BARRIERS AND RECOMMENDATIONS TO FACILITATING EARN AND LEARN TRAINING PROGRAMS IN ALLIED HEALTH PROFESSIONS
Acknowledgments

The Department of Consumer Affairs (DCA or Department) would like to extend its deepest gratitude to the AB 2105 Planning Committee members who committed their time, resources, knowledge, and expertise to providing DCA with technical assistance and guidance with this effort. DCA would also like to thank its healing arts boards, the California Department of Public Health (CDPH), the Division of Apprenticeship Standards (DAS), and the Medical Assisting, Mental Health, Nursing, and Specialty Imaging Subcommittee chairs, co-chairs, and members for their leadership and participation. This report would not have been possible without their gracious contributions. A complete list of stakeholder organizations that participated in this project can be found in Appendix A.

PLANNING COMMITTEE MEMBERS

| Annie Carney, Health Professions Education Foundation | Don Merrill, Division of Apprenticeship Standards |
| John Cordova, California Community Colleges Chancellor’s Office | Dr. Joseph Morris, California Board of Registered Nursing |
| Paul DeHerrera, California Department of Public Health | Dr. Jeffrey Mrizek, California Community Colleges Chancellor’s Office |
| Hellan Roth Dowden, HR Dowden & Associates | Gonzalo Perez, California Department of Public Health |
| Eric Elberg, Division of Apprenticeship Standards | Caryn Rizell, Office of Statewide Health Planning and Development |
| Brenda Fong, California Community Colleges Chancellor’s Office | Bekka Rosenbaum, Jewish Vocational Services |
| Christina Hicks, California Primary Care Association | Anette Smith-Dohring, Sutter Health |
| Francene Kennedy, Jobs for the Future | Elaine Yamaguchi, California Board of Vocational Nursing and Psychiatric Technicians |
| Matt Legé, Service Employees International Union-State Council | Linda Zorn, Butte College |
| Cathy Martin, California Hospital Association |  |
## Acronyms and Helpful Links

Below are the most commonly used acronyms and helpful links referenced throughout the report.

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AAMA</td>
<td>American Association of Medical Assistants (<a href="http://www.aama-ntl.org">www.aama-ntl.org</a>)</td>
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<tr>
<td>ABHES</td>
<td>Accrediting Bureau of Health Education Schools (<a href="http://www.abhes.org">www.abhes.org</a>)</td>
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<td>BBS</td>
<td>Board of Behavioral Sciences (<a href="http://www.bbs.ca.gov">www.bbs.ca.gov</a>)</td>
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<td>BRN</td>
<td>Board of Registered Nursing (<a href="http://www.rn.ca.gov">www.rn.ca.gov</a>)</td>
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<td>BVNPT</td>
<td>Board of Vocational Nurses and Psychiatric Technicians (<a href="http://www.bvnpt.ca.gov">www.bvnpt.ca.gov</a>)</td>
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<td>CAAHEP</td>
<td>Commission on Accreditation of Allied Health Education Programs (<a href="http://www.caahep.org">www.caahep.org</a>)</td>
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<td>CAI</td>
<td>California Apprenticeship Initiative (<a href="https://foundationccc.org/What-We-Do/Workforce-Development/Workforce-Services/California-Apprenticeship-Initiative">https://foundationccc.org/What-We-Do/Workforce-Development/Workforce-Services/California-Apprenticeship-Initiative</a>)</td>
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<td>CCCCO</td>
<td>California Community Colleges Chancellor’s Office (<a href="http://www.cccco.edu">www.cccco.edu</a>)</td>
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<td>CHW</td>
<td>Community Health Worker</td>
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<td>Clinical Laboratory Scientist</td>
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<td>CWDB</td>
<td>California Workforce Development Board (<a href="https://cwdb.ca.gov">https://cwdb.ca.gov</a>)</td>
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<td>DAS</td>
<td>Division of Apprenticeship Standards (<a href="http://www.dir.ca.gov/das/das.html">www.dir.ca.gov/das/das.html</a>)</td>
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<tr>
<td>DCA</td>
<td>Department of Consumer Affairs (<a href="http://www.dca.ca.gov">www.dca.ca.gov</a>)</td>
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<td>DIR</td>
<td>Department of Industrial Relations (<a href="http://www.dir.ca.gov">www.dir.ca.gov</a>)</td>
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<td>U.S. Department of Labor (<a href="http://www.dol.gov">www.dol.gov</a>)</td>
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<td>ETP</td>
<td>Employment Training Panel (<a href="https://etp.ca.gov">https://etp.ca.gov</a>)</td>
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<td>Health Career Advancement Program (<a href="https://hcapinc.org">https://hcapinc.org</a>)</td>
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<td>Health Professions Education Foundation (<a href="https://oshpd.ca.gov/loans-scholarships-grants/hpef">https://oshpd.ca.gov/loans-scholarships-grants/hpef</a>)</td>
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<tr>
<td>JRCERT</td>
<td>Joint Review Commission on Education in Radiologic Technology (<a href="http://www.jrcert.org">www.jrcert.org</a>)</td>
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Background

In 2016, Assembly Member Freddie Rodriguez authored AB 2105 (Chapter 410), which the Legislature passed and Governor Edmund G. Brown Jr. signed. AB 2105 required DCA to carry out a stakeholder process to update policies and remove barriers to facilitate the development of earn and learn training programs, which include apprenticeships in the allied health professions. The stakeholder process was to conclude by January 1, 2020. This report is a summary of the efforts by the Department of Consumer Affairs (DCA) to bring stakeholders together to identify specific barriers and potential solutions.

Earn and learn training programs are models that allow a person to receive compensation while also receiving the necessary training to learn the skills for a specific occupation.1 Apprenticeship, one of the highest standards of earn and learn, is a paid on-the-job training and education model and, in order to be registered at either the federal or state level, must have a number of components, which add rigor and standards.2 Allied health professions are generally considered to be a broad range of professions that are specially trained but are not physicians, dentists, or nurses.

Assembly Bill 2105, and preceding legislation, AB 1797 (Rodriguez, Chapter 157, Statutes of 2014), were aimed at increasing the number of earn and learn job training opportunities in the health care industry. Under AB 1797, the California Workforce Development Board (CWDB), in conjunction with the Division of Apprenticeship Standards (DAS), issued a report, Expanding Earn and Learn Models in the California Health Care Industry, which identified opportunities and barriers to expanding apprenticeship in health care. While DCA has not traditionally played a significant role in workforce development issues in the past, AB 2105 provided an opportunity for DCA to lead a stakeholder process aimed at addressing workforce needs in allied health professions.

The intent of these pieces of legislation was to address and mitigate future workforce shortages in allied health professions while also addressing the need for developing a workforce in the health care industry that reflects the communities they serve. While there is no single solution that will solve the allied health workforce shortage, studies conducted by several groups spanning at least a decade suggest that investing in earn and learn job training programs, where participants earn a wage while completing necessary training, may narrow the workforce gap and increase diversity within the health care industry.3

The mission and priority of DCA and its entities is ensuring the protection of California consumers through the licensure and regulation of professions, including many in the health care industry. Under DCA, there are 19 licensing boards that regulate health care professions. However, there are several professions in the health care industry that are not under the authority of DCA and its entities, such as certified nurse assistants and radiology technicians, and some that may not require any formal licensure by the state, such as medical assistants and medical coders (see Table 1). While there are barriers to implementing earn and learn training programs in the health care industry, there are no direct, specific prohibitions in DCA entities’ laws or regulations limiting the creation of these programs.

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1 AB 1797 Report ([https://www.dca.ca.gov/consumers/earn_and_learn.pdf](https://www.dca.ca.gov/consumers/earn_and_learn.pdf))
2 Components of a Registered Apprenticeship Program include structured on-the-job learning, incremental wage gains, and classroom instruction.
3 AB 1797 Report
However, there are indirect barriers that have been identified as limiting the ability to create earn and learn training programs.

### Table 1. Health Care Licensing Programs

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<tr>
<th>DCA Health Care Licensing Programs</th>
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<td>Board of Chiropractic Examiners</td>
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<td>Medical Board of California</td>
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<td>Naturopathic Medicine Committee</td>
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<td>California Board of Occupational Therapy</td>
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<td>California State Board of Optometry</td>
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<td>Osteopathic Medical Board of California</td>
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<td>California State Board of Pharmacy</td>
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<td>Physical Therapy Board of California</td>
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<td>Podiatric Medical Board of California</td>
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<td>Physician Assistant Board of Psychology</td>
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<td>Board of Registered Nursing</td>
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<td>Respiratory Care Board of California</td>
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<td>Speech-Language Pathology and Audiology and Hearing Aid Dispensers Board</td>
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<td>Board of Vocational Nursing and Psychiatric Technicians</td>
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<table>
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<th>Statutory Barriers</th>
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<td>Accreditation</td>
<td>Financing</td>
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<tr>
<td>Cultural</td>
<td>Education Structure</td>
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While apprenticeship models have been successful in the building/construction trade sectors, the health care industry has been slow to adopt the same models for several reasons. The scope of work performed in a patient care setting is inherently different than the scope performed in a building/construction trade setting. Additionally, health care employers, educational institutions, and community partners face significant challenges with developing sustainable training programs with the finite resources available. The apprenticeship barriers could be attributed to low Medi-Cal reimbursement rates, lack of a culture built around apprenticeship that is found in other industries as well as several other factors including staff (preceptor) time and administrative costs including the cost of documenting and reporting required for state apprenticeship programs, which are viewed by some stakeholders as onerous. This further makes it difficult for health care employers to budget for training programs, including payment of wages for students. Other industries that use earn and learn/apprenticeship models have established and accepted working relationships with unions and employee groups that allow them, through a council structure, to jointly discuss and plan for workforce needs. This does not appear to be as developed within the health care sector.

In April 2018, DCA convened a Planning Committee (Committee) to provide technical assistance and guidance with this effort. The Committee was comprised of subject matter experts representing health care employers, education, labor unions, community-based organizations, and government agencies. The Committee identified four key areas of focus and developed subcommittees to identify and address barriers specific to Medical Assisting, Mental Health, and Specialty Imaging. A subcommittee on Nursing was also established and was tasked with researching and compiling information on existing earn and learn training programs. DCA held a statewide webinar on October 2, 2018 to review its efforts to date and the role of the subcommittees going forward.

The subcommittees, comprised of subject matter experts in the specific focus areas, met from October 2018 through April 2019 to complete a rubric. The subcommittees were tasked with identifying and addressing barriers to the development of earn and learn job training programs in health care within the following categories:

- Statutory Barriers
- Regulatory Barriers
- Accreditation
- Financing
- Cultural
- Education Structure

The four subcommittees were developed based on stakeholder input, employer need, and where there was the greatest opportunity for earn and learn job training program development. While the four areas of focus are not reflective of all allied health professions, or needs across the various regions, the intent of DCA and the Planning Committee was to provide a framework that could possibly be replicated for other health professions. Between the Planning Committee and subcommittees, DCA held over two dozen stakeholder meetings between April 2018 and April 2019. The final Planning Committee meeting was held on September 17, 2019. This report is a culmination of the discussions and work conducted by DCA and the stakeholders.
BARRIERS AND RECOMMENDATIONS TO FACILITATING EARN AND LEARN TRAINING PROGRAMS IN ALLIED HEALTH PROFESSIONS

Key Findings and Recommendations

The barriers and recommendations listed below are cross-cutting themes emerging from DCA’s stakeholder process that included numerous Planning Committee and subcommittee meeting discussions as well as interviews, research, and analysis. The Planning Committee and DCA did not conduct a fiscal or implementation assessment of each recommendation.

1. Prohibitions on Payment by Program Accrediting Entities. Licensure boards enforce minimum qualifications for the professionals they regulate. It is through the enforcement of education, experience, and exam requirements that the boards approve qualified individuals to provide services. Education requirements are set forth in statutes and regulations although some boards do not evaluate training program content.

In some professions, some national accreditation entities are empowered to assess and approve educational programs. Accreditation is given to programs that are deemed to have met the standards by these accrediting entities. Through its deliberations, stakeholders identified some instances where accrediting entities prohibit the payment of wages for students completing hours of training. These prohibitions are not within the authority of DCA to unilaterally remove. These prohibitions may also be the result of cultural resistance to earn and learn training models.

Recommendation: Work with program accrediting entities to remove prohibitions on the payment of money to students and provide educational outreach to them about the value of earn and learn training models. Should accrediting entities refuse, further review may be required.

2. Lack of Demographic and Workforce Data. Stakeholders identified that a lack of available demographic and workforce data necessary to recognize needs and opportunities hinders the evaluation as to whether current investments are achieving intended outcomes, such as insuring the workforce reflects California’s population.

Almost all of DCA healing arts boards collect demographic data, but it is a voluntary request from licensees as only seven of the boards have mandates to collect this data. Additionally, data collection requirements are not standardized among the seven boards.

Business and Professions Code sections 2717, 2852.5, 3518.1, 3770.1, and 4506 require the Board of Registered Nursing (BRN), Board of Vocational Nursing and Psychiatric Technicians (BVNPT), Physician Assistants Board (PAB), and Respiratory Care Board (RCB), to collect data on applicants and licensees in the following fields: Race/Ethnicity, Gender, Languages Spoken, Educational Background, Classification of Primary Practice Site, and Location of Practice. Race/Ethnicity is optional, but all other information is mandatory for applicants to provide.

Recommendation: Using existing statutory authority from these boards as a model, require all healing arts boards under DCA and the California Department of Public Health (CDPH) to collect demographic and workforce data at initial licensure and at renewal.

3. Registered Apprenticeship Requirements Are Not Aligned with Allied Health Training Programs. While federal and state apprenticeship standards allow for competency-

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1 One example is the Commission on Accreditation for Respiratory Care (CoARC), which has standards that prohibit students from being employees or being paid for educational clinical work.
based programs, and competency-based programs appear to be a better fit for health professions, programs must still have 2,000 hours of on-the-job training. Credit for work and education related to skill attainment can be applied to meet the 2,000 hours; however, apprentices receiving credit must be in a state-registered program a minimum of six months. Entry level allied health training programs require less than 2,000 hours and often less than 1,000 hours of on-the-job training. This makes these programs ineligible for state apprentice registration under the time-based and competency-based models; however, these programs could be registered into a pre-apprenticeship program if there is a linkage agreement with a state-registered apprenticeship program.

**Recommendation:** Evaluate the requirements to increase the flexibility for apprenticeship programs in allied health professions. Determine possible workarounds that could be applied in the health professions. The Division of Apprenticeship Standards (DAS) could leverage the new Interagency Council on Apprenticeship (IACA) health subcommittee to help address these issues.

4. **Lack of Knowledge About Registered Apprenticeship for the California Health Care Industry.** Stakeholders experienced challenges with engaging other parties who were not familiar with earn and learn models. While there are materials available on a federal level, there is a lack of information applicable to the health care sector on apprenticeship and earn and learn programs in California. Additionally, there is no clearly delineated process for registering apprenticeships in the health care industry. Stakeholders have reported that it is unclear where they have to go for each step in the process of creating an earn and learn training program.

**Recommendation:** Develop a comprehensive health-centric employer guide/toolkit for the California Registered Apprenticeship Process through the DAS, including how to work with the DAS, the list of steps necessary for the creation of an apprenticeship program, the value that registering an apprenticeship provides, and accessing funding to support program development and implementation. This effort could also include mapping and streamlining the process for establishing a registered apprenticeship program and developing an information portal for sharing contacts, program information, educational resources, and best practices.

5. **Lack of Coordinated Effort.** There was general consensus among the stakeholders that not having a single entity responsible for earn and learn training programs in the health care industry or a single point of contact is a barrier to easily accessing resources and information. State agencies and nongovernmental organizations fill various roles in the development of successful programs and the removal of barriers. Further, there have been several initiatives throughout the state focused on expanding earn and learn programs in the health care industry with little to no coordination among all groups. Coordinating resources would result in greater progress in expanding earn and learn programs in the California health care industry.

**Recommendation:** Establish a workgroup that will serve as the centralized task force on earn and learn job training programs including pre-apprenticeship, apprenticeship, youth employment, subsidized employment, and on-the-job training in health care. Develop a collaboration between state and regional entities, the Office of Statewide Health Planning and Development (OSHPD), Community Colleges Health Sector navigators, Department of Health Care Services (DHCS), DCA, CDPH, and the Labor Agency to address the barriers across training, education, and health entities in the state. The IACA may provide an effective starting point for addressing this issue.

6. **Lack of Available Data on the Economic Benefit of Earn and Learn Job Training Programs in Health Care in California.** Empirical research on the economic benefit of earn and learn job training programs, specifically for apprenticeship programs, has been conducted largely in the building trades sector. Employers and educational institutions may be reluctant to commit to an earn and learn job training model because of the concern on the cost/benefit ratio. The costs of developing and implementing a program are generally easier to measure than the benefits, and research for health care earn and learn training programs in California is inadequate. Employers are not able to easily
identify a return on the investment of an earn and learn training program in health care settings.

**Recommendation:** Identify and gather data to study the economic benefits and value of earn and learn training programs for health care employers and programs sponsors in California. This may require additional time as data may not be easily accessible.

7. **Funding.** Not-for-profit health care employers, educational institutions, and partners face significant challenges with developing sustainable training programs with the finite resources available. Some employers attribute this to low Medi-Cal reimbursement rates as well as several other factors including staff (preceptor) time and administrative costs including the cost to fulfill documenting and what they perceive to be onerous reporting requirements for state apprenticeship programs. This further makes it difficult for health care employers to budget for training programs including payment of wages for students fulfilling their clinical placement requirements.

State investments in earn and learn training programs include various funding structures. One model is the Employment Training Program (ETP), which not-for-profit health care employers cannot access since they do not contribute to this funding source. Other existing programs, such as those managed by OSHPD, are grant-based programs that expend funds from ongoing funding sources, such as Proposition 63 funds. Employers, educational institutions, and partners struggle to create ongoing programs using their own resources after grant dollars have been exhausted.

Further complicating the funding predicament is that state/federal registration does not guarantee Related Supplement Instruction (RSI) funds through the California Apprenticeship Initiative (CAI) grants or other Workforce Innovation and Opportunity Act (WIOA) funding.

Since CAI grants are derived from Proposition 98 funds, public universities are not eligible for CAI grants as they are not Local Education Agencies (LEAs). Given that some health professions require at least a four-year or master’s-level degree, creating a complimentary program for California State University (CSU) and the University of California (UC) could help sustain programs.

Similar to finding No. 5, stakeholders have also expressed that not having a single entity that oversees funding programs makes it difficult for program sponsors to understand how to fund an earn and learn program and locate contacts and resources. Further, individuals completing education or training outside of the traditional classroom setting are not eligible for financial aid (e.g., clinical laboratory scientist who must complete one year of post-baccalaureate training through an employer).

**Recommendations:** Explore the potential of developing a sustainable funding structure for earn and learn training programs using existing models, such as the programs administered by OSHPD via funding collected by licensing boards at initial licensure and renewal.

Consider applying the ETP model to nonprofit health providers using their public benefit funds to fund workforce training that draws workers from the community and diversifies the workforce.

Explore the potential for a CAI model for CSUs and UCs.

8. **Difficulty Finding Clinical Practicum Sites and Program Sponsors.** There is a reluctance to develop earn and learn job training programs, mostly due to already impacted programs and decreased clinical sites required for licensure. Unforeseen bottlenecks could make addressing workforce shortages difficult.

**Recommendations:** Consider innovative training models, such as increased use of simulation for clinical training and telehealth for supervision.

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2 Proposition 63 in 2004 established a state personal income tax surcharge of 1% on taxpayers with annual taxable incomes of more than $1 million. Funds resulting from the surcharge are used to expand county mental health programs. (Legislative Analyst’s Office, https://lao.ca.gov/ballot/2004/63_11_2004.htm)

3 The Licensed Mental Health Services Provider Education Program, Steven M. Thompson Physician Corps Loan Repayment Program, and Bachelor of Science Nursing Loan Repayment Program are examples of OSHPD programs funded by licensees of boards under DCA.
For program sponsors struggling to find qualified preceptors, identify incentives to increase participation (e.g., granting continuing education credit for licensees that serve as preceptors⁴).

Utilize information reported via implementation of SB 1348 (Pan, Chapter 901, Statutes of 2018), which requires the California Community Colleges Chancellor’s Office and the Bureau of Private Postsecondary Education to gather metrics on allied health clinical programs, to further refine how to address this issue.

9. Educational Structure. It is difficult to develop career pathways from high school through graduate degree programs when there are overlapping requirements that may require repeating coursework to move between or within professions. This may also be reflected in licensure requirements. For example, the lack of common prerequisites at the post-secondary level for all health care programs have also been identified as a barrier to earn and learn job training program development. Curriculum design and implementing changes can be an extremely lengthy and multi-layered process. There is not a clear earn and learn process that will allow community colleges’ health programs to quickly adapt to industry needs.

Additionally, the wage disparity between instructors and working health care professionals makes it difficult for educational institutions to recruit and retain instructors, which creates a bottleneck in developing more programs and the ability to grow existing programs.

Recommendation: Support and expand existing programs, such as the Health Workforce Initiative (HWI) within the California Community Colleges Chancellor’s Office, in efforts to align nursing programs and develop a common curriculum for statewide adoption. Model the HWI process for other allied health training programs. Support stackable credentials though the creation of pathways for health care workers.

⁴ The California Board of Occupational Therapy offers continuing education credit (known as professional development units or PDUs) for licensees that supervise students.
Further Efforts

EFFORTS TO ADDRESS LICENSURE BARRIERS AND WORKFORCE DEVELOPMENT

By 2020, California is projected to need nearly half a million health care workers to meet the health care services demand. Increased demand for services will account for 250,000 new health care jobs. Retirement of existing workers will account for 200,000 jobs.1 This growth is projected across all areas of the health care workforce with employment in the allied health workforce, expected to make up roughly 40% of the projected workforce needs.2 The allied health occupations provide a path to the middle class and will be one of the fastest growing occupational groups, growing at a rate of 23.6%.3

Earn and learn job training models, such as apprenticeship, youth employment, subsidized employment, and on-the-job training programs, can provide opportunities for low-income students from underrepresented communities to gain entry into the health care industry and advance into career paths leading to high-paying and high-demand health care professions. Studies on the long-term care workforce, such as the one conducted by the University of California, San Francisco (UCSF), found an inverse relationship between racial/ethnic diversity and educational attainment—as the level of educational attainment increased, the share of employed nonwhite health care workers in long-term care decreased. The study further found that financial assistance for those wishing to pursue additional education4 was needed for the expansion of earn and learn job training models.

As the state continues to make investments in workforce development in the health care industry, regulatory entities, such as DCA and CDPH, have proactively undertaken initiatives to streamline processes to expeditiously license qualified applicants to allow timely entrance into the California workforce and to try to remove artificial barriers to licensure.

• The California Board of Occupational Therapy appointed an ad hoc committee to explore the development of a pilot apprenticeship program to address the shortage of facilities accepting clinical/fieldwork placements for students seeking to become occupational therapy assistants.

• The Board of Registered Nursing (BRN) established a Nurse Education and Workforce Advisory Committee (NEWAC) to advise the BRN members and staff on issues affecting the nursing workforce in California. BRN also conducts multiple surveys annually to gather additional data on nursing education and the workforce.5

• The Board of Behavioral Sciences (BBS) through legislation reduced the total required supervised experience hours from 3,200 to 3,000 for licensed clinical social workers (LCSW).6

○ BBS, through legislation, increased opportunities for associates (LCSWs, licensed marriage and family therapists, and licensed

1 https://www.ppic.org/content/pubs/report/R_914SMR.pdf
2 AB 1797 Report
5 https://www.rn.ca.gov/consumers/advcommittees.shtml#nwa
6 https://www.bbs.ca.gov/pdf/legupdate_18.pdf
professional clinical counselors) to gain supervised work experience hours toward licensure by allowing triadic supervision (one supervisor to two associates).

- BBS has worked to streamline processes and remove barriers for applicants who hold a license in another jurisdiction of the United States as a marriage and family therapist, clinical social worker, or professional clinical counselor.7

- The Dental Hygiene Board of California recently obtained additional staffing to explore alternate pathways to licensure. While the costs and feasibility are yet to be determined, the expectation is that alternative pathways may grant the flexibility to establish nontraditional training programs.

**CALIFORNIA DEPARTMENT OF PUBLIC HEALTH**

DCA is not the only entity that regulates health care professionals in the state. CDPH also regulates health care professionals in California and has implemented a number of initiatives to streamline its licensing processes.

- **Training Program Review Unit (TPRU):** CDPH established the TPRU mailbox, which allows all applications to be immediately received into the unit and reduce delays in receiving applications by mail or fax.

- **Templates:** CDPH developed template policies and procedures that cut application processing times by half.

- **Process Improvements:** CDPH streamlined instructor application approvals, reducing processing times by 30%.

The stakeholder process has yielded increased collaboration between DCA and CDPH. The professions within the nursing field are currently regulated by multiple agencies—BRN and BVNPT under DCA and the Licensing and Certification Program under CDPH. Through the efforts working on this project, these three entities have increased communication and collaboration in enforcement activities to better protect consumers.

**DIVISION OF APPRENTICESHIP STANDARDS**

In February 2019, the Division of Apprenticeship Standards (DAS) began holding its first meetings of the Interagency Council on Apprenticeship (IACA). The IACA was established in the Shelley-Maloney Apprentice Labor Standards Act with the passage of SB 235 (O’Donnell, Chapter 704, Statutes of 2018). The committee provides guidance to the administrator of apprenticeship and chief of DAS on apprenticeship programs, standards, and agreements in nonbuilding trades industries.

**THE FIVE SUBCOMMITTEES UNDER THE INTERAGENCY COUNCIL ON APPRENTICESHIP ARE:**

- Health Care
- Information Technology
- Civil Service
- Advanced Manufacturing
- Pre-Apprenticeship and Equal Employment Opportunity

Ongoing, the Health Care subcommittee may provide a valuable venue for exploring some of the potential solutions identified in this report.

<table>
<thead>
<tr>
<th>MONTH</th>
<th>APPRENTICESHIP NAME</th>
<th>OCCUPATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2019</td>
<td>OPENTECH LA Apprenticeship Committee</td>
<td>Health Information Technology Specialist, Computer Support Specialist, Computer Programmer, Information Technology Project Manager, Clinical Laboratory Scientist, Medical Laboratory Technician, Information Security Analyst, Microbiology Quality Control Technician, and Chemistry Quality Control Technician</td>
</tr>
<tr>
<td>February 2019</td>
<td>Strong Workforce Apprenticeship Group Health Care Apprenticeship Program</td>
<td>Certified Nurse Assistant, Medical Laboratory Technician</td>
</tr>
<tr>
<td>June 2019</td>
<td>Shirley Ware Education Center (Kaiser Permanente and Dignity Health)</td>
<td>Hospital Coder, Medical Assistant, Ambulatory Coder, Central Sterile Processing Technician, Surgical Technologist</td>
</tr>
<tr>
<td>July 2019</td>
<td>Allied Health West (UAC)</td>
<td>Medical Assistant</td>
</tr>
<tr>
<td>July 2019</td>
<td>Rightavenity Technology Workforce Immersion Program</td>
<td>Application Developer, Helpdesk Technician, IT Project Manager, Information Assurance Specialist, E-Commerce Specialist, Health IT Specialist, Health Information Management Business Analyst, Health Information Data Analyst, and Clinical Documentation Improvement Specialist</td>
</tr>
<tr>
<td>July 2019</td>
<td>Martinez Adult Education (MAE) Optical Assistant Training Program</td>
<td>Optical Assistant</td>
</tr>
<tr>
<td>August 2019</td>
<td>CCHCS LVN to RN Apprenticeship Expansion Program Joint Apprenticeship Committee</td>
<td>Registered Nurse</td>
</tr>
</tbody>
</table>

7 SB 679 [http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200SB679](http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201920200SB679)
OPPORTUNITY FOR FURTHER RESEARCH

• Hospital employers have shared during this process that there is a tremendous need for clinical laboratory scientists (CLSs). CLSs assist physicians with determining treatment plans by performing a variety of diagnostic assessments. The California Hospital Association found CLSs to be one of the top three occupations having the highest retirement eligibility figures. A shortage of CLSs will significantly impact physicians’ ability to diagnose and treat patients quickly and efficiently.

CLSs require a bachelor’s degree and one year of post-baccalaureate training, which stakeholders have expressed may meet registered apprenticeship requirements. This is an area of high demand and also high opportunity for potential earn and learn job training program development.

• Surveys should be conducted of regional workforce development boards and registered apprenticeship programs in health care that are approved by DAS. This effort may yield additional perspectives on barriers or difficulties in establishing earn and learn training programs in health care. Regularly assessing these groups will provide continuous improvement to the process of developing earn and learn training programs.
Subcommittees

The AB 2105 Planning Committee identified four specific areas of focus in the allied health professions to review, gather barriers, and identify possible solutions. These four subcommittees were identified as areas of need by the Planning Committee and where time and effort would be best utilized.

- Medical Assistants
- Specialty Imaging
- Mental Health
- Nursing

The rubrics included in this section are working documents that reflect the issues and ideas discussed during those meetings with the relevant stakeholders. The potential solutions have not been fully vetted for fiscal or implementation impacts.

MEDICAL ASSISTANTS

Medical assistants (MAs) are unlicensed individuals who perform noninvasive routine technical support services under the supervision of a licensed physician and surgeon, podiatrist, physician assistant, nurse practitioner, or nurse midwife in a medical office or clinic setting.¹ The MA’s employer and/or supervising physician’s or podiatrist’s malpractice insurance carrier may require that the MA be certified by a national or private association. So long as the MA will not be training other MAs, such a certification may come from a national or private association and is not required to come from one of the board-approved MA-certifying organizations. Only MAs who will train other MAs must be certified by one of four certifying organizations approved by the Medical Board of California.²

1. Source: Centers of Excellence, Health Workforce Initiative, and California Hospital Association 2014 survey
   http://coeccc.net/reports/834da18a-9103-4965-b1f9-d0e3e9265d61

2. http://www.mbc.ca.gov/Licensees/Physicians_and_Surgeons/Medical_Assistants/Medical_Assistants_FAQ.aspx

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FIGURE 1

% of Employers That Require Certification

- 31% No Certification Required
- 69% Certification Required

Accepted Certifications

- 10% Other
- 29% Registered Medical Assistant (RMA)
- 50% California Certified Medical Assistant (CCMA)
- 82% California Medical Assistant (CMA)

Source: Centers of Excellence, Health Workforce Initiative, and California Hospital Association 2014 survey
http://coeccc.net/reports/834da18a-9103-4965-b1f9-d0e3e9265d61
BARRIERS AND RECOMMENDATIONS TO FACILITATING EARN AND LEARN TRAINING PROGRAMS IN ALLIED HEALTH PROFESSIONS

The Career Ladder Mapping Project was an effort to address workforce shortage in health care and was led by Service Employees International Union (SEIU) Local 250 and Kaiser Permanente, Northern California. Jobs for MAs will increase by 29.2%, or 24,800 jobs between 2016 and 2026, making medical assistants one of the fastest growing occupations in California. Employment growth is expected because of the increase in the number of group practices, clinics, and other health care facilities that need greater numbers of support personnel, particularly the flexible MA who can handle both administrative and clinical duties.3

Hospitals, community clinics, and public health systems have reported a high demand for MAs. Hospitals and public health systems in the Bay Area, particularly, face difficulty retaining MAs due to the relatively low wages and high cost of living. Moreover, community clinics experience difficulty with retaining MAs who are often likely to leave the community clinics for the higher-paying hospital setting. The Career Ladder Mapping Project effort4 identified MAs as one of the points in which individuals can enter the health care workforce and then advance into various roles, providing a path to the middle class. See Figure 3.

Medical assistants who pursue further education and training usually advance to licensed vocational nurse and registered nurse occupations. While MA earn and learn programs exist, stakeholders have expressed concerns with sustainability. Further, efforts to expand or scale existing programs have been slow. The following rubric reflect the barriers identified and possible solutions discussed during the Medical Assistant subcommittee meetings.

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3 https://www.labormarketinfo.edd.ca.gov/OccGuides/Detail.aspx?Soccode=319092&Geography=0604000085
4 The Career Ladder Mapping Project was an effort to address workforce shortage in health care and was led by Service Employees International Union (SEIU) Local 250 and Kaiser Permanente, Northern California.
BARRIERS AND RECOMMENDATIONS TO FACILITATING EARN AND LEARN TRAINING PROGRAMS IN ALLIED HEALTH PROFESSIONS

FIGURE 3
Career Ladder Pathways

DOCTORAL NURSING DEGREE (PhD)
- MASTER’S ENTRY PROGRAM IN NURSING (MEPN)
- CLINICAL NURSE SPECIALIST (MSN)
- CERTIFIED REGISTERED NURSE ANESTHETIST (MSN)
- MASTER’S OF SCIENCE NURSING (MSN)
- NURSE PRACTITIONER (MSN)
- CERTIFIED NURSE MIDWIFE (MSN)

BACHELOR OF ARTS OR SCIENCE (BA/BS)
- OCCUPATIONAL THERAPIST
- PHYSICAL THERAPIST
- PHYSICAL THERAPY ASSISTANT
- OCCUPATIONAL THERAPY ASSISTANT

DOSEMETRY/ PET SCAN
- NUCLEAR MED TECH, MRI TECH, RADIATION THERAPY TECH

ORTHODO TEC, EKG TECH, ED TECH, OB MONITOR TECH, ECHO TECH, OPTICAL TECH
- PHARMACIST
- PHYSICIAN ASSISTANT (A.D.N.)

RESPIRATORY THERAPY TECH
- PHYSICIAN ASSISTANT (PA-C)

LAB TECH
- LAB ASSISTANT/ PHLEBOTOMIST

RECESSION
- MEDICAL CODE/BILLER
- MEDICAL CODE TRAINEE

ENVIRONMENTAL SERVICES, FILE CLERK, DIETARY AIDE, CENTRAL SUPPLY TECH
- HEALTH CARE CONTACT SPECIALIST (CALL CENTER), RECEPTIONIST

DIRECT PATIENT CARE
- TECHNICAL AREAS
- CLERICAL
- ENTRY-LEVEL POSITIONS


Kaiser Permanente Labor Management Partnership Career Ladder Workgroup & The Shirley Ware Education Center 9/02 Appendix A
<table>
<thead>
<tr>
<th>STATUTORY BARRIERS</th>
<th>Identify Barrier</th>
<th>Recommendation 1</th>
<th>Recommendation 2</th>
<th>Key Stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Most training programs do not meet the required 2,000-hour training requirement per section 3077 of the Labor Code for state registration.</td>
<td>DAS to provide guidance on how to comply with the hour requirement.</td>
<td>DAS</td>
<td></td>
</tr>
<tr>
<td>REGULATORY BARRIERS</td>
<td>Title 8 CCR section 212.2 requires apprenticeship programs comply with all applicable federal and state law and regulations (including the 2,000-hour requirement) to be eligible for DAS approval.</td>
<td>DAS to provide guidance on how to comply with the hour requirement.</td>
<td>DAS</td>
<td></td>
</tr>
<tr>
<td>ACCREDITATION</td>
<td>CAAHEP and MAERB 2015 standards adopted by AAMA requires students to complete 160 unpaid, supervised hours. <a href="https://www.caahep.org/CAAHEP/media/CAAHEP-Documents/MedicalAssistingStandards.pdf">https://www.caahep.org/CAAHEP/media/CAAHEP-Documents/MedicalAssistingStandards.pdf</a></td>
<td>Have DCA request the accrediting bodies allow for apprenticeships/earn and learn programs.</td>
<td>DCA, accrediting bodies, DAS</td>
<td></td>
</tr>
</tbody>
</table>
| FINANCING | 1. Reimbursement is a barrier to paying students.  
2. Employer incentives are not aligned with training and educating the workforce. Good employees tend to leave.  
3. Financial cost of training—wages, classroom hours, backfill, administration costs, etc.  
4. K-12 schools cannot pay students because it counts as a public gift.  
5. Need sustainable funding not just grant dollars. | Include reimbursement of students/trainees as an allowable cost toward hospital’s/clinic’s community benefit program. | Increase community college reimbursement for allied health programs to defer the cost of trainees.  
Increase the availability of California Apprenticeship Innovation grants. | Legislature, DCA, community colleges, industry |
| CULTURAL | 1. There are cultural barriers between apprenticeship and how employers think about training and educating their workforce.  
2. Employers do not want to take on the malpractice/liability.  
3. There is a misconception that students who are trained using an apprenticeship model are not equipped with the correct courses and/or skills needed in the field.  
4. No employer consensus on training/certification. Hard for education providers to hit a moving target. | Utilize potential education campaigns and work with DAS to put out health care-focused materials that walk through how to set up and sustain a program. | Industry to partner with community colleges to create pathways focused on earn and learn health care program that meet industry short/long term need. | DAS, education institutions, industry |
| EDUCATION STRUCTURE | There are examples of medical assistant earn and learn programs. However, they still have issues:  
1. Curriculum designs/changes can be an extremely lengthy and multi-layered process.  
2. The entry level education does not prepare the workforce for employer needs.  
3. Hard to create an earn and learn pathway because of tension between nonpaid students waiting to get in and paid students. | Allow apprenticeship programs that meet industry need to adjust curriculum through an expedited process. | Allow for online completion of didactic courses to allow for flexibility and the ability to spread the cohort over multiple employers across the state. | |
SPECIALTY IMAGING

While the initial scope of this subcommittee was to focus on “specialty imaging,” the group later took a broader approach and encompassed the broader “imaging” profession in its discussions.

The imaging workforce is comprised of several professions including a number of specialties. Imaging professionals, such as radiological technologists (“rad tech”) and diagnostic sonographers, who provide vital services, use X-rays, MRIs, and ultrasound equipment to help health care providers view inside the human body and perform these functions in inpatient and ambulatory settings. Health care employers report that the need is for specialty imaging modalities, such as cardiovascular and interventional radiology (CVIR). The growing and aging population and the increased demand for diagnostic imaging will result in continued job growth.

To help alleviate the imaging professional shortage, industry leaders will need to establish industry baselines for what is considered a well-trained industry professional. Employers have reported that students coming out of the training programs are not trained to desired levels. Once the baseline is identified, the professional imaging industry will be able to set standards that may open earn and lean programs to a wider demographic of applicants.

Further barriers exist because there is a misalignment of incentives and goals as employers are not incentivized to deal with their own needs. Businesses have to spend a lot of money on training the imagining professionals. Once they are trained, they tend to leave for better and higher paying jobs. For employers to invest in training pathways that open opportunities for all regardless of socioeconomic background, employers need to see a return on their investment.

Figures 4 and 5 show the changes in the professional imaging employment levels from 2012 to 2015 and, as they show, a shortage was already starting to develop in the industry. In reviewing the data below, the amount of imaging professionals were already not meeting demand. With the expansion of population, there is more of a need for earn and learn programs to become more accessible to potential imaging professionals.

FIGURE 4

6 www.labormarketinfo.edd.ca.gov/OccGuides/Detail.aspx?Soccode=292037&Geography=0604000000
The following rubric reflects the barriers identified and possible solutions discussed during the Specialty Imaging subcommittee meetings.

<table>
<thead>
<tr>
<th>STATUTORY BARRIERS</th>
<th>RECOMMENDATION 1</th>
<th>RECOMMENDATION 2</th>
<th>KEY STAKEHOLDERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most training programs do not meet the required 2,000-hour training requirement per the Labor Code for state registration.</td>
<td>There does not seem to be an issue for radiologists because the hour requirement is close to the traditional training requirements.</td>
<td>For the imaging specialties that do not require 2,000 hours, a competency-based equivalent should be developed to satisfy the hour requirement.</td>
<td>CDPH, DAS</td>
</tr>
<tr>
<td>REGULATORY BARRIERS</td>
<td>DAS to provide guidance on how to comply with the hour requirement.</td>
<td>DAS</td>
<td></td>
</tr>
<tr>
<td>Title 8 CCR section 212.2 requires apprenticeship programs comply with all applicable federal and state law and regulations (including the 2,000-hour requirement) to be eligible for DAS approval.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Labor Statistics

FIGURE 5

<table>
<thead>
<tr>
<th>EMPLOYMENT CHANGES FROM 2012 TO 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CALIFORNIA</strong></td>
</tr>
<tr>
<td>2012</td>
</tr>
<tr>
<td>Radiation Therapists</td>
</tr>
<tr>
<td>Nuclear Medicine Technologists</td>
</tr>
<tr>
<td>MRI Technologists</td>
</tr>
<tr>
<td>Diagnostic Medical Sonographers</td>
</tr>
<tr>
<td>Radiologic Technologists</td>
</tr>
<tr>
<td><strong>UNITED STATES</strong></td>
</tr>
<tr>
<td>2012</td>
</tr>
<tr>
<td>Radiation Therapists</td>
</tr>
<tr>
<td>Nuclear Medicine Technologists</td>
</tr>
<tr>
<td>MRI Technologists</td>
</tr>
<tr>
<td>Diagnostic Medical Sonographers</td>
</tr>
<tr>
<td>Radiologic Technologists</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Labor Statistics
<table>
<thead>
<tr>
<th>IDENTIFY BARRIER</th>
<th>RECOMMENDATION 1</th>
<th>RECOMMENDATION 2</th>
<th>KEY STAKEHOLDERS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Joint Review Commission on Education in Radiologic Technology (JRCERT)</strong> has taken the position that students who received wages for their clinical hours would be construed as employees by JRCERT, thus rendering it “inconsistent with JRCERT accreditation policies and standards.” (Standard 1.3) (<a href="https://sccrcolleges.org/images/jcordova/Thurmond_Letter_3-22-17.pdf">https://sccrcolleges.org/images/jcordova/Thurmond_Letter_3-22-17.pdf</a>)</td>
<td>Request for JRCERT to update their standards to recognize/allow for an earn and learn pathway. Petition ABHES to update language to accommodate earn and learn pathway.</td>
<td>Mandate that all accrediting bodies for allied health must recognize/allow for an earn and learn pathway. This mandate would not require a training program to have an earn and learn pathway.</td>
<td>CDPH, JRCERT, Legislature, industry, education institutions</td>
</tr>
<tr>
<td><strong>Accrediting Bureau of Health Education Schools (ABHES)</strong> is used as an institutional accreditor for some “freestanding” allied health education schools. ABHES also has specific programmatic standards for some occupations, which it does not programatically accredit but which may be included within an institution’s grant of accreditation. The standards for diagnostic medical sonography and radiologic technology/radiography include language that forbids remuneration for training hours:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DIAGNOSTIC MEDICAL SONOGRAPHY</strong></td>
<td>CH VIII Program Evaluation Standards for Diagnostic Medical Sonography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMS.A.2.(c) Supervision: “Students may not replace existing staff or be compensated while participating in externships and this fact is made known to the student. The student is clearly in addition to the staff/team and not a substitution.”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RADIOLOGIC TECHNOLOGY/RADIOLOGY</strong></td>
<td>CH VIII Standards for Radiologic Technology/Radiography</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RT.A.3.(a) Assignment and Administration: “... Students may not replace existing clinical site personnel and may not receive compensation while participating in the clinical experience. Admissions or other clinical experience preparatory documents (e.g., clinical agreement) must include these disclosure requirements. Under no circumstances may a student be considered an employee or serve as a staff substitution. Rather, students serve in a capacity to experience relevant processes and procedures in order to learn and master the required skills of the profession.”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IDENTIFY BARRIER</td>
<td>RECOMMENDATION 1</td>
<td>RECOMMENDATION 2</td>
<td>KEY STAKEHOLDERS</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------</td>
<td>------------------</td>
<td>------------------</td>
</tr>
<tr>
<td><strong>FINANCING</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Reimbursement is a barrier to paying students.</td>
<td>Include reimbursement of students/trainees as an allowable cost toward hospital’s community benefit program.</td>
<td>Increase community college reimbursement for allied health programs to defer the cost of trainees.</td>
<td>Legislature, CDPH, community colleges, industry, CSU, other clinical site providers</td>
</tr>
<tr>
<td>2. Employer incentives are not aligned with training and educating the workforce. Employers are not incentivized to deal with their own needs. It costs $100,000 to cross train and once employees become specialized, they tend to leave.</td>
<td>Focus on post-licensure occupations because the employer burden of wages is less of a concern because these individuals are likely to be already working and earning a salary.</td>
<td>Increase the availability of California Apprenticeship Innovation grants. ETP has adopted several initiatives in the past to serve nonprofit organizations. Work with ETP to establish such an alternative funding program.</td>
<td></td>
</tr>
<tr>
<td>3. Financial cost of training—wages, classroom hours, backfill, administration costs, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CULTURAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. There are cultural barriers between apprenticeship and how employers think about training and educating their workforce.</td>
<td>Potential education campaigns and work with DAS to put out health care focused materials.</td>
<td>Industry could partner with community colleges to create pathways focused on earn and learn health care program that meet industry short/long term needs.</td>
<td>DAS, education institutions, industry</td>
</tr>
<tr>
<td>2. Employers do not want to take on the malpractice/liability.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. There is a misconception that students who are trained using an apprenticeship model are not equipped with the correct courses and/or skills needed in the field.</td>
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</tr>
<tr>
<td>4. There is a history of hospital-based programs that current education programs believe were not up to today’s standards.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EDUCATION STRUCTURE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wisconsin has a time-based registered federal apprenticeship for MRI techs, approved in 2006: <a href="http://www.doleta.gov/OA/bul06/bulletin_2006-26-MRI-CT_Tech-Medical_Coder-Mammogram.pdf">www.doleta.gov/OA/bul06/bulletin_2006-26-MRI-CT_Tech-Medical_Coder-Mammogram.pdf</a></td>
<td>1.1 Allow apprenticeship programs that meet industry need to adjust curriculum through an expedited process.</td>
<td>Allow for online completion of didactic courses to allow for flexibility and the ability to spread the cohort over multiple employers across the state.</td>
<td>Community colleges, training programs, CSU, industry</td>
</tr>
<tr>
<td>The Indiana Air National Guard has an approved diagnostic imaging apprenticeship (military only) from 2004: <a href="https://doleta.gov/OA/04/Bul2004-19%20Occ-New%20Apprenticeable%20Occupations%20Military%20Only.pdf">https://doleta.gov/OA/04/Bul2004-19%20Occ-New%20Apprenticeable%20Occupations%20Military%20Only.pdf</a></td>
<td>1.2 Work with industry to create a pre-licensure program to advance certification curriculum.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Curriculum designs/changes can be a lengthy and multi-layered process.</td>
<td>1.3 Provide didactic training.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Employers felt that a disconnected workforce needed more connectivity between entry level rad techs and more advanced specialties.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Entry level education providers do not prepare the workforce for current employer needs. In particular, the current educational need does not meet the requirements for specialties, such as pharmacology.</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
MENTAL HEALTH

Between 2011-2015, only 37.2% of California adults who had a mental illness received mental health treatment in the last year. The Office of Statewide Health Planning and Development (OSHPD) further found that the percentage of California adults with a mental illness and the percentage of California adolescents with major depression who received treatment within the past year were lower than the percentages in the U.S. overall. 

A report issued by the Health Center at UCSF entitled California’s Current and Future Behavioral Health Workforce highlights the need for an adequate supply of behavioral health workers who are distributed equitably across the state and reflect the demographic of the state’s population. Stakeholders across the various sectors of mental health agree there is a need to establish academic ladders that will provide opportunities for individuals with certificates or degrees to pursue education and training leading to licensure through a workplace-based training program.

The Mental Health subcommittee focused on the following mental health/behavioral health professionals and discussed how apprenticeship can be leveraged to build a career ladder to get individuals from entry level professions into the fully licensed mental/behavioral health professions.

• Licensed Clinical Social Worker (LCSW)
• Licensed Marriage and Family Therapist (LMFT)
• Licensed Professional Clinical Counselor (LPCC)
• Licensed Educational Psychologist (LEP)

The above professionals are licensed by BBS. Each discipline requires either a qualifying master’s or doctorate degree, 3,000 hours of supervised experience (gained as an employee or volunteer), the passage of an examination, and licensure application approval.

Data suggests that based on current service utilization patterns, by 2028, California will have 11% fewer psychologists, LMFTs, LPCCs, and LCSWs than needed. The mental health workforce shortage is shared across the United States due in part to the aging workforce.

As states explore strategies to fill the need, new training models emerge. Washington recently developed innovative apprenticeship programs that serve as a workplace-based career pathway program, taking individuals from entry level peer counselors to fully licensed clinical social workers or marriage and family therapists. See Figures 6 and 7.

Career pathway earn and learn programs such as this, if developed in California, can serve to increase the number of diverse, competent licensed and nonlicensed professionals, expand the capacity of California’s current mental health workforce, and provide greater access to care. Moreover, career pathway programs can lead to economic self-sufficiency.

FIGURE 6

<table>
<thead>
<tr>
<th>Profession</th>
<th>On-the-job Training</th>
<th>RSI Hours</th>
<th>Degree and Experience Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health Professional</td>
<td>6,000 hours</td>
<td>1,320-1,540</td>
<td>Master’s degree and completion of supervised hours</td>
</tr>
<tr>
<td>Behavioral Health Coordinator II</td>
<td>6,000 hours</td>
<td>1,980</td>
<td>Bachelor’s degree and work experience</td>
</tr>
<tr>
<td>Behavioral Health Coordinator I</td>
<td>6,000 hours</td>
<td>900</td>
<td>Associate degree and work experience</td>
</tr>
<tr>
<td>Medical Assistant</td>
<td>6,000 hours</td>
<td>900</td>
<td>Associate degree and work experience</td>
</tr>
<tr>
<td>Peer Counselor</td>
<td>2,000 hours</td>
<td>152</td>
<td>Certificate and work experience</td>
</tr>
</tbody>
</table>

Source: Great Rivers Behavioral Health Organization Apprenticeship Program Standards

8 OSHPD WET Report
2-PLUS YEARS OF COLLEGE REQUIRED

CREDENTIAL OR SOME COLLEGE REQUIRED

NO EDUCATION OR MINIMAL TRAINING REQUIRED

Source: SkillUp Washington Health Care Learning Consortium
Recognizing and Rewarding the Role of Entry Level Health Care Workers

SkillUp Washington report
The following rubric reflects the barriers identified and possible solutions discussed during the Mental Health subcommittee meetings.

<table>
<thead>
<tr>
<th>STATUTORY BARRIERS</th>
<th>IDENTIFY BARRIER</th>
<th>RECOMMENDATIONS</th>
<th>IMPLEMENTATION</th>
<th>KEY STAKEHOLDERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of a clear pathway between certificated or other unlicensed mental health occupations and board licensed occupations. Perceived lack of recognition by licensure boards of skills acquired through alternative means of obtaining experience. Lack of statutory recognition of practice levels below master’s level, such as peer counselor, behavior tech, autism tech, bachelor’s level social workers by the state is a barrier. It has led in some cases to private certification of nonlicensed personnel that makes it difficult to develop standards of practice and a set of articulated skills that lead to licensure through a career pathway under DCA or other state agency.</td>
<td>Develop an articulated path between paraprofessions and licensure-based occupations in order to create a defined career pathway. Explore other states licensure of the behavioral health occupations below the master’s level. Develop a database on mental health paraprofessions that includes certification requirements including education and experience. Explore the feasibility of state licensure and the requirements for meeting licensure for practice levels below a master’s degree.</td>
<td>Create a workgroup to articulate possible career pathways, identify core principals of each discipline, identifying models for career pathways. Task the workgroup with examining each of these barriers and, working with education and licensure groups and representatives from competency-based models, develop a strategy for entry into licensure from a variety of pathways. Involve the licensure boards in determining basic requirements for certification of paraprofessions that could lead to board licensure.</td>
<td>DAS, DCA, Legislature, DOL, MHSOAC, OSHPD, DHCS, community colleges, professional organizations</td>
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<td>Title 8 CCR section 212.2 requires apprenticeship programs comply with all applicable federal and state law and regulations (including the 2,000-hour requirement) to be eligible for DAS approval. Regulations may not recognize entry level classifications, i.e., peer counselor, behavior tech, autism tech, that can potentially be a pathway to master’s level mental health professions.</td>
<td>Work with DAS to provide guidance on how to comply with the 2,000-hour requirement, especially with regards the use of competency-based approach. Convene a workgroup of key stakeholders to determine what regulatory changes would be required to create career pathways in the mental health field.</td>
<td>Define as broadly as possible what would count for inclusion of 2,000 hours. Create possible recommendations on the advisability or inadvisability of regulation of entry and mid-level classifications by existing boards or state agencies.</td>
<td>DAS, DOL, CCCCO, other state agencies</td>
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<td>None identified.</td>
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### MENTAL HEALTH (CONT.)

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<th>IDENTIFY BARRIER</th>
<th>RECOMMENDATIONS</th>
<th>IMPLEMENTATION</th>
<th>KEY STAKEHOLDERS</th>
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<td><strong>FINANCING</strong></td>
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<td>New funding sources have been developed (Mental Health Loan Assumption Program, stipends) but awareness is limited. OSHPD collaborated with public mental health stakeholders to develop the 2020-2025 Mental Health Services Act Workforce Education and Training (MHSA WET) Plan, which was approved by the California Behavioral Health Planning Council (CBHPC) in January 2019. The approved plan can support stipends for individuals working toward licensure in the allied mental health professions who choose to work within the publicly funded mental health system. However, this is only one of many approved activities to be implemented with funding allocated in the FY 2019-20 budget process. Additional funding of the WET plan is not guaranteed.* Few if any loan assumption, loan forgiveness, stipend, or scholarship programs for associate’s and bachelor’s degree programs in the social sciences.</td>
<td>Create partnerships that provide outreach regarding loan repayment and scholarship programs through OSHPD and other opportunities through statewide funding resources. Work through local workforce development boards to publicize financing opportunities. Work with local education agencies and graduate programs to place interns in schools due to the change through State Plan Amendment 15-021 that will now allow interns to be reimbursed by Medi-Cal under the LEA Billing Option Program. Explore the feasibility for a program similar to CAI for four-year institutions and determine a funding source. Consider developing loan assumption, forgiveness, stipend, and scholarship programs for associate and bachelor’s degree programs in the social sciences.</td>
<td>Develop partnerships (community colleges) that publicize loan repayment opportunities and other financing programs to underserved populations. Work with local workforce boards to publicize financing opportunities. Work with MSHOAC to develop guidelines for local workforce development to meet shortages. Counties conduct specific outreach to those with schools, community colleges, and four-year institutions as a part of the county MHSA stakeholder process. LEAs to be part of the stakeholder process. Some counties contract with school districts to provide mental health services, including services funded through Proposition 63. Best practices from these collaborations should be collected and disseminated to encourage new partnerships. Create an enhanced Medi-Cal rate for those providing licensed supervision of interns. Determine what would be needed to extend the CAI program to other sectors and who would be interested in discussing feasibility.</td>
<td>OSHPD, California Behavioral Health Planning Council, County Behavioral Health Directors, LEAs, DHCS, DCA, CSU/UC, DOF, labor organizations</td>
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<td><strong>CULTURAL</strong></td>
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<td>Lack of data on demographics. Lack of incentives for people to enter the profession and understanding of stigma.</td>
<td>Require boards to collect and report demographic data on licensees based on current authority for some DCA boards. Require educational institutions and programs to report demographic data on students as a part of accreditation of the institutions. Consider caseload ratios, compensation increases, including bilingual stipends, and remove barriers to college education.</td>
<td>Obtain the necessary statutory or regulatory authority.</td>
<td>Legislature, DCA, educational institutions and programs, diversity-based organizations</td>
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*The fiscal agent must be a CCC or K-12 local educational agency, but a four-year institution can be a partner in the apprenticeship.
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<tr>
<td><strong>EDUCATION STRUCTURE</strong></td>
<td>Lack of career ladders within behavioral health professions. Development of pipeline programs for professionals.</td>
<td>Develop a career ladder that starts from high school and continues to graduate degree education. Increase the number of educational institutions and programs in underrepresented areas and determine funding sources.</td>
<td>Consider certification/licensure through CDPH, DHCS, or community colleges. Use entry level programs such as medical assistants, psychiatric technicians, peer specialists, and substance abuse counselors as pathway to graduate programs. Encourage four-year psychology degree students to enter training programs for professional mental health licensure. Use recent reports from OSHPD to inform policy. Create outreach programs within educational institutions to encourage entry into mental health programs.</td>
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<td><strong>OTHER</strong></td>
<td>Difficulty finding high quality supervision/program sponsors. Lack of information among those in the mental health field about apprenticeship models.</td>
<td>Develop online repository of earn and learn partners and placements for internships and link to relevant public agency websites. Consider innovative models such as tele-supervision or roving supervision for oversight of interns in field placements. Establish formal communication between DAS IACA, mental health groups, and state agencies such as DCA, OSHPD, and DHCS.</td>
<td>Look at possible funding sources to incentivize licensees to become intern supervisors. Identify incentives for public and private entities to provide licensed supervision and oversee for clinical training. Consider creating incentives for supervision by counting hours toward meeting continuing education requirements. Implement provisions of SPA 15-021 that will allow interns within school districts to bill for their services.</td>
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**NURSING**

The Nursing subcommittee was tasked with identifying existing health care earn and learn programs in this field and gathering information regarding their focus and structures. The subcommittee worked to develop a list of existing programs that could serve as exemplars and where interested parties can glean information. While many of the programs are not registered apprenticeship programs, they demonstrate that employers—such as Sutter Health; Kaiser Permanente; Cedars-Sinai Hospital; One Community Health; educational institutions, including Fairfax High School, Valley High School, and San Joaquin Delta College; and partners, which include Jewish Vocational Service (JVS)—are engaging and working to develop paid training programs in health care that serve to narrow the skills and workforce gap and increase diversity in the workforce. These programs have yielded significant positive outcomes, such as 93% of the Cedars-Sinai Youth Employment and Development Program participants (more than half being Hispanic, Latino, Black, or Asian) going on to pursue work at the hospital after program completion. Information available on each program is provided below.

It is important to recognize all of the stakeholders who have made significant investments to provide opportunities to low-income and underserved communities and have made investments to help sustain and expand existing programs.
CEDARS-SINA YOUTH EMPLOYMENT & DEVELOPMENT (YED) HEALTH CAREERS ACADEMY PROGRAM

Program Sponsor: Cedars-Sinai Hospital

Target Participants: Junior and senior Fairfax High School students with diverse socioeconomic and academic experiences.

Program Focus: Engage juniors and seniors at Fairfax High School in health care careers and introduce them to the workforce through experiential learning and working in the health care field.

Duration: Two-year program

Paid/Unpaid: Paid

Description: The YED program was developed to address the following problems: low rates of Fairfax High School students who pursue higher education, workforce shortages and lack of diversity in the health care field among underprivileged and at-risk youth, and economic and social disparities affecting Fairfax High School students and their families. The program is designed with three components: (1) school-based learning/health academy; (2) work-based learning; and, (3) mentoring.

Participant Demographic:
59% Hispanic or Latino
17% Black/African American
13% Asian
5% White
5% Other
72% Female
28% Male

Participant Outcomes:
77% Pursued higher education in a health care-related field of study
93% Pursued work at Cedars-Sinai Hospital
80% Pursued work at another health care setting
65% Became involved in health care in another way (e.g. volunteer work, internship)

VALLEY HIGH SCHOOL COMMUNITY HEALTH WORKER HEALTHTECH ACADEMY

Program Sponsor: Elk Grove Unified School District

Target Participants: Valley High School HealthTECH Academy students

Program Focus: Inspire students representing medically underserved areas and populations to pursue careers in health care; meet the Sacramento region’s need for trained community health workers (CHWs); and, to provide transferable skills to students who wish to pursue careers in nursing, medicine, pharmacy, etc.

Duration: Four-year program (two-year internship)

Paid/Unpaid: Paid

Description: Students who are on track to meet CHW requirements can apply to participate in the HealthTECH paid internship. Interns currently serve at One Community Health and WellSpace Health. Students who are selected for internships receive additional training to build their counseling and health education skills and knowledge. Students receive CHW certification after completion of specified courses along with a minimum of 50 hours of field work experience and passage of a comprehensive CHW certification exam. The HealthTECH academy has articulation agreements with Sacramento City College’s CHW program earning 1/5 nontransferrable units toward the CHW certificate at SCC, CSU Sacramento credit/dual enrollment credits for Communication Studies 5, and future articulation with California Northstate University.

JVS NURSING REFRESHER

Program Sponsor: Jewish Vocational Services (JVS)

Target Participants: Foreign trained and disconnected nurses.

Program Focus: Address the needs of trained nurses who are either disconnected from the health care workforce or who are foreign trained and new to the U.S. job market.

Paid/Unpaid: Paid

Description: In partnership with City College of San Francisco, JVS trains two cohorts of licensed vocational nurses each year. JVS provides classroom instruction, skills labs, clinical rotations at area facilities, job search services, retention support, and connections to Bay Area hospitals and other health care employers in need of culturally competent staff.
Program Outcomes: JVS has offered 14 cohorts of the Nurse Refresher Program and have placed 162 participants in jobs earning wages of $38/hour.

**JVS MEDICAL ASSISTANT REFRESHER**

**Program Sponsor:** Jewish Vocational Services

**Target Participants:** Applicants must have an accredited MA certification, a high school diploma or equivalent, proof of valid authorization to work in the U.S., among other requirements.

**Program Focus:** Enables MAs to refresh their skills in customer service and patient-centered communication while further developing their clinical and job readiness skills.

**Duration:** Five-week classroom learning and six weeks to three months clinical.

**Paid/Unpaid:** Paid

**Description:** In partnership with several employers including Sutter Pacific Medical Foundation, North East Medical Services, Kaiser Permanente, and La Clinica de la Raza and Lifelong Medical Care, JVS provides five weeks of classroom training that includes reviewing the MA scope of practice, vital signs, pharmacology, medication concepts and calculations, medication administration, EKG, medical terminology, cultural awareness, in-flow training, and Epic EHR training. The classroom training is followed by six weeks to three months of clinical training with the employer partner.

**Program Outcomes:** JVS has offered six cohorts of the MA Refresher Program and have placed 82 participants in jobs that average wages between $22.17 and $25.84/hour.

**JVS MEDICAL ADMINISTRATIVE ASSISTANT TRAINING PROGRAM (EXCEL)**

**Program Sponsor:** Jewish Vocational Services

**Target Participants:** CalWORKS recipients.

**Duration:** 8-10 weeks classroom learning and four months paid internship

**Paid/Unpaid:** Paid

**Description:** In partnership with UCSF and the San Francisco Human Services Agency, JVS trains two cohorts annually to become medical administrative assistants in San Francisco. The program consists of 8-10 weeks of classroom training and a four-month paid internship. Participants typically obtain employment as medical administrative assistants, medical receptionists, and patient service representatives post internship.

**Program Outcomes:** JVS has offered 16 cohorts of EXCEL since 2010 and have placed 287 participants (CalWORKS recipients) in jobs that average $20.98 - $25.52/hour.

**JVS DENTAL ASSISTING PROGRAM**

**Program Sponsor:** Jewish Vocational Services

**Target Participants:** Applicants must be 18 years of age or older, authorized to work in the U.S., have a high school diploma or GED, be a Bay Area resident, be low-income or unemployed, among other requirements.

**Duration:** Three months

**Paid/Unpaid:** Paid

**Description:** In partnership with San Francisco State University and multiple dental clinics, JVS provides over 90 hours of hard-skills instruction consisting of basic dental assistant training, 60 hours of health care related soft skills training, and 160 hours of paid externships over the three-month program.

**Program Outcomes:** JVS will be launching its second cohort as a regional partnership across Alameda and Contra Costa counties. JVS is also in conversations to replicate the program in San Francisco with multiple partners.

**KAISER RESIDENCY PROGRAM**

**Program Sponsor:** Kaiser Permanente

**Target Participants:** Newly licensed registered nurses as they transition to professional practice.

**Program Focus:** Provides an opportunity for experienced nurses to pass on their knowledge and help to build the next generation of professional, competent, and caring nurses. Designed to help Kaiser medical centers fill current and future nursing positions in specialty care areas.

**Duration:** 16-week course for labor and delivery, six-month course for perioperative nurses
paid/unpaid: paid

description: the program began with a 16-week course for labor and delivery nurses and a six-month course for perioperative nurses. a third course was added for newly licensed medical/surgical nurses, and a fourth will be added for critical care nurses. training courses typically include a mix of newly licensed nurses and experienced registered nurses who spend three to four days a week in clinical training, working alongside an experienced nurse preceptor at the kaiser permanente medical center where they are hired. the courses also include classroom time led by kaiser permanente nurse educators. nurse residents and fellows also attend a monthly, 12-month professional development program that focuses on leadership, quality outcomes, and the professional role of the registered nurse. nurses go on to complete an evidence-based practice project at their medical center.

san joaquin delta college nurse extern program

program sponsor: st. joseph’s medical center

target participants: nursing program students with certified nurse assistant certification.

program focus: designed to give the student college credit for on-the-job experience.

paid/unpaid: paid

description: under the direction of a registered nurse, the student nurse provides basic nursing care and implements selected aspects of the patient plan of care.

wisconsin’s department of workforce development youth apprenticeship program

program sponsor: multiple employers

target participants: high school students.

program focus: provides opportunities for high school students who want hands on learning in an occupational area at a worksite along with classroom instruction.

duration: one or two-year elective program

paid/unpaid: paid

description: wisconsin’s youth apprenticeship (ya) program is part of a statewide school-to-work initiative. it integrates school-based and work-based learning to instruct students in employability and occupational skills defined by wisconsin industries. students are simultaneously enrolled in academic classes to meet high school graduation requirements, in a youth apprenticeship related instruction class, and are employed by a participating employer under the supervision of a skilled mentor. students may participate in a number of programs including medical office, ambulatory/support services, dental assistant, medical assistant, nursing assistant, and pharmacy technician.

program outcomes: over 3,000 juniors and seniors across wisconsin participate in the youth apprenticeship program.
Appendix A: List of AB 2105 Stakeholders

The following is a list of the organizations that were represented and participated in this stakeholder process under AB 2105 (Rodriguez, 2016). The Department of Consumer Affairs is grateful for the assistance, large and small, provided by these organizations and their representatives.

EDUCATIONAL ENTITIES
Butte College
California Community Colleges Chancellor’s Office
California State University, Northridge
East Los Angeles College
Foothill Community College
Folsom Lake College
Glendale College
Oakmont High School
Napa Valley College
San Joaquin Delta College
UC Davis Health
Valley High School Health TECH Academy
Ventura College

NONGOVERNMENTAL ORGANIZATIONS
California Association of Health Facilities
California Association of School Psychologists
California Hospital Association
California Institute for Behavioral Health Solutions
California Primary Care Association
Cedars-Sinai Hospital
County Behavioral Health Directors Association
Dignity Health
Healthcare Career Advancement Program
HR Dowden & Associates
Jewish Vocational Services
Jobs for the Future
John Muir Hospital
Kaiser Permanente
National Association of Social Workers - California Chapter
Quality Care Health Foundation
Service Employees International Union – United Healthcare Workers
Steinberg Institute
Sutter Health

PUBLIC AGENCIES
California Acupuncture Board
California Board of Behavioral Sciences
California Board of Occupational Therapy
California Board of Psychology
California Board of Registered Nursing
California Veterinary Medical Board
California Board of Vocational Nursing and Psychiatric Technicians
California Department of Health Care Services
California Department of Public Health
California Labor and Workforce Development Agency
California Workforce Development Board
Division of Apprenticeship Standards
Health Workforce Commission
Little Hoover Commission
Medical Board of California
Mental Health Services Oversight and Accountability Commission
Office of Statewide Health Planning and Development
United States Department of Labor