

# Neurodiagnostic Technologists Labor Market Analysis: San Diego County

June 2018

#### Summary

The following list summarizes findings from the labor market analysis below for Neurodiagnostic Technologists:

- Neurodiagnostic Technologists can specialize in one or more of the following diagnostic procedures: electroencephalography (EEG), evoked potential (EP), long-term monitoring (LTM), polysomnography (PSG), nerve conduction studies (NCS), and intraoperative neuromonitoring (IONM).<sup>1</sup> For this report, Neurodiagnostic Technologists specialized in electroencephalography (EEG) is analyzed because it is the most frequently performed procedure for the occupation.
- Between 2010 and 2017, there was an average of 16 online job postings per year for jobs with the keyword "*EEG Technician*" in San Diego County.
- Electroencephalograph Technicians earn median hourly earnings of \$26.86; this is more than the Self-Sufficiency Standard for a single adult in San Diego County, which is \$13.09 per hour.
- There are no EEG Technicians certification programs in San Diego County.
- Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were Scripps Health, Sharp Healthcare, Rady Children's Hospital, Sutter Health, and The Neurology Center of Southern California.

 $<sup>\</sup>label{eq:linear} \end{tabular} \end{tabul$ 

This report provides labor market information in San Diego County for the following occupational code in the Standard Occupational Classification (SOC)<sup>2</sup> system:

**Neurodiagnostic Technologists (SOC 29-2099.01)**: Conduct electroneurodiagnostic (END) tests such as electroencephalograms, evoked potentials, polysomnograms, or electronystagmograms. May perform nerve conduction studies. Sample reported job titles include:

- Certified Neurodiagnostic Technologist
- Clinical Supervisor
- Epilepsy Monitoring Unit
- Electroneurodiagnostic Technologist
- Electroneurodiagnostic Technologist
   Coordinator

- Lead Neurodiagnostic Technologist
- Neurodiagnostic Technologist
- Registered Electroneurodiagnostic
   Technologist
- Registered Polysomnographic Technologist
- Senior Technologist

Neurodiagnostic Technologists can specialize in one or more of the following diagnostic procedures: electroencephalography (EEG), evoked potential (EP), long term monitoring (LTM), polysomnography (PSG), nerve conduction studies (NCS), and intraoperative neuromonitoring (IONM).<sup>3</sup> For this report, *Neurodiagnostic Technologists* specialized in electroencephalography (EEG) is analyzed because it is the most frequently performed procedure for the occupation.<sup>4</sup> *Neurodiagnostic Technologists* specialized in electroencephalography are commonly known as *Electroencephalograph (EEG) Technicians* due to their specialty.

#### **Projected Occupational Demand**

Typically, labor market demand for an occupation can be analyzed if the occupation has a generic code in the Standard Occupational Classification system. *Neurodiagnostic Technologists* (SOC 29-2099.01) has a code that ends in ".01," which means that it has limited data in the SOC system. The closest SOC code with projected occupational demand is *Health Technologists and Technicians, All Other* (SOC 29-2099), which can be found on the Centers of Excellence for Labor Market Research (COE) website, coeccc.net.

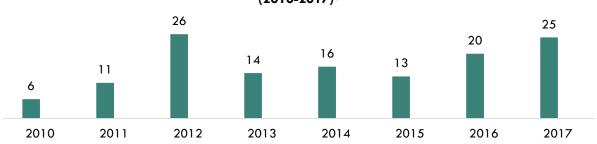
<sup>&</sup>lt;sup>2</sup> The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. bls.gov/soc.

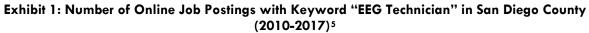
<sup>&</sup>lt;sup>3</sup> Neurodiagnostic Technologist specializations. caahep.org/Students/Program-Info/Neurodiagnostic-Technology.aspx.

<sup>&</sup>lt;sup>4</sup> Neurodiagnostic Technologist procedures. aset.org/i4a/pages/index.cfm?pageid=3788.

## **Online Job Postings**

Between 2010 and 2017, there was an average of 16 online job postings per year for jobs with the keyword *"EEG Technician"* in San Diego County (Exhibit 1).

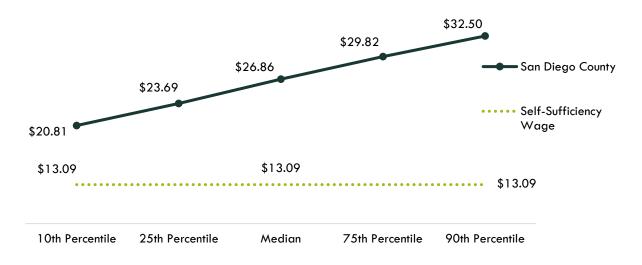




## **Earnings**

*Electroencephalograph Technicians* earn median hourly earnings of \$26.86; this is more than the Self-Sufficiency Standard for a single adult in San Diego County, which is \$13.09 per hour (Exhibit 2).<sup>6</sup>





<sup>&</sup>lt;sup>5</sup> Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2010-2017.

<sup>&</sup>lt;sup>6</sup> The self-sufficient wage in San Diego for one adult is \$13.09 (insightcced.org/tools-metrics/self-sufficiency-standard-tool-for-california).

<sup>&</sup>lt;sup>7</sup> Electroencephalography Technicians in San Diego, California Salary.

<sup>(1.</sup>salary.com/CA/San-Diego/Electroencephalograph-Technician-Salary.html).

## **Educational Supply**

Educational supply for an occupation can be estimated by analyzing the number of related program completers/graduates/awards in San Diego County. According to the California Community Colleges Chancellor's Office Management Information System (MIS) Data Mart, there are no TOP codes associated with the job title, *Electroencephalograph Technicians*; however, there are four Taxonomy of Programs (TOP) codes associated with the general occupation, Health Technologists and Technicians, All Other: 121100: Polysomnography, 121200: Electro-Neurodiagnostic Technology, 121400: Orthopedic Assistant and 121700: Surgical Technician.

Exhibit 3 shows the course length and number of graduates from 2017 related to the schools certified by the Commission on Accreditation of Allied Health Education Programs college within California. There are no EEG Technicians certification programs in San Diego.

## Exhibit 3: Course Length and 2017 Graduates for Electroencephalograph Technicians Program by College in California<sup>8</sup>

College	City	Course Length	2017 Graduates
Concorde Career College-San Bernardino	San Bernardino	2 years	0
Orange Coast College	Costa Mesa	2 years	14

#### **Demand vs. Supply**

Due to a lack of data regarding demand for the occupation *Electroencephalograph Technicians*, no evaluation of demand vs. supply can be completed. However, a demand and supply analysis for the general occupation, Health Technologists and Technicians, All Other (SOC 29-2099), can be found on COE website, coeccc.net.

#### **Student Outcomes**

Based on the information available in the CTE LaunchBoard, students who took courses in the related TOP codes exhibited the following outcomes (Exhibit 4).

<sup>&</sup>lt;sup>8</sup> Electroencephalograph Technicians colleges. mynextmove.org/profile/ext/training/29-2099.01?s=CA.

Metric	San Diego-Imperial	California
Number of course enrollments <sup>9</sup>	N/A	201
Completed 12+ CTE Units in One Year <sup>10</sup>	N/A	30
Completed 48+ CTE Contact Hours in One Year <sup>11</sup>	N/A	0
Number of students who got a degree or certificate <sup>12</sup>	N/A	14
Number of students who transferred <sup>13</sup>	N/A	0
Employed in the second fiscal quarter after exit <sup>14</sup>	N/A	92%
Employed in the fourth fiscal quarter after exit <sup>15</sup>	N/A	92%
Job closely related to field of study <sup>16</sup>	N/A	N/A
Median earnings in the second fiscal quarter after exit <sup>17</sup>	N/A	\$14,902
Median change in earnings <sup>18</sup>	N/A	352%
Attained a living wage <sup>19</sup>	N/A	100%

#### Exhibit 4: Strong Workforce Program Metrics for TOP 121200: Electro-Neurodiagnostic Technology in the San Diego-Imperial Region (PY2015-16)

#### **Top Employers and Work Locations**

Between January 1, 2015 and December 31, 2017, the top five employers in San Diego County for this occupation were Scripps Health, Sharp Healthcare, Rady Children's Hospital, Sutter Health, and The Neurology Center of Southern California (Exhibit 5).

<sup>&</sup>lt;sup>9</sup> The number of enrollments in courses assigned to the TOP code in the selected year.

<sup>&</sup>lt;sup>10</sup> The number of students who completed 12 or more credit CTE units.

<sup>&</sup>lt;sup>11</sup> The number of students who completed 48 or more noncredit CTE instructional contact hours.

<sup>&</sup>lt;sup>12</sup> The number of unduplicated students who earned a locally-issued certificate, Chancellor's Office approved certificate, associate degree, and/or California Community Colleges bachelor's degree in the selected TOP code.

<sup>&</sup>lt;sup>13</sup> Students who took non-introductory courses or completed a California Community Colleges Chancellor's Office award in the selected TOP code in selected year who subsequently enrolled for the first time in a four-year institution the following year.

<sup>&</sup>lt;sup>14</sup> Among all exiters with a valid SSN, the percentage who were employed two quarters after exiting California Community Colleges.

<sup>&</sup>lt;sup>15</sup> Among exiting students with a valid SSN, the percentage who were employed four quarters after exiting California Community Colleges.

<sup>&</sup>lt;sup>16</sup> Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

<sup>&</sup>lt;sup>17</sup> Among exiting students, the median second-quarter earnings one year after the year in which they exited California Community Colleges.

<sup>&</sup>lt;sup>18</sup> Among exiting students with a valid SSN, the percentage change in earnings one year before and one year after exiting California Community Colleges.

<sup>&</sup>lt;sup>19</sup> Among completers and skills builders who exited, the proportion of students who attained a living wage.

#### Exhibit 5: Top Employers for Job Title "EEG Technician" in San Diego County

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- Scripps Health
- Sharp Healthcare
- Rady Children's Hospital
- Sutter Health
- The Neurology Center Of Southern California
- Tri City Medical Center
- Alliance Family Of Companies
- Kaiser Permanente
- Palomar Health
- Abret

#### **Skills, Education and Certifications**

Because there is no SOC code associated with the EEG Technician job title, no national education attainment data was provided in this report. However, labor market data for the general occupational title, *Health Technologists and Technicians, All Other* (SOC 29-2099), can be found on the Centers of Excellence for Labor Market Research website, coeccc.net.

Exhibit 6 lists the top specialized and soft skills that appeared in online job postings for between January 1, 2015 and December 31, 2017.

Specialized Skills	Soft Skills	Software Skills
<ul> <li>Electroencephalography (EEG)</li> <li>Neurology</li> <li>Patient Care</li> <li>Computer Maintenance</li> <li>Data Entry</li> </ul>	<ul> <li>Communication Skills</li> <li>Computer Literacy</li> <li>English</li> <li>Organizational Skills</li> <li>Prioritizing Tasks</li> </ul>	<ul> <li>Microsoft Excel</li> <li>Microsoft Word</li> <li>Microsoft Access</li> <li>Microsoft PowerPoint</li> </ul>

#### Exhibit 6: Top Skills for Electroencephalograph Technicians in San Diego County<sup>20</sup>

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<sup>&</sup>lt;sup>20</sup> Labor Insight Jobs. Burning Glass Technologies. San Diego, CA. Full years 2015-2017.

#### **Important Disclaimers**

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.