MEDICAL LABORATORY TECHNICIANS in the SAN FRANCISCO BAY REGION

Healthcare is one of the largest employers in California, providing a wide range of well-paying career opportunities for residents. In 2014, the Centers of Excellence partnered with the Health Workforce Initiative (HWI) and the California Hospital Association (CHA) on two healthcare surveys to **assess workforce needs** at both state and regional levels. The surveys targeted three healthcare sectors:

- Hospitals provide medical, diagnostic, and treatment services to inpatients and some outpatient services.
- Ambulatory Healthcare Services provide healthcare services to outpatients in settings such as offices of physicians, outpatient care centers, and laboratories.
- Nursing and Residential Care Facilities provide residential care combined with either nursing, supervisory, or other types of care as needed.

Statewide, 190 hospitals responded to the hospital survey and 1,600 clinics, labs and facilities responded to the ambulatory and residential care survey, providing an excellent sample to analyze healthcare workforce demand across the state and in several regions. The research focused on identifying: (1) labor market demand for key occupations in healthcare industries, (2) training supply supporting healthcare industries, and (3) key issues impacting supply and demand.

This report is one in a series of reports profiling healthcare occupations in the San Francisco Bay region¹. There are ten occupational profiles in the series: registered nurses, certified nursing assistants, licensed vocational nurses, medical assistants, medical coders, physician's assistants, healthcare social workers, medical laboratory technicians, occupational therapy assistants and home health aides.

Labor Market Demand

In the San Francisco Bay region, there are approximately 1,970 medical laboratory technician (MLT) jobs in the ambulatory residential care subsectors. Over a 12 month period (Apr 2014 to Mar 2015), employers in these subsectors will need to fill over 485 openings created by new job growth and replacement needs.

Projected Employment for Medical Laboratory Technicians²

Ambulatory & Residential Care	Current Employment (2014)	12-Month Growth	Replacement Jobs	Total Openings (Growth + Replacements)
Industries (n=24)	1,972	127	360	487

California Hospital Association members that responded to the survey employ 95 medical laboratory technicians. This sample does not include an estimate of total hospital employment because 41% of CHA regional member hospitals participated in the survey.

Current Employment for Medical Laboratory Technicians 2

Hospitals (n=34)	Current Employment*	Full-time Positions (% of Total)	Part-time Positions (% of Total)	Per Diem Jobs
	95	67 (71%)	28 (29%)	39

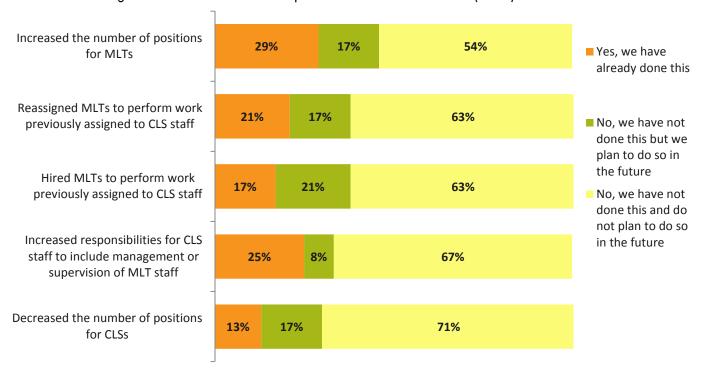
^{*}Ending headcount for the 4^{th} quarter of 2013.

¹The San Francisco Bay region includes the following 12 counties: Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, Santa Clara, San Francisco, San Mateo, Santa Cruz, Solano, and Sonoma counties.

² Ambulatory and residential care and hospital employment counts include full-time and part-time employment. Additional data on per diem employment for hospitals is totaled separately.

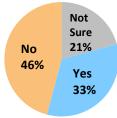
Hiring Trends

Ambulatory and residential care employers were asked about the MLT licensure law passed in 2008 and if they had increased hiring of MLTs since 2010. The responses are summarized below (n=24):



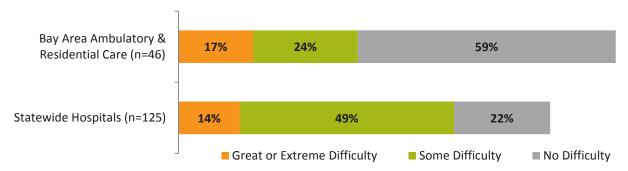
In the ambulatory and residential care survey, employers of MLTs and Clinical Laboratory Scientists (CLS) were asked if they employ any additional unlicensed laboratory assistants/aides. While 33% of employers indicated that they did, 46% replied that they did not, and 21% were not sure.





Difficulty Hiring

41% of the employers in the Bay region **ambulatory and residential care** subsectors reported difficulty finding qualified applicants for entry-level medical laboratory technician positions. 63% of **hospitals** statewide reported difficulty finding qualified applicants.



Training Supply

Currently, DeAnza College is the only community college with a medical laboratory technician program in the San Francisco Bay region. Diablo Valley College discontinued their program during the 2014-15 academic year.

Degrees or Certificates	DeAnza	DeAnza	Diablo Valley	Total
Conferred	Associate Degree	Certificates 30<60 units	Associate Degree	
3 year Annual Average (2010-13)	5	1	1	7

This estimate is based on data reported to the California Community College Chancellor's Office Data Mart and National Center for Education Statistics (NCES). Higher education institutions are required to report completion data to NCES if they participate in any federal financial assistance program authorized by Title IV of the Higher Education Act. Completion data not reported to the NCES or CCCCO Data Mart were not included in the estimate.

Supply Challenges

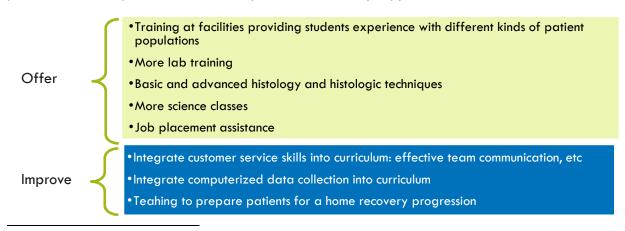
Due to budget constraints and uncertainty in the labor market, Diablo Valley College (DVC) was compelled to discontinue its MLT program effective 2014-15. During its term of operation, the program served 25 students. With one exception, all students passed their National ASCP examination. Most of the graduates are working as MLTs at various locations, with a small number obtaining MLT positions outside California.

The one remaining MLT program in the region is at DeAnza College. The program is small and only graduates a few students each year. It is still difficult for DeAnza to secure clinical sites, which was an ongoing problem for the DVC program. However, there is strong interest in the program, with a waiting list of students who want to enroll. A few new employers have hired graduates and more positions are available, which may indicate that the value these technicians bring to the workplace is starting to be recognized by employers. If this trend persists, then DeAnza College will likely be able to continue educating students who seek employment in this field.

The aging healthcare workforce within hospitals creates a need for replacement workers. 44% of medical laboratory technician employed by **hospitals** statewide fall within the age cohort of 56 or older.³ As healthcare workers retire at greater numbers, the training supply will also need to increase.

Employer Perspective

55% of ambulatory and residential care facilities provide professional development (either in-house or sponsored training) for their MLTs. Some of the training options include: continuing education units to obtain or update certifications, training for upper level positions, lab equipment, and lab training in nephrology. Ambulatory and residential care employers discussed the topics that community colleges could offer or improve upon to support professional development for their existing staff. The following suggestions were offered:



³ Hospital Survey, statewide data.

In Summary

Key issues affecting supply and demand for medical laboratory technicians include:

- 41% of the ambulatory and residential care employers in the Bay region, and 63% of hospitals statewide reported difficulty finding qualified applicants for entry-level medical laboratory technician positions.
- 44% of MLTs in hospitals statewide are over 56 and nearing retirement.
- 46% of ambulatory and residential care employers who employ MLTs and CLSs, have already increased
 or plan to increase the number of positions for MLTs in the future, and one-third of employers indicated
 that they also employ additional unlicensed laboratory assistants/aides.
- 63% of ambulatory and residential care employers have not reassigned and do not plan to reassign work to MLTs that had previously been assigned to CLS staff because of the licensure law passed in 2008.
- However, community colleges have experienced lukewarm demand for graduates from regional employers, and as a result, Diablo Valley College was compelled to discontinue its MLT program effective 2014-15.
- DeAnza College, the only MLT program in the Bay region, has experienced difficulty in obtaining affiliate sites for clinical placements.
- On average each year, DeAnza awards five Associate degrees in Medical Laboratory Technology.
- DeAnza College will likely be able to continue educating students who seek employment in this field if
 employers continue to hire their graduates and support the college with securing sites for clinical
 placements.

DeAnza College can keep its medical laboratory technician program relevant by aligning curriculum with national certification standards. In addition, because employers indicated that existing staff need customer service training, DeAnza should integrate customer service skills (oral communication, time management, eye contact, and compassion) and workplace skills (appearance, professionalism and business etiquette) into existing curriculum.

For More information

This document and others are available to download at www.coeccc.net/health. For more information on this study, contact:

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More about the Health Workforce Initiative: The HWI provides education and training programs to meet emerging demands for healthcare industry workers; to determine needs, facilitate development of innovative solutions and to locate resources to implement planned responses; to evaluate and initialize health-related educational programs. More information about the Health Workforce Initiative is available at www.ca-hwi.org.



More about the Centers of Excellence: The Centers of Excellence (COE), in partnership with business and industry, deliver regional workforce research customized for community college decision making and resource development. This information has proven valuable to colleges in beginning, revising, or updating economic development and Career Technical Education (CTE) programs, strengthening grant applications, assisting in the accreditation process, and in supporting strategic planning efforts. More information about the Centers of Excellence is available at www.coeccc.net.

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