



CENTERS OF EXCELLENCE  
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2010 ENVIRONMENTAL SCAN

# PHYSICIAN ASSISTANTS

in the San Diego Region

AUGUST 2010



**CENTER OF EXCELLENCE**  
**San Diego-Imperial Region**

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An Initiative of



## Acknowledgements

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**Mission:** The Centers of Excellence, in partnership with business and industry, deliver regional workforce research customized for community college decision making and resource development.

**Vision:** We aspire to be the premier source of regional economic and workforce information and insight for community colleges.

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Centers of Excellence, Economic and Workforce Development Program

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*Openings for Physician Assistant positions are expected to grow by nearly 9% over the next 12 months in San Diego County.*

*— Centers of Excellence Employer Survey*

## Introduction

This report explores the supply and demand of Physician Assistants within San Diego County and Southern California to identify opportunities for training programs offered by the nine regional community colleges below. The purpose of this information is to assist community college administration in strategic decision-making regarding future educational and training programs to best serve the region.

**Table 1: Community Colleges located in the San Diego-Imperial Region**

College	Location
Cuyamaca College	El Cajon
Grossmont College	El Cajon
Imperial Valley College	Imperial
Mira Costa College	Encinitas, Oceanside
Palomar College	San Marcos
San Diego – City College	San Diego
San Diego – Mesa College	San Diego
San Diego – Miramar College	San Diego
Southwestern College	Chula Vista

According to the Bureau of Labor Statistics (BLS), Physician Assistants (PA) are formally trained to provide diagnostic, therapeutic, and preventive healthcare services, under the supervision of a physician. As part of a comprehensive healthcare team, Physician Assistants meet with patients to understand their medical needs, and are qualified to examine and treat patients, review test results, and make diagnoses. They will also treat patients by suturing, splinting, and casting. Often, Physician Assistants will prescribe medication and be responsible for patient records, and will supervise medical assistants and other junior staff. Though some duties are similar to nursing occupations, Physician Assistants are trained under the medical model and not the nursing model.<sup>1</sup>

Given the wide range of medical services that can be conducted by Physician Assistants, combined with the current economic difficulties in the healthcare sector and demographic shifts away from primary care medicine, hospitals and clinics in rural and urban areas are looking to PAs to fill their hiring needs.

This report reviews the labor market projections from four relevant geographical perspectives: the San Diego – Imperial Region, Southern California (San Diego, Imperial, Orange, Los Angeles, Ventura, San Bernardino and Riverside counties), California and the United States.<sup>2</sup> It also includes findings from a survey of local employers to determine short-term (12-month) projected needs, effects of healthcare reform legislation, and other employer preferences. Finally, the report includes a review of existing, accredited programs and a supply-demand analysis for the region.

<sup>1</sup> Bureau of Labor Statistics (BLS), Occupational Outlook Handbook (OOH), 2010-2011 Edition

<sup>2</sup> Labor market projections data, also referred to as secondary data, provided by Economic Modeling Specialists, Inc. (EMSI)

## Occupational Overview

### Secondary Data Employment Projections

In the San Diego – Imperial Region, the majority of Physician Assistants are employed in offices of physicians, followed by general and surgical hospitals and the offices of federal, state, and local government. Overall, data from Economic Modeling Specialists, Inc. (EMSI) indicate nearly 18% growth in Physician Assistants over the next five years, representing 200 new jobs and 302 new and replacement jobs during the period. Table 2 illustrates the trends throughout the four geographic regions.

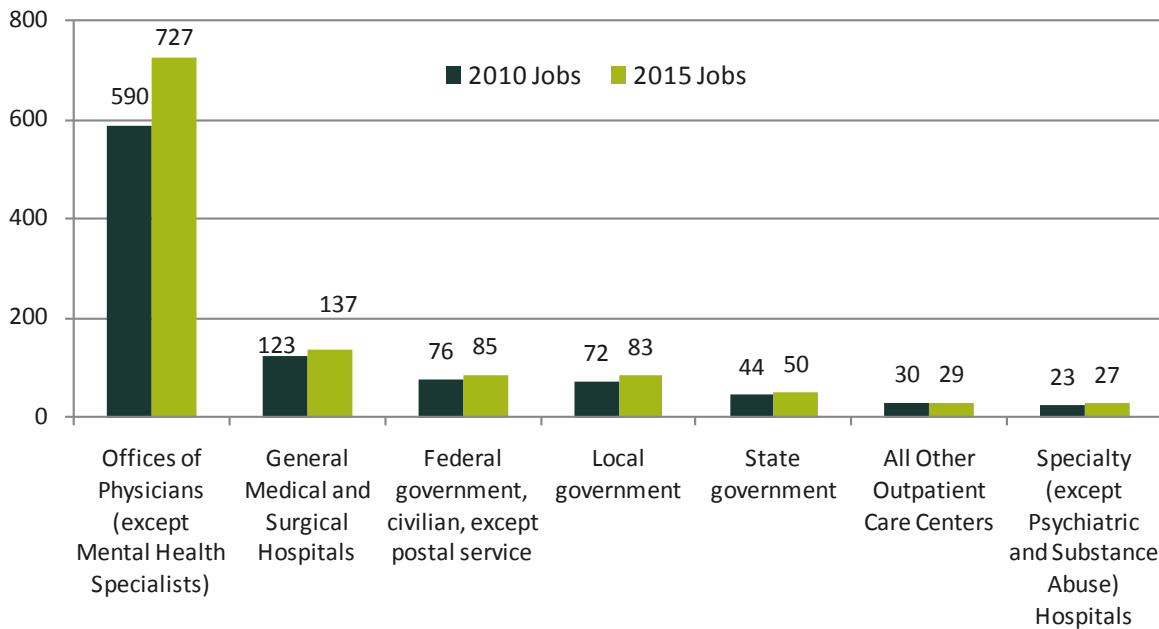
**Table 2: EMSI Projections, 2010-2015**

Physician Assistants in ...	2010 Jobs	2015 Jobs	Change	% Change	New and Replacement Jobs
San Diego – Imperial Region	1,113	1,313	200	18%	302
Southern California	4,720	5,670	950	20.1%	1,380
California	8,507	10,053	1,546	18%	2,321
United States	81,481	97,472	15,991	20%	23,424

Source: EMSI Complete Employment – 2<sup>nd</sup> Quarter 2010

As Figure 1 below illustrates, hiring trends for Physician Assistants are dominated by offices of physicians, followed by general medical and surgical hospitals.

**Figure 1: Staffing Patterns for Physician Assistants in the San Diego-Imperial Region**



### Primary Data Collection

The San Diego-Imperial Center of Excellence conducted a survey of San Diego County healthcare employers to determine short-term employment needs, difficulty hiring, and the perceived impact of healthcare reform legislation on employment. Respondents included hospitals, offices of physicians, and other healthcare employers. Surveyed employers anticipate overall employment growth of 4% over the next 12 months, and close to 9% growth for Physician Assistants, for combined growth of approximately 96 jobs.<sup>3</sup>

**Table 3: Survey Response Data**

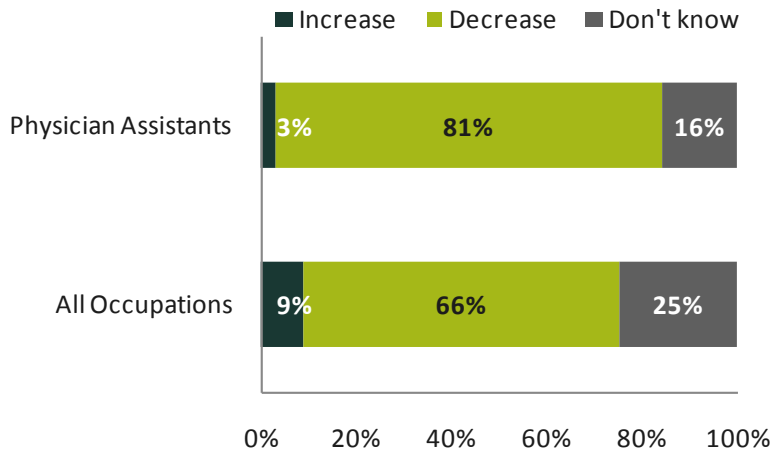
Regional Healthcare Providers on Employment for ...	2010 Jobs	2011 Jobs	Change	% Change
All Occupations	47,442	49,340	1,898	4%
Physician Assistants	1,079	1,175	96	8.9%

Employers were also asked to rate their difficulty finding qualified Physician Assistants. Only one in four employers noted “some difficulty” finding qualified applicants for their openings — none of the employers reported “great difficulty.”

### Healthcare Reform Legislation

Employers were asked about the potential impacts of the recently passed healthcare reform legislation on their general workforce and needs for Physician Assistants. None of the respondents felt it would decrease hiring, and an overwhelming majority indicated that the legislation would have no effect.

**Figure 2: Healthcare Reform Impact on Employment**



<sup>3</sup> This figure does not include one outlier survey response that reported an expectation of adding 300 Physician Assistants to its current location.

## College Response

Based on employment projections, there may be an average of 60 and 276 new and replacement job openings per year for Physician Assistants in the San Diego-Imperial Region and Southern California, respectively. Extrapolated survey data indicate that over the next 12 months, there will be 96 new and replacement jobs in San Diego County alone.

Table 3 shows that in 2009, programs training for these occupational areas contributed up to three students (all were transfers from community colleges) into the San Diego-Imperial Region workforce and 360 students (122 were transfers from community colleges) into the Southern California workforce. It is important to note that not all of the transfers enter or complete PA programs. For a full list of accredited programs in the United States, please see Appendix B.

**Table 4: Physician Assistant Programs**

Region	Number of Program Completions		Annual Job Openings	Gap
	PA Program Completions	Health Professions, Transfer Core Curriculum		
San Diego-Imperial Region	0	3	60-96	57-93
Southern California	238	122	276	(84)-38
California	328	309	464	(173)-136

Source: EMSI Complete Employment, 2<sup>nd</sup> Quarter 2010; figures in red indicate potential oversupply.

The San Diego Region is not providing adequate Physician Assistants to meet local need. The data also indicate that there are gaps throughout Southern California and the rest of the state.

## Conclusion

Community colleges are best positioned to educate new workers, replacement workers and incumbent workers for the allied health industry. They play an integral role in providing highly adaptable, innovative solutions to their surrounding community and the state with their efforts.

Community colleges in the San Diego-Imperial Region have a unique opportunity to provide workforce solutions in a rapidly changing environment that is demonstrating an enhanced need for Physician Assistants. As the largest provider of trained allied health professionals, the region’s community colleges are the logical solution to meet the short and long-term needs for this vital healthcare occupation.

Given the important role of community colleges in healthcare training and the clear need for additional training to meet the demand for Physician Assistants, colleges in San Diego should strongly consider developing Physician Assistant programs.

## Additional References

In addition to the sources cited in report footnotes, the following references were used in developing this report, its Appendices, and/or its corresponding presentation:

“Access to Career Ladders at U.S. Community Colleges,” American Association of Community Colleges, [www.aacc.nche.edu](http://www.aacc.nche.edu)

California Community Colleges, Statewide Health Occupations Directory, [www.healthoccupations.org](http://www.healthoccupations.org)

California Employment Development Department (EDD), Labor Market Information Division (LMID), [www.labormarketinfo.edd.ca.gov](http://www.labormarketinfo.edd.ca.gov)

Career Prep System, [www.careerprep.org/careerpath](http://www.careerprep.org/careerpath)

“Closing the Health Workforce Gap in California: The Education Imperative,” Health Workforce Solutions, November 2007 (online at [www.collegecampaign.org](http://www.collegecampaign.org))

Economic Modeling Specialists, Inc. (EMSI), [www.economicmodeling.com](http://www.economicmodeling.com)

Environmental Systems Research Institute (ESRI) Business Analyst Software, [www.esri.com](http://www.esri.com)

“Health Care Help Wanted” (December 17, 2007), *The Business Press*, p.11. Article archived (available online at [http://wsprod.westernu.edu/news/nr\\_detail.jsp?id=4220&groupname=IntheNews](http://wsprod.westernu.edu/news/nr_detail.jsp?id=4220&groupname=IntheNews))

“Health Care Industry: Identifying and Addressing Workforce Challenges,” by Alexander, Wegner and Associates, U.S. Department of Labor, February 2004. (online at <http://www.doleta.gov/brg/pdf/pdf3.pdf>)

Health Professions Education Data Book 2007-2008, American Medical Association (available online at <https://catalog.ama-assn.org>)

The Career Ladder Mapping Project, Shirley Ware Education Center, SEIU, Local 250 AFL-CIO, December 2002 (<http://www.careerladdersproject.org/resources/sectors/health.php>)

U.S. Bureau of Labor Statistics, [www.bls.gov](http://www.bls.gov)

U.S. Bureau of the Census, 2002 Economic Census [www.census.gov/acs](http://www.census.gov/acs)

U.S. Department of Education, National Center for Education Statistics, <http://nces.ed.gov>

U.S. Department of Labor, Employment Training Administration, Occupational Outlook, [www.doleta.gov](http://www.doleta.gov)

## Appendix A: How to Utilize this Report

This report is designed to provide current industry data to:

- Define potential strategic opportunities relative to an industry's emerging trends and workforce needs;
- Influence and inform local college program planning and resource development;
- Promote a future-oriented and market responsive way of thinking among stakeholders; and,
- Assist faculty, Economic Development and CTE administrators, and Community and Contract Education programs in connecting with industry partners.

The information in this report has been validated by employers and also includes a listing of what programs are already being offered by colleges to address those workforce needs. In some instances, the labor market information and industry validation will suggest that colleges might not want to begin or add programs, thereby avoiding needless replication and low enrollments.

### 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.

The Centers of Excellence Initiative is funded in part by the Chancellor's Office, California Community Colleges, Economic and Workforce Development Program. The Centers aspire to be the premier source of regional economic and workforce information and insight for California's community colleges.

More information about the Centers of Excellence is available at [www.coecc.net](http://www.coecc.net).

### *Important Disclaimer*

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. Efforts have been made to qualify and validate the accuracy of the data and the reported findings. The purpose of the Environmental Scan is to assist the California Community Colleges to respond to emerging market needs for workforce performance improvement. However, neither the Centers of Excellence, COE host District, or the California Community Colleges Chancellor's Office are responsible for applications or decisions made by recipient community colleges or their representatives based upon this study and its components or recommendations.

### *Additional Information*

The Centers of Excellence are funded in part by the Chancellor's Office, California Community Colleges, Economic and Workforce Development Program. The total grant amount represents compensation for multiple documents or written reports through the San Diego-Imperial Center of Excellence. Our mission is to strengthen California's workforce and advance economic growth through education, training and job development.

## Appendix B: Survey Methodology

### About the Survey

In July of 2010, the Center of Excellence for San Diego, in partnership with BW Research, Inc. and Green LMI Consulting, collected workforce data on Physician Assistants through an in-depth survey. Consisting of 11 questions, the quantitative telephone survey collected information from thirty-two (32) San Diego healthcare employers. The table below details the survey process.

Technique	Telephone survey of allied health employers
Sample	32 employer respondents
Field dates	July 2010

### Questionnaire Design

Through an iterative process, the COE, Green LMI, and BW Research Partnership worked closely with subject matter experts and study partners to develop the questionnaire. To avoid the problem of systematic position bias – where the order in which a series of questions is asked systematically influences the answers to some of the questions – several of the questions in this survey were randomized such that respondents were not consistently asked the questions in the same order.

### Population of Employers

The sampling plan for the study was developed to ensure a minimum number of responses from employers in the county, as well as being stratified by the size of the employer to ensure small, medium, and large employers within the sample.

Healthcare employers were randomly surveyed from the region; however, employers that were more likely to hire Physician Assistants were oversampled to provide a more robust occupational dataset. In interpreting survey results, one should remember that the results do not necessarily reflect a representative assessment of the entire healthcare industry, but instead reflect the views and perspectives of healthcare employers that are most likely to hire Physician Assistants. The overall results refer to the complete dataset, combining employer responses from all three sub-sectors for a total of 32 (n=32) completed employer surveys.

To identify healthcare employers in San Diego County area, information from two proprietary databases was incorporated.

1. Using Economic Modeling Specialists, Inc. (EMSI), staffing patterns for healthcare-related industry sectors were analyzed for relevance to the ten occupations selected for the study.
2. Business listings were acquired from InfoUSA, a proprietary database.

To arrive at the estimates of occupational employment currently (2010) and 12-month growth (new jobs), survey data for the sample was applied to EMSI occupational employment levels for the study area.

- In the survey, respondents were asked how many individuals in each occupation were currently employed in permanent positions, full or part-time. These questions resulted in estimates for the distribution of employment across the sample, median and mean employment.
- Respondents were also asked if their organization employs Physician Assistants. These responses informed the percent of the sample firms employing the occupation.
- Employers were asked how many more or fewer Physician Assistants they expect to have at their location in 12 months. These responses resulted in occupational growth rates.
- The growth rates were applied to the current employment levels for the region to arrive at the projected new jobs.

For additional information on data methodology or to request a copy of the survey questions, please contact the Center of Excellence at [www.coecc.net](http://www.coecc.net).

## EMSI Data Source and Calculations

### *State Data Sources*

EMSI uses state data from the following agencies: California Labor Market Information Department.

### *Industry Projections Data*

In order to capture a complete picture of industry employment, EMSI basically combines covered employment data from Quarterly Census of Employment and Wages (QCEW) produced by the Department of Labor with total employment data in Regional Economic Information System (REIS) published by the Bureau of Economic Analysis (BEA), augmented with County Business Patterns (CBP) and Nonemployer Statistics (NES) published by the U.S. Census Bureau. Projections are based on the latest available EMSI industry data combined with past trends in each industry and the industry growth rates in national projections (Bureau of Labor Statistics) and states' own projections, where available.

### *Occupational Projections Data*

Organizing regional employment information by occupation provides a workforce-oriented view of the regional economy. EMSI's occupation data are based on EMSI's industry data and regional staffing patterns taken from the Occupational Employment Statistics program (U.S. Bureau of Labor Statistics). Wage information is partially derived from the American Community Survey (U.S. Census). The occupation-to-program (SOC-to-CIP) crosswalk is based on one from the U.S. Department of Education, with customizations by EMSI.

### *Educational Attainment Data*

EMSI's educational attainment numbers are based on Census 1990, Census 2000, the Current Population Survey, and EMSI's demographic data. By combining these sources, EMSI interpolates for missing years and projects data at the county level. Educational attainment data cover only the population aged 25 years or more and indicate the highest level achieved.

## InfoUSA Data Source and Calculations

### *Number of Employees*

The infoUSA database assigns a location employment number, which was used in this report to calculate employment by NAICS codes for the top ten industries lists. Location employment is available on 98% of the businesses and is largely obtained through the telephone verification process. It represents the number of employees at that location of the business. Volunteers are only included when there are no paid employees. Approximately 27% of the above mentioned 98% carry a modeled employment number rather than a verified number.

When an employment number cannot be verified through the telephone interview process, a model is applied to estimate the employment size. The model considers whether or not the business is part of a larger family such as McDonalds, Wal-Mart, etc. If so, a modeled employment figure, which was designed for that specific chain, is applied. The location of the business (metro area with 50,000 or more in population versus a rural area) is also considered in this process.

If the business is not part of a chain, the employment model will estimate their employment using the business' primary SIC Code. The employment model includes information regarding each 4-digit SIC Code, actual employment sizes and a metro versus rural designation. If the employment model is applied to a professional individual, the modeled employment number represents the estimated support staff.

## Appendix C: Accredited Training Programs in California

All PA educational programs are accredited by one body, the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA), which also maintains a list of PA programs on its website: [www.arc-pa.org](http://www.arc-pa.org). The list below was generated online at <http://physicianassistantprograms.synthasite.com>.

### CREDENTIALS AWARDED

*C - Certificate of Completion  
A - Associate's Degree  
B - Bachelor's Degree  
M - Master's Degree*

**Charles R. Drew University** of Medicine and Science - C, B  
Physician Assistant Program  
College of Health Sciences  
1731 East 120th Street  
Los Angeles, CA 90059  
Phone: 323/563-5879  
Email: [caspauld@cdrewu.edu](mailto:caspauld@cdrewu.edu)

**Keck School of Medicine**  
of the University of Southern California - M  
Physician Assistant Program, Dept. of Family Medicine  
1000 South Fremont Ave, Unit 7, Bldg. A-6, Rm. 6429  
Alhambra, CA 91803-8897  
Phone: 626/457-4240  
Email: [uscpa@usc.edu](mailto:uscpa@usc.edu)

**Loma Linda University** - M  
Physician Assistant Program  
School of Allied Health Professions  
Nichol Hall, Room 2033  
Loma Linda, CA 92350  
Phone: 909/558-7295  
Email: [bstocker@sahp.llu.edu](mailto:bstocker@sahp.llu.edu)

**Riverside County Regional Medical Center/  
Riverside Community College** - C, A  
Primary Care PA Program  
16130 Lasselle Street  
Moreno Valley, CA 92551  
Phone: 951/571-6166

**Samuel Merritt College** - M  
Physician Assistant Program  
450 30th Street, Ste. 4708  
Oakland, CA 94609  
Phone: 510/869-6623  
Email: [admission@samuelmerritt.edu](mailto:admission@samuelmerritt.edu)

**San Joaquin Valley College** - A, B and M options  
Primary Care PA Program  
8400 West Mineral King Avenue  
Visalia, CA 93291  
Phone: 559/651-2500 ext. 351  
Email: [monicau@sjvc.edu](mailto:monicau@sjvc.edu)

**Stanford University**  
School of Medicine - C, A, M option  
Primary Care Associate Program  
Family Nurse Practitioner/Physician Assistant Program  
1215 Welch Road, Modular G  
Palo Alto, CA 94305-5408  
Phone: 650/725-6959  
Email: [pcap-information@lists.stanford.edu](mailto:pcap-information@lists.stanford.edu)

**Touro University**  
California College of Health Sciences- M  
Physician Assistant Program  
Office of Admissions  
1310 Johnson Lane  
Vallejo, CA 94592  
Phone: 888/652-7580  
Email: [sdavis@touro.edu](mailto:sdavis@touro.edu)

**Univ. of California - Davis** - C  
Physician Assistant Program/Family Nurse Practitioner Program  
Department of Family and Community Medicine  
2516 Stockton Blvd, Suite 254  
Sacramento, CA 95817-2208  
Phone: 916/734-3551  
Email: [fnppa@ucdavis.edu](mailto:fnppa@ucdavis.edu)

**Western University of Health Sciences** - M  
Primary Care Physician Assistant Program  
309 E. Second Street  
Pomona, CA 91766-1854  
Phone: 909/469-5378  
Email: [admissions@westernu.edu](mailto:admissions@westernu.edu)

**Note:** Programs listed above represent accreditation only; actual programs may be inactive. Contact the college/institution directly for more information.