DENTAL BOARD OF CALIFORNIA

OCCUPATIONAL ANALYSIS OF THE

REGISTERED DENTAL ASSISTANT IN EXTENDED

FUNCTIONS PROFESSION

REVISED



OFFICE OF PROFESSIONAL EXAMINATION SERVICES



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

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*This report contains minor corrections.

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 questionnaire.

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 21% of the licensed RDAEFs in the sample (191) responded by accessing the Web-based questionnaire. The final sample size included in the data analysis was 144, or 15.6% 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 education and training requirements and passing the RDAEF written and practical examinations.

The examination outline for the RDAEF written 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 EXAMINATION OUTLINE FOR THE REGISTERED DENTAL ASSISTANT IN EXTENDED FUNCTIONS WRITTEN EXAMINATION

	Content Area	Content Area Description	Percent Weight
L	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
П.	Dental Procedures: Direct and Indirect Restorations	This area assesses the candidate's knowledge of materials, techniques, 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 the examination program for RDAEF licensure.

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 written 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 boardapproved 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 a preliminary list of 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 20.7% of the licensed RDAEFs in the sample, responded by accessing the Web-based questionnaire. The final sample size included in the data analysis was 144, or 15.6% of the population that was invited to complete the questionnaire. This response rate (15.6%) 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. Ten 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 RDA 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 respondents, 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 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% (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)

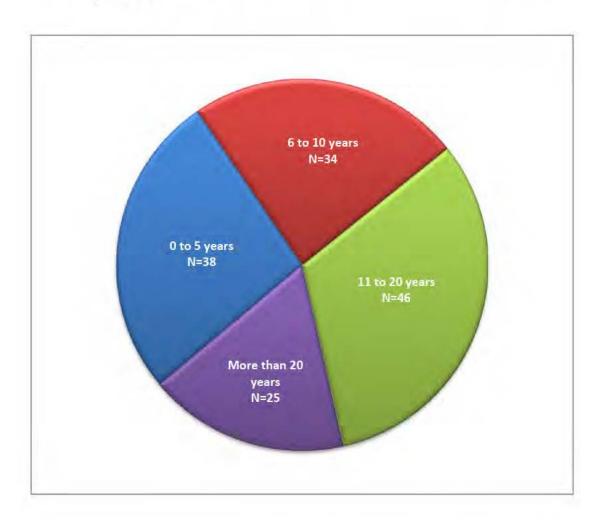


TABLE 2 - WHEN LICENSURE WAS OBTAINED AS AN RDAEF

When Licensed	N	Percent
Prior to 2010, Currently RDAEF	72	50.0
Prior to 2010, Currently RDAEF2	32	22.2
After 2010, Currently RDAEF2	30	20.8
Missing	10	6.9
Total	144	100*

*NOTE: Percentages do not add to 100 due to rounding.

FIGURE 2 - WHEN LICENSURE WAS OBTAINED AS AN RDAEF

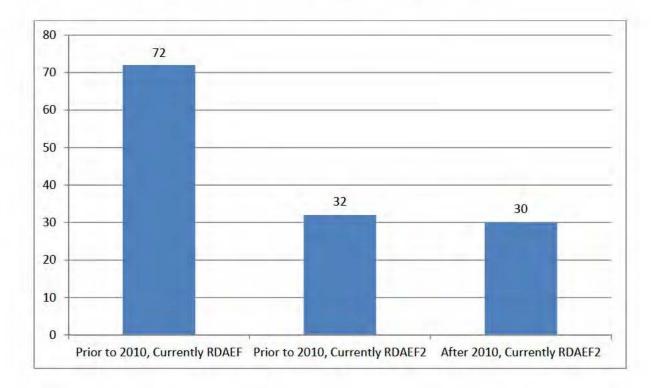


TABLE 3 – NUMBER OF YEARS PRACTICING IN CALIFORNIA AS A DENTAL ASSISTANT BEFORE OBTAINING RDAEF LICENSURE

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

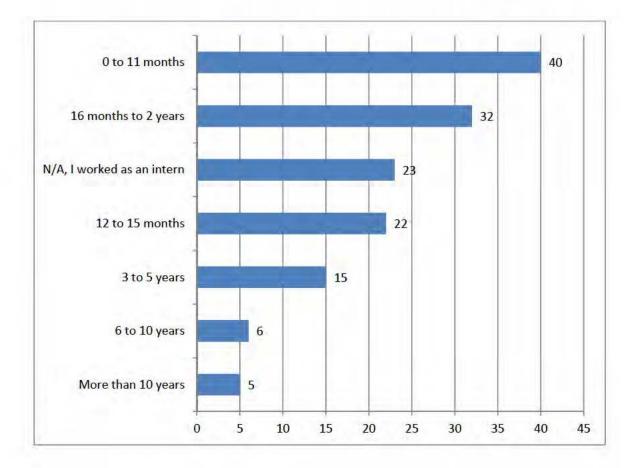


TABLE 4 – NUMBER OF YEARS PRACTICING IN CALIFORNIA AS AN RDA BEFORE OBTAINING RDAEF LICENSURE

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

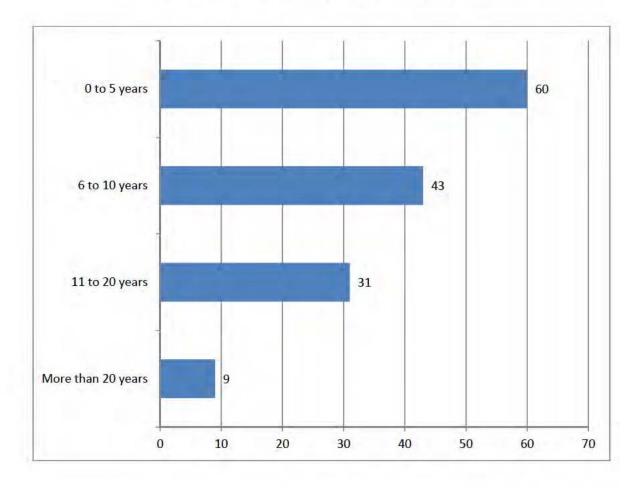


TABLE 5 - PRIMARY WORK SETTING

Work Setting	N	Percent
Group dental practice (2 or more dentists)	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

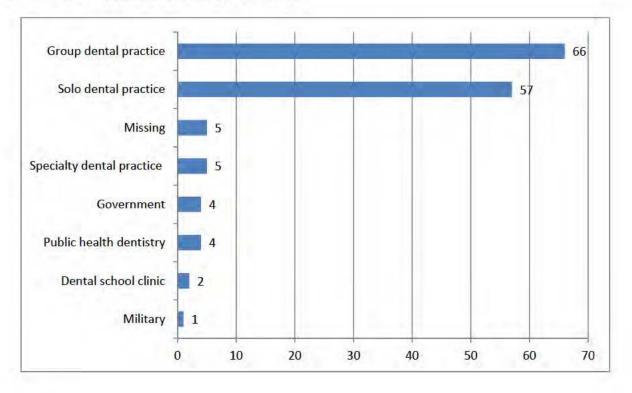


TABLE 6 - TYPE OF DENTAL PRACTICE IN PRIMARY WORK SETTING

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

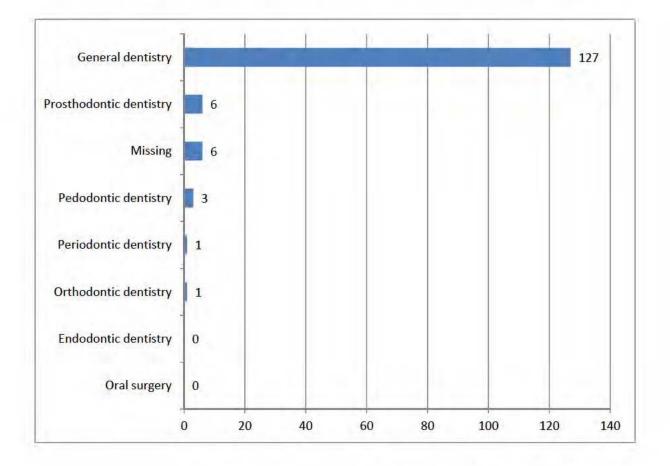
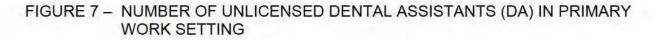


TABLE 7 – NUMBER OF UNLICENSED DENTAL ASSISTANTS (DA) IN PRIMARY WORK SETTING

Number of Unlicensed DAs	Ν	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.



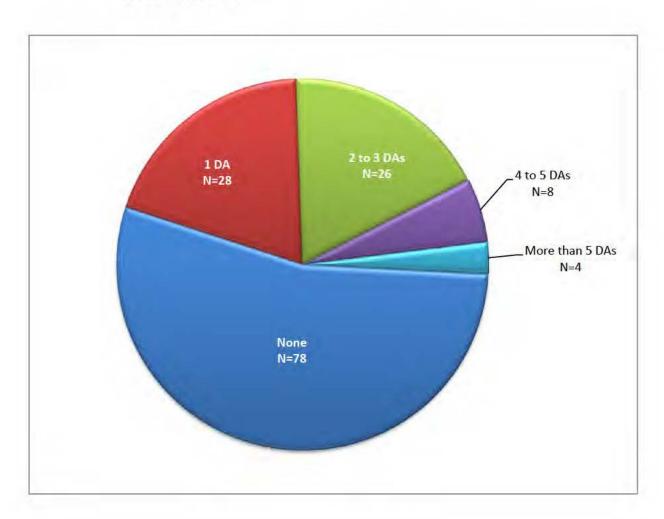


TABLE 8 – NUMBER OF REGISTERED DENTAL ASSISTANTS (RDA) IN PRIMARY WORK SETTING

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

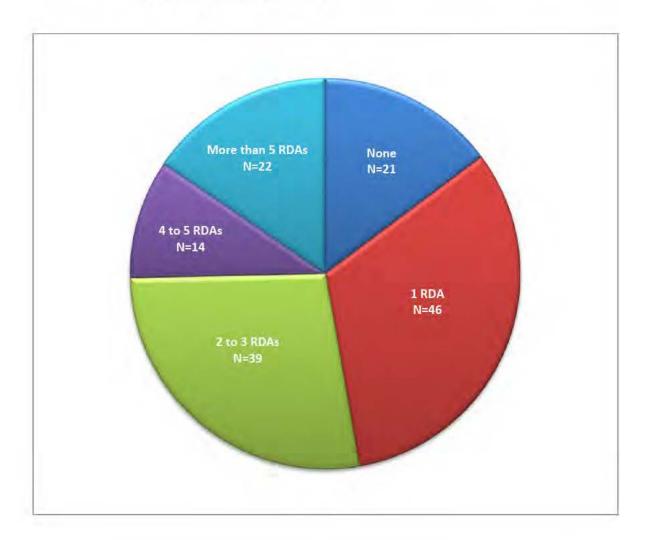
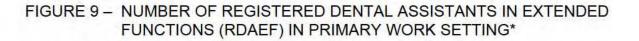
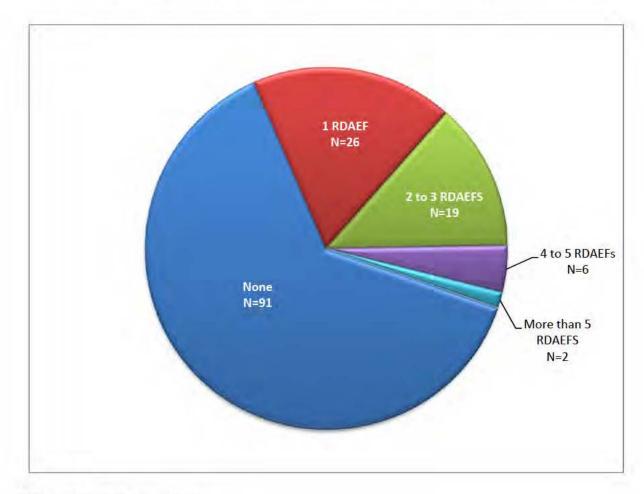


TABLE 9 – NUMBER OF REGISTERED DENTAL ASSISTANTS IN EXTENDED FUNCTIONS (RDAEF) IN PRIMARY WORK SETTING*

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.





* 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

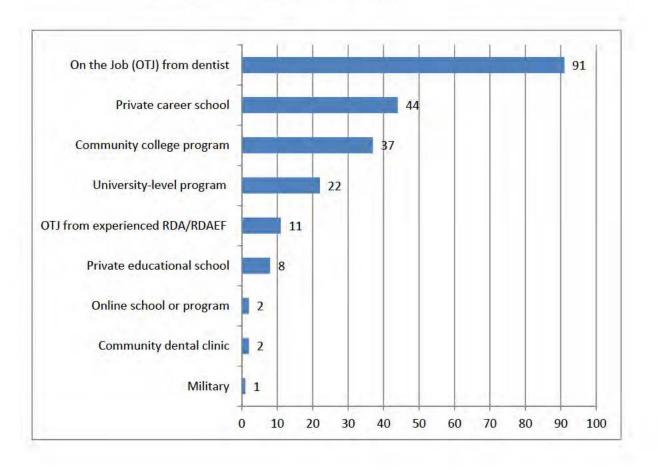


TABLE 11 - OTHER CERTIFICATES/CREDENTIALS POSSESSED

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

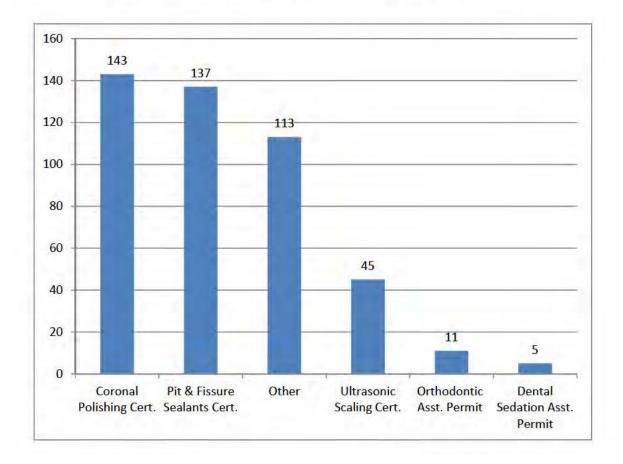


TABLE 12 - LOCATION OF PRIMARY WORK SETTING

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

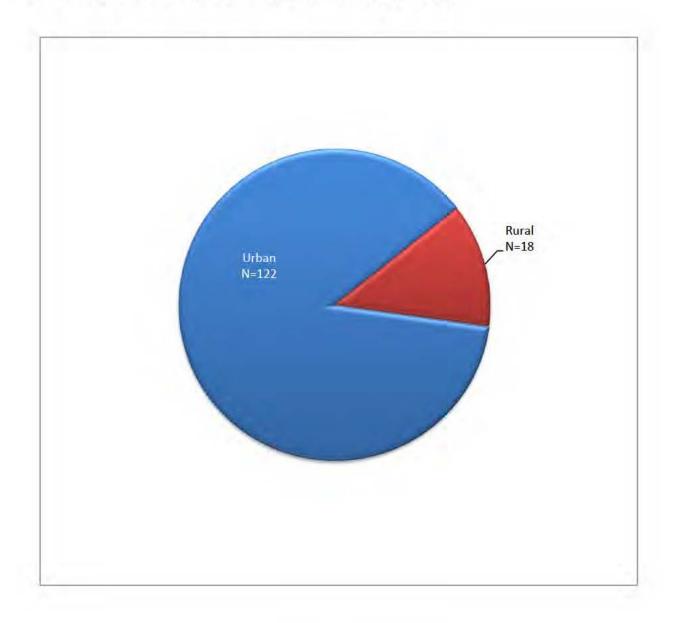


TABLE 13 - PERCENTAGE OF TIME SPENT ON PRINCIPAL WORK TASKS IN AN AVERAGE WEEK

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. <mark>6</mark>
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
Cementing permanent indirect restorations. (EF2)	7.0
Performing 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

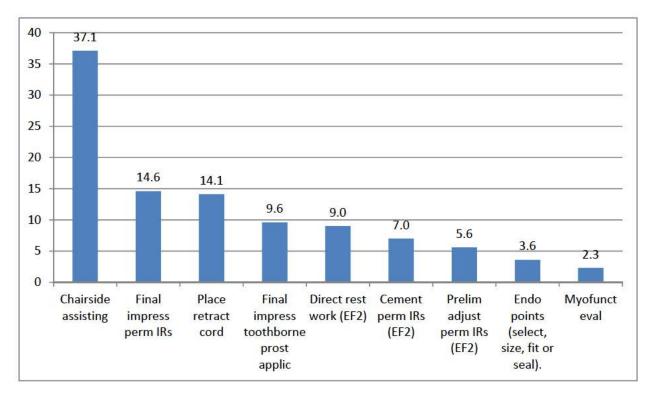


TABLE 14 - RESPONDENTS BY REGION*

Region	Frequency	Percent
Los Angeles County and Vicinity	38	26.4
San Francisco Bay Area	37	25.7
San Joaquin Valley	16	11.1
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
Total	144	100**

*NOTE: Appendix A shows a more detailed breakdown of the frequencies by region. ** NOTE: Percentages do not add to 100 due to rounding.

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.

CONTENT AREA	Number of Tasks	α Frequency	α Importance
I. Patient Examination	12	.79	.81
II. Dental Procedures	21	.89	. <mark>91</mark>
III. Safety	24	.88	.88
IV. Dental Specialty Procedures	9	.83	.90
Total	<mark>66</mark>	.90	.93

TABLE 15 – TASK SCALE RELIABILITY

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 focus groups 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 focus groups 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 a shown below.

Sum of Critical Values for Tasks in Content Area	-	Percent Weight of
Sum of Critical Values for All Tasks		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.

Sum of K(Imp) for Knowledge in Content Area	= Percent Weight of
Sum of K(Imp) for All Knowledge	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
1.	Patient Treatment and Care	40
П.	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 4 7 11 12	Task StatementsInspect patient's oral condition with mouth mirror.Chart existing oral conditions and diagnosticfindings at the direction of the licensed provider.Observe for signs and conditions that may indicateabuse or neglect.Conduct preliminary myofunctional evaluation ofthe head and neck. (EF2)Perform and complete Oral Health Assessmentsunder the direction of a dentist, RDH, or RDHAP.(EF2)	10 11 12 13 14	condition including oral tissues. Knowledge of effects of nutrition and malnutrition on the oral cavity.	
		17 18 19 20 22	oral tissue. Knowledge of legal requirements and ethical principles regarding patient confidentiality. Knowledge of types of dental conditions of hard and soft tissue and how to identify and document them. Knowledge of basic oral and dental anatomy (e.g., nomenclature, morphology, and tooth notation). Knowledge of legal requirements and ethical principles regarding mandated reporting (abuse and neglect).	

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
 Place and contour direct restorations. (EF2) Adjust, finish, and polish direct restorations. (EF2) Perform preliminary adjustment of permanent indirect restorations prior to cementation. (EF2) Cement permanent indirect restorations. (EF2) Perform final adjustment of permanent indirect restorations after cementation. (EF2) Take final impressions for permanent indirect restorations and toothborne removable prostheses. (EF 1/2) 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 techniques and procedures for making final adjustment 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 materials and techniques for taking final impressions.

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 61	Select, size, and fit endodontic master point and accessory points. 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

СА	T#	Task Statement	Avg. TFreq	Avg. Timpt	тсу
2A	15	Place temporary filling material.	2.79	3.54	22.24
<mark>2A</mark>	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.	<mark>1.73</mark>	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	<mark>4.66</mark>	16.62
3A	36	Use germicides for surface disinfection (e.g., tables, chairs, counters).	4.72	4.85	<mark>15.8</mark> 2
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	<mark>15.6</mark>
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.	<mark>4.1</mark> 4	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	3A 40 Use hand hygiene procedures.		4.41	4.82	14.58

CA	T#	Task Statement	Avg. TFreq	Avg. Timpt	тсv
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	<mark>13.83</mark>
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	3.8 <mark>4</mark>	<mark>13.19</mark>
ЗA	43	Dispose of pharmaceuticals and sharps in appropriate container.	4.52	4.88	<mark>13.02</mark>
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.	<mark>0.74</mark>	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.	<mark>1.40</mark>	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	<mark>49</mark>	Assist in the administration of oxygen to patients as instructed by dentist.	2.15	4.20	<mark>10.44</mark>
3B	47	Implement measures for the storage and disposal of radiographic film.	1.60	4.53	9. <mark>6</mark> 5
4E	70	Place and remove dry socket dressing as directed by dentist.	0.76	3.61	9.3

CA	T#	Task Statement	Avg. TFreq	Avg. Timpt	тсv
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).	<mark>1.94</mark>	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	<mark>4.81</mark>	7.82
2A	20	Obtain intraoral images using computer generated imaging system (e.g., CADCAM).	1.9 <mark>4</mark>	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	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 <mark>.64</mark>
2A	21	Take impressions for direct and indirect provisional restorations.	3.82	4.23	6.39
3B	B 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.	1.5 <mark>9</mark>	<mark>3.41</mark>	5.3
4C	62	Place periodontal dressings at surgical site.	0.45	3.41	5.2

APPENDIX C. KNOWLEDGE IMPORTANCE RATINGS

СА	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
ЗA	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.	
ЗA	84	Knowledge of procedures and protocols for the disposal of biological hazardous waste and Other Potentially Infectious Materials (OPIM).	
ЗA	76	Knowledge of procedures and protocols for the disinfection/decontamination of surfaces and work areas.	<mark>4.63</mark>
ЗA	81	Knowledge of procedures for handling, disinfecting, and sterilizing detachable intraoral handpieces, instruments, and devices.	<mark>4.6</mark> 2
2B	59	Knowledge of techniques for gingival cord retraction, tissue management, and cord removal.	<mark>4.61</mark>
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
ЗA	80	Knowledge of procedures for the disinfection and sterilization of laboratory equipment, operatory equipment, and mechanical devices.	
3C	95	Knowledge of signs and symptoms indicating possible allergic reactions and/or sensitivities to medications or materials used in dentistry.	
2B	58	Knowledge of materials and techniques for taking final impressions.	
2A	36	Knowledge of methods for identifying improper occlusal contacts, proximal contacts, or embrasure contours of provisional restorations.	
3A	78	Knowledge of what defines critical, semi-critical and non-critical instruments and their respective disinfection/sterilization protocols.	

СА	K#	Knowledge Statement	Avg. Kimpt.
3A	82	Knowledge of protocols and procedures for hand hygiene.	4.59
ЗA	73	Knowledge of procedures and protocols for the use of surface barriers to prevent contamination.	4.58
ЗA	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.	<mark>4</mark> .56
3A	74	Knowledge of protocols and procedures for purging dental unit waterlines and handpieces (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.	
3C	<mark>91</mark>	Knowledge of the applications and contraindications for use of oxygen and nitrous oxide/oxygen in a dental practice setting.	
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
ЗA	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.	
3C	92	Knowledge of procedures for the use and care of equipment used to administer oxygen and nitrous oxide/oxygen.	
2A	51	Knowledge of RDA and RDAEF scopes of practice related to indirect restorations.	

СА	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.	
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.	
2A	48	Knowledge of types of cements and the techniques and procedures for their application, placement, and removal.	
2B	54	Knowledge of techniques and procedures for adjusting, finishing, and polishing direct restorative materials.	
1	21	Knowledge of techniques to provide natient comfort during intraoral	

СА	K#	Knowledge Statement	Avg. Klmpt.
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	<mark>65</mark>	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).	<mark>4.34</mark>
3B	86	Knowledge of types of film holding devices and placement to minimize multiple exposures during radiography.	<mark>4.33</mark>
3B	89	Knowledge of legal and ethical requirements for RDAs and RDAEFs related to radiation safety.	
2A	<mark>38</mark>	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 fracture 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	<mark>119</mark>	Knowledge of materials and techniques for taking final impressions for toothborne prosthetic appliances.	
1	16	Knowledge of professional and ethical principles regarding patient care.	
2C	66	Knowledge of indications and contraindications for use of pit and fissure sealants.	
1	15	Knowledge of the professional and ethical principles related to communicating with and fair treatment of patient.	

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	<mark>42</mark>	Knowledge of techniques and procedures used to mix and place provisional materials.	
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.	<mark>4.23</mark>
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	<mark>1</mark> 2	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	61 Knowledge of indications and contraindications for performing coronal polishing.	
3B	90	Knowledge of methods for the storage and disposal of radiographic film.	
1	<mark>1</mark> 4	Knowledge of effects of smoking and smokeless tobacco on oral tissue.	
4F	<mark>118</mark>	Knowledge of scope of practice for RDAs and RDAEFs related to the adjustment of extraoral prosthetic appliances.	
4F	117	Knowledge of materials, equipment, and techniques used for adjustment of	

СА	K#	Knowledge Statement	Avg. Kimpt.
4F	116	Knowledge of methods for identifying pressure points (sore spots) related to ill-fitting prosthetic appliances.	<mark>3.97</mark>
1	13	Knowledge of effects of nutrition and malnutrition on the oral cavity.	3.9 <mark>6</mark>
4E	115	Knowledge of methods for treating dry socket.	<mark>3.9</mark> 2
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.	
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.	<mark>3.63</mark>
4B	107	Knowledge of scope of practice for RDA and RDAEFs related to endodontic points.	3.63
4C	<mark>10</mark> 8	Knowledge of scope of practice for RDAs and RDAEFs related to the placement of periodontal dressing materials.	
4C	109	Knowledge of types of periodontal dressings and techniques for their application.	
4A	104	Knowledge of scope of practice for RDAs and RDAEFs related to initial pulp vitality testing and other endodontic procedures.	

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.	 Knowledge of types of plaque, calculus, and stain formations of the oral cavity and their etiology. Knowledge of conditions of the tooth surfaces (e.g., decalcification, caries, stains, and fracture lines) and how to document them. Knowledge of effects of substance abuse on patient's physical condition including oral tissues. Knowledge of effects of nutrition and malnutrition on the oral cavity. Knowledge of effects of smoking and smokeless tobacco on oral tissue. Knowledge of legal requirements and ethical principles regarding patient confidentiality. Knowledge of types of dental conditions of hard and soft tissue and how to identify and document them. 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.	 Knowledge of types of plaque, calculus, and stain formations of the oral cavity and their etiology. Knowledge of conditions of the tooth surfaces (e.g., decalcification, caries, stains, and fracture lines) and how to document them. Knowledge of effects of substance abuse on patient's physical condition including oral tissues. Knowledge of effects of nutrition and malnutrition on the oral cavity. Knowledge of effects of smoking and smokeless tobacco on oral tissue. Knowledge of legal requirements and ethical principles regarding patient confidentiality. Knowledge of types of dental conditions of hard and soft tissue and how to identify and document them. 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 14 20	Knowledge of effects of nutrition and malnutrition on the oral cavity. Knowledge of effects of smoking and smokeless tobacco on oral tissue. 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 26 27	Knowledge of requirements for the supervision of RDAs and RDAEFs related to different dental procedures. Knowledge of scope of practice for RDAs and RDAEFs related to initial patient assessment. Knowledge of techniques and procedures for performing an extraoral 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 20 25 26 27	Knowledge of legal requirements and ethical principles regarding patient confidentiality. Knowledge of legal requirements and ethical principles regarding mandated reporting (abuse and neglect). Knowledge of requirements for the supervision of RDAs and RDAEFs related to different dental procedures. Knowledge of scope of practice for RDAs and RDAEFs related to initial patient assessment. 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 54	Knowledge of RDA and RDAEF scopes of practice related to direct restorations. 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 55	Knowledge of RDA and RDAEF scopes of practice related to indirect restorations. Knowledge of techniques and procedures for identifying and adjusting occlusal, marginal, and contact discrepancies.
27	Cement permanent indirect restorations. (EF2)	51 56	Knowledge of RDA and RDAEF scopes of practice related to indirect restorations. 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 57	Knowledge of RDA and RDAEF scopes of practice related to indirect restorations. 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 58	Knowledge of RDA and RDAEF scopes of practice related to final impressions. 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.

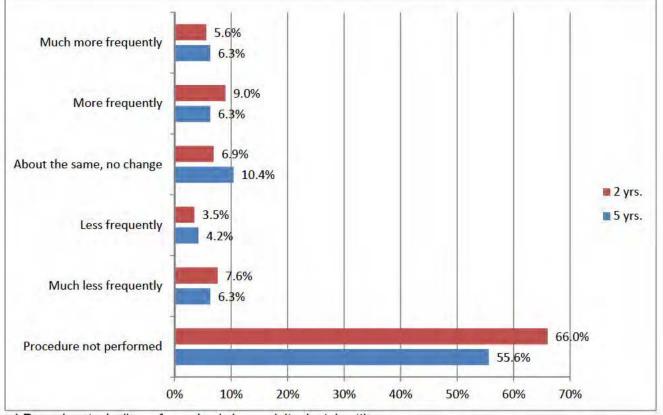
	Task Statements	Knowledge Statements
3A	Dental Specialty Procedures: Endodontic Procedures	
60	Select, size, and fit endodontic master point and accessory points.	 105 Knowledge of techniques and procedures for fitting master point and accessory points. 107 Knowledge of scope of practice for RDA and 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

Traditional braces (brackets/wire)

	Last 2 years		Next 5 years	
and a second second	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**

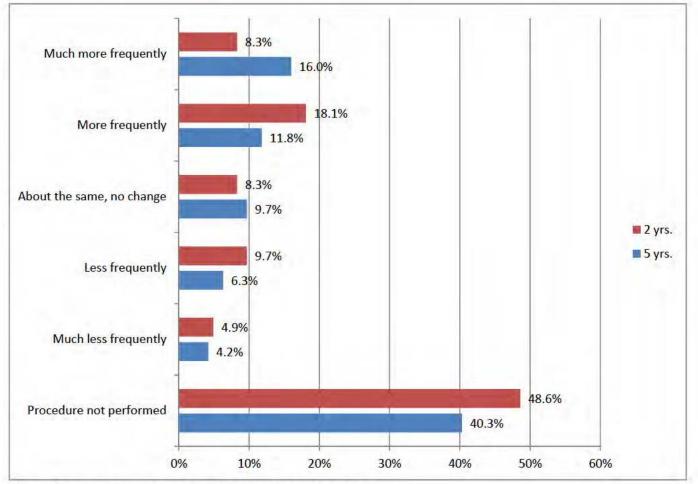
**NOTE: Percentages do not add to 100 due to rounding.



* Procedure typically performed only in specialty dental settings

	Last 2 years		Next 5 years	
	N	Percent	Ν	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.

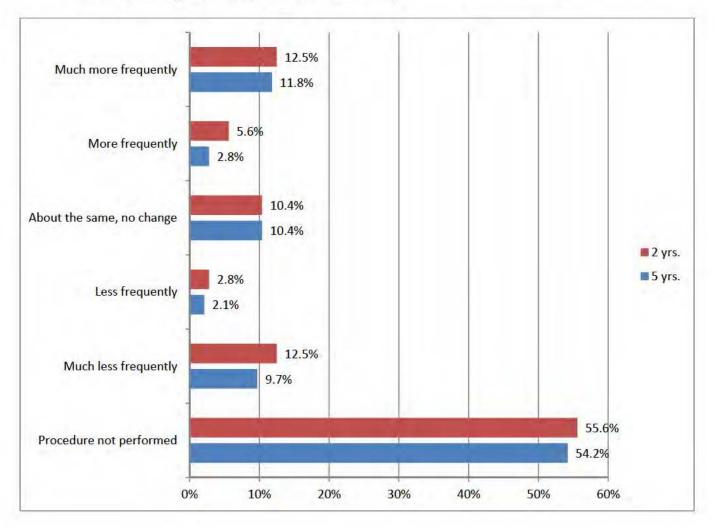


* Procedure typically performed only in specialty dental settings

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

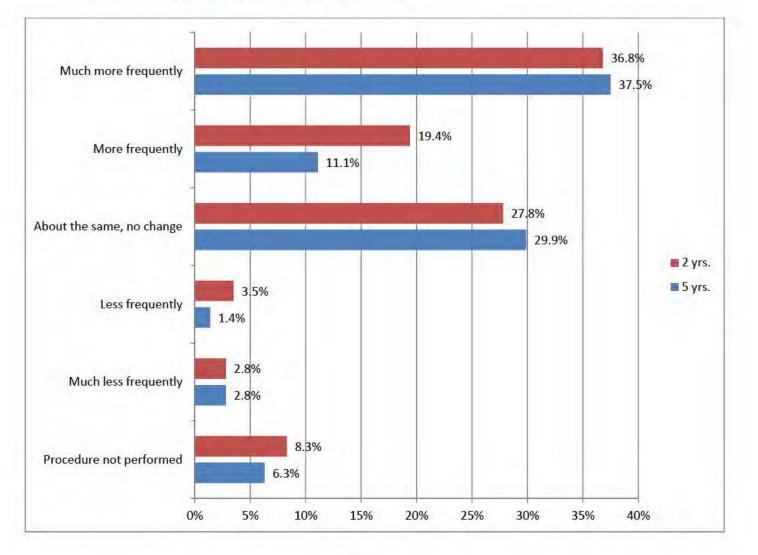
*NOTE: Percentages do not add to 100 due to rounding.



Radiography by digital sensors/phosphor plates

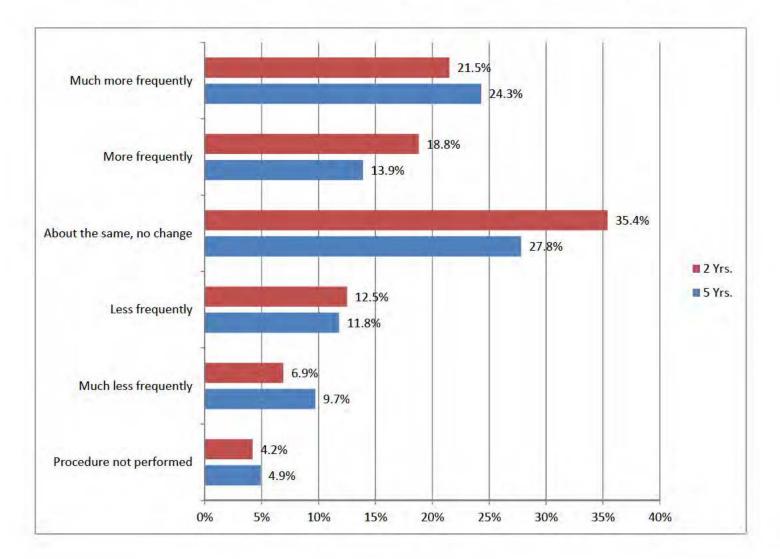
	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	12	8.3	9	6.3
Much less frequently	4	2.8	4	2.8
Less frequently	5	3.5	2	1.4
About the same, no change	40	27.8	43	29.9
More frequently	28	19.4	16	11.1
Much more frequently	53	36.8	54	37.5
Missing	2	1.4	16	11.1
Total	144	100	144	100*

*NOTE: Percentages do not add to 100 due to rounding.



Restorations using traditional impression material

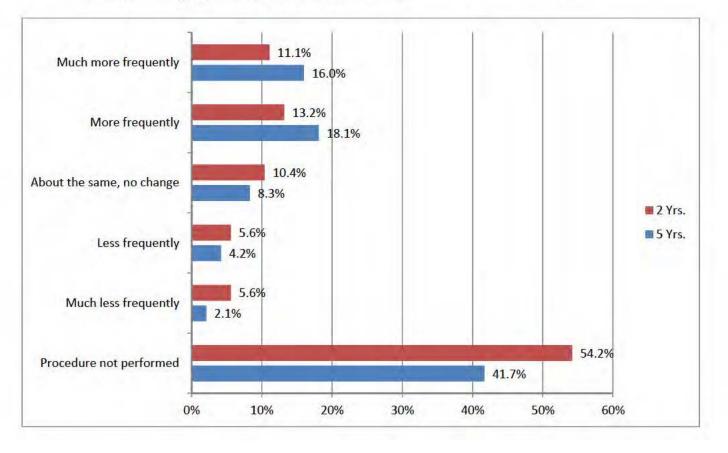
	Last 2 years		Next 5 years	
	Ν	Percent	N	Percent
Procedure not performed	6	4.2	7	4.9
Much less frequently	10	6.9	14	9.7
Less frequently	18	12.5	17	11.8
About the same, no change	51	35.4	40	27.8
More frequently	27	18.8	20	13.9
Much more frequently	31	21.5	35	24.3
Missing	1	0.7	11	7.6
Total	144	100	144	100



Restorations using digital impressions (CAD/CAM)

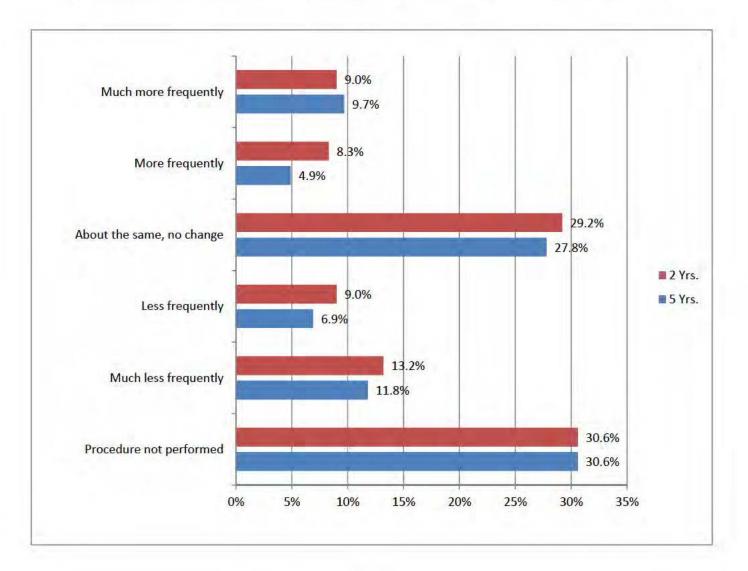
	Last 2 years		Next 5 years	
	N	Percent	Ν	Percent
Procedure not performed	78	54.2	60	41.7
Much less frequently	8	5.6	3	2.1
Less frequently	8	5.6	6	4.2
About the same, no change	15	10.4	12	8.3
More frequently	19	13.2	26	18.1
Much more frequently	16	11.1	23	16.0
Missing	0	0.0	14	9.7
Total	144	100*	144	100*

*NOTE: Percentages do not add to 100 due to rounding.



Bonding agents (mix catalyst and base)

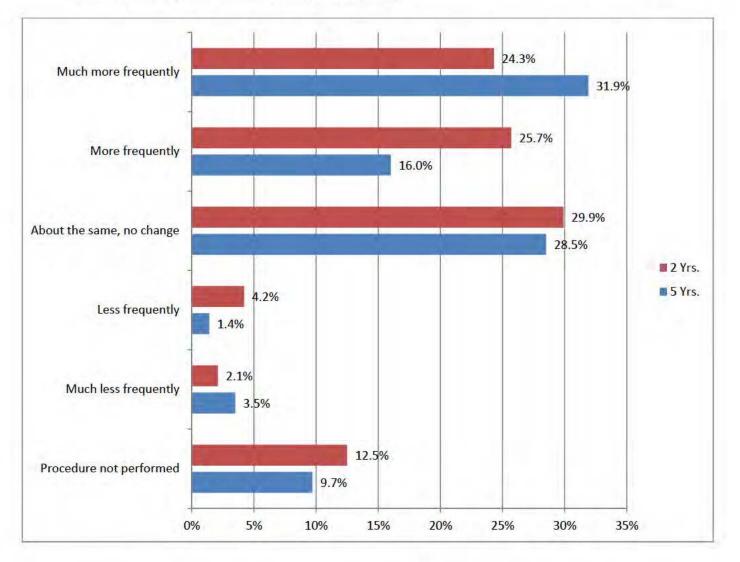
	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	44	30.6	44	30.6
Much less frequently	19	13.2	17	11.8
Less frequently	13	9.0	10	6.9
About the same, no change	42	29.2	40	27.8
More frequently	12	8.3	7	4.9
Much more frequently	13	9.0	14	9.7
Missing	1	0.7	12	8.3
Total	144	100	144	100



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

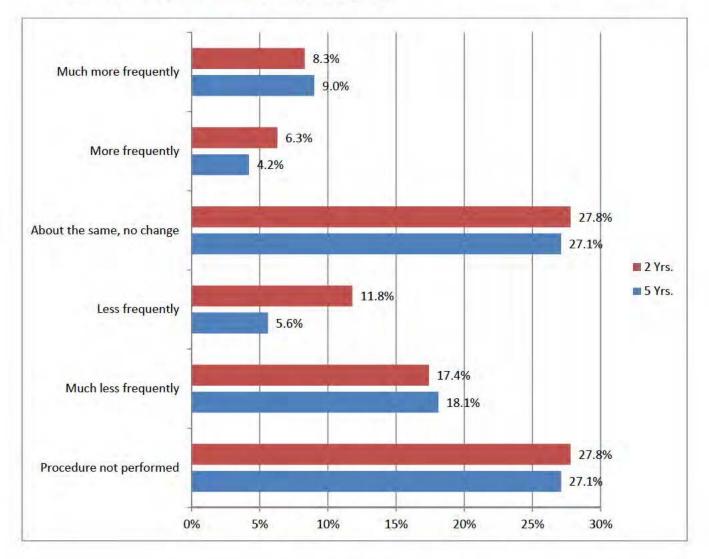
^{*}NOTE: Percentages do not add to 100 due to rounding.



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*

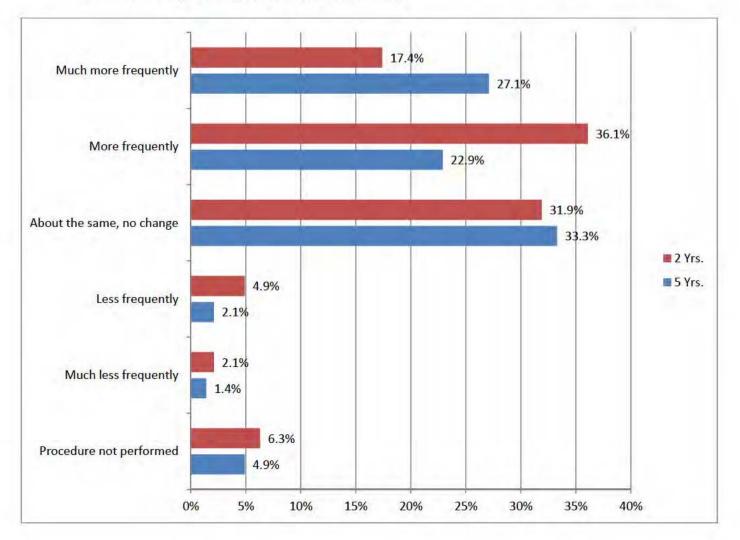
*NOTE: Percentages do not add to 100 due to rounding.



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

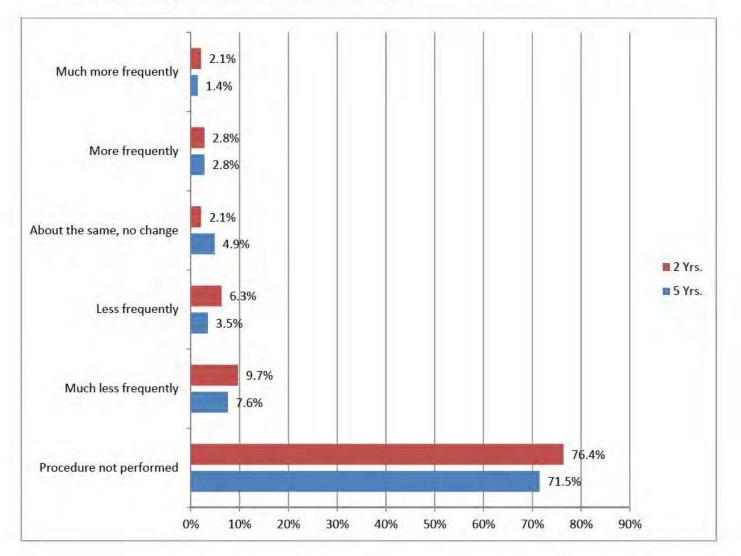
^{*}NOTE: Percentages do not add to 100 due to rounding.



Core build-up using amalgam

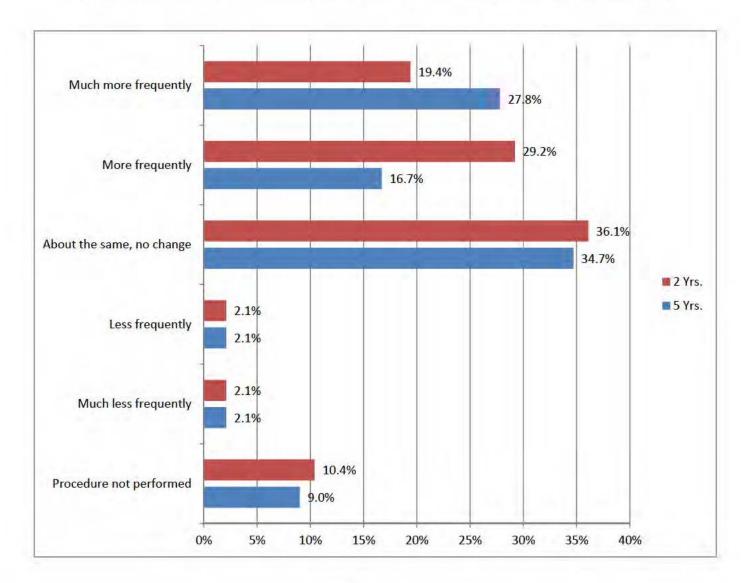
	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	110	76.4	103	71.5
Much less frequently	14	9.7	11	7.6
Less frequently	9	6.3	5	3.5
About the same, no change	3	2.1	7	4.9
More frequently	4	2.8	4	2.8
Much more frequently	3	2.1	2	1.4
Missing	1	0.7	12	8.3
Total	144	100*	144	100

*NOTE: Percentages do not add to 100 due to rounding.



Core build-up	o using glass	ionomers and	composites
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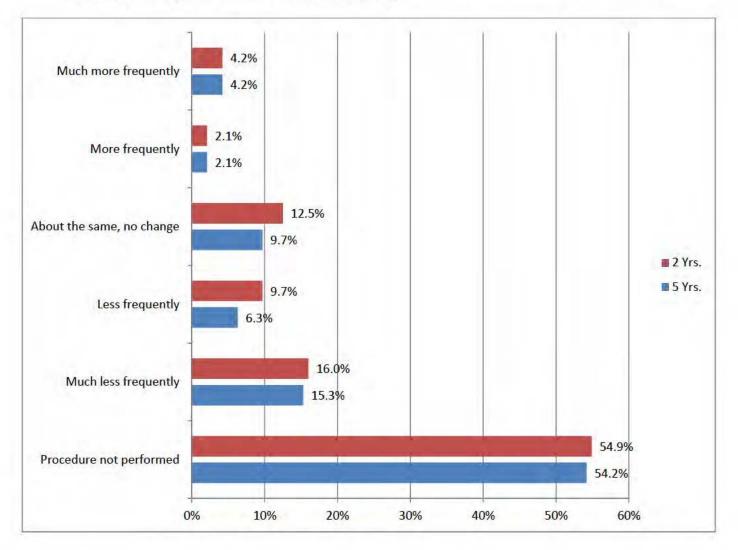
	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	15	10.4	13	9.0
Much less frequently	3	2.1	3	2.1
Less frequently	3	2.1	3	2.1
About the same, no change	52	36.1	50	34.7
More frequently	42	29.2	24	16.7
Much more frequently	28	19.4	40	27.8
Missing	1	0.7	11	7.6
Total	144	100	144	100



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*

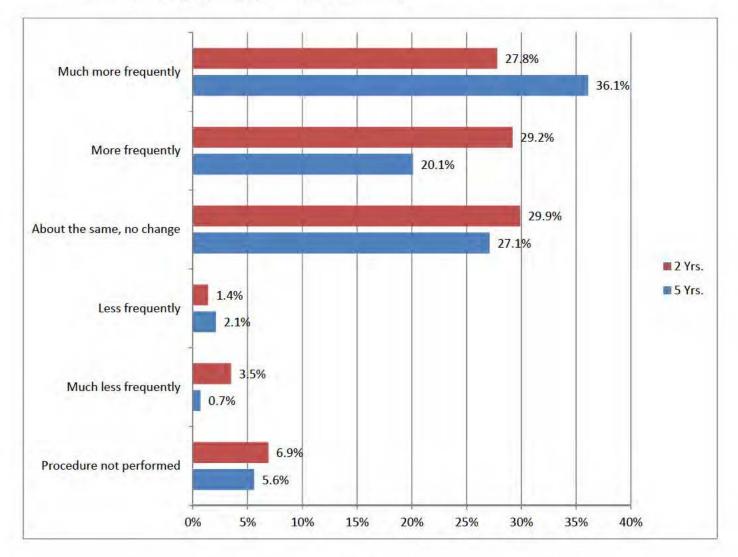
*NOTE: Percentages do not add to 100 due to rounding.



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

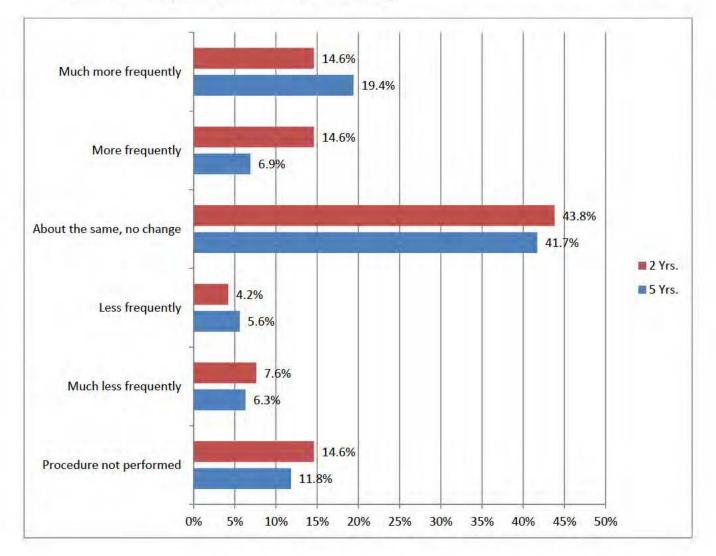
^{*}NOTE: Percentages do not add to 100 due to rounding.



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

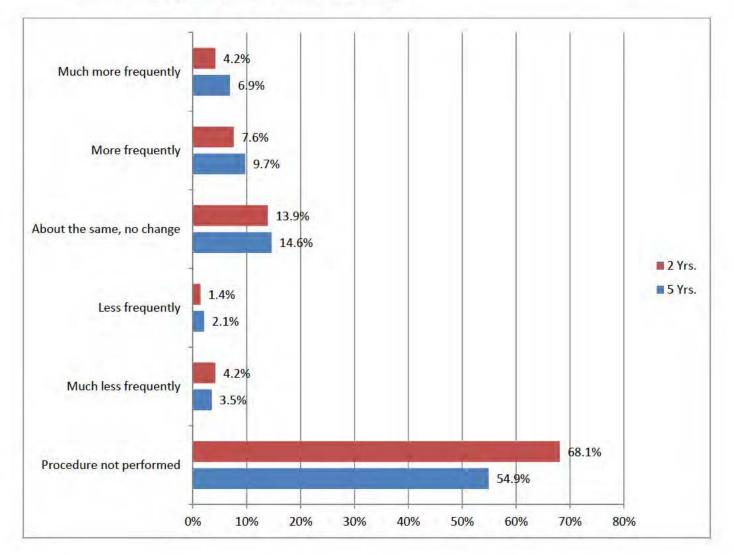
*NOTE: Percentages do not add to 100 due to rounding.



Caries detection - laser fluorescence

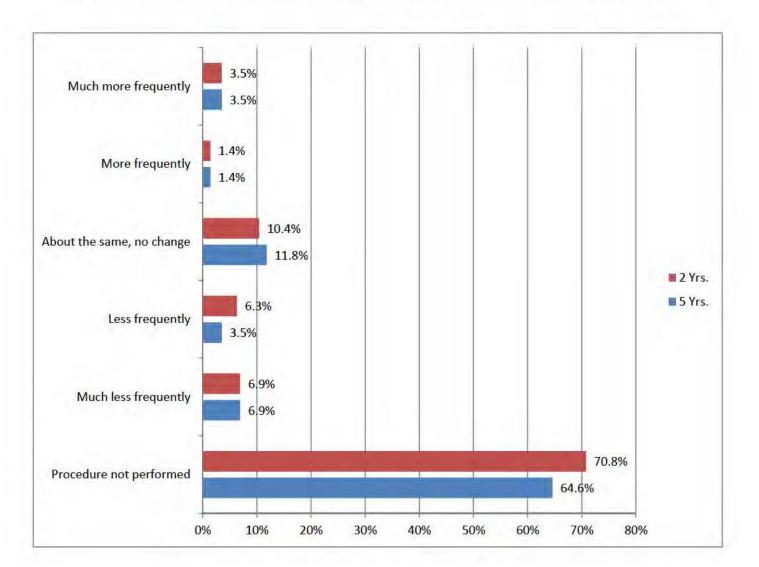
	Last 2 years		Next 5 years	
	N	Percent	N	Percent
Procedure not performed	98	68.1	79	54.9
Much less frequently	6	4.2	5	3.5
Less frequently	2	1.4	3	2.1
About the same, no change	20	13.9	21	14.6
More frequently	11	7.6	14	9.7
Much more frequently	6	4.2	10	6.9
Missing	1	0.7	12	8.3
Total	144	100*	144	100

*NOTE: Percentages do not add to 100 due to rounding.



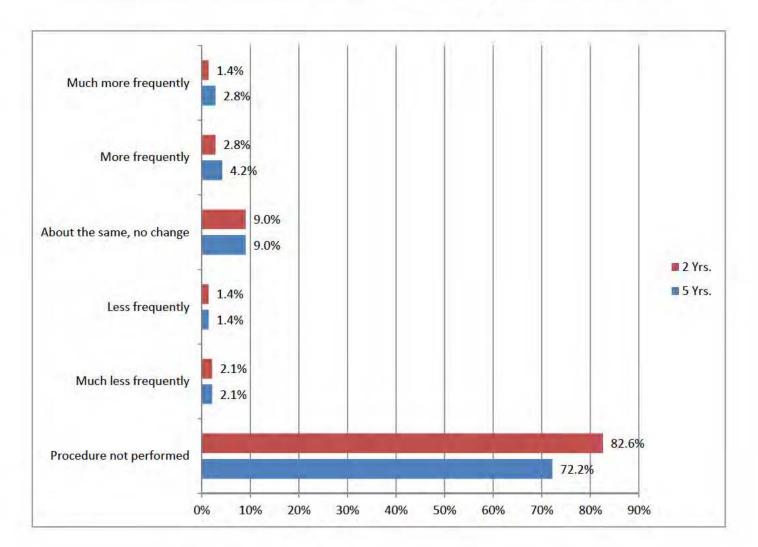
Periodontal dressing (catalyst-based)

	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



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

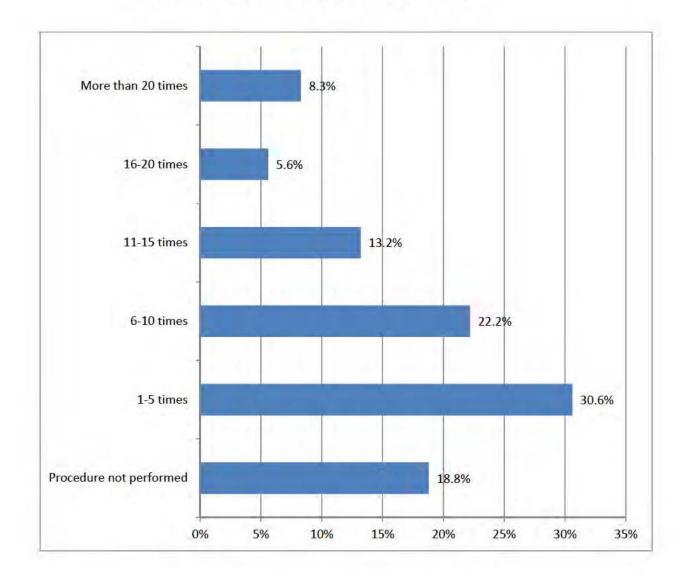


APPENDIX F. FREQUENCY OF PERFORMING DENTAL PROCEDURES BY REGISTERED DENTAL ASSISTANTS IN EXTENDED FUNCTIONS

In an average week, how frequently do you cement and place provisional resto	rations
for teeth in each of the following groups?	

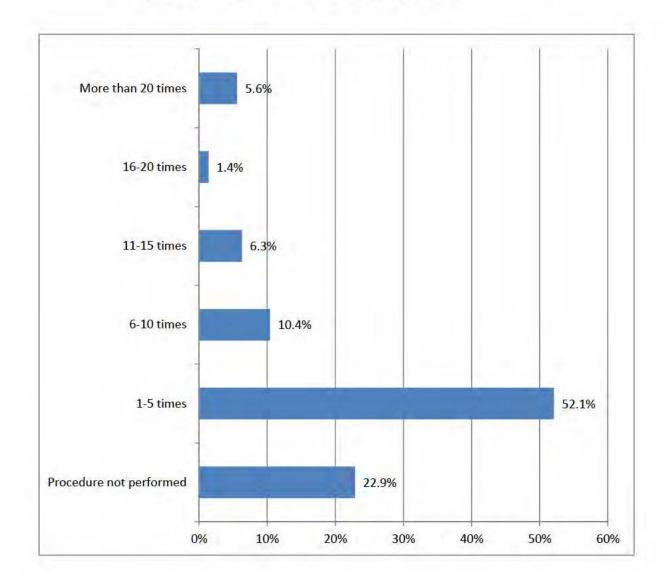
Mandibular posterior	N	Percent
Procedure not performed	27	18.8
1-5 times	44	30.6
6-10 times	32	22.2
11-15 times	19	13.2
16-20 times	8	5.6
More than 20 times	12	8.3
Missing	2	1.4
Total	144	100*

*NOTE: Percentages do not add to 100 due to rounding.

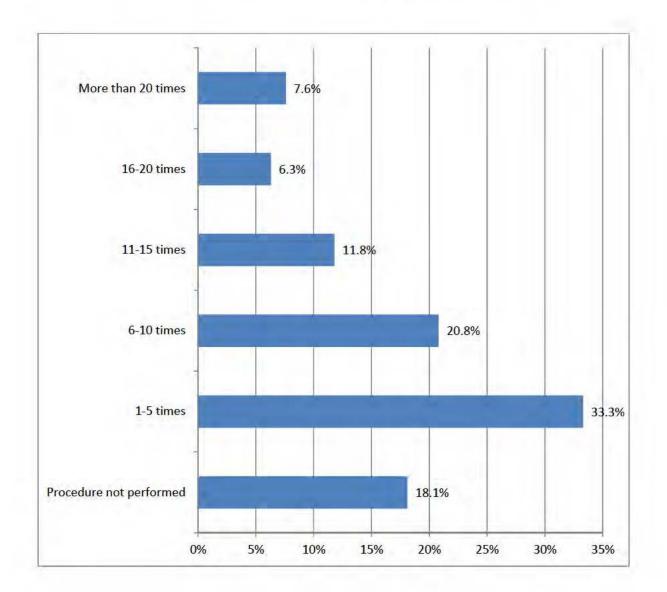


Mandibular anterior	N	Percent
Procedure not performed	33	22.9
1-5 times	75	52.1
6-10 times	15	10.4
11-15 times	9	6.3
16-20 times	2	1.4
More than 20 times	8	5.6
Missing	2	1.4
Total	144	100*

*NOTE: Percentages do not add to 100 due to rounding.

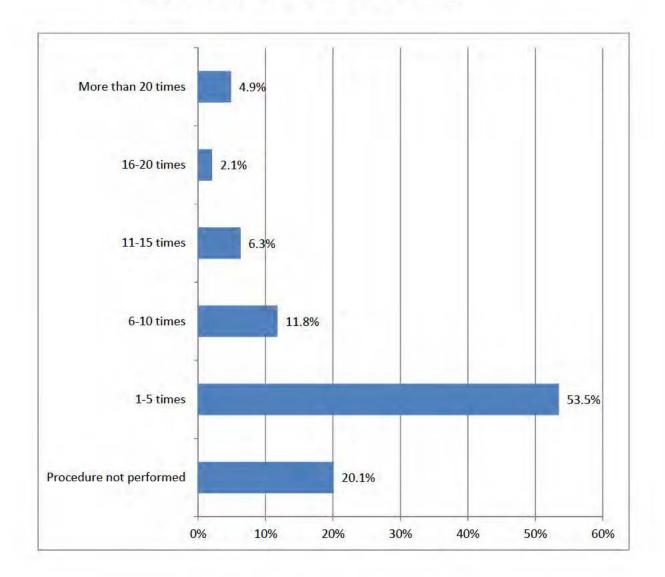


Maxillary posterior	N	Percent
Procedure not performed	26	18.1
1-5 times	48	33.3
6-10 times	30	20.8
11-15 times	17	11.8
16-20 times	9	6.3
More than 20 times	11	7.6
Missing	3	2.1
Total	144	100



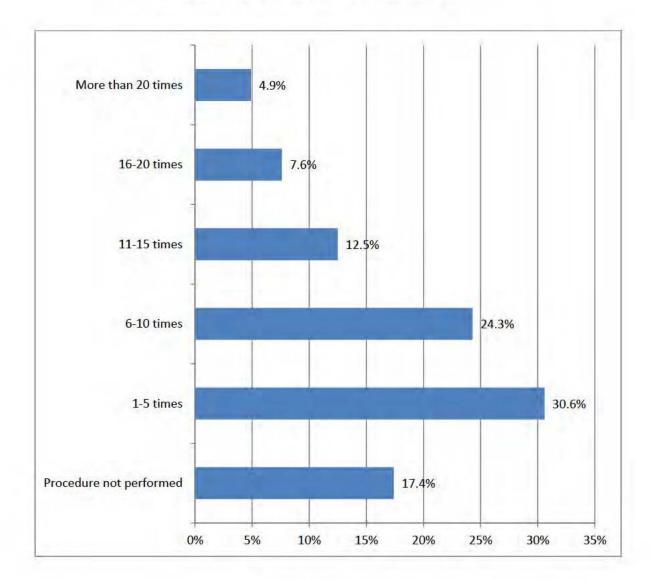
Maxillary anterior	N	Percent
Procedure not performed	29	20.1
1-5 times	77	53.5
6-10 times	17	11.8
11-15 times	9	6.3
16-20 times	3	2.1
More than 20 times	7	4.9
Missing	2	1.4
Total	144	100*

*NOTE: Percentages do not add to 100 due to rounding.



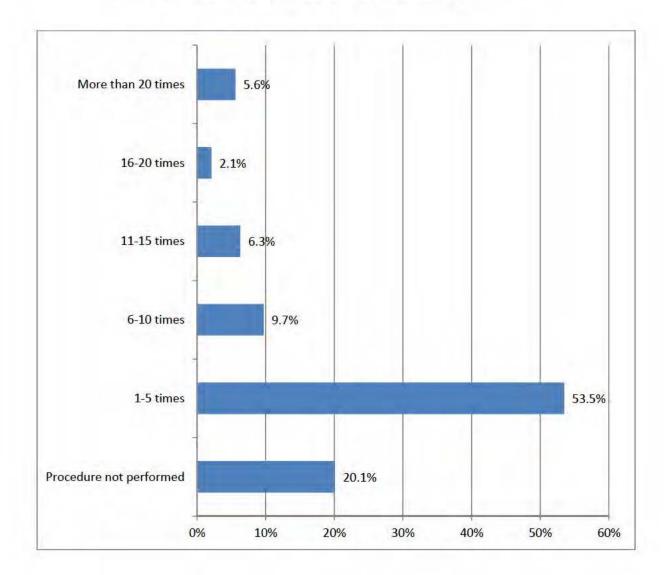
Mandibular posterior	N	Percent
Procedure not performed	25	17.4
1-5 times	44	30.6
6-10 times	35	24.3
11-15 times	18	12.5
16-20 times	11	7.6
More than 20 times	7	4.9
Missing	4	2.8
Total	144	100*

*NOTE: Percentages do not add to 100 due to rounding.

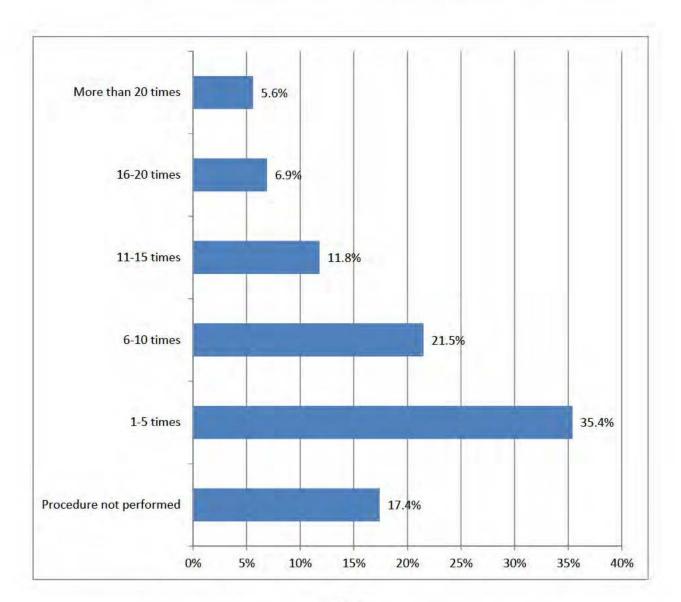


Mandibular anterior	N	Percent
Procedure not performed	29	20.1
1-5 times	77	53.5
6-10 times	14	9.7
11-15 times	9	6.3
16-20 times	3	2.1
More than 20 times	8	5.6
Missing	4	2.8
Total	144	100*

*NOTE: Percentages do not add to 100 due to rounding.

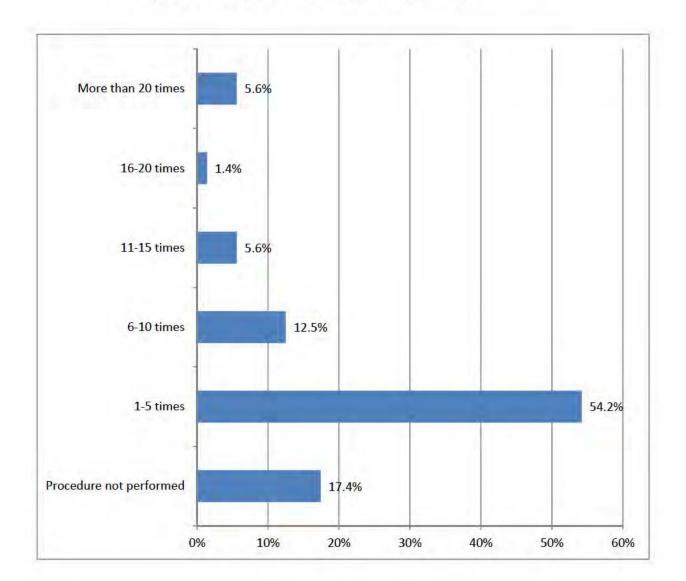


Maxillary posterior	N	Percent
Procedure not performed	25	17.4
1-5 times	51	35.4
6-10 times	31	21.5
11-15 times	17	11.8
16-20 times	10	6.9
More than 20 times	8	5.6
Missing	2	1.4
Total	144	100



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



EDENIESS, CONSUMER SERVICES, AND HOUSING ADENCY - COVERNOR ECMUND IS ENDWINUE 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: <u>https://www.surveymonkey.com/s/H6JLD9H?c=#####</u> 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

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.

<u>Please Note:</u> 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 clickingNEXT.

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.

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 <u>currently</u> 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: <u>Email is REQUIRED</u> 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. <u>Please note the instructions for each item before marking your response as several permit multiple responses.</u>

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 RE in California?)A licensure
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

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.

7

	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 onomers 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 Frequentl	y 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)

	Procedure not performed	1-5 times	6-10 times	11-15 times	16-20 times	More than 20 times
Mandibular posterior	0	0	0	0	0	0
Mandibular anterior	0	0	\bigcirc	\bigcirc	0	\bigcirc
Maxillary posterior	0	0	0	\bigcirc	0	0
Maxillary anterior	0	0	0	0	0	\bigcirc

	Procedure not performed	1-5 times	6-10 times	11-15 times	16-20 times	More than 20 times
Mandibular posterior	0	0	0	0	0	0
Mandibular anterior	0	0	0	0	\bigcirc	0
Maxillary posterior	0	0	0	0	0	0
Maxillary anterior	0	0	0	0	0	0

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	21 - Marin	41 - San Mateo
02 - Alpine	22 - Mariposa	42 - Santa Barbara
03 - Amador	23 - Mendocino	43 - Santa Clara
04 - Butte	24 - Merced	44 - Santa Cruz
05 - Calaveras	25 - Modoc	45 - Shasta
06 - Colusa	26 - Mono	46 - Sierra
07 - Contra Costa	27 - Monterey	47 - Siskiyou
08 - Del Norte	28 - Napa	48 - Solano
09 - El Dorado	29 - Nevada	49 - Sonoma
10 - Fresno	30 - Orange	50 - Stanislaus
11 - Glenn	31 - Placer	51 - Sutter
12 - Humboldt	32 - Plumas	52 - Tehama
13 - Imperial	33 - Riverside	53 - Trinity
14 - Inyo	34 - Sacramento	54 - Tulare
15 - Kern	35 - San Benito	55 - Tuolumne
16 - Kings	36 - San Bernardino	56 - Ventura
17 - Lake	37 - San Diego	57 - Yolo
18 - Lassen	38 - San Francisco	58 - Yuba
19 - Los Angeles	39 - San Joaquin	
20 - Madera	40 - San Luis Obispo	

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).		
 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)

Disast		In alter at	Destautions	
Direct	and	indirect	Restorations	

	FREQUENCY	IMPORTANCE
13. Place bases and liners.		
4. 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.		
7. Place bonding agent.		
8. 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 booth-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.		
mergencies		
	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.		
dentist. 50. Implement basic life support and/or use of AED as indicated		
dentist. 50. Implement basic life support and/or use of AED as indicated during medical emergency.		
dentist. 50. Implement basic life support and/or use of AED as indicated during medical emergency. 51. Assist in emergency care of patient.		

Occupational Safety		
	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 howMPORTANT 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	and the second	CRITICALLY
1. Knowledge of effects of coexisting medical/dental conditions on dental treatment.	3	O	0	0	0	0
2. Knowledge of common medical conditions that may affect dental treatment (e.g., asthma, cardiac conditions, diabetes).	0	Ć	0	Ø	Q	Q.
3. Knowledge of allergic reactions and sensitivities associated with dental treatment and materials (e.g., latex, epinephrine).	0	J.	Q	0	0	0
4. Knowledge of purposes and effects of commonly prescribed medications that may affect dental treatment (e.g., Coumadin, psychotropics).	0	0	0	0	0	0
5. Knowledge of the legal and ethical requirements regarding patient records and patient confidentiality.	0	ø	0	0	0	Ø
6. Knowledge of medical conditions that may require premedication for dental treatment (e.g., joint replacement, infective endocarditis, artificial heart valves).	Ø	Ó	Q	Ø	Q	a
7. Knowledge of acceptable levels of blood pressure for performing dental procedures.	0	0	0	Õ	Ö	Q
8. Knowledge of methods and techniques for using medical equipment to take vital signs.	0	Ø	Q	Ó	Ó	a
9. Knowledge of techniques and procedures for using imaging equipment to perform intra-oral and extra-oral diagnostic imaging.	0	0	0	0	Q	0
10. Knowledge of types of plaque, calculus, and stain formations of the oral cavity and their etiology.	9	0	0	Ø	0	0
11. Knowledge of conditions of the tooth surfaces (e.g., decalcification, caries, stains, fracture lines) and how to document them.	0	Ö	Q	Ø	0	Q

	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.	O	0	0	0	Ø	O.
13. Knowledge of effects of nutrition and malnutrition on the oral cavity.	0	0	0	O	Ô	(<u>©</u>)
14. Knowledge of effects of smoking and smokeless tobacco on oral tissue.	O	O	0	Q	Q	0
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)	0	Ö	0	0	Ó	0
16. Knowledge of professional and ethical principles regarding patient care. (CDA-Compassion, 1C, 5, Integrity)	Q	Ó.	Ø	Ø	Ø	0
17. Knowledge of legal requirements and ethical principles regarding patient confidentiality. (B&P code, CA client Confidentiality, HIPPA)	0	O	0	0	Ø	0
18. Knowledge of types of dental conditions of hard and soft tissue and how to identify and document them.	Ø	O	0	0	0	0
19. Knowledge of basic oral and dental anatomy (e.g., nomenclature, morphology, and tooth notation).	0	Q	Q	Ō	Ó	0
20. Knowledge of legal requirements and ethical principles regarding mandated reporting (abuse and neglect). (Penal 11166, ADA 3.E, & DANB Definition)	D	Ó	Ő	O	Ö	O.
21. Knowledge of techniques to provide patient comfort during intra-oral procedures.	Ó	Q	0	Q	0	0
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.	0	Q	Q	Ö	0	0
23. Knowledge of methods and techniques patients can perform to improve oral health.	0	Ŏ	Ó	Ø	0	Ū.
24. Knowledge of preoperative and postoperative care and maintenance for dental procedures and appliances.	Ó	Ø	0	0	0	Ø
25. Knowledge of requirements for the supervision of RDAs and RDAEFs related to different dental procedures.	Q	Ċ	0	0	0	0

	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.	0	0	0	0	0	0
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.	0	0	0	0	0	0

Part III - KNOWLEDGE RATINGS (28 through 59)

Direct and Indirect Restorations

	NOT REQUIRED	OF MINOR	FAIRLY IMPORTANT	MODERATELY IMPORTANT	Service and the service of the service of	CRITICALLY
28. Knowledge of types of base and liner materials and the techniques and procedures for their application and placement.	O	Q	0	Q	Q	0
29. Knowledge of types of wedges and the techniques and procedures for their use.	Q	O	0	0	Ø	0
30. Knowledge of techniques and procedures for using matrix bands with or without band retainers.	0	Ø	0	Ó	Ó.	0
31. Knowledge of types of temporary filling materials and the techniques and procedures to mix, place, and contour them.	0	0	Q	0	0	Q
32. Knowledge of types of bonding agents and the techniques and procedures for their application and placement.	0	0	0	0	0	0
33. Knowledge of types of etchants and the techniques and procedures for their application and placement.	Q	0	Q	Q	0	0
34. Knowledge of irregularities in margins that affect direct and indirect provisional restorations.	0	2	Ò.	Q	Q	Q
35. Knowledge of techniques used to eliminate open margins when placing restorative materials.	0	Ċ	Ø	Q	Ø	0
36. Knowledge of methods for identifying improper occlusal contacts, proximal contacts, or embrasure contours of provisional restorations.	ŏ	0	0	0	Q	0
37. Knowledge of techniques and procedures for mitigating the effects of improper occlusal contacts, proximal contacts, or embrasure contours of provisional restorations.	D.	Q	0	0	Q	Q,
38. Knowledge of instrumentation and techniques related to the removal of indirect provisional restorations.	0	Ö	0	0	0	Ö

	NOT REQUIRED	OF MINOR	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.	0	0	0	0	0	0
40. Knowledge of equipment and procedures used to obtain intra-oral images for computer-aided milled restorations.	0	0	0	0	0	0
41. Knowledge of types of impression materials and techniques and procedures for their application and placement.	0	0	0	0	\bigcirc	0
42. Knowledge of techniques and procedures used to mix and place provisional materials.	0	0	0	0	0	0
43. Knowledge of techniques and procedures for bonding provisional veneers	0	0	\bigcirc	0	0	0
44. Knowledge of indications and contraindications for the use of whitening (bleaching) agents.	0	0	0	0	0	0
45. Knowledge of indications and contraindications for the use of bonding agents.	0	0	0	0	0	0
46. Knowledge of indications and contraindications for the use of etching agents.	0	0	0	0	0	0
47. Knowledge of types of whitening (bleaching) agents and the techniques and procedures for their application.	0	0	0	0	0	0
48. Knowledge of types of cements and the techniques and procedures for their application, placement, and removal.	0	0	\bigcirc	0	0	0
49. Knowledge of scope of practice for RDAs and RDAEFs related to applying and activating whitening (bleaching) agents.	0	0	0	0	0	0
50. Knowledge of scope of practice for RDAs and RDAEFs related to direct restorations.	0	0	0	0	0	0
51. Knowledge of scope of practice for RDAs and RDAEFs related to indirect restorations.	0	0	\bigcirc	0	0	0
52. Knowledge of scope of practice for RDAs and RDAEFs related to final impressions.	\bigcirc	0	0	0	0	0
53. Knowledge of types of direct restorative materials and the techniques and procedures for their application, placement, and contouring.	\bigcirc	0	0	0	0	0

	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.	0	0	0	0	0	0
55. Knowledge of techniques and procedures for identifying and adjusting occlusal, marginal, and contact discrepancies.	0	0	0	\bigcirc	0	0
56. Knowledge of the types of luting agents and the techniques and procedures for applying them in the placement of permanent indirect restorations.	0	0	0	0	0	0
57. Knowledge of techniques and procedures for making final adjustment of permanent indirect restorations after cementation.	0	0	0	0	0	0
58. Knowledge of materials and techniques for taking final impressions.	0	0	0	0	0	0
59. Knowledge of techniques for gingival cord retraction, tissue management, and cord removal.	0	0	0	0	0	0

Part III - KNOWLEDGE RATINGS (60 through 68)

Preventative Procedures

	NOT REQUIRED	OF MINOR	FAIRLY IMPORTANT	MODERATELY IMPORTANT	and the second second	CRITICALLY
60. Knowledge of scope of practice for RDAs related to coronal polishing and the application of pit and fissure sealants.	0	Q	0	0	Ø	Ø
61. Knowledge of indications and contraindications for performing coronal polishing.	0	С	0	0	0	0
62. Knowledge of techniques and procedures for coronal polishing.	0	Q	0	0	Ö	0
63. K of types of disclosing agents used in conjunction with coronal polishing.	Q	Q	0	0	0	0
64. Knowledge of types of automated caries detection devices and materials and the procedures for their use.	.0.	0	0	0	0	O
65. Knowledge of procedures for preparing the tooth for application of pit and fissure sealants.	D	0	Ó	Q	0	0
66. Knowledge of indications and contraindications for use of pit and fissure sealants.	0	0	0	0	0	0
67. Knowledge of types of pit and fissure sealants and the techniques and procedures for their application.	0	0	0	0	0	0
68. Knowledge of scope of practice for RDAs related to use of caries detection devices and materials.	Q	Q	0	Q	ø	0

Part III - KNOWLEDGE RATINGS (69 through 84)

Infection Control and Safety

	NOT REQUIRED	OF MINOR	FAIRLY IMPORTANT	MODERATELY IMPORTANT	STATES STATES AND INCOMENTS	CRITICALLY
69. Knowledge of laws and regulations pertaining to infection control procedures related to dental healthcare personnel (DHCP) environments. (CCR 1005 Infection control)	0	0	0	Ø	0	0
70. Knowledge of procedures and protocols for management and disposal of pharmaceuticals and sharps.	Ő	0	0	Ø	Q	0
71. Knowledge of methods and procedures for the handling, use, cleaning, and disposal of personal protective equipment (e.g., gloves, masks, goggles, gown).	0	0	0	0	Q	Q
72. Knowledge of sequence for donning and removing personal protective equipment.	D	0	0	0	0	0
73. Knowledge of procedures and protocols for the use of surface barriers to prevent contamination.	Q	Ó	Q	Ō	Q	Q
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))	Ø	О	0	Ø	0	Ō
75. Knowledge of procedures for managing self-contained water systems.	0	,ci	0	0	Q	Q
76. Knowledge of procedures and protocols for the disinfection/decontamination of surfaces and work areas.	Q	Ø	Q	Q	Q	Ő.
77. Knowledge of the methods and procedures for the application and disposal of low-level, intermediate-level, and high-level disinfectants and germicides.	O	Ö	0	Ø	œ.	ø
78. Knowledge of what defines critical, semi-critical, and non-critical instruments and their respective disinfection/sterilization protocols.	0	Q	0	0	0	0

	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.	0	0	0	\bigcirc	0	0
80. Knowledge of procedures for the disinfection and sterilization of laboratory equipment, operatory equipment, and mechanical devices.	0	0	0	0	0	0
81. Knowledge of procedures for handling, disinfecting, and sterilizing detachable intra oral hand pieces, instruments, and devices		0	0	0	0	0
82. Knowledge of procedures and protocols for hand hygiene.	0	0	0	0	0	0
83. Knowledge of protocols for using biological spore test and heat-indicating devices.	0	0	\bigcirc	0	0	0
84. Knowledge of procedures and protocols for the disposal of biological hazardous waste and other potentially infectious materials (OPIM).	0	0	0	0	0	0

Part III - KNOWLEDGE RATINGS (85 through 101)

Radiation Safety

	NOT REQUIRED	OF MINOR	FAIRLY IMPORTANT	MODERATELY IMPORTANT	and the second second	CRITICALLY
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.		Q	0	Q	0	Ö
86. Knowledge of types of film-holding devices and placement to minimize multiple exposures during radiography.	0	0	Ø	0	0	0
87. Knowledge of factors of radiographic film speed, digital sensors, phosphor plates and exposure time as related to radiographic safety.	0	0	0	0	0	Q
88. Knowledge of techniques and procedures for minimizing radiation exposure to self and others during radiographic procedures.	O	Q	0	0	0	Q
89. Knowledge of legal and ethical requirements for RDAs and RDAEFs related to radiation safety. (BPC 1645.1(a) (b) Compliance)	0	Ģ	Q	0	0	Ċ.
90. Knowledge of methods for the storage and disposal of radiographic film.	Ö.	D	Q	0	Q	Ø

Emergencies

	NOT REQUIRED	OF MINOR	FAIRLY IMPORTANT	MODERATELY IMPORTANT	- market and a second	CRITICALLY IMPORTANT
91. Knowledge of the applications and contraindications for use of oxygen and nitrous oxide/oxygen in a dental practice setting.	Э	Ó	0	0	0	Ó
92. Knowledge of procedures for the use and care of equipment used to administer oxygen and nitrous oxide/oxygen.	0	0	Ø	Ō	0	Ø
93. Knowledge of signs and symptoms indicating the need to implement first aid and basic life support measures.	0	O	Ø	Ø	Ø	0
94. Knowledge of procedures for implementing protocols for responding to office and environmental emergencies.	0	0	0	0	0	Q.
95. Knowledge of signs and symptoms indicating possible allergic reactions and/or sensitivities to medications or materials used in dentistry.	0	0	0	Q	Ø	0
96. Knowledge of the equipment used for first aid and BLS and their uses and applications (e.g., eyewash station, AED).	Ø	D	0	0	0	0
97. Knowledge of measures for preventing spread of infection during first aid and BLS.	Ó	Q	0	Q	0	0

Occupational Safety

	NOT REQUIRED	OF MINOR	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.	0	0	Q	Ø	Q	ð,
99. Knowledge of what constitutes hazardous waste and the procedures and protocols for its disposal.	D	0	0	D	O	Q
100. Knowledge of methods for maintaining a chemical inventory.	O	0	0	Ø	Ø	0
101. Knowledge of requirements for placing hazardous substances in secondary containers (e.g., labeling, handling, applicable containers).	0	0	0	Ø	0	0

Part III - KNOWLEDGE RATINGS (102 through 119)

Endodontic Procedures

	NOT REQUIRED	OF MINOR	FAIRLY IMPORTANT	MODERATELY IMPORTANT	and the state of the state of	CRITICALLY IMPORTANT
102. Knowledge of techniques and procedures for testing pulp vitality.	0	0	0	0	Ō	0
103. Knowledge of techniques and procedures for measuring canal length and size.	S	0	0	Û	0	ð
104. Knowledge of scope of practice for RDAs and RDAEFs related to initial pulp vitality testing and other endodontic procedures.	ø	0	0	0	Ó	0
105. Knowledge of techniques and procedures for fitting master and accessory points.	Ø	0	0	0	0	Ú.
106. Knowledge of techniques and procedures for sealing endodontic master and accessory points.	Õ	Q.	0	0	0	Õ.
107. Knowledge of scope of practice for RDAs and RDAEFs related to endodontic points.	D	Ø	Q	0	0	0
Periodontal Procedures						
	NOT REQUIRED	OF MINOR	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.	0	0	Ø	Ø	0	0

109. Knowledge of types of periodontal dressings and techniques for their application.

mplants, Oral Surgery, Extractions						
	NOT REQUIRED	OF MINOR	FAIRLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	CRITICALLY IMPORTANT
114. Knowledge of techniques for removing post-extraction and post-surgery sutures.	0	0	0	0	0	0
115. Knowledge of methods for treating dry socket.	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc	0
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.	0	0	0	0	0	0
117. Knowledge of materials, equipment, and techniques used for adjustment of prosthetic appliances.	0	0	0	0	0	0
118. Knowledge of scope of practice for RDAs and RDAEFs related to the adjustment of extra-oral prosthetic appliances.	0	0	0	0	0	0
119. Knowledge of materials and techniques for taking final impressions for tooth-borne prosthetic appliances.	0	0	0	0	0	0

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

O NO

Comments

Were any important areas of practice left out?

YES

O NO

Comments

35

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