



OCCUPATIONAL ANALYSIS OF THE
CONTACT LENS DISPENSER PROFESSION



OFFICE OF PROFESSIONAL EXAMINATION SERVICES

BOARD OF OPTOMETRY

OCCUPATIONAL ANALYSIS OF THE CONTACT LENS DISPENSER PROFESSION



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EXECUTIVE SUMMARY

The Board of Optometry (Board) requested that the Department of Consumer Affairs' Office of Professional Examination Services (OPES) conduct an occupational analysis (OA) of contact lens dispenser (CLD) practice in California. The purpose of the OA is to define current practice for CLDs in terms of the actual tasks that new CLDs must be able to perform safely and competently at the time of licensure. The results of this OA provide a description of practice for the CLD profession that can then be used to review the Contact Lens Registry Examination (CLRE) developed by the National Contact Lens Examiners (NCLE).

OPES test specialists began by researching the profession and conducting telephone interviews with licensed CLDs working in locations throughout California. The purpose of these interviews was to identify the tasks performed by CLDs and to specify the knowledge required to perform those tasks in a safe and competent manner. Using the information gathered from the research and the interviews, OPES test specialists developed a preliminary list of tasks performed in CLD practice, along with statements representing the knowledge needed to perform those tasks.

In January 2019, OPES convened a workshop to review and refine the preliminary lists of task and knowledge statements derived from the telephone interviews. The workshop was comprised of licensed CLDs, or subject matter experts (SMEs), with diverse backgrounds in the profession (e.g., location of practice, years licensed, specialty). These SMEs also identified changes and trends in CLD practice, determined demographic questions for the OA questionnaire, and performed a preliminary linkage of the task and knowledge statements to ensure that all tasks had a related knowledge statement and all knowledge statements had a related task. Additional task and knowledge statements were created as needed to complete the scope of the content areas of the description of practice.

After the workshop, OPES test specialists developed a three-part OA questionnaire to be completed by CLDs statewide. Development of the OA questionnaire included a pilot study that was conducted using a group of licensed CLDs. The pilot study participants' feedback was incorporated into the final questionnaire, which was administered in early April 2019.

In the first part of the OA questionnaire, CLDs were asked to provide demographic information relating to their work settings and practice. In the second part, CLDs were asked to rate specific tasks in terms of frequency (i.e., how often the CLD performs the task in the CLD's current practice) and importance (i.e., how important the task is to effective performance of the CLD's current practice). In the third part, CLDs were asked to rate specific knowledge statements in terms of how important each knowledge statement is to effective performance of the CLD's current work.

In April 2019, on behalf of the Board, OPES distributed the questionnaire to licensed CLDs who were in good standing with the Board and had an email address in California (a total of 318 CLDs), inviting them to complete the OA questionnaire online. Paper mail invitations were sent to the entire population of CLDs who were in good standing with the Board (1,354). A total of 151 CLDs, or 11.2% of the CLDs receiving the invitation, responded by accessing the online OA

questionnaire. The final sample size included in the data analysis was 148, or 10.9% of the population invited to complete the questionnaire. This response rate reflects an adjustment: OPES excluded data from respondents who indicated they were not currently licensed and practicing as CLDs in California. The demographic composition of the respondent sample is representative of the CLD population in California.

OPES test specialists then performed data analyses of the task and knowledge ratings obtained from the OA questionnaire respondents. The task frequency and importance ratings were combined 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 was analyzed, OPES conducted an additional workshop with SMEs in May 2019. The SMEs evaluated the criticality indices and determined whether any task or knowledge statements should be eliminated. The SMEs in this group also established the final linkage between tasks and knowledge statements, organized the task and knowledge statements into content areas, and defined those areas. The SMEs then evaluated and confirmed the content area weights of the examination outline.

The examination outline is structured into five content areas weighted by criticality relative to the other content areas. This outline provides a description of the scope of practice for CLDs, and it also identifies the tasks and knowledge critical to safe and competent CLD practice in California at the time of licensure. Additionally, this examination outline provides a basis for evaluating the degree to which the content of any examination under consideration measures content critical to CLD practice in California.

At this time, California licensure as a CLD is granted by passing the CLRE.

OVERVIEW OF THE CLD EXAMINATION OUTLINE

Content Area	Content Area Description	Percent Weight
1. Patient Assessment	This area assesses knowledge of patient contact lens needs based on patient prescription or lens type; prescription requirements; indications and contraindications; and conditions which require referral to an optometrist or other healthcare provider.	26%
2. Contact Lens Fitting	This area assesses knowledge of methods for interpreting prescriptions; procedures for handling contact lenses; determining and modifying measurements for contact lens prescriptions; and the anatomy and physiology of the eye.	21%
3. Patient Education and Training	This area assesses knowledge of techniques for training and educating patients on contact lens care; insertion and removal; adverse effects; wear schedules; and additional ocular protection.	22%
4. Patient Follow-Up and Contact Lens Dispensing	This area assesses knowledge of procedures for verifying that the product dispensed matches the patient prescription; maintaining records in accordance with laws and regulations; and recognizing and troubleshooting problems with prescription or fit.	27%
5. Advertising and Supervising	This area assesses knowledge of laws and regulations related to advertising and supervising trainees.	4%
Total		100%

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CHAPTER 1 | INTRODUCTION

PURPOSE OF THE OCCUPATIONAL ANALYSIS

The Board of Optometry (Board) requested that the Department of Consumer Affairs' Office of Professional Examination Services (OPES) conduct an occupational analysis (OA) as part of the Board's comprehensive review of CLD practice in California. The purpose of the OA is to identify the critical activities performed by CLDs in California. The results of this OA provide a description of practice for the CLD profession that can then be used to review the Contact Lens Registry Examination (CLRE) developed by the National Contact Lens Examiners (NCLE).

CONTENT VALIDATION STRATEGY

OPES used a content validation strategy to ensure that the OA reflected the actual tasks performed by practicing CLDs. OPES incorporated the technical expertise of California CLDs throughout the OA process to ensure that the identified task and knowledge statements directly reflect requirements for performance in current practice.

PARTICIPATION OF SUBJECT MATTER EXPERTS

The Board selected California CLDs to participate as subject matter experts (SMEs) during the OA. These SMEs were selected from a broad range of work settings, geographic locations, and experience backgrounds. The SMEs provided information regarding the different aspects of current CLD practice during the development phase of the OA. The SMEs also provided technical expertise during the workshop that was convened to evaluate and refine the content of task and knowledge statements before administration of the OA questionnaire. After the administration of the OA questionnaire, OPES convened an additional group of SMEs to review the results and finalize the examination outline, which ultimately provides the basis of the description of practice.

ADHERENCE TO LEGAL STANDARDS AND GUIDELINES

Licensure, certification, and registration programs in the State of California adhere strictly to federal and state laws and regulations, as well as to professional guidelines and technical standards. For the purpose of OAs, 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 tasks and knowledge required for practice.

DESCRIPTION OF OCCUPATION

The CLD occupation is described as follows in sections 2560-2564.5 of the California Business and Professions Code:

2560. No individual may fit and adjust contact lenses, including plano contact lenses, unless the registration requirement of Section 2550 is complied with, and unless (a) the individual is a duly registered contact lens dispenser as provided in Section 2561 or (b) the individual performs the fitting and adjusting under the direct responsibility and supervision of a duly registered contact lens dispenser who is then present on the registered premises. In no event shall a registered contact lens dispenser supervise more than three contact lens dispenser trainees.

2561. An individual shall apply for registration as a registered contact lens dispenser on forms prescribed by the board. The board shall register an individual as a registered contact lens dispenser upon satisfactory proof that the individual has passed the contact lens registry examination of the National Committee of Contact Lens Examiners or any successor agency to that committee. In the event the board should ever find after hearing that the registry examination is not appropriate to determine entry level competence as a contact lens dispenser or is not designed to measure specific job performance requirements, the board may thereafter from time to time prescribe or administer a written examination that meets those specifications. If an applicant for renewal has not engaged in the full-time or substantial part-time practice of fitting and adjusting contact lenses within the last five years then the board may require the applicant to take and pass the examination referred to in this section as a condition of registration. Any examination administered by the board shall be given at least twice each year on dates publicly announced at least 90 days before the examination dates. The board is authorized to contract with the National Committee of Contact Lens Examiners or any successor agency to that committee to provide that the registry examination is given at least twice each year on dates publicly announced at least 90 days before the examination dates.

The board may deny registration where there are grounds for denial under the provisions of Division 1.5 (commencing with Section 475).

The board shall issue a certificate to each qualified individual stating that the individual is a registered contact lens dispenser.

A registered contact lens dispenser may use that designation, but shall not hold himself or herself out in advertisements or otherwise as a specialist in fitting and adjusting contact lenses.

2562. Upon satisfactory completion of the fitting of contact lenses, but in no event more than 60 days after receipt of the prescription, a registered contact lens dispenser shall direct the person named in the prescription to return to the prescribing physician and surgeon or optometrist for an evaluation.

2563. A certificate issued to a registered contact lens dispenser may in the discretion of the board be suspended or revoked for violating or attempting to violate any provision of this chapter or any regulation adopted under this chapter, or for incompetence, gross negligence, or repeated similar negligent acts performed by the certificate holder. A certificate may also be suspended or revoked if the individual certificate holder has been convicted of a felony as provided in Section 2555.1.

Any proceedings under this section shall be conducted in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code, and the board shall have all the powers granted therein.

2564. The provisions of this article shall not apply to an assistant fitting contact lenses while acting under the direct responsibility and supervision of a physician and surgeon or optometrist who engages in the practice of fitting contact lenses for his or her patients under Section 2544.

2564.5. A registered dispensing optician fitting contact lenses shall maintain accessible handwashing facilities on the premises and those facilities shall be used before each fitting of contact lenses.

CHAPTER 2 | OCCUPATIONAL ANALYSIS QUESTIONNAIRE

SUBJECT MATTER EXPERT INTERVIEWS

The Board provided OPES with a list of CLDs to contact for telephone interviews. During the semi-structured interviews, nine CLDs were asked to identify all of the activities they perform that are specific to the CLD profession. The CLDs outlined major content areas of their practice and confirmed the tasks performed in each content area. The CLDs were also asked to identify the knowledge necessary to perform each task safely and competently.

TASK AND KNOWLEDGE STATEMENTS

To develop task and knowledge statements, OPES test specialists integrated the information gathered from literature reviews of profession-related sources (e.g., previous OA report, articles, industry publications) and from interviews with CLD SMEs.

In January 2019, OPES test specialists facilitated a workshop with six CLDs from diverse backgrounds (e.g., years licensed, work setting, and work location) to evaluate the task and knowledge statements for technical accuracy and comprehensiveness.

OPES presented the task and knowledge statements to the SMEs, and they assigned each statement to a content area and verified that the content areas were independent and nonoverlapping. In addition, the SMEs performed a preliminary linkage of the task and knowledge statements to ensure that every task had a related knowledge statement and every knowledge statement had a related task. The SMEs also verified proposed demographic questions for the OA questionnaire, including questions regarding scope of practice and work setting.

Once the lists of task and knowledge statements and the demographic questions were verified, OPES used this information to develop an online questionnaire that was sent to California CLDs for completion and evaluation.

QUESTIONNAIRE DEVELOPMENT

OPES test specialists developed an online OA questionnaire designed to solicit CLDs' ratings of the task and knowledge statements. The surveyed CLDs were instructed to rate each task in terms of how often they perform the task (Frequency) and in terms of how important the task is to the effective performance of their current work (Importance). In addition, they were instructed to rate each knowledge statement in terms of how important the specific knowledge is to the effective performance of their current work (Importance). The OA questionnaire also included a demographic section for the purpose of developing an accurate profile of the respondents. The OA questionnaire can be found in Appendix H.

PILOT STUDY

Before administering the final questionnaire, OPES conducted a pilot study of the online questionnaire. The pilot study was reviewed by the Board and then sent to six SMEs who had participated in the task and knowledge statement development workshop. The respondents provided information about the technical accuracy of the task and knowledge statements, online navigation, and ease of use of the study. OPES used this feedback to develop the final questionnaire.

CHAPTER 3 | RESPONSE RATE AND DEMOGRAPHICS

SAMPLING STRATEGY AND RESPONSE RATE

In April 2019, on behalf of the Board, OPES distributed a questionnaire to licensed CLDs in California who were in good standing with the Board (a total of 1,354 CLDs), inviting them to complete the OA questionnaire online. The paper mail and email invitations can be found in Appendices F and G.

Of the 1,354 CLDs in the sample, 151 CLDs (11.2%) responded by accessing the web-based questionnaire. The final sample size included in the data analysis was 148 respondents, or 10.9% of the CLDs who were invited to complete the questionnaire. This response rate reflects an adjustment: OPES excluded data from respondents who indicated they were not currently licensed and practicing as CLDs in California. Because respondents were permitted to skip items, response rates vary from item to item. The respondent sample appears to be representative of the population of California CLDs based on the sample's demographic composition.

DEMOGRAPHIC SUMMARY

As shown in Table 1 and Figure 1, 33.8% of the respondents included in the analysis reported having been licensed for 5 years or fewer, 20.9% for 6-10 years, 23.0% for 11-20 years, and 18.2% for more than 20 years.

Table 2 and Figure 2 show that the majority of respondents (75.7%) reported working in the retail setting, and 10.1% reported working for a corporation. Table 3 and Figure 3 show that 59.5% of respondents report their job title as licensed optician, and 29.7% report their job title as manager/supervisor.

Table 4 and Figure 4 show that the greatest percentage of respondents (56.1%) reported working between 40-49 hours per week, and 21.6% reported working 30-39 hours per week. Table 5 and Figure 5 show that 93.9% respondents reported that they are also licensed spectacle lens dispensers.

When asked to indicate the location of their primary work setting, 83.1% of the respondents reported that they work in an urban area. See Table 6 and Figure 6.

As shown in Table 7 and Figure 7, 43.9% of respondents reported having between 1-3 other registered CLDs in their facility, and 29.1% reported having between 4-6 other registered CLDs. As shown in Table 8 and Figure 8, 58.8% reported having between 1-3 nonregistered CLDs working in their facility, and 20.9% reported working with no nonregistered CLDs.

When asked to report their education and training, 47.9% reported having on-the-job training and 33.7% reported having attended vocational schools. See Table 9 and Figure 9.

More detailed demographic information from respondents can be found in Tables 1-10 and Figures 1-9.

TABLE 1 – NUMBER OF YEARS LICENSED AS A CLD*

YEARS	NUMBER (N)	PERCENT
0 to 5 years	50	33.8%
6 to 10 years	31	20.9%
11 to 20 years	34	23.0%
More than 20 years	27	18.2%
Missing	6	4.1%
Total	148	100

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

FIGURE 1 – NUMBER OF YEARS LICENSED AS A CLD

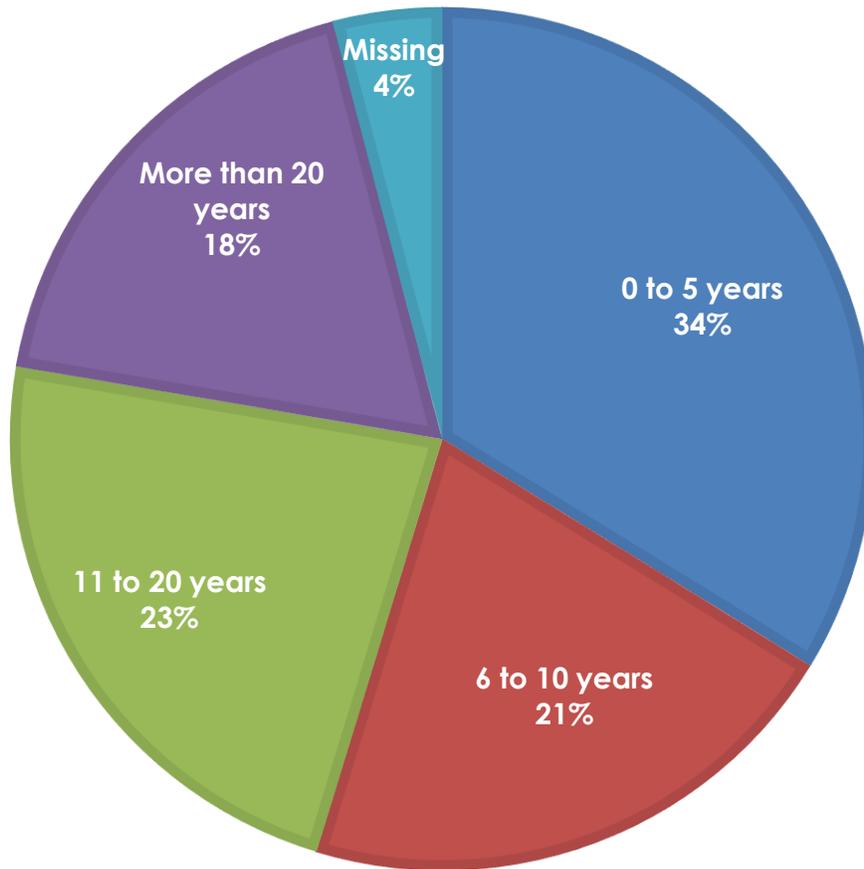


TABLE 2 – PRIMARY WORK SETTING*

SETTING	NUMBER (N)	PERCENT
Retail	112	75.7%
Private Practice	8	5.4%
Partnership	1	0.7%
Group Practice	2	1.4%
Corporation	15	10.1%
Educational facility	1	0.7%
Other	2	1.4%
Missing	7	4.7%
Total	148	100

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

FIGURE 2 – PRIMARY WORK SETTING

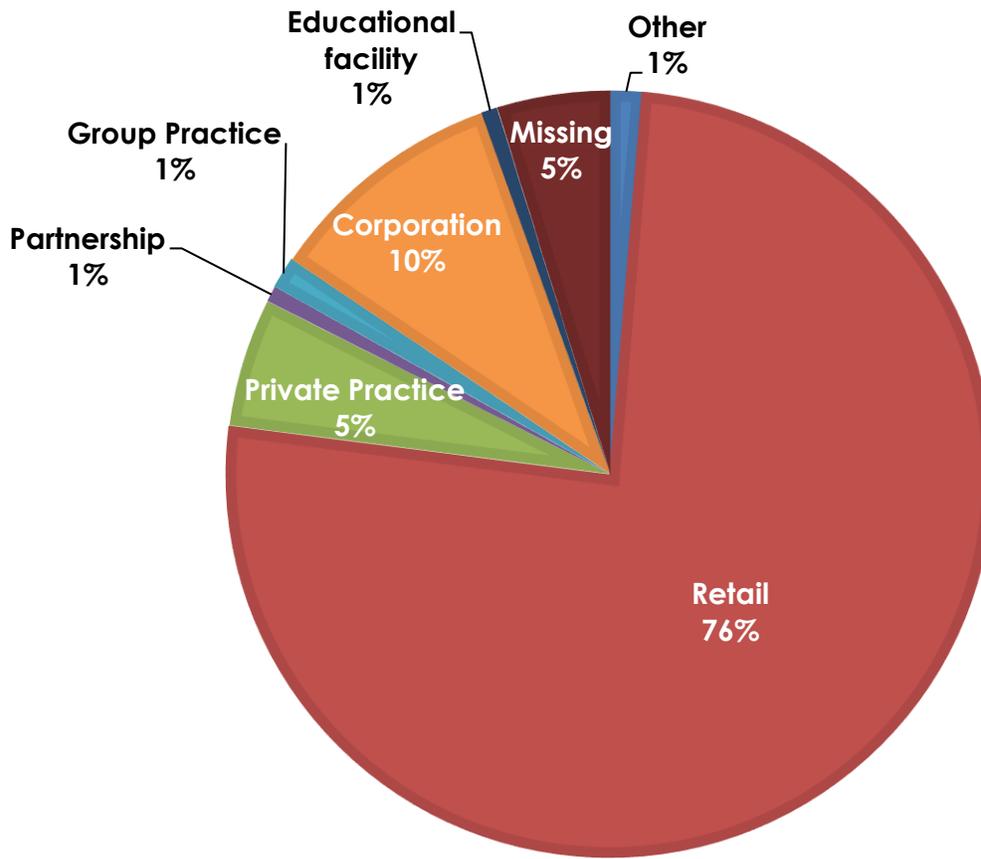


TABLE 3 – JOB TITLE*

TITLE	NUMBER (N)	PERCENT
Sole owner / Principal	6	4.1%
Manager / Supervisor	44	29.7%
Ophthalmic technician	2	1.4%
Contact lens fitter	1	0.7%
Licensed optician	88	59.5%
Other	1	0.7%
Missing	6	4.1%
Total	148	100

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

FIGURE 3 – JOB TITLE

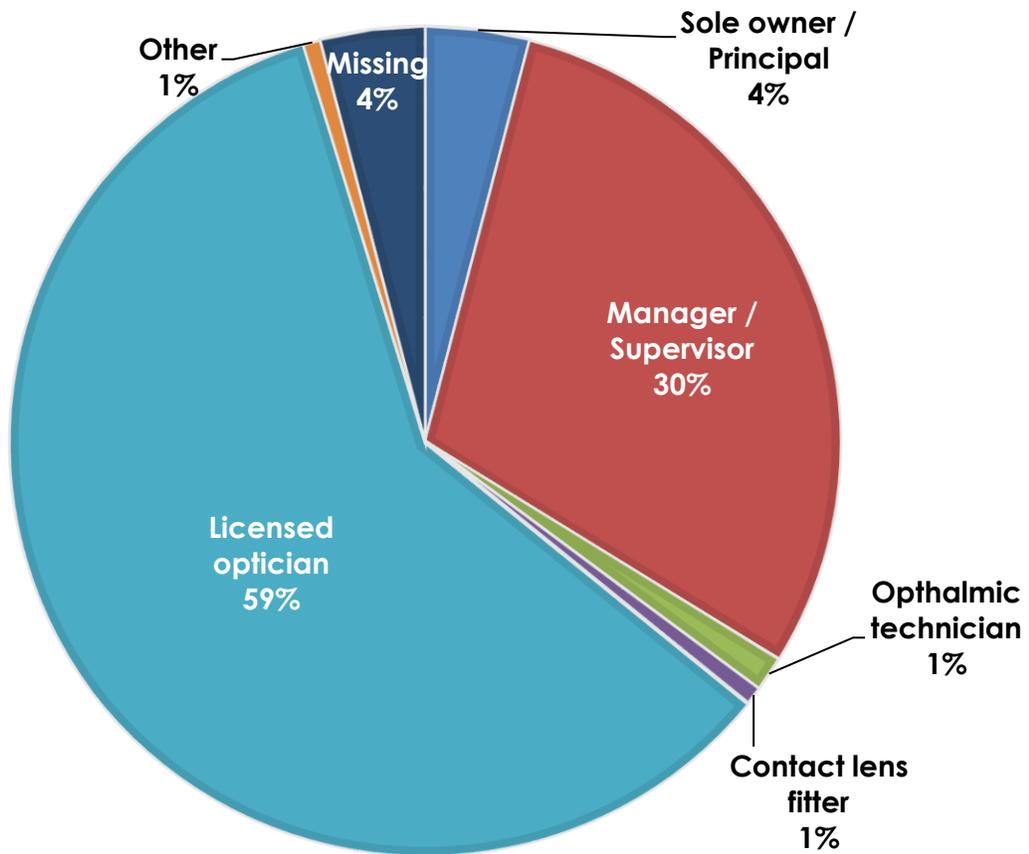


TABLE 4 – HOURS WORKED PER WEEK

HOURS	NUMBER (N)	PERCENT
9 or fewer	13	8.8%
10 to 19 hours	4	2.7%
20 to 29 hours	7	4.7%
30 to 39 hours	32	21.6%
40 to 49 hours	83	56.1%
50 or more hours	2	1.4%
Missing	7	4.7%
Total	148	100

FIGURE 4 – HOURS WORKED PER WEEK

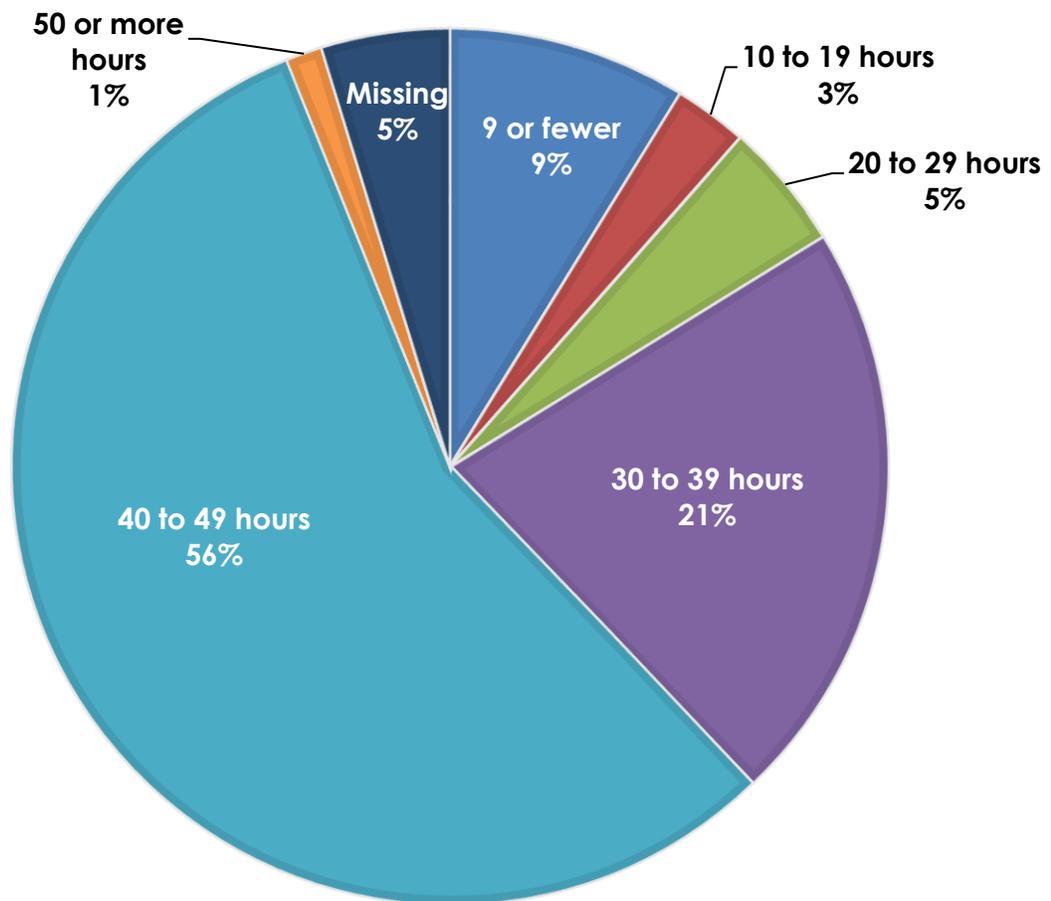


TABLE 5 – LICENSED AS A SPECTACLE LENS DISPENSER

SPECTACLE LENS DISPENSER	NUMBER (N)	PERCENT
Yes	139	93.9%
No	2	1.4%
Missing	7	4.7%
Total	148	100

FIGURE 5 – LICENSED AS A SPECTACLE LENS DISPENSER

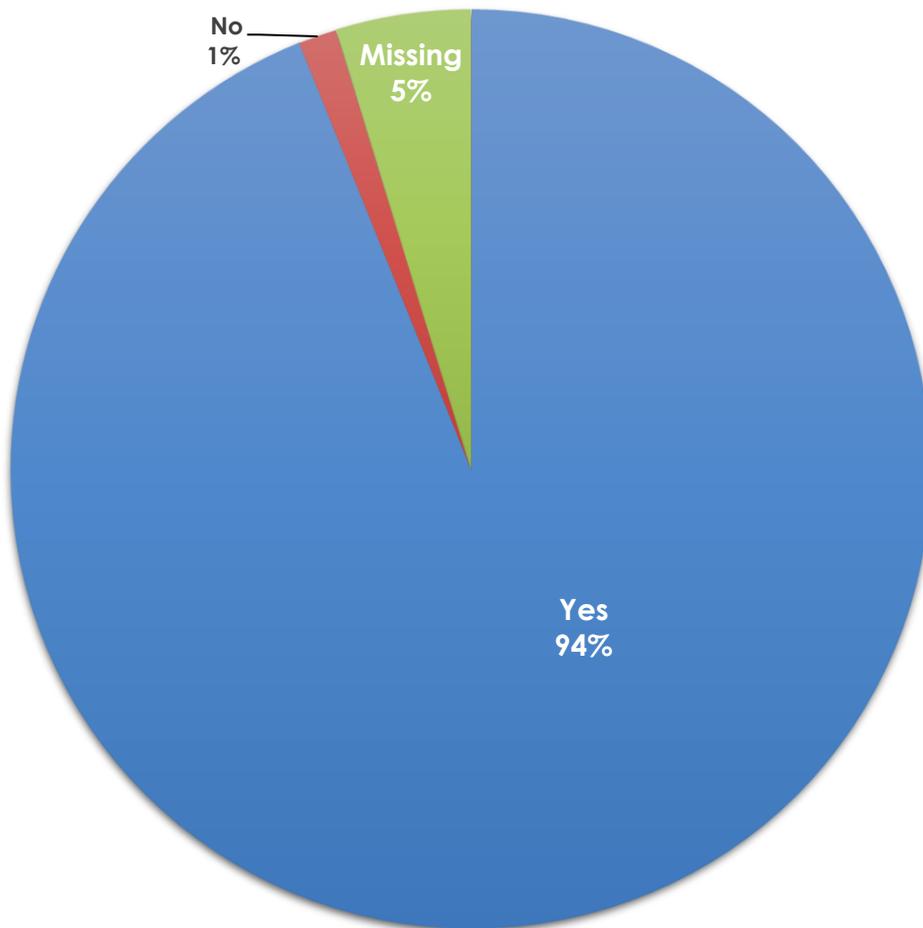


TABLE 6 – LOCATION OF PRIMARY WORK SETTING

LOCATION	NUMBER (N)	PERCENT
Urban (50,000 or more)	123	83.1%
Rural (fewer than 50,000)	19	12.8%
Missing	6	4.1%
Total	148	100

FIGURE 6 – LOCATION OF PRIMARY WORK SETTING

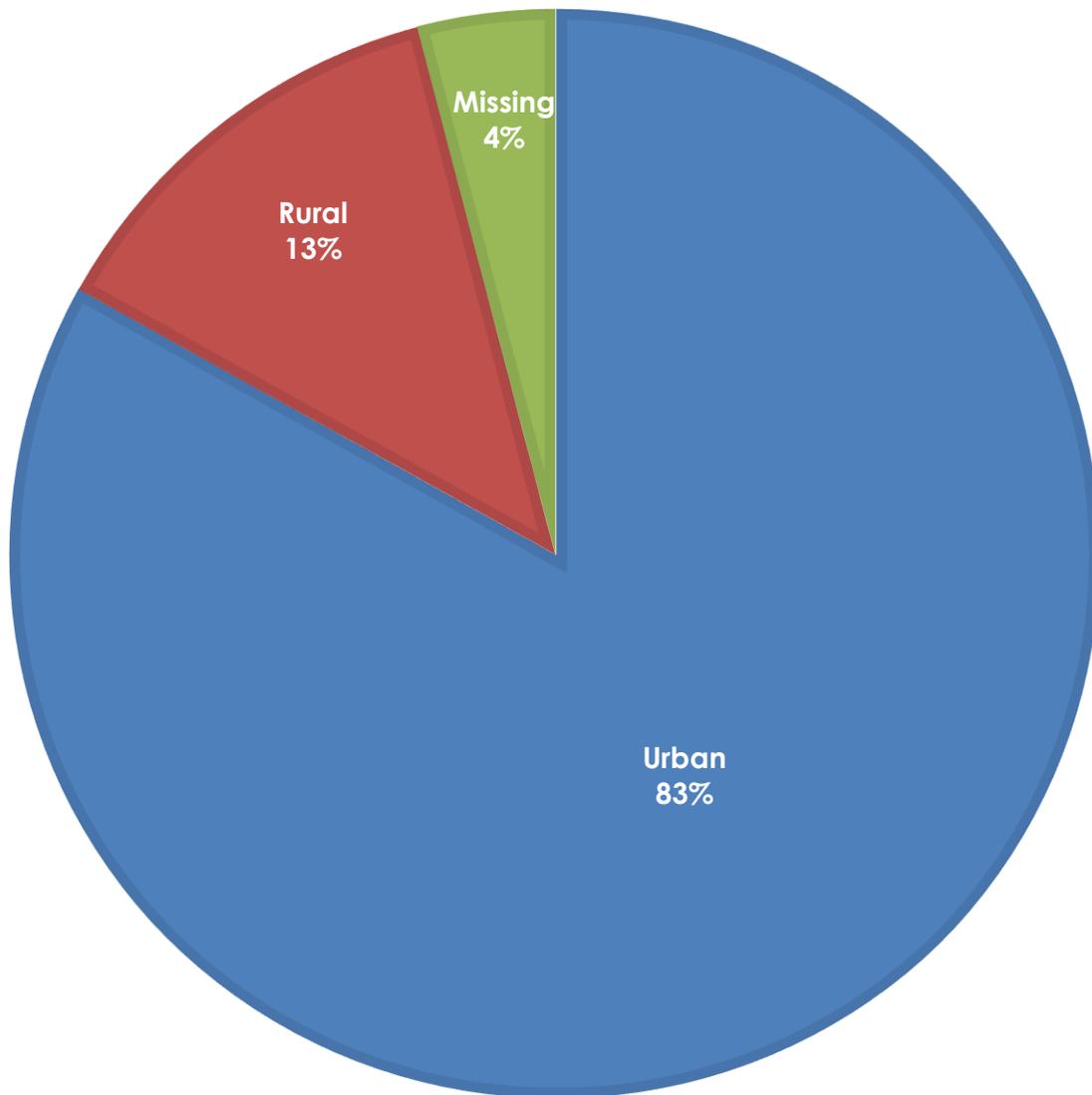


TABLE 7 – NUMBER OF REGISTERED CLDs WORKING AT FACILITY

CLDs	NUMBER (N)	PERCENT
0	17	11.5%
1-3	65	43.9%
4-6	43	29.1%
7 or more	16	10.8%
Missing	7	4.7%
Total	148	100

FIGURE 7 – NUMBER OF REGISTERED CLDS WORKING AT FACILITY

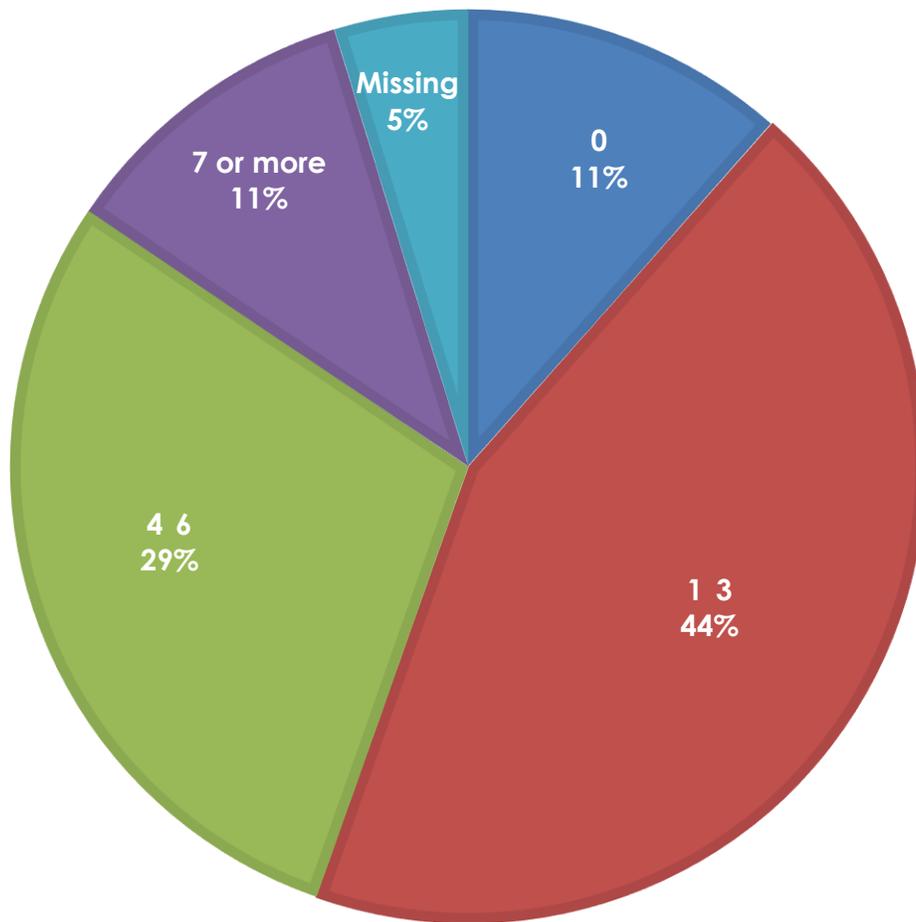


TABLE 8 – NUMBER OF NONREGISTERED CLDs WORKING AT FACILITY*

CLDs	NUMBER (N)	PERCENT
0	31	20.9%
1-3	87	58.8%
4-6	15	10.1%
7 or more	7	4.7%
Missing	8	5.4%
Total	148	100

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

FIGURE 8 – NUMBER OF NONREGISTERED CLDs WORKING AT FACILITY

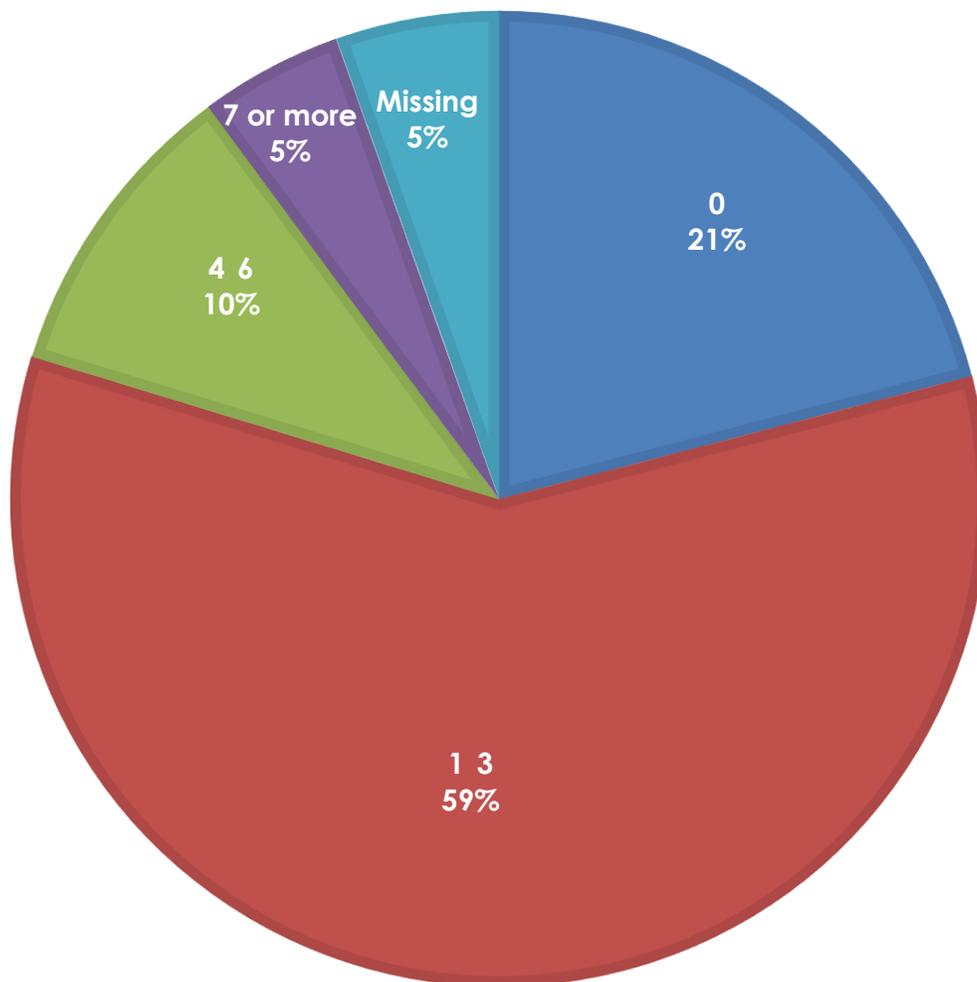


TABLE 9 – EDUCATION AND TRAINING*

EDUCATION	NUMBER (N)	PERCENT
On-the-job training	71	47.9%
Vocational program	50	33.7%
Associate degree	24	16.2%
Bachelor's degree	37	25.0%
Master's degree	2	1.3%
Doctorate	1	0.6%
Other	4	2.7%

*NOTE: Respondents were asked to select all that apply.

FIGURE 9 – EDUCATION AND TRAINING

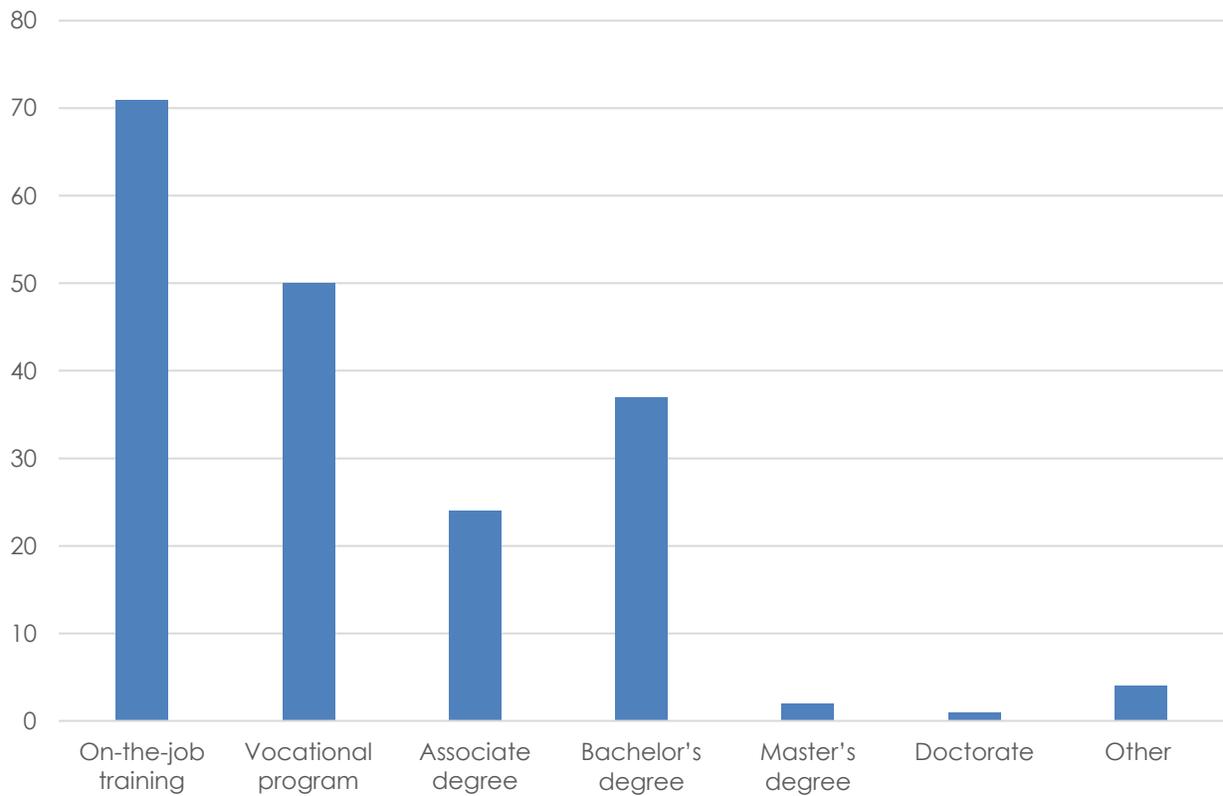


TABLE 10 – RESPONDENTS BY REGION*

REGION NAME	NUMBER (N)	PERCENT
Los Angeles County and Vicinity	40	27.0%
San Francisco Bay Area	23	15.5%
San Joaquin Valley	19	12.8%
Sacramento Valley	8	5.4%
San Diego County and Vicinity	17	11.5%
Shasta - Cascade	2	1.4%
Riverside and Vicinity	19	12.8%
Sierra Mountain Valley	3	2.0%
North Coast	2	1.4%
South Coast and Central Coast	7	4.7%
Missing	8	5.4%
Total	148	100

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

Appendix A shows a more detailed breakdown of the frequencies by region.

CHAPTER 4 | DATA ANALYSIS AND RESULTS

RELIABILITY OF RATINGS

OPES evaluated the task and knowledge ratings obtained by the questionnaire results with a standard index of reliability, coefficient alpha (α), which ranges from 0 to 1. Coefficient alpha is an estimate of the internal consistency of the respondents' ratings of the task and knowledge statements. A higher coefficient value indicates more consistency between respondent ratings. Coefficients were calculated for all respondent ratings.

Table 11 displays the reliability coefficients for the task statement rating scales in each content area. The overall ratings of task frequency and task importance across content areas were highly reliable (frequency $\alpha = .953$; importance $\alpha = .946$). Table 12 displays the reliability coefficients for the knowledge statement rating scale in each content area. The overall ratings of knowledge statement importance across content areas were also highly reliable ($\alpha = .982$). These results indicate that the responding CLDs rated the task and knowledge statements consistently throughout the questionnaire.

TABLE 11 – TASK SCALE RELIABILITY

CONTENT AREA	NUMBER OF TASKS	α FREQUENCY	α IMPORTANCE
1. Patient Assessment	6	.747	.773
2. Contact Lens Fitting	8	.890	.933
3. Patient Education and Training	6	.906	.918
4. Patient Follow-Up and Contact Lens Dispensing	7	.763	.618
5. Advertising and Supervising	2	.614	.645
Total	29	.953	.946

TABLE 12 – KNOWLEDGE SCALE RELIABILITY

CONTENT AREA	NUMBER OF KNOWLEDGE STATEMENTS	α IMPORTANCE
1. Patient Assessment	13	.925
2. Contact Lens Fitting	15	.962
3. Patient Education and Training	13	.968
4. Patient Follow-Up and Contact Lens Dispensing	10	.927
5. Advertising and Supervising	2	.669
Total	53	.982

TASK CRITICALITY INDICES

OPES convened a workshop consisting of six SMEs in May 2019. The purpose of this workshop was to identify the essential tasks and knowledge required for safe and effective CLD practice at the time of licensure. The SMEs reviewed the mean frequency and importance ratings for each task and its criticality index and evaluated the mean importance ratings for all knowledge statements.

To calculate the criticality indices of the task statements, OPES test specialists used the following formula. For each respondent, OPES first multiplied the frequency rating (F_i) and the importance rating (I_i) for each task. Next, OPES averaged the multiplication products across respondents as shown below.

$$\text{Task criticality index} = \text{mean} [(F_i) \times (I_i)]$$

The task statements were sorted in descending order of their criticality index and by content area. The task statements, their mean frequency and importance ratings, and their associated criticality indices are presented in Appendix B.

The SMEs who participated in the May 2019 workshop evaluated the task criticality indices derived from the questionnaire results. SMEs were provided with the mean criticality indices across all respondents. Because of the differing duties between CLDs working in retail and CLDs working in other practice settings, OPES test specialists also analyzed the task ratings separately for respondents practicing in retail and nonretail settings. During the May 2019 workshop, OPES test specialists facilitated a discussion with the SMEs to determine whether practice for CLDs in retail and nonretail settings could be adequately addressed using the same set of tasks. Appendix C presents a comparison of task criticality indexes for retail and nonretail and Appendix D presents a comparison of knowledge importance ratings for retail and nonretail.

OPES test specialists instructed the SMEs to identify a cutoff value to determine if any of the tasks did not have a high enough criticality index to be retained. The SMEs determined that all tasks were important in both retail and nonretail settings and that separate examination outlines would not be necessary. Based on the SMEs' judgment of the relative importance of tasks to CLD practice, the SMEs determined that no cutoff value should be established and that all task statements would remain in the examination outline.

KNOWLEDGE IMPORTANCE RATINGS

To determine the importance of each knowledge statement, the mean importance (K Imp) rating for each knowledge statement was calculated. Because of the differing duties between CLDs working in retail and CLDs working in other practice settings, OPES test specialists also analyzed the knowledge ratings separately for respondents practicing in retail and nonretail settings. The knowledge statements and their mean importance ratings, sorted by content area and in descending order, are presented in Appendix E.

The SMEs who participated in the May 2019 workshop that evaluated the task criticality indices also reviewed the knowledge statement mean importance ratings. After reviewing the mean importance ratings and considering their relative importance to CLD practice, the SMEs determined that no cutoff value should be established and that all knowledge statements should remain in the examination outline.

CHAPTER 5 | EXAMINATION OUTLINE

TASK-KNOWLEDGE LINKAGE

The SMEs who participated in the May 2019 workshop reviewed the preliminary assignments of the task and knowledge statements to content areas from the January 2019 workshop. The SMEs established the final linkage of specific knowledge statements to task statements.

The SMEs reviewed the content areas and wrote descriptions for each content area. The SMEs also changed the name of content area 5 (originally titled Scope of Practice) to Advertising and Supervising.

CONTENT AREA WEIGHTS

The SMEs in the May 2019 workshop were asked to evaluate the tasks within each content area and determine whether they should be categorized into subareas. The SMEs determined that no subareas were needed.

The SMEs were also asked to finalize the weights for the content areas on the CLD examination outline. OPES test specialists presented the SMEs with preliminary weights of the content areas that were calculated by dividing the sum of the criticality indices for the tasks in each content area by the overall sum of the criticality indices for all tasks, as shown below.

$$\frac{\textit{Sum of Criticality Indices for Tasks in Content Area}}{\textit{Sum of Criticality Indices for All Tasks}} = \textit{Percent Weight of Content Area}$$

The SMEs evaluated the preliminary weights by reviewing the following elements for each content area: the group of tasks and knowledge, the linkage established between the tasks and knowledge, and the relative importance of the tasks to CLD practice in California. The SMEs adjusted the preliminary weights based on what they perceived as the relative importance of the tasks' content to CLD practice in California. The preliminary and final content area weights for the CLD examination outline are presented in Tables 13 and 14.

TABLE 13 – PRELIMINARY CONTENT AREA WEIGHTS*

Content Area	Percent Weight
1. Patient Assessment	27%
2. Contact Lens Fitting	18%
3. Patient Education and Training	22%
4. Patient Follow-Up and Contact Lens Dispensing	27%
5. Advertising and Supervising	7%
Total	100%

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

TABLE 14 – FINAL CONTENT AREA WEIGHTS

Content Area	Percent Weight
1. Patient Assessment	26%
2. Contact Lens Fitting	21%
3. Patient Education and Training	22%
4. Patient Follow-Up and Contact Lens Dispensing	27%
5. Advertising and Supervising	4%
Total	100%

The examination outline for the CLD profession is presented in Table 15.

TABLE 15 – EXAMINATION OUTLINE FOR THE CLD PROFESSION

<p>1. PATIENT ASSESSMENT (26%)</p>	<p>This area assesses knowledge of patient contact lens needs based on patient prescription or lens type; prescription requirements; indications and contraindications; and conditions which require referral to an optometrist or other health care provider.</p>
<p><i>Tasks</i></p>	<p><i>Associated Knowledge Statements</i></p>
<p>T1. Evaluate contact lens wear schedule preferences, needs, and goals when patients are considering or requesting contact lenses.</p>	<p>K1. Knowledge of patient eye conditions (e.g. dry eyes, corneal abrasion) that could affect contact lens use.</p> <p>K2. Knowledge of common medical conditions and medications that could affect contact lens use.</p> <p>K3. Knowledge of contact lens wear schedules based on eye condition, lens type, and lens materials.</p> <p>K4. Knowledge of lifestyle factors and hobbies that affect contact lens selection.</p>
<p>T2. Refer patients to medical professional to address possible medical conditions.</p>	<p>K5. Knowledge of patient medical conditions that require referral to a medical professional.</p>
<p>T3. Provide information regarding different types of contact lenses (e.g., soft vs. RPG; spherical vs. toric) and wear schedules.</p>	<p>K6. Knowledge of advantages and disadvantages of different types of contact lenses.</p> <p>K7. Knowledge of current trends in contact lenses.</p> <p>K8. Knowledge of the water and air content of different types of contact lenses.</p> <p>K9. Knowledge of different brands of contact lenses and their base curves and diameters.</p>
<p>T4. Refer patients to optometrists or ophthalmologists to obtain current prescriptions.</p>	<p>K10. Knowledge of requirements for patients to have prescription before contact lens fitting.</p>
<p>T5. Obtain patient authorization to request that optometrists or ophthalmologists provide patient prescriptions.</p>	<p>K11. Knowledge of requirements for patient consent for release of medical records.</p>
<p>T6. Review contact lens prescriptions provided by patients to ensure they are valid and current.</p>	<p>K12. Knowledge of required elements for contact lens prescriptions.</p> <p>K13. Knowledge of contact lens prescription expiration dates.</p>

2. CONTACT LENS FITTING (21%)	This assesses knowledge of methods for interpreting prescriptions; procedures for handling contact lenses; determining and modifying measurements for contact lens prescriptions; and anatomy and physiology of the eye.
<i>Tasks</i>	<i>Associated Knowledge Statements</i>
T7. Interpret contact lens prescriptions to understand vision corrections.	K14. Knowledge of anatomy and physiology of the eye. K15. Knowledge of how to interpret contact lens prescriptions.
T8. Perform keratotomy to measure curvature of patient cornea.	K14. Knowledge of anatomy and physiology of the eye. K16. Knowledge of methods to adjust base curve measurements. K17. Knowledge of how to interpret keratotomy findings. K18. Knowledge of methods to use a keratometer to measure base curve.
T9. Modify curvature measurement to improve contact lens fit.	K14. Knowledge of anatomy and physiology of the eye. K19. Knowledge of base curves, diameters, and thicknesses of contact lenses. K20. Knowledge of instruments used to verify contact lens parameters and fit.
T10. Convert spectacle lens prescription to contact lens prescription.	K15. Knowledge of how to interpret contact lens prescriptions. K19. Knowledge of base curves, diameters, and thicknesses of contact lenses. K21. Knowledge of methods for modifying contact lens prescriptions to accommodate for astigmatism.
T11. Wash hands before handling contact lenses.	K22. Knowledge of methods for maintaining hygiene when handling contact lenses.
T12. Handle different contact lens types based on manufacturer's recommendations.	K23. Knowledge of methods for handling soft contact lenses. K24. Knowledge of methods for handling hard contact lenses. K25. Knowledge of methods for handling rigid gas permeable contact lenses.

<p>T13. Dispense trial lenses for patients based on base curve and vision correction requirements.</p>	<p>K16. Knowledge of methods to adjust base curve measurements.</p> <p>K19. Knowledge of base curves, diameters, and thicknesses of contact lenses.</p>
<p>T14. Assess base curve, diameter, and visual acuity of trial contact lenses to determine fit.</p>	<p>K16. Knowledge of methods to adjust base curve measurements.</p> <p>K17. Knowledge of how to interpret keratotomy findings.</p> <p>K19. Knowledge of base curves, diameters, and thicknesses of contact lenses.</p> <p>K20. Knowledge of instruments used to verify contact lens parameters and fit.</p> <p>K26. Knowledge of methods to perform visual acuity tests.</p> <p>K27. Knowledge of methods to assess fit of contact lenses.</p> <p>K28. Knowledge of procedures to use a slit lamp to assess the relationship between the cornea and the lens.</p>

3 PATIENT EDUCATION AND TRAINING (22%)	This assesses knowledge of techniques for training and educating patients on contact lens care; insertion and removal; adverse effects; wear schedules; and additional ocular protection.
<i>Tasks</i>	<i>Associated Knowledge Statements</i>
T15. Train patients on techniques for inserting and removing contact lenses.	K29. Knowledge of methods for training patients to insert and remove contact lenses. K30. Knowledge of techniques for inserting and removing soft contact lenses. K31. Knowledge of techniques for inserting and removing hard contact lenses. K32. Knowledge of techniques for inserting and removing rigid gas permeable contact lenses.
T16. Train patients on methods for cleaning contact lenses.	K33. Knowledge of contact lens solutions for cleaning and lubrication.
T17. Educate patients about contact lens wear schedules.	K34. Knowledge of contact lens wear schedules based on lens type. K35. Knowledge of wear schedules for extended-wear contact lenses.
T18. Educate patients about the possible adverse effects of contact lenses.	K36. Knowledge of adverse effects (e.g., eye infections) of contact lens wear. K37. Knowledge of adverse effects of wearing contact lenses for more hours than recommended. K38. Knowledge of adverse effects of not following manufacturer recommendations for extended-wear contact lenses.
T19. Educate patients about the signs and symptoms of eye infections and corneal ulcers.	K39. Knowledge of signs and symptoms of eye irritation and infection. K40. Knowledge of signs and symptoms of corneal ulcers.
T20. Educate patients about the need for secondary lens options and sun protection.	K41. Knowledge of the need for secondary lenses and sun protection when wearing contact lenses.

4 PATIENT FOLLOW-UP AND CONTACT LENS DISPENSING (27%)	This assesses knowledge of procedures for verifying that the product dispensed matches the patient prescription; maintaining records in accordance with laws and regulations; and recognizing and troubleshooting problems with prescription or fit.
<i>Tasks</i>	<i>Associated Knowledge Statements</i>
T21. Verify that patient prescriptions match the packaged contact lenses when dispensing.	K42. Knowledge of ANSI standards for contact lenses.
T22. Address patient concerns with contact lenses or wear schedules.	K43. Knowledge of methods for addressing the underlying cause of contact lens-related problems. K44. Knowledge of causes of common contact lens-related problems.
T23. Identify defects (e.g., tears, warping) in contact lenses and notify manufacturer.	K45. Knowledge of methods to use a lensometer to read the power of a contact lens.
T24. Perform follow-up assessment to evaluate comfort and fit of contact lenses.	K46. Knowledge of procedures for using a slit lamp to assess fit of contact lenses. K47. Knowledge of methods to evaluate fit of contact lens and patient comfort during follow-up consultation. K48. Knowledge of laws and regulations related to post-fitting evaluation from prescribing medical professional.
T25. Refer patients to medical professionals to address prescription or fit problems.	K49. Knowledge of prescription or fit problems that require referral to a medical professional.
T26. Document prescription, assessment, and fitting information in patient records.	K50. Knowledge methods for maintaining and recording patient information.
T27. Provide copies of contact lens prescriptions to patients.	K51. Knowledge of laws and regulations related to providing contact lens prescriptions to patients.

5 ADVERTISING AND SUPERVISING (4%)	This assesses knowledge of laws and regulations related to advertising and supervising trainees.
<i>Tasks</i>	<i>Associated Knowledge Statements</i>
T28. Advertise contact lens dispenser services in accordance with laws and regulations.	K52. Knowledge of laws and regulations related to advertising contact lens dispenser services.
T29. Supervise contact lens dispenser trainees in accordance with laws and regulations.	K53. Knowledge of laws and regulations related to supervising contact lens dispenser trainees.

CHAPTER 6 | CONCLUSION

The OA of CLD practice described in this report provides a comprehensive description of current CLD practice in California. The procedures employed to perform the OA were based upon a content validation strategy to ensure that the results accurately represent CLD practice. Results of this OA provide information regarding current practice that can be used to review the Contact Lens Registry Examination (CLRE) developed by the National Contact Lens Examiners (NCLE).

By adopting the CLD examination outline 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	28
Orange	12
TOTAL	40

NORTH COAST

County of Practice	Frequency
Humboldt	1
Sonoma	1
TOTAL	2

RIVERSIDE AND VICINITY

County of Practice	Frequency
Riverside	15
San Bernardino	4
TOTAL	19

SACRAMENTO VALLEY

County of Practice	Frequency
Lake	1
Sacramento	6
Yolo	1
TOTAL	8

SAN DIEGO COUNTY AND VICINITY

County of Practice	Frequency
Imperial	1
San Diego	16
TOTAL	17

SAN FRANCISCO BAY AREA

County of Practice	Frequency
Alameda	4
Contra Costa	3
San Mateo	6
Santa Clara	8
Santa Cruz	1
Solano	1
TOTAL	23

SAN JOAQUIN VALLEY

County of Practice	Frequency
Fresno	3
Kern	6
Kings	2
Merced	2
San Joaquin	2
Stanislaus	3
Tulare	1
TOTAL	19

SHASTA-CASCADE

County of Practice	Frequency
Shasta	2
TOTAL	2

SIERRA MOUNTAIN VALLEY

County of Practice	Frequency
Placer	3
TOTAL	3

SOUTH COAST AND CENTRAL COAST

County of Practice	Frequency
Monterey	1
San Luis Obispo	2
Santa Barbara	4
TOTAL	7

APPENDIX B | CRITICALITY INDICES FOR ALL TASKS BY CONTENT AREA

**Content Area 1
Patient Assessment**

	Task Statements	N	Mean Frequency	N	Mean Importance	N	Task Criticality Index
T6.	Review contact lens prescriptions provided by patients to ensure they are valid and current.	121	4.6942	112	4.5982	110	22.47
T4.	Refer patients to optometrists or ophthalmologists to obtain current prescriptions.	123	3.8130	111	3.8018	112	16.23
T5.	Obtain patient authorization to request that optometrists or ophthalmologists provide patient prescriptions.	122	3.1721	110	3.5455	110	13.01
T3.	Provide information regarding different types of contact lenses (e.g., soft vs. RPG, spherical vs. toric) and wear schedules.	123	2.8618	111	2.9550	113	10.67
T2.	Refer patients to medical professionals to address possible medical conditions.	123	2.2846	111	3.0991	115	8.93
T1.	Evaluate contact lens wear schedule preferences, needs, and goals when patients are considering or requesting contact lenses.	123	2.1301	112	2.3571	117	7.88

**Content Area 2
Contact Lens Fitting**

Task Statements	N	Mean Frequency	N	Mean Importance	N	Task Criticality Index
T7. Interpret contact lens prescriptions to understand vision corrections.	116	3.4052	104	3.3942	106	13.72
T11. Wash hands before handling contact lenses.	113	2.4956	101	3.0198	106	11.21
T12. Handle different contact lens types based on manufacturer's recommendations.	114	2.1754	97	2.4948	106	8.46
T13. Dispense trial lenses for patients based on base curve and vision correction requirements.	115	1.8783	95	2.2947	106	7.11
T14. Assess base curve, diameter, and visual acuity of trial contact lenses to determine fit.	115	.9913	95	1.9263	112	4.12
T8. Perform keratotomy to measure curvature of patient cornea.	115	.8348	96	1.7708	113	3.35
T10. Convert spectacle lens prescription to contact lens prescription.	116	.7759	94	1.4894	112	3.06
T9. Modify curvature measurement to improve contact lens fit.	115	.6696	96	1.5208	112	2.67

**Content Area 3
Patient Education and Training**

	Task Statements	N	Mean Frequency	N	Mean Importance	N	Task Criticality Index
T20.	Educate patients about the need for secondary lens options and sun protection.	105	3.8476	99	3.7576	97	16.21
T17.	Educate patients about contact lens wear schedules.	105	2.8952	94	3.3191	96	12.02
T18.	Educate patients about the possible adverse effects of contact lenses.	105	2.6476	94	3.0851	96	10.70
T19.	Educate patients about the signs and symptoms of eye infections and corneal ulcers.	105	2.2571	94	2.9362	99	9.29
T16.	Train patients on methods for cleaning contact lenses.	105	2.1333	92	2.7717	98	8.78
T15.	Train patients on techniques for inserting and removing contact lenses.	106	1.7925	93	2.5161	101	7.40

Content Area 4
Contact Lens Dispensing and Patient Follow-Up

Task Statements	N	Mean Frequency	N	Mean Importance	N	Task Criticality Index
T21. Verify that patient prescriptions match the packaged contact lenses when dispensing.	99	4.7273	93	4.7527	93	22.76
T25. Refer patients to medical professionals to address prescription or fit problems.	99	3.2222	93	3.7634	92	13.50
T22. Address patient concerns with contact lenses or wear schedules.	99	2.9798	90	3.4000	92	12.40
T27. Provide copies of contact lens prescriptions to patients.	99	2.5657	86	2.5814	91	10.00
T26. Document prescription, assessment, and fitting information in patient records.	99	1.9798	86	2.4302	94	8.62
T23. Identify defects (e.g., tears, warping) in contact lenses and notify manufacturer.	99	1.8586	90	2.6889	93	6.98
T24. Perform follow-up assessment to evaluate comfort and fit of contact lenses.	99	1.0909	84	1.7619	97	4.60

**Content Area 5
Advertising and Supervising**

Task Statements	N	Mean Frequency	N	Mean Importance	N	Task Criticality Index
T29. Supervise contact lens dispenser trainees in accordance with laws and regulations.	97	2.4433	87	3.0230	94	10.78
T28. Advertise contact lens dispenser services in accordance with laws and regulations.	97	2.2062	87	2.5517	93	9.42

**APPENDIX C | TASK CRITICALITY INDEX RETAIL AND NONRETAIL
COMPARISON**

Side-by-Side Means Comparison for Criticality Indices of Retail and Nonretail*

Task Statement		N	Mean
T1. Evaluate contact lens wear schedule preferences, needs, and goals when patients are considering or requesting contact lenses.	retail	95	6.94
	nonretail	22	11.95
T2. Refer patients to medical professionals to address possible medical conditions.	retail	92	8.43
	nonretail	23	10.91
T3. Provide information regarding different types of contact lenses (e.g., soft vs. RPG, spherical vs. toric) and wear schedules.	retail	91	9.85
	nonretail	22	14.09
T4. Refer patients to optometrists or ophthalmologists to obtain current prescriptions.	retail	90	16.46
	nonretail	22	15.32
T5. Obtain patient authorization to request that optometrists or ophthalmologists provide patient prescriptions.	retail	88	12.73
	nonretail	22	14.14
T6. Review contact lens prescriptions provided by patients to ensure they are valid and current.	retail	88	22.76
	nonretail	22	21.32
T7. Interpret contact lens prescriptions to understand vision corrections.	retail	85	13.22
	nonretail	21	15.71
T8. Perform keratotomy to measure curvature of patient cornea.	retail	89	2.75
	nonretail	24	5.58
T9. Modify curvature measurement to improve contact lens fit.	retail	89	2.13
	nonretail	23	4.74
T10. Convert spectacle lens prescription to contact lens prescription.	retail	89	2.87
	nonretail	23	3.83
T11. Wash hands before handling contact lenses.	retail	85	9.09
	nonretail	21	19.76

T12. Handle different contact lens types based on manufacturer's recommendations.	retail	85	7.76
	nonretail	21	11.29
T13. Dispense trial lenses for patients based on base curve and vision correction requirements.	retail	85	5.95
	nonretail	21	11.81
T14. Assess base curve, diameter, and visual acuity of trial contact lenses to determine fit.	retail	89	3.00
	nonretail	23	8.43
T15. Train patients on techniques for inserting and removing contact lenses.	retail	79	5.66
	nonretail	22	13.64
T16. Train patients on methods for cleaning contact lenses.	retail	76	6.92
	nonretail	22	15.18
T17. Educate patients about contact lens wear schedules.	retail	74	10.91
	nonretail	22	15.77
T18. Educate patients about the possible adverse effects of contact lenses.	retail	74	8.57
	nonretail	22	17.86
T19. Educate patients about the signs and symptoms of eye infections and corneal ulcers.	retail	77	7.57
	nonretail	22	15.32
T20. Educate patients about the need for secondary lens options and sun protection.	retail	75	15.61
	nonretail	22	18.23
T21. Verify that patient prescriptions match the packaged contact lenses when dispensing.	retail	71	22.62
	nonretail	22	23.23
T22. Address patient concerns with contact lenses or wear schedules.	retail	70	11.07
	nonretail	22	16.64
T23. Identify defects (e.g., tears, warping) in contact lenses and notify manufacturer.	retail	71	6.06
	nonretail	22	9.95

T24. Perform follow-up assessment to evaluate comfort and fit of contact lenses.	retail	74	3.36
	nonretail	23	8.57
T25. Refer patients to medical professionals to address prescription or fit problems.	retail	70	13.04
	nonretail	22	14.95
T26. Document prescription, assessment, and fitting information in patient records.	retail	71	7.04
	nonretail	23	13.48
T27. Provide copies of contact lens prescriptions to patients.	retail	70	9.34
	nonretail	21	12.19
T28. Advertise contact lens dispenser services in accordance with laws and regulations.	retail	71	8.45
	nonretail	22	12.55
T29. Supervise contact lens dispenser trainees in accordance with laws and regulations.	retail	72	10.18
	nonretail	22	12.73

**Highlighted tasks show significant differences ($p < .05$) in mean criticality between retail and nonretail responses. Significance for each task criticality comparison was determined using Welch's t-test.*

APPENDIX D | KNOWLEDGE IMPORTANCE RATINGS RETAIL AND NONRETAIL COMPARISON

Side-by-Side Means Comparison for Knowledge Importance Ratings of Retail and Nonretail

Knowledge Statement			N	Mean
K1.	Knowledge of patient eye conditions (e.g. dry eyes, corneal abrasion) that could affect contact lens use.	retail	70	2.3714
		nonretail	22	3.1818
K2.	Knowledge of common medical conditions and medications that could affect contact lens use.	retail	70	2.5000
		nonretail	22	3.2727
K3.	Knowledge of contact lens wear schedules based on eye condition, lens type, and lens materials.	retail	70	2.9429
		nonretail	22	3.3636
K4.	Knowledge of lifestyle factors and hobbies that affect contact lens selection.	retail	70	2.6857
		nonretail	22	3.1818
K5.	Knowledge of patient medical conditions that require referral to a medical professional.	retail	70	2.7714
		nonretail	22	3.2727
K6.	Knowledge of advantages and disadvantages of different types of contact lenses.	retail	70	3.0143
		nonretail	22	3.6364
K7.	Knowledge of current trends in contact lenses.	retail	69	3.0290
		nonretail	21	3.5714
K8.	Knowledge of the water and air content of different types of contact lenses.	retail	70	2.7143
		nonretail	22	3.2273
K9.	Knowledge of different brands of contact lenses and their base curves and diameters.	retail	70	3.5429
		nonretail	22	4.0455
K10.	Knowledge of requirements for patients to have prescriptions before contact lens fitting.	retail	69	3.2319
		nonretail	22	3.5909
K11.	Knowledge of requirements for patient consent for release of medical records.	retail	70	4.0857

		nonretail	22	3.9091
K12.	Knowledge of required elements for contact lens prescriptions.	retail	70	4.0714
		nonretail	22	3.6364
K13.	Knowledge of contact lens prescription expiration dates.	retail	70	4.6857
		nonretail	22	4.4545
K14.	Knowledge of anatomy and physiology of the eye.	retail	69	3.2464
		nonretail	22	3.4545
K15.	Knowledge of how to interpret contact lens prescriptions.	retail	69	4.3188
		nonretail	22	4.0455
K16.	Knowledge of methods to adjust base curve measurements.	retail	69	1.6087
		nonretail	22	2.9091
K17.	Knowledge of how to interpret keratotomy findings.	retail	69	1.5362
		nonretail	22	2.5909
K18.	Knowledge of methods to use a keratometer to determine base curve.	retail	69	1.5507
		nonretail	22	2.5909
K19.	Knowledge of base curves, diameters, and thicknesses of contact lenses.	retail	69	2.7391
		nonretail	22	3.1364
K20.	Knowledge of instruments used to verify contact lens parameters and fit.	retail	69	1.7536
		nonretail	22	2.6818
K21.	Knowledge of methods for modifying contact lens prescriptions to accommodate for astigmatism.	retail	69	1.5942
		nonretail	22	2.4091

K22.	Knowledge of methods for maintaining hygiene when handling contact lenses.	retail	69	3.6667
		nonretail	22	4.5455
K23.	Knowledge of methods for handling soft contact lenses.	retail	69	3.3623
		nonretail	22	4.0909
K24.	Knowledge of methods for handling hard contact lenses.	retail	69	3.0580
		nonretail	22	4.0000
K25.	Knowledge of methods for handling rigid gas permeable contact lenses.	retail	69	3.0435
		nonretail	22	3.8182
K26.	Knowledge of methods to perform visual acuity tests.	retail	69	1.7681
		nonretail	21	2.7143
K27.	Knowledge of methods to assess fit of contact lenses.	retail	69	1.6377
		nonretail	22	2.8636
K28.	Knowledge of procedures to use a slit lamp to assess the relationship between the cornea and the lens.	retail	69	1.4928
		nonretail	22	2.5455
K29.	Knowledge of methods for training patients to insert and remove contact lenses.	retail	68	2.2500
		nonretail	21	3.9048
K30.	Knowledge of techniques for inserting and removing soft contact lenses.	retail	68	2.4559
		nonretail	21	3.8571
K31.	Knowledge of techniques for inserting and removing hard contact lenses.	retail	68	2.3676
		nonretail	21	3.8095
K32.	Knowledge of techniques for inserting and removing rigid gas permeable contact lenses.	retail	68	2.3529
		nonretail	21	3.5714

K33.	Knowledge of contact lens solutions for cleaning and lubrication.	retail	68	2.7794
		nonretail	21	4.0476
K34.	Knowledge of contact lens wear schedules based on lens type.	retail	68	3.5441
		nonretail	21	4.0000
K35.	Knowledge of wear schedules for extended-wear contact lenses.	retail	68	3.3676
		nonretail	21	3.9524
K36.	Knowledge of adverse effects (e.g., eye infections) of contact lens wear.	retail	68	3.3676
		nonretail	21	4.0000
K37.	Knowledge of adverse effects of wearing contact lenses for more hours than recommended.	retail	68	3.4706
		nonretail	21	4.2381
K38.	Knowledge of adverse effects of not following manufacturer recommendations for extended-wear contact lenses.	retail	68	3.3971
		nonretail	21	3.9048
K39.	Knowledge of signs and symptoms of eye irritation and infection.	retail	68	2.9412
		nonretail	21	4.3333
K40.	Knowledge of signs and symptoms of corneal ulcers.	retail	68	2.6176
		nonretail	21	3.6190
K41.	Knowledge of the need for secondary lenses and sun protection when wearing contact lenses.	retail	68	3.7941
		nonretail	21	4.4286
K42.	Knowledge of ANSI standards for contact lenses.	retail	68	2.5735
		nonretail	21	3.5238
K43.	Knowledge of methods for addressing the underlying cause of contact lens-related problems.	retail	67	2.7313
		nonretail	21	3.0952

K44.	Knowledge of causes of common contact lens-related problems.	retail	68	2.9853
		nonretail	21	3.4762
K45.	Knowledge of methods to use a lensometer to read the power of a contact lens.	retail	68	1.9265
		nonretail	21	3.0952
K46.	Knowledge of procedures for using a slit lamp to assess fit of contact lenses.	retail	68	1.5294
		nonretail	21	2.7619
K47.	Knowledge of methods to evaluate fit of contact lens and patient comfort during follow-up consultation.	retail	68	1.6324
		nonretail	21	2.9048
K48.	Knowledge of laws and regulations related to post-fitting evaluation from prescribing medical professional.	retail	67	2.2090
		nonretail	21	3.2857
K49.	Knowledge of prescription or fit problems that require referral to medical professionals.	retail	68	2.7206
		nonretail	21	3.1905
K50.	Knowledge of methods for maintaining and recording patient information.	retail	68	4.1471
		nonretail	21	3.8571
K51.	Knowledge of laws and regulations related to providing contact lens prescriptions to patients.	retail	68	4.1471
		nonretail	20	3.7500
K52.	Knowledge of laws and regulations related to advertising contact lens dispenser services.	retail	67	2.6119
		nonretail	21	3.4286
K53.	Knowledge of laws and regulations related to supervising contact lens dispenser trainees.	retail	68	3.2500
		nonretail	21	3.8571

APPENDIX E | KNOWLEDGE IMPORTANCE RATINGS BY CONTENT AREA

**Content Area 1
Patient Assessment**

Knowledge Statements	N	Mean Importance
K13. Knowledge of contact lens prescription expiration dates.	92	4.6304
K11. Knowledge of requirements for patient consent for release of medical records.	92	4.0435
K12. Knowledge of required elements for contact lens prescriptions.	92	3.9674
K9. Knowledge of different brands of contact lenses and their base curves and diameters.	92	3.663
K10. Knowledge of requirements for patients to have prescriptions before contact lens fitting.	91	3.3187
K6. Knowledge of advantages and disadvantages of different types of contact lenses.	92	3.163
K7. Knowledge of current trends in contact lenses.	90	3.1556
K3. Knowledge of contact lens wear schedules based on eye condition, lens type, and lens materials.	92	3.0435
K5. Knowledge of patient medical conditions that require referral to a medical professional.	92	2.8913
K8. Knowledge of the water and air content of different types of contact lenses.	92	2.837
K4. Knowledge of lifestyle factors and hobbies that affect contact lens selection.	92	2.8043
K2. Knowledge of common medical conditions and medications that could affect contact lens use.	92	2.6848
K1. Knowledge of patient eye conditions (e.g. dry eyes, corneal abrasion) that could affect contact lens use.	92	2.5652

**Content Area 2
Contact Lens Fitting**

Knowledge Statements	N	Mean Frequency
K15. Knowledge of how to interpret contact lens prescriptions.	91	4.2527
K22. Knowledge of methods for maintaining hygiene when handling contact lenses.	91	3.8791
K23. Knowledge of methods for handling soft contact lenses.	91	3.5385
K14. Knowledge of anatomy and physiology of the eye.	91	3.2967
K24. Knowledge of methods for handling hard contact lenses.	91	3.2857
K25. Knowledge of methods for handling rigid gas permeable contact lenses.	91	3.2308
K19. Knowledge of base curves, diameters, and thicknesses of contact lenses.	91	2.8352
K26. Knowledge of methods to perform visual acuity tests.	90	1.9889
K20. Knowledge of instruments used to verify contact lens parameters and fit.	91	1.978
K27. Knowledge of methods to assess fit of contact lenses.	91	1.9341
K16. Knowledge of methods to adjust base curve measurements.	91	1.9231
K18. Knowledge of methods to use a keratometer to determine base curve.	91	1.8022
K17. Knowledge of how to interpret keratotomy findings.	91	1.7912
K21. Knowledge of methods for modifying contact lens prescriptions to accommodate for astigmatism.	91	1.7912
K28. Knowledge of procedures to use a slit lamp to assess the relationship between the cornea and the lens.	91	1.7473

**Content Area 3
Patient Education and Training**

Knowledge Statements	N	Mean Frequency
K41. Knowledge of the need for secondary lenses and sun protection when wearing contact lenses.	89	3.9438
K34. Knowledge of contact lens wear schedules based on lens type.	89	3.6517
K37. Knowledge of adverse effects of wearing contact lenses for more hours than recommended.	89	3.6517
K36. Knowledge of adverse effects (e.g., eye infections) of contact lens wear.	89	3.5169
K38. Knowledge of adverse effects of not following manufacturer recommendations for extended-wear contact lenses.	89	3.5169
K35. Knowledge of wear schedules for extended-wear contact lenses.	89	3.5056
K39. Knowledge of signs and symptoms of eye irritation and infection.	89	3.2697
K33. Knowledge of contact lens solutions for cleaning and lubrication.	89	3.0787
K40. Knowledge of signs and symptoms of corneal ulcers.	89	2.8539
K30. Knowledge of techniques for inserting and removing soft contact lenses.	89	2.7865
K31. Knowledge of techniques for inserting and removing hard contact lenses.	89	2.7079
K29. Knowledge of methods for training patients to insert and remove contact lenses.	89	2.6404
K32. Knowledge of techniques for inserting and removing rigid gas permeable contact lenses.	89	2.6404

Content Area 4
Contact Lens Dispensing and Patient Follow-Up

Knowledge Statements	N	Mean Frequency
K50. Knowledge of methods for maintaining and recording patient information.	89	4.0787
K51. Knowledge of laws and regulations related to providing contact lens prescriptions to patients.	88	4.0568
K44. Knowledge of causes of common contact lens-related problems.	89	3.1011
K49. Knowledge of prescription or fit problems that require referral to medical professionals.	89	2.8315
K43. Knowledge of methods for addressing the underlying cause of contact lens-related problems.	88	2.8182
K42. Knowledge of ANSI standards for contact lenses.	89	2.7978
K48. Knowledge of laws and regulations related to post-fitting evaluation from prescribing medical professional.	88	2.4659
K45. Knowledge of methods to use a lensometer to read the power of a contact lens.	89	2.2022
K47. Knowledge of methods to evaluate fit of contact lens and patient comfort during follow-up consultation.	89	1.9326
K46. Knowledge of procedures for using a slit lamp to assess fit of contact lenses.	89	1.8202

**Content Area 5
Advertising and Supervising**

Knowledge Statements		N	Mean Frequency
K53.	Knowledge of laws and regulations related to supervising contact lens dispenser trainees.	89	3.3933
K52.	Knowledge of laws and regulations related to advertising contact lens dispenser services.	88	2.8068

APPENDIX F | QUESTIONNAIRE INVITATION LETTER TO PRACTITIONERS



CALIFORNIA BOARD OF OPTOMETRY
2450 DEL PASO ROAD, SUITE 105 SACRAMENTO, CA 95834

P 916 575 7170 | F 916 575 7292 | WWW.OPTOMETRY.CA.GOV

April 5, 2019
Name
Address
City, State, Zip

Dear Contact Lens Dispenser:

The Board is conducting an occupational analysis (OA) of the CLD profession. The purpose of the OA is to identify the important tasks performed by currently working CLDs and the knowledge required to perform those tasks. Your participation in the OA is essential to this process. The Board requires responses from many licensees to achieve representation from different geographic regions of the state and from different work settings.

As part of the study, a questionnaire has been developed to identify the important tasks that CLDs perform upon entry into the profession. The questionnaire will be available online until **April 26, 2019**, 24 hours a day, 7 days a week.

Please take the time to complete the questionnaire as it relates to your current work. Your responses will be kept confidential and will not be tied to your license or any other personal information. Individual responses will be combined with the responses of other CLDs and only group data will be analyzed.

Please follow one of these two steps to participate in this important project:

Go to the link: <https://www.surveymonkey.com/r/CLD2019OA>

OR

Scan the QR code:



For your convenience, you do not have to complete the questionnaire in a single session. Before you exit, complete the page that you are on. You can resume where you stopped as long as you reopen the questionnaire from the same computer and use the same web browser. The web link is available 24 hours a day, 7 days a week. The bottom of each page has a progress bar showing you what percentage of the questionnaire you have completed.

If you have any questions or need assistance from the Board, please contact [redacted] at [redacted]@dca.ca.gov

The Board welcomes your feedback and appreciates your time!

Sincerely,

Shara Murphy

Executive Officer

California State Board of Optometry

Please Note: If you have already received this Occupational Analysis questionnaire via email and have already taken the survey, please disregard this letter.

APPENDIX G | QUESTIONNAIRE INVITATION EMAIL TO PRACTITIONERS

Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Congratulations! You have been selected by California Board of Optometry to participate in the 2019 Contact Lens Dispenser (CLD) Occupational Analysis Survey. The purpose of the survey is to gather data on the job tasks performed by California-licensed CLDs as well as to specify the knowledge required to perform those tasks. Your participation is essential to the success of this project.

The survey is estimated to take 20 minutes to complete, but you do not need to complete it in a single session. You may return to it multiple times as long as you are using the same computer and web browser. Your individual responses will be kept confidential.

Please complete the entire survey by April 26, 2019. Click the button below to start the survey. Thank you for your participation!

[Begin Survey](#)

APPENDIX H | QUESTIONNAIRE

Dear Contact Lens Dispenser:

Thank you for participating in this study of the contact lens dispenser (CLD) profession in California, a project of the California State Board of Optometry (Board).

The Board is conducting an occupational analysis (OA) of the CLD profession. The purpose of the OA is to identify the important tasks performed by currently working CLDs and the knowledge required to perform those tasks.

Your participation in the OA is essential to this process. The Board requires responses from many licensees to achieve representation from different geographic regions of the state and from different work settings.

Please take the time to complete the questionnaire as it relates to your current work. Your responses will be kept confidential and will not be tied to your license or any other personal information. Individual responses will be combined with the responses of other CLDs and only group data will be analyzed.

For your convenience, you do not have to complete the questionnaire in a single session. Before you exit, complete the page that you are on. You can resume where you stopped as long as you reopen the questionnaire from the same computer and use the same web browser. The web link is available 24 hours a day, 7 days a week. The bottom of each page has a progress bar showing you what percentage of the questionnaire you have completed.

To begin the survey, please click Next. Any question marked with an asterisk must be answered before you can progress through the questionnaire. Please submit the completed questionnaire by **April 26, 2019**.

If you have any questions or need assistance from the Board, please contact [REDACTED] [REDACTED]@dca.ca.gov.

The Board welcomes your feedback and appreciates your time!

Sincerely,



Shara Murphy
Executive Officer
California State Board of Optometry



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part I - Personal Data

Complete this questionnaire only if you are currently licensed and working as a CLD in California.

The California State Board of Optometry recognizes that every CLD may not perform all of the tasks or use all of the knowledge contained in this questionnaire. However, your participation is essential, and your contribution will help establish standards for safe and effective contact lens dispensing in the State of California.



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part I - Personal Data

The information you provide here is voluntary and confidential. It will be treated as personal information subject to the Information Practices Act (Civil Code section 1798 et seq.) and will be used only for the purpose of aiding in interpreting the task and knowledge ratings that are requested in Parts II and III. Please choose only one answer unless more than one is requested.

* 1. Do you currently work as a CLD in California?

Yes

No



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part I - Personal Data

2. How many years have you been licensed and working as a CLD in California?

- 0-5 years
- 6-10 years
- 11-20 years
- More than 20 years

3. How many hours per week do you work as a CLD?

- 9 hours or fewer
- 10-19 hours
- 20-29 hours
- 30-39 hours
- 40-49 hours
- 50 or more hours

4. Which title below most nearly matches your job title?

- Sole Owner / Principal
- Manager / Supervisor
- Ophthalmic Technician
- Sales Associate
- Contact Lens Fitter
- Licensed Optician
- Other (please specify)

5. Which of the following levels of education have you achieved? (check all that apply)

- On-the-job training
- Vocational program
- Associate Degree
- Bachelor's Degree
- Master's Degree
- Doctorate
- Other (please specify)

6. Are you also licensed as a spectacle lens dispenser in California?

- Yes
- No

7. Which choice below better describes the location of your primary work setting?

- Urban (50,000 people or more)
- Rural (fewer than 50,000 people)



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part I - Personal Data

8. How would you describe your primary work setting?

- Retail
- Private practice
- Partnership
- Group practice
- Corporation
- Educational facility
- Private hospital
- HMO facility
- Military or veterans' hospital or clinic
- Federal facility (nonmilitary)
- State facility
- Other (please specify)

9. How many **registered** CLDs work within your primary work setting?

- 0
- 1-3
- 4-6
- 7 or more

10. How many **non-registered** employees perform work related to contact lens dispensing within your primary work setting?

- 0
- 1-3
- 4-6
- 7 or more



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part I - Personal Data

11. In what California county do you perform the majority of your work?

- | | | |
|------------------------------------|---------------------------------------|-------------------------------------|
| <input type="radio"/> Alameda | <input type="radio"/> Marin | <input type="radio"/> San Mateo |
| <input type="radio"/> Alpine | <input type="radio"/> Mariposa | <input type="radio"/> Santa Barbara |
| <input type="radio"/> Amador | <input type="radio"/> Mendocino | <input type="radio"/> Santa Clara |
| <input type="radio"/> Butte | <input type="radio"/> Merced | <input type="radio"/> Santa Cruz |
| <input type="radio"/> Calaveras | <input type="radio"/> Modoc | <input type="radio"/> Shasta |
| <input type="radio"/> Colusa | <input type="radio"/> Mono | <input type="radio"/> Sierra |
| <input type="radio"/> Contra Costa | <input type="radio"/> Monterey | <input type="radio"/> Siskiyou |
| <input type="radio"/> Del Norte | <input type="radio"/> Napa | <input type="radio"/> Solano |
| <input type="radio"/> El Dorado | <input type="radio"/> Nevada | <input type="radio"/> Sonoma |
| <input type="radio"/> Fresno | <input type="radio"/> Orange | <input type="radio"/> Stanislaus |
| <input type="radio"/> Glenn | <input type="radio"/> Placer | <input type="radio"/> Sutter |
| <input type="radio"/> Humboldt | <input type="radio"/> Plumas | <input type="radio"/> Tehama |
| <input type="radio"/> Imperial | <input type="radio"/> Riverside | <input type="radio"/> Trinity |
| <input type="radio"/> Inyo | <input type="radio"/> Sacramento | <input type="radio"/> Tulare |
| <input type="radio"/> Kern | <input type="radio"/> San Benito | <input type="radio"/> Tuolumne |
| <input type="radio"/> Kings | <input type="radio"/> San Bernardino | <input type="radio"/> Ventura |
| <input type="radio"/> Lake | <input type="radio"/> San Diego | <input type="radio"/> Yolo |
| <input type="radio"/> Lassen | <input type="radio"/> San Francisco | <input type="radio"/> Yuba |
| <input type="radio"/> Los Angeles | <input type="radio"/> San Joaquin | |
| <input type="radio"/> Madera | <input type="radio"/> San Luis Obispo | |



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part II - Task Ratings

INSTRUCTIONS FOR RATING TASK STATEMENTS

This part of the questionnaire contains 29 task statements. Please rate each task as it relates to effective performance of your current work as a CLD using the Frequency and Importance scales displayed below.

FREQUENCY RATING SCALE

HOW FREQUENTLY do you perform this task in your current work?

- 0 - DOES NOT APPLY. I do not perform this task in my current work.
- 1 - RARELY. I perform this task the least often in my current work relative to other tasks I perform.
- 2 - SELDOM. I perform this task less often than most other tasks I perform in my current work.
- 3 - SOMETIMES. I perform this task as often as other tasks I perform in my current work.
- 4 - OFTEN. I perform this task more often than most other tasks I perform in my current work.
- 5 - VERY OFTEN. This task is one of the tasks I perform most often in my current work relative to other tasks I perform.

IMPORTANCE RATING SCALE

HOW IMPORTANT is this task for effective performance in your current work?

- 0 - DOES NOT APPLY. This task is not required for effective performance of my current work.
- 1 - NOT IMPORTANT. This task is not important for effective performance of my current work.
- 2 - FAIRLY IMPORTANT. This task is somewhat important for effective performance of my current work.
- 3 - IMPORTANT. This task is important for effective performance of my current work.
- 4 - VERY IMPORTANT. This task is very important for effective performance of my current work.
- 5 - CRITICALLY IMPORTANT. This task is extremely important for effective performance of my current work.



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part II - Task Ratings

Your Frequency and Importance ratings should be separate and independent ratings. Therefore, the ratings that you assign using one rating scale should not influence the ratings that you assign using the other rating scale.

If the task is NOT part of your current work, rate the task "0" (zero) Frequency and "0" (zero) Importance.

The boxes for rating the Frequency and Importance of each task have drop-down lists. Click on the "down" arrow in each box to see the rating, and then select the value based on your current work.



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part II - Task Ratings

12. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance of your current work (Importance).

Patient Assessment

	Frequency	Importance
T1. Evaluate contact lens wear schedule preferences, needs, and goals when patients are considering or requesting contact lenses.	<input type="text"/>	<input type="text"/>
T2. Refer patients to medical professionals to address possible medical conditions.	<input type="text"/>	<input type="text"/>
T3. Provide information regarding different types of contact lenses (e.g., soft vs. RPG, spherical vs. toric) and wear schedules.	<input type="text"/>	<input type="text"/>
T4. Refer patients to optometrists or ophthalmologists to obtain current prescriptions.	<input type="text"/>	<input type="text"/>
T5. Obtain patient authorization to request that optometrists or ophthalmologists provide patient prescriptions.	<input type="text"/>	<input type="text"/>
T6. Review contact lens prescriptions provided by patients to ensure they are valid and current.	<input type="text"/>	<input type="text"/>



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part II - Task Ratings

13. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance of your current work (Importance).

Contact Lens Fitting

	Frequency	Importance
T7. Interpret contact lens prescriptions to understand vision corrections.	<input type="text"/>	<input type="text"/>
T8. Perform keratotomy to measure curvature of patient cornea.	<input type="text"/>	<input type="text"/>
T9. Modify curvature measurement to improve contact lens fit.	<input type="text"/>	<input type="text"/>
T10. Convert spectacle lens prescription to contact lens prescription.	<input type="text"/>	<input type="text"/>
T11. Wash hands before handling contact lenses.	<input type="text"/>	<input type="text"/>
T12. Handle different contact lens types based on manufacturer's recommendations.	<input type="text"/>	<input type="text"/>
T13. Dispense trial lenses for patients based on base curve and vision correction requirements.	<input type="text"/>	<input type="text"/>
T14. Assess base curve, diameter, and visual acuity of trial contact lenses to determine fit.	<input type="text"/>	<input type="text"/>



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part II - Task Ratings

14. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance of your current work (Importance).

Patient Education and Training

	Frequency	Importance
T15. Train patients on techniques for inserting and removing contact lenses.	<input type="text"/>	<input type="text"/>
T16. Train patients on methods for cleaning contact lenses.	<input type="text"/>	<input type="text"/>
T17. Educate patients about contact lens wear schedules.	<input type="text"/>	<input type="text"/>
T18. Educate patients about the possible adverse effects of contact lenses.	<input type="text"/>	<input type="text"/>
T19. Educate patients about the signs and symptoms of eye infections and corneal ulcers.	<input type="text"/>	<input type="text"/>
T20. Educate patients about the need for secondary lens options and sun protection.	<input type="text"/>	<input type="text"/>



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part II - Task Ratings

15. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance of your current work (Importance).

Contact Lens Dispensing and Patient Follow-Up

	Frequency	Importance
T21. Verify that patient prescriptions match the packaged contact lenses when dispensing.	<input type="text"/>	<input type="text"/>
T22. Address patient concerns with contact lenses or wear schedules.	<input type="text"/>	<input type="text"/>
T23. Identify defects (e.g., tears, warping) in contact lenses and notify manufacturer.	<input type="text"/>	<input type="text"/>
T24. Perform follow-up assessment to evaluate comfort and fit of contact lenses.	<input type="text"/>	<input type="text"/>
T25. Refer patients to medical professionals to address prescription or fit problems.	<input type="text"/>	<input type="text"/>
T26. Document prescription, assessment, and fitting information in patient records.	<input type="text"/>	<input type="text"/>
T27. Provide copies of contact lens prescriptions to patients.	<input type="text"/>	<input type="text"/>



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part II - Task Ratings

16. Please rate the following tasks based on how often you perform the task (Frequency) and how important the task is for effective performance of your current work (Importance).

Scope of Practice

	Frequency	Importance
T28. Advertise contact lens dispenser services in accordance with laws and regulations.	<input type="text"/>	<input type="text"/>
T29. Supervise contact lens dispenser trainees in accordance with laws and regulations.	<input type="text"/>	<input type="text"/>



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part III - Knowledge Ratings

INSTRUCTIONS FOR RATING KNOWLEDGE STATEMENTS

This part of the questionnaire contains 53 knowledge statements. Please rate each knowledge statement based on how important you believe the knowledge is for effective performance of your current work as a CLD.

If the knowledge is NOT required for effective performance of your current work, rate the statement as "DOES NOT APPLY."

Please use the following scale to make your ratings:

IMPORTANCE RATING SCALE

HOW IMPORTANT is this knowledge for effective performance of tasks in your current work?

0 - DOES NOT APPLY. This knowledge is not required for effective performance of tasks in my current work.

1- NOT IMPORTANT. This knowledge is not important for effective performance of tasks in my current work.

2 - FAIRLY IMPORTANT. This knowledge is somewhat important for effective performance of tasks in my current work.

3 - IMPORTANT. This knowledge is important for effective performance of tasks in my current work.

4 - VERY IMPORTANT. This knowledge is very important for effective performance of tasks in my current work.

5 - CRITICALLY IMPORTANT. This knowledge is extremely important for effective performance of tasks in my current work.



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part III - Knowledge Ratings

17. How important is this knowledge for effective performance of tasks in your current work?

Patient Assessment

	0 Does Not Apply	1 Not Important	2 Fairly Important	3 Important	4 Very Important	5 Critically Important
K1. Knowledge of patient eye conditions (e.g. dry eyes, corneal abrasion) that could affect contact lens use.	<input type="radio"/>					
K2. Knowledge of common medical conditions and medications that could affect contact lens use.	<input type="radio"/>					
K3. Knowledge of contact lens wear schedules based on eye condition, lens type, and lens materials.	<input type="radio"/>					
K4. Knowledge of lifestyle factors and hobbies that affect contact lens selection.	<input type="radio"/>					
K5. Knowledge of patient medical conditions that require referral to a medical professional.	<input type="radio"/>					
K6. Knowledge of advantages and disadvantages of different types of contact lenses.	<input type="radio"/>					
K7. Knowledge of current trends in contact lenses.	<input type="radio"/>					
K8. Knowledge of the water and air content of different types of contact lenses.	<input type="radio"/>					
K9. Knowledge of different brands of contact lenses and their base curves and diameters.	<input type="radio"/>					
K10. Knowledge of requirements for patients to have prescriptions before contact lens fitting.	<input type="radio"/>					
K11. Knowledge of requirements for patient consent for release of medical records.	<input type="radio"/>					
K12. Knowledge of required elements for contact lens prescriptions.	<input type="radio"/>					
K13. Knowledge of contact lens prescription expiration dates.	<input type="radio"/>					



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part III - Knowledge Ratings

18. How important is this knowledge for effective performance of tasks in your current work?

Contact Lens Fitting

	0 Does Not Apply	1 Not Important	2 Fairly Important	3 Important	4 Very Important	5 Critically Important
K14. Knowledge of anatomy and physiology of the eye.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K15. Knowledge of how to interpret contact lens prescriptions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K16. Knowledge of methods to adjust base curve measurements.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K17. Knowledge of how to interpret keratotomy findings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K18. Knowledge of methods to use a keratometer to determine base curve.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K19. Knowledge of base curves, diameters, and thicknesses of contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K20. Knowledge of instruments used to verify contact lens parameters and fit.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K21. Knowledge of methods for modifying contact lens prescriptions to accommodate for astigmatism.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K22. Knowledge of methods for maintaining hygiene when handling contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K23. Knowledge of methods for handling soft contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K24. Knowledge of methods for handling hard contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K25. Knowledge of methods for handling rigid gas permeable contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K26. Knowledge of methods to perform visual acuity tests.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K27. Knowledge of methods to assess fit of contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K28. Knowledge of procedures to use a slit lamp to assess the relationship between the cornea and the lens.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part III - Knowledge Ratings

18. How important is this knowledge for effective performance of tasks in your current work?

Contact Lens Fitting

	0 Does Not Apply	1 Not Important	2 Fairly Important	3 Important	4 Very Important	5 Critically Important
K14. Knowledge of anatomy and physiology of the eye.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K15. Knowledge of how to interpret contact lens prescriptions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K16. Knowledge of methods to adjust base curve measurements.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K17. Knowledge of how to interpret keratotomy findings.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K18. Knowledge of methods to use a keratometer to determine base curve.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K19. Knowledge of base curves, diameters, and thicknesses of contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K20. Knowledge of instruments used to verify contact lens parameters and fit.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K21. Knowledge of methods for modifying contact lens prescriptions to accommodate for astigmatism.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K22. Knowledge of methods for maintaining hygiene when handling contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K23. Knowledge of methods for handling soft contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K24. Knowledge of methods for handling hard contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K25. Knowledge of methods for handling rigid gas permeable contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K26. Knowledge of methods to perform visual acuity tests.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K27. Knowledge of methods to assess fit of contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K28. Knowledge of procedures to use a slit lamp to assess the relationship between the cornea and the lens.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part III - Knowledge Ratings

19. How important is this knowledge for effective performance of tasks in your current work?

Patient Education and Training

	0 Does Not Apply	1 Not Important	2 Fairly Important	3 Important	4 Very Important	5 Critically Important
K29. Knowledge of methods for training patients to insert and remove contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K30. Knowledge of techniques for inserting and removing soft contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K31. Knowledge of techniques for inserting and removing hard contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K32. Knowledge of techniques for inserting and removing rigid gas permeable contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K33. Knowledge of contact lens solutions for cleaning and lubrication.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K34. Knowledge of contact lens wear schedules based on lens type.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K35. Knowledge of wear schedules for extended-wear contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K36. Knowledge of adverse effects (e.g., eye infections) of contact lens wear.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K37. Knowledge of adverse effects of wearing contact lenses for more hours than recommended.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K38. Knowledge of adverse effects of not following manufacturer recommendations for extended-wear contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K39. Knowledge of signs and symptoms of eye irritation and infection.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K40. Knowledge of signs and symptoms of corneal ulcers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K41. Knowledge of the need for secondary lenses and sun protection when wearing contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part III - Knowledge Ratings

19. How important is this knowledge for effective performance of tasks in your current work?

Patient Education and Training

	0 Does Not Apply	1 Not Important	2 Fairly Important	3 Important	4 Very Important	5 Critically Important
K29. Knowledge of methods for training patients to insert and remove contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K30. Knowledge of techniques for inserting and removing soft contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K31. Knowledge of techniques for inserting and removing hard contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K32. Knowledge of techniques for inserting and removing rigid gas permeable contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K33. Knowledge of contact lens solutions for cleaning and lubrication.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K34. Knowledge of contact lens wear schedules based on lens type.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K35. Knowledge of wear schedules for extended-wear contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K36. Knowledge of adverse effects (e.g., eye infections) of contact lens wear.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K37. Knowledge of adverse effects of wearing contact lenses for more hours than recommended.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K38. Knowledge of adverse effects of not following manufacturer recommendations for extended-wear contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K39. Knowledge of signs and symptoms of eye irritation and infection.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K40. Knowledge of signs and symptoms of corneal ulcers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K41. Knowledge of the need for secondary lenses and sun protection when wearing contact lenses.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part III - Knowledge Ratings

20. How important is this knowledge for effective performance of tasks in your current work?

Contact Lens Dispensing and Patient Follow-Up

	0 Does Not Apply	1 Not Important	2 Fairly Important	3 Important	4 Very Important	5 Critically Important
K42. Knowledge of ANSI standards for contact lenses.	<input type="radio"/>					
K43. Knowledge of methods for addressing the underlying cause of contact lens-related problems.	<input type="radio"/>					
K44. Knowledge of causes of common contact lens-related problems.	<input type="radio"/>					
K45. Knowledge of methods to use a lensometer to read the power of a contact lens.	<input type="radio"/>					
K46. Knowledge of procedures for using a slit lamp to assess fit of contact lenses.	<input type="radio"/>					
K47. Knowledge of methods to evaluate fit of contact lens and patient comfort during follow-up consultation.	<input type="radio"/>					
K48. Knowledge of laws and regulations related to post-fitting evaluation from prescribing medical professional.	<input type="radio"/>					
K49. Knowledge of prescription or fit problems that require referral to medical professionals.	<input type="radio"/>					
K50. Knowledge of methods for maintaining and recording patient information.	<input type="radio"/>					
K51. Knowledge of laws and regulations related to providing contact lens prescriptions to patients.	<input type="radio"/>					



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part III - Knowledge Ratings

21. How important is this knowledge for effective performance of tasks in your current work?

Scope of Practice

	0 Does Not Apply	1 Not Important	2 Fairly Important	3 Important	4 Very Important	5 Critically Important
K52. Knowledge of laws and regulations related to advertising contact lens dispenser services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K53. Knowledge of laws and regulations related to supervising contact lens dispenser trainees.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Part III - Knowledge Ratings

21. How important is this knowledge for effective performance of tasks in your current work?

Scope of Practice

	0 Does Not Apply	1 Not Important	2 Fairly Important	3 Important	4 Very Important	5 Critically Important
K52. Knowledge of laws and regulations related to advertising contact lens dispenser services.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K53. Knowledge of laws and regulations related to supervising contact lens dispenser trainees.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Contact Lens Dispenser (CLD) Occupational Analysis Questionnaire

Thank you!

Thank you for taking the time to complete this questionnaire. The California State Board of Optometry values your contribution.

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