

(4) Documentation of the candidate's competency to successfully restore edentulous spaces with removable prosthesis. The documentation shall include:

(A) Evidence the candidate developed a diagnosis and treatment plan for the removable prosthesis.

(B) Evidence the candidate obtained diagnostic casts.

(C) Evidence the candidate performed diagnostic wax-up/survey framework designs.

(D) Evidence the candidate performed an assessment to determine the need for pre-prosthetic surgery and made the necessary referral.
(E) Evidence the candidate performed tooth modifications and/or survey crowns, when indicated.

(F) Evidence the candidate obtained master impressions and casts.

(G) Evidence the candidate obtained occlusal records.

(H) Evidence the candidate performed a try-in and evaluated the trial dentures.

(I) Evidence the candidate inserted the prosthesis and provided the patient with post-insertion care.

(J) Documentation the candidate followed established standards of care in the restoration of the edentulous spaces, (e. g. informed consent, and infection control).

(5) Documentation of the candidate's competency to manage tooth loss transitions with immediate or transitional prostheses. The documentation shall include:

(A) Evidence the candidate developed a diagnosis and treatment plan that identified teeth that could be salvaged and or teeth that needed extraction.

(B) Evidence the candidate educated the patient regarding the healing process, denture experience, and future treatment need.

(C) Evidence the candidate developed prosthetic phases which included surgical plans.

(D) Evidence the candidate obtained casts (preliminary and final impressions).

(E) Evidence the candidate obtained the occlusal records.

(F) Evidence the candidate did try-ins and evaluated trial dentures.

(G) Evidence the candidate competently managed and coordinated the surgical phase.

(H) Evidence the candidate provided the patient post insertion care including adjustment, relines and patient counseling within the established standards of care.

(I) Documentation the candidate followed established standards of care in the restoration of the edentulous spaces, (e. g. informed consent, and infection control).

(6) Documentation of the candidate's competency to manage prosthetic problems. The documentation shall include:

(A) Evidence the candidate competently managed real or perceived patient problems.

(B) Evidence the candidate evaluated existing prosthesis.
(C) Evidence the candidate performed uncomplicated repairs, relines, re-base, re-set or re-do, if needed.

(D) Evidence the candidate made a determination if specialty referral was necessary.

(E) Evidence the candidate obtained impressions/records/information for laboratory use.

(F) Evidence the candidate competently communicated needed prosthetic procedure to laboratory technician.

(G) Evidence the candidate inserted the prosthesis and provided the patient follow-up care.

(H) Evidence the candidate performed in-office maintenance, (e.g. prosthesis cleaning, clasp tightening and occlusal adjustments).

(7) Documentation the candidate directed and evaluated the laboratory services for the prosthesis. The documentation shall include:

(A) Complete laboratory prescriptions sent to the dental technician.

(B) Copies of all communications with the laboratory technicians.

(C) Evaluations of the laboratory work product, (e.g. frameworks, processed dentures).

(8) Prosthetic treatment for the examination shall include an immediate or interim denture.

(9) Patients shall not be shared or split between examination candidates.

(10) Patient Management. The candidate shall be familiar with the patient's medical and dental history.

(11) Implementation of any treatment modifications needed that are consistent with the patient's medical history.

(12) Case complexity shall not exceed the American College of Prosthodontics Class II for partially edentulous patients.

(c) Acceptable Criteria for Removable Prosthodontics Examination. Prosthetic procedures shall be performed on patients with supported soft tissue, implants, or natural tooth retained overdentures.

(d) Competency Examination Scoring. The scoring system used for the removable prosthodontics competency examination is defined as follows:

(1) A score of 1 is unacceptable with gross errors

(2) A score of 2 is unacceptable with major errors

(3) A score of 3 is minimum competence with moderate errors that do not compromise outcome

(4) A score of 4 is acceptable with minor errors that do not compromise outcome

(5) A score of 5 is optimal with no errors evident
A score rating of “3” shall be deemed the minimum competence level of performance.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632, and 1632.1, Business and Professions Code.

§ 1032.7. Portfolio Examination: Endodontics.
(a) The portfolio examination shall contain the following documentation of the minimum endodontic clinical experiences and documentation of the endodontic portfolio competency examination:

(1) Evidence of successful completion of the endodontic clinical experiences shall be certified by the director of the school's clinical education program on the “Portfolio Examination Certification of Clinical Experience Completion” Form 33A-23P (New 08/13), which is hereby incorporated by reference, and shall be maintained in the candidate's portfolio.

(2) Documentation providing proof of satisfactory completion of a final assessment in the endodontic competency examination. For purpose of this section, satisfactory proof means the endodontic competency examination has been approved by the designated dental school faculty.

(b) Competency Examination Requirements. The candidate shall have the approval of his or her clinical faculty prior to beginning the competency examination. The endodontic examination shall include:

(1) Ten (10) scoring factors:

(A) Pretreatment Clinical Testing and Radiographic Imaging;

(B) Endodontic Diagnosis;

(C) Endodontic Treatment Plan;

(D) Anesthesia and Pain Control;

(E) Caries Removal, Removal of Failing Restorations, Evaluation of Restorability, Site Isolation;

(F) Access Opening;

(G) Canal Preparation Technique;

(H) Master Cone Fit;

(I) Obturation Technique;

(J) Completion of Case.

(2) One (1) clinical case.

(3) Documentation the candidate applied case selection criteria for endodontic case. The portfolio shall contain evidence the case selected met the American Association of Endodontics case criteria for minimum difficulty such that treated teeth have uncomplicated morphologies, have signs and symptoms of swelling and acute inflammation and have not had previously completed or initiated endodontic therapy. The documentation shall include:

(A) The determination of the diagnostic need for endodontic therapy;

(B) Charting and diagnostic testing;

(C) A record of radiographs performed on the patient and an interpretation of the radiographs pertaining to the patient's oral condition;

(D) Evidence of a pulpal diagnosis within approved parameters, including consideration and determination following the pulpal diagnosis that it was within the approved parameters. The approved parameters for pulpal diagnosis shall be normal pulp, reversible pulpits, irreversible pulpits, and necrotic pulp.

(E) Evidence of a periapical diagnosis within approved parameters, including consideration and determination following the periapical diagnosis that it was within the approved parameters. The approved parameters for periapical diagnosis shall be normal periapex, asymptomatic apical periodontitis, symptomatic apical periodontitis, acute apical abscess, and chronic apical abscess.

(F) Evidence of development of an endodontic treatment plan that included trauma treatment, management of emergencies, and referrals when appropriate. An appropriate treatment plan may include an emergency treatment due to a traumatic dental injury or for relief of pain or acute infection. The endodontic treatment may be done at a subsequent appointment.
(4) Documentation the candidate performed pretreatment preparation for endodontic treatment. The documentation shall include:

(A) Evidence the patient's pain was competently managed.

(B) Evidence the caries and failed restorations were removed.

(C) Evidence of determination of tooth restorability.

(D) Evidence of appropriate isolation with a dental dam.

(5) Documentation the candidate competently performed access opening. The documentation shall include:

(A) Evidence of creation of the indicated outline form.

(B) Evidence of creation of straight line access.

(C) Evidence of maintenance of structural integrity.

(D) Evidence of completion of un-roofing of pulp chamber.

(E) Evidence of identification of all canal systems.

(6) Documentation the candidate performed proper cleaning and shaping techniques. The documentation shall include:

(A) Evidence of maintenance of canal integrity.

(B) Evidence of preservation of canal shape and flow.

(C) Evidence of applied protocols for establishing working length.

(D) Evidence of demonstration of apical control.

(E) Evidence of applied disinfection protocols.

(7) Documentation of performance of proper obturation protocols, including selection and fitting of master cone, determination of canal condition before obturation, and verification of sealer consistency and adequacy of coating.

(8) Documentation of demonstrated proper length control of obturation, including achievement of dense obturation of filling material and obturation achieved to a clinically appropriate height for the planned definitive coronal restoration.
(9) Documentation of a competently completed endodontic case, including evidence of an achieved coronal seal to prevent recontamination and creation of diagnostic, radiographic, and narrative documentation.

(10) Documentation of provided recommendations for post-endodontic treatment, including evidence of recommendations for final restoration alternatives and recommendations for outcome assessment and follow-up.

(11) Patient Management. The candidate shall be familiar with the patient's medical and dental history.

(12) Implementation of any treatment modifications needed that are consistent with the patient's medical history.

(c) Acceptable Criteria for Endodontics Competency Examination. The procedure shall be performed on any tooth to completion by the same candidate on the same patient. A “completed case” means a tooth with an acceptable and durable coronal seal.

(d) Competency Examination Scoring. The scoring system used for the endodontics competency examination is defined as follows:

(1) A score of 0 is unacceptable; candidate exhibits a critical error.

(2) A score of 1 is unacceptable; major deviations that are correctable.

(3) A score of 2 is acceptable; minimum competence.

(4) A score of 3 is adequate; less than optimal.

(5) A score of 4 is optimal.
A score rating of “2” shall be deemed the minimum competence level performance.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632 and 1632.1, Business and Professions Code.

§ 1032.8. Portfolio Examination: Periodontics.
(a) The portfolio examination shall contain the following documentation of the minimum periodontic clinical experiences and documentation of the periodontic portfolio competency examination:

(1) Evidence of successful completion of the periodontic clinical experiences shall be certified by the director of the school's clinical education program on the “Portfolio Examination Certification of Clinical Experience Completion” Form 33A-23P (New 08/13), which is hereby incorporated by reference, and shall be maintained in the candidate's portfolio.
(2) Documentation providing proof of satisfactory completion of a final assessment in the periodontic competency examination. For purpose of this section, satisfactory proof means the periodontic competency examination has been approved by the designated dental school faculty.

(b) Competency Examination Requirements. The candidate shall have the approval of his or her clinical faculty prior to beginning the competency examination. The periodontic competency examination shall include:

(1) One (1) case to be scored in three parts, as follows:

(A) Part A: Review medical and dental history, radiographic findings, comprehensive periodontal data collection, evaluate periodontal etiology/risk factors, comprehensive periodontal diagnosis, and treatment plan;

(B) Part B: Calculus detection and effectiveness of calculus removal; and

(C) Part C: Periodontal re-evaluation.

(2) Nine (9) scoring factors:

(A) Review Medical and Dental History (Part A);

(B) Radiographic Findings(Part A);

(C) Comprehensive Periodontal Data Collection (Part A);

(D) Evaluate Periodontal Etiology/Risk Factors (Part A);

(E) Comprehensive Periodontal Diagnosis (Part A);

(F) Treatment Plan (Part A);

(G) Calculus Detection (Part B);

(H) Effectiveness of Calculus Removal (Part B); and

(I) Periodontal Re-evaluation (Part C).

(3) All three parts of the examination shall be performed on the same patient. In the event the patient does not return for periodontal re-evaluation (Part C), the student shall use a second patient for the completion of the periodontal re-evaluation (Part C) portion of the periodontic competency examination.

(4) Documentation the candidate performed a comprehensive periodontal examination. The documentation shall include:
(A) Evidence that the patient's medical and dental history was reviewed.

(B) Evidence that the patient's radiographs were evaluated.

(C) Evidence of performance of an extra-oral and intra-oral examination on the patient.

(D) Evidence of performance of comprehensive periodontal data collection. Evidence shall include evaluation of patient's plaque index, probing depths, bleeding on probing, suppurations, cementoenamel junction to the gingival margin (CEJ-GM), clinical attachment, furcations, and tooth mobility.

(E) Evidence of performance of an occlusal assessment.

(5) Documentation the candidate diagnosed and developed a periodontal treatment plan. The documentation shall include:

(A) Evidence of determination of periodontal diagnosis.

(B) Evidence of formulation of an initial periodontal treatment plan that demonstrates

(i) Determination of periodontal diagnosis.

(ii) Formulation of an initial periodontal treatment plan that demonstrates the following:

(a) Determination to treat or refer patient to periodontist or periodontal surgery;

(b) Discussion with patient regarding etiology, periodontal disease, benefits of treatment, consequences of no treatment, specific risk factors, and patient-specific oral hygiene instructions;

(c) Determination on non-surgical periodontal therapy;

(d) Determination of re-evaluation need; and

(e) Determination of recall interval.

(6) Documentation of performance of non-surgical periodontal therapy. The documentation shall include:

(A) Detected supragingival and subgingival calculus;

(B) Performance of periodontal instrumentation, including:

(i) Removed calculus;

(ii) Removed plaque; and
(iii) Removed stains;

(C) Demonstration that excessive soft tissue trauma was not inflicted; and

(D) Demonstration that anesthesia was provided to the patient.

(7) Documentation of performance of periodontal re-evaluation. The documentation shall include:

(A) Evidence of evaluation of effectiveness of oral hygiene;

(B) Evidence of assessment of periodontal outcomes, including:

(i) Review of the patient's medical and dental history;

(ii) Review of the patient's radiographs;

(iii) Performance of comprehensive periodontal data collections (e.g. evaluation of plaque index, probing depths, bleeding on probing, suppurations, cementoenamel junction to the gingival margin (CEJ-GM), clinical attachment level, furcations, and tooth mobility.

(C) Evidence of discussion with patient regarding current periodontal status as compared to the pre-treatment status, patient-specific oral hygiene instructions, and modifications of specific risk factors;

(D) Evidence of determination of further periodontal needs including the need for referral to a periodontist and periodontal surgery; and

(E) Evidence of establishment of a recall interval for periodontal treatment.

(c) Acceptable Patient Criteria for Periodontics Competency Examination:

(1) The examination, diagnosis, and treatment planning shall include:

(A) A patient with a minimum of twenty (20) natural teeth, with at least four (4) molars;

(B) At least one probing depth of five (5) mm or greater shall be present on at least four

(4) of the teeth, excluding third molars, with at least two of these teeth with clinical attachment loss of 2 mm or greater;

(C) A full mouth assessment or examination

(D) The patient shall not have had previous periodontal treatment at the dental school where the examination is being conducted. Additionally, the patient shall not have had previous non-surgical or surgical periodontal treatment within the past six (6) months.

(2) Calculus detection and periodontal instrumentation (scaling and root planing) shall include:

(A) A patient with a minimum of six (6) natural teeth in one quadrant, with at least two

(2) adjacent posterior teeth in contact, one of which shall be a molar. Third molars may be used if they are fully erupted.

(B) At least one probing depth of five (5) mm or greater shall be present on at least two

(2) of the teeth that require scaling and root planing.

(C) A minimum of six (6) surfaces of clinically demonstrable subgingival calculus shall be present in one or two quadrants. Readily clinically demonstrable calculus is defined as easily explorer detectable, heavy ledges. At least four (4) surfaces of the subgingival calculus shall be on posterior teeth. Each tooth is divided into four surfaces for qualifying calculus: mesial, distal, facial, and lingual. If additional teeth are needed to obtain the required calculus and pocket depths two quadrants may be used.

(3) Re-evaluation shall include:

(A) A thorough knowledge of the patient's case;

(B) At least two (2) quadrants of scaling and root planing on the patient being reevaluated.

(C) At least two documented oral hygiene care (OHC) instructions with the patient being reevaluated 4-6 weeks after scaling and root planing is completed. The scaling and root planing shall be completed within an interval of 6 weeks or less.

(D) A patient with a minimum twenty (20) natural teeth with at least four (4) molars.

(E) Baseline probing depth of at least five (5) mm on at least four (4) of the teeth, excluding third molars.

(d) Competency Examination Scoring. The scoring system used for the periodontics competency examination is defined as follows:

(1) A score of 0 is unacceptable; candidate exhibits a critical error

(2) A score of 1 is unacceptable; major deviations that are correctable

(3) A score of 2 is acceptable; minimum competence

(4) A score of 3 is adequate; less than optimal

(5) A score of 4 is optimal
A score rating of “2” shall be deemed the minimum competence level performance.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632 and 1632.1, Business and Professions Code.

§ 1032.9. Portfolio Examination: Competency Examiner Qualifications.
(a) Portfolio competency examiners shall meet the following criteria:

(1) An examiner shall be full-time or part-time faculty member of a Board-approved California dental school.

(2) An examiner shall have a minimum of one (1) year of previous experience in administering clinical examinations.

(3) An examiner shall undergo calibration training in the Board's standardized evaluation system through didactic and experiential methods as established in section 1032.10. Portfolio competency examiners are required to attend Board-developed standardized calibration training sessions offered at their schools prior to administering a competency examination and annually thereafter.

(b) At the beginning of each school year, each school shall submit to the Board the names, credentials and qualifications of the dental school faculty to be approved or disapproved by the Board as portfolio competency examiners. Documentation of qualifications shall include a letter from the dean of the California dental school stating that the dental school faculty satisfies the criteria and standards established by the dental school to conduct portfolio competency examinations in an objective manner, and has met the requirements of subdivision (a)(1) through (a)(3) of this section.

(c) In addition to the names, credentials and qualifications, the dean of the California dental school shall submit documentation that the appointed dental school faculty examiners have been trained and calibrated in compliance with the Board's requirements established in section 1032.10.

(d) Any changes to the list of portfolio competency examiners shall be reported to the Board within thirty (30) days, including any action taken by the school to replace an examiner.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632 and 1632.1, Business and Professions Code.

§ 1032.10. Portfolio Examination: Competency Examiner Training Requirements.
(a) Prospective portfolio competency examiners are required to attend Board-developed standardized calibration training sessions offered at their schools prior to administering a competency examination. Each of the schools will designate faculty who have been approved by the Board to serve as competency examiners and is responsible for administering the Board developed calibration course for said examiners. Examiners may grade any competency examination in which they have completed the required calibration. Each training session shall be presented by designated Portfolio competency examiners at their respective schools and require the prospective examiners to participate in both didactic and hands-on activities.

(b) Didactic Training Component. During didactic training, designated Portfolio competency examiners shall present an overview of the examination and its evaluation (grading) system through lecture, review of examiner training materials, including slide presentations, sample documentation, and sample cases.

(c) Hands-On Component. Training shall include multiple examples of performance that clearly relate to the specific judgments that examiners are expected to provide during the portfolio competency examinations. Hands-on training sessions include an overview of the rating process, clear examples of rating errors, examples of how to mark the grading forms, a series of several sample cases for examiners to hone their skills, and opportunities for training staff to provide feedback to individual examiners.

(d) Calibration of Examiners. The calibration of portfolio competency examiners shall be conducted to maintain common standards as an ongoing process. Portfolio competency examiners shall be provided feedback about their performance and how their scoring varies from their fellow examiners. Portfolio competency examiners whose error rate exceeds psychometrically accepted standards for reliability shall be re-calibrated. A school shall notify the Board if, at any time, it is determined that a competency examiner is unable to meet the Board's calibration standards. If any portfolio competency examiner is unable to be re-calibrated, the Board shall disapprove the portfolio competency examiner from further participation in the portfolio examination process.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632 and 1632.1, Business and Professions Code.

§ 1033.1. General Procedures and Policies for Portfolio Examination.
The following rules, which are in addition to any other examination rules set forth elsewhere in this chapter, are adopted for the uniform conduct of the portfolio examination.

(a) The candidate shall be able to read and interpret instructions and examination material as part of the examination.

(b) A patient shall be in a health condition acceptable for dental treatment. If conditions indicate a need to consult the patient's physician or for the patient to be premedicated (e.g. high blood pressure, heart murmur, rheumatic fever, heart condition, prosthesis), the candidate must obtain the necessary written medical clearance and/or, evidence of premedication before the patient will be accepted. If the patient's well-being is put into jeopardy at any time during the portfolio competency examination, the examination shall be terminated. The candidate shall fail the examination, regardless of performance on any other part of the examination.

(c) The use of local anesthetics shall be administered according to the school's protocol and standards of care. The type and amount of anesthetics shall be consistent with the patient's medical history and current condition.

(d) A candidate may be dismissed from the entire examination, and a statement of issues may be filed against the candidate, for acts which interfere with the board's objective of evaluating professional competence. Such acts include, but are not limited to the following:

(1) Allowing another person to take the portfolio examination in the place of, and under the identity of, the candidate.

(2) Presenting purported carious lesions which are artificially created, whether or not the candidate created the defect.

(3) Presenting radiographs which have been altered, or contrived to represent other than the patient's true condition, whether or not the misleading radiograph was created by the candidate.

(4) Bringing any notes, textbooks, unauthorized models, periodontal charting information or other informative data into the clinic during any portfolio competency examination.

(5) Assisting another candidate during the portfolio examination process.

(6) Failing to comply with the board's infection control regulations. Candidates shall be responsible for maintaining all of the standards of infection control while treating patients. This shall include the appropriate sterilization and disinfection of the cubicle, instruments and handpieces, as well as, the use of barrier techniques (including glasses, mask, gloves, proper attire, etc.) as required by the California Division of Occupational Safety and Health (Cal/OSHA) and California Code of Regulations, Title 16, Section 1005.

(7) Treating a patient, or causing a patient to receive treatment outside the designated examination settings and timeframes.

(e) Candidates shall wear personal protective equipment (PPE) during the portfolio competency examinations. PPE shall include masks, gloves, and eye protection during each portfolio competency examination.

(f) Radiographs for each of the portfolio competency examinations shall be of diagnostic quality. Digital or conventional radiographs may be used.

(g) Dental dams shall be used during endodontic treatment and the preparation of amalgam and composite restorations. Finished restorations shall be graded without the dental dam in place.

(h) Candidates shall provide clinical services upon patients of record of the dental school who fulfill the acceptable criteria for each of the six (6) portfolio competency examinations.

(i) Candidates shall be allowed three (3) hours and thirty (30) minutes for each patient treatment session.

(j) Each portfolio competency examination shall be performed by the candidate without faculty intervention. Completion of a successful portfolio competency examination may be counted as a clinical experience for the purpose of meeting the requirements of section 1032.2.

(k) Candidates who fail a portfolio competency examination three (3) times shall not be permitted to retake the portfolio competency examination until remediation has been completed as specified in section 1036.

(l) Readiness for a candidate to take a portfolio competency examination shall be determined by the dental school's clinical faculty.
Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632 and 1632.1, Business and Professions Code.

§ 1034. Portfolio Competency Examination Grading.
This section shall apply, in addition to any other examination rules set forth in this Chapter, for the purpose of uniform conduct of the portfolio examination grading.

(a) Each portfolio competency examination shall be graded by two (2) independent portfolio competency examiners and shall use the Board's standardized scoring system as specified in subdivision (f) of this section. There shall be no communication between grading examiners.

(b)

(c) A candidate shall be deemed to have passed the portfolio competency examination if his or her overall scaled score is at least 75 in each of the portfolio competency examinations.

(d) The Board shall notify candidates who have passed or failed the portfolio examination.

(e) Each portfolio competency examination shall be signed by the school portfolio competency examiners who performed the grading.

(f) Competency Examination Scoring: The portfolio competency examiners shall use the following scoring system for each of the competency examinations:

(1) The scoring system used for the ODTP competency examination as specified in Section 1032.3(d).

(2) The scoring system used for the direct restoration competency as specified in Section 1032.4(d).

(3) The scoring system used for the indirect restoration competency examination as specified in Section 1032.5(d).

(4) The scoring system used for the removable prosthodontics competency examination as specified in Section 1032.6(d).

(5) The scoring system used for the endodontics competency examination as specified in Section 1032.7(d).

(6) The scoring system used for the periodontics competency examination as specified in Section 1032.8(d).

(g) If a candidate commits a critical error, the candidate shall not proceed with the portfolio competency examination. If the candidate makes a critical error at any point during a portfolio competency examination, a score of “0” shall be assigned and the portfolio competency examination shall be terminated immediately.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Sections 1630, 1632, 1632.1 and 1634, Business and Professions Code.

§ 1036.01. Remedial Education: Portfolio Competency Examinations.
A candidate, who fails to pass a portfolio competency examination after three attempts, shall not be eligible for further re-examination until the candidate has successfully completed the required additional education as specified in Section 1633(b) of the Business and Professions Code.

(a) The course work shall be taken at a dental school approved by the Commission on Dental Accreditation or a comparable organization approved by the Board, and shall be completed within a period of one year from the date of notification of the applicant's third failure.

(1) The course of study must be didactic, laboratory or a combination of the two. Use of patients is optional.
(2) Instruction must be provided by a faculty member of a dental school approved by the Commission on Dental Accreditation or a comparable organization approved by the Board.

(3)) Pre-testing and post-testing must be part of the course of study.

(b) When an applicant applies for reexamination, he or she shall furnish evidence of successful completion of the remedial education requirements for reexamination.

(1) Evidence of successful completion must be on the “Certification of Successful Completion of Remedial Education for Portfolio Competency Re-Examination requirements for re-examination Eligibility” (Form New 08/13), that is hereby incorporated by reference, that is submitted prior to the examination.

(2) The form must be signed and sealed by the Dean of the dental school providing the remedial education course.

Note: Authority cited: Section 1614, Business and Professions Code. Reference: Section 1632.5, Business and Professions Code.

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MEMORANDUM

DATE	August 2, 2016
TO	Dental Board of California
FROM	Tina Vallery, Licensing Analyst
SUBJECT	**Agenda Item 12 Examinations: A.** Western Regional Examination Board (WREB) Update; **B:** Staff Update on Portfolio Pathway to Licensure

A. Western Regional Examination Board (WREB) Update. If a representative of WREB is present, a report may be given.

B. On July 21, 2016, Dr. Steve Morrow, Dr. Debra Woo, and Board Staff participated in a teleconference with the Iowa State Dental Board. Dr. Morrow gave a verbal overview of the Board's Portfolio pathway to licensure in California.

The Board received a request from Nova Southeastern's American Student Dental Association Chapter, to attend an event on Saturday September 17th to give a short presentation about the Portfolio Pathway to Licensure.

Throughout the months of June and July, staff received and processed thirty-two portfolio applications. Twelve (12) applications were submitted by the University of California, San Francisco, Eighteen (18) applications were submitted by the University of the Pacific and the two (2) remaining applications were submitted by the University of Southern California. In August, staff received one (1) additional portfolio application from the University of the Pacific that is in the process of being reviewed. To date, twenty-nine (29) portfolio applicants have been issued their license. The applications that do not have licenses issued are due to application deficiencies and are expected to be licensed as soon as the deficient items are received.

Staff is currently working on the addition of a portfolio page to the website.

Dr. Morrow and Dr. Woo may add additional comments.

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MEMORANDUM

DATE	July 27, 2016
TO	Dental Board Members
FROM	Leslie Kihara, Program Technician II
SUBJECT	**Agenda Item 13A:** Review of Dental Licensure and Permit Statistics

A. Following are statistics of current license/permits by type as of July 27, 2016

Dental License (DDS)	
Active	37,947
Inactive	3,210
Retired	2,247
Disabled - Non practice	182
Renewal in Process	293
Delinquent	7,478
Suspended No Coronal Polish/X-ray	N/A
Total Cancelled Since Licensing was required	20,676

Dental Licenses Issued via Pathway	Total Issued in 2016	Total Issued in 2015	Total Issued in 2014	Total Issued to Date	Date Pathway Implemented
California Exam	0	0	0	57,087	Prior to 1929
WREB Exam	456	747	753	7,516	January 1, 2006
Licensure by Residency	70	162	170	1,491	January 1, 2007
Licensure by Credential	71	116	144	3,004	July 1, 2002
LBC Clinic Contract	3	5	1	33	July 1, 2002
LBC Faculty Contract	3	2	0	14	July 1, 2002
Portfolio	29	7	N/A	36	November 5, 2014

License/Permit /Certification/Registration Type	Current Active Permits	Delinquent	Total Cancelled Since Permit was Required
Additional Office Permit	2,479	504	6,011
Conscious Sedation Permit	513	38	406
Continuing Education Registered Provider Permit	1,151	614	1,748
Elective Facial Cosmetic Surgery Permit	27	2	0
Extramural Facility Registration*	154	n/a	n/a
Fictitious Name Permit	6,557	969	5,223
General Anesthesia Permit	862	39	854
Mobile Dental Clinic Permit	40	32	36
Medical General Anesthesia Permit	77	40	156
Oral Conscious Sedation Certification (Adult Only 1,637; Adult & Minors 1,875)	2,420	567	490
Oral & Maxillofacial Surgery Permit	84	7	16
Referral Service Registration*	153	n/a	n/a
Special Permits	41	10	165

*Current population for Extramural Facilities and Referral Services are approximated because they are not automated programs.

Active Licensees by County as of July 27, 2016

County	DDS	County	DDS
Alameda	1,431	Placer	441
Alpine	0	Plumas	18
Amador	23	Riverside	1,053
Butte	154	Sacramento	1,068
Calaveras	21	San Benito	21
Colusa	4	San Bernardino	1,306
Contra Costa	1,069	San Diego	2,640
Del Norte	15	San Francisco	1,237
El Dorado	155	San Joaquin	355
Fresno	562	San Luis Obispo	225
Glenn	9	San Mateo	875
Humboldt	81	Santa Barbara	318
Imperial	38	Santa Clara	2,206
Inyo	10	Santa Cruz	191
Kern	339	Shasta	120
Kings	50	Sierra	2
Lake	25	Siskiyou	20
Lassen	23	Solano	293
Los Angeles	8,287	Sonoma	418
Madera	50	Stanislaus	277
Marin	322	Sutter	57
Mariposa	6	Tehama	27
Mendocino	55	Trinity	4
Merced	92	Tulare	213
Modoc	5	Tuolumne	47
Mono	3	Ventura	678
Monterey	271	Yolo	120
Napa	106	Yuba	9
Nevada	84	Out of State/Country	2,964
Orange	3,745		
		TOTAL	**34,238**

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MEMORANDUM

DATE	July 29, 2016
TO	Dental Board Members
FROM	Carlos Alvarez, Acting Enforcement Chief
SUBJECT	**Agenda Item 14:** Enforcement A. Enforcement – Statistics and Trends B. Review of Third Quarter Performance Measures from the Department of Consumer Affairs C. Diversion Program Report and Statistics

A. Enforcement – Statistics and Trends

A verbal report will be provided.

B. Review of Second Quarter Performance Measures from the Department of Consumer Affairs

(See attachment 1)

C. Diversion Program Report and Statistics

(See attachment 2)

Department of Consumer Affairs

Dental Board of California

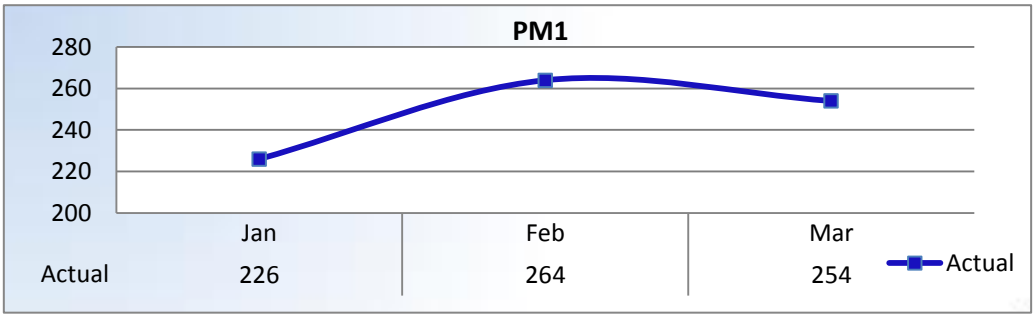
Performance Measures

Q3 Report *(January – March 2016)*

To ensure stakeholders can review the Board's progress toward meeting its enforcement goals and targets, we have developed a transparent system of performance measurement. These measures will be posted publicly on a quarterly basis.

PM1 | Volume

Number of complaints and convictions received.

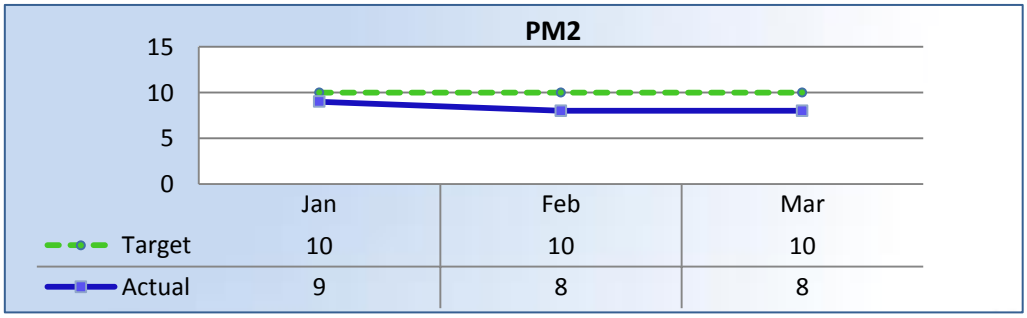


Total Received: 848 **Monthly Average**: 248

Complaints: 744 | **Convictions**: 104

PM2 | Intake

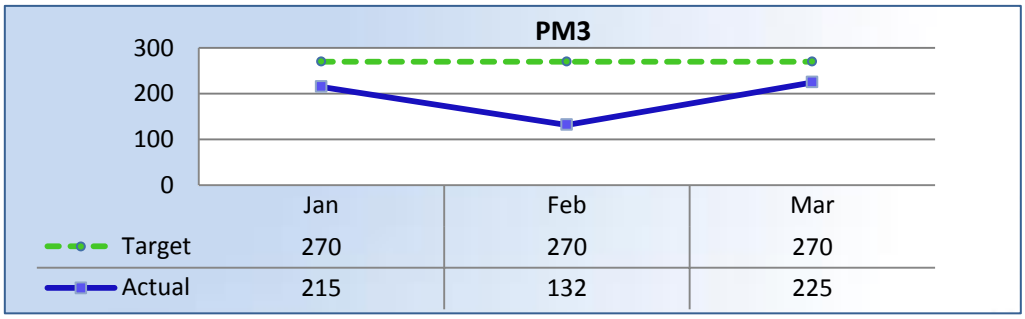
Average cycle time from complaint receipt, to the date the complaint was assigned to an investigator.



Target Average: 10 Days | **Actual Average:** 8 Days

PM3 | Intake & Investigation

Average number of days to complete the entire enforcement process for cases not transmitted to the AG. (Includes intake and investigation)

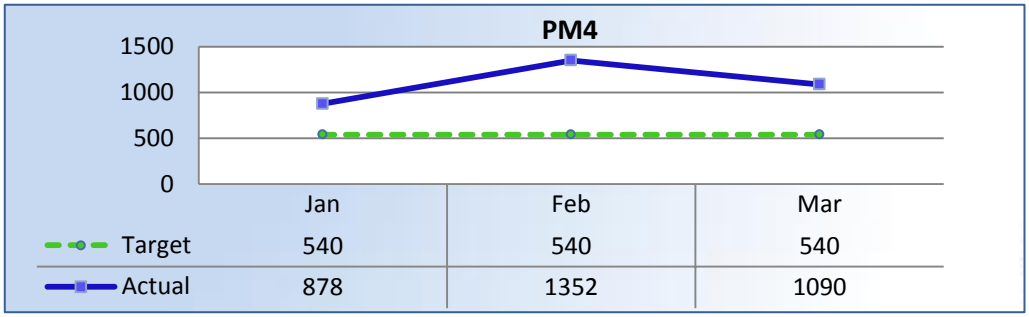


	Jan	Feb	Mar
Target	270	270	270
Actual	215	132	225

Target Average: 270 Days | **Actual Average:** 191 Days

PM4 | Formal Discipline

Average number of days to complete the entire enforcement process for cases transmitted to the AG for formal discipline. (Includes intake, investigation, and transmittal outcome)

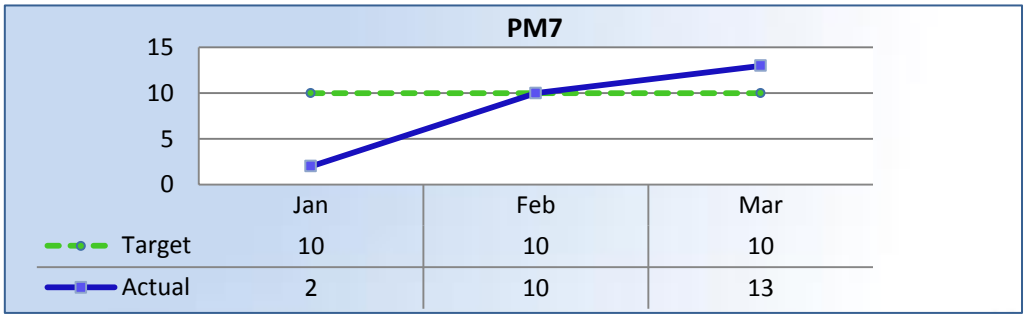


	Jan	Feb	Mar
Target	540	540	540
Actual	878	1352	1090

Target Average: 540 Days | **Actual Average:** 1,021 Days

PM7 |Probation Intake

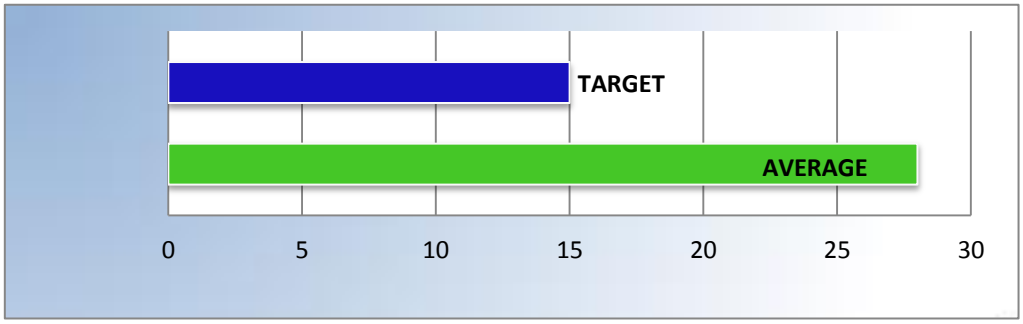
Average number of days from monitor assignment, to the date the monitor makes first contact with the probationer.



Target Average: 10 Days | **Actual Average:** 8 Days

PM8 |Probation Violation Response

Average number of days from the date a violation of probation is reported, to the date the assigned monitor initiates appropriate action.



Target Average: 15 Days | **Actual Average:** 28 Days

ATTACHMENT 2

The Diversion Evaluation Committee (DEC) program statistics for quarter ending June 30, 2016, are provided below. These statistics reflect the participant activity in the Diversion (Recovery) Program and are presented for information purposes only.

These statistics are derived from the MAXIMUS monthly reports.

Intake Referrals	**April**	**May**	**June**
Self-Referral	0	0	0
Enforcement Referral	0	0	0
Probation Referral	0	1	0
Closed Cases	0	0	0
Active Participants	18	19	19

The Board is currently recruiting for two open auxiliary positions.

The next DEC meeting is scheduled for September 1, 2016 in Northern California.

ACTION REQUESTED:
No action requested.

JOINT MEETING OF THE DENTAL BOARD AND DENTAL ASSISTING COUNCIL

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JOINT MEETING OF THE DENTAL BOARD AND DENTAL ASSISTING COUNCIL

Thursday, August 18, 2016

Upon Conclusion of Agenda Item 14

Hilton Sacramento Arden West
2200 Harvard Street, Sacramento, CA 95815
916-604-3993 (Hotel) or 916-263-2300 (Board Office)

Members of the Board

Steven Morrow, DDS, MS, President
*Judith Forsythe, RDA, Vice President (Also a Council member)
Steven Afriat, Public Member, Secretary

Fran Burton, MSW, Public Member
Yvette Chappell-Ingram, Public Member
Katie Dawson, RDH
Kathleen King, Public Member
Ross Lai, DDS
Huong Le, DDS, MA
Meredith McKenzie, Public Member
Thomas Stewart, DDS
*Bruce Whitcher, DDS, (Also a Council member)
Debra Woo, DDS

Members of the Dental Assisting Council

Chair – Anne Contreras, RDA
Vice Chair – Emma Ramos, RDA

Pamela Davis-Washington, RDA
Tamara McNealy, RDA
Judith Forsythe, RDA
Bruce Whitcher, DDS

Public comments will be taken on agenda items at the time the specific item is raised. Action may be taken on any item listed on the agenda, unless listed as informational only. All times are approximate and subject to change. Agenda items may be taken out of order to accommodate speakers and to maintain a quorum. The meeting may be cancelled without notice. Time limitations for discussion and comment will be determined by the Council Chair. For verification of the meeting, call (916) 263-2300 or access the Board's website at www.dbc.ca.gov. This Council meeting is open to the public and is accessible to the physically disabled. A person who needs a disability-related accommodation or modification in order to participate in the meeting may make a request by contacting Karen M. Fischer, MPA, Executive Officer, at 2005 Evergreen Street, Suite 1550, Sacramento, CA 95815, or by phone at (916) 263-2300. Providing your request at least five business days before the meeting will help to ensure availability of the requested accommodation.

While the Board intends to webcast this meeting, it may not be possible to webcast the entire open meeting due to limitations on resources or technical difficulties that may arise.

JNT 1 - Call to Order/Roll Call/Establishment of Quorum

**The Board meeting is still in progress. Therefore, it is necessary to take roll call of the Dental Assisting Council members only, for the purpose of joining the Board meeting.*

**The Board may take action on any Council recommendations during this joint meeting.*

JNT 2 - Approval of the May 11, 2016 Joint Dental Board and Dental Assisting Council Meeting Minutes.

JNT 3 – Overview of Dental Education Programs, Course Curriculum Requirements and the Application Process.

JNT 4 - Update on Dental Assisting Examinations Statistics.

- Practical
- Written
- Orthodontic Assistant (OA)
- Dental Sedation Assistant (DSA)

JNT 5 – Update on Dental Assisting Licensing Statistics.

- Registered Dental Assistant (RDA)
- Registered Dental Assistant in Extended Functions (RDAEF)
- Orthodontic Assistant (OA)
- Dental Sedation Assistant (DSA)

JNT 6 – Report on the Results of the Department of Consumer Affairs (DCA) Office of Professional Examination Services (OPES) Occupational Analysis of the Registered Dental Assistant in Extended Functions (RDAEF) Practical Examinations.

JNT 7 – Discussion and Possible Action Regarding the Registered Dental Assistant in Extended Functions (RDAEF) Written Examination in Accordance with Business and Professions Code Section 139 Requirements.

JNT 8 – Update on Dental Assisting Council Regulatory Workshops.

JNT 9 – Public Comment on Items Not on the Agenda

The Board may not discuss or take action on any matter raised during the Public Comment section that is not included on this agenda, except whether to decide to place the matter on the agenda of a future meeting (Government Code §§ 11125 and 11125.7(a)).

JNT 10 - Adjourn Joint Meeting of the Dental Board and the Dental Assisting Council.

DENTAL BOARD AND DENTAL ASSISTING COUNCIL MINUTES

Wednesday, May 11, 2016

Wyndham Anaheim Garden Grove
12021 Harbor Boulevard, Garden Grove, CA 92840

DRAFT

Board Members Present
Steven Morrow, DDS, MS, President
*Judith Forsythe, RDA, Vice President (Also a Council member)
Steven Afriat, Public Member, Secretary
Fran Burton, MSW, Public Member
Luis Dominicis, DDS
Kathleen King, Public Member
Ross Lai, DDS
Huong Le, DDS, MA
Thomas Stewart, DDS
*Bruce Whitcher, DDS, (Also a Council member)
Debra Woo, DDS

Board Members Absent
Katie Dawson, RDH
Yvette Chappell-Ingram, Public Member

Dental Assisting Council Members Present
Vice Chair – Emma Ramos, RDA
Pamela Davis-Washington, RDA
Teresa Lua, RDAEF
Tamara McNealy, RDA
Judith Forsythe, RDA
Bruce Whitcher, DDS

DAC Members Absent
Chair – Anne Contreras, RDA

JNT 1 - Call to Order/Roll Call/Establishment of Quorum

President Steven Morrow called the meeting to order at 1:05 p.m. Steve Afriat, Secretary, called the roll and a quorum was established.

JNT 2 - Approval of the March 3, 2016 Joint Dental Board and Dental Assisting Council Meeting Minutes.

President Morrow asked for a motion to approve the minutes as reported.

The motioner (Judith Forsythe) and seconder (Tamara McNealy) agreed.

Support: Morrow, Forsythe, Burton, Chappell-Ingram, Dawson, Dominicis, King, Le, McKenzie, Stewart, Whitcher, Woo, Contreras, Ramos, Davis-Washington, McNealy.
Oppose: 0 **Abstain:** 1

The motion passes.

JNT 3 - Dental Assisting Staff Update.
Sarah Wallace, Assistant Executive Officer gave a staff update. Ms. Wallace reported that since the last Board meeting, the Board has administered 1 RDA examination, 1 RDAEF examination, and is preparing to administer another RDA examination for the month of May. She went on to mention that staff continues to work diligently to learn all the business processes that have come with our new online system Breeze and that some overtime work has been necessary to complete renewals, applications, and respond to the large volume of phone calls and emails coming in on a daily basis. Ms. Wallace went on to point out that the Dental Assistant unit is fully staffed, however with 2 key staff members away on extended leave; the unit continues to make pace with the additional backlog.

Board comment:
Dr. Whitcher commented that it has been a great experience working with the 2 new staff members in the RDA unit.

JNT 4 – Update on Dental Assisting Programs and Courses
Ms. Wallace gave an overview of the information provided.

Questions:
Tamara McNealy, DAC member, asked if the Board is approving Orthodontic Assistant Permit courses and at the same time approving Ultrasonic Scaling courses that have been incorporated into the Orthodontic Assistant permit courses. Or are the Ultrasonic Scaling courses being approved separate from the Orthodontic Assistant Permit courses. Ms. Wallace responded that staff is still working through this issue, especially because of the development of the regulations that pertain to Ultrasonic Scaling courses. She mentioned she will need to look into this, but believes the Ultrasonic Scaling courses integrated into the Orthodontic Assistant courses should be getting approved as well.

JNT 5 - Update on Dental Assisting Examinations Statistics.
- Practical
- Written
- Orthodontic Assistant (OA)
- Dental Sedation Assistant (DSA)

Ms. Wallace gave an overview of the information provided.

Board comment:
Tamara McNealy mentioned she noticed OJT statistics were not included in the information provided and asked if it was due to a Breeze issue or just an oversight. Ms. Wallace responded that we are limited on what we're able to pull from Breeze and staff is still in the process of learning how to manually pull all the OJT statistics.

Dr. Stewart asked what the geographical boundaries are for the south, central and northern areas. Ms. Wallace responded that Fresno and Santa Maria are considered central testing areas, UCSF is considered north, and the Carrington College in Pomona, CA is considered south.

DRAFT

Pamela Davis-Washington mentioned she noticed that, regarding the 2011 - 2015 RDA exam pass rates, the 2012 and 2013 pass rates were so much higher than the rest and asked if that was a result of the test being calibrated. Ms. Wallace responded that it was in 2014 when the Board began to see the failure rate.

JNT 6 – Update on Dental Assisting Licensing Statistics.

- Registered Dental Assistant (RDA)
- Registered Dental Assistant in Extended Functions (RDAEF)
- Orthodontic Assistant (OA)
- Dental Sedation Assistant (DSA)

Ms. Wallace gave an overview of the information provided. She explained that staff is still in the process of pulling data relating to licensees with delinquent RDA licenses due to now possessing RDAEF, RDH or RDHAP licenses. However, as soon as the department can provide staff with an extract report and the data is made available, the information will be shared at the next Board meeting.

Board comment:
Ms. McNealy commented that she wanted to thank Katie Le for taking on the task of pulling statistics on licensees with delinquent RDA licenses due to possessing dual licensure.

JNT 7 – Report on the Results of the Department of Consumer Affairs (DCA) Office of Professional Examination Services (OPES) Occupational Analysis of the Registered Dental Assistant (RDA) and Registered Dental Assistant in Extended Functions (RDAEF) Practical Examinations.

Dr. Heidi Lincer, Chief of OPES, provided a power point presentation report on the findings of the (OPES) Occupational Analysis of the Registered Dental Assistant (RDA) and Registered Dental Assistant in Extended Functions (RDAEF) Practical Examinations.

Board Comment:
Dr. Morrow thanked and complemented Ms. Lincer on her thorough analysis of the Occupational Analysis. He pointed out that all of the information provided in the presentation is very useful information, and will help in making necessary decisions. However, there is still a lot to discuss at the Board level in regards to what actions to take.

Dr. Morrow went on to mention that some questions that arise are: Is the practical examination really necessary? Is there evidence to support that the knowledge and task connection competency could be established by written examination only? Or is a practical examination in Dr. Lincer's professional opinion required at entry level for these licensees? Ms. Lincer indicated that those questions would be answered during an upcoming agenda item.

Dr. Stewart asked if the written examination was included in the Occupational Analysis. Ms. Lincer responded affirmatively but pointed out that the occupational analysis did not focus on the current issue the practical examination is facing. Dr. Stewart asked how

the examinations are sequenced. Are they all done together? Are they all considered different experiences? Ms. Lincer responded affirmatively.

Dr. Whitcher commented that he believes the Board last updated the RDA written exam in 2010. Dr. Morrow answered affirmatively. Dr. Whitcher asked if the law and ethics exam was recently updated as well because of an exam breech. Ms. Fischer responded affirmatively and added that the law and ethics exam is constantly being updated due to the ongoing contract the Board has with OPES. She went on to discuss that Dr. Lincer is speaking on the possibility of combining both the written and law and ethics examinations and have only one examination that will be discussed on another agenda item.

Ms. McNealy commented that the scope and depth of this new combined written examination would really require the Board and DAC members to digest and process it.

She went on to ask if there is a typo in the scope of practice for RDA's found on page 2 of the memo from Dr. Lincer to Karen Fischer titled Evaluation of Clinical Skills related to RDA Scope of Practice as a prerequisite to Licensure, under Summary of Licensee focus groups, clause A. She explained that clause A mistakenly indicates that RDA's can take impressions for direct and indirect restorations, which is within the scope of practice of an RDAEF, not an RDA. She asked if the clause meant to state RDA's can take "provisional impressions" rather than "direct and indirect" restorations. Ms. Wallace clarified that clause A was meant state "provisional". Ms. McNealy moved on to point out a statement found on page 2 of the Occupational Analysis that reads: For licensure program to meet these standards it must be solidly based upon job activities required for practice. She explained that because the Board has an On The Job (OJT) pathway, when looking at the Occupational Analysis, at the state exams and various other options, we should keep in mind that there is another pathway for applicants to take licensure examination and what oversight and consistency will be provided within that area or arena. There is a lot of emphasis on the educational aspect found in the Occupational Analysis; however the OJT aspect should not be overlooked. To ensure consistency, depending on whichever option we go with, how will the Board determine through OJT that that criteria was met in the same manner as the educational? Ms. McNealy commented she wanted to point that out but no discussion was necessary. Ms. McNealy moved on to comment on the information found on the graph on page 9 of the occupational analysis. She clarified that there exists a waiting or delay period when a student qualifies through the educational pathway, based on how often the filing periods occur and how often the exams are offered and also the cost and expense of the exam. Participants do have to wait so they can work in the field, be employed and earn the money in order to take the exam. The Board will also be raising the prices of the exams so that will be another delay factor for candidates. Dr. Morrow asked Ms. McNealy if she is indicating that the delay between the time that they've completed their training and taking the examination is diluting their level of knowledge and skills and therefore reducing the quality of their examination product. Ms. McNealy answered affirmatively and added that the longer a candidate waits, the less proficient they will be when tested. Ms. Lincer clarified that the question found on page 9 is not asking how long candidates waited to take the test. The question is asking how many months or years did the candidate work as an unlicensed dental assistant. Dr. Morrow commented that Ms. McNealy's concept is valid; however the data that's being

presented here is not addressing that issue. Dr. Whitcher added that Ms. McNealy has brought out a good point, but again the data being presented here is more about exam design and development, and not about exam delivery which would go along with scheduling and implementation. This can be discussed at a later agenda item.

Dr. Lai asked what is tested on the practical exam. Ms. Fischer responded that in statute it outlines that there are 4 procedures and the Board can choose 3 of them to test the candidates. Ms. Wallace added that the 3 current procedures being tested on the practical exam are found in the Business and Profession Code, Section 1752.3 which are: placing, adjusting and finishing a provisional restoration, fabricating and adjusting an indirect provisional restoration, and cementing an indirect provisional restoration.

Ms. Fischer thanked Dr. Lincer once again for the arduous work and dedication she put into the Occupational Analysis.

JNT 8 – Discussion and Possible Action Regarding the Update of the Registered Dental Assistant (RDA) Law & Ethics and Written Examinations in Accordance with Business and Professions Code Section 139 Requirements.

Ms. Wallace discussed the typical procedure that takes place after the conclusion of an Occupational Analysis and summarized the Boards current examination process for all 3 exams. She moved on to discuss the possibility of combining both the Written and Law & Ethics examinations into one exam and that it may require a statutory change. However combining both examinations would allow for a greater item bank, greater reliability and we would also be able to look to OPES to continue the updating of the exam on a yearly basis as the Board currently does with the Law & Ethics exam. Ms. Wallace went on to discuss that at this point, we would be asking the Board to direct staff to look at the feasibility of combining both exams and also give direction to update the content of these written examinations. She added that at this point in time, the Board does not have the statutory authority to combine both examinations, but we could still move forward with updating the content of both exams. If and when the time comes when we gain the statutory authority to offer 1 examination, we can combine those at that time.

Board comment:
Dr. Whitcher commented he believes it's a lot less labor intensive to do an update certainly than to develop a whole new exam and that the Board can probably use most of the existing item banks. Dr. Lincer responded affirmatively.

Ms. McKenzie asked if combining both exams would create the need for 2 different sections and would a candidate have to pass each section? Or would it be completely lumped together? Dr. Lincer responded that we would have a workshop with subject matter experts to answer that question of how to best distribute the weight and make a new examination outline covering everything. Most likely there would be a separate safety section as there is in the Law and Ethics exam, but the others may be combined into their respective sections. Ms. McKenzie expressed her approval of a combined exam if it would be divided into sections.

Ms. Burton asked how the Board would handle the issue on discipline under Law & Ethics if the exam were to be combined. Ms. Wallace clarified that this is considered a licensing examination and it's only utilized for licensure. The ethics courses and requirements are considered different. Ms. Fischer added that the ethics courses and requirements are tailored specifically to the particular licensee being disciplined. It's not the Law and Ethics exam. Ms. Forsythe commented that on occasion, the Board does require the re-take of the Law and Ethics exam for a reinstatement of a license. For this reason, the Board needs to consider keeping the exams separate for that reason, unless they can be divided into parts A and B.

Dr. Dominicis asked if the exam was divided into parts, would both parts of the exam be taken on the same date. Dr. Morrow responded that the Board is going to direct staff to look into that and bring back to the Board.

Public comment:
Claudia Pohl with CDAA asked if the same Law and Ethics exam is given to RDAs, RDAEFs and RDHs. Ms. Forsythe responded that she believes the RDH Law and Ethics exam is different. Ms. Pohl added that CDAA would not like both exams to be combined. If it is combined, it needs to be separated into parts A and B.

Suzie Dault expressed her thoughts on not wanting to see the exam combined.

Lori Hubble, Executive Officer of the Dental Hygiene Committee clarified that the Law and Ethics exam for hygienists is different from the Law and Ethics exam given to RDAs.

Dr. Morrow asked for a motion for consideration be given to direct staff to work with the Department of Consumer Affairs office of Professional Examination Services to update the Law and Ethics Exam and the Written Exam required for Registered Dental Assistants licensure based on the findings recently completed in the Occupational Analysis of the Registered Dental Assistant profession.

The motioner (Judith Forsythe) and seconder (Thomas Stewart) agreed.

Support: Morrow, Forsythe, Burton, Chappell-Ingram, Dawson, Dominicis, King, Le, McKenzie, Stewart, Whitcher, Woo, Contreras, Ramos, Davis-Washington, McNealy.
Oppose: 0 **Abstain:** 0

The motion passes.

Secondly, Dr. Morrow asked for a motion to direct staff to determine if it would be feasible and statutorily authorized to combine both exams into one to allow for a greater pool of availability test questions which would strengthen the psychometric validity of the examinations.

Dr. Dominicis commented that there's already a low pass rate on the RDA exams and that adding more to that exam is going to lower the pass rate even more. The combined exam will lengthen the test. The longer the test is, the higher the chances will be for failing it. He believes its best to leave it separate.

Ms. Fischer asked if the Board would necessarily lengthen the exam. Dr. Lincer responded the combined exam would not necessarily have to be lengthened.

Ms. Burton added that a low pass rate on the RDA exam already exists and that changing and combining both written exams might not be the appropriate thing to do at this time.

Public comment:
Suzie Dault commented that it's very important to have 2 separate exams because combining them would not give us a very true statistical evaluation of whether or not how much did the candidate understand the Law and Ethics and how much they understood on the RDA written exam. Combining both exams will be like mudding the water.

Lisa Okamoto, CA Dental Hygienist Association, brought up a point to consider keeping both exams separate. She mentioned that the Board has had a lot of discussion about increasing enforcement cases due the lack of knowledge and application of the Dental Practice Act on the practitioner's part. She is not convinced that combining the 2 exams would help that situation.

Tamara McNealy asked for a motion to table this discussion until the Board has enough knowledge and information to make an informed decision.

The motioner (Debra Woo) and seconder (Tamara McNealy) agreed but then withdrew their motion.

Dr. Morrow tabled his 2nd motion until a future date when the Board has enough knowledge and information to make an informed decision.

JNT 9 – Discussion and Possible Action Regarding the Registered Dental Assistant in Extended Functions (RDAEF) Written Examination in Accordance with Business and Professions Code Section 139 Requirements.

Dr. Morrow discussed that it's been decided to table this agenda item for discussion for a future Board meeting due the Occupational Analysis report not being complete at this time.

JNT 10 – Update on Dental Assisting Council Regulatory Workshops.

Ms. Wallace gave a summary of the scheduled Regulatory Workshops throughout 2016 for the purpose of developing the dental assisting comprehensive rulemaking package. Ms. Wallace thanked the Dental Assisting Council, stakeholders and our Legal Counsel for their collaboration and participation in getting these workshops up and running.

Ms. McNealy thanked Ms. Wallace, Katie Le and Leslie Campaz for organizing and keeping the workshops running smoothly.

Ms. Forsythe commented that it's exciting to see these workshops moving forward.

JNT 11 – Discussion and Possible Action Regarding the Suspension of the Registered Dental Assistant (RDA) Practical Examination in Accordance with Business and Professions Code Section 1752.1(i)(j).

Ms. Wallace gave an overview of the information provided relating to the possibility of suspending the RDA practical examination. She went on to discuss that now that the Occupational Analysis has been concluded, the Board and Dental Assisting Council can discuss and take action regarding the potential suspension of the examination. The Board and Council can take no action to suspend the RDA practical examination, take action to suspend the RDA Practical Examination until July 1st, 2017 and work with OPES to develop a revised written RDA examination based on the finding of the occupational analysis, take action to suspend the RDA Practical Examination and have staff work with OPES to develop an alternative method to acquire licensure which may not include a practical exam, however that option would require statutory amendment to take effect by July 1st, 2017. Ms. Wallace moved on to state that at this point Board staff does not have a recommendation to move one way or another but is prepared to move in either direction that the Board chooses, whether that means to continue administering the RDA practical examination or suspend the RDA practical examination if necessary.

Ms. Forsythe asked if a 4th option can be added to continue to administer the RDA practical examination while working with OPES to create an alternative.

Dr. Stewart commented that it's difficult for him to enter into this discussion without understanding the problem for the low pass rates. Without that understanding, it's hard for me to support any direction and would like to understand what the core issues are and maybe that can be the start of the conversation. Ms. Fischer responded that in past meetings, it's been discussed that in order to determine why some of the candidates are failing the examination, that would require staff to go into each program and examine each student's record to find out everything we can about the student's to see if we could even determine why they would be failing the exam. That was determined to be not only an unpractical solution but unfeasible as well. Aside from the fact that the students are failing the RDA practical exam, at this point the Board should be discussing whether or not a practical examination is necessary.

Dr. Morrow described the straightforward process of taking a written examination. However, a practical examination has significant number of variables that might or might not be controlled, and if those variables are not controlled they can have a significant outcome affect as far as an individual being able to pass that examination because of those variables are outside of the candidates control.

Dr. Le commented on page 87 of the of the Occupational Analysis report relating to the provisional restoration procedures and how the answers indicate that those duties are not done very often. If the Board is testing on provisional restorations, and the candidates don't really perform these duties in the field, what is the value of the exam? She went on to comment that we need to look at what candidates perform most in the field, and test them on those procedures, if we want to keep the Practical Exam.

Ms. Forsythe commented that that's the point of the Occupational Analysis. To find out what the Board needs to be testing on and change the exam procedure.

Ms. McNealy commented on the variables that are out of the candidates control such as the timeline, the 2 pathways, the application process, facility variations, equipment variations that are not consistent, examiner calibration and bottom line student preparation. All these significantly impact the outcome of the exam.

Ms. Ramos commented on Dr. Le's comment that the answer to these questions will vary, depending on who you ask these questions to. These answers are not all true for everyone working in the dental assisting field. Dr. Le responded that she is basing her opinion on the survey answers because that is all the data we have and it is valid data.

Dr. Woo asked if the pass rate a lot higher when we didn't have this problem and didn't we have a different type of examiner at that time? Ms. Fischer responded that neither the exam nor the examiner has changed. What changed was the calibration of the examiners. In other words a dentist came in and taught the examiners essentially how they should be looking at the results of the exam and grading it. Typically within a calibration, at some point you grade the examiners and determine how many are grading too lenient and how many are grading too hard. Based on information we received, the examiners had been grading too leniently. However the examination has not changed it's just the calibration that has.

Ms. Forsythe commented on the standard that exists in California. She went on to discuss that she has been approached by many dentists expressing their concerns of seeing the RDA practical exam go away because when we hire someone, we don't know what that standard is of the dental assistant is that we're interviewing. If we remove the practical exam and replace it with a written exam, they will become an RDA without being tested clinically.

Ms. Burton moved a motion to go for option 3, suspend the practical exam and look for an alternative that does not include a practical exam.

Dr. Stewart encouraged educators to express their thoughts on getting rid of the practical exam.

Ms. McNealy commented on wanting to see the practical get suspended due to the many uncontrolled variables that contribute to the student's failure of the RDA practical exam, the broken exam system and because dental assistants are under the supervision of a DDS.

Dr. Woo expressed her thoughts on how important it is for her, as a DDS, to know who she is hiring and to know what they can and cannot do. The practical exam at the least guarantees some sort of assurance that the licensed RDA does know how to perform certain procedures.

Dr. Tanner commented that the low pass rate is due to the calibration problem between the educators and the examiners. He went on to say that the Board literally destroys the evidence as to whether a candidate passed or failed. Currently there is not a fair hearing process in the RDA exam because a candidate cannot appeal a process on that exam. He also expressed the importance of keeping the RDA exam.

Suzie Dault also expressed the importance of keeping the RDA practical exam for the safety of the public and because it determines whether or not an individual is clinically able to perform a procedure and actually work on a patient's mouth. She added that there is a valid reason why a Practical exam came into effect years ago and that if we take the practical exam away, the Board is not having any care for the public.

Melodi Randolph, Sac City College Dental Assisting program, commented on what she believes are the biggest problems that contribute to the failure rate. She went on to say that the educators are not informed of the criteria on what the candidates will be tested on. She would like for the educators and candidates to be informed what the criteria is on what they will be tested on. She also pointed out that a lot of the duties of a dental assistant are generally supervised, where a DDS doesn't even have to be in the building. She stated that a dental assistant is not supervised at all times. She described the RDA practical exam as a tool to determine minimal competency on candidates.

Zenia with CDA agreed with everything Ms. Randolph expressed and believes that the RDA exam should stay and suggested that the Board organize workshops where educators can come together. She also would like to see the Board tell the failing candidates the reason for their failure of the exam using language that the candidate was taught in school. That way the candidate knows how to correct their mistake.

Dawn commented on the need to keep the practical exam but updating it. She wants to see the practical test candidates on what's currently being done in the field. She moved on to express that being able to know the grading criteria would help immensely in passing the exam.

Dawn Klien, RDA and Educator, commented that it's the job of the educators to give dentist's quality RDA's. And the practical exam is an important tool to help determine the quality of a candidate. She added that if the practical exam stays, the Board needs to let the educators know what it expects of its students in order to pass the exam.

Lisa Okamoto, California Dental Association, commented that it's very important to maintain some type of practical exam to ensure some level of competency and skill. She added that the Board needs to communicate more closely with the educators.

Dr. Dominicis asked if there exists published grading criteria for the RDA exam. Ms. McNealy answered no. She said it's minimal. Dr. Dominicis went on to express that if the grading criteria is published, the passing grade will rise and suggested that the Board members look into this. Ms. McNealy added that the educators have been asking for the RDA practical exam criteria since 2009. But the excuse that we have been given is that for the protection of exam integrity, the Board can't release that criteria. She also stated that she is against the RDA practical exam in its current state because it sets the candidate up for failure. She reiterated that she is not against a practical exam, she is against the exam as it exists today.

Gayle Mathe, CDA, commented on the importance on keeping some measure of being able to determine the clinical competency of the student with a practical exam. She

added that the exam serves as some feedback for the Board to know how educational programs are doing to prepare their students for the exam.

Cindy Ovard, SJVC Temecula, commented that the practical should stay, but the broken system needs to change.

Cara Miyasaki commented that the practical exam needs to stay and that the grading criteria should be released to educators.

Dr. Lincer commented that there needs to be some way to grade the students in a practical way. She added that the practical exam should be new and improved.

Ms. Burton repeated her motion.

Dr. Stewart discussed alternatives to suspending the exam. He stated that suspending the exam might not be the solution, but rather making the changes the educators have expressed to a faulty exam system.

Ms. McKenzie and Dr. Le agreed with Dr. Stewart's comment.

Mr. Afriat asked how often the exam is given and if the motion to suspend the exam passed, what would Board staff do. Ms. Wallace gave an approximate amount of exams offered throughout a given year and informed Mr. Afriat that if the RDA practical exam was suspended, Board staff would contact the candidates and inform them that the exam has been cancelled.

Ms. McNealy asked what the next step is for those candidates that have taken the written exam, if the RDA practical exam is suspended. Spencer Walker responded that if the candidates meet all of the requirements, even if the RDA practical exam is suspended, the candidate would be able to apply for licensure and it would not be provisional, it would be permanent.

Ms. Burton explained her reasons for choosing to pass the motion she had earlier.

Ms. Lincer commented that OPES is prepared to work closely with the Board to identify issues with the practical exam and to fix those issues if they are asked to do that. She added that OPES has worked with other Boards and their practical exams, has the expertise to improve practical exams, and is more than happy to work closely with the Dental Board of CA to improve their practical exam.

Dr. Stewart commented that we need to hear the educators out and continue to work with them and OPES to keep the practical but drastically improve it.

Spencer Walker read the substitute motion: The motion would be to take no action to suspend the RDA practical exam and direct staff to work with OPES to develop a revised practical examination based on the findings of the now complete occupational analysis of the dental assistant profession to be implemented effective July 1, 2017, and for staff to release the grading criteria of the current practical examination and post it on the Board's website as soon as feasible.

Ms. Fischer stated that the Board will meet with OPES to determine what and how much of the grading criteria can be legally released.

The motioner (Woo) and seconder (McKenzie) agreed. to take no action to suspend the RDA practical exam and direct staff to work with OPES to develop a revised practical examination based on the findings of the now complete occupational analysis of the dental assistant profession to be implemented effective July 1, 2017, and for staff to release the grading criteria of the current practical examination and post it on the Board's website as soon as feasible.

Support: Morrow, Forsythe, Burton, Chappell-Ingram, Dawson, Dominicis, King, Le, McKenzie, Stewart, Whitcher, Woo, Contreras, Ramos, Davis-Washington, McNealy. **Oppose:** 0 **Abstain:** 0

The motion passes.

JNT 12 – Discussion and Possible Action Regarding the Subcommittee Recommendation Relating to Dental Assisting Fee Increases

Ms. Sarkisyan gave an overview of the information provided.

Ms. King asked if the fee increase should be justified. Ms. Wallace gave a detailed explanation of the fee audit the private consultant performed. She went on to explain that some fee values will change in order to sustain the Boards expenditures moving forward. What staff is presenting to the Board are the recommended fee amounts that would need to be assessed to sustain our expenditures.

M/S (Davis-Washington/McNealy) Accept staff's recommendation that the Dental Assisting Council accept the proposed regulatory language and request that the Board accept their recommendation to proceed with the initiation of the rulemaking package relating to the dental assisting fees.

Support: Forsythe, Whitcher, Ramos, Davis-Washington, McNealy. Oppose: 0 Abstain: 0

The motion passed.

The motioner (Mr. Afriat) and seconder (Ms. Forsythe) agreed. To accept the Dental Assisting Council's recommendation to proceed with the initiation of the rulemaking package relating to the dental assisting fees.

Support: Morrow, Forsythe, Burton, Chappell-Ingram, Dawson, Dominicis, King, Le, McKenzie, Stewart, Whitcher, Woo. **Oppose:** 0 **Abstain:** 0

The motion passes.

JNT 13 – Update Regarding Regulatory Language Development to Implement Provisions of AB 1174 (Chapter 662, Statutes of 2014).

Ms. Wallace gave an overview of the information provided.

Dr. Morrow asked for volunteers. Dr. Stewart volunteered.

JNT 14 - Public Comment on Items Not on the Agenda
Cindy Ovard, SJVC Temecula commented on her experience with the recent site visit their school had.

JNT 15 - Adjourn Joint Meeting of the Dental Board and the Dental Assisting Council.
President Morrow adjourned the council meeting at ____ p.m

DRAFT

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MEMORANDUM

DATE	July 22, 2016
TO	Dental Assisting Council Members, Dental Board of California
FROM	Katie Le Dental Assisting Educational Program Coordinator
SUBJECT	**JNT 3:** Overview of the Dental Assisting Educational Program, Course Curriculum Requirements and the Application Process

Background:

Pursuant to California Code of Regulations (CCR), Title 16, Section 1070, *General Provisions Governing all Dental Assistant Educational Programs and Courses*, the Dental Board of California (Board) may approve, provisionally approve, or deny approval of any program or course for which an application to the Board for approval is required.

Educational programs that require an application include:

- Registered Dental Assistant (RDA) Program
- Registered Dental Assistant in Extended Functions (RDAEF) Program

Educational courses that require an application include:

- Coronal Polishing
- Dental Sedation Assistant
- Infection Control
- Orthodontic Assistant
- Pit and Fissure Sealant
- Radiation Safety
- Ultrasonic Scaling

Educational Program and Course Application Process:

Educational Programs Application Process

Applicants for program approval are required to submit the application, applicable fees, and all supporting documentation requested to be considered for approval. The timeline for initial application review is typically 90 days from the date the application is received. Failure to submit a complete application may significantly delay the program approval. Subject matter experts are utilized for the review of the curriculum. If deficiencies are found, the applicant will be notified in writing. It is the responsibility of the applicant to correct all deficiencies before the approval process can continue.

Once all application requirements are met, the applicant for program approval will be notified in writing. Prior to receiving provisional approval, RDA and RDAEF Programs must complete a site visit. The Board will schedule a site visit with each RDA and

RDAEF program applicant after the curriculum has been reviewed and any deficiencies have been addressed. Subject matter experts are utilized for review of facilities, requirements and supplies, and records during site visits.

Initial site visits for provisional approval of a program includes the following:

- Meeting with the program director and administrators;
- Tour of the dental assisting facilities;
- Review of the facilities;
- Review of equipment and supplies;
- Evaluation of the library and internet; and
- A formal exit report

The Board grants provisional approval to RDA and RDAEF programs that pass the site visit, with the intention of revisiting the facility within one year of the approval date; however, the provisional approval is valid until the Board revisits the facility.

Full site visits to remove provisional status include the following:

- Meeting with the program director and administrators;
- Review of the facilities;
- Review of the equipment and supplies;
- Review of the radiation safety records;
- Review of the coronal polishing records;
- Review of the pit and fissure sealant records;
- Review of the evaluation from clinical facilities;
- Review of the advisory committee meeting minutes;
- Review of faculty meeting minutes;
- Observation of students performing basic dental assisting and registered dental assisting duties;
- Private conferences with students;
- Evaluation of the library and internet; and
- A formal exit report

The Board then grants full approval to RDA and RDAEF program that pass the site visit.

Educational Courses Application Process

Applicants for course approval are required to submit the application, applicable fees, and all supporting documentation requested to be considered for approval. The timeline for initial application review is typically 90 days from the date the application is received. Failure to submit a complete application may significantly delay the program approval. Subject matter experts are utilized for the review of the curriculum. If deficiencies are found, the applicant will be notified in writing. It is the responsibility of the applicant to correct all deficiencies before the approval process can continue. Once all application requirements are met, the application will be provided with an approval letter.

Maintenance of Approval:

Pursuant to CCR, Title 16, Section 1070(a)(2), “All Registered Dental Assistant (RDA) and Registered Dental Assistant in Extended Functions (RDAEF) programs and dental assisting educational courses shall be re-evaluated approximately every seven years, but may be subject to re-evaluation and inspection by the Board at any time to review

and investigate compliance with this Article and the Dental Practice Act (Act). Re-evaluation may include a site visit or written documentation that ensures compliance with all regulations." Additionally, all programs and courses must maintain records for five (5) years and inform the Board of any changes to the course content, physical facility, or facility within 10 days of the change.

Program and Course Application Requirements:

Applicants for RDA program approval must meet the requirements outlined in CCR Section 1070.2, *Approval of Registered Dental Assistant Educational Programs*, by submitting proof of the following, prior to being approved by the Board:

1) Submit completed *Registered Dental Assistant (RDA) Program Application for Approval by the Dental Board of California*;
2) Submit $1,400 application fee;
3) If a program wishes to provide stand-alone courses in Infection Control, Radiation Safety, Coronal Polish, and/or Pit and Fissure Sealants, individual applications, fees, and appropriate documentation must be submitted separately;
4) Submit a copy of the program director's license issued by the Board;
5) Submit a copy of the license and resume of each faculty member;
6) Submit evidence that each faculty member instructing Pit and Fissure Sealants has completed a Board-approved course in the application of pit and fissure sealants;
7) Submit a table or chart containing information regarding the intended daily hours for each faculty member in the areas of: daily student contact, class preparation, student advising, and extern visitation;
8) Submit a copy of the certificate of completion that will be issued to students;
9) Submit a list of equipment and supplies that will be provided by each party to instruct all dental assistant and registered dental assistant duties;
10) Submit a description of the operatories, their number, and a list of the equipment and supplies that are housed in the operatory area;
11) Submit a copy of protocols for the following: student immunizations, personal protective equipment, equipment and supply infection control, biohazardous waste, OSHA training requirement for dental office employees, management of training records, management of occupational exposure to blood and body fluids, infection control protocol for operatory set-up and clean-up, infection control protocol during dental treatment, disinfection, sterilization, sanitation, barrier use, surface disinfection, and responsibilities of infection control officer in the dental office;
12) Submit a description of the space and equipment;
13) Submit a copy of each faculty and instructional staff members' current CPR card issued by the American Heart Association or American Red Cross;
14) Submit a copy of the document the program will use for the clinical evaluation of students during externship, which must be signed and dated by the student and instructor;
15) Submit the complete orientation packet that is given to the dentist and all licensed dental healthcare workers who may provide instruction, evaluation, and oversight of the student in the clinical setting prior to placement of a student in the extern site which shall include, at a minimum: student evaluation forms,

objective evaluation criteria, procedures on how the extern's clinical experience is to be conducted including at a minimum when and how the student receives his/her first evaluation, and at the completion of the training, extern time sheet;

16) Submit the evaluation form that will be completed by the student;
17) If an extramural facility is used, submit a copy of the contract of affiliation with each extramural facility;
18) Submit a table or chart showing the following: maximum number of students enrolled per session, number of operatories, faculty/student ratios for laboratory, preclinical, and clinical, the proposed class session schedule with hours, number of students, number of faculty providing instruction, and name of the faculty providing instruction;
19) Submit a table showing the following information for each of the advisory members: name, license number, license expiration date, title, and telephone number;
20) Submit a description of the content and subjects of the advisory committee meeting including its responsibilities;
21) Submit a copy of the certification or diploma for each faculty/instructional staff member;
22) Submit a table or chart containing information regarding the intended daily hours for the program director in the following areas: administrative, student contact, class preparation, student counseling, and extern visitation;
23) Submit a description of the intended frequency and content of staff meetings;
24) Submit an explanation of the financial resources available to support the program and comply with the laws governing program approval;
25) If the program is required to be approved by any other governmental agency, specify which agency and provide a copy of the approval document(s);
26) If the program is accredited by another agency, specify which agency;
27) Submit a floor plan of the entire facility, identifying the location of the following major areas of instruction: lecture area, laboratory, dental operatories, x-ray exposure area, sterilization area, and x-ray processing area;
28) Submit a list of the types, location, and number of the required equipment and armamentarium;
29) Submit a detailed description on how students will be instructed in CAD machine and patient monitoring;
30) Submit a list of all instruments and the quantity that will be utilized to instruct general and specialty dentistry;
31) Submit the following information for each reference material: name, author, publisher, and publication date;
32) Submit a copy of the written policy on managing emergency situations;
33) Submit a description of the location of the eye wash stations and oxygen tank, a list of the contents of the working emergency kit, and a list of the contents of the first aid kit;
34) Submit the curriculum materials, including methods, materials, and examinations with keys, for all subjects taught in the orientation curriculum, which must include tooth anatomy, tooth numbering, general program guidelines, basic chairside skills, emergency and safety precautions, infection control, and sterilization protocols associated with and required for patient treatment;
35) Submit a complete *Application for Approval of Course in Radiation Safety*;

36) Submit a complete *Application for Approval of a Course in Coronal Polishing by an RDA*;
37) Submit a complete *Application for Approval of Course in Pit and Fissure Sealants*; and
38) Submit the following for each program course/module: a detailed program outline, general program objectives, specific objectives in the cognitive and psychomotor domain, criteria for all psychomotor skills, minimum number of satisfactory performances for all psychomotor skills, lesson plans, process evaluation grade sheets, product evaluation grade sheets, and practical and clinical examinations;

Applicants for RDAEF program approval must meet the requirements outlined in CCR Section 1071, *Approval of RDAEF Educational Programs*, by submitting proof of the following, prior to being approved by the Board:

1) Submit completed *Registered Dental Assistant in Extended Functions (RDAEF) Program Application for Approval by the Dental Board of California*;
2) Submit $1,400 application fee;
3) Submit the name and license number of the proposed program director;
4) Submit a description of the responsibilities of the program director;
5) Submit a table containing the name and license number of each faculty member;
6) Submit a copy of the certificate of completion of a six-hour methodology course in clinical evaluation for each faculty member;
7) Submit a copy of each faculty and staff members' current CPR card issued by the American Red Cross or American Heart Association;
8) Submit a copy of the certificate of completion that will be issued to students;
9) Submit a copy of the written policy on managing emergency situations;
10) Submit a description of the location of the eye wash stations and oxygen tank and a list of the contents of the first aid kit;
11) Submit a copy of protocols for the following: personal protective equipment, equipment and supply infection control, biohazardous waste, management of occupational exposure to blood and body fluids, infection control protocol for operatory set-up and clean-up, infection control protocol during dental treatment, disinfection, sterilization, sanitation, barrier use, and surface disinfection;
12) Submit a description of how reuseable instruments are properly sterilized before use on patients;
13) Submit a table or chart containing information on the following: maximum students enrolled per session, number of operatories, and faculty/student ratios for didactic, laboratory, and clinical;
14) Submit a description of the entire facility, identifying the location of the following major areas of instruction: lecture area, laboratory, dental operatories, and sterilization area;
15) Submit a list of the types, location, and number of the required equipment and armamentarium;
16) Submit a description of the operatories, their number, and a list of the equipment and supplies that are housed in the operatory area; and
17) Submit the following for each program course/module: a detailed program outline, general program objectives, specific objectives in the cognitive and

psychomotor domain, criteria for all psychomotor skills, minimum number of satisfactory performances for all psychomotor skills, lesson plans, process evaluation grade sheets, product evaluation grade sheets, and practical and clinical examinations;

Applicants for Coronal Polishing course approval must meet the requirements outlined in CCR Section 1070.4, *Approval of Coronal Polishing Courses,* by submitting proof of the following, prior to being approved by the Board:

1) Submit completed *Application for Approval of a Course in Coronal Polishing by an RDA*;
2) Submit $300 application fee;
3) Submit a copy of the documentation of the required prerequisites for this course;
4) Submit a copy of each faculty member's license and proof of basic life support provided by the American Red Cross or American Heart Association;
5) Submit a copy of the certificates of completion of teaching methodology in clinical evaluation for all faculty;
6) Submit a memorandum of understanding that the course director is aware of his/her responsibilities with regard to course approval;
7) Submit a copy of the certificate of completion to be issued to students;
8) Submit a diagram and description of the facilities (lecture classroom, operatories, laboratories, sterilization area);
9) Submit a copy of the asepsis protocol, written policy on managing emergency situations that will be available to all students, faculty, and staff;
10) Submit a copy of the policy on managing emergency situations;
11) Submit a detailed course outline;
12) Submit general program objectives and specific instructional unit objectives, including theoretical aspects of each subject as well as practical application;
13) Submit a copy of the objective evaluation criteria used to measure student progress;
14) Submit a copy of the task/product evaluation forms;
15) Submit a copy of the standard of performance established by the program that defines the minimum satisfactory performances required for each procedure;
16) Submit a copy of the school's infection control protocols;
17) If an extramural facility is used, submit a copy of the contract used; and
18) Submit a copy of the final examination and answer key

Applicants for Dental Sedation Assistant course approval must meet the requirements outlined in CCR Section 1070.8, *Approval of Dental Sedation Assistant Permit Courses,* by submitting proof of the following, prior to being approved by the Board:

1) Submit completed *Dental Sedation Assistant Course Application for Approval by the Dental Board of California*;
2) Submit $300 application fee;
3) Submit a description of how the course will assure that the dental assistant has completed six months of work experience prior to commencing the course;
4) Submit the name and license number of the proposed course director;
5) Submit a table containing the name and license number of each faculty member;

6) Submit a copy of the certificate of completion of a two-hour teaching methodology course in clinical evaluation for each faculty member;
7) Submit a copy of each faculty and staff members' CPR card issued by the American Red Cross of American Heart Association;
8) Submit a copy of the certificate of completion that will be given to students;
9) Submit a copy of the written policy on managing emergency situations;
10) Submit a copy of protocols for the following: personal protective equipment, equipment and supply infection control, biohazardous waste, management of occupational exposure to blood and body fluids, infection control protocol for operatory set-up and clean-up, infection control protocol during dental treatment, disinfection, sterilization, sanitation, barrier use, and surface disinfection;
11) Submit a description of how reusable instruments are properly sterilized before use on patients;
12) Submit a chart on the faculty/student ratios for didactic, laboratory, and clinical;
13) Submit a description of the entire facility, identifying the location of the following major areas of instruction: lecture area, laboratory, dental operatories or surgical suites, and sterilization area;
14) Submit a list of the types, location, and number of the required equipment and armamentarium;
15) Submit a description of the operatories or surgical suites, their number, and a list of the equipment and supplies that are housed in that area;
16) Submit a detailed course outline including subsections that clearly state curriculum subject matter and specifies instruction hours for each topic in the individual areas of didactic, laboratory, clinical, and externship instruction;
17) Submit general course objectives;
18) Submit specific objectives in the cognitive and psychomotor domain;
19) Submit criteria for all psychomotor skills;
20) Submit the minimum number of satisfactory performances for all psychomotor skills;
21) Submit lesson plans including information sheets/procedure sheets when applicable;
22) Submit process evaluation grade sheets;
23) Submit product evaluation grade sheets;
24) Submit practical and clinical examinations;
25) Submit written examinations and keys; and
26) If an extramural facility is used, submit a copy of the contract used;

Applicants for Infection Control course approval must meet the requirements outlined in CCR Section 1070.6, *Approval of Infection Control Courses,* by submitting proof of the following, prior to being approved by the Board:

1) Submit completed *Infection Control Course Application for Approval by the Dental Board of California*;
2) Submit $300 application fee;
3) Submit the name and license number of the proposed course director;
4) Submit a table containing the name of each faculty member, including a description of each faculty member's experience in the instruction of the infection

control regulations and guidelines issued by the Board and the Division of Occupational Safety and Health (Cal-DOSH);

5) Submit a copy of the certificate of completion of a two-hour methodology course in clinical evaluation for each faculty member;
6) Submit a copy of each faculty and staff members' CPR card issued by the American Red Cross or American Heart Association;
7) Submit a copy of the certificate of completion that will be given to students;
8) Submit a copy of the written policy on managing emergency situations;
9) Submit a copy of protocols for the following: personal protective equipment, equipment and supply infection control, biohazardous waste, OSHA training requirements for dental office employees, management of training records, management of occupational exposure to blood and body fluids, infection control protocol for operatory set-up and clean-up, infection control protocol during dental treatment, disinfection, sterilization, sanitation, barrier use, surface disinfection, and responsibilities of infection control officer in a dental office;
10) Submit a description of how reusable instruments are properly sterilized before use on patients;
11) Submit a description of how the simulation of contamination will occur;
12) Submit a chart on the faculty/student ratios for didactic, laboratory, and clinical;
13) Submit a description of the clinical facility and instrument processing area(s), identifying the location of the following major areas of instruction: lecture area, laboratory, dental operatories, x-ray exposure area, and sterilization area;
14) Submit a list of the types, location, and number of the required equipment and armamentarium;
15) Submit a description of the operatories, their number, and a list of the equipment and supplies that are housed in that area;
16) Submit a detailed course outline including subsections that clearly state curriculum subject matter and specifies instruction hours for each topic in the individual areas of didactic, laboratory, clinical, and externship instruction;
17) Submit general course objectives;
18) Submit specific objectives in the cognitive and psychomotor domain;
19) Submit criteria for all psychomotor skills;
20) Submit the minimum number of satisfactory performances for all psychomotor skills;
21) Submit lesson plans including information sheets/procedure sheets when applicable;
22) Submit process evaluation grade sheets;
23) Submit product evaluation grade sheets;
24) Submit practical and clinical examinations;
25) Submit written examinations and keys; and
26) If an extramural facility is used, submit a copy of the contract used

Applicants for Orthodontic Assistant course approval must meet the requirements outlined in CCR Section 1070.7, *Approval of Orthodontic Assistant Permit Courses,* by submitting proof of the following, prior to being approved by the Board:

1) Submit completed *Orthodontic Assistance Course Application for Approval by the Dental Board of California*;

2) Submit $300 application fee;
3) Submit a description of how the course will assure that the dental assistant has completed the prerequisite of six months of work experience as a dental assistant prior to commencing the course;
4) Submit the name and license number of the proposed course director;
5) Submit a table containing the name and license number of each faculty member;
6) Submit a copy of the certificate of completion of a two-hour course in teaching methodology in clinical evaluation for each faculty member;
7) Submit a copy of each faculty and staff members' CPR card issued by the American Red Cross or American Heart Association;
8) Submit a copy of the certificate of completion;
9) Submit a copy of the written policy on managing emergency situations;
10) Submit a copy of protocols for the following: personal protective equipment, equipment and supply infection control, biohazardous waste, OSHA training requirements for dental office employees, management of training records, management of occupational exposure to blood and body fluids, infection control protocol for operatory set-up and clean-up, infection control protocol during dental treatment, disinfection, sterilization, sanitation, barrier use, and surface disinfection;
11) Submit a description of how reusable instruments are properly sterilized before use on patients;
12) Submit a chart on the faculty/student ratios for didactic, laboratory, and clinical;
13) Submit a description of the entire facility, identifying the location of the following major areas of instruction: lecture area, laboratory, dental operatories, and sterilization area;
14) Submit a list of the types, location, and number of the required equipment and armamentarium;
15) Submit a description of the operatories, their number, and a list of the equipment and supplies that are housed in the operatory area;
16) Submit a detailed course outline including subsections that clearly state curriculum subject matter and specifies instruction hours for each topic in the individual areas of didactic, laboratory, clinical, and externship instruction;
17) Submit general course objectives;
18) Submit specific objectives in the cognitive and psychomotor domain;
19) Submit criteria for all psychomotor skills;
20) Submit the minimum number of satisfactory performances for all psychomotor skills;
21) Submit lesson plans including information sheets/procedure sheets when applicable;
22) Submit process evaluation grade sheets;
23) Submit product evaluation grade sheets;
24) Submit practical and clinical examinations; and
25) If an extramural facility is used, submit a copy of the contract used

Applicants for Pit and Fissure Sealant course approval must meet the requirements outlined in CCR Section 1070.3, *Approval of Pit and Fissure Sealant Courses,* by submitting proof of the following, prior to being approved by the Board:

1) Submit completed *Application for Approval of a Course in Pit and Fissure Sealants*;
2) Submit $300 application fee;
3) Submit a copy of the documentation of the required prerequisites for this course;
4) Submit a copy of each faculty member's license and proof of CPR certification issued by the American Red Cross or American Heart Association;
5) Submit a copy of the certificates of completion of teaching methodology in clinical evaluation for all faculty;
6) Submit a memorandum of understanding that the course director is aware of his/her responsibilities with regard to course approval;
7) Submit a copy of the certificate of completion to be issued to students;
8) Submit a diagram and description of the facilities (lecture classroom, operatories, laboratories, sterilization area);
9) Submit a copy of the asepsis protocol, written policy on managing emergency situations that will be available to all students, faculty, and staff;
10) Submit a copy of the policy on managing emergency situations;
11) Submit a detailed course outline;
12) Submit general program objectives and specific instructional unit objectives, including theoretical aspects of each subject as well as practical application;
13) Submit a copy of the objective evaluation criteria used to measure student progress toward attainment of specific course objectives;
14) Submit an equipment list specifying how each item will be used and how it has been adapted and/or prepared to be used in the application of pit and fissure sealants;
15) If an extramural facility is used, submit a copy of the contract used; and
16) Submit a copy of the final examination and answer key

Applicants for Radiation Safety course approval must meet the requirements outlined in CCR Section 1014, *Approval of Pit and Fissure Sealant Courses,* and 1014.1, *Requirements for Radiation Safety Courses*, by submitting proof of the following, prior to being approved by the Board:

1) Submit completed *Application for Approval of a Course in Radiation Safety*;
2) Submit $300 application fee;
3) Submit a diagram of the facility;
4) Submit a copy of the certificate of completion that will be issued to students;
5) Submit a document signed by the supervising dentist that states that the dentist agrees to be responsible for and in control of the quality, radiation safety, and technical aspects of all x-ray examinations and procedures in accordance with Section 106974 of the Health and Safety Code;
6) Submit a copy of the program director data sheet, curriculum vitae, current CPR certification and teaching credential and/or teaching methodology certification;
7) Submit a copy of the program faculty data sheet, curriculum vitae, current CPR certification and teaching credential and/or teaching methodology certification for all faculty members;
8) Submit a description and any prerequisites of the established criteria and procedures used for admission to the class;
9) Submit a description and diagram of the operatory(s);

10) Submit a copy of the infection control procedures followed in the x-ray operatory to include at a minimum the equipment, surface barriers, pre-cleaning, set up and clean-up protocol;
11) Submit a copy of the documentation that establishes that each radiographic operatory fully complies with the California Radiation Control Regulations (Title 17, California Code of Regulations, commencing with Section 30100), and that it is properly equipped with supplies and equipment for practical work and includes for every seven (7) students at least one (1) functioning radiography machine that is adequately filtered and collimated in compliance with Department of Health Services regulations and is equipped with a minimum of one (1) set of position-indicating film holding devices for each machine;
12) Submit a copy of the infection control procedures followed in the x-ray darkroom or processing area to include at minimum the equipment, surface barrier, pre-cleaning, set-up and clean-up protocols, special precautions for daylight and installed automatic processing units;
13) Submit a description of the process by which the position-indicating film holding devices are sterilized;
14) Submit a description of the method(s) for waste removal of processing chemicals;
15) Submit a list of the audiovisual equipment and classroom instructional materials used for the course;
16) Submit a list of all x-ray equipment, manikins, and supplies maintained by the program;
17) Submit a comprehensive curriculum that includes: a detailed course outline that states curriculum subject matter, specific instructional hours in the individual areas of didactic, laboratory and clinical instruction, general program objectives, specific instructional unit objectives in the cognitive and psychomotor domain and objective evaluation criteria with noted critical steps and number of attempts required for psychomotor skills;
18) Submit a description of the laboratory (manikin) and clinical practice (patients) experience that includes a description of the amount of exposures for bitewing and full mouth surveys, sequence of performance from laboratory to clinical experience; film
packet requirement for laboratory and clinical experience, how students progress towards attainment of clinical competency, detailed description of prescription form used prior to exposure on clinical patients and patient criteria;
19) Submit a copy of the criteria for an acceptable bitewing and periapical film that includes a description of root apex of the periapical exposure, contact area, density and contrast;
20) Submit a description of the retake policy for periapical and bitewing films that are deemed undiagnostic;
21) Submit an explanation of the procedures used for assisting students with academic difficulties;
22) Submit a description of the procedures for conducting the written examination and what constitutes a passing score for this examination;
23) Submit a description of the procedures used to evaluate the bitewing and full mouth surveys and include the radiograph evaluation forms that include the following: description of student and faculty evaluation protocol, worksheets that

include areas of identification for commonly encountered exposure and processing errors, x-ray manikin and clinical patient product evaluation sheets;

24) Submit a description of how the clinical examination is conducted and what constitutes a passing score for this examination;
25) Submit a copy of a written contract of affiliation that describes the settings in which the clinical experience is received, verification that all equipment meets the State requirements, a medical health history form used for each patient being exposed, and the signature of the provider of the facility with address and phone number;
26) Submit a copy of a sample certificate that would contain the student's name, course provider name, course provider address, date course was completed, signature of administrator/faculty, Dental Board issued course ID number, and school seal; and
27) If an extramural facility is used, submit a copy of the contract used

Applicants for Ultrasonic Scaling course approval must meet the requirements outlined in CCR Section 1070.5, *Approval of Ultrasonic Scaling Courses,* by submitting proof of the following, prior to being approved by the Board:

1) Submit completed *Application for Approval of a Course in the use of Ultrasonic Scaler*;
2) Submit $300 application fee;
3) Submit a copy of each faculty member's license and proof of basic life support provided by the American Red Cross or American Heart Association;
4) Submit a diagram of the operatories used for training; and
5) Submit a copy of complete curriculum, course outlines, objectives, and grading criteria

Status of Dental Assisting Program and Course Applications

Table 1 identifies the number of applications which have received approval since the May 2016 Board Meeting. The table also displays applications of those that are currently moving through the approval process. Table 2 is a list of names of the applicants who have received approval since the last Board meeting.

Table 1 DA Program & Course Applications Approved and Received Since Last Board Meeting				
Program or Course Title	**Approved**	**Denied**	**Received/ Currently Processing**	**Incomplete Application Received**
RDA Program/Curriculum	2	0	1	0
RDAEF/Program/Curriculum	0	0	3	0
Radiation Safety	4	0	0	0
Coronal Polish	0	0	1	0
Pit and Fissure	1	0	0	0
Ultrasonic Scaler	1	0	1	0
Infection Control	2	0	3	0
OA Permit	5	0	3	1
DSA Permit	0	0	0	0
Total Applications	**15**	**0**	**12**	**1**

Table 2

Dental Assisting Courses Approved Since Last Board Meeting

Provider	Approval Date	RDA Program	X-Ray	CP	P/F	US	IC	DSA	OA
California Dental Certifications	6/7/16	X							
California Institute of Dental Education	6/22/16					X			
California Institute of Dental Education	6/22/16		X						
California Institute of Dental Education	6/2/16						X		
Career Care Institute, Inc.	5/20/16		X						
Dental Assisting School of San Pablo	5/20/16		X						
Dental Assisting School of San Pablo	5/20/16				X				
Dental Career Institute	7/72016		X						
Dr. Mary Thodas	6/22/16								X
Hulse Orthodontics	7/7/16								X
Image Orthodontics	5/19/16								X
Kairos Career College	6/22/16								X
RDA4U	6/2/16						X		
Rowan Orthodontics	6/22/16								X
Unitek College - Concord	7/1/16	X							
INDIVIDUAL COURSE TOTALS		**2**	**4**	**0**	**1**	**1**	**2**	**0**	**5**
TOTAL APPROVALS = 15									

STATE OF CALIFORNIA
DEPARTMENT OF CONSUMER AFFAIRS
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MEMORANDUM

DATE	July 20, 2016
TO	Dental Assisting Council Members, Dental Board of California
FROM	Jana Adams, Dental Assisting Examination Coordinator Dental Board of California
SUBJECT	**JNT 4:** Update on Dental Assisting Examinations Statistics

Staff is not including a breakdown of first-time and repeat test takers for the written or practical examination statistics shown in any of the tables below. Since the implementation of BreEZe, staff has not been able to generate a report that provides this information. The report needed should be created by the next board meeting.

The following table provides the written examination pass and fail statistics for candidates who took the examinations from January 1, 2016 to June 30, 2016.

Written Examination Statistics for **January – June 2016 All Candidates**

Written Exam	Total Candidates Tested	# of Examinee Passed	# of Examinee Failed	% Passed	% Failed
RDA	896	566	330	63	37%
RDA Law & Ethics	520	274	246	53%	47%
RDAEF	36	20	16	56%	44%
Orthodontic Assistant	169	69	100	41%	59%
Dental Sedation Assistant	0	-	-	-	-

The following tables provide the RDA practical examination statistics for the months of January through May 2016.

RDA Practical Examination Statistics for **2016 All Candidates**

Practical Exam	Total Candidates Tested	% Passed	% Failed
RDA – February North	297	69%	31%
RDA – February South	495	41%	59%
RDA – April North	297	50%	50%
RDA – May South	476	39%	61%
Total for Year	**1564**	**52%**	**48%**

The following tables provide the RDAEF practical examination statistics for the months of January through May 2016.

RDAEF Clinical/Practical Examination Statistics for **2016 All Candidates**

Clinical/Practical Exam	Total Candidates Tested	% Passed	% Failed
RDAEF – Jan North	18	67%	33%
RDAEF- May South	30	73%	27%
Total for Year	48	54%	46%

The following tables provide RDA Practical Examination Pass and Fail Rates of overall candidates from 2011 through 2016 broken down by the North, South and Central region examination sites.

RDA Practical Examination Statistics for **2011-2016 Overall Pass Rates**

	North	South	Central
2011			85%
2012	88%	82%	88%
2013	88%	84%	84%
2014	41%	33%	59%
2015	64%	49%	81%
2016	59%	41%	

RDA Practical Examination Statistics for **2011-2016 Overall Fail Rates**

	North	South	Central
2011			15%
2012	12%	18%	12%
2013	12%	16%	16%
2014	59%	67%	41%
2015	37%	51%	19%
2016	41%	59%	

RDA PRACTICAL EXAMINATION SCHOOL STATISTICS

Program	Feb-16	Apr-16	May-16	Total
4D College - Victorville (914)	**100%**	**N/A**	**100%**	**100%**
pass	1		1	**2**
fail	0		0	**0**
Allan Hancock (508)	**50%**	**N/A**	**50%**	**50%**
pass	1		1	**2**
fail	1		1	**2**
American Career - Anaheim (896)	**30%**	**0%**	**46%**	**38%**
pass	3	0	6	**9**
fail	7	1	7	**15**
American Career - Los Angeles (867)	**75%**	**0%**	**50%**	**53%**
pass	3	0	5	**8**
fail	1	1	5	**7**
American Career - Ontario (905)	**50%**	**N/A**	**63%**	**55%**
pass	7		5	**12**
fail	7		3	**10**
Anthem College (503)	**100%**	**0%**	**N/A**	**33%**
pass	1	0		**1**
fail	0	2		**2**
Bakersfield College (509)	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				
Baldy View ROP (590)	**0%**	**N/A**	**0%**	**0%**
pass	0		0	**0**
fail	1		1	**2**
Blake Austin College (897)	**86%**	**67%**	**N/A**	**80%**
pass	12	4		**16**
fail	2	2		**4**
Butte County ROP (605)	**100%**	**N/A**	**N/A**	**100%**
pass	2			**2**
fail	0			**0**
CA Coll of Voc Careers (878)	**0%**	**N/A**	**N/A**	**0%**
pass	0			**0**
fail	1			**1**

RDA PRACTICAL EXAMINATION SCHOOL STATISTICS

Program	Feb-16	Apr-16	May-16	Total
Cabrillo College, Aptos (510) (001)	**0%**	**N/A**	**50%**	**33%**
pass	0		1	**1**
fail	1		1	**2**
Carrington - Antioch (886)	**0%**	**0%**	**N/A**	**0%**
pass	0	0		**0**
fail	1	1		**2**
Carrington - Citrus Heights (882)	**76%**	**56%**	**0%**	**67%**
pass	13	5	0	**18**
fail	4	4	1	**9**
Carrington - Pleasant Hill (868)	**86%**	**50%**	**50%**	**69%**
pass	12	5	1	**18**
fail	2	5	1	**8**
Carrington - Pomona (908)	**50%**	**N/A**	**100%**	**60%**
pass	2		1	**3**
fail	2		0	**2**
Carrington - Sacramento (436)	**60%**	**54%**	**20%**	**54%**
pass	18	13	1	**32**
fail	12	11	4	**27**
Carrington - San Jose (876)	**43%**	**53%**	**N/A**	**50%**
pass	3	8		**11**
fail	4	7		**11**
Carrington - San Leandro (609)	**50%**	**31%**	**N/A**	**40%**
pass	6	4		**10**
fail	6	9		**15**
Carrington - Stockton (902)	**86%**	**0%**	**N/A**	**60%**
pass	6	0		**6**
fail	1	3		**4**
Carrington - Emeryville (904)	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				
Cerritos College (511)	**30%**	**N/A**	**50%**	**33%**
pass	3		1	**4**
fail	7		1	**8**

RDA PRACTICAL EXAMINATION SCHOOL STATISTICS

Program	Feb-16	Apr-16	May-16	Total
Chaffey College (514)	**50%**	**N/A**	**43%**	**45%**
pass	2		3	**5**
fail	2		4	**6**
Charter College - Canyon Country (401)	**100%**	**N/A**	**75%**	**83%**
pass	2		3	**5**
fail	0		1	**1**
Citrus College (515)	**N/A**	**N/A**	**50%**	**50%**
pass			2	**2**
fail			2	**2**
City College of SF (534)	**N/A**	**100%**	**N/A**	**100%**
pass		1		**1**
fail		0		**0**
College of Alameda (506)	**0%**	**100%**	**N/A**	**40%**
pass	0	2		**2**
fail	3	0		**3**
College of Marin (523)	**0%**	**100%**	**N/A**	**50%**
pass	0	2		**2**
fail	2	0		**2**
College of the Redwoods (838)	**100%**	**100%**	**N/A**	**100%**
pass	2	1		**3**
fail	0	0		**0**
College of San Mateo (536)	**100%**	**0%**	**N/A**	**75%**
pass	3	0		**3**
fail	0	1		**1**
Concorde Career - Garden Grove (425)	**31%**	**0%**	**47%**	**39%**
pass	5	0	9	**14**
fail	11	1	10	**22**
Concorde Career - North Hollywood (435)	**50%**	**N/A**	**50%**	**50%**
pass	3		3	**6**
fail	3		3	**6**
Concorde Career - San Bernardino (430)	**23%**	**N/A**	**35%**	**29%**
pass	6		8	**14**
fail	20		15	**35**

RDA PRACTICAL EXAMINATION SCHOOL STATISTICS

Program	Feb-16	Apr-16	May-16	Total
Concorde Career - San Diego (421)	**55%**	**83%**	**46%**	**57%**
pass	6	5	6	**17**
fail	5	1	7	**13**
Concorde Career - Contra Costa (745)	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				
Cypress College (518)	**75%**	**N/A**	**N/A**	**75%**
pass	3			**3**
fail	1			**1**
Diablo Valley College (516)	**80%**	**0%**	**N/A**	**67%**
pass	4	0		**4**
fail	1	1		**2**
East Los Angeles Occ Cntr (855)	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				
Eden ROP (608) (856)	**100%**	**N/A**	**0%**	**50%**
pass	1		0	**1**
fail	0		1	**1**
Everest - Alhambra (406)	**50%**	**N/A**	**0%**	**33%**
pass	1		0	**1**
fail	1		1	**2**
Everest - Anaheim (403)/(600)	**100%**	**N/A**	**50%**	**75%**
pass	2		1	**3**
fail	0		1	**1**
Everest - City of Industry (875)	**50%**	**N/A**	**100%**	**75%**
pass	1		2	**3**
fail	1		0	**1**
Everest - Gardena (870)	**0%**	**N/A**	**N/A**	**0%**
pass	0			**0**
fail	1			**1**
Everest - Los Angeles (410)	**100%**	**N/A**	**50%**	**60%**
pass	1		2	**3**
fail	0		2	**2**

RDA PRACTICAL EXAMINATION SCHOOL STATISTICS

Program	Feb-16	Apr-16	May-16	Total
Everest - Ontario (501)	**75%**	**N/A**	**33%**	**57%**
pass	3		1	**4**
fail	1		2	**3**
Everest - Reseda (404)	**25%**	**N/A**	**40%**	**33%**
pass	1		2	**3**
fail	3		3	**6**
Everest - San Bern (881)	**20%**	**N/A**	**0%**	**13%**
pass	1		0	**1**
fail	4		3	**7**
Everest - San Fran (407)	**100%**	**33%**	**N/A**	**50%**
pass	1	1		**2**
fail	0	2		**2**
Everest - San Jose (408)	**N/A**	**100%**	**N/A**	**100%**
pass		1		**1**
fail		0		**0**
Everest - Torrance (409)	**N/A**	**0%**	**N/A**	**0%**
pass		0		**0**
fail		1		**1**
Everest - W LA (874) ***(formerly Nova)***	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				
Foothill College (517)	**100%**	**100%**	**N/A**	**100%**
pass	1	1		**2**
fail	0	0		**0**
Galen - Fresno (413)	**100%**	**N/A**	**N/A**	**100%**
pass	1			**1**
fail	0			**0**
Galen - Modesto (497)	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				
Galen - Visalia (445)	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				

RDA PRACTICAL EXAMINATION SCHOOL STATISTICS

Program	Feb-16	Apr-16	May-16	Total
Grossmont Com Coll - El Cajon (519)	**50%**	**100%**	**47%**	**50%**
pass	3	1	8	**12**
fail	3	0	9	**12**
Grossmont Health Oc (610)	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				
Hacienda La Puente (776)	**25%**	**N/A**	**N/A**	**25%**
pass	1			**1**
fail	3			**3**
Heald - Concord (891)	**0%**	**43%**	**N/A**	**38%**
pass	0	3		**3**
fail	1	4		**5**
Heald - Hayward (889)	**75%**	**0%**	**N/A**	**60%**
pass	3	0		**3**
fail	1	1		**2**
Heald - Roseville (911)	**40%**	**0%**	**N/A**	**33%**
pass	2	0		**2**
fail	3	1		**4**
Heald - Salida (910)	**0%**	**0%**	**N/A**	**0%**
pass	0	0		**0**
fail	2	1		**3**
Heald - Stockton (887)	**100%**	**100%**	**N/A**	**100%**
pass	1	1		**2**
fail	0	0		**0**
Kaplan - Bakersfield (884)	**50%**	**75%**	**0%**	**44%**
pass	4	3	0	**7**
fail	4	1	4	**9**
Kaplan - Clovis (885)	**78%**	**29%**	**100%**	**59%**
pass	7	2	1	**10**
fail	2	5	0	**7**
Kaplan - Modesto (499)/(890)	**86%**	**54%**	**25%**	**65%**
pass	12	7	1	**20**
fail	2	6	3	**11**

RDA PRACTICAL EXAMINATION SCHOOL STATISTICS

Program	Feb-16	Apr-16	May-16	Total
Kaplan - Palm Springs (901)	**25%**	**N/A**	**0%**	**13%**
pass	1		0	**1**
fail	3		4	**7**
Kaplan - Riverside (898)	**60%**	**0%**	**60%**	**55%**
pass	3	0	3	**6**
fail	2	1	2	**5**
Kaplan - Sacramento (888)	**80%**	**56%**	**N/A**	**64%**
pass	4	5		**9**
fail	1	4		**5**
Kaplan - San Diego (899)	**17%**	**N/A**	**67%**	**33%**
pass	1		2	**3**
fail	5		1	**6**
Kaplan - Stockton (611)	**0%**	**100%**	**N/A**	**50%**
pass	0	1		**1**
fail	1	0		**1**
Kaplan - Vista (900)	**50%**	**0%**	**33%**	**40%**
pass	4	0	2	**6**
fail	4	1	4	**9**
Milan Institute - Indio (906)	**0%**	**N/A**	**14%**	**8%**
pass	0		1	**1**
fail	5		6	**11**
Milan Institute - Visalia (907)	**70%**	**20%**	**33%**	**50%**
pass	7	1	1	**9**
fail	3	4	2	**9**
Modesto Junior College (526)	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				
Monterey Peninsula (527)	**50%**	**N/A**	**100%**	**67%**
pass	1		1	**2**
fail	1		0	**1**
Moreno Valley College (903)	**0%**	**N/A**	**67%**	**33%**
pass	0		2	**2**
fail	3		1	**4**

Program	Feb-16	Apr-16	May-16	Total
Mt. Diablo/Loma Vista (500)	**78%**	**63%**	**N/A**	**71%**
pass	7	5		**12**
fail	2	3		**5**
National Education Center (604)	**0%**	**0%**	**N/A**	**0%**
pass	0	0		**0**
fail	1	1		**2**
Newbridge College - SD (883) ***(formerly Valley Career College)***	**0%**	**N/A**	**N/A**	**0%**
pass	0			**0**
fail	2			**2**
North Orange Co (495)	**47%**	**N/A**	**67%**	**50%**
pass	7		2	**9**
fail	8		1	**9**
North-West - Pomona (420)	**100%**	**N/A**	**100%**	**100%**
pass	1		1	**2**
fail	0		0	**0**
North-West - West Covina (419)	**0%**	**N/A**	**50%**	**30%**
pass	0		3	**3**
fail	4		3	**7**
Orange Coast (528)	**10%**	**N/A**	**100%**	**18%**
pass	1		1	**2**
fail	9		0	**9**
Palomar College (721)	**75%**	**N/A**	**100%**	**80%**
pass	3		1	**4**
fail	1		0	**1**
Pasadena City College (529)	**0%**	**N/A**	**47%**	**43%**
pass	0		9	**9**
fail	2		10	**12**
Pima - Chula Vista (871)	**54%**	**0%**	**57%**	**52%**
pass	7	0	4	**11**
fail	6	1	3	**10**
Reedley College (530)	**80%**	**N/A**	**N/A**	**80%**
pass	4			**4**
fail	1			**1**

Program	Feb-16	Apr-16	May-16	Total
Riverside County Office of Edu. (921)	**N/A**	**N/A**	**100%**	**100%**
pass			1	**1**
fail			0	**0**
Riverside ROP (498)	**29%**	**N/A**	**40%**	**32%**
pass	4		2	**6**
fail	10		3	**13**
Sac City College (532)	**0%**	**50%**	**N/A**	**33%**
pass	0	1		**1**
fail	1	1		**2**
San Bernardino Cty ROP - Hesperia (454)	**14%**	**N/A**	**57%**	**36%**
pass	1		4	**5**
fail	6		3	**9**
San Bernardino Cty ROP - Morongo USD (913)	**0%**	**N/A**	**100%**	**50%**
pass	0		1	**1**
fail	1		0	**1**
San Diego Mesa (533)	**33%**	**N/A**	**0%**	**25%**
pass	1		0	**1**
fail	2		1	**3**
SJVC - Bakersfield (601)	**100%**	**0%**	**0%**	**20%**
pass	1	0	0	**1**
fail	0	1	3	**4**
SJVC - Fresno (602)	**71%**	**40%**	**67%**	**60%**
pass	5	2	2	**9**
fail	2	3	1	**6**
SJVC - Rancho Cordova (880)	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				
SJVC - Temecula (919)	**N/A**	**N/A**	**100%**	**100%**
pass			6	**6**
fail			0	**0**
SJVC - Visalia (446)	**63%**	**29%**	**33%**	**44%**
pass	5	2	1	**8**
fail	3	5	2	**10**

RDA PRACTICAL EXAMINATION SCHOOL STATISTICS

Program	Feb-16	Apr-16	May-16	Total
San Jose City College (535)	**67%**	**56%**	**100%**	**60%**
pass	4	10	1	**15**
fail	2	8	0	**10**
Santa Barbara City College (537)	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				
Santa Rosa JC (538)	**100%**	**33%**	**N/A**	**71%**
pass	4	1		**5**
fail	0	2		**2**
Shasta/Trinity ROP (455)	**N/A**	**100%**	**N/A**	**100%**
pass		1		**1**
fail		0		**0**
Southern Cal ROC (612)	**0%**	**N/A**	**0%**	**0%**
pass	0		0	**0**
fail	1		1	**1**
Southland College (428)	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				
The Valley School of DA (920)	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				
Tri Cities ROP (877)	**100%**	**N/A**	**0%**	**33%**
pass	1		0	**1**
fail	0		2	**2**
UEI - Chula Vista (879)	**75%**	**N/A**	**67%**	**71%**
pass	6		4	**10**
fail	2		2	**4**
UEI - El Monte (909)	**20%**	**N/A**	**0%**	**7%**
pass	1		0	**1**
fail	4		10	**14**
UEI - Huntington Park (448)	**14%**	**N/A**	**30%**	**24%**
pass	1		3	**4**
fail	6		7	**13**

RDA PRACTICAL EXAMINATION SCHOOL STATISTICS

Program	Feb-16	Apr-16	May-16	Total
UEI - LA (449)	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				
UEI - Ontario (450)	**50%**	**0%**	**20%**	**33%**
pass	3	0	1	**4**
fail	3	1	4	**8**
UEI - San Diego (451)	**N/A**	**N/A**	**0%**	**0%**
pass			0	**0**
fail			1	**1**
UEI - Riverside (917)	**67%**	**100%**	**33%**	**52%**
pass	8	1	4	**13**
fail	4	0	8	**12**
UEI - Van Nuys (453)	**20%**	**N/A**	**40%**	**30%**
pass	1		2	**3**
fail	4		3	**7**
UEI - Gardena (915)	**60%**	**N/A**	**0%**	**38%**
pass	3		0	**3**
fail	2		3	**5**
UEI - Anaheim (916)	**N/A**	**N/A**	**N/A**	**N/A**
pass				
fail				
RDA Schools (ACE)	**52%**	**N/A**	**N/A**	**52%**
pass	274			**274**
fail	258			**258**
ADA Education	**53%**	**30%**	**33%**	**48%**
pass	23	3	1	**27**
fail	20	7	2	**29**
MIX OJT & ED (MEO)	**55%**	**N/A**	**N/A**	**55%**
pass	23			**23**
fail	19			**19**
O-J-T	**100%**	**N/A**	**N/A**	**40%**
pass	2	45	45	**92**
fail	0	37	101	**138**

RDA PRACTICAL EXAMINATION SCHOOL STATISTICS

Program	Feb-16	Apr-16	May-16	Total
PERCENT PASS	52%	50	39%	48%
TOTAL PASS	414	148	186	748
TOTAL FAIL	378	149	290	817

RDAEF PRACTICAL EXAMINATION SCHOOL STATISTICS

Program	Jan-16	16-May	Total
Expanded Functions Dental Assistants			
Amalgam and Composite	50%	81%	**77%**
pass	2	21	**23**
fail	2	5	**7**
Cord Retraction & Final Impression	50%	81%	**77%**
Pass	2	21	**23**
Fail	2	5	**7**
J Production (005)			
Amalgam and Composite	100%	N/A	**100%**
pass	1		**1**
fail	0		**0**
Cord Retraction & Final Impression	100%	N/A	**100%**
pass	1		**1**
fail	0		**0**
Loma Linda University (007)			
Amalgam and Composite	N/A	N/A	**N/A**
pass			
fail			
Cord Retraction & Final Impression	N/A	N/A	**N/A**
pass			
fail			
University of California, Los Angeles (002)			
Amalgam and Composite	100%	65%	**68%**
pass	2	17	**19**
fail	0	9	**9**
Cord Retraction & Final Impression	100%	65%	**68%**
pass	2	17	**19**
fail	0	9	**9**
University of the Pacfic (006)			
Amalgam and Composite	63%	75%	**67%**
pass	5	3	**8**
fail	3	1	**4**
Cord Retraction & Final Impression	63%	75%	**67%**
pass	5	3	**8**
fail	3	1	**4**
AMALGAM AND COMPOSITE	78%	67%	**71%**
TOTAL PASS	14	20	**34**
TOTAL FAIL	4	10	**14**
CORD RETRACTION & FINAL IMPRESSION	71%	73%	**77%**
TOTAL PASS	12	24	**36**
TOTAL FAIL	5	6	**11**

*January 2016 Exam had 1 RDAEF2 Candidate

*May 2016 Exam had 0 RDAEF2 Candidates

RDA WRITTEN EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
4D College - Victorville (914)	N/A	N/A	N/A	N/A	N/A	N/A	**N/A**
pass							
fail							
Allan Hancock (508)	N/A	N/A	N/A	N/A	N/A	N/A	**100%**
pass						1	**1**
fail						0	**0**
American Career - Anaheim (896)	0%	67%	60%	100%	50%	50%	**58%**
pass	0	2	3	2	3	1	**11**
fail	1	1	2	0	3	1	**8**
American Career - Los Angeles (867)	0%	75%	100%	0%	40%	50%	**53%**
pass	0	3	2	0	2	1	**8**
fail	2	1	0	0	3	1	**7**
American Career - Ontario (905)	N/A	67%	33%	0%	N/A	N/A	**44%**
pass		2	2	0		1	**4**
fail		1	4	1		1	**5**
Anthem College (503)	67%	33%	33%	0%	50%	0%	**38%**
pass	2	1	1	0	1	0	**5**
fail	1	2	2	1	1	1	**8**
Bakersfield College	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Baldy View ROP (590)	N/A	N/A	0%	N/A	100%	N/A	**25%**
pass			0		1		**1**
fail			3		0		**3**
Blake Austin College (897)	80%	100%	100%	60%	100%	33%	**72%**
pass	4	1	2	3	2	1	**13**
fail	1	0	0	2	0	2	**5**
Butte County ROP (605)	100%	N/A	100%	N/A	N/A	100%	**100%**
pass	1		1			1	**2**
fail	0		0			0	**0**
Cabrillo College (001)	N/A	N/A	100%	N/A	N/A	0%	**100%**
pass			1			0	**1**
fail			0			1	**0**
CA Coll of Voc Careers (878)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Carrington - Antioch (886)	N/A	100%	N/A	N/A	N/A	N/A	**100%**
pass		1					**1**
fail		0					**0**
Carrington - Citrus Heights (882)	N/A	100%	N/A	67%	100%	67%	**80%**
pass		1		2	3	2	**8**
fail		0		1	0	1	**2**
Carrington - Pleasant Hill (868)	100%	60%	60%	50%	67%	67%	**69%**
pass	3	3	3	2	2	2	**9**

RDA WRITTEN EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
fail	0	2	2	2	1	1	**4**
Carrington - Pomona (908)	N/A	100%	0%	N/A	N/A	N/A	**40%**
pass		2	0			0	**2**
fail		0	3			1	**3**
Carrington - Sacramento (436)	67%	67%	71%	100%	40%	80%	**70%**
pass	2	4	10	4	2	4	**16**
fail	1	2	4	0	3	1	**7**
Carrington - San Jose (876)	100%	50%	100%	50%	100%	67%	**80%**
pass	1	1	2	1	3	2	**4**
fail	0	1	0	1	0	1	**1**
Carrington - San Leandro (609)	100%	N/A	100%	50%	67%	60%	**100%**
pass	4		1	1	2	3	**5**
fail	0		0	1	1	2	**0**
Carrington - Stockton (902)	100%	100%	50%	100%	100%	100%	**75%**
pass	1	3	2	3	1	1	**6**
fail	0	0	2	0	0	0	**2**
Carrington - Emeryville (904)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Cerritos College (511)	100%	0%	100%	100%	25%	100%	**60%**
pass	2	0	1	1	1	1	**3**
fail	0	2	0	0	3	0	**2**
Chaffey College (514)	100%	100%	N/A	N/A	N/A	N/A	**100%**
pass	1	2		0		1	**3**
fail	0	0		1		0	**0**
Charter College - Canyon Country (401)	N/A	100%	100%	50%	N/A	N/A	**100%**
pass		1	1	1			**2**
fail		0	0	1			**0**
Citrus College (515)	80%	50%	100%	0%	N/A	N/A	**75%**
pass	4	1	1				**6**
fail	1	1	0				**2**
City College of SF (534)	N/A	100%	100%	100%	100%	N/A	**100%**
pass		2	2	1	1		**4**
fail		0	0	0	0		**0**
College of Alameda (506)	100%	N/A	50%	N/A	0%	100%	**60%**
pass	1		2		0	2	**3**
fail	0		2		2	0	**2**
College of Marin (523)	50%	N/A	N/A	100%	N/A	N/A	**50%**
pass	1			3			**1**
fail	1			0			**1**
College of the Redwoods (838)	N/A	N/A	100%	N/A	N/A	100%	**100%**
pass			1			3	**1**
fail			0			0	**0**
College of San Mateo (536)	0%	50%	25%	50%	100%	100%	**29%**
pass	0	1	1	1	3	2	**2**

RDA WRITTEN EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
fail	1	1	3	1	0	0	**5**
Concorde Career - Garden Grove (425)	0%	67%	33%	0%	50%	57%	**33%**
pass	0	2	1	0	1	4	**3**
fail	3	1	2	2	1	3	**6**
Concorde Career - North Hollywood (435)	N/A	0%	N/A	N/A	0%	100%	**0%**
pass		0		1	0	1	**0**
fail		2		0	1	0	**2**
Concorde Career - San Bernardino (430)	40%	67%	67%	33%	50%	60%	**57%**
pass	2	2	4	1	2	3	**8**
fail	3	1	2	2	2	2	**6**
Concorde Career - San Diego (421)	N/A	57%	50%	100%	100%	33%	**55%**
pass		4	2	2	2	1	**6**
fail		3	2	0	0	2	**5**
Contra Costa (745)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Cypress College (518)	0%	100%	100%	N/A	100%	N/A	**75%**
pass	0	2	1		1		**3**
fail	1	0	0		0		**1**
Diablo Valley College (516)	N/A	100%	100%	0%	N/A	N/A	**100%**
pass		3	1	0			**4**
fail		0	0	2			**0**
East Los Angeles Occ Cntr (855)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Eden ROP (608) (856)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Everest - Alhambra (406)	100%	N/A	N/A	0%	N/A	N/A	**100%**
pass	2			0			**2**
fail	0			1			**0**
Everest - Anaheim (403)/(600)	0%	N/A	100%	N/A	100%	0%	**50%**
pass	0		1		1		**1**
fail	1		0		0		**1**
Everest - City of Industry (875)	N/A	100%	N/A	100%	N/A	N/A	**100%**
pass		1		1			**1**
fail		0		0			**0**
Everest - Gardena (870)	0%	100%	0%	0%	100%	100%	**33%**
pass	0	1	0	0	1	1	**1**
fail	1	0	1	1	0	0	**2**
Everest - Los Angeles (410)	N/A	100%	100%	N/A	100%	0%	**100%**
pass		1	1		1	0	**2**
fail		0	0		0	1	**0**
Everest - Ontario (501)	50%	80%	100%	0%	N/A	0%	**75%**
pass	1	4	1	0		0	**6**

RDA WRITTEN EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
fail	1	1	0	1		1	**2**
Everest - Reseda (404)	N/A	50%	100%	0%	50%	N/A	**67%**
pass		1	1	0	1		**2**
fail		1	0	1	1		**1**
Everest - San Bern (881)	100%	0%	N/A	N/A	N/A	N/A	**33%**
pass	1	0				2	**1**
fail	0	2				0	**2**
Everest - San Fran (407)	0%	N/A	100%	N/A	0%	50%	**67%**
pass	0		2		0	1	**2**
fail	1		0		2	1	**1**
Everest - San Jose (408)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Everest - Torrance (409)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Everest - W LA (Was Nova) (874)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Foothill College (517)	100%	100%	100%	N/A	100%	100%	**100%**
pass	1	2	1		1	1	**4**
fail	0	0	0		0	0	**0**
Galen - Fresno (413)	N/A	50%	N/A	50%	100%	N/A	**50%**
pass		1		1	1		**1**
fail		1		1	0		**1**
Galen - Modesto (497)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Galen - Visalia (445)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Grossmont Com Coll - El Cajon (519)	67%	100%	100%	100%	67%	67%	**80%**
pass	2	1	1	1	2	2	**4**
fail	1	0	0	0	1	1	**1**
Grossmont Health Oc (610)	N/A	N/A	100%	N/A	100%	N/A	**100%**
pass			1		1		**2**
fail			0		0		**0**
Hacienda La Puente (776)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Heald - Concord (891)	100%	100%	100%	33%	100%	N/A	**100%**
pass	2	1	1	1	1		**4**
fail	0	0	0	2	0		**0**
Heald - Hayward (889)	100%	N/A	0%	67%	0%	0%	**67%**
pass	2		0	2	0	0	**2**

RDA WRITTEN EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
fail	0		1	1	1	1	**1**
Heald - Roseville (911)	N/A	100%	0%	100%	100%	N/A	**50%**
pass		1	0	2	1		**1**
fail		0	1	0	0		**1**
Heald - Salida (910)	100%	N/A	100%	100%	N/A	N/A	**100%**
pass	1		1	2			**2**
fail	0		0	0			**0**
Heald - Stockton (887)	N/A	0%	100%	N/A	N/A	100%	**50%**
pass		0	1			1	**1**
fail		1	0			0	**1**
Kaplan - Bakersfield (884)	N/A	67%	50%	50%	20%	33%	**57%**
pass		2	2	1	1	1	**4**
fail		1	2	1	4	2	**3**
Kaplan - Clovis (885)	50%	50%	67%	100%	N/A	67%	**54%**
pass	3	2	2	1		2	**7**
fail	3	2	1	0		1	**6**
Kaplan - Modesto (499)/(890)	0%	50%	57%	100%	75%	67%	**43%**
pass	0	2	4	3	3	4	**6**
fail	3	2	3	0	1	2	**8**
Kaplan - Palm Springs (901)	N/A	N/A	50%	0%	80%	0%	**50%**
pass			1	0	4	0	**1**
fail			1	1	1	1	**1**
Kaplan - Riverside (898)	N/A	100%	N/A	N/A	100%	N/A	**100%**
pass		1			1		**1**
fail		0			0		**0**
Kaplan - Sacramento (888)	0%	50%	0%	40%	0%	0%	**20%**
pass	0	1	0	2	0	0	**1**
fail	1	1	2	3	1	1	**4**
Kaplan - San Diego (899)	67%	N/A	100%	0%	0%	0%	**75%**
pass	2		1	0	0	0	**3**
fail	1		0	2	1	2	**1**
Kaplan - Stockton (611)	0%	N/A	100%	N/A	0%	N/A	**67%**
pass	0		2		0		**2**
fail	1		0		1		**1**
Kaplan - Vista (900)	100%	100%	100%	100%	33%	67%	**100%**
pass	2	1	1	2	1	2	**4**
fail	0	0	0	0	2	1	**0**
Milan Institute - Indio (906)	0%	33%	50%	100%	N/A	N/A	**33%**
pass	0	1	1	2			**2**
fail	1	2	1	0			**4**
Milan Institute - Visalia (907)	N/A	100%	0%	67%	N/A	N/A	**50%**
pass		1	0	2			**1**
fail		0	1	1			**1**
Modesto Junior College (526)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							

RDA WRITTEN EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
fail							
Monterey Peninsula (527)	N/A	100%	100%	N/A	100%	100%	**100%**
pass		2	2		1	1	**4**
fail		0	0		0	0	**0**
Moreno Valley College (903)	N/A	N/A	N/A	N/A	100%	N/A	**100%**
pass					1		**1**
fail					0		**0**
Mt. Diablo/Loma Vista (500)	100%	100%	N/A	80%	100%	N/A	**100%**
pass	2	2		4	1		**4**
fail	0	0		1	0		**0**
National Education Center (604)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Newbridge College - SD (883)	N/A	100%	N/A	N/A	N/A	N/A	**100%**
pass		1					**1**
fail		0					**0**
North Orange Co (formerly Valley Career Coll) (495)	50%	100%	25%	N/A	N/A	50%	**43%**
pass	1	1	1			1	**3**
fail	1	0	3			1	**4**
North-West - Pomona (420)	N/A	0%	N/A	100%	N/A	N/A	**0%**
pass		0		1			**0**
fail		1		0			**1**
North-West - West Covina (419)	N/A	N/A	60%	0%	100%	50%	**60%**
pass			3	0	2	1	**3**
fail			2	2	0	1	**2**
Orange Coast (528)	N/A	N/A	N/A	N/A	N/A	100%	**100%**
pass						1	**1**
fail						0	**0**
Palomar College (721)	N/A	100%	N/A	100%	N/A	N/A	**100%**
pass		1		1			**1**
fail		0		0			**0**
Pasadena City College (529)	N/A	100%	100%	N/A	60%	100%	**100%**
pass		2	2		3	5	**4**
fail		0	0		2	0	**0**
Pima - Chula Vista (871)	100%	0%	100%	50%	100%	50%	**75%**
pass	2	0	1	2	3	1	**3**
fail	0	1	0	2	0	1	**1**
Riverside County Office of Education (921)	N/A	N/A	100%	50%	100%	100%	**100%**
pass			1	1	1	1	**1**
fail			0	1	0	0	**0**
Reedley College (530)	100%	0%	67%	67%	50%	50%	**67%**
pass	2	0	4	2	1	1	**6**
fail	0	1	2	1	1	1	**3**
Riverside ROP (498)	100%	83%	67%	50%	33%	50%	**80%**
pass	1	5	2	1	1	1	**8**

RDA WRITTEN EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
fail	0	1	1	1	2	1	**2**
Sac City College (532)	N/A	100%	0%	50%	0%	100%	**50%**
pass		1	0	1	0	1	**1**
fail		0	1	1	1	0	**1**
San Bernardino Cty ROP - Hesperia (454)	N/A	0%	0%	100%	0%	50%	**0%**
pass		0	0	1	0	1	**0**
fail		2	1	0	1	1	**3**
San Bernardino Cty ROP - Morongo USD (913)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
San Diego Mesa (533)	50%	100%	100%	50%	N/A	N/A	**75%**
pass	1	1	1	1			**3**
fail	1	0	0	1			**1**
SJVC - Bakersfield (601)	N/A	100%	N/A	N/A	N/A	N/A	**100%**
pass		3		0			**3**
fail		0		1			**0**
SJVC - Fresno (602)	0%	100%	67%	100%	100%	50%	**70%**
pass	0	3	4	3	2	1	**7**
fail	1	0	2	0	0	1	**3**
SJVC - Rancho Cordova (880)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
SJVC - Temecula (919)	100%	67%	0%	N/A	100%	50%	**67%**
pass	2	2	0		1	1	**4**
fail	0	1	1		0	1	**2**
SJVC - Visalia (446)	40%	100%	71%	50%	0%	100%	**69%**
pass	2	4	5	1	0	2	**11**
fail	3	0	2	1	2	0	**5**
San Jose City College (535)	100%	33%	100%	80%	50%	100%	**85%**
pass	7	1	3	8	2	3	**11**
fail	0	2	0	2	2	0	**2**
Santa Barbara City College (537)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Santa Rosa JC (538)	50%	100%	100%	N/A	100%	N/A	**83%**
pass	1	1	3		1		**5**
fail	1	0	0		0		**1**
Shasta/Trinity ROP (455)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Southern Cal ROC - Torrance (612)	N/A	N/A	N/A	100%	100%	0%	**67%**
pass				2	2	0	**2**
fail				0		1	**1**
Southland College (428)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							

RDA WRITTEN EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
fail							
Tri Cities ROP (877)	N/A	N/A	N/A	N/A	N/A	100%	100%
pass						1	1
fail						0	0
UEI - Chula Vista (879)	0%	N/A	100%	N/A	N/A	0%	50%
pass	0		1			0	1
fail	1		0			2	1
UEI - El Monte (909)	N/A	100%	N/A	100%	67%	N/A	100%
pass		2		1	2		2
fail		0		0	1		0
UEI - Huntington Park (448)	67%	33%	100%	N/A	25%	N/A	57%
pass	2	1	1		1		4
fail	1	2	0		3		3
UEI - LA (449)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
UEI - Ontario (450)	50%	100%	50%	N/A	100%	N/A	60%
pass	1	1	1		1		3
fail	1	0	1		0		2
UEI - San Diego (451)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
UEI - Riverside (917)	75%	0%	100%	25%	0%	50%	67%
pass	3	0	1	1	0	1	4
fail	1	1	0	3	1	1	2
UEI - Van Nuys (453)	0%	100%	0%	100%	N/A	N/A	33%
pass	0	1	0	1			1
fail	1	0	1	0			2
UEI - Gardena (915)	100%	100%	100%	0%	33%	50%	100%
pass	1	1	1	0	1	1	3
fail	0	0	0	2	2	1	0
UEI - Anaheim (916)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
RDA Schools	64%	69%	63%	N/A	N/A	N/A	65%
(ACE) pass	76	105	110				291
fail	43	47	64				154
ADA Education	33%	64%	64%	88%	67%	50%	63%
pass	2	7	7	7	6	3	32
fail	4	4	4	1	3	3	19
PERCENT PASS	62%	69%	63%	63%	59%	62%	63%
TOTAL PASS	78	112	117	91	85	83	566
TOTAL FAIL	47	51	68	55	58	51	330

RDAEF WRITTEN EXAMINATION PROGRAM STATISTICS

Program	Jan-16	16-Apr	16-May	16-Jun	Total
Expanded Functions Dental Assistants Association (004)					
pass		0	6	5	**11**
fail		2	1	2	**5**
J Production (005)					
pass			0	0	**0**
fail			1	1	**2**
Loma Linda University (007)					
pass					
fail					
University of California, Los Angeles (002)					
pass		1	2	1	**4**
fail		3	2	1	**6**
University of the Pacfic (006)					
pass		0		5	**5**
fail		2		1	**3**
PERCENT PASS		**13%**	**67%**	**69%**	**56%**
TOTAL PASS	**0**	**1**	**8**	**11**	**20**
TOTAL FAIL	**0**	**7**	**4**	**5**	**16**

RDA LAW ETHICS EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	16-May	Jun-16	Total
4D College - Victorville (914)	100%	N/A	0%	0%	N/A	N/A	**50%**
pass	1		0	0			**1**
fail	0		1	1			**1**
Allan Hancock (508)	N/A	N/A	N/A	N/A	N/A	100%	
pass						1	
fail						0	
American Career - Anaheim (896)	N/A	17%	25%	100%	88%	N/A	**20%**
pass		1	1	2	7		**2**
fail		5	3	0	1		**8**
American Career - Los Angeles (867)	50%	100%	0%	40%	50%	0%	**44%**
pass	2	1	0	2	2	0	**7**
fail	2	0	1	3	2	1	**9**
American Career - Ontario (905)	N/A	75%	50%	20%	100%	0%	**67%**
pass		3	1	1	1	0	**4**
fail		1	1	4	0	2	**2**
Anthem College (503)	50%	40%	33%	50%	0%	N/A	**38%**
pass	2	2	1	1	0		**6**
fail	2	3	2	1	2		**10**
Bakersfield College	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Baldy View ROP (590)	N/A	N/A	0%	N/A	N/A	0%	**0%**
pass			0			0	**0**
fail			2			1	**2**
Blake Austin College (897)	50%	60%	100%	N/A	50%	67%	**71%**
pass	1	3	4	1	1	2	**12**
fail	1	2	0		1	1	**5**
Butte County ROP (605)	100%	N/A	100%	N/A	N/A	100%	
pass	1		1			1	**2**
fail	0		0			0	**0**
CA Coll of Voc Careers (878)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Carrington - Antioch (886)	N/A	100%	N/A	N/A	N/A	N/A	
pass		1					**1**
fail		0					**0**
Carrington - Citrus Heights (882)	33%	83%	33%	75%	100%	33%	**60%**
pass	1	5	1	3	1	1	**12**
fail	2	1	2	1	0	2	**8**
Carrington - Pleasant Hill (868)	100%	100%	67%	50%	60%	50%	**68%**
pass	1	5	2	3	3	1	**15**
fail	0	0	1	3	2	1	**7**
Carrington - Pomona (908)	N/A	100%	N/A	N/A	N/A	N/A	**100%**
pass		1					**1**
fail		0					**0**
Carrington - Sacramento (436)	50%	57%	33%	73%	83%	60%	**56%**
pass	2	4	5	8	5	3	**27**

RDA LAW ETHICS EXAMINATION SCHOOL STATISTICS

Program		Jan-16	Feb-16	Mar-16	Apr-16	16-May	Jun-16	Total
	fail	2	3	10	3	1	2	**21**
Carrington - San Jose (876)		0%	100%	100%	N/A	50%	57%	**80%**
	pass	0	3	1		1	4	**4**
	fail	1	0	0		1	3	**1**
Carrington - San Leandro (609)		0%	50%	75%	0%	N/A	50%	**36%**
	pass	0	1	3	0		2	**4**
	fail	1	1	1	4		2	**7**
Carrington - Stockton (902)		67%	100%	0%	50%	0%	0%	**53%**
	pass	2	4	0	2	0	0	**8**
	fail	1	0	2	2	1	1	**7**
Carrington - Emeryville (904)		N/A	N/A	N/A	N/A	N/A	N/A	
	pass							
	fail							
Cerritos College (511)		100%	0%	100%	N/A	50%	N/A	**50%**
	pass	1	0	1		1		**2**
	fail	0	2	0		1		**2**
Chaffey College (514)		100%	N/A	100%	N/A	N/A	50%	
	pass	2		2			1	**4**
	fail	0		0			1	**0**
Charter College - Canyon Country (401)		N/A	100%	100%	0%	100%	N/A	**100%**
	pass		1	1	0	1		**2**
	fail		0	0	1	0		**0**
Citrus College (515)		100%	100%	100%	N/A	100%	N/A	**100%**
	pass	3	2	1		1		**6**
	fail	0	0	0		0		**0**
City College of SF (534)		50%	N/A	100%	100%	100%	N/A	**80%**
	pass	1		3	1	2		**4**
	fail	1		0	0	0		**1**
College of Alameda (506)		100%	0%	33%	N/A	50%	N/A	**33%**
	pass	1	0	1		1		**2**
	fail	0	2	2		1		**4**
College of Marin (523)		0%	100%	N/A	100%	100%	100%	**67%**
	pass	0	2		4	1	1	**2**
	fail	1	0		0	0	0	**1**
College of the Redwoods (838)		N/A	N/A	0%	100%	N/A	67%	**0%**
	pass			0	1		2	**0**
	fail			1	0		1	**1**
College of San Mateo (536)		0%	100%	50%	100%	100%	N/A	**70%**
	pass	0	2	2	1	2		**7**
	fail	1	0	2	0	0		**3**
Concorde Career - Garden Grove (425)		67%	0%	67%	50%	0%	43%	**43%**
	pass	2	0	2	2	0	3	**9**
	fail	1	1	1	2	3	4	**12**
Concorde Career - North Hollywood		N/A	N/A	N/A	N/A	N/A	0%	
(435)	pass						0	
	fail						1	

RDA LAW ETHICS EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	16-May	Jun-16	Total
Concorde Career - San Bernardino (430)	50%	50%	100%	0%	50%	40%	**50%**
pass	3	4	3	0	2	2	**14**
fail	3	4	0	2	2	3	**14**
Concorde Career - San Diego (421)	67%	17%	67%	40%	100%	50%	**54%**
pass	2	1	2	2	5	1	**13**
fail	1	5	1	3	0	1	**11**
Contra Costa (745)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Cypress College (518)	100%	N/A	67%	100%	N/A	N/A	**75%**
pass	1		2	1			**3**
fail	0		1	0			**1**
Diablo Valley College (516)	N/A	25%	75%	N/A	N/A	N/A	**58%**
pass		1	6				**7**
fail		3	2				**5**
East Los Angeles Occ Cntr (855)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Eden ROP (608) (856)	N/A	N/A	N/A	0%	N/A	100%	
pass				0		2	
fail				1		0	
Everest - Alhambra (406)	100%	N/A	N/A	N/A	0%	N/A	**100%**
pass	1				0		**1**
fail	0				1		**0**
Everest - Anaheim (403)/(600)	N/A	N/A	0%	N/A	N/A	0%	**0%**
pass			0			0	**0**
fail			1			1	**1**
Everest - City of Industry (875)	N/A	N/A	N/A	N/A	100%	N/A	
pass					1		
fail					0		
Everest - Gardena (870)	N/A	50%	N/A	50%	0%	100%	**50%**
pass		1		1	0	1	**1**
fail		1		1	1	0	**1**
Everest - Los Angeles (410)	N/A	N/A	N/A	0%	100%	0%	
pass				0	2	0	
fail				1	0	1	
Everest - Ontario (501)	33%	0%	50%	N/A	0%	100%	**33%**
pass	1	0	1		0	1	**2**
fail	2	1	1		2	0	**4**
Everest - Reseda (404)	N/A	0%	0%	100%	50%	0%	**0%**
pass		0	0	1	1	0	**0**
fail		3	2	0	1	1	**5**
Everest - San Bern(881)	100%	0%	N/A	100%	N/A	50%	**33%**
pass	1	0		1		1	**1**
fail	0	2		0		1	**2**
Everest - San Fran (407)	N/A	N/A	50%	33%	33%	0%	**50%**

RDA LAW ETHICS EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	16-May	Jun-16	Total
pass			1	1	1	0	**1**
fail			1	2	2	1	**1**
Everest - San Jose (408)	0%	N/A	N/A	0%	100%	100%	**0%**
pass	0			0	1	1	**0**
fail	1			1	0	0	**1**
Everest - Torrance (409)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Everest - W LA (874) (formerly Nova)	N/A	0%	N/A	N/A	N/A	N/A	**0%**
pass		0					**0**
fail		1					**1**
Foothill College - Los Altos (007)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Foothill Community College - Los Altos Hills (517)	100%	0%	100%	N/A	N/A	100%	**75%**
pass	1	0	2			1	**3**
fail	0	1	0			0	**1**
Galen - Fresno (413)	N/A	N/A	N/A	N/A	0%	N/A	
pass					0		
fail					1		
Galen - Modesto (497)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Galen - Visalia (445)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Grossmont Com Coll - El Cajon (519)	75%	N/A	N/A	33%	75%	60%	
pass	3			1	3	3	
fail	1			2	1	2	
Grossmont Health Oc (610)	N/A	N/A	N/A	N/A	0%	N/A	
pass					0		
fail					1		
Hacienda La Puente (776)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Heald - Concord (891)	N/A	0%	100%	67%	50%	0%	**50%**
pass		0	1	2	2	0	**1**
fail		1	0	1	2	1	**1**
Heald - Hayward (889)	50%	N/A	100%	50%	33%	N/A	**67%**
pass	1		1	1	1		**2**
fail	1		0	1	2		**1**
Heald - Roseville (911)	N/A	100%	100%	0%	N/A	N/A	**100%**
pass		1	1	0			**2**
fail		0	0	1			**0**
Heald - Salida (910)	N/A	100%	0%	0%	0%	50%	**50%**
pass		1	0	0	0	1	**1**

RDA LAW ETHICS EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	16-May	Jun-16	Total
fail		0	1	2	1	1	**1**
Heald - Stockton (887)	100%	100%	100%	0%	N/A	100%	**75%**
pass	1	1	1	0		1	**3**
fail	0	0	0	1		0	**1**
Kaplan - Bakersfield (884)	N/A	0%	100%	0%	75%	0%	**25%**
pass		0	1	0	3	0	**1**
fail		3	0	1	1	1	**3**
Kaplan - Clovis (885)	50%	17%	43%	80%	67%	0%	**43%**
pass	3	1	3	4	2	0	**13**
fail	3	5	4	1	1	3	**17**
Kaplan - Modesto (499)/(890)	33%	20%	56%	20%	22%	43%	**34%**
pass	2	1	5	1	2	3	**14**
fail	4	4	4	4	7	4	**27**
Kaplan - Palm Springs (901)	N/A	50%	N/A	N/A	40%	0%	**50%**
pass		1			2	0	**1**
fail		1			3	2	**1**
Kaplan - Riverside (898)	N/A	100%	N/A	N/A	N/A	0%	**100%**
pass		1				0	**1**
fail		0				1	**0**
Kaplan - Sacramento (888)	0%	N/A	100%	33%	100%	N/A	**50%**
pass	0		1	1	1		**1**
fail	1		0	2	0		**1**
Kaplan - San Diego (899)	50%	N/A	0%	33%	100%	N/A	**33%**
pass	1		0	1	1		**1**
fail	1		1	2	0		**2**
Kaplan - Stockton (611)	N/A	50%	100%	N/A	N/A	N/A	**67%**
pass		1	1				**2**
fail		1	0				**1**
Kaplan - Vista (900)	75%	N/A	50%	67%	50%	100%	**67%**
pass	3		1	2	1	1	**4**
fail	1		1	1	1	0	**2**
Los Angeles City College (522)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Milan Institute - Indio (906)	0%	0%	0%	0%	0%	100%	**14%**
pass	0	0	0	0	0	1	**1**
fail	1	1	1	2	1	0	**6**
Milan Institute - Visalia (907)	N/A	100%	0%	50%	100%	N/A	**50%**
pass		1	0	1	1		**1**
fail		0	1	1	0		**1**
Modesto Junior College (526)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Monterey Peninsula (527)	N/A	N/A	100%	0%	67%	N/A	**100%**
pass			2	0	2		**2**
fail			0	1	1		**0**

RDA LAW ETHICS EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	16-May	Jun-16	Total
Moreno Valley College (903)	N/A	100%	N/A	N/A	100%	N/A	**100%**
pass		1			1		**1**
fail		0			0		**0**
Mt. Diablo/Loma Vista (500)	100%	67%	50%	100%	100%	N/A	**83%**
pass	1	2	1	5	1		**10**
fail	0	1	1	0	0		**2**
National Education Center (604)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Newbridge College - SD (883) (formerly Valley Career Coll)	100%	N/A	N/A	N/A	100%	100%	**100%**
pass	1				1	1	**1**
fail	0				0	0	**0**
North Orange Co (495)	100%	N/A	25%	0%	0%	100%	**40%**
pass	1		1	0	0	1	**2**
fail	0		3	1	1	0	**3**
North-West - Pomona (420)	0%	0%	67%	N/A	100%	N/A	**40%**
pass	0	0	2		1		**2**
fail	1	1	1		0		**3**
North-West - West Covina (419)	N/A	0%	33%	100%	N/A	100%	**25%**
pass		0	1	2		1	**1**
fail		1	2	0		0	**3**
Orange Coast (528)		100%	N/A	N/A	0%	100%	**100%**
pass		1			0	1	**1**
fail		0			1	0	**0**
Palomar College (721)	100%	N/A	100%	N/A	N/A	N/A	**100%**
pass	2		1				**3**
fail	0		0				**0**
Pasadena City College (529)	N/A	100%	N/A	N/A	80%	100%	**100%**
pass		3			4	2	**3**
fail		0			1	0	**0**
Pima - Chula Vista (871)	100%	100%	100%	100%	100%	67%	**92%**
pass	3	1	1	1	4	2	**12**
fail	0	0	0	0	0	1	**1**
Reedley College (530)	100%	0%	80%	25%	0%	N/A	**53%**
pass	3	0	4	1	0		**8**
fail	0	1	1	3	2		**7**
Riverside County Office of Education (921)	100%	N/A	100%	0%	100%	100%	**100%**
pass	1		1	0	1	1	**2**
fail	0		0	1	0	0	**0**
Riverside ROP (498)	100%	29%	40%	75%	67%	100%	**52%**
pass	1	2	2	3	2	1	**11**
fail	0	5	3	1	1	0	**10**
Sac City College (532)	100%	N/A	100%	50%	N/A	0%	**100%**
pass	1		2	1		0	**3**
fail	0		0	1		2	**0**
San Bernardino Cty ROP - Hesperia (454)	0%	25%	0%	0%	0%	50%	**18%**

RDA LAW ETHICS EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	16-May	Jun-16	Total
pass	0	1	0	0	0	1	**2**
fail	2	3	1	1	1	1	**9**
San Bernardino Cty ROP - Morongo USD (913)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
San Diego Mesa (533)	N/A	100%	N/A	N/A	100%	N/A	**100%**
pass		1			1		**1**
fail		0			0		**0**
SJVC - Bakersfield (601)	100%	75%	N/A	N/A	0%	N/A	**80%**
pass	1	3			0		**4**
fail	0	1			1		**1**
SJVC - Fresno (602)	100%	33%	80%	50%	100%	50%	**74%**
pass	3	1	4	1	4	1	**14**
fail	0	2	1	1	0	1	**5**
SJVC - Rancho Cordova (880)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
SJVC - Temecula (919)	100%	60%	0%	100%	100%	100%	**64%**
pass	1	3	0	1	1	1	**7**
fail	0	2	2	0	0	0	**4**
SJVC - Visalia (446)	83%	0%	40%	60%	50%	67%	**58%**
pass	5	0	2	3	2	2	**14**
fail	1	1	3	2	2	1	**10**
San Jose City College (535)	100%	40%	50%	33%	80%	80%	**63%**
pass	5	2	2	3	8	4	**24**
fail	0	3	2	6	2	1	**14**
Santa Barbara City College (537)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Santa Rosa JC (538)	60%	100%	100%	N/A	N/A	100%	**75%**
pass	3	1	2			1	**6**
fail	2	0	0			0	**2**
Shasta/Trinity ROP (455)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Southern Cal ROC - Torrance (612)	100%	100%	N/A	0%	0%	100%	**100%**
pass	2	1		0	0	1	**3**
fail	0	0		2	1	0	**0**
Southland College (428)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
Tri Cities ROP (877)	N/A	0%	N/A	N/A	N/A	N/A	**0%**
pass		0					**0**
fail		1					**1**
UEI - Chula Vista (879)	0%	0%	50%	0%	100%	0%	**25%**
pass	0	0	1	0	1	0	**2**

RDA LAW ETHICS EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	16-May	Jun-16	Total
fail	1	1	1	2	0	1	**6**
UEI - El Monte (909)	N/A	100%	0%	100%	25%	N/A	**33%**
pass		1	0	1	1		**1**
fail		0	2	0	3		**2**
UEI - Huntington Park (448)	0%	67%	0%	0%	0%	25%	**23%**
pass	0	2	0	0	0	1	**3**
fail	3	1	1	1	1	3	**10**
UEI - LA (449)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
UEI - Ontario (450)	0%	0%	50%	0%	N/A	50%	**14%**
pass	0	0	1	0		1	**1**
fail	2	2	1	1		1	**6**
UEI - San Diego (451)	N/A	N/A	N/A	N/A	N/A	N/A	
pass							
fail							
UEI - Riverside (917)	0%	0%	0%	33%	33%	0%	**15%**
pass	0	0	0	1	1	0	**2**
fail	2	2	1	2	2	2	**11**
UEI - Van Nuys (453)	33%	N/A	0%	N/A	N/A	N/A	**25%**
pass	1		0				**1**
fail	2		1				**3**
UEI - Gardena (915)	100%	50%	100%	N/A	0%	0%	**71%**
pass	1	2	2		0	0	**5**
fail	0	2	0		1	1	**2**
UEI - Anaheim (916)	N/A	N/A	0%	N/A	N/A	N/A	
pass							
fail							
RDA Schools (ACE)	60%	49%	54%	N/A	N/A	N/A	**54%**
pass	79	85	94				**258**
fail	52	88	80				**220**
ADA Education	33%	38%	45%	80%	71%	50%	**47%**
pass	5	6	5	4	5	5	**30**
fail	10	10	6	1	2	5	**34**
PERCENT PASS	**58%**	**48%**	**54%**	**48%**	**60%**	**51%**	**53%**
TOTAL PASS	**84**	**91**	**99**	**79**	**105**	**70**	**274**
TOTAL FAIL	**62**	**98**	**86**	**86**	**70**	**67**	**246**

OA WRITTEN EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
Andrea DeLurgio, DDS (032)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Bart R. Boulton, DDS (038)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Bella Smile (016)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Dental Career Institute (006)	100%	N/A	N/A	50%	N/A	100%	**75%**
pass	1			1		1	**3**
fail	0			1		0	**1**
Dental Pros (007)	100%	0%	33%	33%	25%	75%	**38%**
pass	1	0	1	1	2	3	**8**
fail	0	2	2	2	6	1	**13**
Dental Specialties Institute Inc. (015)	0%	67%	33%	N/A	N/A	0%	**29%**
pass	0	2	2			0	**4**
fail	2	1	4			3	**10**
Diablo Orthodontic Specialities (096)	100%	100%	N/A	100%	N/A	N/A	**100%**
pass	1	1		1			**3**
fail	0	0		0			**0**
Downey Adult School (004)	0%	N/A	N/A	N/A	N/A	N/A	**0%**
pass	0						**0**
fail	1						**1**
Dr. Brian C Crawford (086)	100%	N/A	N/A	N/A	N/A	N/A	**100%**
pass	1						**1**
fail	0						**0**
Dr. Christopher C. Cruz (081)	N/A	100%	N/A	N/A	N/A	N/A	**100%**
pass		1					**1**
fail		0					**0**
Dr. Douglas Nguyen (012)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Dr. Efstatios Righellis (029)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Dr. Jasmine Gordon (008)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Dr. Jason M. Cohen (085)	100%	N/A	N/A	N/A	N/A	N/A	**100%**
pass	1						**1**
fail	0						**0**
Dr. Joel Brodskey (013)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Dr. Joseph Gray (009)	N/A	N/A	N/A	0%	N/A	N/A	**0%**

OA WRITTEN EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
pass				0			**0**
fail				1			**1**
Dr. Kurt Stromberg (014)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Dr. Michael Payne/Cao (005)	N/A	0%	80%	0%	N/A	N/A	**57%**
pass		0	4	0			**4**
fail		1	1	1			**3**
Dr. Waleed Soliman, Brite Dental Group (020)	N/A	N/A	N/A	N/A	0%	100%	**50%**
pass					0	1	**1**
fail					1	0	**1**
Expanded Functions Dental Assistant Assoc (001)	26%	60%	21%	50%	40%	20%	**36%**
pass	5	6	3	8	6	2	**30**
fail	14	4	11	8	9	8	**54**
Howard Healthcare Academy, LLC (084)	N/A	100%	N/A	N/A	N/A	N/A	**100%**
pass		1					**1**
fail		0					**0**
J Productions (003)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Joseph K. Buchanan DDS, Inc (036)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Kubisch A Dental Corporation (028)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
M. John Redmond, DDS (024)	N/A	0%	67%	N/A	0%	N/A	**33%**
pass		0	2		0		**2**
fail		2	1		1		**4**
Melanie Parker, DDS (049)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Orthoworks Dental Group, Dr. David Shen (043)	N/A	N/A	N/A	N/A	100%	N/A	**100%**
pass					2		**2**
fail					0		**0**
Parkside Dental (041)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Pasadena City College (011)	N/A	N/A	N/A	0%	0%	N/A	**0%**
pass				0	0		**0**
fail				1	1		**2**
Raymond J. Kieffer, DDS (069)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Sacramento City College (002)	0%	50%	N/A	N/A	N/A	N/A	**33%**
pass	0	1					**1**

OA WRITTEN EXAMINATION SCHOOL STATISTICS

Program	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Total
fail	1	1					**2**
Tal D. Jeregensen, DDS (042)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Thao Nguyen, DDS (038)	N/A	N/A	N/A	N/A	N/A	0%	**0%**
pass						0	**0**
fail						1	**1**
Thompson Tom, DDS (030)	N/A	N/A	N/A	N/A	N/A	100%	**100%**
pass						1	**1**
fail						0	**0**
Valley School of Dental Assisting (027)	N/A	N/A	N/A	0%	50%	67%	**50%**
pass				0	3	2	**5**
fail				1	3	1	**5**
Western Dental Services Los Angeles (052)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Western Dental Services Manteca (062)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Western Dental Services Modesto (064)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Western Dental Services Oceanside (055)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Western Dental Services Riverside (057)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Western Dental Services Sacramento (051)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Western Dental Services San Leandro (050)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
pass							
fail							
Western Dental Services Santa Clara (054)	N/A	N/A	N/A	N/A	0%	N/A	**0%**
pass					0		**0**
fail					1		**1**
Western Dental Services Tracy (063)	N/A	N/A	N/A	N/A	0%	100%	**50%**
pass					0	1	**1**
fail					1	0	**1**
PERCENT PASS	36%	52%	39%	42%	36%	44%	**41%**
TOTAL PASS	**10**	**12**	**12**	**11**	**13**	**11**	**69**
TOTAL FAIL	**18**	**11**	**19**	**15**	**23**	**14**	**100**

STATE OF CALIFORNIA
DEPARTMENT OF CONSUMER AFFAIRS
BUSINESS, CONSUMER SERVICES, AND HOUSING AGENCY • GOVERNOR EDMUND G. BROWN JR.
DENTAL BOARD OF CALIFORNIA
2005 Evergreen Street, Suite 1550, Sacramento, CA 95815
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MEMORANDUM

DATE	July 21, 2016
TO	Dental Assisting Council Members, Dental Board of California
FROM	Katie Le, Dental Assisting Educational Program Coordinator Dental Board of California
SUBJECT	**JNT 5:** Dental Assisting Program Licensing Statistics

The following table provides current license status statistics by license type as of **July 21, 2016**

License Type	Registered Dental Assistant (RDA)	Registered Dental Assistant in Extended Functions (RDAEF)	Total Licenses
Current & Active	29,044	1335	30,379
Current & Inactive	4,716	80	4,796
Delinquent	10,405	202	10,607
Total Population (Current & Delinquent)	**44,165**	**1,617**	**45,782**
Total Cancelled Since Implementation	40,488	240	40,728

The following table provides current permit status statistics by permit type as of **July 21, 2016**

Permit Type	Orthodontic Assistant (OA)	Dental Sedation Assistant (DSA)	Total Permits
Current & Active	485	27	512
Current & Inactive	6	1	7
Delinquent	29	8	37
Total Population (Current & Delinquent)	**520**	**36**	**556**
Total Cancelled Since Implementation	1	0	1

Dual Registered Dental Assistant (RDA) and Registered Dental Hygienist (RDH) Licensure

The following table provides current license status as of May 5, 2016 for licensees who possess both an RDA and RDH license. Based on the license type, the table shows the status of each license. There are approximately 4,059 licensees that hold dual licenses. From that population, 2,160 licensees have a cancelled RDA license. However, those licensees may have a current RDH license in good standing.

License Status	Registered Dental Assistant (RDA)	Dental Hygienist
Current & Active	949	3611
Current & Inactive	190	141
Delinquent	760	215
Cancelled	2160	85
Voluntary Surrender	0	1
Revoked	0	2
Deceased	0	4
Grand Total	**4059**	**4059**

Definitions

Current & Active	An individual who has an active status and has completed all renewal requirements receives this status.
Current & Inactive	An individual who has an inactive status and has completed all renewal requirements receives this status.
Delinquent	An individual who does not comply with renewal requirements receives this status until renewal requirements are met.
Cancelled	An individual who fails to comply with renewal requirements by a set deadline will receive this status.
Voluntary Surrendered	An individual who surrenders his or her license as part of a disciplinary action would receive this status.
Revoked	An individual who receives a disciplinary action of revoked would receive this status.
Deceased	After the Board/Bureau receives proof of death, a license would be set to this status.

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MEMORANDUM

DATE	July 27, 2016
TO	Members of the Dental Board of California Members of the Dental Assisting Council
FROM	Sarah Wallace, Assistant Executive Officer
SUBJECT	**JNT 6:** Report on the Results of the Department of Consumer Affairs (DCA) Office of Professional Examination Services (OPES) Occupational Analysis of the Registered Dental Assistant (RDA) and Registered Dental Assistant in Extended Functions (RDAEF) Practical Examinations.

The Department of Consumer Affairs' (Department) Office of Professional Examination Services (OPES) has completed its *Occupational Analysis of the Registered Dental Assistant in Extended Functions Profession*. The following includes a copy of the occupational analysis report. Dr. Lincer will also be available at the Board meeting to present the findings and answer any questions the Board may have.

DENTAL BOARD OF CALIFORNIA

OCCUPATIONAL ANALYSIS OF THE

REGISTERED DENTAL ASSISTANT IN EXTENDED

FUNCTIONS PROFESSION

OFFICE OF PROFESSIONAL EXAMINATION SERVICES

STATE OF CALIFORNIA

dca

DEPARTMENT OF CONSUMER AFFAIRS

DENTAL BOARD OF CALIFORNIA

OCCUPATIONAL ANALYSIS OF THE REGISTERED DENTAL ASSISTANT IN EXTENDED FUNCTIONS PROFESSION

This report was prepared and written by the
Office of Professional Examination Services
California Department of Consumer Affairs

June 2016

Heidi Lincer, Ph.D., Chief

Raul Villanueva, Personnel Selection Consultant

PROFESSIONAL EXAMINATION SERVICES

EXECUTIVE SUMMARY

The Dental Board of California (Board) requested that the Department of Consumer Affairs' Office of Professional Examination Services (OPES) conduct an occupational analysis (OA) of Registered Dental Assistant in Extended Functions (RDAEF) practice in California. The purpose of the occupational analysis is to define practice for RDAEFs in terms of the actual job tasks that new licensees must be able to perform safely and competently at the time of licensure. The results of this occupational analysis serve as the basis for the RDAEF licensing examination.

OPES test specialists began by researching the profession and conducting a stakeholder and practitioner focus group that included four Registered Dental Assistants (RDA), two RDAEFs, one educator, and two dentists who practice in locations throughout California. The focus group was held at OPES on June 19-20, 2015, to identify changes and trends in RDAEF practice specific to California. Information gained during the research and focus group was used to conduct telephone interviews with six RDAs and three RDAEFs who practice in locations throughout California. The purpose of these interviews was to identify the tasks performed in RDAEF practice and to specify the knowledge required to perform those tasks in a safe and competent manner. The interviews were also used to follow up on topics arising from the focus group.

Two additional focus groups were later held with RDAs and RDAEFs to review and refine the preliminary list of task and knowledge statements. The RDAEFs in these focus groups also performed a preliminary linkage of the task and knowledge statements to ensure that all tasks had a related knowledge and all knowledge statements had a related task. New task and knowledge statements were created as a result of this process, and some statements were eliminated from the final list due to overlap and reconciliation. The licensees also developed demographic items for inclusion in the survey.

OPES then developed a three-part questionnaire to be completed by RDAEFs statewide. Development of the questionnaire included a pilot study which was conducted using a group of eight licensees. The participants' feedback was used to refine the questionnaire before the final questionnaire was prepared by OPES for administration in October 2015.

In the first part of the questionnaire, licensees were asked to provide demographic information relating to their work settings and practice. In the second part, the licensees were asked to rate specific job tasks in terms of frequency (i.e., how often the licensee performs the task in the licensee's current practice) and importance (i.e., how important the task is to performance of the licensee's current practice). In the third part of the questionnaire, licensees were asked to rate specific knowledge statements in terms of how important that knowledge is to performance of their current practice.

OPES developed a stratified random sample of RDAEF1 licensees (RDAEFs licensed before 2010) to participate in the occupational analysis. The RDAEF1 sample was stratified by years of practice and county of practice with oversampling of licensees licensed 0 to 5 years. The RDAEF2 sample consisted of 169 RDAEFs who were licensed under the 2010 requirements (or 100% of RDAEF2 licensees). The Board sent notification letters to a sample of 924 RDAEFs (out of 1,530 total licensees) inviting them to complete the questionnaire online. Approximately 13% of the licensed RDAEFs in the sample (191) responded by accessing the Web-based survey. The final sample size included in the data analysis was 144, or 9.4% of the population that was invited to complete the questionnaire. The demographic composition of the respondent sample is representative of the California RDAEF population.

OPES then performed data analyses on the task and knowledge rating responses. OPES combined the task ratings to derive an overall criticality index for each task statement. The mean importance rating was used as the criticality index for each knowledge statement.

Once the data had been analyzed, two additional focus groups were conducted that included practitioners licensed as RDAs and RDAEFs. The RDAEF licensees evaluated the criticality indices and determined whether any task or knowledge statements should be eliminated. They also established the linkage between job tasks and knowledge statements, organized the task and knowledge statements into content areas, and defined those areas. They then evaluated and confirmed the content area weights.

The description of practice for the RDAEF is structured into three content areas weighted by criticality relative to the other content areas. The description of practice specifies the job tasks and knowledge critical to safe and effective RDAEF practice in California at the time of licensure and serves as a basis for developing examinations for inclusion in the process of granting California RDAEF licensure. The description of practice is also the underlying foundation for evaluating the degree to which the content of any examination under consideration measures content critical to California RDAEF practice.

At this time, California licensure as an RDAEF is granted by meeting the requisite education and training requirements and passing the RDAEF general knowledge and practical examinations.

The examination outline for the RDAEF general knowledge examination is structured into three content areas weighted by criticality relative to the other content areas. An overview of the final examination outline for the exam is provided below.

OVERVIEW OF THE REGISTERED DENTAL ASSISTANT IN EXTENDED FUNCTIONS WRITTEN EXAMINATION OUTLINE

Content Area	Content Area Description	Percent Weight
I. Patient Treatment and Care	This area assesses the candidate's ability to review the patient's dental health by assessing medical and dental history; to note and chart the oral cavity; and to provide instruction regarding oral hygiene, preoperative care, and postoperative care.	40
II. Dental Procedures: Direct and Indirect Restorations	This area assesses the candidate's knowledge of materials, techniques, and procedures, and scope of practice regarding direct and indirect restoration dental procedures.	45
III. Dental Specialty Procedures	This area assesses the candidate's knowledge of materials, techniques, procedures, and scope of practice regarding dental specialty procedures.	15
Total		**100**

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CHAPTER 1. INTRODUCTION

PURPOSE OF THE OCCUPATIONAL ANALYSIS

The Dental Board of California (Board) requested that the Department of Consumer Affairs' Office of Professional Examination Services (OPES) conduct an occupational analysis (OA) to identify critical job activities performed by licensed Registered Dental Assistants in Extended Functions (RDAEF). This OA was part of the Board's comprehensive review of RDAEF practice in California. The purpose of the OA is to define practice for RDAEFs in terms of actual job tasks that new licensees must be able to perform safely and competently at the time of licensure. The results of this OA serve as the basis for determining the tasks and knowledge that make up the description of practice for the RDAEF profession in California.

CONTENT VALIDATION STRATEGY

OPES used a content validation strategy to ensure that the OA reflected the actual tasks performed by RDAEFs in practice. The technical expertise of California-licensed RDAEFs was used throughout the OA process to ensure the identified task and knowledge statements directly reflect requirements for performance in current practice.

UTILIZATION OF SUBJECT MATTER EXPERTS

The Board selected Registered Dental Assistants (RDAs) and RDAEFs to participate as subject matter experts (SMEs) during various phases of the OA. The RDAs participated in the discussions describing the role and duties of the RDAEFs in their respective work setting. The SMEs were selected from a broad range of practice settings, geographic locations, and experience backgrounds. They provided information regarding the different aspects of current RDAEF practice during the OA development phase. They also participated in focus groups to review the content of task and knowledge statements for technical accuracy prior to administration of the OA questionnaire. Following administration of the OA questionnaire, groups of SMEs convened at OPES to review the results, finalize the description of practice, and develop the content outlines for the RDAEF General Knowledge examination.

ADHERENCE TO LEGAL STANDARDS AND GUIDELINES

Licensing, certification, and registration programs in the State of California adhere strictly to federal and State laws and regulations and professional guidelines and technical standards. For the purpose of an OA, the following laws and guidelines are authoritative:

- California Business and Professions Code section 139.
- Uniform Guidelines on Employee Selection Procedures (1978), Code of Federal Regulations, Title 29, Section 1607.
- California Fair Employment and Housing Act, Government Code section 12944.
- *Principles for the Validation and Use of Personnel Selection Procedures* (2003), Society for Industrial and Organizational Psychology (SIOP).
- *Standards for Educational and Psychological Testing* (2014), American Educational Research Association, American Psychological Association, and National Council on Measurement in Education.

For a licensure program to meet these standards, it must be solidly based upon the job activities required for practice.

DESCRIPTION OF OCCUPATION

The RDAEF occupation is described as follows in Sections 1753.5 and 1753.55 of the California Business and Professions Code:

1753.5. (a) A registered dental assistant in extended functions licensed on or after January 1, 2010, is authorized to perform all duties and procedures that a registered dental assistant is authorized to perform as specified in and limited by Section 1752.4, and those duties that the board may prescribe by regulation.

(b) A registered dental assistant in extended functions licensed on or after January 1, 2010, is authorized to perform the following additional procedures under direct supervision and pursuant to the order, control, and full professional responsibility of a licensed dentist:

(1) Conduct preliminary evaluation of the patient's oral health, including, but not limited to, charting, intraoral and extra-oral evaluation of soft tissue, classifying occlusion, and myofunctional evaluation.

(2) Perform oral health assessments in school-based, community health project settings under the direction of a dentist, registered dental hygienist, or registered dental hygienist in alternative practice.

(3) Cord retraction of gingiva for impression procedures.

(4) Size and fit endodontic master points and accessory points.

(5) Cement endodontic master points and accessory points.

(6) Take final impressions for permanent indirect restorations.

(7) Take final impressions for tooth-borne removable prosthesis.

(8) Polish and contour existing amalgam restorations.

(9) Place, contour, finish, and adjust all direct restorations.

(10) Adjust and cement permanent indirect restorations.

(11) Other procedures authorized by regulations adopted by the board.

(c) All procedures required to be performed under direct supervision shall be checked and approved by the supervising licensed dentist prior to the patient's dismissal from the office.

1753.55.[1] (a) A registered dental assistant in extended functions is authorized to perform additional duties as set forth in subdivision (b) pursuant to the order, control, and full professional responsibility of a supervising dentist if the licensee meets one the following requirements:

(1) Is licensed on or after January 1, 2010.

(2) Is licensed prior to January 1, 2010, has successfully completed a board-approved course in the additional procedures specified in paragraphs (1), (2), (5), and (7) to (11), inclusive, of subdivision (b) of Section 1753.5, and passed the examination as specified in Section 1753.4.

(b) (1) Determine which radiographs to perform on a patient who has not received an initial examination by the supervising dentist for the specific purpose of the dentist making a diagnosis and treatment plan for the patient. In these circumstances, the dental assistant in extended functions shall follow protocols established by the supervising dentist. This paragraph only applies in the following settings:

(A) In a dental office setting.

(B) In public health settings, using telehealth, as defined by Section 2290.5, for the purpose of communication with the supervising dentist, including, but not limited to, schools, head start and preschool programs, and community clinics, under the general supervision of a dentist.

(2) Place protective restorations, which for this purpose are identified as interim therapeutic restorations, and defined as a direct provisional restoration placed to stabilize the tooth until a licensed dentist diagnoses the need for further definitive treatment. An interim therapeutic restoration consists of the removal of soft material from the tooth using only hand instrumentation, without the use of rotary instrumentation, and subsequent placement of an adhesive restorative material. Local anesthesia shall not be necessary for interim therapeutic restoration placement. Interim therapeutic restorations shall be placed only in accordance with both of the following:

(A) In either of the following settings:

(i) In a dental office setting, under the direct or general supervision of a dentist as determined by the dentist.

(ii) In public health settings, using telehealth, as defined by Section 2290.5, for the purpose of communication with the supervising dentist, including, but not limited to, schools, head start and preschool programs, and community clinics, under the general supervision of a dentist.

(B) After the diagnosis, treatment plan, and instruction to perform the procedure provided by a dentist.

(c) The functions described in subdivision (b) may be performed by a registered dental assistant in extended functions only after completion of a program that includes training in performing those functions, or after providing evidence, satisfactory to the board, of having completed a board-approved course in those functions.

[1] During the course of the OA, Business and Professions Code section 1753.55 was amended by legislation. The current law may be found at www.leginfo.legislature.ca.gov.

CHAPTER 2. OCCUPATIONAL ANALYSIS QUESTIONNAIRE

PRACTITIONER FOCUS GROUP

OPES test specialists began by researching the profession and conducting a stakeholder and practitioner focus group. The focus group, which consisted of four RDAs, two RDAEFs, one educator, and two dentists, was held at OPES on June 19-20, 2015, to identify changes and trends in RDAEF practice specific to California. Information gained during the research and focus group was used to conduct telephone interviews with three RDAEFs and six RDAs throughout California. The purpose of these interviews was to identify the tasks performed in RDAEF practice and to specify the knowledge required to perform those tasks in a safe and competent manner. The interviews were also used to follow up on topics arising from the focus group.

SUBJECT MATTER EXPERT INTERVIEWS

The Board provided OPES with a list of six RDAs and three RDAEFs practicing throughout California to contact for telephone interviews. During the nine semi-structured interviews, the licensees were asked to identify all of the activities performed that are specific to the RDAEF profession. The interviews confirmed major content areas of their practice and the job tasks performed in each content area. The licensees were also asked to identify the knowledge required by RDAEFs to perform each job task safely and competently.

TASK AND KNOWLEDGE STATEMENTS

OPES staff integrated the information gathered during the interviews and from prior studies of the profession and developed task and knowledge statements. The statements were then organized into the major content areas of practice.

In July and August 2015, OPES facilitated two focus groups of RDAs and RDAEFs to evaluate the task and knowledge statements for technical accuracy and comprehensiveness and to assign each statement to the appropriate content area. The RDAEF groups verified that the content areas were independent and non-overlapping, and they performed a preliminary linkage of the task and knowledge statements to ensure that every task had a related knowledge and every knowledge statement had a related task. Additional task and knowledge statements were created as needed to complete the scope of the content areas.

The finalized lists of task and knowledge statements were developed into an online questionnaire that was eventually completed and evaluated by a sample of RDAEFs throughout California.

QUESTIONNAIRE DEVELOPMENT

OPES developed the online OA questionnaire to solicit the licensees' ratings of the job task and knowledge statements for analysis. The surveyed RDAEFs were instructed to rate each job task in terms of how often they performed the task (FREQUENCY) and how important the task was to the performance of their current practice (IMPORTANCE). In addition, they were instructed to rate each knowledge statement in terms of how important the specific knowledge was to the performance of their current practice (IMPORTANCE). The questionnaire also included a demographic section for purposes of developing an accurate profile of the respondents. The questionnaire can be found in Appendix H**.**

PILOT STUDY

Prior to developing the final questionnaire, OPES prepared an online pilot questionnaire. The pilot questionnaire was reviewed by the Board and a group of eight RDAEF licensees for feedback about the technical accuracy of the task and knowledge statements, estimated time for completion, online navigation, and ease of use. OPES used this feedback to develop the final questionnaire.

CHAPTER 3. RESPONSE RATE AND DEMOGRAPHICS

SAMPLING STRATEGY AND RESPONSE RATE

OPES developed a stratified random sample of RDAEF1 licensees (RDAEFs licensed before 2010) to participate in the OA. The RDAEF1 sample was stratified by years of practice and county of practice with oversampling of licensees licensed 0 to 5 years. The RDAEF2 sample consisted of 169 RDAEFs who were licensed under the 2010 requirements (or 100% of RDAEF2 licensees). The Board sent notification letters to a sample of 924 RDAEFs (out of 1,530 total licensees) inviting them to complete the questionnaire online. The online format allowed for several enhancements to the questionnaire and data collection process. As part of the questionnaire development, configuration, and analysis process, various criteria were established to ensure the integrity of the data.

A total of 191 RDAEFs, or 12.5% of the licensed RDAEFs in the sample, responded by accessing the Web-based survey. The final sample size included in the data analysis was 144, or 9.4% of the population that was invited to complete the questionnaire. This response rate (10.3%) reflects two adjustments. First, data from respondents who indicated they were not currently licensed and practicing as RDAEFs in California were excluded from analysis. And second, the reconciliation process removed questionnaires containing incomplete and unresponsive data. The respondent sample is representative of the population of California RDAEFs based on the sample's demographic composition.

DEMOGRAPHIC SUMMARY

Of the respondents included in the analysis, 26.4% had been practicing as an RDAEF for 5 years or less, 23.6% had been practicing between 6 and 10 years, 31.9% had been practicing between 11 and 20 years, and 17.4% had been practicing for more than 20 years (see Table 1).

As shown in Table 2, RDAEF1s made up 50% of the final sample and RDAEF2s made up 43% of the final sample (10 respondents declined to answer this item). Of the RDAEF2s, approximately half received their RDAEF license before 2010 and half received their RDAEF license after 2010.

As shown in Table 10, respondents gained the majority of their work experience to become an RDAEF from the dentist (63.2%), a private career school (30.6%), a community college program (25.7%), or a university-level program (15.3%). As shown in Table 4, 41.7% of the respondents worked 0 to 5 years as an RDA before being licensed as an RDAEF with 29.9% of the respondents practicing 6 to 10 years as an RDA and 21.5% practicing 11 to 20 years as an RDA before being licensed as an RDAEF.

The respondents were also asked to indicate the primary work setting where they provide services as an RDAEF. Work in a solo dental practice was reported by 39.6% of the sample, while 45.8% of the respondents reported working in a group dental practice (with two or more dentists), 3.5% reported working in specialty dental practice settings, and 2.8% indicated working in public health dentistry. The remaining respondents primarily reported working in government (2.8%), dental school clinics (1.4%), or military settings (0.7%). None of the respondents reported working in a hospital setting (see Table 5).

As shown in Table 9, respondents generally worked as either the only RDAEF (63.2%) or with one other RDAEF (18.1%).

The respondents were also asked to indicate the type of dental practice in their primary work setting. General dentistry was reported by 88.2% of respondents, prosthodontic dentistry by 4.2%, and pedodontic dentistry by 2.1%, and (see Table 6).

As shown in Table 13, the respondents reported that, on average, 37.1% of their time was spent assisting the dentist at chairside, 14.6% of their time was spent on taking final impressions for permanent indirect restorations, 14.1% of their time was spent placing a retraction cord for impression procedures, and 18.6% of their time was spent either taking final impressions for toothborne prosthetic devices (9.6%) or conducting direct restoration-related work (9.0%).

The demographic information from the respondents can be found in Tables 1 through 14.

CHANGES AND TRENDS IN DENTAL PROCEDURES

Based on the results of the initial focus group and practitioner interviews, specific dental procedures, either performed or assisted by RDAEFs, were included in the questionnaire to identify the extent to which possible trends were being seen in the workplace (radiography by x-ray or by digital sensor, for example). Respondents were asked to provide information regarding the extent to which the frequency of their performing the specific dental procedures had changed over the last two years and, based on their current practice, the extent to which the frequency of their performing these procedures was expected to change over the next five years. These results are summarized in Appendix E.

In addition, specific dental procedures performed by RDAEFs related to direct and indirect restorations were identified for inclusion in the questionnaire to identify the frequency with which they are currently being performed by practitioners. These questionnaire items focus on a specific procedure (fabricating provisional restorations, for example), and the teeth where the procedure may be employed (mandibular anterior, for example). The results allow for a comparison of the average frequency with which the dental procedures are applied to specific groups of teeth by the licensees. The results are summarized in Appendix F.

TABLE 1 – NUMBER OF YEARS PRACTICING IN CALIFORNIA AS A REGISTERED DENTAL ASSISTANT IN EXTENDED FUNCTIONS (RDAEF)

Years	N	Percent
0 to 5 years	38	26.4
6 to 10 years	34	23.6
11 to 20 years	46	31.9
More than 20 years	25	17.4
Missing	1	0.7
Total	144	100

FIGURE 1 – NUMBER OF YEARS PRACTICING IN CALIFORNIA AS A REGISTERED DENTAL ASSISTANT IN EXTENDED FUNCTIONS (RDAEF)

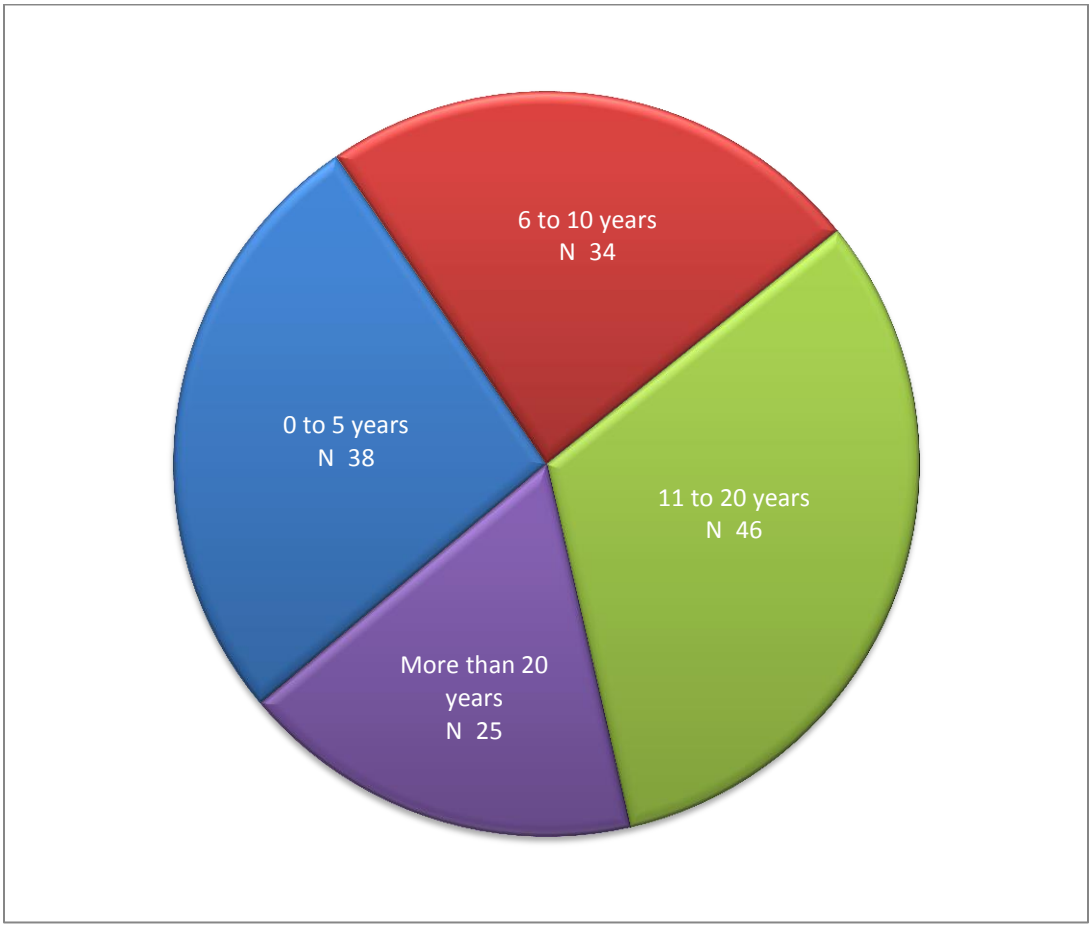


TABLE 2 – WHEN LICENSURE WAS OBTAINED AS AN RDAEF

When Licensed	N	Percent
Prior to 2010, Currently RDAEF1	72	50.0
Prior to 2010, Currently RDAEF2	32	22.2
After 2010, Currently RDAEF2	30	20.8

FIGURE 2 – WHEN LICENSURE WAS OBTAINED AS AN RDAEF

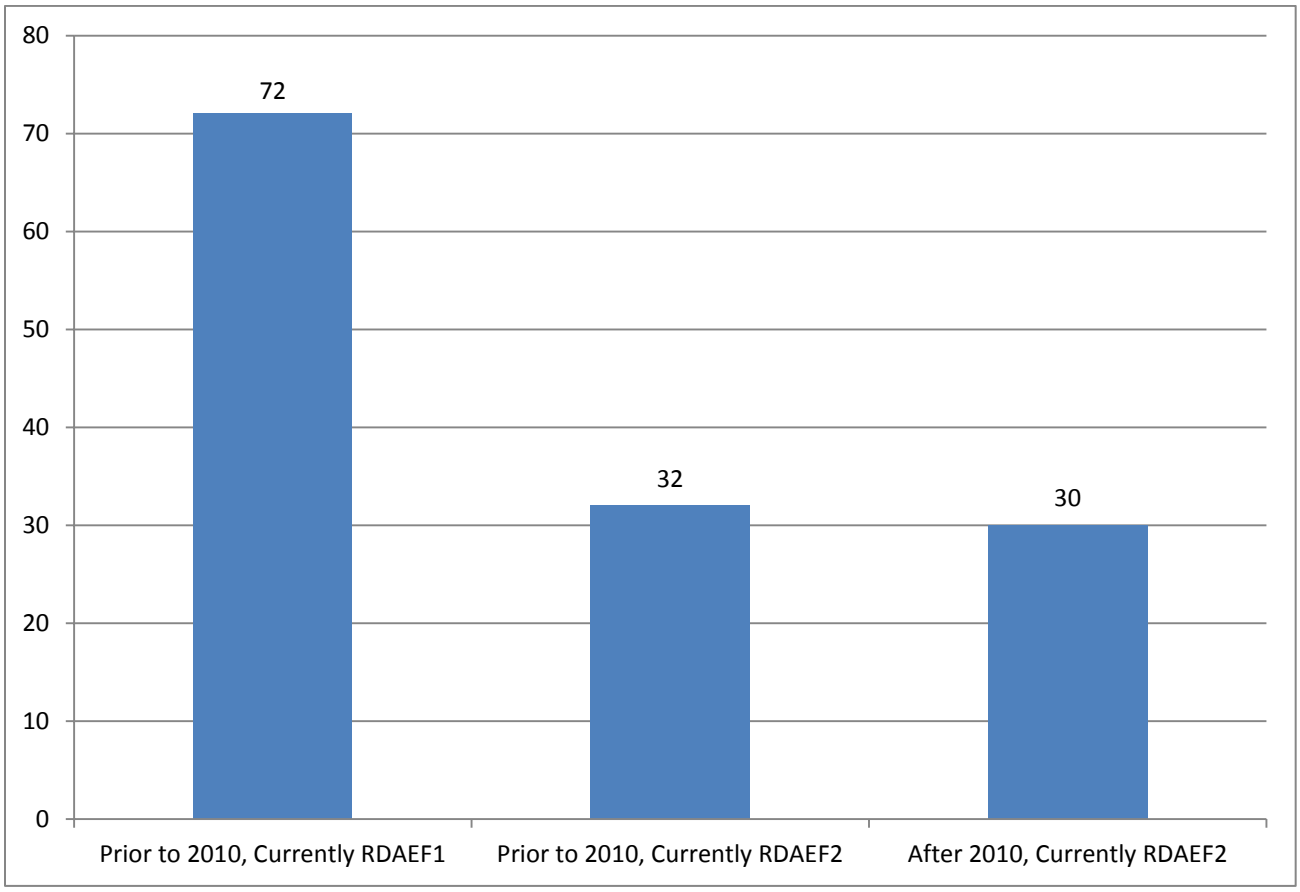


TABLE 3 – NUMBER OF YEARS PRACTICING IN CALIFORNIA AS A DENTAL ASSISTANT BEFORE OBTAINING RDAEF LICENSURE

Years	N	Percent
N/A, I worked as an intern	23	16.0
0 to 11 months	40	27.8
12 to 15 months	22	15.3
16 months to 2 years	32	22.2
3 to 5 years	15	10.4
6 to 10 years	6	4.2
More than 10 years	5	3.5
Missing	1	0.7
Total	144	100*

**NOTE: Percentages do not add to 100 due to rounding.*

FIGURE 3 – NUMBER OF YEARS PRACTICING IN CALIFORNIA AS A DENTAL ASSISTANT BEFORE OBTAINING RDAEF LICENSURE

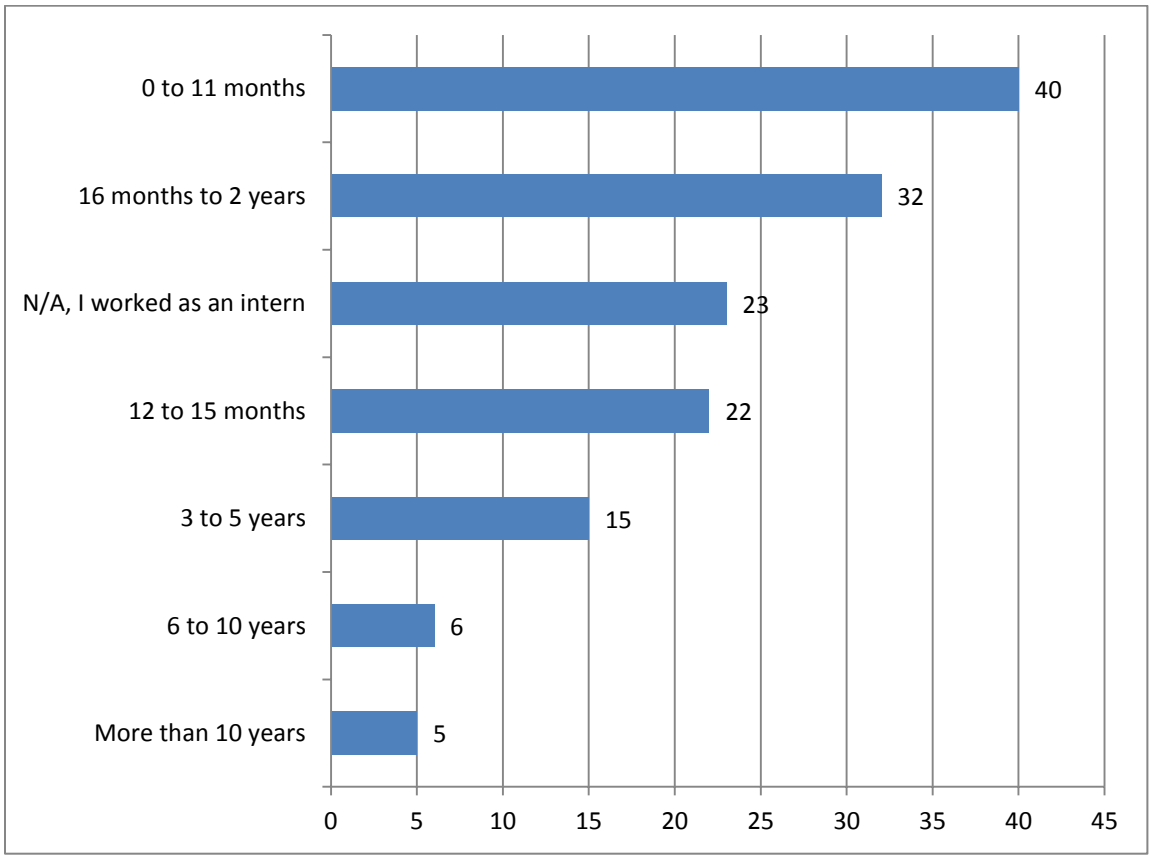


TABLE 4 – NUMBER OF YEARS PRACTICING IN CALIFORNIA AS AN RDA BEFORE OBTAINING RDAEF LICENSURE

Years	N	Percent
0 to 5 years	60	41.7
6 to 10 years	43	29.9
11 to 20 years	31	21.5
More than 20 years	9	6.3
Missing	1	0.7
Total	144	100*

**NOTE: Percentages do not add to 100 due to rounding.*

FIGURE 4 – NUMBER OF YEARS PRACTICING IN CALIFORNIA AS AN RDA BEFORE OBTAINING RDAEF LICENSURE

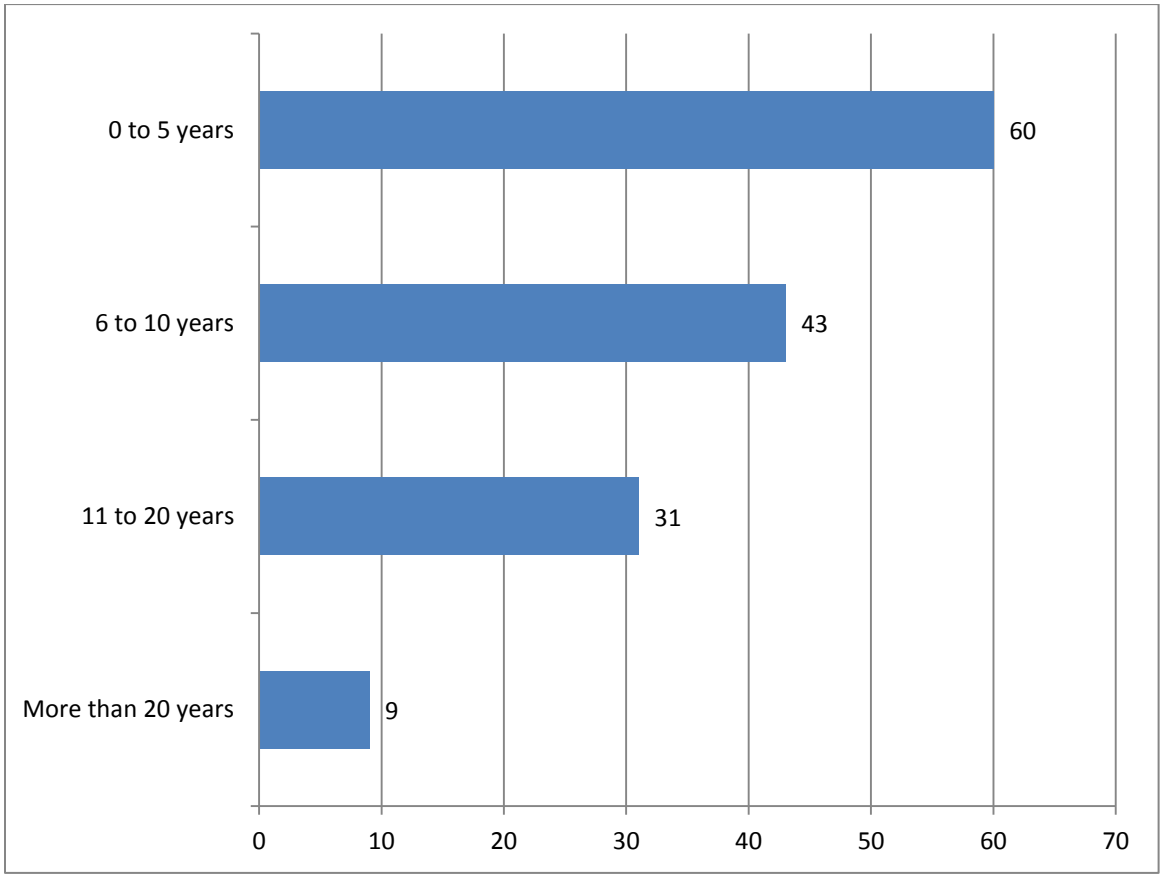


TABLE 5 – PRIMARY WORK SETTING

Work Setting	N	Percent
Group dental practice (2 or more dentist)	66	45.8
Solo dental practice	57	39.6
Specialty dental practice (oral/maxillofacial surgery, dentofacial orthopedics)	5	3.5
Government	4	2.8
Public health dentistry	4	2.8
Dental school clinic	2	1.4
Military	1	0.7
Missing	5	3.5
Total	144	100*

**NOTE: Percentages do not add to 100 due to rounding.*

FIGURE 5 – PRIMARY WORK SETTING

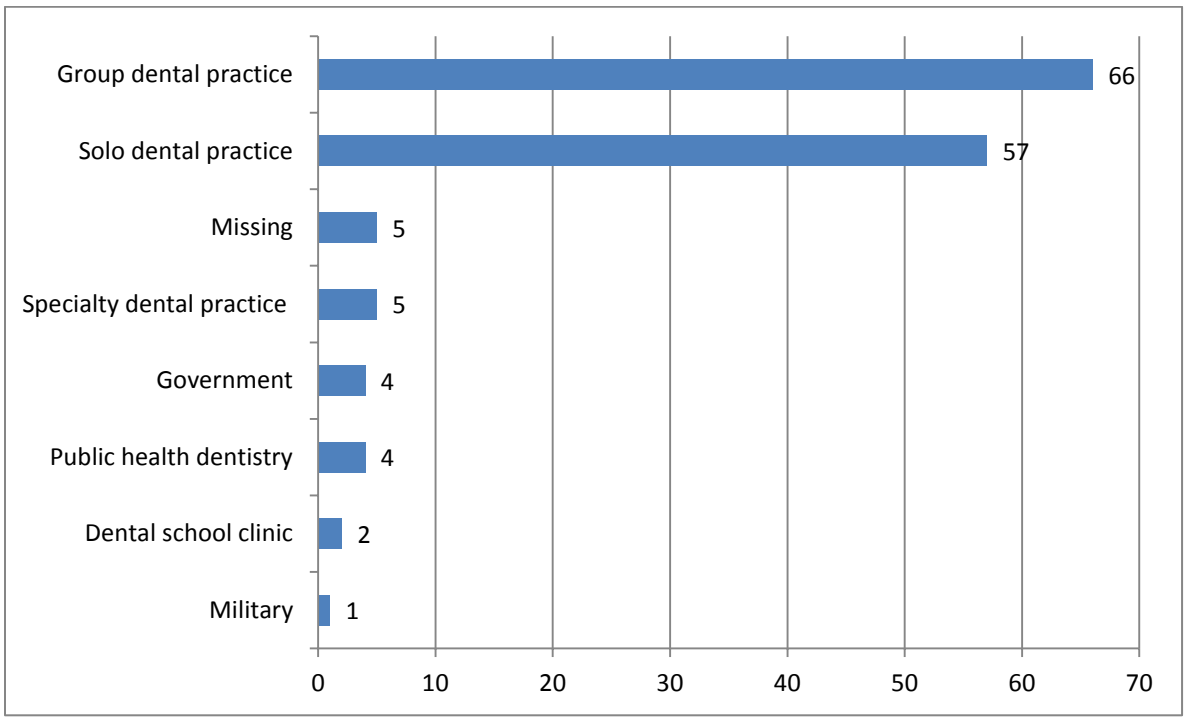


TABLE 6 – TYPE OF DENTAL PRACTICE IN PRIMARY WORK SETTING

Practice Type	N	Percent
General dentistry	127	88.2
Prosthodontic dentistry	6	4.2
Pedodontic dentistry	3	2.1
Periodontic dentistry	1	0.7
Orthodontic dentistry	1	0.7
Endodontic dentistry	0	0
Oral surgery	0	0
Missing	6	4.2
Total	144	100*

**NOTE: Percentages do not add to 100 due to rounding.*

FIGURE 6 – TYPE OF DENTAL PRACTICE IN PRIMARY WORK SETTING

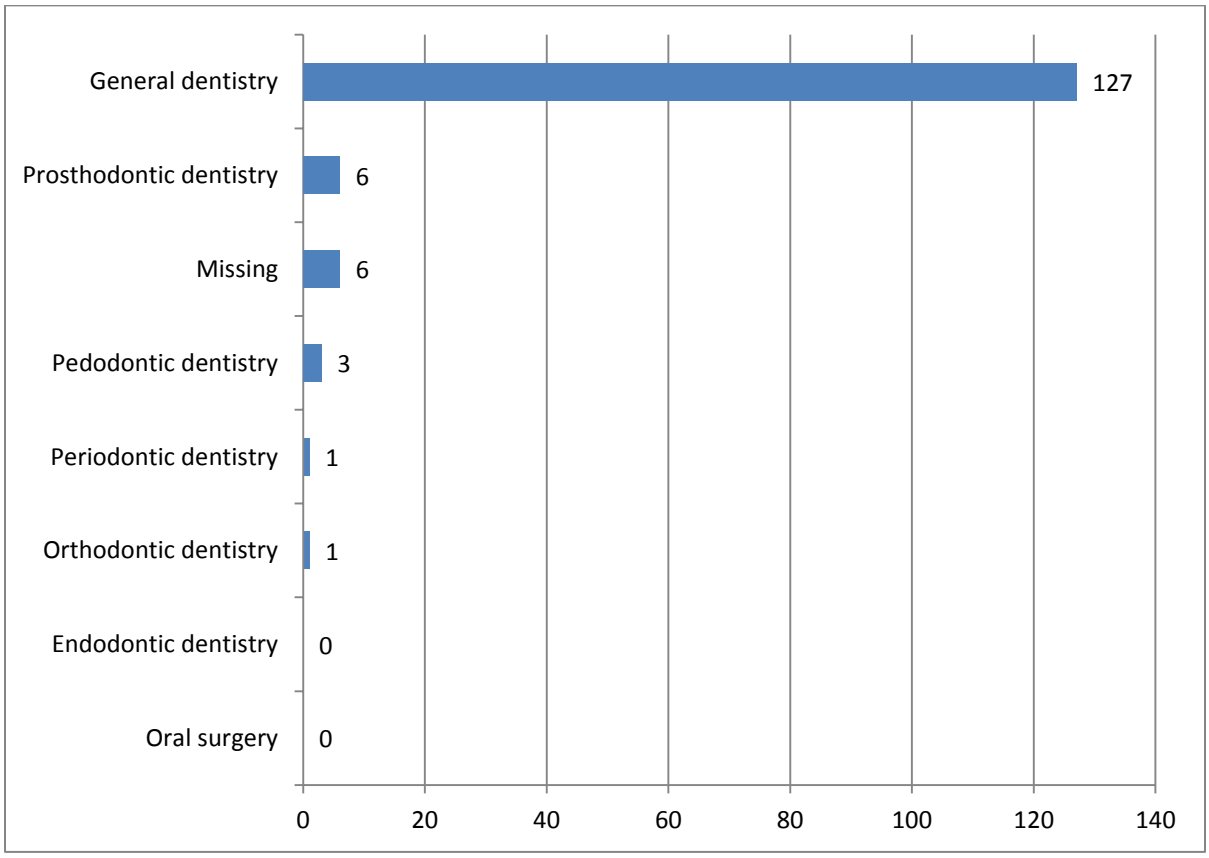


TABLE 7 – NUMBER OF UNLICENSED DENTAL ASSISTANTS (DA) IN PRIMARY WORK SETTING

Number of Unlicensed DAs	N	Percent
None	78	54.2
1 DA	28	19.4
2 to 3 DAs	26	18.1
4 to 5 DAs	8	5.6
More than 5 DAs	4	2.8
Total	144	100*

**NOTE: Percentages do not add to 100 due to rounding.*

FIGURE 7 – NUMBER OF UNLICENSED DENTAL ASSISTANTS (DA) IN PRIMARY WORK SETTING

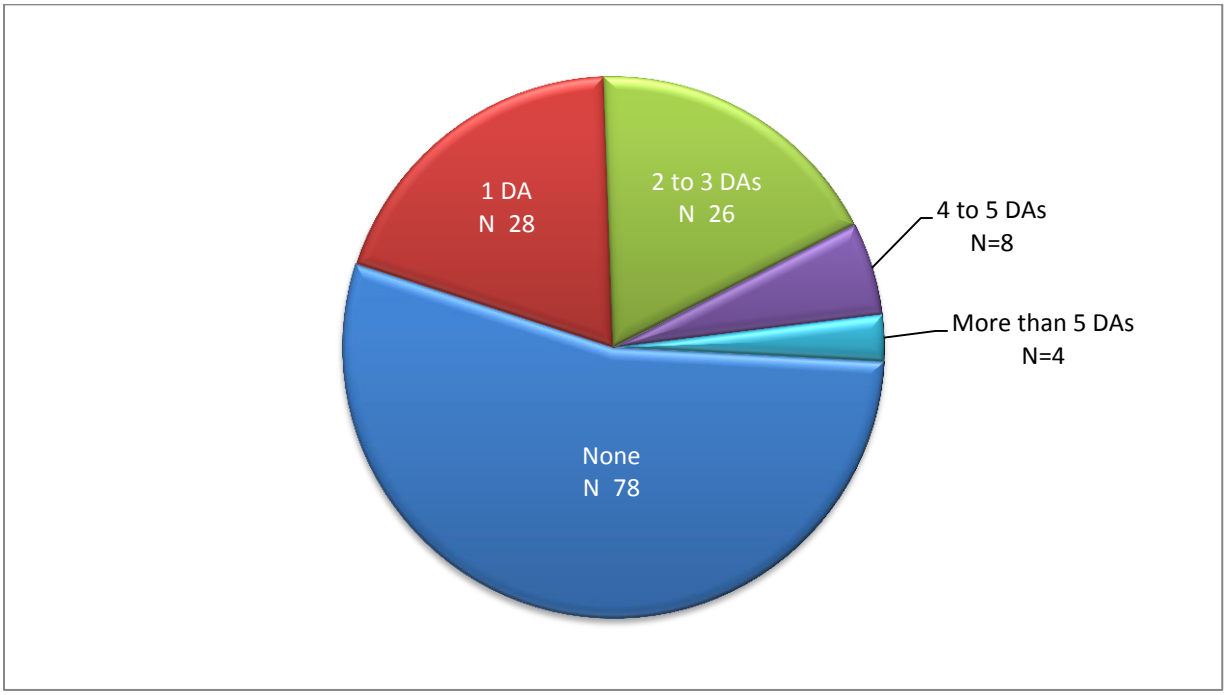


TABLE 8 – NUMBER OF REGISTERED DENTAL ASSISTANTS (RDA) IN PRIMARY WORK SETTING

Number of RDAs	N	Percent
None	21	14.6
1 RDA	46	31.9
2 to 3 RDAs	39	27.1
4 to 5 RDAs	14	9.7
More than 5 RDAs	22	15.3
Missing	2	1.4
Total	144	100

FIGURE 8 – NUMBER OF REGISTERED DENTAL ASSISTANTS (RDA) IN PRIMARY WORK SETTING

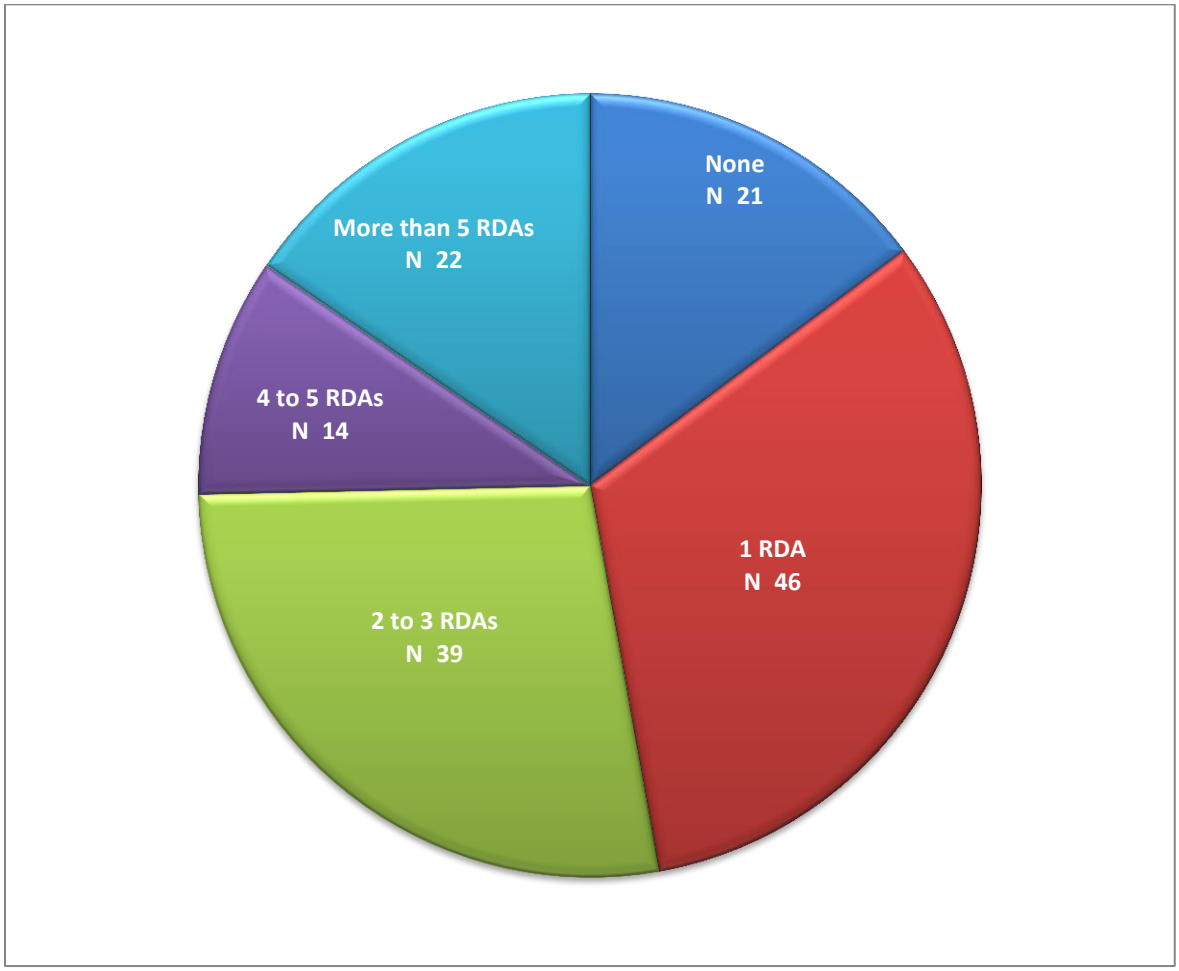
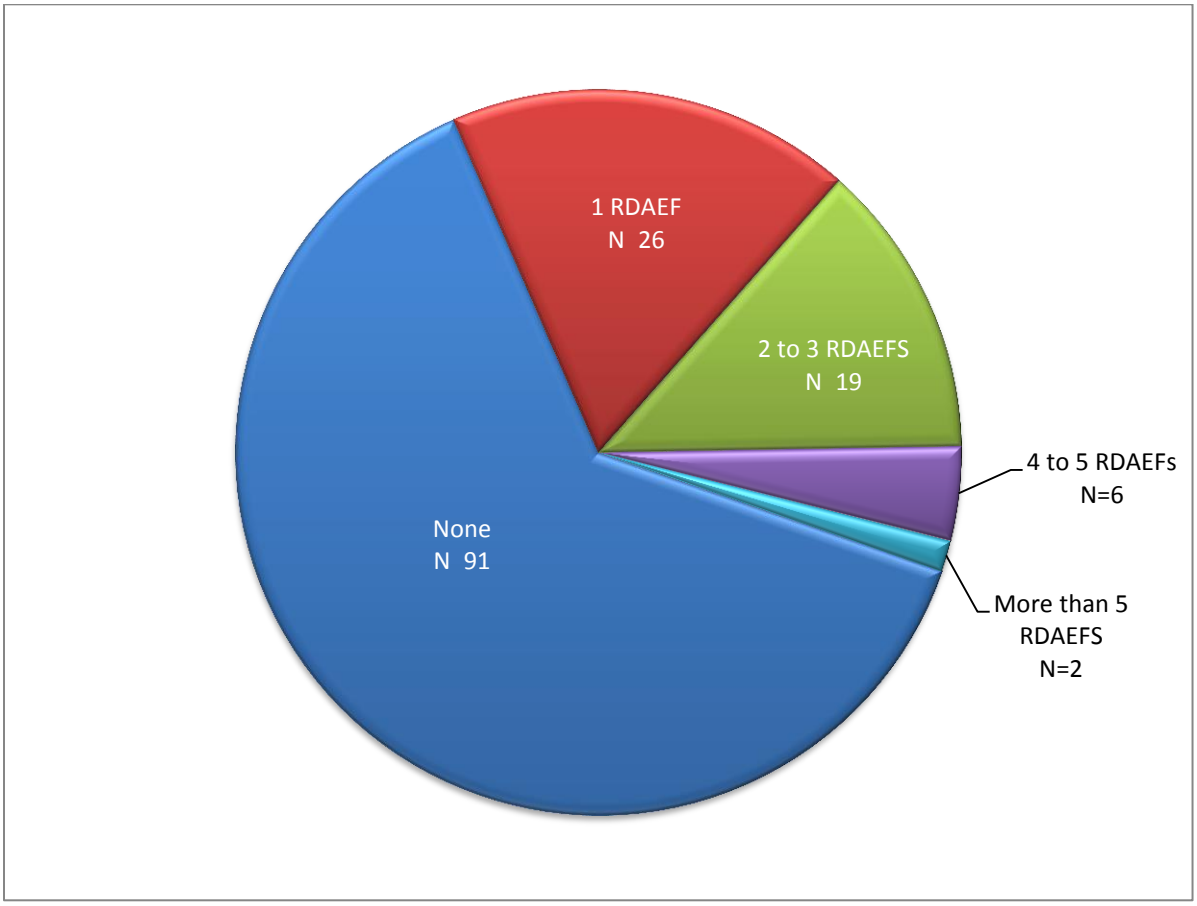


TABLE 9 – NUMBER OF REGISTERED DENTAL ASSISTANTS IN EXTENDED FUNCTIONS (RDAEF) IN PRIMARY WORK SETTING*

Number of RDAEFs	N	Percent
None	91	63.2
1 RDAEF	26	18.1
2 to 3 RDAEFs	19	13.2
4 to 5 RDAEFs	6	4.2
More than 5 RDAEFs	2	1.4
Total	144	100**

***NOTE: Percentages do not add to 100 due to rounding.*

FIGURE 9 – NUMBER OF REGISTERED DENTAL ASSISTANTS IN EXTENDED FUNCTIONS (RDAEF) IN PRIMARY WORK SETTING*



* Does not include respondent

TABLE 10 – SOURCE OF WORK EXPERIENCE TO BECOME A REGISTERED DENTAL ASSISTANT*

Experience Source	Frequency	Percent
On the Job (OTJ) from dentist	91	63.2
Private career school	44	30.6
Community college program	37	25.7
University-level program	22	15.3
OTJ from experienced RDA/RDAEF	11	7.6
Private educational school	8	5.6
Community dental clinic	2	1.4
Online school or program	2	1.4
Military	1	0.7

**NOTE: Respondents were asked to check no more than 3 options.*

FIGURE 10 – SOURCE OF WORK EXPERIENCE TO BECOME A REGISTERED DENTAL ASSISTANT

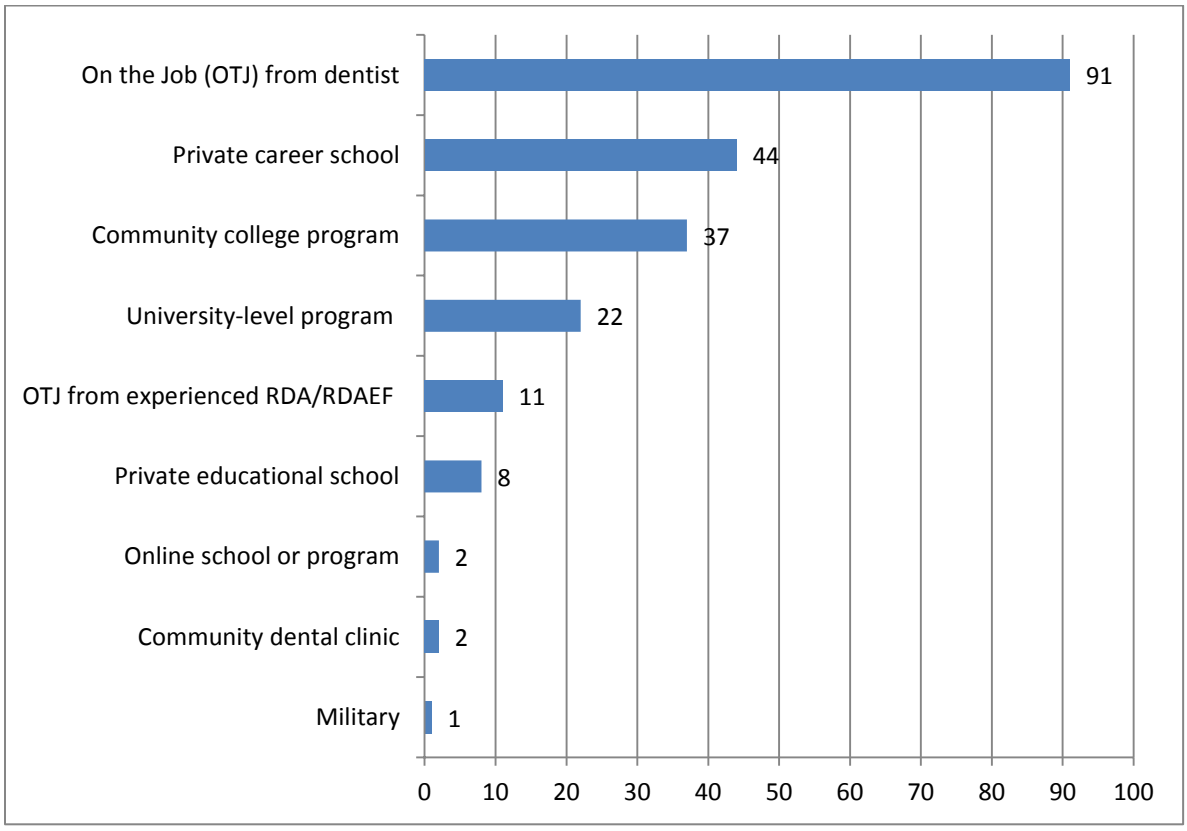


TABLE 11 – OTHER CERTIFICATES/CREDENTIALS POSSESSED

Certificates / Credentials	N	Percent
Coronal Polishing Cert.	143	99.3
Pit & Fissure Sealants Cert.	137	95.1
Other	113	78.5
Ultrasonic Scaling Cert.	45	31.3
Orthodontic Asst. Permit	11	7.6
Dental Sedation Asst. Permit	5	3. 5

**NOTE: Respondents were asked to mark all that apply.*

FIGURE 11 – OTHER CERTIFICATES/CREDENTIALS POSSESSED

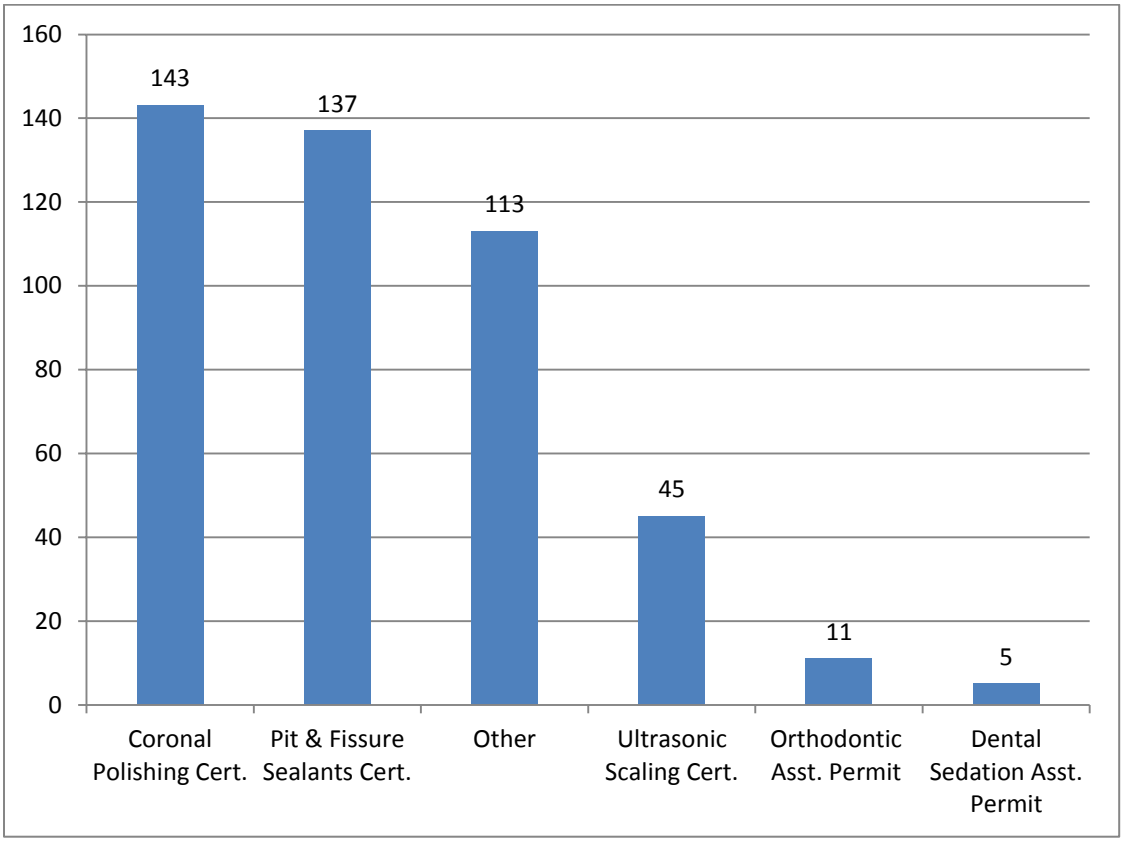


TABLE 12 – LOCATION OF PRIMARY WORK SETTING

Location	N	Percent
Urban	122	84.7
Rural	18	12.5
Missing	4	2.8
Total	144	100

FIGURE 12 – LOCATION OF PRIMARY WORK SETTING

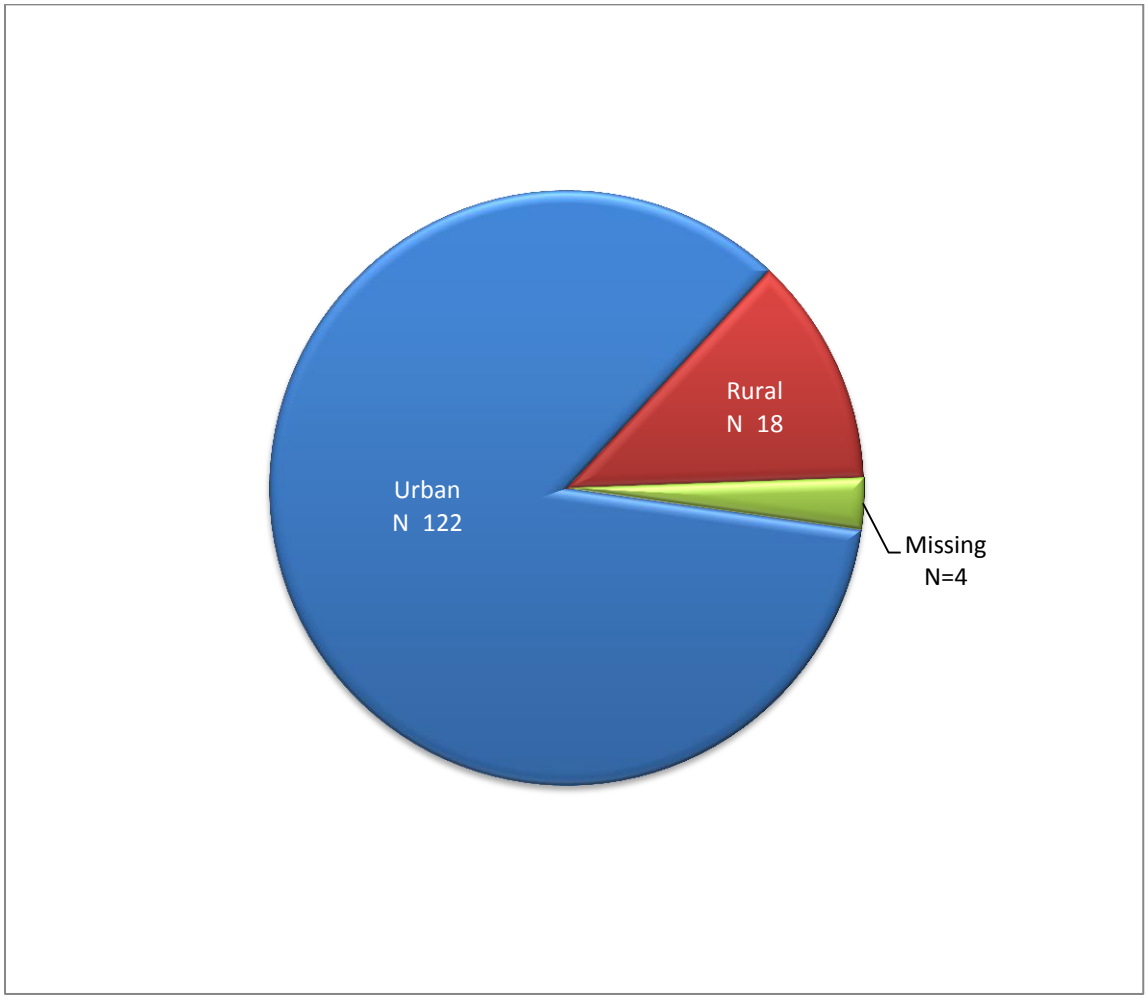


TABLE 13 – PERCENTAGE OF TIME SPENT ON PRINCIPAL WORK TASKS IN AN AVERAGE WEEK

Work Task	Avg. Percent
Assisting the dentist in the administration of treatment at the chair side.	37.1
Taking final impressions for permanent indirect restorations.	14.6
Placing a retraction cord for impression procedures.	14.1
Taking final impressions for toothborne prosthetic appliances.	9.6
Conducting direct restoration related work. (EF2)	9.0
Cement permanent indirect restorations. (EF2)	7.0
Perform preliminary adjustment of permanent indirect restorations. (EF2)	5.6
Working with endodontic master points and accessory points (select, size, fit or seal).	3.6
Conducting preliminary myofunctional evaluation of the head and neck. (EF2)	2.3

FIGURE 13 – PERCENTAGE OF TIME SPENT ON PRINCIPAL WORK TASKS IN AN AVERAGE WEEK

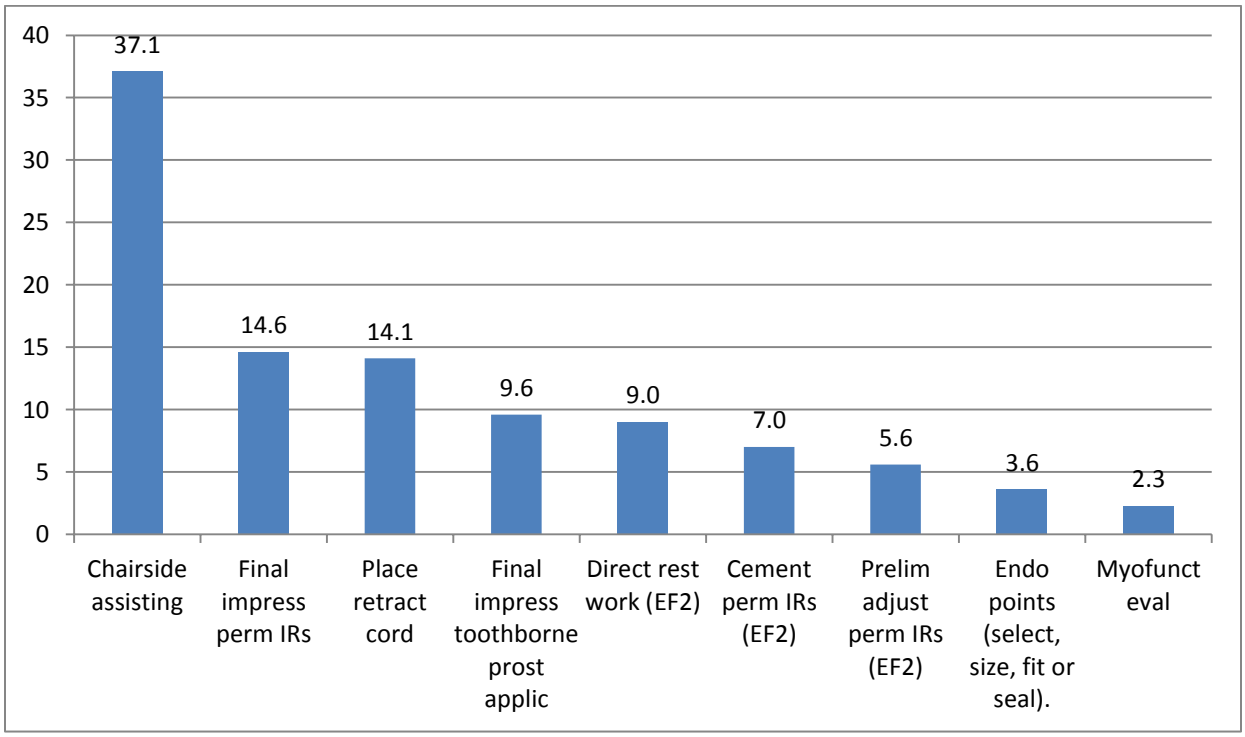


TABLE 14 – RESPONDENTS BY REGION*

Region	Frequency	Percent
Los Angeles County and Vicinity	38	26.4
San Francisco Bay Area	37	25.9
San Joaquin Valley	16	11.2
Sacramento Valley	18	12.5
San Diego County and Vicinity	8	5.6
Shasta/Cascade	1	0.7
Riverside County and Vicinity	7	4.9
Sierra Mountain Valley	10	6.9
North Coast	3	2.1
South/Central Coast	6	4.2

**NOTE: Appendix A shows a more detailed breakdown of the frequencies by region.*

CHAPTER 4. DATA ANALYSIS AND RESULTS

RELIABILITY OF RATINGS

The job task and knowledge ratings obtained by the questionnaire were evaluated with a standard index of reliability called coefficient alpha (α) that ranges from 0 to 1. Coefficient alpha is an estimate of the internal-consistency of the respondents' ratings of job task and knowledge statements. Coefficients were calculated for all respondent ratings.

Table 15 displays the reliability coefficients for the task rating scales in each content area. The overall ratings of task frequency (α = .90) and task importance (α = .93) across content areas were highly reliable. Table 16 displays the reliability coefficients for the knowledge statements rating scale in each content area. The overall ratings of knowledge importance (α = .97) across content areas were highly reliable. These results indicate that the responding RDAEFs rated the task and knowledge statements consistently throughout the questionnaire.

TABLE 15 – TASK SCALE RELIABILITY

CONTENT AREA	Number of Tasks	α Frequency	α Importance
I. Patient Examination	12	.79	.81
II. Dental Procedures	21	.89	.91
III. Safety	24	.88	.88
IV. Dental Specialty Procedures	9	.83	.90
Total	66	.90	.93

TABLE 16 – KNOWLEDGE SCALE RELIABILITY

CONTENT AREA	Number of Knowledge Statements	α Importance
I. Patient Examination	27	.95
II. Dental Procedures	41	.96
III. Safety	33	.94
IV. Dental Specialty Procedures	14	.94
Total	115	.97

TASK CRITICAL VALUES

Focus groups of licensed RDAEFs were convened at OPES in January and February 2016 to review the average frequency and importance ratings and the criticality indices of all task and knowledge statements. The purpose of these workshops was to identify the essential tasks and knowledge required for safe and effective RDAEF practice at the time of licensure. The licensees reviewed the task frequency, importance, and criticality indices for all task statements.

In order to determine the critical values (criticality) of the task statements, the frequency rating (Fi) and the importance rating (Ii) for each task were multiplied for each respondent, and the products averaged across respondents.

Critical task index = mean [(Fi) X (Ii)]

The task statements were then ranked according to the tasks' critical values. The task statements, their mean frequency and importance ratings, and associated critical values are presented in Appendix B.

The January 2016 focus group of SMEs evaluated the tasks' critical values based on the questionnaire results. OPES staff instructed the SMEs to identify a cutoff value of criticality in order to determine if any tasks did not have a high enough critical value to be retained. The SMEs determined that no cutoff value should be set based on their judgment of the relative importance of all tasks to RDAEF practice. The February 2016 focus group of SMEs performed an independent review of the same data and arrived at the same conclusion that no cutoff value should be set and that all tasks should be retained.

KNOWLEDGE IMPORTANCE RATINGS

In order to determine the importance of each knowledge, the mean importance (KImp) rating for each knowledge statement was calculated. The knowledge statements were then ranked according to mean importance. The knowledge statements and their importance ratings are presented in Appendix C.

The January 2016 focus group of SMEs that evaluated the task critical values also reviewed the knowledge statement importance values. After reviewing the average importance ratings and considering their relative importance to RDAEF practice, they determined that no cutoff value should be established, and all knowledge statements were retained. The February 2016 focus group of SMEs independently reviewed the same data and arrived at the same conclusion that no cutoff value should be set and that all knowledge statements should be retained.

CHAPTER 5. EXAMINATION PLAN

CONTENT AREAS AND WEIGHTS

The SMEs attending the January and February 2016 workshops independently reviewed the tasks in each content area and identified those tasks that were descriptive of RDAEF practice. Each group of SMEs then identified the knowledge related to these tasks. The tasks and their related knowledge that were not descriptive of RDAEF practice were removed. Both groups of SMEs continued in this manner until all of the content areas had been reviewed. Once the second group of SMEs had completed this work, they were asked to review the results from the first group of SMEs and to reconcile any differences through discussion. This reconciliation process resulted in the task and knowledge statements that the SMEs thought best reflected RDAEF practice. The resulting content areas with their respective task and knowledge linkage form the examination outline for the RDAEF written examination. The examination outline is presented in Table 18.

In order for the February 2016 group of SMEs to determine the relative weights of the content areas of the RDAEF written examination, initial calculations were performed by dividing the sum of the task critical values for a content area by the overall sum of the task critical values for all tasks, as shown below.

$$\frac{\textit{Sum of Critical Values for Tasks in Content Area}}{\textit{Sum of Critical Values for All Tasks}} = \textit{Percent Weight of Content Area}$$

In reviewing the preliminary weights based solely on the task critical values, the SMEs determined that these weights did not reflect the relative importance of the content areas to RDAEF practice in California.

The SMEs were then presented with values based on the knowledge importance (KImp) ratings for each content area. These values were calculated by dividing the sum of the knowledge importance for a content area by the overall sum of the knowledge importance ratings for all knowledge, as shown below.

$$\frac{\textit{Sum of K(Imp) for Knowledge in Content Area}}{\textit{Sum of K(Imp) for All Knowledge}} = \textit{Percent Weight of Content Area}$$

In determining the final weighting of the content areas for the RDAEF written examination, the February 2016 group of SMEs reviewed the tasks and knowledge in each content area, the linkage between the tasks and knowledge, and the relative importance of the tasks and knowledge in each content area to RDAEF practice in California.

The final weights took into consideration where the majority of practice-related knowledge was located (Content Area I-Patient Treatment and Care and Content Area II-Dental Procedures: Direct and Indirect Restorations) as well as the fact that the

majority of knowledge statements in Content Area III-Dental Specialty Procedures was related to scope of practice while the knowledge in Content Areas I and II involved multiple areas of law and practice. As such, the SMEs gave heavier weighting to Content Areas I and II.

The final results of their evaluation are depicted in Table 17 below.

TABLE 17 – CONTENT AREA WEIGHTS – RDAEF WRITTEN EXAMINATION

Content Area	Final Weights
I. Patient Treatment and Care	40
II. Dental Procedures: Direct and Indirect Restorations	45
III. Dental Specialty Procedures	15
Total	100

TABLE 18 – EXAMINATION OUTLINE: REGISTERED DENTAL ASSISTANT IN EXTENDED FUNCTIONS WRITTEN EXAMINATION

I. Patient Treatment and Care (40%): This area assesses the candidate's ability to review the patient's dental health by assessing medical and dental history; to note and chart the oral cavity; and, to provide instruction regarding oral hygiene, preoperative care, and postoperative care.

Task Statements	Knowledge Statements
3 Inspect patient's oral condition with mouth mirror. 4 Chart existing oral conditions and diagnostic findings at the direction of the licensed provider. 7 Observe for signs and conditions that may indicate abuse or neglect. 11 Conduct preliminary myofunctional evaluation of the head and neck. (EF2) 12 Perform and complete Oral Health Assessments under the direction of a dentist, RDH, or RDHAP. (EF2)	10 Knowledge of types of plaque, calculus, and stain formations of the oral cavity and their etiology. 11 Knowledge of conditions of the tooth surfaces (e.g., decalcification, caries, stains, and fractures lines) and how to document them. 12 Knowledge of effects of substance abuse on patient's physical condition including oral tissues. 13 Knowledge of effects of nutrition and malnutrition on the oral cavity. 14 Knowledge of effects of smoking and smokeless tobacco on oral tissue. 17 Knowledge of legal requirements and ethical principles regarding patient confidentiality. 18 Knowledge of types of dental conditions of hard and soft tissue and how to identify and document them. 19 Knowledge of basic oral and dental anatomy (e.g., nomenclature, morphology, and tooth notation). 20 Knowledge of legal requirements and ethical principles regarding mandated reporting (abuse and neglect). 22 Knowledge of the RDA/RDAEFs legal and ethical responsibilities to report violations of the state dental practice act, administrative rules or regulations to the proper authorities.

I. Patient Treatment and Care (continued)

Task Statements	Knowledge Statements
	25 Knowledge of requirements for the supervision of RDAs and RDAEFs related to different dental procedures. 26 Knowledge of scope of practice for RDAs and RDAEFs related to initial patient assessment. 27 Knowledge of techniques and procedures for performing an extra-oral and intraoral examination of the hard and soft tissues to identify pathology and abnormalities.

II. Dental Procedures: Direct and Indirect Restorations (45%): This area assesses the candidate's knowledge of materials, techniques, procedures, and scope of practice regarding direct and indirect restoration dental procedures.

Task Statements	Knowledge Statements
24 Place and contour direct restorations. (EF2) 25 Adjust, finish, and polish direct restorations. (EF2) 26 Perform preliminary adjustment of permanent indirect restorations prior to cementation. (EF2) 27 Cement permanent indirect restorations. (EF2) 28 Perform final adjustment of permanent indirect restorations after cementation. (EF2) 29 Take final impressions for permanent indirect restorations and toothborne removable prostheses. (EF 1/2) 30 Place retraction cord for impression procedures.	50 Knowledge of RDA and RDAEF scopes of practice related to direct restorations. 51 Knowledge of RDA and RDAEF scopes of practice related to indirect restorations. 52 Knowledge of RDA and RDAEF scopes of practice related to final impressions. 53 Knowledge of types of direct restorative materials and the techniques and procedures for their application, placement, and contouring. 54 Knowledge of techniques and procedures for adjusting, finishing, and polishing direct restorative materials. 55 Knowledge of techniques and procedures for identifying and adjusting occlusal, marginal, and contact discrepancies. 56 Knowledge of the types of luting agents and the techniques and procedures for applying them in the placement of permanent indirect restorations. 57 Knowledge of techniques and procedures for making final adjustment of permanent indirect restorations after cementation. 58 Knowledge of materials and techniques for taking final impressions. 59 Knowledge of techniques for gingival cord retraction, tissue management, and cord removal.

III: Dental Specialty Procedures (15%): This area assesses the candidate's knowledge of materials, techniques, procedures, and scope of practice regarding dental specialty procedures.

Task Statements	Knowledge Statements
3A Dental Specialty Procedures: Endodontic Procedures	
60 Select, size, and fit endodontic master point and accessory points. 61 Seal endodontic master and accessory points.	105 Knowledge of techniques and procedures for fitting master point and accessory points. 106 Knowledge of techniques and procedures for sealing endodontic master and accessory points. 107 Knowledge of scope of practice for RDA and RDAEFs related to endodontic points.
3B Dental Specialty Procedures: Prosthetic Appliances	
72 Take final impressions for toothborne prosthetic appliances.	119 Knowledge of materials and techniques for taking final impressions for toothborne prosthetic appliances.

CHAPTER 6. CONCLUSION

The occupational analysis of the Registered Dental Assistant in Extended Functions profession described in this report provides a comprehensive description of current practice in California. The procedures employed to perform the occupational analysis were based upon a content validation strategy to ensure that the results accurately represent the practice of Registered Dental Assistants in Extended Functions. Results of this occupational analysis provide information regarding current practice that can be used to make job-related decisions regarding professional licensure.

By adopting the examination outline for the Registered Dental Assistant in Extended Functions written examination contained in this report, the Board ensures that its examination program reflects current practice.

This report provides all documentation necessary to verify that the analysis has been completed in accordance with legal, professional, and technical standards.

APPENDIX A. RESPONDENTS BY REGION

LOS ANGELES COUNTY AND VICINITY

County of Practice	Frequency
Los Angeles	26
Orange	12
TOTAL	38

SAN FRANCISCO BAY AREA

County of Practice	Frequency
Alameda	7
Santa Clara	9
Contra Costa	6
Napa	2
San Mateo	3
Marin	1
Solano	1
San Francisco	8
TOTAL	37

SAN JOAQUIN VALLEY

County of Practice	Frequency
Fresno	2
Kings	1
Stanislaus	4
San Joaquin	3
Kern	5
Tulare	1
TOTAL	16

SACRAMENTO VALLEY

County of Practice	Frequency
Sacramento	12
Lake	3
Butte	2
Sutter	1
TOTAL	18

SAN DIEGO COUNTY AND VICINITY

County of Practice	Frequency
San Diego	7
Imperial	1
TOTAL	8

SHASTA/CASCADE

County of Practice	Frequency
Shasta	1
TOTAL	1

RIVERSIDE COUNTY AND VICINITY

County of Practice	Frequency
Riverside	4
San Bernardino	3
TOTAL	7

SIERRA MOUNTAIN VALLEY

County of Practice	Frequency
Placer	7
El Dorado	1
Amador	1
Mono	1
TOTAL	10

NORTH COAST

County of Practice	Frequency
Mendocino	2
Sonoma	1
TOTAL	3

SOUTH/CENTRAL COAST

County of Practice	Frequency
Monterey	2
Ventura	4
TOTAL	6

COUNTY 2

County of Practice	Frequency
Riverside	1
Sacramento	1
San Bernardino	2
San Diego	1
San Francisco	2
San Mateo	2
Santa Clara	1
Santa Cruz	1
Tehama	1
Ventura	2
TOTAL	14

COUNTY 3

County of Practice	Frequency
San Mateo	1
TOTAL	1

APPENDIX B. CRITICALITY INDICES FOR ALL TASKS

CA	T#	Task Statement	Avg. TFreq	Avg. TImpt	TCV
2A	15	Place temporary filling material.	2.79	3.54	22.24
2A	16	Apply etchant to tooth surface (tooth dentin or enamel) for direct and indirect provisional restorations.	3.01	3.92	20.62
2A	19	Perform cementation procedure for direct and indirect provisional restorations.	3.54	4.24	20.48
2A	18	Fabricate and adjust direct and indirect provisional restorations.	3.56	4.27	20.29
2A	17	Place bonding agent.	2.96	4.05	19.71
2A	14	Place matrices and wedges.	2.99	3.79	19.28
4G	72	Take final impressions for toothborne prosthetic appliances.	2.60	3.90	18.35
1	10	Instruct patient about pre- and postoperative care and maintenance for dental procedures and appliances.	4.56	4.45	18.23
1	9	Educate patient about behaviors that could affect oral health or dental treatment.	4.40	4.41	18.13
1	1	Review and report to dentist patient medical conditions, medications, and areas of medical/dental treatment history that may affect dental treatment.	3.99	4.36	18.01
1	11	Conduct preliminary myofunctional evaluation of the head and neck.	1.73	3.35	17.82
3A	41	Conduct biological spore testing to ensure functioning of sterilization devices.	4.13	4.83	17.19
4A	59	Dry canals with absorbent points.	1.06	3.66	16.9
4A	58	Test pulp vitality.	0.95	3.38	16.69
1	8	Perform dental procedures using professional chairside manner.	4.70	4.66	16.62
3A	36	Use germicides for surface disinfection (e.g., tables, chairs, counters).	4.72	4.85	15.82
1	7	Observe for signs and conditions that may indicate abuse or neglect.	3.23	4.08	15.76
3A	35	Purge dental unit lines with air or water prior to attachment of devices.	4.16	4.58	15.72
3A	37	Use surface barriers for prevention of cross-contamination.	4.74	4.86	15.6
1	2	Take patient's blood pressure and vital signs.	3.46	4.16	15.38
1	3	Inspect patient's oral condition with mouth mirror.	3.17	3.90	15.31
1	6	Respond to patient questions about existing conditions and treatment following dentist's diagnosis.	4.14	4.26	14.74
3A	34	Wear personal protective equipment during patient-based and non-patient-based procedures as specific to the tasks.	4.77	4.84	14.6
3A	40	Use hand hygiene procedures.	4.41	4.82	14.58

CA: Content Area

CA	T#	Task Statement	Avg. TFreq	Avg. TImpt	TCV
3D	57	Store, label, and log chemicals used in a dental practice.	3.36	4.47	14.35
3A	42	Dispose of biological hazardous waste and Other Potentially Infectious Materials (OPIM).	4.07	4.76	14.21
2A	13	Place bases and liners.	1.97	3.35	13.91
1	12	Perform and complete Oral Health Assessments under the direction of a dentist, RDH, or RDHAP.	2.02	3.52	13.83
1	4	Chart existing oral conditions and diagnostic findings at the direction of the licensed provider.	3.70	4.02	13.34
1	5	Perform intraoral diagnostic imaging of patient's mouth and dentition (e.g., radiographs, photographs, CT scans).	4.04	4.37	13.19
2C	33	Prepare teeth and apply pit and fissure sealants.	2.95	3.84	13.19
3A	43	Dispose of pharmaceuticals and sharps in appropriate container.	4.52	4.88	13.02
2C	31	Perform coronal polishing.	2.84	3.51	12.81
2C	32	Utilize caries detection materials and devices to gather information for dentist.	1.50	3.27	12.63
2B	27	Cement permanent indirect restorations.	2.04	4.29	12.54
4B	60	Select, size, and fit endodontic master point and accessory points.	0.74	3.77	12.33
3D	56	Package, prepare, and store hazardous waste for disposal.	3.19	4.52	12.31
4F	71	Adjust prosthetic appliances extraorally.	1.81	3.59	12.25
2B	26	Perform preliminary adjustment of permanent indirect restorations prior to cementation.	2.40	4.08	11.26
2B	30	Place retraction cord for impression procedures.	3.73	4.33	11.19
4B	61	Seal endodontic master and accessory points.	0.63	3.67	11.04
2B	28	Perform final adjustment of permanent indirect restorations after cementation.	1.76	3.97	11.02
3C	50	Implement basic life support and/or use of AED as indicated during medical emergency.	1.40	4.66	10.81
2B	29	Take final impressions for permanent indirect restorations and toothborne removable prostheses.	3.13	4.31	10.73
3C	51	Assist in emergency care of patient.	1.78	4.51	10.61
3C	48	Assist in the administration of nitrous oxide/oxygen when used for analgesia or sedation by dentist.	2.31	4.13	10.57
3C	49	Assist in the administration of oxygen to patients as instructed by dentist.	2.15	4.20	10.44
3B	47	Implement measures for the storage and disposal of radiographic film.	1.60	4.53	9.65
4E	70	Place and remove dry socket dressing as directed by dentist.	0.76	3.61	9.3

CA: Content Area

CA	T#	Task Statement	Avg. TFreq	Avg. TImpt	TCV
3C	53	Implement emergency preparedness protocols as per office procedures.	2.98	4.51	9.13
3C	52	Implement first aid and BLS measures to support patient care.	1.65	4.53	9.07
3A	39	Disinfect and sterilize laboratory and operatory equipment in compliance with the office's infection control program.	4.60	4.79	8.3
2A	23	Perform in-office whitening (bleaching) procedures (e.g., Boost, Opalescence).	1.94	3.16	7.94
3C	54	Follow infection control procedures during the administration of first aid and basic life support.	2.75	4.66	7.84
3A	38	Perform instrument sterilization in compliance with the office's infection control program.	4.44	4.81	7.82
2A	20	Obtain intraoral images using computer generated imaging system (e.g., CADCAM).	1.94	4.07	7.65
3D	55	Implement protocols and procedures to protect operator from exposure during hazardous waste management.	3.58	4.56	7.62
2B	25	Adjust, finish, and polish direct restorations.	2.28	4.27	7.5
3B	44	Implement measures to minimize radiation exposure to patient during radiographic procedures.	4.56	4.76	7.23
2A	22	Remove indirect provisional restorations.	3.25	3.82	6.97
2B	24	Place and contour direct restorations.	2.10	4.36	6.66
3B	45	Implement measures to prevent and monitor scatter radiation exposure (e.g., lead shields, radiation dosimeter) to self and others during radiographic procedures.	4.38	4.75	6.64
2A	21	Take impressions for direct and indirect provisional restorations.	3.82	4.23	6.39
3B	46	Implement measures for the storage and maintenance of radiation protective barriers and portable X-Ray units.	3.58	4.60	5.34
4E	69	Remove post-extraction and post-surgery sutures as directed by dentist.	1.59	3.41	5.3
4C	62	Place periodontal dressings at surgical site.	0.45	3.41	5.2

CA: Content Area

APPENDIX C. KNOWLEDGE IMPORTANCE RATINGS

CA	K#	Knowledge Statement	Avg. KImpt.
1	3	Knowledge of allergic reactions and sensitivities associated with dental treatment and materials (e.g., latex, epinephrine).	4.73
1	6	Knowledge of medical conditions that may require premedication for dental treatment (e.g., joint replacement, infective endocarditis, artificial heart valves).	4.70
3C	96	Knowledge of the equipment used for first aid and BLS and their uses and applications (e.g., eyewash station, AED).	4.70
3A	70	Knowledge of procedures and protocols for management and disposal of pharmaceuticals and sharps.	4.69
3C	93	Knowledge of signs and symptoms indicating the need to implement first aid and basic life support measures.	4.69
3C	97	Knowledge of measures for preventing spread of infection during first aid and BLS.	4.68
3A	71	Knowledge of methods and procedures for the handling, use, cleaning, and disposal of personal protective equipment (e.g., gloves, masks, goggles, gown).	4.67
1	5	Knowledge of the legal and ethical requirements regarding patient records and patient confidentiality.	4.66
3A	69	Knowledge of laws and regulations pertaining to infection control procedures related to “Dental Healthcare Personnel” (DHCP) environments.	4.65
3A	84	Knowledge of procedures and protocols for the disposal of biological hazardous waste and Other Potentially Infectious Materials (OPIM).	4.65
3A	76	Knowledge of procedures and protocols for the disinfection/decontamination of surfaces and work areas.	4.63
3A	81	Knowledge of procedures for handling, disinfecting, and sterilizing detachable intraoral handpieces, instruments, and devices.	4.62
2B	59	Knowledge of techniques for gingival cord retraction, tissue management, and cord removal.	4.61
3A	79	Knowledge of types of sterilization devices and the indications and procedures for their use (e.g., steam and dry heat automated sterilization devices).	4.61
3A	80	Knowledge of procedures for the disinfection and sterilization of laboratory equipment, operatory equipment, and mechanical devices.	4.61
3C	95	Knowledge of signs and symptoms indicating possible allergic reactions and/or sensitivities to medications or materials used in dentistry.	4.61
2B	58	Knowledge of materials and techniques for taking final impressions.	4.60
2A	36	Knowledge of methods for identifying improper occlusal contacts, proximal contacts, or embrasure contours of provisional restorations.	4.59
3A	78	Knowledge of what defines critical, semi-critical and non-critical instruments and their respective disinfection/sterilization protocols.	4.59

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CA	K#	Knowledge Statement	Avg. KImpt.
3A	82	Knowledge of protocols and procedures for hand hygiene.	4.59
3A	73	Knowledge of procedures and protocols for the use of surface barriers to prevent contamination.	4.58
3A	77	Knowledge of the methods and procedures for the application and disposal of low-level, intermediate-level and high-level disinfectants and germicides.	4.58
2A	35	Knowledge of techniques used to eliminate open margins when placing restorative materials.	4.56
3A	83	Knowledge of protocols for using biological spore test and heat indicating devices.	4.56
3A	74	Knowledge of protocols and procedures for purging dental unit waterlines and hand pieces (DUWL).	4.55
3C	94	Knowledge of procedures for implementing protocols for responding to office and environmental emergencies.	4.54
1	4	Knowledge of purposes and effects of commonly prescribed medications that may affect dental treatment (e.g., Coumadin, psychotropics).	4.53
2A	37	Knowledge of techniques and procedures for mitigating the effects of improper occlusal contacts, proximal contacts, or embrasure contours of provisional restorations.	4.53
3C	91	Knowledge of the applications and contraindications for use of oxygen and nitrous oxide/oxygen in a dental practice setting.	4.53
2A	52	Knowledge of RDA and RDAEF scopes of practice related to final impressions.	4.52
1	7	Knowledge of acceptable levels of blood pressure for performing dental procedures.	4.51
3A	72	Knowledge of sequence for donning and removing personal protective equipment.	4.51
3B	85	Knowledge of methods and procedures for the use and care of protective barriers (e.g., lead apron, thyroid collar, shield) to protect patient from radiation exposure.	4.51
2A	34	Knowledge of irregularities in margins that affect direct and indirect provisional restorations.	4.50
2A	50	Knowledge of RDA and RDAEF scopes of practice related to direct restorations.	4.50
1	25	Knowledge of requirements for the supervision of RDAs and RDAEFs related to different dental procedures.	4.49
3C	92	Knowledge of procedures for the use and care of equipment used to administer oxygen and nitrous oxide/oxygen.	4.49
2A	51	Knowledge of RDA and RDAEF scopes of practice related to indirect restorations.	4.48

CA: Content Area

CA	K#	Knowledge Statement	Avg. KImpt.
1	22	Knowledge of the RDA/RDAEFs legal and ethical responsibilities to report violations of the state dental practice act, administrative rules or regulations to the proper authorities.	4.47
1	2	Knowledge of common medical conditions that may affect dental treatment (e.g., asthma, cardiac conditions, diabetes).	4.45
1	8	Knowledge of methods and techniques for using medical equipment to take vital signs.	4.45
1	17	Knowledge of legal requirements and ethical principles regarding patient confidentiality.	4.44
3D	99	Knowledge of what constitutes hazardous waste and the protocols and procedures for its disposal.	4.44
2A	32	Knowledge of types of bonding agents and the techniques and procedures for their application and placement.	4.43
2A	41	Knowledge of types of impression materials and techniques and procedures for their application and placement.	4.43
2A	33	Knowledge of types of etchants and the techniques and procedures for their application and placement.	4.42
2A	43	Knowledge of techniques and procedures for bonding provisional veneers.	4.42
2B	53	Knowledge of types of direct restorative materials and the techniques and procedures for their application, placement, and contouring.	4.41
2B	55	Knowledge of techniques and procedures for identifying and adjusting occlusal, marginal, and contact discrepancies.	4.41
1	19	Knowledge of basic oral and dental anatomy (e.g., nomenclature, morphology, and tooth notation).	4.40
3A	75	Knowledge of procedures for managing self-contained water systems.	4.40
2A	46	Knowledge of indications and contraindications for the use of etching agents.	4.39
1	24	Knowledge of pre- and postoperative care and maintenance for dental procedures and appliances.	4.38
1	26	Knowledge of scope of practice for RDAs and RDAEFs related to initial patient assessment.	4.38
2A	45	Knowledge of indications and contraindications for the use of bonding agents.	4.38
2A	48	Knowledge of types of cements and the techniques and procedures for their application, placement, and removal.	4.38
2B	54	Knowledge of techniques and procedures for adjusting, finishing, and polishing direct restorative materials.	4.38
1	21	Knowledge of techniques to provide patient comfort during intraoral procedures.	4.37

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CA	K#	Knowledge Statement	Avg. KImpt.
2B	56	Knowledge of the types of luting agents and the techniques and procedures for applying them in the placement of permanent indirect restorations.	4.35
2B	57	Knowledge of techniques and procedures for making final adjustment of permanent indirect restorations after cementation.	4.35
2C	67	Knowledge of types of pit and fissure sealants and the techniques and procedures for their application.	4.35
3B	88	Knowledge of techniques and procedures for minimizing exposure to self and others during radiation procedures.	4.35
3D	98	Knowledge of location within Safety Data Sheets of safe handling and emergency protocols for hazardous substances.	4.35
1	23	Knowledge of methods and techniques patients can perform to improve oral health.	4.34
2C	65	Knowledge of procedures for preparing the tooth for the application of pit and fissure sealants.	4.34
3D	101	Knowledge of requirements for placing hazardous substances in secondary containers, (e.g., labeling, handling, applicable containers).	4.34
3B	86	Knowledge of types of film holding devices and placement to minimize multiple exposures during radiography.	4.33
3B	89	Knowledge of legal and ethical requirements for RDAs and RDAEFs related to radiation safety.	4.33
2A	38	Knowledge of instrumentation and techniques related to the removal of indirect provisional restorations.	4.32
2A	49	Knowledge of scope of practice for RDAs and RDAEFs related to applying and activating whitening (bleaching) agents.	4.32
2A	31	Knowledge of types of temporary filling materials and the techniques and procedures to mix, place, and contour them.	4.31
2A	39	Knowledge of scope of practice for RDAs and RDAEFs related to applying bases, liners, and bonding agents.	4.31
1	11	Knowledge of conditions of the tooth surfaces (e.g., decalcification, caries, stains, and fractures lines) and how to document them.	4.30
2A	44	Knowledge of indications and contraindications for the use of whitening (bleaching) agents.	4.30
4G	119	Knowledge of materials and techniques for taking final impressions for toothborne prosthetic appliances.	4.29
1	16	Knowledge of professional and ethical principles regarding patient care.	4.28
2C	66	Knowledge of indications and contraindications for use of pit and fissure sealants.	4.27
1	15	Knowledge of the professional and ethical principles related to communicating with, and fair treatment of patient.	4.25

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CA	K#	Knowledge Statement	Avg. KImpt.
2A	28	Knowledge of types of base and liner materials and the techniques and procedures for their application and placement.	4.25
2A	42	Knowledge of techniques and procedures used to mix and place provisional materials.	4.25
1	1	Knowledge of effects of coexisting medical/dental conditions on dental treatment.	4.24
1	9	Knowledge of techniques and procedures for using imaging equipment to perform intraoral and extraoral diagnostic imaging.	4.24
1	18	Knowledge of types of dental conditions of hard and soft tissue and how to identify and document them.	4.23
1	20	Knowledge of legal requirements and ethical principles regarding mandated reporting (abuse and neglect).	4.23
3D	100	Knowledge of methods for maintaining a chemical inventory.	4.23
2C	60	Knowledge of scope of practice for RDAs related to coronal polishing and the application of pit and fissure sealants.	4.22
2C	62	Knowledge of techniques and procedures for coronal polishing.	4.22
2A	30	Knowledge of techniques and procedures for using matrix bands with or without band retainers.	4.21
1	12	Knowledge of effects of substance abuse on patient's physical condition including oral tissues.	4.18
2A	29	Knowledge of types of wedges and the techniques and procedures for their use.	4.18
2A	47	Knowledge of types of whitening (bleaching) agents and the techniques and procedures for their application.	4.17
3B	87	Knowledge of factors of radiographic film speed, digital sensors, phosphor plates, and exposure time as related to radiographic safety.	4.16
2A	40	Knowledge of equipment and procedures used to obtain intraoral images for computer-aided, milled restorations.	4.15
1	27	Knowledge of techniques and procedures for performing an extra-oral and intraoral examination of the hard and soft tissues to identify pathology and abnormalities.	4.14
2C	61	Knowledge of indications and contraindications for performing coronal polishing.	4.13
3B	90	Knowledge of methods for the storage and disposal of radiographic film.	4.13
1	14	Knowledge of effects of smoking and smokeless tobacco on oral tissue.	4.11
4F	118	Knowledge of scope of practice for RDAs and RDAEFs related to the adjustment of extraoral prosthetic appliances.	4.06
4F	117	Knowledge of materials, equipment, and techniques used for adjustment of prosthetic appliances.	3.98

CA: Content Area

CA	K#	Knowledge Statement	Avg. KImpt.
4F	116	Knowledge of methods for identifying pressure points (sore spots) related to ill-fitting prosthetic appliances.	3.97
1	13	Knowledge of effects of nutrition and malnutrition on the oral cavity.	3.96
4E	115	Knowledge of methods for treating dry socket.	3.92
4E	114	Knowledge of techniques for removing post-extraction and post-surgery sutures.	3.91
2C	68	Knowledge of scope of practice for RDAs related to use of caries detection devices and materials.	3.90
1	10	Knowledge of types of plaque, calculus, and stain formations of the oral cavity and their etiology.	3.86
2C	63	Knowledge of types of disclosing agents used in conjunction with coronal polishing.	3.83
4A	102	Knowledge of techniques and procedures for testing pulp vitality.	3.73
2C	64	Knowledge of types of automated caries detection devices, materials, and procedures for their use.	3.70
4A	103	Knowledge of techniques and procedures for measuring canal length and size.	3.66
4B	105	Knowledge of techniques and procedures for fitting master point and accessory points.	3.64
4B	106	Knowledge of techniques and procedures for sealing endodontic master and accessory points.	3.63
4B	107	Knowledge of scope of practice for RDA and RDAEFs related to endodontic points.	3.63
4C	108	Knowledge of scope of practice for RDAs and RDAEFs related to the placement of periodontal dressing materials.	3.55
4C	109	Knowledge of types of periodontal dressings and techniques for their application.	3.54
4A	104	Knowledge of scope of practice for RDAs and RDAEFs related to initial pulp vitality testing and other endodontic procedures.	3.53

APPENDIX D. TASK-KNOWLEDGE LINKAGE
RDAEF WRITTEN EXAMINATION

RDAEF GENERAL KNOWLEDGE TEST PLAN
TASK AND KNOWLEDGE LINKAGE

I. **Patient Treatment and Care (40%):** This area assesses the candidate's ability to review the patient's dental health by assessing medical and dental history; to note and chart the oral cavity; and, to provide instruction regarding oral hygiene, preoperative care, and postoperative care.

Task Statements	Knowledge Statements
3 Inspect patient's oral condition with mouth mirror.	10 Knowledge of types of plaque, calculus, and stain formations of the oral cavity and their etiology. 11 Knowledge of conditions of the tooth surfaces (e.g., decalcification, caries, stains, and fractures lines) and how to document them. 12 Knowledge of effects of substance abuse on patient's physical condition including oral tissues. 13 Knowledge K of effects of nutrition and malnutrition on the oral cavity. 14 Knowledge of effects of smoking and smokeless tobacco on oral tissue. 17 Knowledge of legal requirements and ethical principles regarding patient confidentiality. 18 Knowledge of types of dental conditions of hard and soft tissue and how to identify and document them. 27 Knowledge of techniques and procedures for performing an extra-oral and intraoral examination of the hard and soft tissues to identify pathology and abnormalities.
4 Chart existing oral conditions and diagnostic findings at the direction of the licensed provider.	10 Knowledge of types of plaque, calculus, and stain formations of the oral cavity and their etiology. 11 Knowledge of conditions of the tooth surfaces (e.g., decalcification, caries, stains, and fractures lines) and how to document them. 12 Knowledge of effects of substance abuse on patient's physical condition including oral tissues. 13 Knowledge of effects of nutrition and malnutrition on the oral cavity. 14 Knowledge of effects of smoking and smokeless tobacco on oral tissue. 17 Knowledge of legal requirements and ethical principles regarding patient confidentiality. 18 Knowledge K of types of dental conditions of hard and soft tissue and how to identify and document them. 19 Knowledge of basic oral and dental anatomy (e.g., nomenclature, morphology, and tooth notation).

I. Patient Treatment and Care (continued)

Task Statements	Knowledge Statements
7 Observe for signs and conditions that may indicate abuse or neglect.	13 Knowledge of effects of nutrition and malnutrition on the oral cavity. 14 Knowledge of effects of smoking and smokeless tobacco on oral tissue. 20 Knowledge of legal requirements and ethical principles regarding mandated reporting (abuse and neglect).
11 Conduct preliminary myofunctional evaluation of the head and neck. (EF2)	25 Knowledge of requirements for the supervision of RDAs and RDAEFs related to different dental procedures. 26 Knowledge of scope of practice for RDAs and RDAEFs related to initial patient assessment. 27 Knowledge of techniques and procedures for performing an extra-oral and intraoral examination of the hard and soft tissues to identify pathology and abnormalities.
12 Perform and complete Oral Health Assessments under the direction of a dentist, RDH, or RDHAP. (EF2)	17 Knowledge of legal requirements and ethical principles regarding patient confidentiality. 20 Knowledge of legal requirements and ethical principles regarding mandated reporting (abuse and neglect). 25 Knowledge of requirements for the supervision of RDAs and RDAEFs related to different dental procedures. 26 Knowledge of scope of practice for RDAs and RDAEFs related to initial patient assessment. 27 Knowledge of techniques and procedures for performing an extra-oral and intraoral examination of the hard and soft tissues to identify pathology and abnormalities.

II. Dental Procedures: Direct and Indirect Restorations (45%): This area assesses the candidate's knowledge of materials, techniques, procedures, and scope of practice regarding direct and indirect restoration dental procedures.

Task Statements	Knowledge Statements
24 Place and contour direct restorations. (EF2)	53 Knowledge of types of direct restorative materials and the techniques and procedures for their application, placement, and contouring.
25 Adjust, finish, and polish direct restorations. (EF2)	50 Knowledge of RDA and RDAEF scopes of practice related to direct restorations. 54 Knowledge of techniques and procedures for adjusting, finishing, and polishing direct restorative materials.
26 Perform preliminary adjustment of permanent indirect restorations prior to cementation. (EF2)	51 Knowledge of RDA and RDAEF scopes of practice related to indirect restorations. 55 Knowledge of techniques and procedures for identifying and adjusting occlusal, marginal, and contact discrepancies.
27 Cement permanent indirect restorations. (EF2)	51 Knowledge of RDA and RDAEF scopes of practice related to indirect restorations. 56 Knowledge of the types of luting agents and the techniques and procedures for applying them in the placement of permanent indirect restorations.
28 Perform final adjustment of permanent indirect restorations after cementation. (EF2)	51 Knowledge of RDA and RDAEF scopes of practice related to indirect restorations. 57 Knowledge of techniques and procedures for making final adjustment of permanent indirect restorations after cementation.
29 Take final impressions for permanent indirect restorations and toothborne removable prostheses. (EF1/2)	52 Knowledge of RDA and RDAEF scopes of practice related to final impressions. 58 Knowledge of materials and techniques for taking final impressions.
30 Place retraction cord for impression procedures.	59 Knowledge of techniques for gingival cord retraction, tissue management, and cord removal.

III. Dental Specialty Procedures (15%): This area assesses the candidate's knowledge of materials, techniques, procedures and scope of practice regarding dental specialty procedures.

Task Statements	Knowledge Statements
3A Dental Specialty Procedures: Endodontic Procedures	
60 Select, size, and fit endodontic master point and accessory points.	105 Knowledge of techniques and procedures for fitting master point and accessory points. 107 Knowledge of scope of practice for RDA and RDAEFs related to endodontic points.
61 Seal endodontic master and accessory points.	106 Knowledge of techniques and procedures for sealing endodontic master and accessory points. 107 Knowledge of scope of practice for RDA and RDAEFs related to endodontic points.
3B Dental Specialty Procedures: Prosthetic Appliances	
72 Take final impressions for toothborne prosthetic appliances.	119 Knowledge of materials and techniques for taking final impressions for toothborne prosthetic appliances.

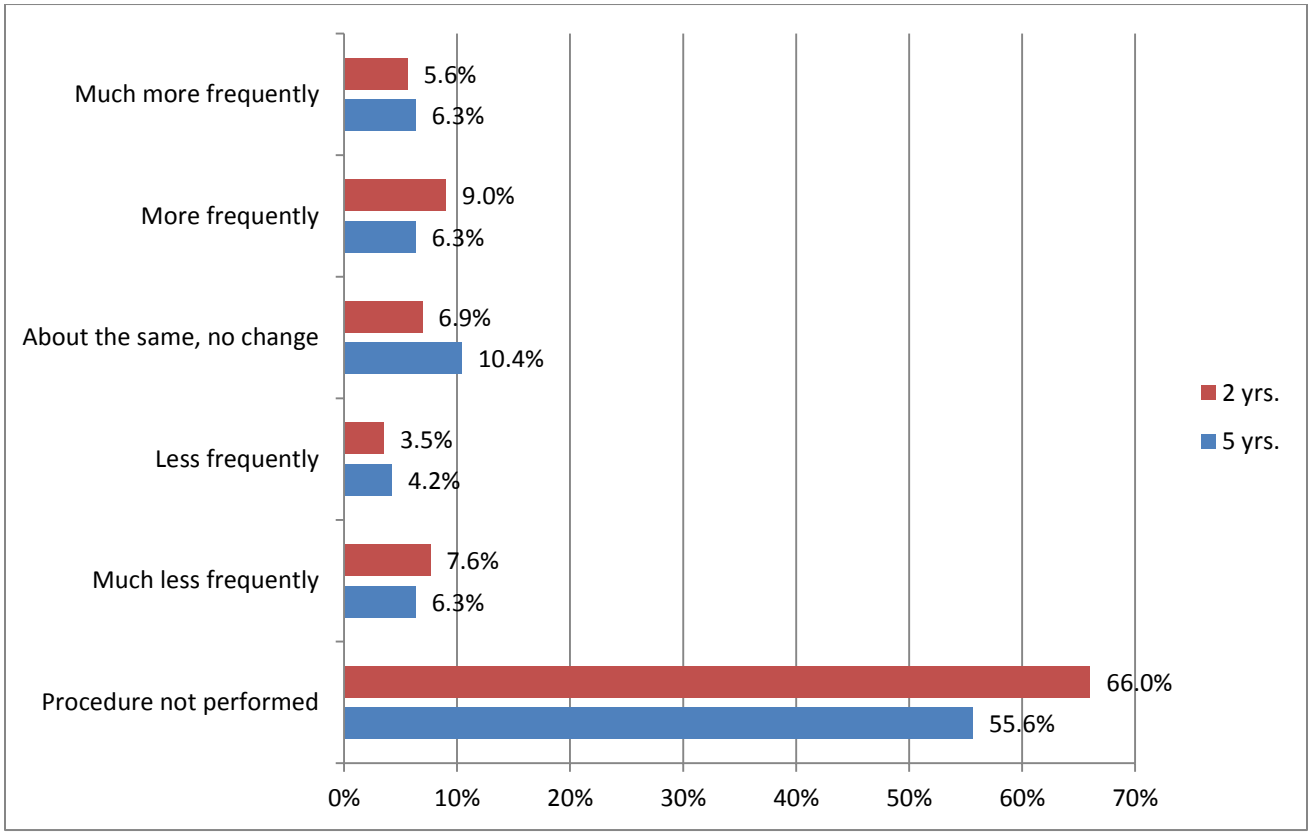
APPENDIX E. FREQUENCY OF PERFORMING DENTAL PROCEDURES IN PRACTICE SETTING BY REGISTERED DENTAL ASSISTANTS IN EXTENDED FUNCTIONS

Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Traditional braces (brackets/wire)

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed *	95	66.0	80	55.6
Much less frequently	11	7.6	9	6.3
Less frequently	5	3.5	6	4.2
About the same, no change	10	6.9	15	10.4
More frequently	13	9.0	9	6.3
Much more frequently	8	5.6	9	6.3
Missing	2	1.4	16	11.1
Total	144	100	144	100**

***NOTE: Percentages do not add to 100 due to rounding.*



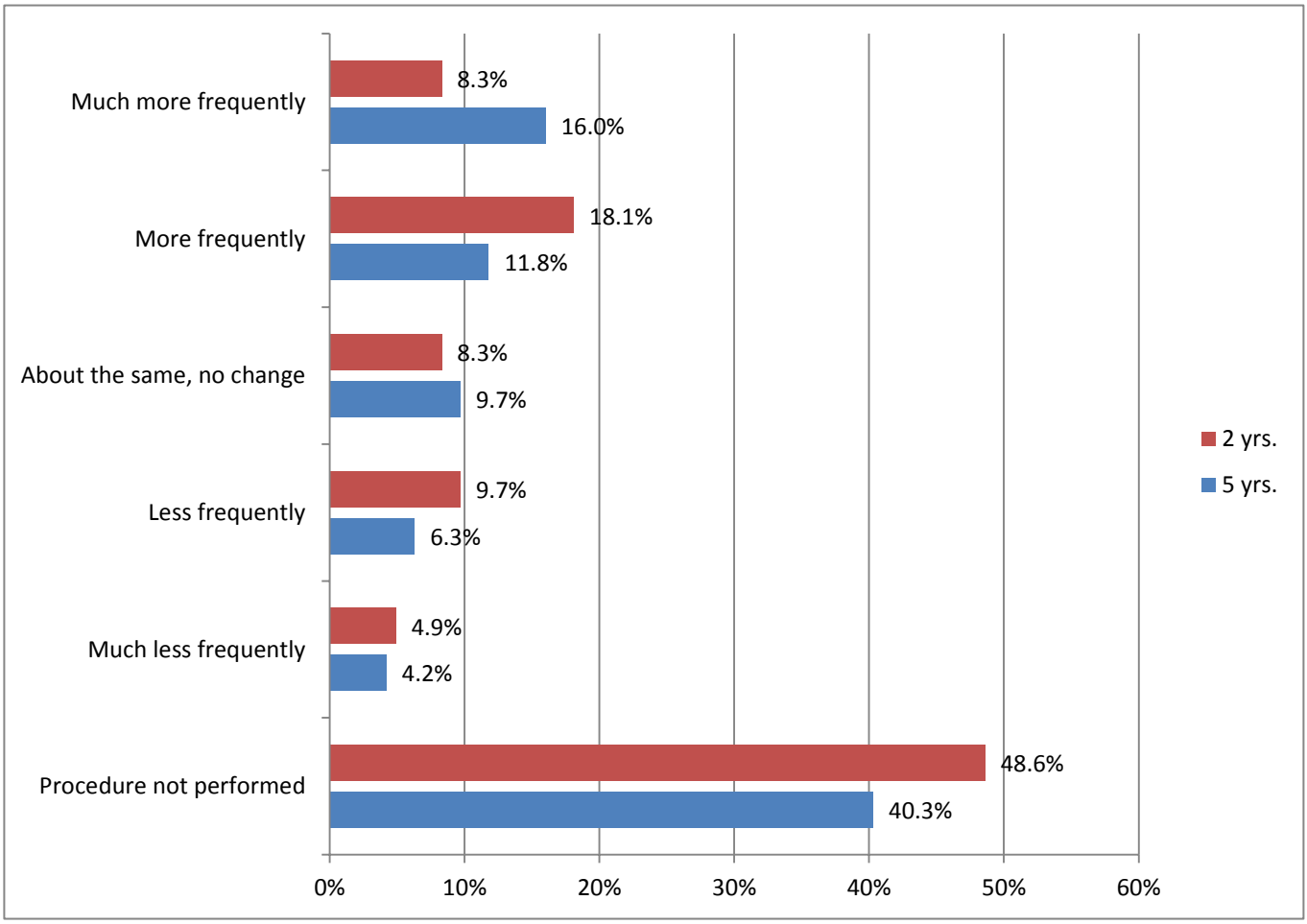
* Procedure typically performed only in specialty dental settings

Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Clear tooth aligner systems (e.g., Invisalign, Minor Tooth Movement [MTM])

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed *	70	48.6	58	40.3
Much less frequently	7	4.9	6	4.2
Less frequently	14	9.7	9	6.3
About the same, no change	12	8.3	14	9.7
More frequently	26	18.1	17	11.8
Much more frequently	12	8.3	23	16.0
Missing	3	2.1	17	11.8
Total	144	100	144	100**

***NOTE: Percentages do not add to 100 due to rounding.*



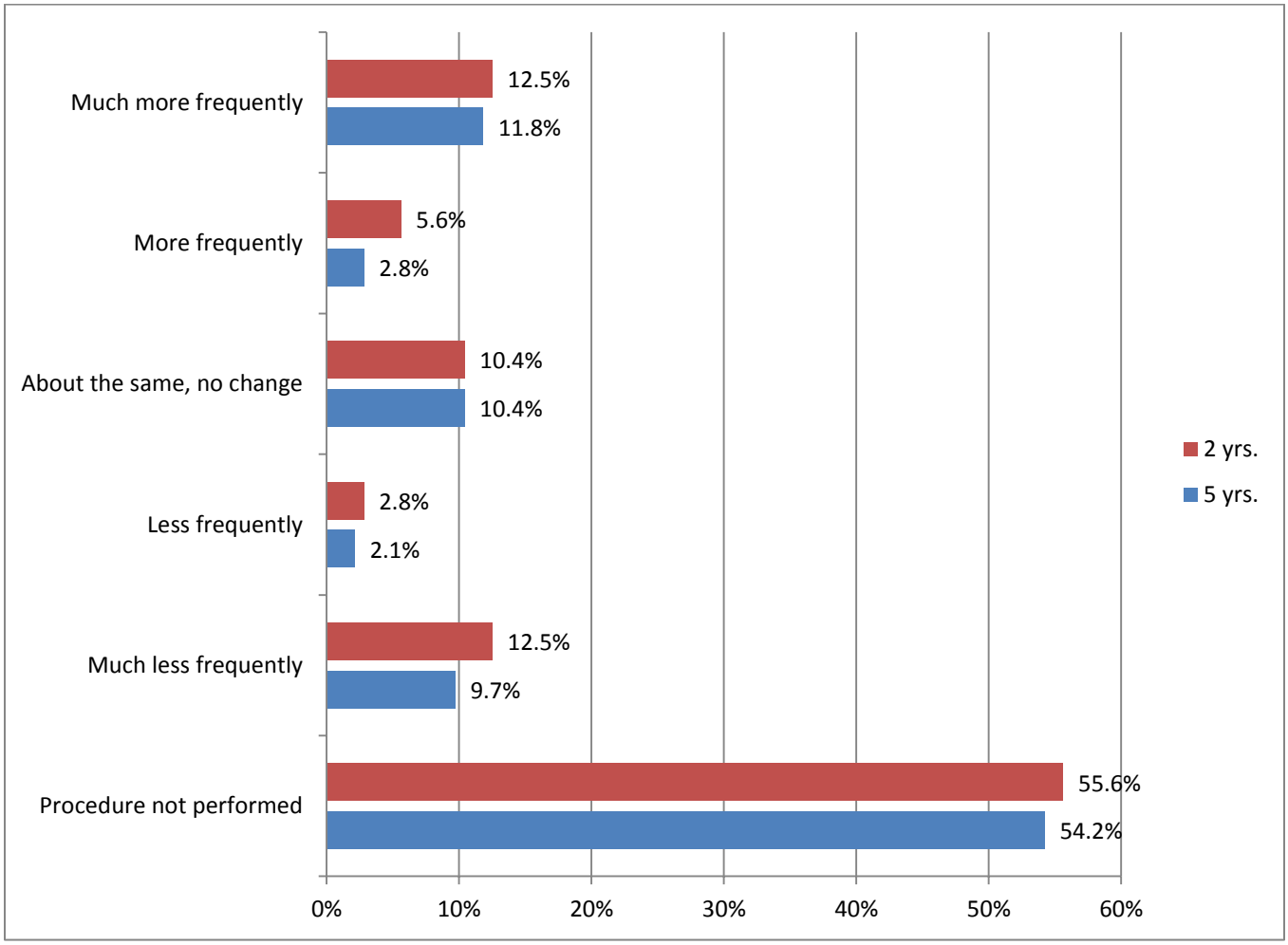
* Procedure typically performed only in specialty dental settings

Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Radiographs by X-ray film

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	80	55.6	78	54.2
Much less frequently	18	12.5	14	9.7
Less frequently	4	2.8	3	2.1
About the same, no change	15	10.4	15	10.4
More frequently	8	5.6	4	2.8
Much more frequently	18	12.5	17	11.8
Missing	1	0.7	13	9.0
Total	144	100*	144	100

**NOTE: Percentages do not add to 100 due to rounding.*

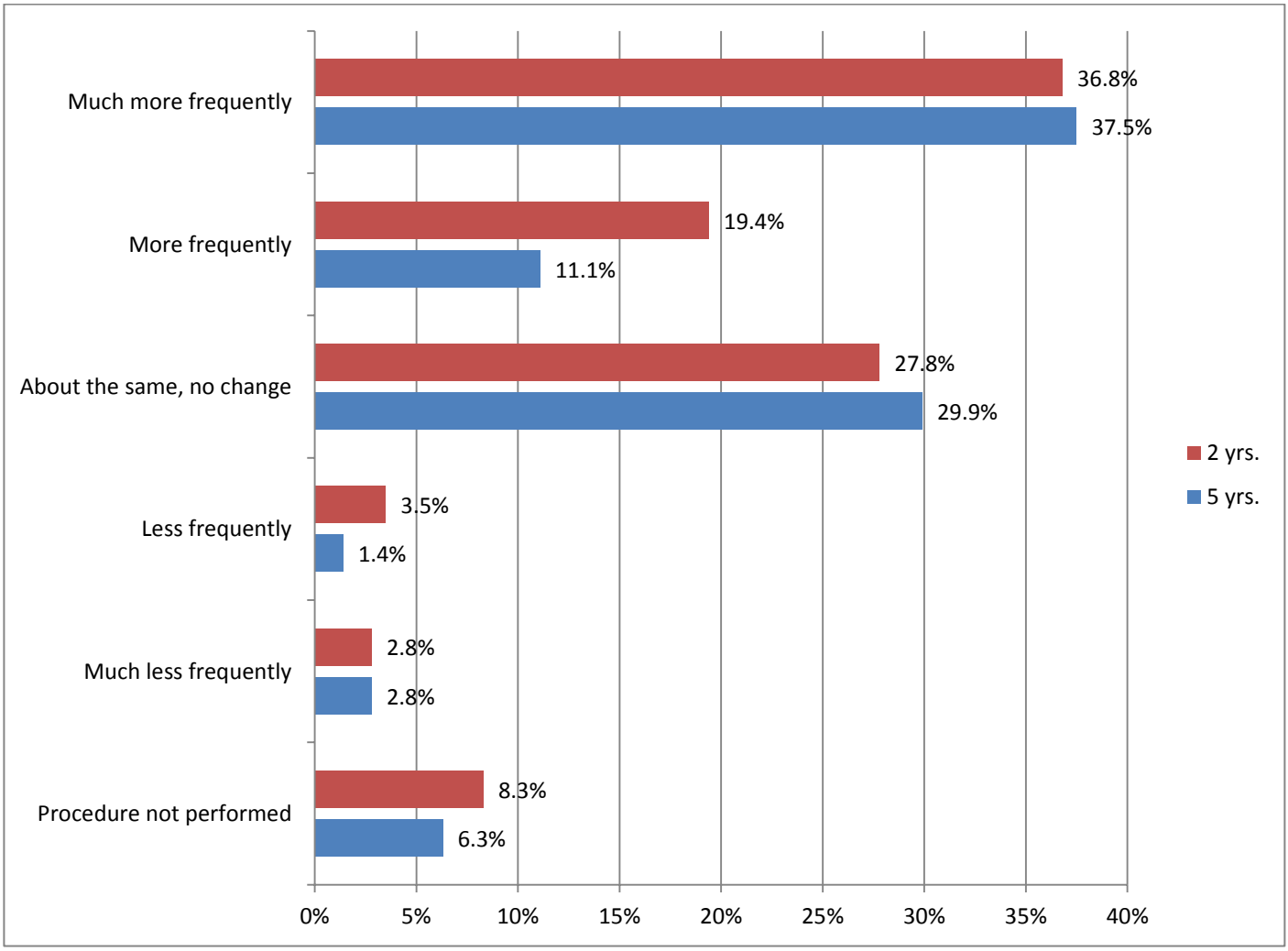


Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Radiography by digital sensors/phosphor plates

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	12	8.3	9	6.3
Much less frequently	4	2.8	4	2.8
Less frequently	5	3.5	2	1.4
About the same, no change	40	27.8	43	29.9
More frequently	28	19.4	16	11.1
Much more frequently	53	36.8	54	37.5
Missing	2	1.4	16	11.1
Total	144	100	144	100*

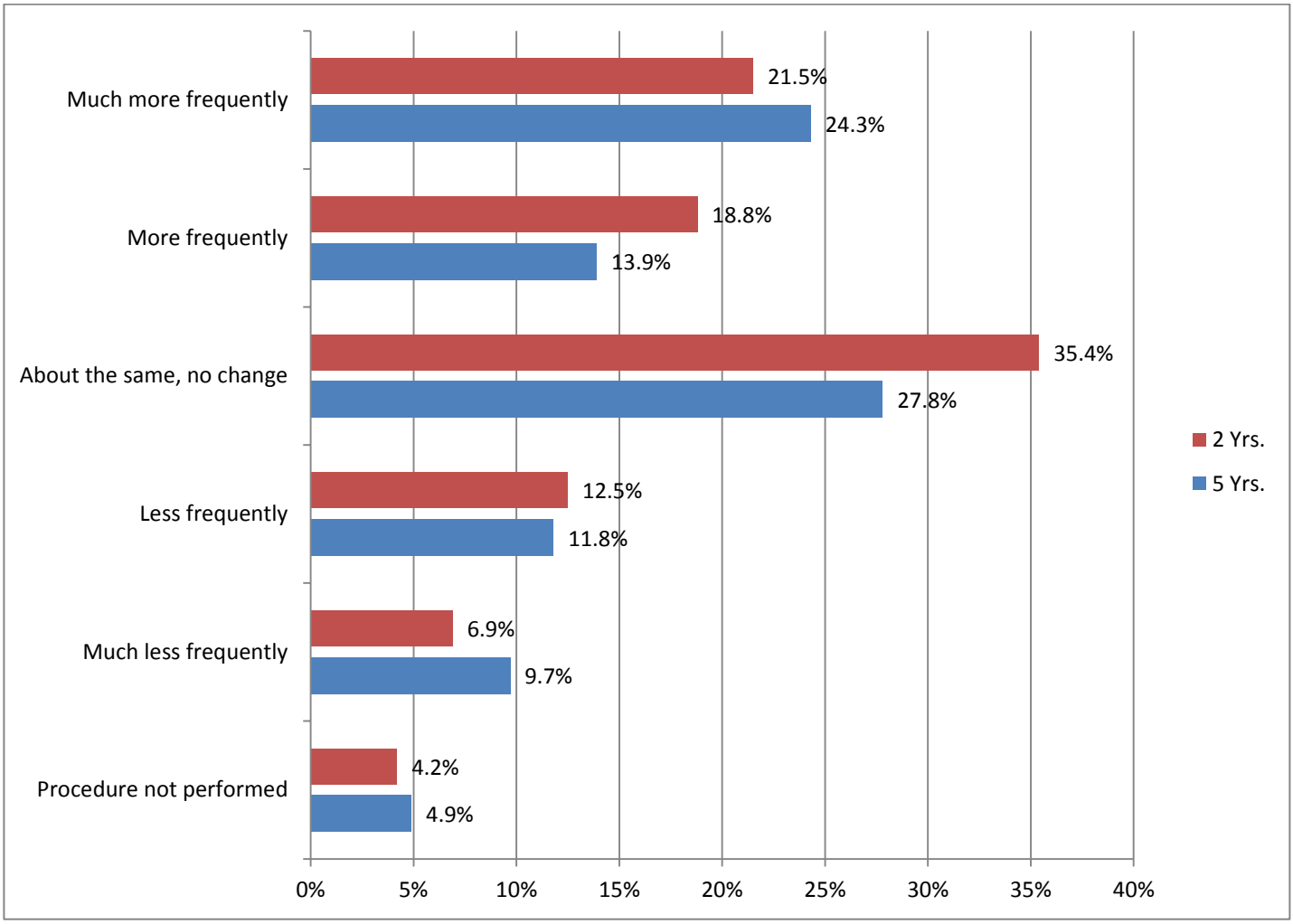
**NOTE: Percentages do not add to 100 due to rounding.*



Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Restorations using traditional impression material

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	6	4.2	7	4.9
Much less frequently	10	6.9	14	9.7
Less frequently	18	12.5	17	11.8
About the same, no change	51	35.4	40	27.8
More frequently	27	18.8	20	13.9
Much more frequently	31	21.5	35	24.3
Missing	1	0.7	11	7.6
Total	144	100	144	100

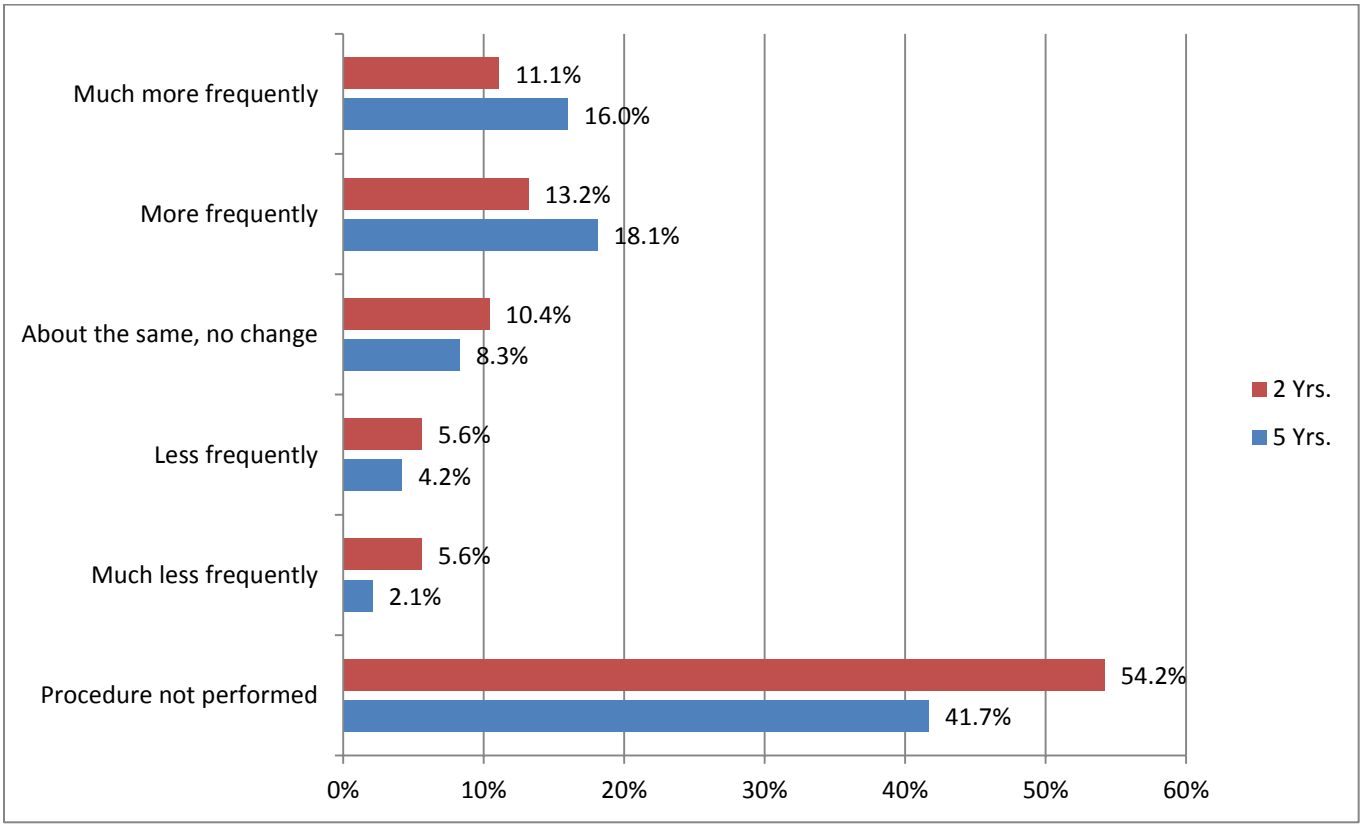


Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Restorations using digital impressions (CAD/Cam)

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	78	54.2	60	41.7
Much less frequently	8	5.6	3	2.1
Less frequently	8	5.6	6	4.2
About the same, no change	15	10.4	12	8.3
More frequently	19	13.2	26	18.1
Much more frequently	16	11.1	23	16.0
Missing	0	0.0	14	9.7
Total	144	100*	144	100*

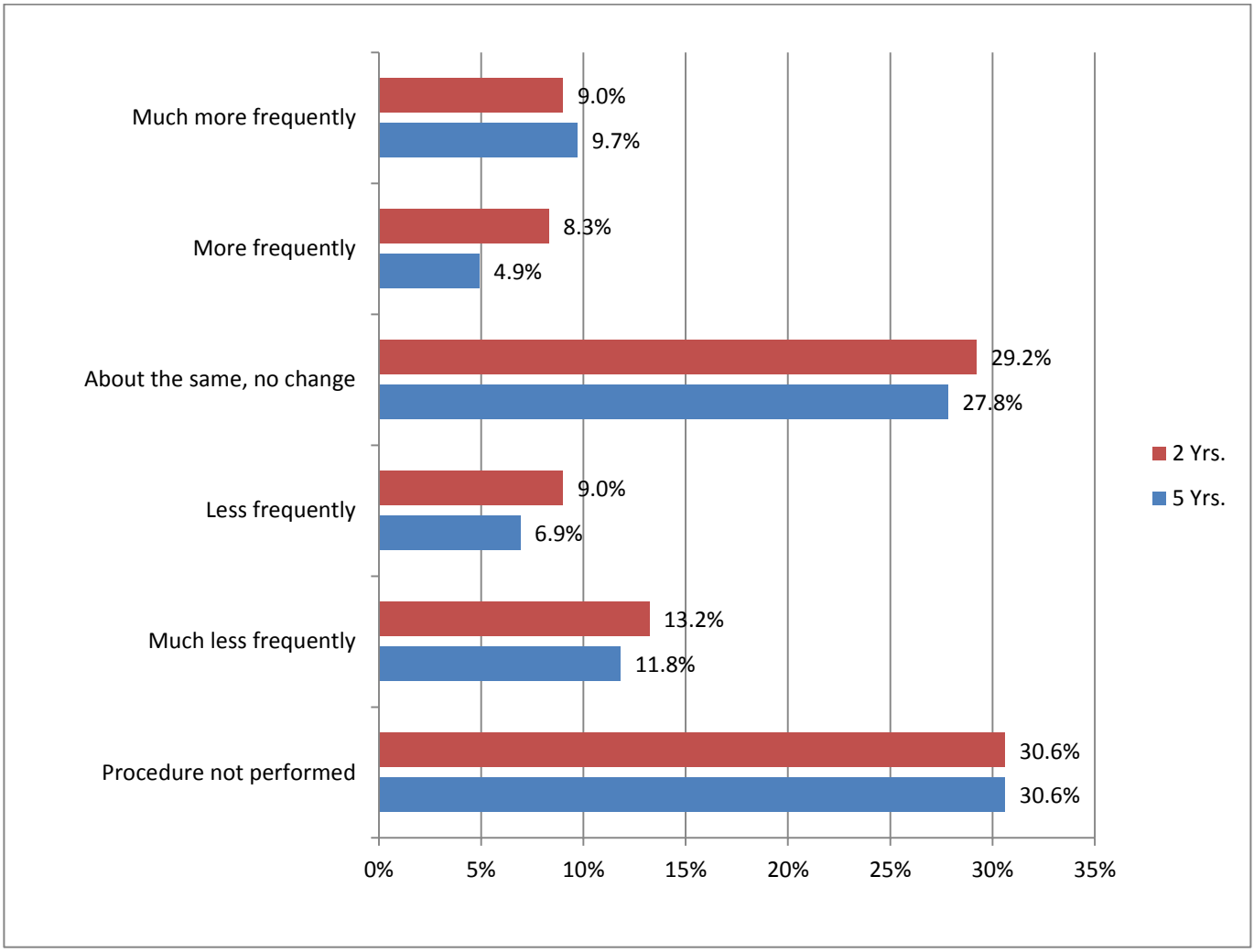
**NOTE: Percentages do not add to 100 due to rounding.*



Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Bonding agents (mix catalyst and base)

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	44	30.6	44	30.6
Much less frequently	19	13.2	17	11.8
Less frequently	13	9.0	10	6.9
About the same, no change	42	29.2	40	27.8
More frequently	12	8.3	7	4.9
Much more frequently	13	9.0	14	9.7
Missing	1	0.7	12	8.3
Total	144	100	144	100

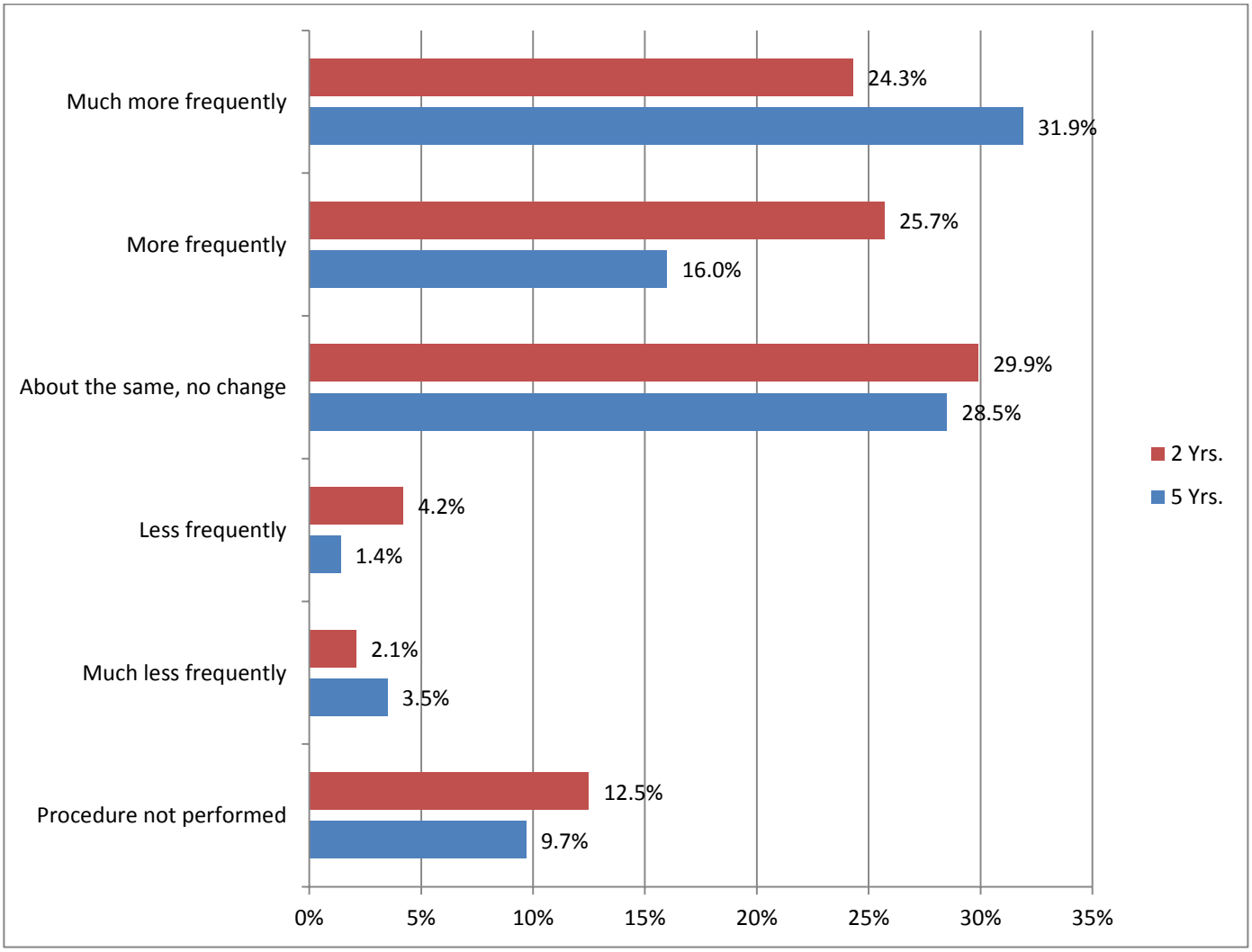


Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Bonding agents (all in one etch/prime and bond)

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	18	12.5	14	9.7
Much less frequently	3	2.1	5	3.5
Less frequently	6	4.2	2	1.4
About the same, no change	43	29.9	41	28.5
More frequently	37	25.7	23	16.0
Much more frequently	35	24.3	46	31.9
Missing	2	1.4	13	9.0
Total	144	100*	144	100

**NOTE: Percentages do not add to 100 due to rounding.*

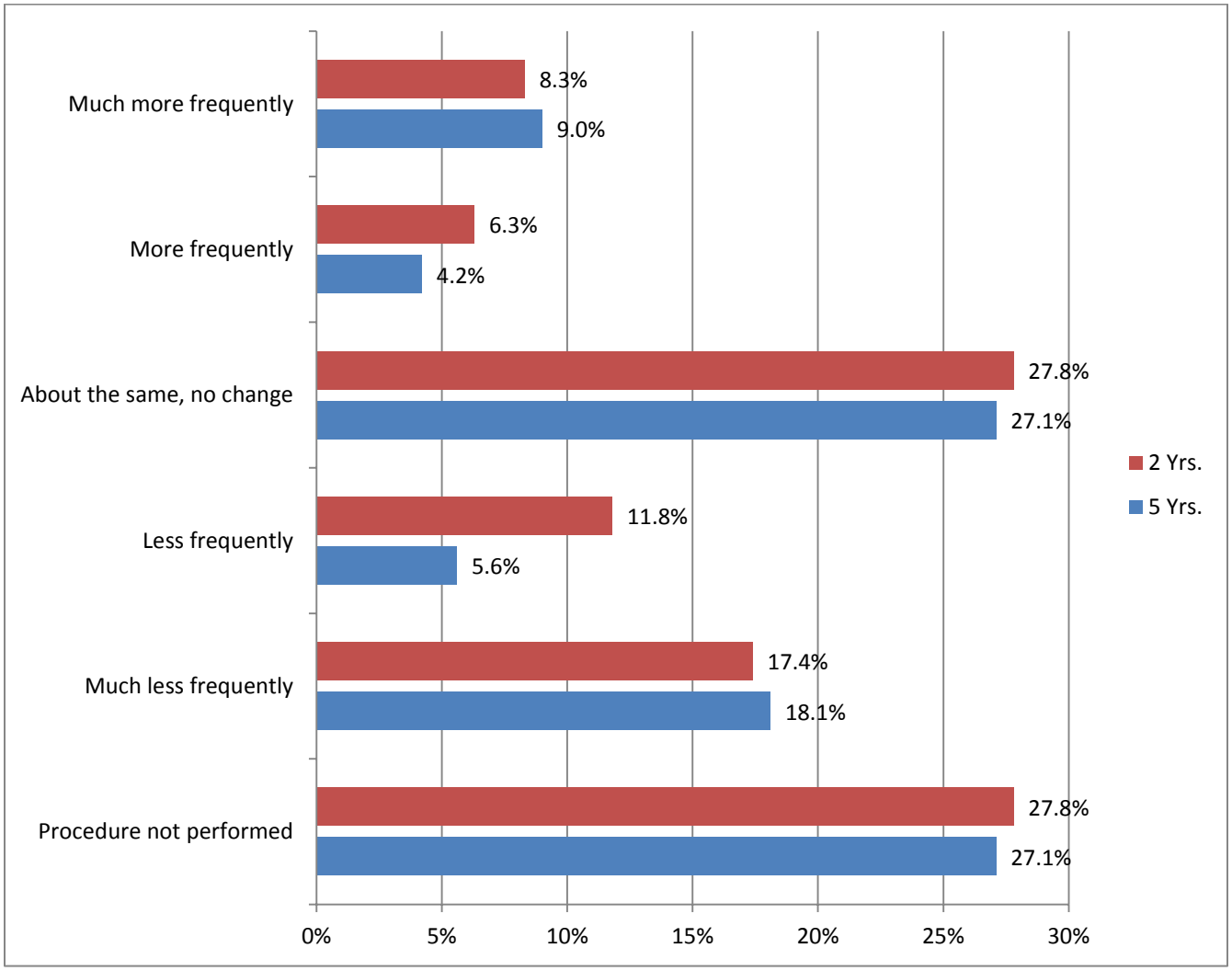


Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Cements (zinc phosphate, polycarboxylate)

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	40	27.8	39	27.1
Much less frequently	25	17.4	26	18.1
Less frequently	17	11.8	8	5.6
About the same, no change	40	27.8	39	27.1
More frequently	9	6.3	6	4.2
Much more frequently	12	8.3	13	9.0
Missing	1	0.7	13	9.0
Total	144	100*	144	100*

**NOTE: Percentages do not add to 100 due to rounding.*

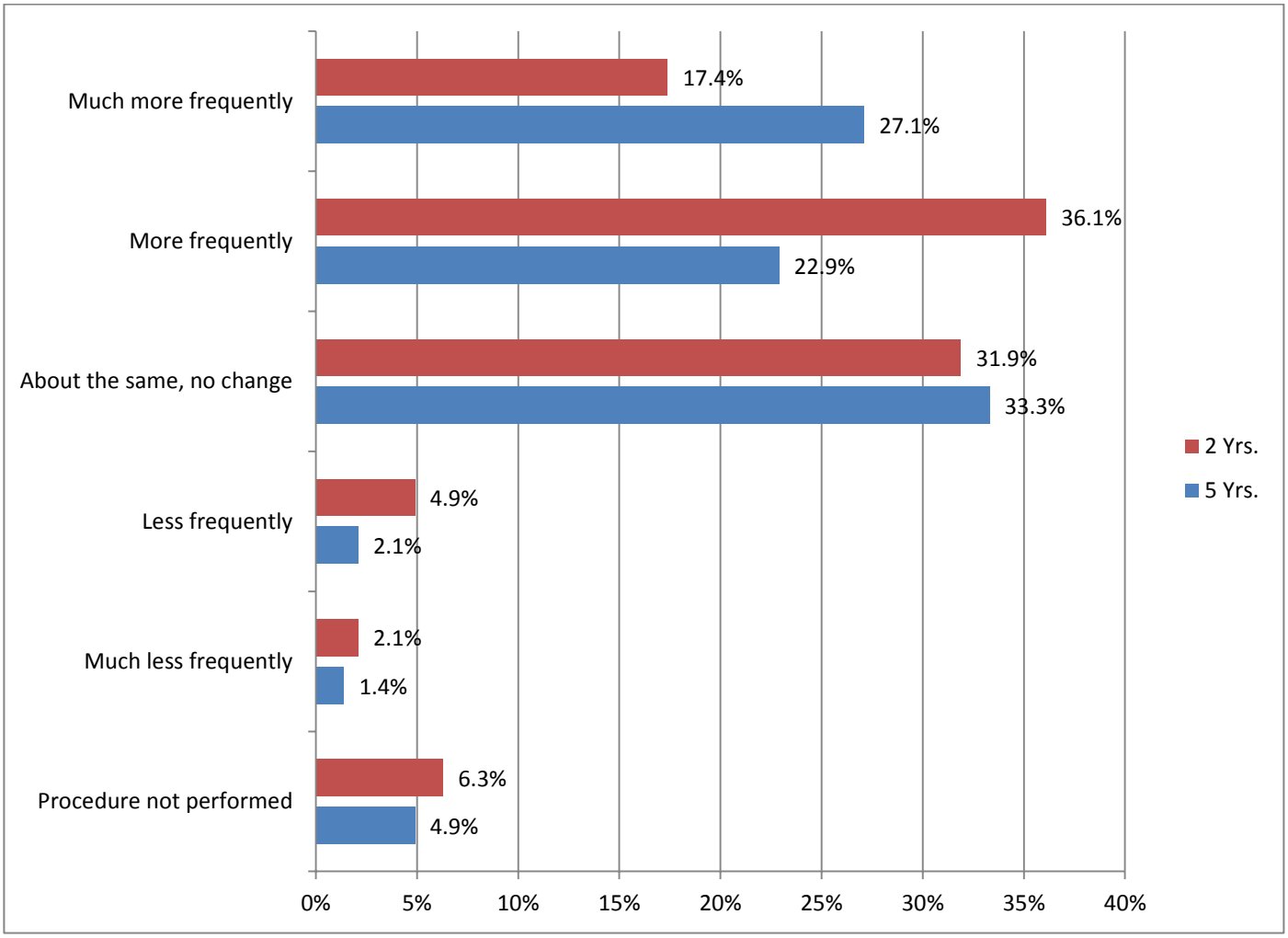


Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Cements (glass ionomers and bonded cements)

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	9	6.3	7	4.9
Much less frequently	3	2.1	2	1.4
Less frequently	7	4.9	3	2.1
About the same, no change	46	31.9	48	33.3
More frequently	52	36.1	33	22.9
Much more frequently	25	17.4	39	27.1
Missing	2	1.4	12	8.3
Total	144	100*	144	100

**NOTE: Percentages do not add to 100 due to rounding.*

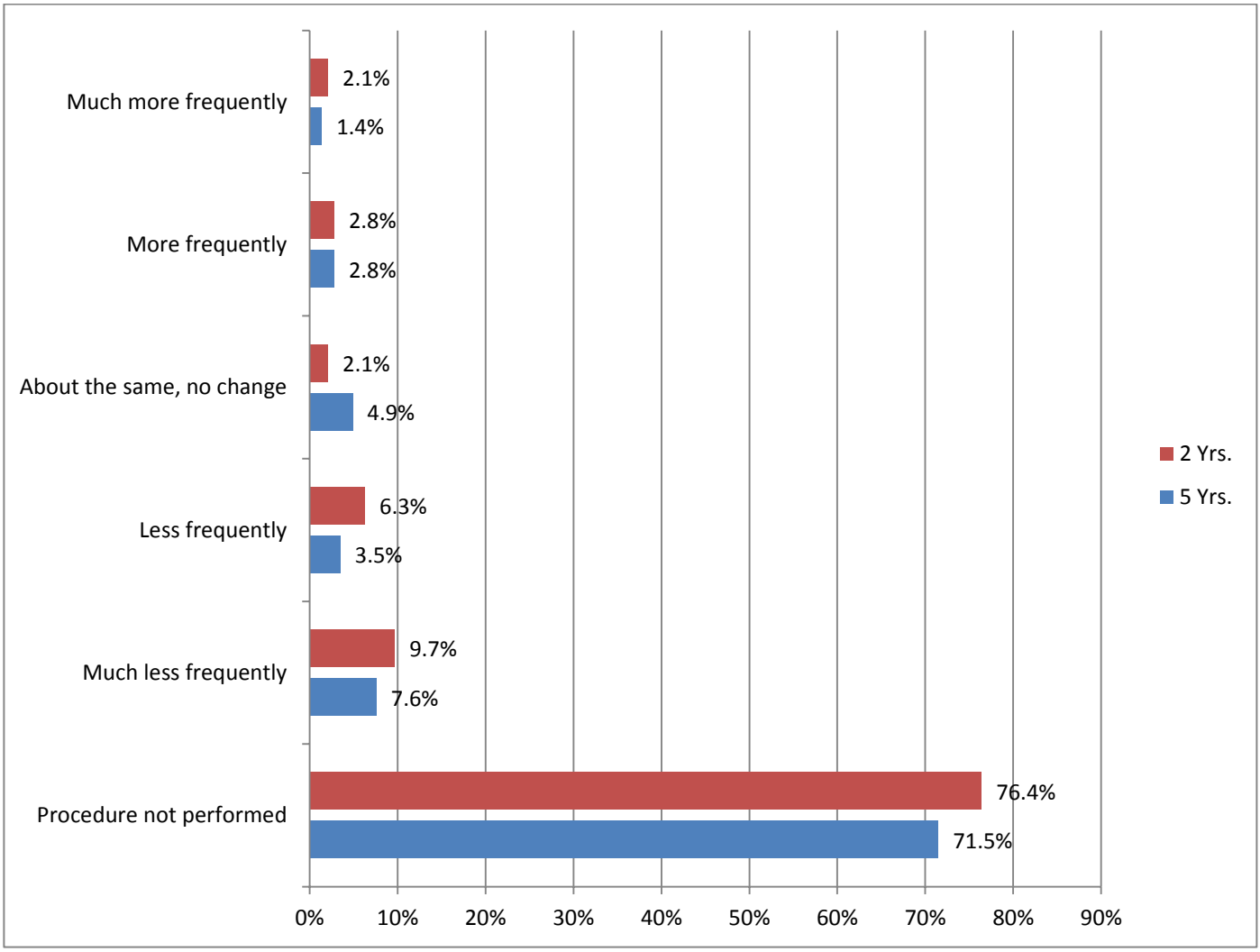


Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Core build-up using amalgam

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	110	76.4	103	71.5
Much less frequently	14	9.7	11	7.6
Less frequently	9	6.3	5	3.5
About the same, no change	3	2.1	7	4.9
More frequently	4	2.8	4	2.8
Much more frequently	3	2.1	2	1.4
Missing	1	0.7	12	8.3
Total	144	100*	144	100

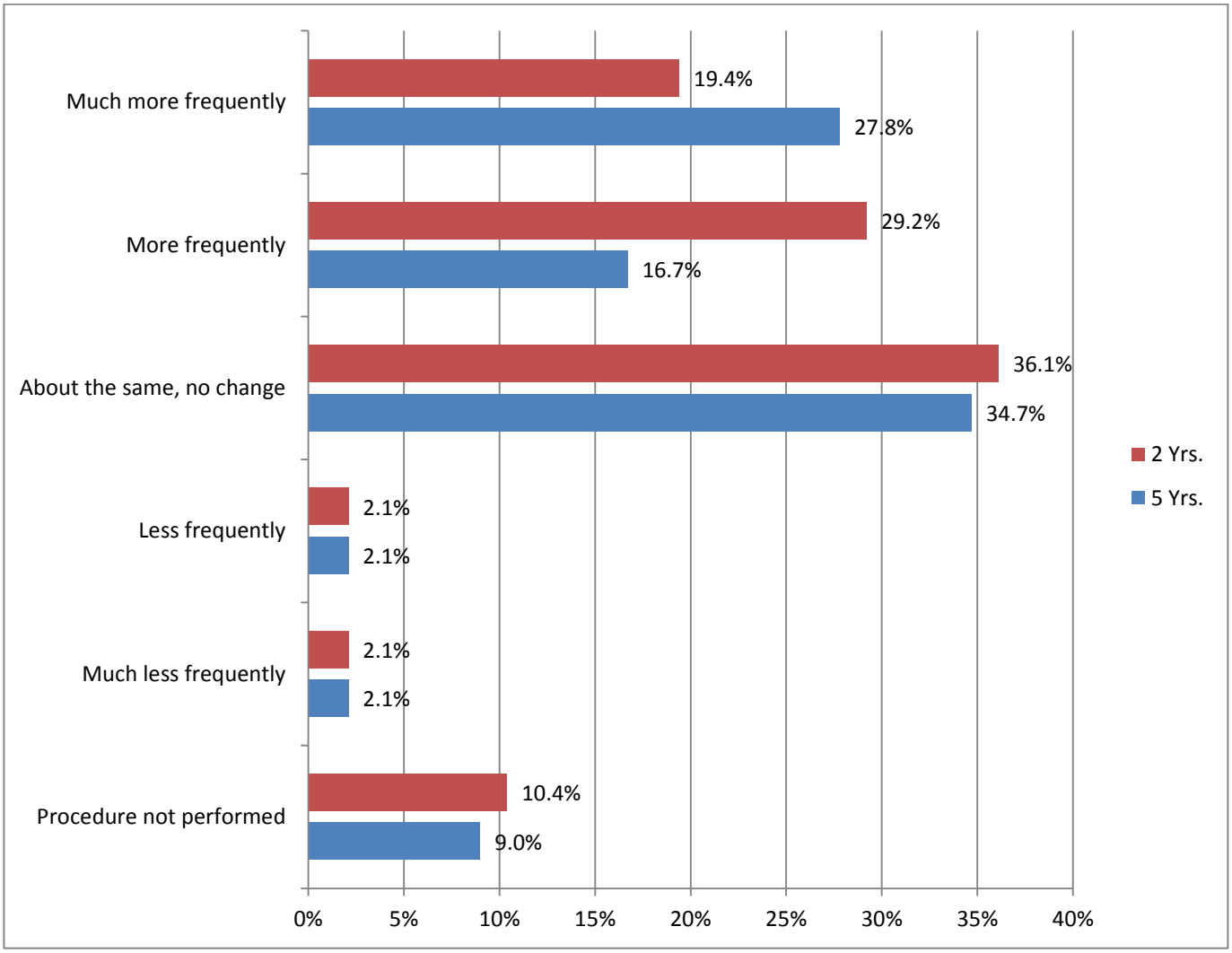
**NOTE: Percentages do not add to 100 due to rounding.*



Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Core build-up using glass ionomers and composites

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	15	10.4	13	9.0
Much less frequently	3	2.1	3	2.1
Less frequently	3	2.1	3	2.1
About the same, no change	52	36.1	50	34.7
More frequently	42	29.2	24	16.7
Much more frequently	28	19.4	40	27.8
Missing	1	0.7	11	7.6
Total	144	100	144	100

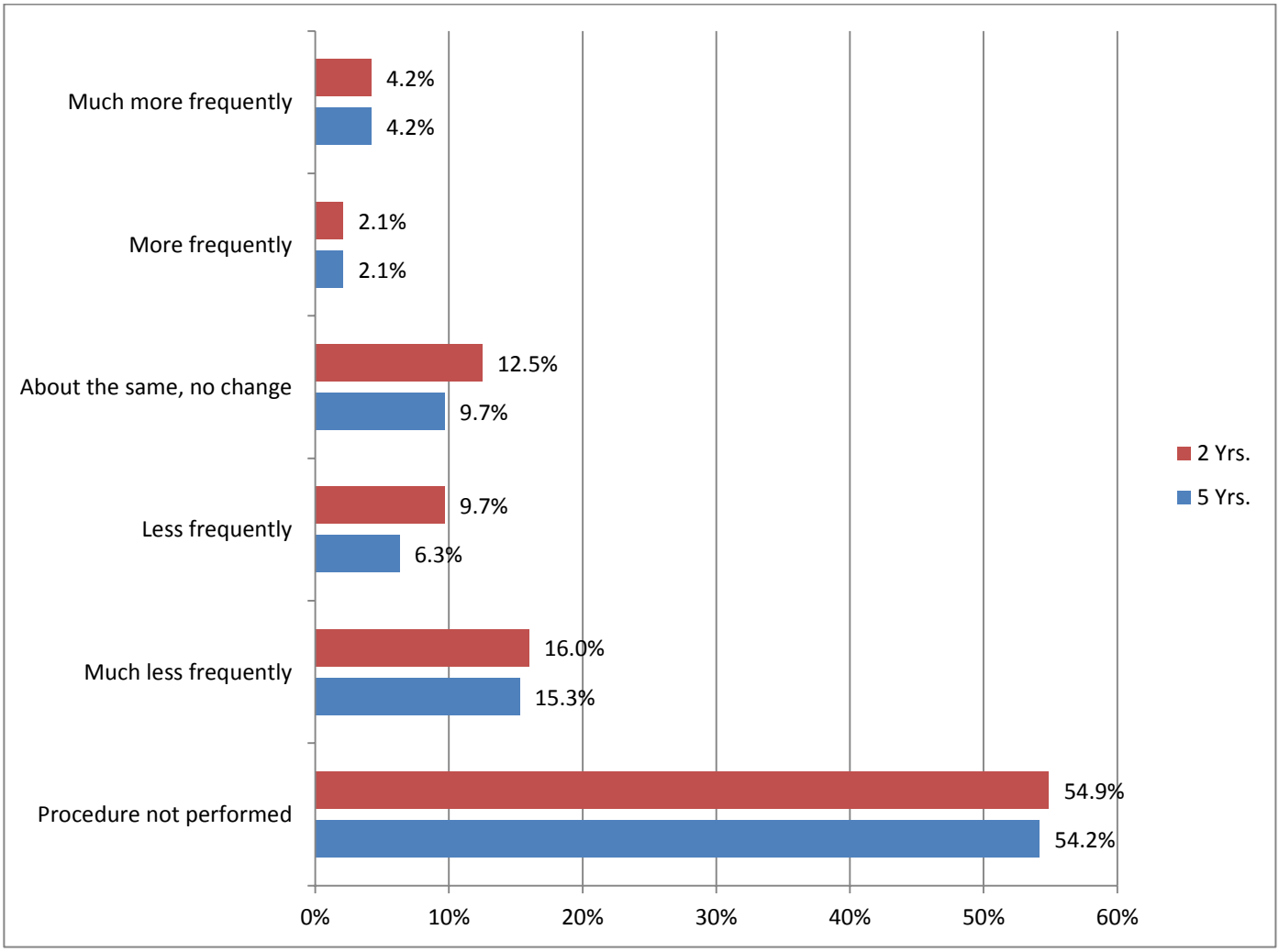


Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Posterior direct restorations (amalgam)

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	79	54.9	78	54.2
Much less frequently	23	16.0	22	15.3
Less frequently	14	9.7	9	6.3
About the same, no change	18	12.5	14	9.7
More frequently	3	2.1	3	2.1
Much more frequently	6	4.2	6	4.2
Missing	1	0.7	12	8.3
Total	144	100*	144	100*

**NOTE: Percentages do not add to 100 due to rounding.*

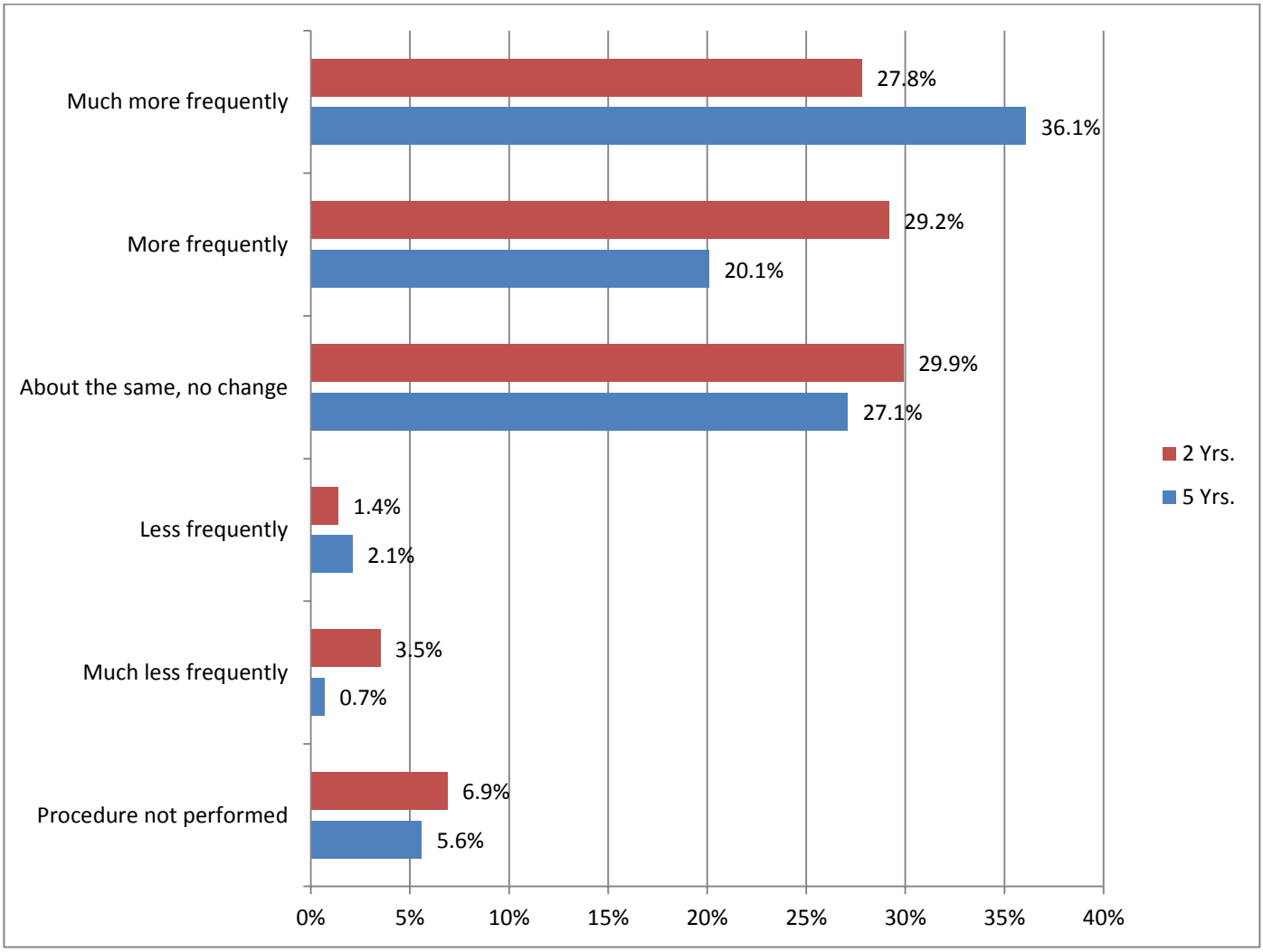


Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Posterior direct restorations (composites)

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	10	6.9	8	5.6
Much less frequently	5	3.5	1	0.7
Less frequently	2	1.4	3	2.1
About the same, no change	43	29.9	39	27.1
More frequently	42	29.2	29	20.1
Much more frequently	40	27.8	52	36.1
Missing	2	1.4	12	8.3
Total	144	100*	144	100

**NOTE: Percentages do not add to 100 due to rounding.*

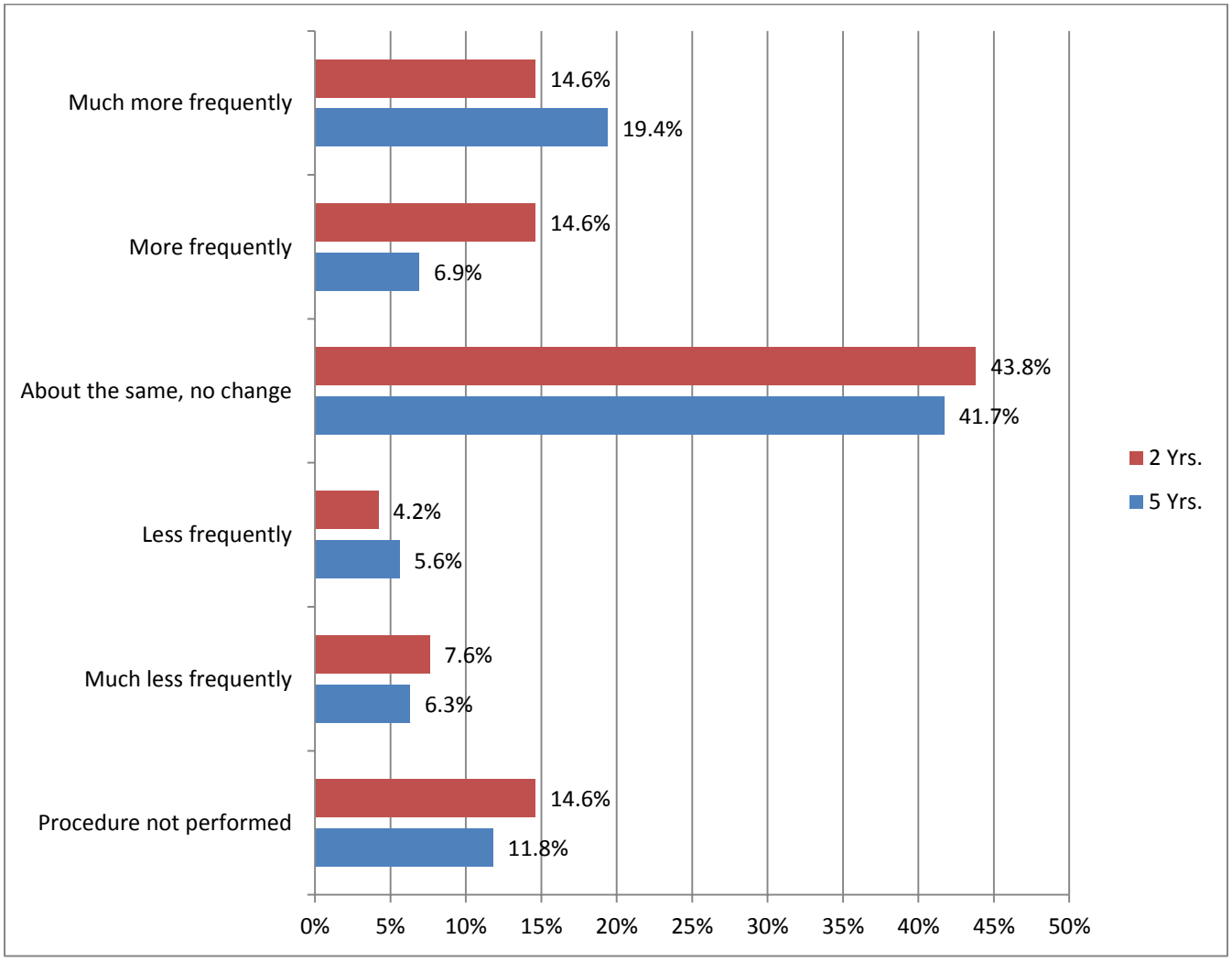


Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Caries detection – explorer & disclosing agents

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	21	14.6	17	11.8
Much less frequently	11	7.6	9	6.3
Less frequently	6	4.2	8	5.6
About the same, no change	63	43.8	60	41.7
More frequently	21	14.6	10	6.9
Much more frequently	21	14.6	28	19.4
Missing	1	0.7	12	8.3
Total	144	100*	144	100

**NOTE: Percentages do not add to 100 due to rounding.*

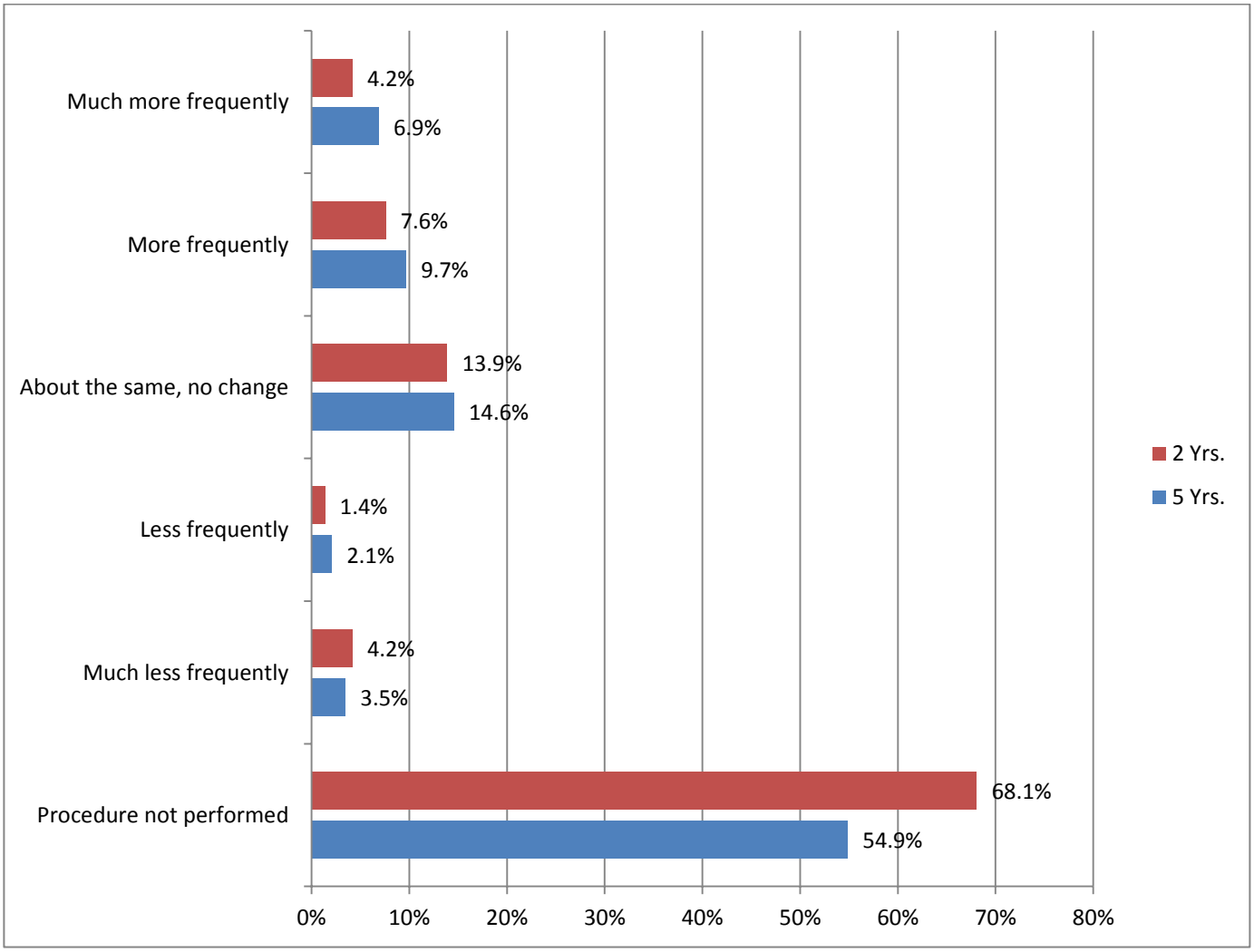


Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Caries detection – laser fluorescence

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	98	68.1	79	54.9
Much less frequently	6	4.2	5	3.5
Less frequently	2	1.4	3	2.1
About the same, no change	20	13.9	21	14.6
More frequently	11	7.6	14	9.7
Much more frequently	6	4.2	10	6.9
Missing	1	0.7	12	8.3
Total	144	100*	144	100

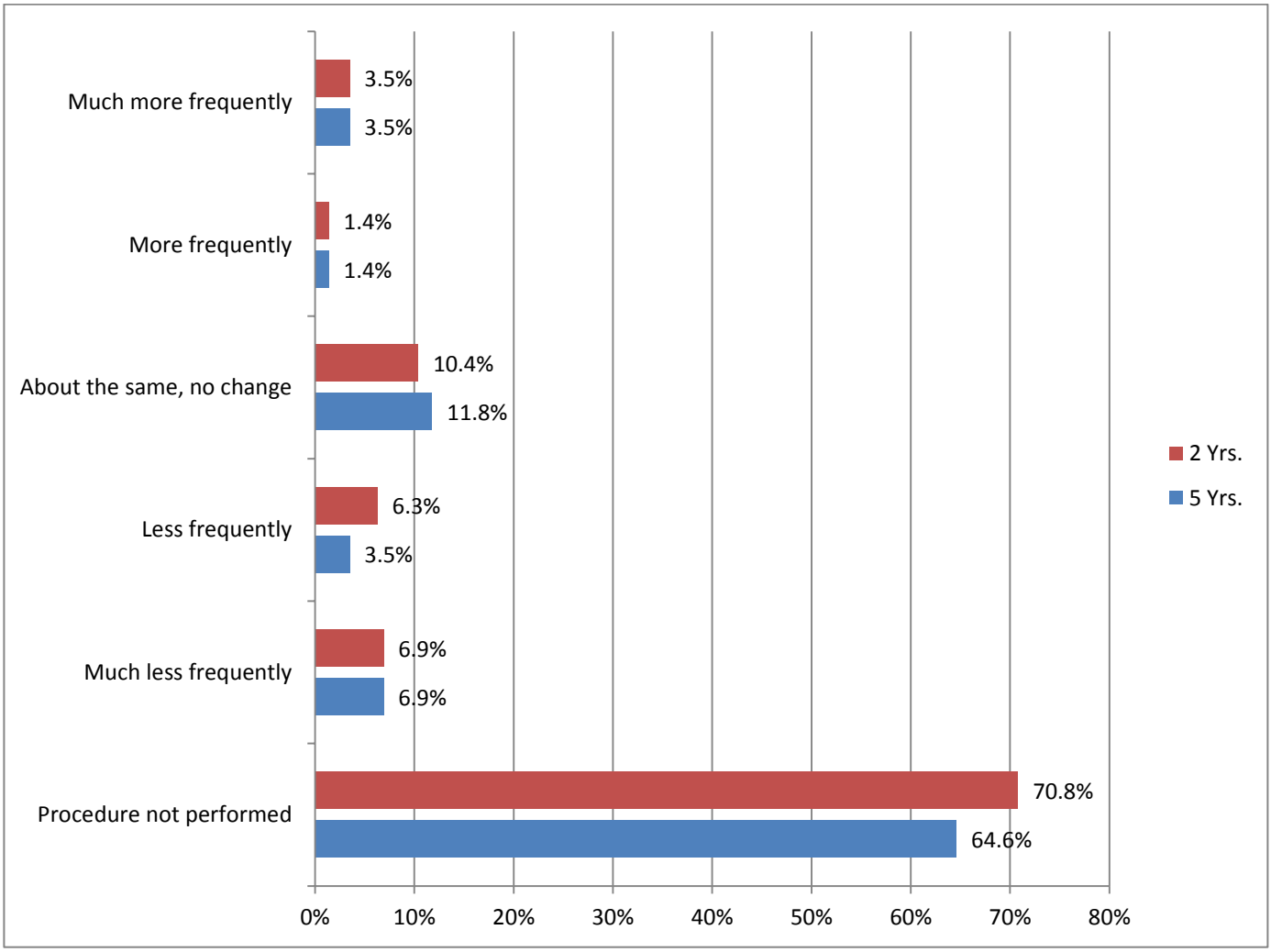
**NOTE: Percentages do not add to 100 due to rounding.*



Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Periodontal dressing (catalyst-based)

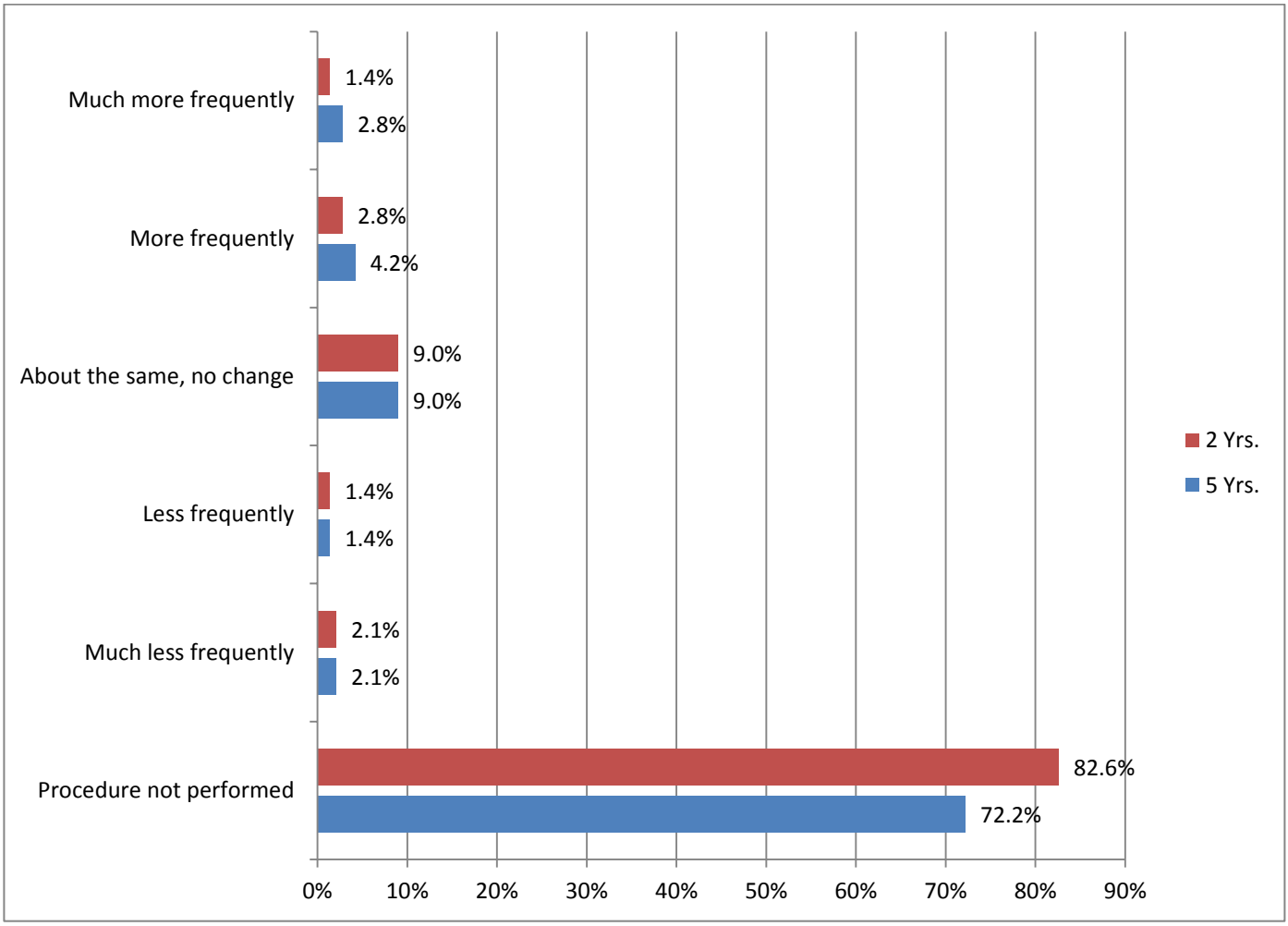
	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	102	70.8	93	64.6
Much less frequently	10	6.9	10	6.9
Less frequently	9	6.3	5	3.5
About the same, no change	15	10.4	17	11.8
More frequently	2	1.4	2	1.4
Much more frequently	5	3.5	5	3.5
Missing	1	0.7	12	8.3
Total	144	100	144	100



Indicate the extent to which the frequency of your performing this procedure has changed over the last 2 years AND, based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

Periodontal dressing (auto-mix)

	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	119	82.6	104	72.2
Much less frequently	3	2.1	3	2.1
Less frequently	2	1.4	2	1.4
About the same, no change	13	9.0	13	9.0
More frequently	4	2.8	6	4.2
Much more frequently	2	1.4	4	2.8
Missing	1	0.7	12	8.3
Total	144	100	144	100

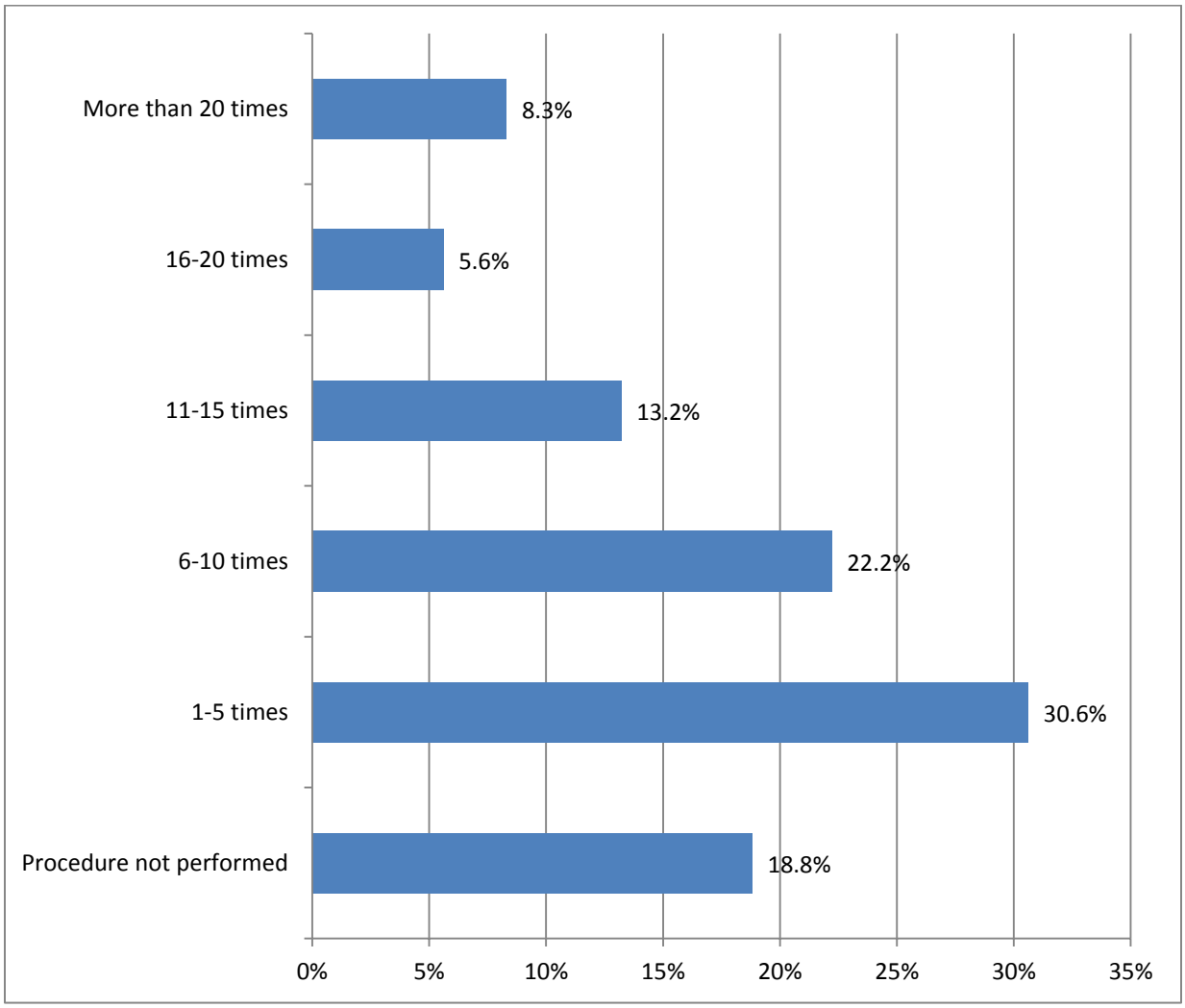


APPENDIX F. FREQUENCY OF PERFORMING DENTAL PROCEDURES BY REGISTERED DENTAL ASSISTANTS IN EXTENDED FUNCTIONS

In an average week, how frequently do you cement and place provisional restorations for teeth in each of the following groups?

Mandibular posterior	N	Percent
Procedure not performed	27	18.8
1-5 times	44	30.6
6-10 times	32	22.2
11-15 times	19	13.2
16-20 times	8	5.6
More than 20 times	12	8.3
Missing	2	1.4
Total	144	100*

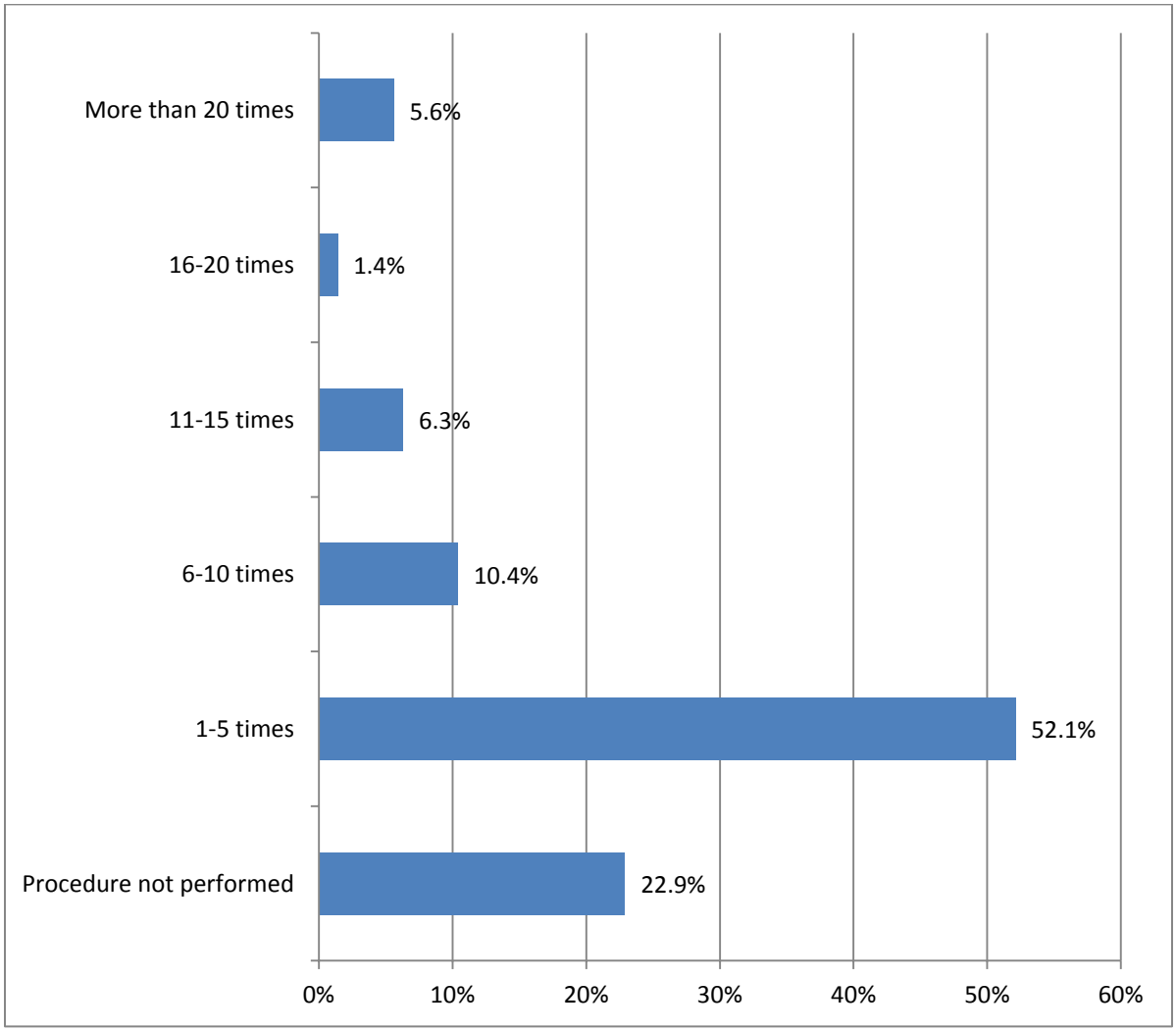
**NOTE: Percentages do not add to 100 due to rounding.*



In an average week, how frequently do you cement and place provisional restorations for teeth in each of the following groups?

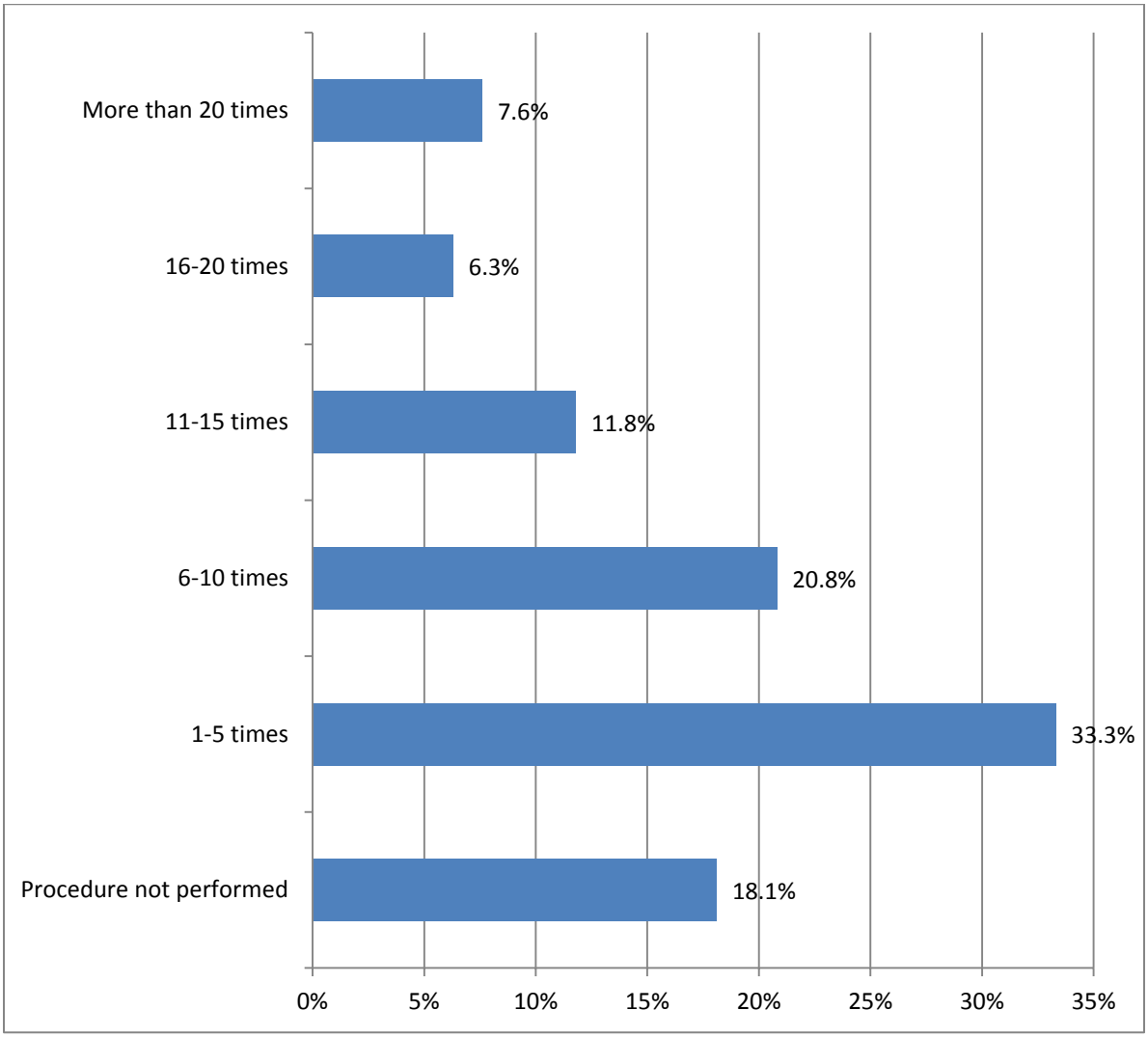
Mandibular anterior	N	Percent
Procedure not performed	33	22.9
1-5 times	75	52.1
6-10 times	15	10.4
11-15 times	9	6.3
16-20 times	2	1.4
More than 20 times	8	5.6
Missing	2	1.4
Total	144	100*

**NOTE: Percentages do not add to 100 due to rounding.*



In an average week, how frequently do you cement and place provisional restorations for teeth in each of the following groups?

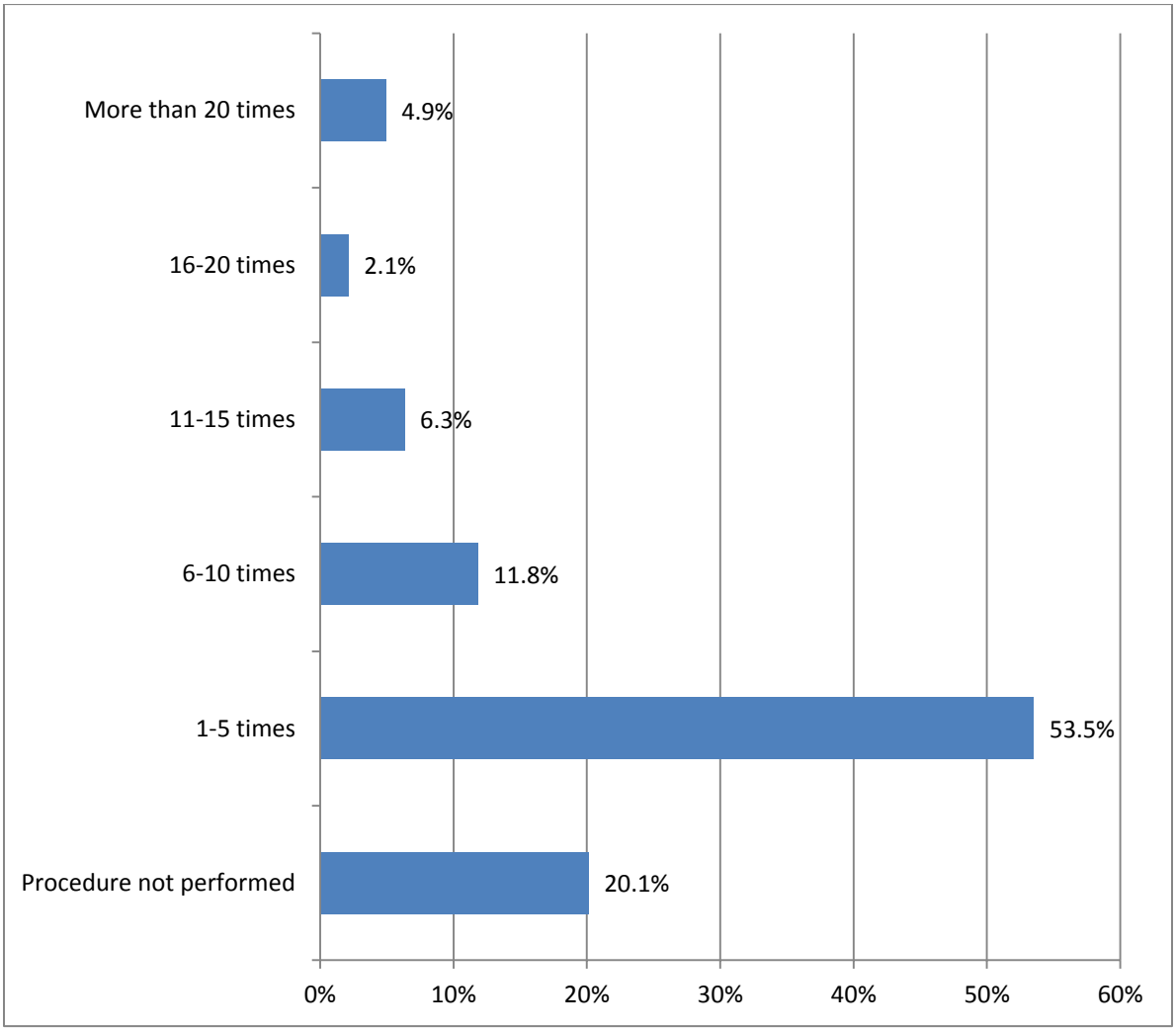
Maxillary posterior	N	Percent
Procedure not performed	26	18.1
1-5 times	48	33.3
6-10 times	30	20.8
11-15 times	17	11.8
16-20 times	9	6.3
More than 20 times	11	7.6
Missing	3	2.1
Total	144	100



In an average week, how frequently do you cement and place provisional restorations for teeth in each of the following groups?

Maxillary anterior	N	Percent
Procedure not performed	29	20.1
1-5 times	77	53.5
6-10 times	17	11.8
11-15 times	9	6.3
16-20 times	3	2.1
More than 20 times	7	4.9
Missing	2	1.4
Total	144	100*

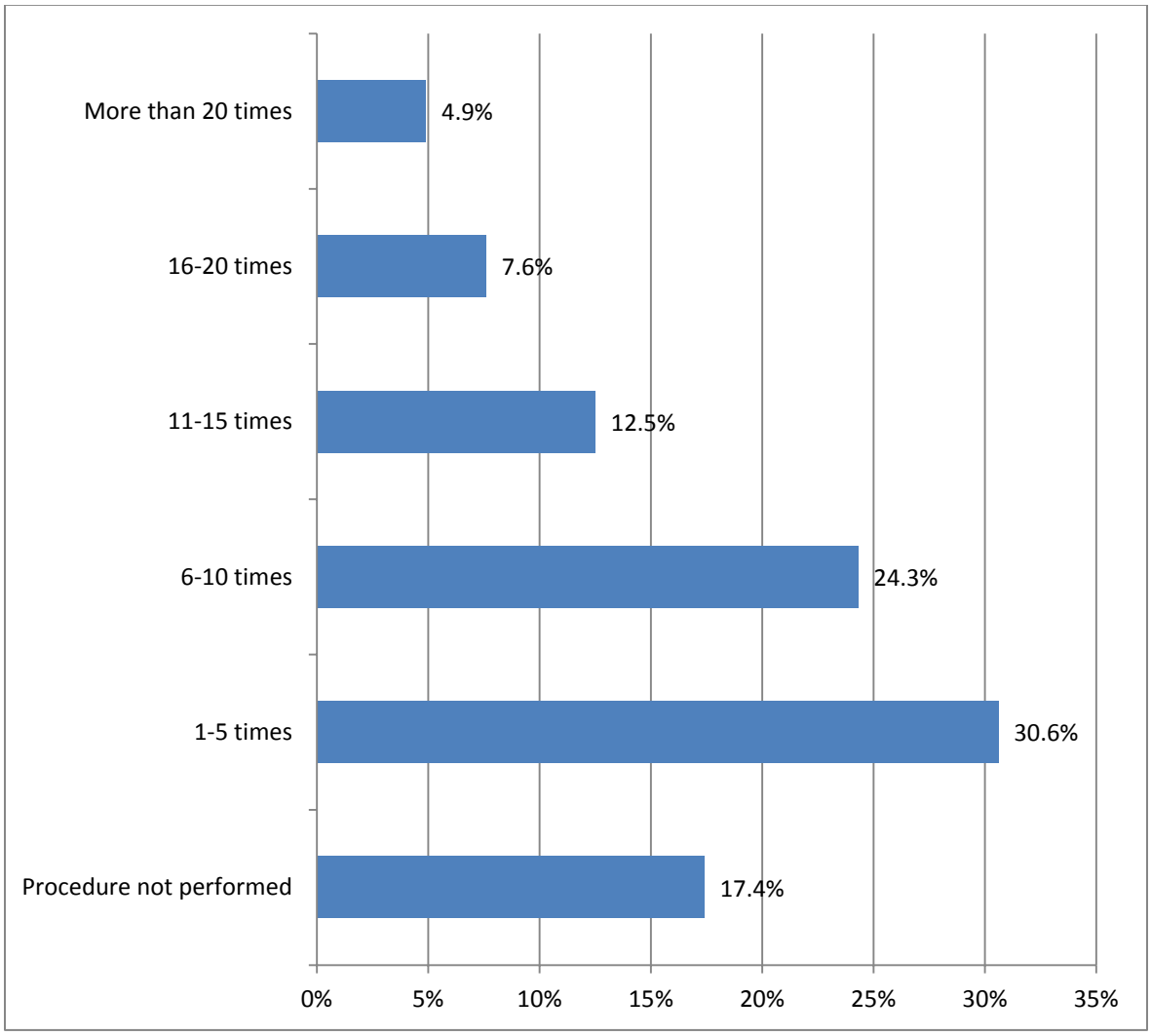
**NOTE: Percentages do not add to 100 due to rounding.*



In an average week, how frequently do you fabricate provisional restorations for teeth in each of the following groups?

Mandibular posterior	N	Percent
Procedure not performed	25	17.4
1-5 times	44	30.6
6-10 times	35	24.3
11-15 times	18	12.5
16-20 times	11	7.6
More than 20 times	7	4.9
Missing	4	2.8
Total	144	100*

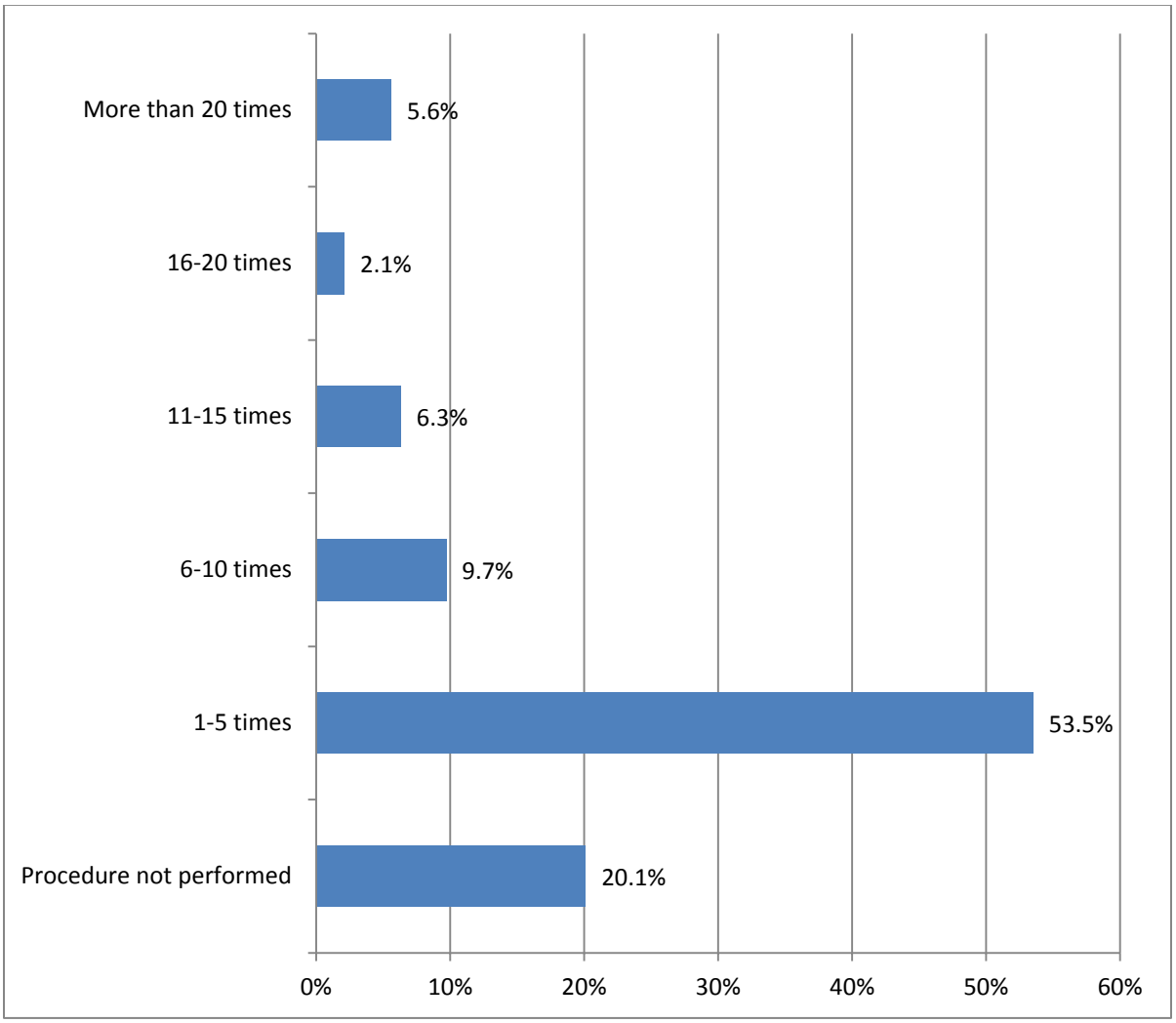
**NOTE: Percentages do not add to 100 due to rounding.*



In an average week, how frequently do you fabricate provisional restorations for teeth in each of the following groups?

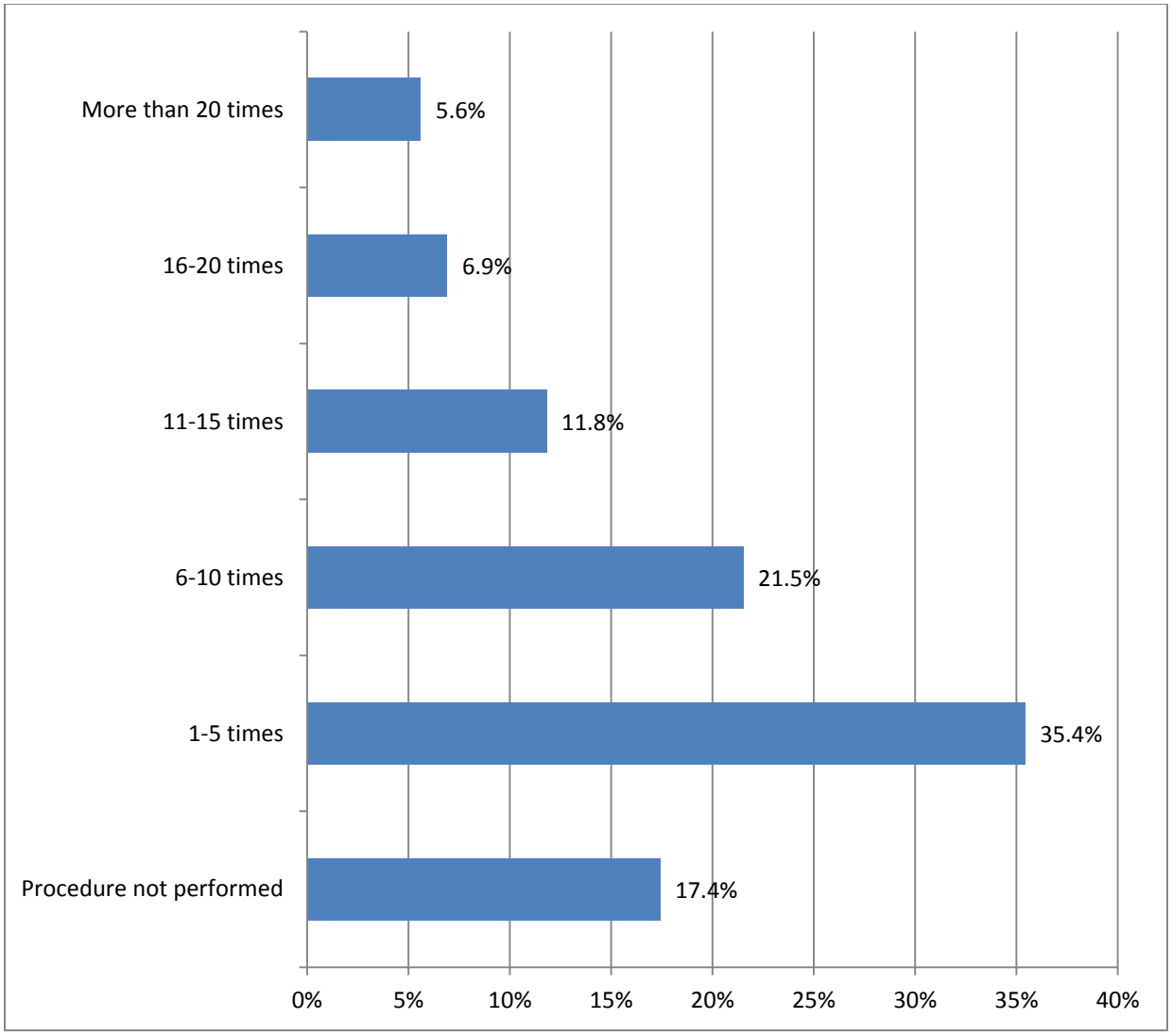
Mandibular anterior	N	Percent
Procedure not performed	29	20.1
1-5 times	77	53.5
6-10 times	14	9.7
11-15 times	9	6.3
16-20 times	3	2.1
More than 20 times	8	5.6
Missing	4	2.8
Total	144	100*

**NOTE: Percentages do not add to 100 due to rounding.*



In an average week, how frequently do you fabricate provisional restorations for teeth in each of the following groups?

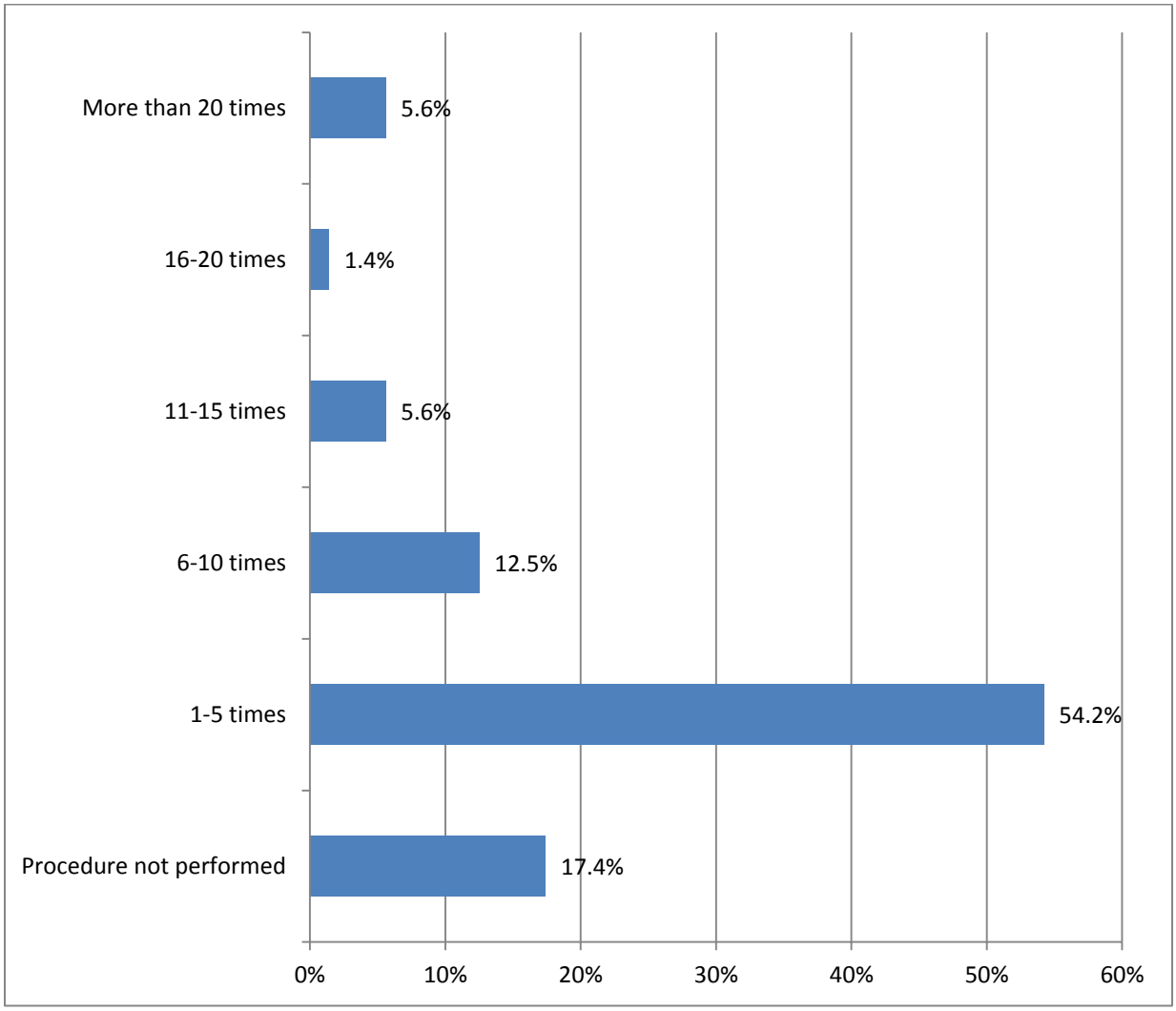
Maxillary posterior	N	Percent
Procedure not performed	25	17.4
1-5 times	51	35.4
6-10 times	31	21.5
11-15 times	17	11.8
16-20 times	10	6.9
More than 20 times	8	5.6
Missing	2	1.4
Total	144	100



In an average week, how frequently do you fabricate provisional restorations for teeth in each of the following groups?

Maxillary anterior	N	Percent
Procedure not performed	25	17.4
1-5 times	78	54.2
6-10 times	18	12.5
11-15 times	8	5.6
16-20 times	2	1.4
More than 20 times	8	5.6
Missing	5	3.5
Total	144	100*

**NOTE: Percentages do not add to 100 due to rounding.*



APPENDIX G. LETTER TO PRACTITIONERS

STATE OF CALIFORNIA
DEPARTMENT OF CONSUMER AFFAIRS

BUSINESS, CONSUMER SERVICES, AND HOUSING AGENCY • GOVERNOR EDMUND G. BROWN JR.
DENTAL BOARD OF CALIFORNIA
2005 Evergreen Street, Suite 1550, Sacramento, CA 95815
P (916) 263-2300 F (916) 263-2140 | www.dbc.ca.gov

October 7, 2015

FirstName LastName 5D_Code
Address1
City, State Zip

Dear Registered Dental Assistant in Extended Functions,

The Board is inviting you to participate in the 2015 Occupational Analysis (OA) of the Registered Dental Assistant in Extended Functions practice and we would like to award you three CE hours for helping us out on this very important project!

As you know, the Board is responsible for developing examinations to test applicant's skills for licensure in California. The development of an examination begins with an occupational analysis which is a method for identifying the tasks performed in a profession and the knowledge, skills, and abilities required to perform that job. The OA is only conducted every five to seven years and the results are very important to the development of the written and practical exams.

Several workshops with RDAEFs have been held in Sacramento, conducted by the Office of Professional Examination Services (OPES). As a result of their efforts, a survey questionnaire has been developed and we invite you to participate in evaluating the 2015 OA as it relates to your current practice as an RDAEF in California. Your responses will be combined with responses of other licensees to determine the tasks and knowledge needed for independent practice. Your individual responses will be kept confidential.

The survey will be available from **October 12 thru November 6, 2015,** 24 hours a day, 7 days a week. It will take approximately two - three hours to complete the online survey questionnaire. For your convenience, you may begin the survey questionnaire and exit to return at a later time, as long as it is from the same computer. Certificates for three CE hours will be mailed to those participants who have completed the entire survey.

If you are interested in helping us out with this important project, please:

Enter the following link to access the survey: **https://www.surveymonkey.com/s/H6JLD9H?c=#####**
In place of the **#####,** please type in the 5 digits located after your name (above).
The password for the survey is **dentin** (all lower case).

Again, we appreciate your dedication to your profession and to our mission of protecting the consumers of California by licensing qualified and competent providers.

Sincerely,

The Dental Board of California

APPENDIX H. QUESTIONNAIRE

RDAEF - REGISTERED DENTAL ASSISTANT IN EXTENDED FUNCTIONS OCCUPATIONAL ANALYSIS QUESTIONNAIRE

Welcome Registered Dental Assistants in Extended Functions

Dear Licensee:

The Dental Board of California (Board) is conducting an occupational analysis of the Registered Dental Assistant in Extended Functions profession. The purpose of the occupational analysis is to identify the important tasks performed by Registered Dental Assistants in Extended Functions in current practice and the knowledge required to perform those tasks. Results of the occupational analysis will be used to update the CA Registered Dental Assistant in Extended Functions description of practice.

The Board requests your assistance in this process. Please take the time to complete the survey questionnaire as it relates to your current practice. Your participation ensures that all aspects of the profession are covered and is essential to the success of this project.

Licensees completing the survey in its entirety will earn 3 CE credits for their participation.

Your individual responses will be kept confidential. Your responses will be combined with responses of other RDAEFs and only group trends will be reported.

In order to progress through this survey, please use the following navigation buttons:

- **Click the Next button to continue to the next page.**
- **Click the Prev button to return to the previous page.**
- **Click the Exit this survey button to exit the survey and return to it at a later time.**
- **Click the Done/Submit button to submit your survey as completed.**

Any questions marked with an asterisk (*) require an answer in order to progress through the survey questionnaire.

Please Note: Once you have started the survey, you can exit at any time and return to it later without losing your responses as long as you are accessing the survey from the same computer. The survey automatically saves fully-completed pages, but will not save responses to questions on pages that were partially completed when the survey was exited.

Please make sure to exit only after completing all items on a page and clicking NEXT.

For your convenience, the weblink is available 24 hours a day 7 days a week.

Please complete the survey questionnaire by November 6, 2015.

If you have any questions about completing this survey, please contact Dental Board staff at rda_surveyhelp@dca.ca.gov. The Board welcomes your participation in this project and thanks you for your time.

RDAEF - REGISTERED DENTAL ASSISTANT IN EXTENDED FUNCTIONS OCCUPATIONAL ANALYSIS QUESTIONNAIRE

The information you provide here is voluntary and confidential. It will be treated as personal information subject to the Information Practices Act (Civil Section 1798 et seq.) and will be used soley for analyzing the ratings from this questionnaire.

* Are you currently licensed and practicing in California as a licensed Registered Dental Assistant in Extended Functions (RDAEF)?

- ◯ YES
- ◯ NO

CE Confirmation

Please provide the board with an email address. An email will be sent to you to confirm that you initiated the survey and to confirm that you completed the survey as required to receive the continuing education credits. Note: Email is REQUIRED to receive CE credit.

Please enter the 5-digit NUMERIC code you received with your survey invitation.

Part I - Personal Information

INSTRUCTIONS FOR COMPLETING THE DEMOGRAPHIC ITEMS

This part of the questionnaire contains an assortment of demographic items, the responses to which will be used to describe Registered Dental Assistant practice as represented by the respondents to the questionnaire. Please note the instructions for each item before marking your response as several permit multiple responses.

How many years have you been licensed and practicing in California as an RDAEF?

- ◯ 0 to 5 years
- ◯ 6 to 10 years
- ◯ 11 to 20 years
- ◯ More than 20 years

When did you become licensed as an RDAEF?

- ◯ I received my RDAEF license prior to 2010 and I am currently an RDAEF
- ◯ I received my initial RDAEF license prior to 2010, but completed additional education and I am currently an RDAEF2
- ◯ I received my RDAEF license after 2010 and I am currently an RDAEF2

How many years did you work as a Registered Dental Assistant (RDA) before obtaining licensure as an RDAEF?

- ◯ 0 to 5 years
- ◯ 6 to 10 years
- ◯ 11 to 20 years
- ◯ More than 20 years

How many months or years did you work as an unlicensed Dental Assistant before obtaining RDA licensure in California?

- ◯ Not Applicable, I worked as an intern
- ◯ 0 to 11 months
- ◯ 12 to 15 months
- ◯ 16 months to 2 years
- ◯ 3 to 5 years
- ◯ 6 to 10 years
- ◯ More than 10 years

How would you describe your primary work setting?

- ◯ Solo dental practice
- ◯ Group dental practice (2 or more dentist)
- ◯ Specialty dental practice (oral and maxillofacial surgery, dentofacial orthopedics)
- ◯ Public health dentistry
- ◯ Hospital dental clinic
- ◯ Dental school clinic
- ◯ Military
- ◯ Government

Other (please specify)

How would you describe the dental practice in your primary work setting?

- ◯ General dentistry
- ◯ Orthodontic dentistry
- ◯ Endodontic dentistry
- ◯ Periodontic dentistry
- ◯ Pedodontic dentistry
- ◯ Prosthodontic dentistry
- ◯ Oral surgery

Other (please specify)

How would you describe the location of your primary work setting?

- ◯ Urban
- ◯ Rural

How many unlicensed Dental Assistants work in your primary work setting?

- ◯ None
- ◯ 1
- ◯ 2 to 3
- ◯ 4 to 5
- ◯ More than 5

How many licensed RDAs work in your primary work setting?

- ◯ None
- ◯ 1
- ◯ 2 to 3
- ◯ 4 to 5
- ◯ More than 5

How many licensed RDAEFs work in your primary work setting (do not include yourself)?

- ◯ None
- ◯ 1
- ◯ 2 to 3
- ◯ 4 to 5
- ◯ More than 5

RDAEF - REGISTERED DENTAL ASSISTANT IN EXTENDED FUNCTIONS OCCUPATIONAL ANALYSIS QUESTIONNAIRE

Part I - Personal Information

Where did you gain the majority of your training and experience to become an RDA? (Check no more than 3.)

- ☐ On the job from dentist
- ☐ On the job from experienced RDAEF's
- ☐ Community college program
- ☐ University-level program
- ☐ Private career school
- ☐ Private educational school
- ☐ Online school or program
- ☐ Community dental clinic
- ☐ Military

Which of the following permits/certificates do you possess in addition to your RDA license? (Mark all that apply.)

- ☐ Dental Sedation Assistant Permit
- ☐ Orthodontic Assistant Permit
- ☐ Ultrasonic Scaling Certificate
- ☐ Pit and Fissure Sealants Certificate
- ☐ Coronal Polishing Certificate

Other (please specify)

For each of the following procedures, use the Frequency Scale below to indicate:

- The extent to which the frequency of your performing this procedure has changed over the last 2 years.

  AND

- Based on your current practice, the extent to which the frequency of your performing this procedure is expected to change over the next 5 years.

	How Frequently Performed Last 2 years	How Frequently Performed Next 5 years
Traditional braces (brackets/wire)		
Clear tooth aligner systems (e.g., Invisalign, Minor Tooth Movement [MTM])		
Radiographs by X-ray film		
Radiography by digital sensors/phosphor plates		
Restorations using traditional impression material		
Restorations using digital impressions (CAD/Cam)		
Bonding agents (mix catalyst and base)		
Bonding agents (all in one etch/prime and bond)		
Cements (zinc phosphate, polycarboxylate)		
Cements (glass ionomers and bonded cements)		
Core build-up using amalgam		
Core build-up using glass ionomers and composites		
Posterior direct restorations (amalgam)		
Posterior direct restorations (composites)		
Caries detection – explorer & disclosing agents		
Caries detection – laser fluorescence		
Periodontal dressing (catalyst-based)		

	How Frequently Performed Last 2 years	How Frequently Performed Next 5 years
Periodontal dressing (auto-mix)		

In an average week, what percentage of your time is spent performing each of the following tasks in the course of your work? (your numbers should add up to 100)

Assisting the dentist in the administration of treatment at the chair side

Working with endodontic master points and accessory points (select, size, fit, or seal).

Taking final impressions for permanent indirect restorations.

Taking final impressions for toothborne prosthetic appliances.

Placing a retraction cord for impression procedures.

Conducting preliminary myofunctional evaluation of the head and neck. (EF2)

Conducting direct restoration related work. (EF2)

Perform preliminary adjustment of permanent indirect restorations. (EF2)

Cement permanent indirect restorations. (EF2)

In an average week, how frequently do you cement and place provisional restorations for teeth in each of the following groups?

	Procedure not performed	1-5 times	6-10 times	11-15 times	16-20 times	More than 20 times
Mandibular posterior						
Mandibular anterior						
Maxillary posterior						
Maxillary anterior						

In an average week, how frequently do you fabricate provisional restorations for teeth in each of the following groups?

	Procedure not performed	1-5 times	6-10 times	11-15 times	16-20 times	More than 20 times
Mandibular posterior	○	○	○	○	○	○
Mandibular anterior	○	○	○	○	○	○
Maxillary posterior	○	○	○	○	○	○
Maxillary anterior	○	○	○	○	○	○

California Counties

Location of Registered Dental Assistant in Extended Function Services

In what California county do you perform the majority of your work as a Registered Dental Assistant in Extended Functions? (check no more than 3)

- ☐ 01 - Alameda
- ☐ 02 - Alpine
- ☐ 03 - Amador
- ☐ 04 - Butte
- ☐ 05 - Calaveras
- ☐ 06 - Colusa
- ☐ 07 - Contra Costa
- ☐ 08 - Del Norte
- ☐ 09 - El Dorado
- ☐ 10 - Fresno
- ☐ 11 - Glenn
- ☐ 12 - Humboldt
- ☐ 13 - Imperial
- ☐ 14 - Inyo
- ☐ 15 - Kern
- ☐ 16 - Kings
- ☐ 17 - Lake
- ☐ 18 - Lassen
- ☐ 19 - Los Angeles
- ☐ 20 - Madera
- ☐ 21 - Marin
- ☐ 22 - Mariposa
- ☐ 23 - Mendocino
- ☐ 24 - Merced
- ☐ 25 - Modoc
- ☐ 26 - Mono
- ☐ 27 - Monterey
- ☐ 28 - Napa
- ☐ 29 - Nevada
- ☐ 30 - Orange
- ☐ 31 - Placer
- ☐ 32 - Plumas
- ☐ 33 - Riverside
- ☐ 34 - Sacramento
- ☐ 35 - San Benito
- ☐ 36 - San Bernardino
- ☐ 37 - San Diego
- ☐ 38 - San Francisco
- ☐ 39 - San Joaquin
- ☐ 40 - San Luis Obispo
- ☐ 41 - San Mateo
- ☐ 42 - Santa Barbara
- ☐ 43 - Santa Clara
- ☐ 44 - Santa Cruz
- ☐ 45 - Shasta
- ☐ 46 - Sierra
- ☐ 47 - Siskiyou
- ☐ 48 - Solano
- ☐ 49 - Sonoma
- ☐ 50 - Stanislaus
- ☐ 51 - Sutter
- ☐ 52 - Tehama
- ☐ 53 - Trinity
- ☐ 54 - Tulare
- ☐ 55 - Tuolumne
- ☐ 56 - Ventura
- ☐ 57 - Yolo
- ☐ 58 - Yuba

Part II - TASK RATINGS

In this part of the questionnaire, please rate each task as it relates to your current practice as a Registered Dental Assistant in Extended Functions.

Your Frequency and Importance ratings should be separate and independent ratings. Therefore, the ratings that you assign from one rating scale should not influence the ratings that you assign from the other rating scale.

Please note that this questionnaire purposefully encompasses both RDA and RDAEF specific duties in its content. If, as an RDAEF1 or RDAEF2, you do NOT perform the activity listed, simply select "0" (zero) DOES NOT APPLY for the frequency and "0" (zero) DOES NOT APPLY for the Importance rating.

The boxes for rating the Frequency and Importance of each task have drop-down lists. Click on the "down" arrow for each list to see the ratings and then select the option based on your current job.

FREQUENCY RATING How often are these tasks performed in your current job? Use the following scale to make your rating.

- **0 - DOES NOT APPLY TO MY PRACTICE. I do not perform this task in my job.**
  1 - RARELY. This task is one of the tasks I perform least often in my practice relative to other tasks I perform.
  2 - SELDOM. This task is performed less often relative to other tasks I perform in my practice.
  3 - REGULARLY. This task is performed as often as other tasks I perform in my practice.
  4 - OFTEN. This task is performed more often than most other tasks I perform in my practice.
  5 - VERY OFTEN. This task is one of the tasks I perform most often in my practice.

IMPORTANCE RATING HOW IMPORTANT are these tasks in the performance of your current practice? Use the following scale to make your ratings.

- **0 - NOT IMPORTANT; DOES NOT APPLY TO MY PRACTICE I do not perform this task in my practice.**
  1 - OF MINOR IMPORTANCE. This task is of minor importance for effective performance relative to other tasks; it has the lowest priority of all the tasks I perform in my current practice.
  2 - FAIRLY IMPORTANT. This task is fairly important for effective performance relative to other tasks; it does not have the priority of most other tasks I perform in my current practice.
  3 - MODERATELY IMPORTANT. This task is moderately important for effective performance relative to other tasks; it has average priority of all the tasks I perform in my current job.
  4 - VERY IMPORTANT. This task is very important for performance in my practice; it has a higher degree of priority than most other tasks I perform in my current practice.
  5 - CRITICALLY IMPORTANT. This task is one of the most critical tasks I perform in practice; it

has the highest degree of priority of all the tasks I perform in my current practice.

Part II - TASK RATINGS (1 through 12)

Patient Examination

	FREQUENCY	IMPORTANCE
1. Review and report to dentist patient medical conditions, medications, and areas of medical/dental treatment history that may affect dental treatment.		
2. Take patient blood pressure and vital signs.		
3. Inspect patient oral condition with mouth mirror.		
4. Chart existing oral conditions and diagnostic findings at the direction of the licensed provider.		
5. Perform intra-oral diagnostic imaging of patient mouth and dentition (e.g., radiographs, photographs, CT scans).		
6. Respond to patient questions about existing conditions and treatment following dentist's diagnosis.		
7. Observe for signs and conditions that may indicate abuse or neglect.		
8. Perform dental procedures using professional chairside manner.		
9. Educate patient about behaviors that could affect oral health or dental treatment.		
10. Instruct patient about preoperative and postoperative care and maintenance for dental procedures and appliances.		
11. Conduct preliminary myofunctional evaluations of the head and neck.		
12. Perform and complete Oral Health Assessments under the direction of a dentist, RDH, or RDHAP.		

Part II - TASK RATINGS (13 through 33)

Direct and Indirect Restorations

	FREQUENCY	IMPORTANCE
13. Place bases and liners.		
14. Place matrices and wedges.		
15. Place temporary filling material.		
16. Apply etchant to tooth surface (tooth dentin or enamel) for direct and indirect provisional restorations.		
17. Place bonding agent.		
18. Fabricate and adjust direct and indirect provisional restorations.		
19. Perform cementation procedure for direct and indirect provisional restorations.		
20. Obtain intra-oral images using computer-generated imaging system (e.g., CADCAM).		
21. Take impressions for direct and indirect provisional restorations.		
22. Remove indirect provisional restorations.		
23. Perform in-office whitening (bleaching) procedures (e.g., Boost, Opalescence).		
24. Place and contour direct restorations.		
25. Adjust, finish, and polish direct restorations.		
26. Perform preliminary adjustment of permanent indirect restorations prior to cementation.		
27. Cement permanent indirect restorations.		
28. Perform final adjustment of permanent indirect restorations after cementation.		
29. Take final impressions for permanent indirect restorations and tooth-borne removable prostheses.		
30. Place retraction cord for impression procedures.		

Preventive Procedures

	FREQUENCY	IMPORTANCE
31. Perform coronal polishing.		
32. Utilize caries detection materials and devices to gather information for dentist.		
33. Prepare teeth and apply pit and fissure sealants.		

Part II - TASK RATINGS (34 through 43)

Infection Control & Safety

	FREQUENCY	IMPORTANCE
34. Wear personal protective equipment during patient-based and non-patient-based procedures as specific to the tasks.		
35. Purge dental unit lines with air or water prior to attachment of devices.		
36. Use germicides for surface disinfection (e.g., tables, chairs, counters).		
37. Use surface barriers for prevention of cross-contamination.		
38. Perform instrument sterilization in compliance with the office's infection control program.		
39. Disinfect and sterilize laboratory and operatory equipment in compliance with the office's infection control program.		
40. Use hand hygiene procedures.		
41. Conduct biological spore testing to ensure functioning of sterilization devices.		
42. Dispose of biological hazardous waste and other potentially infectious materials (OPIM).		
43. Dispose of pharmaceuticals and sharps in appropriate container.		

Part II - TASK RATINGS (44 through 57)

Radiation Safety

	FREQUENCY	IMPORTANCE
44. Implement measures to minimize radiation exposure to patient during radiographic procedures.		
45. Implement measures to prevent and monitor scatter radiation exposure (e.g., lead shields, radiation dosimeter) to self and others during radiographic procedures.		
46. Implement measures for the storage and maintenance of radiation protective barriers and portable X-Ray units.		
47. Implement measures for the storage and disposal of radiographic film.		

Emergencies

	FREQUENCY	IMPORTANCE
48. Assist in the administration of nitrous oxide/oxygen when used for analgesia or sedation by dentist.		
49. Assist in the administration of oxygen to patients as instructed by dentist.		
50. Implement basic life support and/or use of AED as indicated during medical emergency.		
51. Assist in emergency care of patient.		
52. Implement first aid and BLS measures to support patient care.		
53. Implement emergency preparedness protocols in compliance with office procedures.		
54. Follow infection control procedures during the administration of first aid and basic life support.		

	FREQUENCY	IMPORTANCE
55. Implement procedures and protocols to protect operator from exposure during hazardous waste management.		
56. Package, prepare, and store hazardous waste for disposal.		
57. Store, label, and log chemicals used in a dental practice.		

Part II - TASK RATINGS (58 through 72)

Endodontic Procedures

	FREQUENCY	IMPORTANCE
58. Test pulp vitality.		
59. Dry canals with absorbent points.		
60. Select, size, and fit endodontic master and accessory points.		
61. Seal endodontic master and accessory points.		

Periodontal Procedures

	FREQUENCY	IMPORTANCE
62. Place periodontal dressings at surgical site.		

Implants, Oral Surgery, Extractions

	FREQUENCY	IMPORTANCE
69. Remove post-extraction and post-surgery sutures as directed by dentist.		
70. Place and remove dry socket dressing as directed by dentist.		

Prosthetic Appliances

	FREQUENCY	IMPORTANCE
71. Adjust prosthetic appliances extra-orally.		
72. Take final impressions for tooth-borne prosthetic appliances.		

Part III - KNOWLEDGE RATINGS

In this part of the questionnaire, rate each of the knowledge statements based on how IMPORTANT the knowledge is to successful performance in your practice.

Please note that this questionnaire purposefully encompasses both RDA and RDAEF specific duties in its content. If, as an RDAEF1 or RDAEF2, you do NOT perform the activity listed, simply select "0" (zero) NOT REQUIRED for the Importance rating.

PLEASE NOTE: Numbering of Knowledges occasionally skips a few numbers, this is purposeful.

The boxes for rating the Importance of each knowledge statement have a drop-down list. Click on the "down" arrow for the list to see the ratings. Then select the rating based on your current practice.

IMPORTANCE RATING
HOW IMPORTANT is this knowledge in the performance of your current practice?

Use the following scale to make your ratings.
0 - DOES NOT APPLY TO MY PRACTICE; NOT REQUIRED; this knowledge is not required to perform in my practice.
1 - OF MINOR IMPORTANCE; this knowledge is of minor importance for performance of my practice relative to all other knowledge.
2 - FAIRLY IMPORTANT; this knowledge is fairly important for performance of my practice relative to all other knowledge.
3 - MODERATELY IMPORTANT; this knowledge is moderately important for performance of my practice relative to all other knowledge.
4 - VERY IMPORTANT; this knowledge is very important for performance of my practice relative to all other knowledge.
5 - CRITICALLY IMPORTANT; this knowledge is essential for performance of my practice relative to all other knowledge.

Part III - KNOWLEDGE RATINGS (1 through 27)

Patient Examination

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
1. Knowledge of effects of coexisting medical/dental conditions on dental treatment.	○	○	○	○	○	○
2. Knowledge of common medical conditions that may affect dental treatment (e.g., asthma, cardiac conditions, diabetes).	○	○	○	○	○	○
3. Knowledge of allergic reactions and sensitivities associated with dental treatment and materials (e.g., latex, epinephrine).	○	○	○	○	○	○
4. Knowledge of purposes and effects of commonly prescribed medications that may affect dental treatment (e.g., Coumadin, psychotropics).	○	○	○	○	○	○
5. Knowledge of the legal and ethical requirements regarding patient records and patient confidentiality.	○	○	○	○	○	○
6. Knowledge of medical conditions that may require premedication for dental treatment (e.g., joint replacement, infective endocarditis, artificial heart valves).	○	○	○	○	○	○
7. Knowledge of acceptable levels of blood pressure for performing dental procedures.	○	○	○	○	○	○
8. Knowledge of methods and techniques for using medical equipment to take vital signs.	○	○	○	○	○	○
9. Knowledge of techniques and procedures for using imaging equipment to perform intra-oral and extra-oral diagnostic imaging.	○	○	○	○	○	○
10. Knowledge of types of plaque, calculus, and stain formations of the oral cavity and their etiology.	○	○	○	○	○	○
11. Knowledge of conditions of the tooth surfaces (e.g., decalcification, caries, stains, fracture lines) and how to document them.	○	○	○	○	○	○

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
12. Knowledge of effects of substance abuse on patient physical condition, including oral tissues.	○	○	○	○	○	○
13. Knowledge of effects of nutrition and malnutrition on the oral cavity.	○	○	○	○	○	○
14. Knowledge of effects of smoking and smokeless tobacco on oral tissue.	○	○	○	○	○	○
15. Knowledge of the professional and ethical principles related to communicating with and fair treatment of patient. (ADA 4-A.1, C, C1, ADA 5-A, CDA 4, DANB-Justice, Truth)	○	○	○	○	○	○
16. Knowledge of professional and ethical principles regarding patient care. (CDA-Compassion, 1C, 5, Integrity)	○	○	○	○	○	○
17. Knowledge of legal requirements and ethical principles regarding patient confidentiality. (B&P code, CA client Confidentiality, HIPPA)	○	○	○	○	○	○
18. Knowledge of types of dental conditions of hard and soft tissue and how to identify and document them.	○	○	○	○	○	○
19. Knowledge of basic oral and dental anatomy (e.g., nomenclature, morphology, and tooth notation).	○	○	○	○	○	○
20. Knowledge of legal requirements and ethical principles regarding mandated reporting (abuse and neglect). (Penal 11166, ADA 3.E, & DANB Definition)	○	○	○	○	○	○
21. Knowledge of techniques to provide patient comfort during intra-oral procedures.	○	○	○	○	○	○
22. Knowledge of RDA/RDAEFs' legal and ethical responsibilities to report violations of the California Dental Practice Act and administrative rules and regulations to the proper authorities.	○	○	○	○	○	○
23. Knowledge of methods and techniques patients can perform to improve oral health.	○	○	○	○	○	○
24. Knowledge of preoperative and postoperative care and maintenance for dental procedures and appliances.	○	○	○	○	○	○
25. Knowledge of requirements for the supervision of RDAs and RDAEFs related to different dental procedures.	○	○	○	○	○	○

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
26. Knowledge of scope of practice for RDAs and RDAEFs related to initial patient assessment.	○	○	○	○	○	○
27. Knowledge of techniques and procedures for performing an extra-oral and intra-oral examination of the hard and soft tissues to identify pathology and abnormalities.	○	○	○	○	○	○

Part III - KNOWLEDGE RATINGS (28 through 59)

Direct and Indirect Restorations

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
28. Knowledge of types of base and liner materials and the techniques and procedures for their application and placement.	○	○	○	○	○	○
29. Knowledge of types of wedges and the techniques and procedures for their use.	○	○	○	○	○	○
30. Knowledge of techniques and procedures for using matrix bands with or without band retainers.	○	○	○	○	○	○
31. Knowledge of types of temporary filling materials and the techniques and procedures to mix, place, and contour them.	○	○	○	○	○	○
32. Knowledge of types of bonding agents and the techniques and procedures for their application and placement.	○	○	○	○	○	○
33. Knowledge of types of etchants and the techniques and procedures for their application and placement.	○	○	○	○	○	○
34. Knowledge of irregularities in margins that affect direct and indirect provisional restorations.	○	○	○	○	○	○
35. Knowledge of techniques used to eliminate open margins when placing restorative materials.	○	○	○	○	○	○
36. Knowledge of methods for identifying improper occlusal contacts, proximal contacts, or embrasure contours of provisional restorations.	○	○	○	○	○	○
37. Knowledge of techniques and procedures for mitigating the effects of improper occlusal contacts, proximal contacts, or embrasure contours of provisional restorations.	○	○	○	○	○	○
38. Knowledge of instrumentation and techniques related to the removal of indirect provisional restorations.	○	○	○	○	○	○

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
39. Knowledge of scope of practice for RDAs and RDAEFs related to applying bases, liners, and bonding agents.	○	○	○	○	○	○
40. Knowledge of equipment and procedures used to obtain intra-oral images for computer-aided milled restorations.	○	○	○	○	○	○
41. Knowledge of types of impression materials and techniques and procedures for their application and placement.	○	○	○	○	○	○
42. Knowledge of techniques and procedures used to mix and place provisional materials.	○	○	○	○	○	○
43. Knowledge of techniques and procedures for bonding provisional veneers.	○	○	○	○	○	○
44. Knowledge of indications and contraindications for the use of whitening (bleaching) agents.	○	○	○	○	○	○
45. Knowledge of indications and contraindications for the use of bonding agents.	○	○	○	○	○	○
46. Knowledge of indications and contraindications for the use of etching agents.	○	○	○	○	○	○
47. Knowledge of types of whitening (bleaching) agents and the techniques and procedures for their application.	○	○	○	○	○	○
48. Knowledge of types of cements and the techniques and procedures for their application, placement, and removal.	○	○	○	○	○	○
49. Knowledge of scope of practice for RDAs and RDAEFs related to applying and activating whitening (bleaching) agents.	○	○	○	○	○	○
50. Knowledge of scope of practice for RDAs and RDAEFs related to direct restorations.	○	○	○	○	○	○
51. Knowledge of scope of practice for RDAs and RDAEFs related to indirect restorations.	○	○	○	○	○	○
52. Knowledge of scope of practice for RDAs and RDAEFs related to final impressions.	○	○	○	○	○	○
53. Knowledge of types of direct restorative materials and the techniques and procedures for their application, placement, and contouring.	○	○	○	○	○	○

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
54. Knowledge of techniques and procedures for adjusting, finishing, and polishing direct restorative materials.	○	○	○	○	○	○
55. Knowledge of techniques and procedures for identifying and adjusting occlusal, marginal, and contact discrepancies.	○	○	○	○	○	○
56. Knowledge of the types of luting agents and the techniques and procedures for applying them in the placement of permanent indirect restorations.	○	○	○	○	○	○
57. Knowledge of techniques and procedures for making final adjustment of permanent indirect restorations after cementation.	○	○	○	○	○	○
58. Knowledge of materials and techniques for taking final impressions.	○	○	○	○	○	○
59. Knowledge of techniques for gingival cord retraction, tissue management, and cord removal.	○	○	○	○	○	○

Part III - KNOWLEDGE RATINGS (60 through 68)

Preventative Procedures

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
60. Knowledge of scope of practice for RDAs related to coronal polishing and the application of pit and fissure sealants.	○	○	○	○	○	○
61. Knowledge of indications and contraindications for performing coronal polishing.	○	○	○	○	○	○
62. Knowledge of techniques and procedures for coronal polishing.	○	○	○	○	○	○
63. K of types of disclosing agents used in conjunction with coronal polishing.	○	○	○	○	○	○
64. Knowledge of types of automated caries detection devices and materials and the procedures for their use.	○	○	○	○	○	○
65. Knowledge of procedures for preparing the tooth for application of pit and fissure sealants.	○	○	○	○	○	○
66. Knowledge of indications and contraindications for use of pit and fissure sealants.	○	○	○	○	○	○
67. Knowledge of types of pit and fissure sealants and the techniques and procedures for their application.	○	○	○	○	○	○
68. Knowledge of scope of practice for RDAs related to use of caries detection devices and materials.	○	○	○	○	○	○

Part III - KNOWLEDGE RATINGS (69 through 84)

Infection Control and Safety

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
69. Knowledge of laws and regulations pertaining to infection control procedures related to dental healthcare personnel (DHCP) environments. (CCR 1005 Infection control)	○	○	○	○	○	○
70. Knowledge of procedures and protocols for management and disposal of pharmaceuticals and sharps.	○	○	○	○	○	○
71. Knowledge of methods and procedures for the handling, use, cleaning, and disposal of personal protective equipment (e.g., gloves, masks, goggles, gown).	○	○	○	○	○	○
72. Knowledge of sequence for donning and removing personal protective equipment.	○	○	○	○	○	○
73. Knowledge of procedures and protocols for the use of surface barriers to prevent contamination.	○	○	○	○	○	○
74. Knowledge of procedures and protocols for purging dental unit waterlines and hand pieces (DUWL). (Dental Board Minimum Standards for infection control – CCR 1005(b)(21))	○	○	○	○	○	○
75. Knowledge of procedures for managing self-contained water systems.	○	○	○	○	○	○
76. Knowledge of procedures and protocols for the disinfection/decontamination of surfaces and work areas.	○	○	○	○	○	○
77. Knowledge of the methods and procedures for the application and disposal of low-level, intermediate-level, and high-level disinfectants and germicides.	○	○	○	○	○	○
78. Knowledge of what defines critical, semi-critical, and non-critical instruments and their respective disinfection/sterilization protocols.	○	○	○	○	○	○

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
79. Knowledge of types of sterilization devices (e.g., steam and dry heat automated sterilization devices) and the indications and procedures for their use.	○	○	○	○	○	○
80. Knowledge of procedures for the disinfection and sterilization of laboratory equipment, operatory equipment, and mechanical devices.	○	○	○	○	○	○
81. Knowledge of procedures for handling, disinfecting, and sterilizing detachable intra-oral hand pieces, instruments, and devices.	○	○	○	○	○	○
82. Knowledge of procedures and protocols for hand hygiene.	○	○	○	○	○	○
83. Knowledge of protocols for using biological spore test and heat-indicating devices.	○	○	○	○	○	○
84. Knowledge of procedures and protocols for the disposal of biological hazardous waste and other potentially infectious materials (OPIM).	○	○	○	○	○	○

Part III - KNOWLEDGE RATINGS (85 through 101)

Radiation Safety

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
85. Knowledge of methods and procedures for use and care of protective barriers (e.g., lead apron, thyroid collar, shield) to protect patient from radiation exposure.	○	○	○	○	○	○
86. Knowledge of types of film-holding devices and placement to minimize multiple exposures during radiography.	○	○	○	○	○	○
87. Knowledge of factors of radiographic film speed, digital sensors, phosphor plates, and exposure time as related to radiographic safety.	○	○	○	○	○	○
88. Knowledge of techniques and procedures for minimizing radiation exposure to self and others during radiographic procedures.	○	○	○	○	○	○
89. Knowledge of legal and ethical requirements for RDAs and RDAEFs related to radiation safety. (BPC 1645.1(a)(b) Compliance)	○	○	○	○	○	○
90. Knowledge of methods for the storage and disposal of radiographic film.	○	○	○	○	○	○

Emergencies

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
91. Knowledge of the applications and contraindications for use of oxygen and nitrous oxide/oxygen in a dental practice setting.	○	○	○	○	○	○
92. Knowledge of procedures for the use and care of equipment used to administer oxygen and nitrous oxide/oxygen.	○	○	○	○	○	○
93. Knowledge of signs and symptoms indicating the need to implement first aid and basic life support measures.	○	○	○	○	○	○
94. Knowledge of procedures for implementing protocols for responding to office and environmental emergencies.	○	○	○	○	○	○
95. Knowledge of signs and symptoms indicating possible allergic reactions and/or sensitivities to medications or materials used in dentistry.	○	○	○	○	○	○
96. Knowledge of the equipment used for first aid and BLS and their uses and applications (e.g., eyewash station, AED).	○	○	○	○	○	○
97. Knowledge of measures for preventing spread of infection during first aid and BLS.	○	○	○	○	○	○

Occupational Safety

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
98. Knowledge of location within Safety Data Sheets of safe handling and emergency protocols for hazardous substances.	○	○	○	○	○	○
99. Knowledge of what constitutes hazardous waste and the procedures and protocols for its disposal.	○	○	○	○	○	○
100. Knowledge of methods for maintaining a chemical inventory.	○	○	○	○	○	○
101. Knowledge of requirements for placing hazardous substances in secondary containers (e.g., labeling, handling, applicable containers).	○	○	○	○	○	○

Part III - KNOWLEDGE RATINGS (102 through 119)

Endodontic Procedures

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
102. Knowledge of techniques and procedures for testing pulp vitality.	○	○	○	○	○	○
103. Knowledge of techniques and procedures for measuring canal length and size.	○	○	○	○	○	○
104. Knowledge of scope of practice for RDAs and RDAEFs related to initial pulp vitality testing and other endodontic procedures.	○	○	○	○	○	○
105. Knowledge of techniques and procedures for fitting master and accessory points.	○	○	○	○	○	○
106. Knowledge of techniques and procedures for sealing endodontic master and accessory points.	○	○	○	○	○	○
107. Knowledge of scope of practice for RDAs and RDAEFs related to endodontic points.	○	○	○	○	○	○

Periodontal Procedures

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
108. Knowledge of scope of practice for RDAs and RDAEFs related to the placement of periodontal dressing materials.	○	○	○	○	○	○
109. Knowledge of types of periodontal dressings and techniques for their application.	○	○	○	○	○	○

Implants, Oral Surgery, Extractions

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
114. Knowledge of techniques for removing post-extraction and post-surgery sutures.	○	○	○	○	○	○
115. Knowledge of methods for treating dry socket.	○	○	○	○	○	○

Prosthetic Appliances

	NOT REQUIRED	OF MINOR IMPORTANCE	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
116. Knowledge of methods for identifying pressure points (sore spots) related to ill-fitting prosthetic appliances.	○	○	○	○	○	○
117. Knowledge of materials, equipment, and techniques used for adjustment of prosthetic appliances.	○	○	○	○	○	○
118. Knowledge of scope of practice for RDAs and RDAEFs related to the adjustment of extra-oral prosthetic appliances.	○	○	○	○	○	○
119. Knowledge of materials and techniques for taking final impressions for tooth-borne prosthetic appliances.	○	○	○	○	○	○

PARTICIPANT FEEDBACK

Please provide your feedback about the RDAEF Occupational Analysis Questionnaire.

When done, please click NEXT to continue onto the next page.

Were the instructions for rating the task and knowledge statements clearly stated?

- ◯ YES
- ◯ NO

Comments

Were the rating scales easy to understand and apply?

- ◯ YES
- ◯ NO

Comments

Were any important areas of practice left out?

- ◯ YES
- ◯ NO

Comments

Finished!

Thank you for participating in the 2015 Registered Dental Assistant in Extended Functions Occupational Analysis.

Once the completeness of your survey has been verified you will receive a letter from the Board confirming the CE credits for your records.

Dental Board of California

STATE OF CALIFORNIA
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BUSINESS, CONSUMER SERVICES, AND HOUSING AGENCY • GOVERNOR EDMUND G. BROWN JR.
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MEMORANDUM

DATE	July 27, 2016
TO	Members of the Dental Board of California Members of the Dental Assisting Council
FROM	Sarah Wallace, Assistant Executive Officer
SUBJECT	**JNT 7:** Discussion and Possible Action Regarding the Update of the Registered Dental Assistant in Extended Functions (RDAEF) Written Examination in Accordance with Business and Professions Code Section 139 Requirements.

Now that the *Occupational Analysis of the Registered Dental Assistant in Extended Functions (RDAEF) Profession* is complete, the Board may consider the revision of its currently administered RDAEF Written Examination in compliance with Business and Professions Code Section 139.

Business and Professions Code Section 1753 specifies that, in addition to other required licensing requirements, the Board may require applicants for registered dental assistant in extended functions to successfully complete a written examination.

Board Action Requested:
Consider and possibly direct staff to work with the Department of Consumer Affairs' Office of Professional Examination Services to update the Board's written examination required for registered dental assistant in extended functions licensure based on the findings of the recently completed *Occupational Analysis of the Registered Dental Assistant in Extended Functions Profession*.

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MEMORANDUM

DATE	August 18, 2016
TO	Members of the Dental Board of California Members of the Dental Assisting Council
FROM	Leslie Campaz, Educational Program Analyst
SUBJECT	**JNT 8:** Update on Dental Assisting Council Regulatory Workshops.

2016 Regulatory Development Workshops

Several regulatory workshops scheduled throughout 2016 have been successfully held at the Department of Consumer Affairs HQ 2 Building in Natomas, CA. At the June 10, 2016 workshop, the discussions on Pit & Fissure Sealants, Coronal Polish, and Ultrasonic Scaling course requirements were finalized and the discussions on Orthodontic Assistant Permit and Dental Sedation Permit course requirements were initiated. At the July 15, 2016 workshop, the discussion on Orthodontic Assistant Permit courses requirements was finalized and the discussion on RDA Educational Program requirements initiated. The Dental Sedation Assisting Permit course requirements discussion will finalize at a future workshop. The development of the language for all aforementioned topics has begun in collaboration with the department's Legal Counsel. The topics of discussion at the next regulatory workshop will be RDA Educational Programs (CCR § 1070.2) and RDAEF Educational Programs (CCR § 1071).

Date	Topics of Discussion	Location
September 16, 2016	**RDA Program** **RDAEF Program**	**HQ 2 Building** **1747 North Market Blvd.** **Sacramento, CA 95834** **Emerald Training Room** **Ste. 184**
October 28, 2016	**General Provisions Governing All Dental Assistant Programs and Courses** **Educational Program and Course Definitions and Instructor Ratios** **Definitions**	**HQ 2 Building** **1747 North Market Blvd.** **Sacramento, CA 95834** **Emerald Training Room** **Ste. 184**
December 16, 2016	**Finalize discussion pertaining to any/all other pending sections**	**HQ 2 Building** **1747 North Market Blvd.** **Sacramento, CA 95834** **Emerald Training Room** **Ste. 184**

Public Comment on Items Not on the Agenda.

The Board may not discuss or take action on any matter raised during the Public Comment section that is not included on this agenda, except whether to decide to place the matter on the agenda of a future meeting (Government Code §§ 11125 and 11125.7(a)).

Adjourn Joint Meeting of the Dental Board and the Dental Assisting Council