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FOR THE HEALTH PROFESSIONS  
*University of California, San Francisco*

## Medical Assistants in California

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### Overview/Description of Workforce

Medical assistants (MA) represent a large pool of healthcare givers in the United States. As with other types of healthcare workers such as registered nurses and pharmacists, shortages of medical assistants have been documented for several years.<sup>1</sup>

Medical assistants are multi-skilled health care practitioners trained to assist physicians, physician-assistants and nurse practitioners with administrative and/or clinical duties in an ambulatory care setting.

Medical assistants are responsible for the smooth flow of patients or “throughput” of a medical practice. Administrative or “front office” duties are clerical in nature and include appointment scheduling, medical record management, insurance billing, telephoning pharmacy refills, and transcribing. Clinical or “back office” duties relate to patient care, and include obtaining vital signs and assisting with medical examinations. They may also be trained to administer immunizations, draw blood, run basic laboratory tests, and perform EKGs.<sup>2,3</sup>

### History of the Profession

The first medical assistants were trained by physicians during WWII when nurses fled to work in hospitals due to nursing staffing shortages. Physicians found themselves without nurses to assist them and began training their medical secretaries to perform this function. The notion of medical assistants being able to run the “front office” -- administrative and financial procedures -- as well as the “back office” -- clinical and patient care responsibilities -- dates back to this period

(J. C. Nakano, President of the California Society for Medical Assistants, personal communication, 2003). Since then, medical assistants have retained the administrative and clinical versatility to capably manage the clinical practice setting.

### Growth of the Profession

Medical assistants held about 365,000 jobs in 2002.<sup>3</sup> In California, the estimated number of medical assistants was 50,500 for the year 2000.<sup>1</sup> These are conservative figures that most likely underestimate the true number of medical assistants. Census Bureau estimates for medical assistants place them holding 604,205 positions nationwide. For California, this number increases to 70,980.<sup>4</sup> The discrepancy in these values is most likely related to the number of part-time employees in medical assisting nationwide.

The 2002-2012 projections covering U.S. occupations predict that medical assistants will have one of the fastest job growth rates, reaching 60% growth, and 282,000 new and replacement positions by 2012.<sup>2</sup> The medical assistant occupation also has one of the largest number of openings in California by 2010.<sup>1</sup>

Due to technological advances in medicine, the health services industry continues to expand. During this expansion, employment growth for medical assistants will be driven by an increased demand for healthcare and social assistance because of a growing and aging population with longer life expectancies. Growth of this profession is also assumed to parallel the increase in complexity of outpatient practice, and reimbursement patterns.<sup>3</sup> Employment growth will also be determined by the increase in the number of group practices, clinics, and other healthcare facilities that need a high proportion of support personnel, particularly the flexible medical assistant who can handle both administrative and clinical duties.

Table 1 shows the number of medical assistants per 100,000 population. The supply in California is comparable to that of other large states, and near the national average. As the table indicates, California's ratio of medical assistants is close to most other large states and the nation.

**Table 1. Number of Medical Assistants per 100,000 Population**

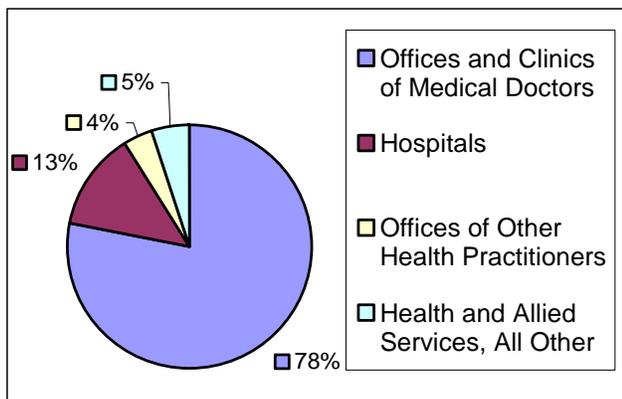
	Number of MAs per 100,000
U.S.	228
CA	207
FL	233
IL	171
NY	211
PA	272
TX	173
OH	250

Source: U.S. Census, Special Equal Employment Office Tabulation

In 2000, 78% of all medical assistants worked in offices or clinics of medical doctors (Figure 1). In comparison, only 14% of registered nurses, and 32% of licensed vocational nurses worked in this sector. This data demonstrates that medical assistants are the backbone of physician office support in the United States.<sup>4</sup>

In California medical office settings, the average number of medical assistants is 2.5 per physician (J.C. Nakano, personal communication, 2003).

**Figure 1. National Employment of Medical Assistants by Industry Setting**



Source: California Employment Development Department/ Labor Market Information Division

## Work/Practice Patterns

Medical assistants practice under the supervision of a physician, as allowed by state law. Providing a national standardized job description or clearly demarcating the parameters of the profession is therefore difficult. The uniqueness of each medical office, the varying requirements of each state, as well as the medical specialty of the physician’s practice, affect the medical assistant’s scope of practice.<sup>5</sup>

Table 2 describes some of the more common responsibilities listed in the AAMA’s scope of practice.<sup>2</sup> Some of these responsibilities include basic administrative functions, scheduling and coordinating appointments, claims submission, and monitoring third party reimbursement. Clinical responsibilities involve obtaining patient history and vital signs such as blood pressure, pulse, height and weight, preparing and maintaining examination and treatment areas, preparing patients for examination, assisting with procedures and treatments, preparing and administering medications and immunizations, recognizing and responding to emergencies, screening and following up on patient test results, as well as collecting and processing specimens for diagnostic tests.<sup>2</sup>

Medical assistant duties vary from office to office and depend on office location, size and whether a medical assistant develops an area of concentration. In small offices, most medical assistants handle both administrative and clinical duties and are considered “generalists”. They tend to report directly to a physician, health practitioner or office manager. In larger offices, most medical assistants tend to focus in a particular area such as billing, administrative, or clinical functions. MAs in larger offices report to department administrators or other operations management.

**Table 2. Administrative & Clinical Scopes of Practice for Medical Assistants**

<b>Clinical Scope of Practice</b>
escort patient to room
conduct patient history interviews
take and record vital signs
prepare patient for examination
provide patient information/instructions
assist with medical examinations/surgical procedures
set up/clean patient rooms
inventory supplies
restock supplies in patient rooms
perform venipuncture
administer immunizations
collect and prepare laboratory specimens
perform basic laboratory tests
prepare/administer oral/intramuscular meds as directed
perform EKGs
translate during medical interviews
give prevention reminders
instruct patients about medications or special diets
remove sutures
change dressings
notify patients of laboratory results
triage patients over the telephone
schedule patient appointments
<b>Administrative Scope of Practice</b>
reception
answer telephone
schedule appointments
medical billing
maintain financial records
file medical charts
telephone prescription orders to a pharmacy
transcribe dictations
send letters
triage patients over the telephone

**Source: American Association of Medical Assistants: Role Delineation Study 2003**

## Demographics/Data

National demographic data demonstrate that 88% of the medical assistant workforce is female, with a majority (73%) of Caucasians. In California, the workforce is also predominantly females (88%) and has a higher predominance of minorities, 54% working in the field.<sup>6</sup>

## Education and Certification

There are numerous educational programs in medical assisting located throughout the U.S. and in California. Certification is strictly voluntary for individuals trained and/or working as medical assistants. Certification can be achieved at the national or state level.

### *Education*

Two agencies recognized by the United States Department of Education, or analogous private sector bodies, accredit training programs in medical assisting: the Commission on Accreditation of Allied Health Education Programs (CAAHEP), and the Accredited Bureau of Health Education Schools (ABHES). In 2002, there were 495 medical assisting programs accredited by CAAHEP and about 170 accredited by ABHES.<sup>3</sup> Graduation rates range between 80-90% of enrollees.

Many programs will retrain recent graduates if employers are not satisfied with the training level (D. Rincon, Head Instructor for medical assisting training and certification, San Francisco City College, personal communication, 2004). However, graduation from an accredited program is not mandatory. Neither the federal government nor most states require MAs to be formally trained in one of these programs to become employed as a medical assistant (D. Balasa, Executive Director of the American Association of Medical Assistants, personal communication, 2003).<sup>9</sup>

Graduates of formal programs in medical assisting may have attended courses offered in vocational and technical high schools, post secondary vocational schools, community and junior colleges, and in colleges and

universities. The vocational schools tend to have shorter courses with the minimum state requirements for training ranging from four to nine months in duration. Post secondary programs usually last either one year, resulting in a certificate or diploma, or two years, resulting in an associate degree. For example, the City College of San Francisco course offers a one year program or a two year associates degree and includes Mathematics and English proficiency courses as well as anatomy, medical terminology, and disease process classes. (D. Rincon, personal communication, 2004). Accredited programs include an internship that provides practical experience in physicians' offices, hospitals, or other healthcare facilities.

### *Certification*

Table 3 outlines the various pathways to certification. The American Association of Medical Assistants (AAMA) awards the Certified Medical Assistants (CMA) Credential; the American Medical Technologists (AMT) awards the Registered Medical Assistant (RMA) Credential. The only pathway for the AAMA CMA Certification Examination is graduation from a postsecondary medical assisting program accredited by either CCAHEP or ABHES. The AMT RMA allows alternate pathways as well. For CMAs, recertification occurs every five years through continuing education or re-examination. Recertification for RMAs occurs by renewal of yearly dues to the AMT. Both credentials are voluntary, and neither the federal government, nor most states require a medical assistant to be certified in order to work in medical assisting. Advantages of certification include higher salary and assurance of competency in knowledge and skill sets.

**Table 3. National and California State Certifying Organizations and Certification Types**

	National		California
Certifying Organization	AAMA	AMT	CMAA
	↓	↓	↓
Certification Type	CMA	RMA	CCMA

Currently, there are approximately 45,000 total certified MAs (40,000 AAMA CMAs, and 15,000 AMT RMAs) in the United States. This represents approximately 12.5% of the estimated total medical assistant workforce (S.Gautschy, Director of Marketing for AMT, personal communication, February 2004). The AAMA highly encourages medical assistants to become certified to provide increased marketability in job setting. (D. Balasa, personal communication, 2003). Other factors urging increased MA certification come from local healthcare organizations that seek to have higher standards for their staff. Some employers will pay for their medical assistants to become certified.<sup>10</sup>

Medical assistants are not licensed by any state boards. Some states issue limited permits in invasive procedures (e.g. venipuncture, injections, and limited scope radiography), while others issue limited radiography permits. The only state requiring registration is South Dakota. In order to be employed as a medical assistant in South Dakota, a person must be registered with the state board of medical and osteopathic examiners, and renew his or her registration on a biennial basis (D. Balasa, personal communication, 2003).

### *State of California*

California has a fragmented approach to the certification of medical assistants. The Medical Board of California, Affiliated Healing Arts recognizes three types of certifications for medical assisting: the national CMA certificate through the AAMA, the RMA certificate through the AMT, and the California Certified Medical Assistant (CCMA) credential. In Northern California, medical assistants predominantly obtain the California Certified Medical Assistant established by the California Medical Assistants Association (CMAA), while Southern California medical assistants primarily become certified through the AAMA. Less than 5% of medical assistants in California opt for state or national certification because the incentives to do so are few. Those incentives include a 3-7% higher salary and the professional satisfaction of being credentialed (J. C. Nakano, personal communication, 2003).

## Regulation and Role Delineation

The California Business and Professions Code Medical Practice Act outlines laws related to medical assistance practice as well as minimum requirements for training institutions to establish accreditation and graduate students from their programs.<sup>11</sup> Students must have completed minimum requirements of appropriate training established by the Division of Licensing in accredited schools or under the supervision of a licensed physician in order to be delegated to perform venipuncture and injections in California. Training must include 10 hours of injections, venipuncture and inhalation therapy. With regards to administering injections, 10 satisfactory demonstrations in each of the subsections outlined in Table 4 must be performed.<sup>9</sup>

**Table 4. Mandatory hours of training for certification required in accredited training institutions**

Administer Injections	10 hours
Intramuscular	10 (demonstrations)
Subcutaneous	10 (demonstrations)
Intradermal	10 (demonstrations)
Perform venipuncture	10 hours
Administer inhalation therapy	10 hours

**Source: Medical Board of California**

Training in each of the categories in Table 4 additionally requires instruction and demonstration in:

- knowledge of pertinent anatomy and physiology appropriate to the procedures
- use of proper sterile technique
- understanding of hazards and complications
- knowledge of patient care following treatments or tests
- awareness of emergency procedures
- capacity to chose appropriate equipment

Other legal requirements stipulate that medical assistants must be supervised by a licensed physician, and be at least 18 years of age in order to work legally.<sup>9,11</sup>

There is no enforcement agency for quality control of medical assistants. Responsibility for supervision occurs at the physician level in small practices or operations management level in larger practices.

## Earnings

The median hourly wage for medical assistants in the state of California is \$12.61, with a median annual salary of \$27,120.<sup>1</sup> Certified medical assistants (CMA's) earn approximately 5-10% more in salary than their non-certified counterparts.<sup>2</sup> The national average hourly wage was \$11.93 in 2002. Median national annual earnings for medical assistants were \$23,940 in 2002. The middle 50% earned between \$20,260 and \$28,410.<sup>3</sup> Annual salaries vary slightly by work setting as indicated in Table 5 below.

**Table 5. National Average Annual Salaries by industry type for MAs in 2002**

	National Average
Offices of physicians	\$24,260
Hospitals	\$24,460
Outpatient care centers	\$23,980
Other ambulatory health care services	\$23,440
Offices of other health practitioners	\$21,620

**Source: 2002 Occupational Outlook Handbook, BLS**

## Critical Issues and Policy Concerns

### *Difficulty Recruiting*

A majority of counties in California reported moderate or high difficulty in recruiting entry-level medical assistants.<sup>1</sup> Turnover rates parallel the health of the economy with shortages becoming more severe in a strong economy as more competing opportunities are available. Recruiting is particularly difficult in rural counties. In California 43 of the 58 counties in the state, primarily rural, reported that it was "very difficult" or "moderately difficult" to recruit MAs.<sup>8</sup>

### *Turnover Rates and Workforce Shortage*

There are reported high turnover rates among medical assistants in medical practice settings. Physician office practice managers reported concern about the amount of time spent on frequent training of new MAs for the specific needs of a practice, due to the frequent turnover of staff. Some medical offices, interviewed, report turnover rates of 20-30% per year. Staff turnover is thought to be due to a lack of professional advancement and low wages.<sup>12</sup>

In addition to turnover, more complex physician office practice leads to an increase in the number of medical assistants needed. The projected increase in MAs in California parallels the growth of the population and physician supply.

### *Lack of Consistency in Requirements*

Current regulation of medical assisting at both the state and federal level is minimal. The absence of mandatory certification for medical assistants results in market forces and the industry directing the training level of medical assistants. Large managed care organizations develop their own standards for hiring and retaining their MAs.

### *Scope of Practice*

There are discussions about MA licensure, however, the Medical Board of California states that it is not legal to use medical assistants to replace highly trained licensed professionals.<sup>11</sup> The extent to which MA's could replace licensed professionals may pose a threat to other healthcare workers in the field. Potential areas of overlap may include phlebotomy, radiology, and health education. Most MAs have specialized skills obtained in on-the-job training to function in a particular physician practice or clinic setting. However, these skills are not transferable to settings other than outpatient practices with licensed physicians.

### *Lack of Career Path*

The career paths available to medical assistants are limited within the field and include office

management, or teaching. It often takes several years for a medical assistant to advance to these positions.<sup>1</sup>

Most MA advancement occurs through other health professions in fields such as nursing, physician assisting, or other related occupations.<sup>1</sup> Stated reasons for entering nursing or physician assisting include the desire to perform more procedures, the capacity to have greater patient contact, and involvement in patient care responsibilities, as well as better financial remuneration.<sup>12</sup>

A limited number of credits from medical assisting training are transferable as elective science credits towards other health related studies. However, students must often repeat prior courses in the course of pursuing career advancement (D. Rincon, personal communication, 2004).

### *Future Directions in Training*

Increasingly, vocational schools are offering fast track programs to become specialized in billing, medical reception, and medical administration in addition to the classical "front and back office" training (D. Rincon, personal communication, 2004). This trend, in part, addresses the increased complexity of medical practice and the need for "specialization" of medical assistants. It also calls to attention the needs for a closer examination of the MA workforce, training, requirements, and scope of practice.

### *Summary*

The medical assistant workforce is an essential part of ambulatory medical practices and employment growth projections are expected to reach 53% within the next ten years. Medical assisting currently has one of the fastest job growth rates in California. Medical assistants provide both the administrative and clinical support functions that ensure the throughput of a medical practice. Several training options leading to certification including vocational schools, college degrees, and on-the-job training. However, neither individual states nor the federal government mandate formal certification to work as a medical assistant at this time. Average

earnings are lower than for other licensed or registered allied health workers for this reason. The lack of career paths and low wages within the field are in part responsible for turnover rates.

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<sup>1</sup> EDD/LMID. (2002). *Occupational employment survey of employers*. Employment Development Department.

<sup>2</sup> AAMA. (2003). *American association of medical assistants role delineation study: Occupational analysis of the medical assisting profession*. Chicago: author.

<sup>3</sup> Bureau of Labor Statistics (2003). *Occupational Outlook Handbook, Medical Assistants*. Retrieved November 4, 2003, from <http://www.bls.gov/oco/ocos164.htm>

<sup>4</sup> U.S. Census. (2000). *Census 2000 Special EEO Tabulation*. Retrieved May 13, 2004, from <http://www.census.gov/hhes/www/eeoindex/occcategories.pdf>

<sup>5</sup> Grumbach, K. (2002). Fighting hand to hand over physician workforce policy. *Health Affairs*, 21(5), 13-27.

<sup>6</sup> EDD/LMID. (2003). *Help wanted: Making a difference in health care*. California Employment Development Department.

<sup>7</sup> Flight, M.R. (2000). *Protecting your right to practice*. Chicago: AAMA.

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<sup>8</sup> CPS Utilities, Unicon Research Corporation. (2001). *Current Population Survey, Outgoing Rotations*.

Retrieved May 17, 2004, from <http://www.unicon.com>

<sup>9</sup> California Medical Assistants Association. (2003). *California Business and Professions Code; Medical Practice Act*. Retrieved October 15, 2003, from <http://www.cmaa-ca.org/medical.html>

<sup>10</sup> Balasa, D. (2000). *Securing the future for certified medical assistants*. Chicago: AAMA.

<sup>11</sup> Medical Board of California. (2004). *Affiliated Healing Arts*. Retrieved May 17, 2004, from [http://www.medbd.ca.gov/MA\\_SB929.htm](http://www.medbd.ca.gov/MA_SB929.htm)

<sup>12</sup> Taché, S. (2004). A qualitative study on medical assistants in Northern California. Paper presented at: AAFP Convocation of Practice-Based Research Networks, Kansas City, MO.

## Acknowledgments

This report was made possible through the support of the California HealthCare Foundation, which, in partnership with The California Endowment, funds the Allied and Auxiliary Healthcare Workforce Project. The Center for the Health Professions wishes to thank Donald Balasa, Executive Director of the American Association of Medical Assistants, Sharon Gautschy, Director of Marketing for AMT, Joyce Nakano, President of the California Society of Medical Assistants, Kate Logan, California Medical Assistants Association, Yvonne Davis, Medical Board of California, Dory Rincon, Head Instructor for Medical Assisting, San Francisco City College, and Christine Nielsen, Program Analyst at the Center for the Health Professions, for their help with this report.

The findings and views contained in this report do not necessarily reflect the views of the California HealthCare Foundation, The California Endowment, the University of California, the reviewers, or contributors of the project.

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