

Program Endorsement Brief: 1211.00/Polysomnography

Polysomnography Technology

Orange County Center of Excellence, August 2021

Summary Analysis

Program Endorsement:	Endorsed: All Criteria Met <input type="checkbox"/>	Endorsed: Some Criteria Met <input checked="" type="checkbox"/>	Not Endorsed <input type="checkbox"/>
Program Endorsement Criteria			
Supply Gap:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Living Wage: (Entry-Level, 25 th)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Education:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Emerging Occupation(s)			
Yes <input checked="" type="checkbox"/>		No <input type="checkbox"/>	

The Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to one emerging middle-skill occupation: *neurodiagnostic technologists* (29-2099.01). Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.¹

Because *neurodiagnostic technologists* is currently considered an emerging occupation, traditional labor market information is collected and reported under the broader *medical dosimetrists, medical records specialists, and health technologists and technicians, all other* (29-2098) SOC code. However, it is important to note that this SOC code includes a variety of emerging occupations, and not only *neurodiagnostic technologists*. Therefore, the demand data throughout this report is overstated for *neurodiagnostic technologists*. This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with the relevant occupations.

Based on the available data, there appears to be a supply gap for *neurodiagnostic technologists* in the region and the typical entry-level education for this occupation is a postsecondary nondegree award. However, typical entry-level wages are below the living wage in Orange County. **Therefore, due to some of the criteria being met, the COE endorses this proposed program.** Detailed reasons include:

Demand:

- **Supply Gap Criteria** – Over the next five years, there is projected to be **1,261 jobs available annually** in the region due to new job growth and replacements, **which is more than the 2 awards conferred annually** by educational institutions in the region.

¹ The COE classifies middle-skill jobs as the following:

- All occupations that require an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
- All occupations that require a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

- However, the medical dosimetrists, medical records specialists, and health technologists and technicians, all other (29-2098) SOC code includes a variety of emerging occupations, including neurodiagnostic technologists (29-2099.01). Since the SOC code does not solely represent neurodiagnostic technologists, **the number of annual job openings is overstated.**
- Over the past 12 months, there were **228 online job postings related to neurodiagnostic technologists.** The highest number of job postings were for neurodiagnostic technicians, EEG technicians, neurodiagnostic technologists, polysomnographers, and EEG technologists.
- **Living Wage Criteria** –Within Orange County, **typical entry-level hourly wages** for *medical dosimetrists, medical records specialists, and health technologists and technicians, all other* are **\$17.87, which is lower than the living wage** for one adult in the region (\$20.63 in Orange County).²
- **Educational Criteria** –The Bureau of Labor Statistics (BLS) lists a **postsecondary non-degree award as the typical entry-level education** for medical dosimetrists, medical records specialists, and health technologists and technicians, all other.
 - Furthermore, the national-level educational attainment data indicates **45.7% of workers in the field have completed some college or an associate degree** as their highest level of education..

Supply:

- There is **1 community college** (Orange Coast) in the LA/OC region that issues awards related to polysomnography, conferring an average of **2 awards annually** between 2017 and 2020.

Occupational Demand

Exhibit 1, on the following page, shows the five-year occupational demand projections for *medical dosimetrists, medical records specialists, and health technologists and technicians, all other*, which includes all other health technologist/technician occupations that do not fit into a detailed SOC code, including *neurodiagnostic technologists*. In Los Angeles/Orange County, the number of jobs related to this occupation is projected to increase by 9% through 2025. There will be over 1,260 job openings per year through 2025 due to job growth and replacements.

It is important to note that the *medical dosimetrists, medical records specialists, and health technologists and technicians, all other* SOC code includes a variety of emerging occupations, such as *ophthalmic medical technologists* and *patient representatives* and not solely *neurodiagnostic technologists*. Therefore, the data in Exhibit 1 is overstated for *neurodiagnostic technicians*.

² Living wage data was pulled from California Family Needs Calculator on 8/10/22. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties³

Geography	2020 Jobs	2025 Jobs	2020-2025 Change	2020-2025 % Change	Annual Openings
Los Angeles	10,684	11,593	909	9%	955
Orange	3,277	3,605	328	10%	305
Total	13,962	15,199	1,237	9%	1,261

Wages

The labor market endorsement in this report considers the entry-level hourly wages for *medical dosimetrists, medical records specialists, and health technologists and technicians, all other* in Orange County as they relate to the county's living wage. Los Angeles County wages are included below in order to provide a complete analysis of the LA/OC region. Detailed wage information, by county, is included in Appendix A.

Orange County—The typical entry-level hourly wages for *medical dosimetrists, medical records specialists, and health technologists and technicians, all other* are \$17.81, which is below the living wage for one adult (\$20.63 in Orange County). Experienced workers can expect to earn wages of \$29.79, which is higher than the living wage estimate. Orange County's average wages are below the average statewide wage of \$26.77 for this occupation.

Los Angeles County—The typical entry-level hourly wages for *medical dosimetrists, medical records specialists, and health technologists and technicians, all other* are \$18.56, which is above the living wage for one adult (\$18.10 in Los Angeles County). Experienced workers can expect to earn wages of \$30.89. Los Angeles County's average wages are nearly equivalent to the average statewide wage of \$26.77 for this occupation.

Job Postings

There were 228 online job postings related to the emerging occupation *neurodiagnostic technologists* listed in the past 12 months. The highest number of job postings were for neurodiagnostic technicians, EEG technicians, neurodiagnostic technologists, polysomnographers, and EEG technologists. The top skills were: electroencephalography (EEG), pulmonology, neurology, patient preparation, and polysomnography. The top employers, by number of job postings, in the region were: Aya Healthcare, Cedars-Sinai, and CNS Network.

Educational Attainment

The Bureau of Labor Statistics (BLS) lists a postsecondary non-degree award as the typical entry-level education for *medical dosimetrists, medical records specialists, and health technologists and technicians, all other*. Furthermore, the national-level educational attainment data indicates 45.7% of workers in the field have completed some college or an associate degree as their highest level of education. Of the 33% of *neurodiagnostic technologists* job postings listing a minimum education

³ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

requirement in Los Angeles/Orange County, 32% (35) requested a high school diploma, 31% (34) requested a bachelor's degree, and 25% (27) requested an associate degree.

Educational Supply

Community College Supply—Exhibit 2 shows the three-year average number of awards conferred by community colleges in the related TOP code: Polysomnography (1211.00). The only college in the region with completions is Orange Coast. Over the past 12 months, there were no other related program recommendation requests from regional community colleges. Currently, there are no non-community college programs or awards associated with this occupation in the Los Angeles/Orange County region.

Exhibit 2: Regional community college awards (certificates and degrees), 2017-2020

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TOP Code	Program	College	2017-2018 Awards	2018-2019 Awards	2019-2020 Awards	3-Year Award Average
1211.00	Polysomnography	Orange Coast	-	5	-	2
		OC Subtotal	0	5	0	2
Supply Total/Average			0	5	0	2

Appendix A: Occupational demand and wage data by county

Exhibit 4. Orange County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other (29-2098)	3,277	3,605	328	10%	305	\$17.87	\$22.83	\$29.79

Exhibit 5. Los Angeles County

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other (29-2098)	10,684	11,593	909	9%	955	\$18.56	\$23.69	\$30.89

Exhibit 6. Los Angeles and Orange Counties

Occupation (SOC)	2020 Jobs	2025 Jobs	5-Yr Change	5-Yr % Change	Annual Openings
Medical Dosimetrists, Medical Records Specialists, and Health Technologists and Technicians, All Other (29-2098)	13,962	15,199	1,237	9%	1,261

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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