DENTAL BOARD OF CALIFORNIA

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

December 1, 2016

DENTAL BOARD OF CALIFORNIA

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Introduction

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

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

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

Examination Validation & Development

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

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

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

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

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

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

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

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

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

Implementation

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

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

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

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

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

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

In 2016, thirty (35) applicants applied for a license through the portfolio pathway. One (1) application was received from the University of California, Los Angeles. Twelve (12) applications were received from the University of California, San Francisco. Nineteen (19) applications were received from the University of the Pacific. Three (3) applications were received from the University of Southern California.

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

Application Status	2015	2016
Total Applications Received	7	35
Loma Linda University	0	0
University of California, Los Angeles	0	1
University of California, San Francisco	1	12

University of the Pacific	6	19
University of Southern California	0	3
Western University of Health Sciences	0	0

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

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

Currently in 2016, Thirty-four (34) licenses were issued to applicants applying through the Board's Portfolio Examination pathway to licensure. One (1) license was issued to a graduate of the University of California, Los Angeles. Twelve (12) licenses were issued to graduates of the University of California, San Francisco. Eighteen (18) licenses were issued to graduates of the University of the Pacific. Three (3) licenses were issued to graduates of the University of Southern California.

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

	2015	2016
Total Number of Licenses Issued	7	34
Loma Linda University	0	0
University of California, Los Angeles	0	1
University of California, San Francisco	1	12
University of the Pacific	6	18
University of Southern California	0	3
Western University of Health Sciences	0	0

Materials Relied Upon (Attachments)

- 1. "Alternative Pathways for Initial Licensure for General Dentists, Final Report", Prepared by Comira, February 9, 2009
- 2. "Portfolio Examination to Qualify for California Dental Licensure", Prepared by Comira, December 1, 2009
- 3. Assembly Bill 1524 (Chapter 446, Statutes of 2010)
- 4. "Development and Validation of a Portfolio Examination for Initial Dental Licensure", Prepared by PSI Services LLC, May 10, 2013
- 5. California Code of Regulations, Title 16, Sections 1028 through 1036.01

Findings

The Board's Portfolio Examination is in compliance with Business and Professions Code Section 139 in that the current examination requirements are based on the report entitled "Development and Validation of a Portfolio Examination for Initial Dental Licensure, May 10, 2013", prepared by PSI Services LLC, a psychometric contractor hired by the Board to conduct the analysis and evaluation. This report included the basis for the Portfolio Examination, item analysis to permit a psychometric evaluation of the items, and an assessment of the appropriateness of the prerequisites for admittance to the examination. The Board implemented these requirements provided in the report via regulations. The regulations prescribe the following requirements for the Board's Portfolio Examination:

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

Certification/Evaluation

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