

The November, 2018 printing funded by the California Community Colleges Chancellor's Office, pursuant to grant #15-197-001

Exploring Health Careers: What Do You Want To Be?

Edited by: Valerie A. Fisher, RN, MA Central Region Deputy Sector Navigator Health Workforce Initiative www.ca-hwi.org

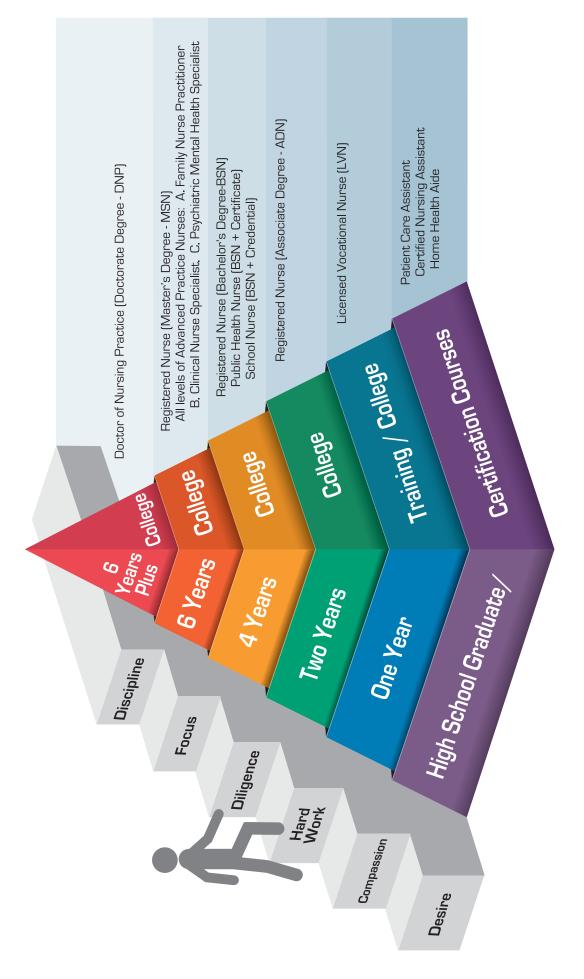
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CHAPTER 1 SNISUR

Nursing Career Pathways



Patient Care Assistant

Job Description: Assist the elderly, convalescents, or persons with disabilities with daily activities of living at the person's home or in a care facility. Duties performed at a place of residence may include keeping house (making beds, doing laundry, washing dishes) and preparing meals.

Educational Requirements: High school diploma and/or other training/on-the-job-training.

Salary Range: \$20,000 to \$22,000 per year



For Additional Information:

QR Code: http://www.bls.gov/OOH/personal-care-and-service/personal-care-aides.htm Video Link: https://www.youtube.com/watch?v=Sn6RJenOgzo

Certified Nurse Assistant

Job Description: Provides basic patient care under direction of nursing staff. Perform duties such as feed, bathe, dress, groom, or move patients, or change linens. May transfer or transport patients. Place of work may be in patient's home and/or at a long term care facility or hospital.

Educational Requirements: Be at least 16 years old and have at least a high school diploma, or GED, and at least some form of post-secondary nursing instruction. After training students are then required to pass an examination for their state certification. Must apply for a state certificate from the California Department of Public Health.

Salary Range: \$25,000 to \$30,000/per year



For Additional Information:

QR Code: http://www.bls.gov/ooh/healthcare/nursing-assistants.htm Video Link: https://www.youtube.com/watch?v=fRjNpjxnjYo

Home Health Aide

Job Description: Provide routine individualized healthcare such as changing bandages and dressing wounds, and applying topical medications to the elderly, convalescents, or persons with disabilities at the patient's home or in a care facility. Monitor or report changes in health status. May also provide personal care such as bathing, dressing, and grooming of patient.

Educational Requirements: Must be a CNA prior to Home Health Aide Training. Training is a short course of approximately 54 hours (both lecture and skill lab training). Must apply for a state certificate from the California Department of Public Health.

Salary Range: \$22,000 to \$24,000/per year



For Additional Information:

QR Code: http://www.bls.gov/ooh/healthcare/home-health-aides.htm Video Link: https://www.youtube.com/watch?v=NKeSQSwVtYc

Licensed Vocational Nurse

Job Description: Care for ill, injured, or convalescing patients or persons with disabilities in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. LVNs may work under the supervision of a registered nurse or physician, depending on the clinical setting. State licensing required.

Educational Requirements: High School Diploma or GED required. Various prerequisite courses in biology, medical terminology and nutrition are required prior to admission. Training must be taken at a state approved community college, vocational training institute or adult school and requires one year or 3 semesters of education and training.

Salary Range: \$43,000 to \$52,000/per year



For Additional Information:

QR Code: http://www.bls.gov/ooh/healthcare/licensed-practical-and-licensed-vocational-nurses.htm Video link: https://www.youtube.com/watch?v=eTwzPRJEfN8

Registered Nurse (ADN & BSN)

Job Description: Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. State licensing required.

Educational Requirements: RNs must be licensed to practice in California by the State Board of Registered Nursing (BRN). To take the licensing examination, an applicant must have completed an Associate (2 year) or Bachelor's (4 year) degree in nursing.

Salary Range: \$64,000 to \$100,000/per year



For Additional Information:

QR Code: http://www.bls.gov/ooh/healthcare/registered-nurses.htm Video Link: https://www.youtube.com/watch?v=I_GIPN2I4cY

Public Health Nurse

Job Description: Registered nurses (BSN) who hold a public health nurse certification work within a community to improve the health of the people who reside in that community. Common places of employment are county or state departments of health/public health, correctional facilities, or in community health clinics. They focus primarily on improving health outcomes, prevention interventions and safety issues in the workplace. They also provide disaster relief and help communities prepare for natural disasters.

Educational Requirements: Possession of a baccalaureate or entry-level master's degree in nursing from a nursing school which includes course work in public health nursing and includes a minimum of 90 hours of supervised clinical experience in a public health setting(s).Special certification required from the Board of Registered Nursing.

Salary Range: \$50,000 to \$95,000

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For Additional Information:

QR Code: https://explorehealthcareers.org/career/nursing/public-health-nurse/ Video Link: https://www.youtube.com/watch?v=pdTvSHAcQ1s

School Nurse

Job Description: A specialized practice in nursing which protects and promotes student health and well-being in a school setting. The school nurse also implements strategies that promote student and staff health and safety.

Educational Requirements: Prerequisites to this specialty in nursing is possession of a baccalaureate degree in nursing, Community or Public Health coursework or certificate, and a course in research, counseling and special education. Number of units and course requirements vary by college for this credential, but most work can be completed within a year.



Salary Range: \$52,000 to \$92,000 depending on experience.

For Additional Information: QR Code: http://www.nursesource.org/school.html Video Link: https://www.youtube.com/watch?v=-tCg7Xf-HtU

Registered Nurse – Advanced Practice (APRN)

Description: Most advanced nursing roles require a master's degree that encompasses theory and clinical training to address a specific area of nursing. Students must meet all the requirements for graduate level coursework before admissions to the specialty nursing program which vary slightly by college. However this education and training can usually be completed within two years.

A. Family Nurse Practitioner

Job Description: Diagnose and treat acute, episodic, or chronic illness, independently or as part of a healthcare team. May focus on health promotion and disease prevention. May order, perform, or interpret diagnostic tests such as lab work and X rays. May prescribe medication. FNPs are needed most in rural settings (clinics) which serve clients from diverse cultural backgrounds.



Salary Range: \$98,000 to \$118,000/per year

For Additional Information:

QR Code: http://www.bls.gov/oes/current/oes291171.htm Video Link: www.youtube.com/watch?v=WmYBxOVo4oc

B. Clinical Nurse Specialist

Job Description: Plan, direct, or coordinate the daily patient care activities in a clinical practice. Ensure adherence to established clinical policies, protocols, regulations, and standards.



Salary Range: \$65,000 to \$110,000

For Additional Information:

QR Code: http://explorehealthcareers.org/en/Career/82/Clinical_Nurse_Specialist Video Link: https://www.youtube.com/watch?v=XeRPuo7ai50

C. Psychiatric Mental Health Nurse Specialist

Job Description: Provides advanced nursing care for patients with psychiatric disorders. May also provide psychotherapy under the direction of a psychiatrist.



Salary Range: \$78,000 to \$125,000

For Additional Information:

QR Code: http://www.onetonline.org/link/summary/29-1141.02 Video Link: https://www.youtube.com/watch?v=en7ElVyE5DA

Doctor of Nursing Practice (Doctorate Degree – DNP)

Job Description: The Doctor of Nursing Practice (DNP) is a doctoral degree to prepare nurses for advanced nursing practice roles. The DNP provides expanded knowledge through the formulation and interpretation of evidence-based practice. The DNP prepares the graduate for multiple roles including health policy development, leadership, administration, advanced clinical practice, and information technology in an environment of inter-professional collaboration. (As defined by the American Nurses Association, 2016)

Educational Requirements: A post-master's DNP can typically be earned in one or two years full time. A post-BSN DNP degree can be earned in three or four years full time. Many DNP programs have part-time options that allow flexibility for nurses who continue to work.

Salary Range: There are a number of different factors that will influence the average salary of someone with a DNP degree. Some of these factors include the area of specialization, the employer, years of experience and geographical location. Salary is similar to APRNs.



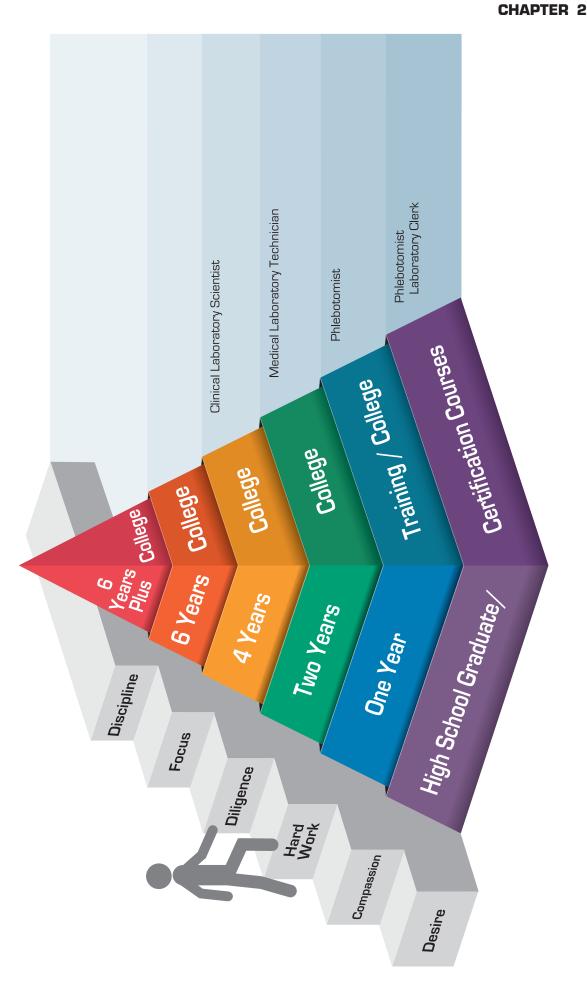
For Additional Information: QR Code: Not available Video Link: https://www.youtube.com/watch?v=anPzMPCUG90





LABORATORY SCIENCE

Laboratory Science Career Pathways



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Laboratory Clerk

Job Description: Performs various office tasks required with receiving, processing, reporting, and delivering laboratory test results. Upon receiving written or verbal instructions, Laboratory Clerk will help coordinate patient specimen collection.

Educational Requirements: High school diploma minimum; associate's degree in a science-related field may be preferred. Some experience with patient care or laboratory procedures helpful.

Salary Range: \$30,000 to \$33,000/per year*

QR Code: None available Video Link: None available

Phlebotomist

Job Description: Draws blood for tests, transfusions, donations, or research. May explain the procedure to patients and assist in the recovery of patients with adverse reactions.

Educational Requirements: High school diploma or GED required and a CA State Certification.

Certification as a Limited Phlebotomy Technician (LPT), must complete 20 hours of basic didactic and classroom instruction.* No examination is required. This certification is for Medical Assistants who work under the supervision of a physician only.

Certification as a Certified Phlebotomy Technician I (CPT I), applicants must complete a minimum of 40 hours of didactic/classroom instruction in basic and advanced phlebotomy techniques,* as well as complete a minimum of 40 hours of practical instruction in a clinical setting. A national certification examination is required.

* Training program must be approved by the California Department of Health Services.

Salary Range: \$32,000 to \$41,360/per year (Bureau of Labor Statistics)



For Additional Information:

QR Code: https://www.bls.gov/OES/current/oes319097.htm Video Link: https://www.careeronestop.org/videos/careeronestop-videos.apx?videocode=31909700



Medical Laboratory Technician

Job Description: Collect samples and perform tests to analyze body fluids, tissue, and other human substances. Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease.

Educational Requirements: Medical laboratory technicians must have an Associate Degree of Science from a CA State approved training program and/or NACCLS accredited program. There are currently 4 California Community Colleges that offer this education and training.

A medical laboratory technician must be licensed by CA. Department of Public Health, Division of Laboratory Field Services. However, an optional certification exam is offered by several national professional organizations.

Salary Range: \$51,000 to \$60,000 (Salary.com - California 2017)



For Additional Information: QR Code:

https://www.bls.gov/ooh/Healthcare/Medical-and-clinical-labratory-technologists-and-technicians.htm Video link: https://www.youtube.com/watch?v=xiiw2WVG-FY

Clinical Laboratory Scientist

Job Description: Using laboratory equipment, the clinical laboratory scientist analyzes body fluid samples, such as blood, urine, or DNA samples. The results of these analyses provide information that help physicians diagnose or monitor a patient's state of health or disease. The clinical laboratory scientist typically works in a clinical laboratory setting, such as a hospital or research laboratory.

Educational Requirements: Bachelor's degree; California Clinical Laboratory Scientist (CLS) generalist license. The CLS generalist license permits you to work in all specialty areas of the clinical laboratory. Academic program must be approved by the CA. Department of Public Health.

CA. Department of Public Health, Division of Laboratory Field Services (LFS) requires applicants to submit documentation of academic coursework and clinical training or work experience to qualify for licensure.

Salary Range: \$68,490 to \$97,905 (Glassdoor.com – California – 2017)

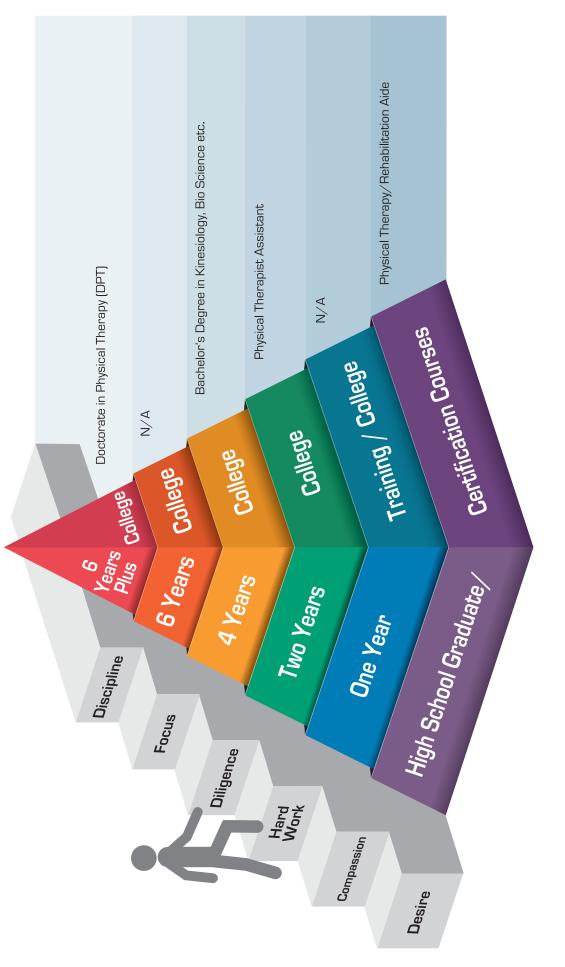


For Additional Information:

QR Code: https://www.bls.gov/ooh/Healthcare/Medical-and-clinical-laboratory-technologists-andtechnicians.htm Video Link: https://www.youtube.com/watch?v=jp2WuorCDUk



Physical Therapy Career Pathways



CHAPTER 3

Physical Therapist/Rehabilitation Aide

Job Description: Under close supervision of a physical therapist or physical therapy assistant, performs only delegated, selected, or routine tasks in specific situations. These duties include preparing the patient and the treatment area, cleaning treatment areas and equipment, and the handling of clerical tasks.

Educational Requirements: Physical therapist aides have a high school diploma and receive on-the-job training or take a short course offered by an educational institution (ROP, Adult School or Community College).

Salary Range: \$25,000 to \$28,000 per year



For Additional Information:

QR Code: https://www.bls.gov/oes/current/oes312022.htm Video Link: https://www.youtube.com/watch?v=Ku3kZOJeyDM

Physical Therapist Assistant

Job Description: Physical Therapist Assistants (PTA) work with physical therapists in providing physical therapy treatments and procedures. May carry out routine functions, document the progress of treatment, and modify specific treatments, according to patient status and within the scope of treatment plans established by a physical therapist. Physical therapist assistants must have strength and stamina. Requires 2 years of formal training from an accredited college.

Educational Requirements: Must be licensed by the State of California. Licensing requires either completion of an associate degree accredited* program in physical therapist assistant, or three years of experience as a physical therapy aide plus some related college coursework, or five years of experience as a physical therapy aide. Visit www.ptbc.ca.gov/ for more licensing information.

*Program must be accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE)

Salary Range: \$55,000 to \$66,000 per year



For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/physical-therapist-assistants-and-aides.htm Video Link:

https://www.youtube.com/watch?v=r35FQT3u0J4



Bachelor's Degree in Kinesiology, Biological Sciences or Exercise Physiology

This degree does not provide any "job ready skills." To find gainful employment, the student must advance their career to the next level with a Doctorate in Physical Therapy (DPT), or a Master's Degree in Occupational Therapy or change their major to Physical Education with a teaching credential. Another option is to pursue licensure in a related allied health occupation that requires a two-year Associate Degree specialized training: Physical Therapist Assistant, Occupational Therapy Assistant, or Sports Medicine/Athletic Trainer. *

Job Description: N/A

Educational Requirements: Note: If you are planning to pursue a DPT degree it is important to plan your 4 year educational schedule in concert with the prerequisites required by the college you plan to attend. Prerequisites for DPT school vary widely. Use this link to download a "Summary of Course Prerequisites for Programs" from the Physical Therapist Centralized Application Service: http://www.ptcas.org/ProgramPrereqs/

Salary Range: N/A

For Additional Information: QR Code: N/A Video Link: N/A

* Description provided by Valerie A. Fisher, MA, R.N., Health Workforce Initiative

Physical Therapist (DPT)

Job Description: Assess, plan, organize, and participate in rehabilitative programs that improve mobility, relieve pain, increase strength, and improve or correct disabling conditions resulting from disease or injury.

Educational Requirements: Must obtain a Doctorate of Physical Therapy (DPT) degree (typically 3 years post-baccalaureate). Must have a baccalaureate GPA of 3.0 or higher for admission and admission is very competitive. Mandatory in California; PTs must pass the National Physical Therapy Examination administered by the Federation of State Boards of Physical Therapy. Visit www.ptbc.ca.gov/ for additional licensing information.

Salary Range: \$84,000 to \$95,350 per year (CA Occupational Employment & Wages – 2016)



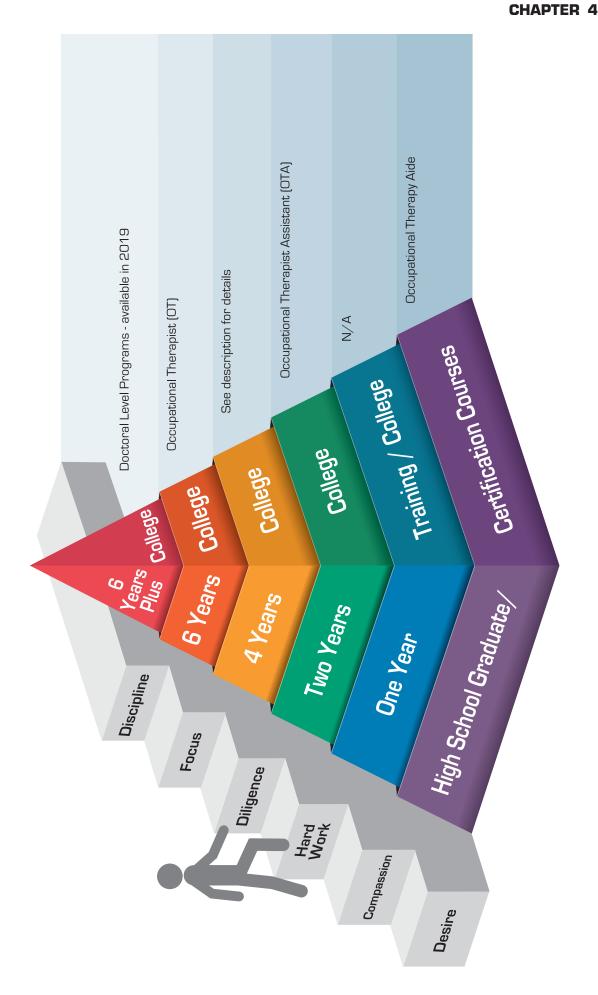
For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/physical-therapists.htm Video Link: https://www.youtube.com/watch?v=0Ka4_uxLLh4



OCCUPATIONAL THERAPY

Occupational Therapy Career Pathways



Occupational Therapy Aide

Job Description: Under close supervision of an occupational therapist or occupational therapy assistant, performs only delegated, selected, or routine tasks in specific situations. These duties include preparing patients for therapy, positing the patient for comfort and making sure equipment is clean before and after therapy secessions. Clerical/office duties are also routinely part of the job description for an aide.

Educational Requirements: Occupational therapy aides have a high school diploma or equivalent and/or have taken a short training course at an educational institution. Another possible option for someone interested in working in this field is on-the-job training.

Salary Range: \$28,000 to \$32,000 per year



For Additional Information: QR Code: https://www.bls.gov/ooh/healthcare/occupational-therapy-assistants-and-aides.htm Video Link: https://www.youtube.com/watch?v=DIDUndGUroM

Occupational Therapist Assistant (OTA)

Job Description: Assist occupational therapist in providing occupational therapy treatments and procedures. May assist in the development of treatment plans; carry out routine functions, direct activity programs, and document the progress of treatments. Occupational therapy assistants may work in hospitals, nursing homes, educational institutions with special education children or for an occupational therapist in private practice.

Educational Requirements: Occupational therapy assistants need an associate's degree from an accredited occupational therapy assistant program. Occupational therapy assistants must be licensed by the state of California.

Salary Range: \$58,000 to \$68,000 per year



For Additional Information: QR Code: https://www.bls.gov/ooh/healthcare/occupational-therapy-assistants-and-aides.htm

Video Link:

https://www.youtube.com/watch?v=T79Mpt6NY6o



OCCUPATIONAL THERAPY

Bachelor's Degrees

A Master's Degree is considered standard for the field of occupational therapy, so it is important for the student to be certain this is the health profession they wish to pursue prior to beginning this educational path. Possible Bachelors degree majors include: bio-sciences, psychology, kinesiology, or health sciences. Two colleges in California offer a combined baccalaureate/masters program over 5 years (University of Southern California and Dominican University - 2017). Admission to these programs are highly competative and you must have a GPA > 3.0 for acceptance.

If you are still unsure occupational therapy is the right field for you (many students have diffiuclty deciding between occupational and physical therapy fields), you may choose to attend a community college first, then transfer to college of your choice. Courses in anatomy, physiology, chemistry, biology and psychology are essential to prepare for this field.*

For more information on career planning go to: The American Occupational Therapy Association, Inc. http://www.aota.org/

Job Description: N/A

Educational Requirements: N/A

Salary Range: N/A



For Additional Information:

QR Code: http://www.aota.org/Education-Careers/Considering-OT-Career/Resources/ consider-becoming-ota.aspx Video Link: https://www.youtube.com/watch?v=ETcPH5-LmDw

* Description provided by Valerie A. Fisher, RN, MA, Health Workforce Initiative

Occupational Therapist (OT)

Job Description: Assess, plan, organize, and facilitate rehabilitative programs that help build or restore vocational, homemaking, and daily living skills, as well as general independence to persons with disabilities or developmental delays or someone recovering from illness or injury.

Educational Requirements: Occupational therapists must have a master's degree in occupational therapy. All states require occupational therapists to be licensed. For more information: http://www.bot.ca.gov/

Salary Range: \$80,000 to \$92,000 per year



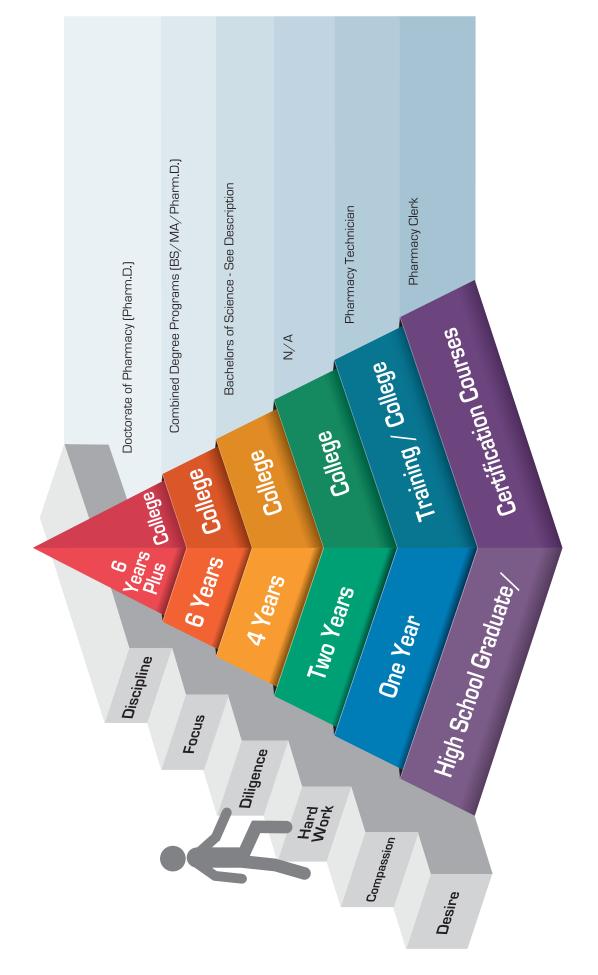


For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/occupational-therapists.htm Video Link: https://connectedstudios.org/url-zuF2ha7ENUkhXWnhzOFCGrTnKFIAxYaCUodeL00B



Pharmacy Services Career Pathways



PHARMACY SERVICES

Pharmacy Clerk

Job Description: A clerk may operate cash register and accept prescriptions for filling and serve customers who are picking up prescriptions. Other duties may include recording drugs delivered to the pharmacy, storing incoming merchandise, and informing the supervisor of stock needs. Basic clerking skills with some medical knowledge and customer service experience is helpful.

Educational Requirements: High school diploma or on the job training.

Salary Range: \$10.50 to \$11.45/hour



For Additional Information: QR Code: https://www.bls.gov/OES/current/oes319095.htm Video Link: N/A

Pharmacy Technician

Job Description: Works under the direction of a pharmacist to help prepare and distribute medications. May take prescriptions over the phone and in person, helps mix medications, counts pills, measures medications, makes labels with instructions for taking medication. May also track inventory and serve as a pharmacy clerk in a retail setting.

Educational Requirements: There are several different paths to becoming a Pharmacy Technician in California. A high school diploma or GED is required. Then one of the following must be completed and documented for the CA. State Board of Pharmacy: 1.) Military Training as a pharmacy technician; 2.) Completion of a minimum of 240 hours of instruction by an educational institution; 3.) Or self-study in order to successfully pass either the Pharmacy Technician Certification Board Exam (PTCB) or the National Healthcare Association Pharmacy Technician Certification Program (ExCPT).

Salary Range: \$30,000 to \$38,000 per year



For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/pharmacy-technicians.htm Video Link: https://www.youtube.com/watch?v=DW81Hd2YENY



Job Description: N/A

Educational Requirements: To become a pharmacist in today's world there are several different educational paths depending on the student's academic abilities, financial resources and time.

Here are several options currently available in California:

- 1. A traditional pattern would be to complete baccalaureate coursework in general and organic chemistry; human anatomy and physiology; molecular and cellular biology; microbiology; statistics; calculus; and English before applying to graduate school. To be competitive a GPA >3.0 is required;
- 2. Combined degrees (baccalaureate/doctoral) incorporate all needed coursework to become a pharmacist in one program. Combined degrees are offered in various forms and allow the student to complete all required coursework in a shorter time frame. Six and seven-year programs are most common, and award both a bachelor's and doctor of pharmacy degree upon graduation. These programs are well-suited to students with a resolute understanding of future career goals and those who want to finish their studies earlier.
- Special Pre-Pharmacy Programs offer talented high school and college students undergraduate courses in a pharmacy related discipline such as Science & Management of Biomedical Therapeutics at USC School of Pharmacy.*

Note: Most pharmacy schools require the student to pass the Pharmacy College Admissions Test (PCAT) before being admitted to a graduate program.

Salary Range: N/A



For Additional Information:

American Association of Colleges of Pharmacy at: http://www.aacp.org/RESOURCES/STUDENT/PHARMACYFORYOU/ADMISSIONS/ Pages/default.aspx Video Link: N/A

* Description provided by Valerie A. Fisher, RN, MA, Health Workforce Initiative

Pharmacist – Doctor of Pharmacy (Pharm D)

Job Description: Pharmacists are licensed professionals who oversee the process of the delivery of pharmaceutical drugs, both over-the-counter and prescription for patients and the general public. The primary aim of this profession is to provide patients with medications as prescribed by physicians and drug information including use, dosage, interactions and possible side effects.

Educational Requirements: The Doctor of Pharmacy (Pharm.D.) degree program requires at least four (or more) years of professional pharmacy study. The student will have many options when applying to pharmacy school. Some schools offer a combined master's and doctoral degrees in related areas, such as pharmaceutical sciences or pharmacology. Another option is a dual degree which joins a Doctor of Pharmacy with a bachelor's or master's degree in a related field, such as chemistry or public health. Combined Pharm.D./Ph.D. programs are also available and take about eight years to complete. Many universities offer specialized dual degrees which can enhance employability upon completion. For example: Pharm.D. with a Master of Business Administration or Masters of Public Health etc. All schools of pharmacy should be explored well in advance in order to maximize one's educational trajectory.

In addition, a post graduate residency in a pharmacy may be required.

Note: The state of California requires the passing of examinations prior to licensure. The CA. State Board of pharmacy exam (CPJE) and National Association of Boards of Pharmacy Licensure Exam (NAPLEX).

Salary Range: \$122,000 to \$141,000 per year

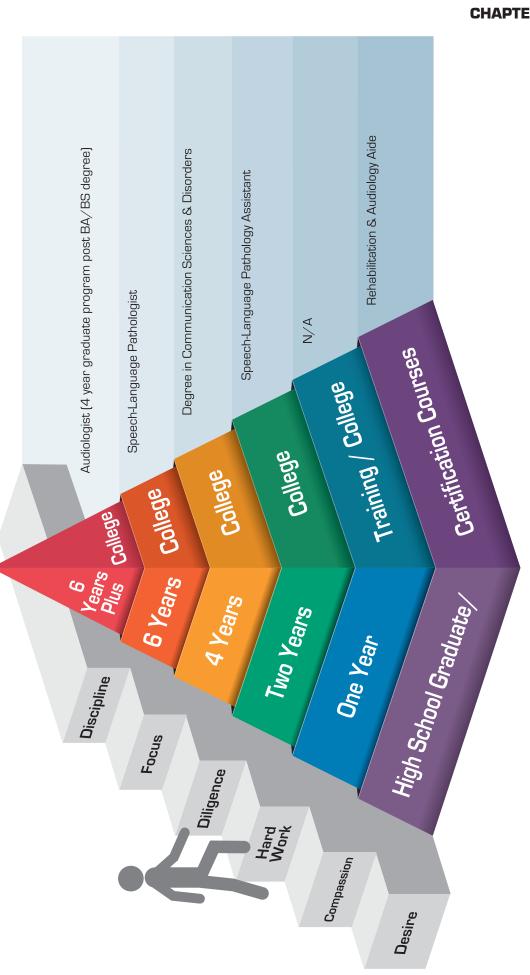


For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/pharmacists.htm Video Link: https://www.youtube.com/watch?v=w2cx3aU1Tjs



Speech - Language Pathology Career Pathways



Rehabilitation & Audiology Aide

Job Description: Under close supervision of a speech pathologist or pathologist assistant, perform only delegated, selected, or routine tasks in specific situations.

Educational Requirements: Speech Rehabilitation and Audiology Aides have a high school diploma or equivalent. However, some on-the-job training is required for an audiology aide prior to registration with the state of California.

Salary Range: \$28,000 to \$32,000 per year



For Additional Information: QR Code: http://www.speechandhearing.ca.gov/applicants/app_pack_au_aide.shtml Video Link: N/A

Speech-Language Pathology Assistant

Speech pathology involves the assessment, diagnosis and treatment of disorders related to speech, language and fluency.

Job Description: Assist speech-language pathologists in the assessment and treatment of speech, language, voice, and fluency disorders. Implement speech and language programs or activities as planned and directed by speech-language pathologists. Monitor the use of alternative communication devices and systems.

Educational Requirements: While an associate's degree is typically acceptable for a position as a speech pathology assistant, certain states require further education to meet licensure requirements.

Salary Range: \$36,000 to 42,000 per year



For Additional Information: QR Code: See info on Speech Language Pathology below. Video Link: https://www.youtube.com/watch?v=mGFmxDTmMCI

Bachelor's Degree in Communication Sciences and Disorders

Students of communication sciences and disorders study the science behind communication problems and their development. They learn how to come up with new strategies and technologies for diagnosis and rehabilitation.

Job Description: There are no specific jobs that correlate with this level of education. Must advance to the next level of education to practice in this area.

Educational Requirements: Students gain knowledge in the areas of normal processes of communications and its disorders - speech, hearing, language, and swallowing disorders. A Communication Sciences and Disorders degree will prepare you for graduate studies in Speech Language Pathology or Audiology.

Salary Range: N/A

Speech-Language Pathologist

Job Description: Work with the full range of human communication and swallowing disorders in individuals of all ages. Assess and treat persons with speech, language, voice, and fluency disorders. May select alternative communication systems and teach their use. May perform research related to speech and language problems.

Educational Requirements: Speech-language pathologists need at least a master's degree. Graduate programs often include courses in speech and language development, age-specific speech disorders, alternative communication methods, and swallowing disorders. These programs also include supervised clinical experience.

The Council on Academic Accreditation (CAA), part of the American Speech-Language-Hearing Association (http://www.asha.org/), accredits education programs in speech-language pathology. Graduation from an accredited program is required for certification and, often, for state licensure.

Salary Range: \$73,000 to \$88,000 per year



For Additional Information: QR Code: https://www.bls.gov/oob/boolthcore/spaceb.lan/

https://www.bls.gov/ooh/healthcare/speech-language-pathologists.htm Video Link: https://www.youtube.com/watch?v=RB5doy3ApDY

Audiologist (Aud.D. - Hearing)

Job Description: Assess and treat persons suffering from hearing, central auditory processing, and balance disorders. May fit hearing aids and provide auditory training. May perform research related to hearing problems.

Educational Requirements: The doctoral degree in audiology (Aud.D.) is a four-year graduate program that you can enter while holding a bachelor's degree in any field. Must also complete 300 hours of supervised clinical experience. For licensure in California, must also pass a national audiology examination.

For more information, please see the CA. Department of Consumer Affairs Speech-Language Pathology & Audiology & Hearing Aid Dispensers Board at: http://www.speechandhearing.ca.gov/applicants/ app_pack_au.shtml

Salary Range: \$75,000 to \$91,000 per year





For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/audiologists.htm Video Link: https://www.youtube.com/watch?v=wBzsm0yeQJ8



Fire Science - Bachelor's Degree and Specialty Certifications Emergency Medical Technician (EMT) Emergency Medical Responder (EMR) Fire Science - Advance Degrees and Specialty Certifications Fire Science - Associate Degree + Paramedic Certification Paramedic **Career Pathways** Certification Courses Training / College College College 6 Years College Years Plus College High School Graduate/ 4 Years Two Years One Year Discipline Focus Diligence Work Vork Compassion Desire

Emergency Medical Services (EMS)

Emergency Medical Responder (EMR)

Job Description: Emergency medical responders (or sometimes referred to as "First Responders") are often the first medically trained personnel to arrive at an accident or scene of a medical emergency. An EMR quickly assesses emergency situations, calls an ambulance, and administers first aid. Most public safety personnel are trained as EMR providers.

Educational Requirements: Becoming a certified first responder/emergency medical responder requires a high school diploma or GED. Candidates must first obtain certification in CPR for healthcare providers. The prospective EMR must complete a state-approved Emergency Medical Responder training course as well as pass cognitive and psychomotor examinations. (The cognitive portion of the exam covers a full range of emergency medical care topics, while the psychomotor test consists of a hands-on demonstration of learned emergency skills.) After completing your training, you should be prepared to take the certification exam to acquire state licensure.

For more information about EMS careers and certification details, visit National Registry of Emergency Medical Technicians (NREMT) at: https://www.nremt.org/ and/or your local county Emergency Medical Services Authority at: http://www.emsa.ca.gov/Local_EMS_Agencies

Salary Range: \$30,000 to \$33,000 per year (or more depending on primary occupation)



For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/emts-and-paramedics.htm Video Link: https://www.youtube.com/watch?v=JOuY7SwXfJU

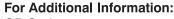
Emergency Medical Technician (EMT)

Job Description: Emergency medical technicians (EMTs) care for the sick or injured in pre-hospital emergency settings. People's lives often depend on the quick reaction and competent care provided by these workers. EMTs respond to emergency calls, performing medical services and transporting patients to medical facilities. EMT's provide basic-level life support to persons who are hurt or injured. EMT's can perform CPR, vital signs, basic airway management, artificial ventilations, automated defibrillation, bandaging/splinting, oxygen administration, and spinal immobilization.

Educational Requirements: EMT training consists of 80 to 106 hours of classroom education plus 10 hours of internship and field training. EMT training is considered the entry level for Emergency Medical Services. Training is available at most CA community colleges.

Salary Range:: \$30,000 to \$35,000 per year





QR Code: https://www.bls.gov/ooh/healthcare/emts-and-paramedics.htm Video Link: https://www.youtube.com/watch?v=Q9FY0Gfr93c

Paramedic

Job Description: The highest skilled pre-hospital care provider is the Paramedic. Paramedics are licensed healthcare professionals who provide the most extensive pre-hospital advanced life support. Paramedics deliver care that is on par with that of the emergency room but in the field. During a medical emergency Paramedics can provide advanced life support care including: advanced airway management, endotracheal intubation (breathing tube), manual defibrillation, external transcutaneous pacing, EKG monitoring, 12-lead EKG acquisition, IV fluid therapy, cardiac monitoring, needle chest decompressions, surgical airways, and the administration of a wide array of life saving medications.

Educational Requirements: To become a paramedic you must be 18 years or older, have graduated from high school or received your GED. You must also hold a California driver's license, and have an active EMT certification with current CPR for Healthcare Providers certificate.

Paramedics are required to complete 1100 hours of classroom training plus an additional 500 hours of internship and field training. Paramedic programs are college based, thus requiring pre-requisite college education in addition to basic EMT training. Additionally, Paramedics maintain specialty classifications once licensed, such as Advanced Cardiac Life Support, Pediatric Advanced Life Support, Neonatal Resuscitation Program, Pre-Hospital Trauma Life Support, Critical Care Paramedic and Certified Flight Paramedic to name a few.

Salary Range: \$38,000 to \$46,000 per year



For Additional Information: QR Code: https://www.bls.gov/ooh/healthcare/emts-and-paramedics.htm Video Link: https://www.youtube.com/watch?v=C0pWE_xCKWY

Firefighter/Paramedic

Job Description: Firefighters control and extinguish fires or respond to emergency situations where life, property, or the environment is at risk. Duties may include fire prevention, emergency medical service, hazardous material response, search and rescue, and disaster assistance. Many cities and counties in California with fire services hire firefighter/paramedics to provide emergency medical services.

Educational Requirements: Most firefighters today have an associate degree in fire science from an accredited community college. New hires must complete intensive training programs, usually at a state or local fire training academy. In addition to passing pre-employment written, physical and medical exams, fire fighters are usually required to earn certification as emergency medical technicians (EMT) or hold a Paramedic certification.

Salary Range: \$66,260 - \$106,000 per year depending on location and type of employer.

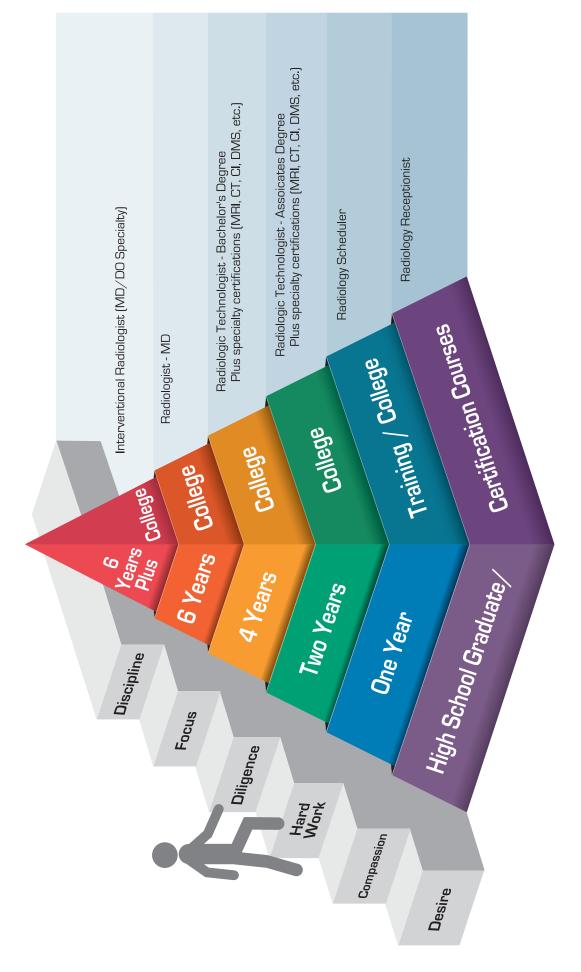


For Additional Information: QR Code: https://www.bls.gov/oes/current/oes332011.htm Video Link: https://www.youtube.com/watch?v=aGKJj3FaMV0



RADIOLOGY SERVICES

Radiology Services Career Pathways



Radiology Receptionist

Job Description: Receptionists perform administrative tasks, such as answering phones, receiving visitors, processing paperwork and physician's orders, as well as providing general information about their radiologic examination and any preparatory instructions.

Educational Requirements: Receptionists need a high school diploma and good communication skills in concert with computer literacy. Bi-lingual skills are preferred. A course in medical terminology is helpful in securing employment.

Salary Range: \$27,000 to \$30,000* per year



For Additional Information:

QR Code: https://www.bls.gov/ooh/office-and-administrative-support/receptionists.htm Video Link: https://www.youtube.com/watch?v=wuB-B2llt88

Radiology Scheduler

Job Description: Radiology Schedulers perform secretarial duties within the Radiology department using specific knowledge of medical terminology and radiologic procedures. Duties may include: scheduling appointments, procuring insurance information, and compiling and recording medical charts.

Educational Requirements: High school graduates can take courses in word processing and office procedures at community colleges or adult schools. Radiology Schedulers need to learn industry-specific terminology and practices by attending courses offered at community colleges or other educational institution. Courses in medical terminology and medical assisting are beneficial.

Salary Range: \$33,000 to \$37,000* per year



For Additional Information:

QR Code: https://www.bls.gov/oes/current/oes436013.htm Video Link: https://www.youtube.com/watch?v=MZgpQodB6Rc

Radiologic Technologist

Job Description: Radiologic technologists use radiation to create images used to diagnose medical conditions in patients. Working from doctors' orders, they use x-rays, fluoroscopes and other techniques to make pictures. They position patients for each procedure and calculate the appropriate exposure for the x-ray including duration, distance from the patient and strength of the x-ray. During the x-ray process, they monitor patient condition and reactions. Radiologic technologists also make sure that all equipment is ready and working correctly and that supplies are available.

Educational Requirements: Prior to admission to become radiologic technologist prerequisite courses in anatomy, physiology, chemistry and physics, along with general education college courses, are required at a community college or private trade school. Most programs in California are two-years leading to an associate degree in Radiologic Technology. However, a Bachelor's of Science degree in Radiologic Sciences is available at California State University, Northridge.

Continued on next page

A Radiologic Technologist must be licensed as a Certified Radiologic Technologist (CRT) by the California Department of Public Health-Radiation Health Branch and be certified by the American Registry of Radiologic Technologists (ARRT). To sit for these examinations the applicant must have completed a Radiologic Technology program that is accredited by the Joint Review Committee on Education in Radiologic Technology.

The student must complete a minimum of 1,850 hours of clinical education in California beyond the didactic educational component to be eligible to sit for the ARRT and receive the ARRT certification, allowing the successful student to apply for a license to practice in the state. The applicant must be licensed as a Certified Radiologic Technologist by the California Department of Health Services.

Salary Range: \$57,000 to \$75,000* per year



For Additional Information: QR Code: https://www.bls.gov/ooh/healthcare/radiologic-technologists.htm Video Link: https://www.youtube.com/watch?v=OvnJj_nlvzU

Radiology Specialty Certifications*

Once you have become a Radiology Technologist and have gained some experience, there are a variety of specialty certifications to consider: computed tomography (CT), magnetic resonance imaging (MRI), ultrasound (DMS), and positron emission tomography (PET) all of which are used to see within the human body in order to diagnose disease and abnormalities. There are also digital and computer radiography (DR, CR) systems, digital vascular imaging devices, and mammography. Each one of these specialties have very specific training requirements and exam-based certifications by national organizations. CSU Northridge offers the most advanced imaging educational certifications in the state.



For Additional Information:

QR Code: http://www.csun.edu/health-human-development/health-sciences/ certificate-programs-radiologic-sciences Video Link: https://www.youtube.com/watch?v=8-P6U9RAtMA

Here are the four specialty certifications offered at CSU Northridge and brief descriptions:

Magnetic Resonance Imaging Technician (MRI) Specialty*

Job Description: MRI is a medical imaging technique used in radiology to form pictures of the anatomy and the physiological processes of the body in both health and disease. MRI scanners use strong magnetic fields, radio waves, and field gradients to generate images of the organs in the body. MRI technologists develop a working knowledge of the equipment, including how the patient should be positioned in order to get the best diagnostic images. They operate MRI machines to create images that doctors will use to diagnose illness and injury.



For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/radiologic-technologists.htm Video Link: https://www.youtube.com/watch?v=aQZ8tTZnQ8A

Computerized Tomography (CT) Specialty*

Job Description: Computerized tomography technicians are specialized radiology technicians who employ ionizing radiation to take cross-sectional x-rays of a part of the body. These sections are combined to produce a 3D image for diagnostic purposes.



For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/radiologic-technologists.htm Video Link: https://www.youtube.com/watch?v=SuW5he7Jvtg

Mammography Specialty*

Job Description: Mammography is a type of imaging that uses a low-dose X-ray system to take images that aid in the early detection and diagnosis of breast diseases in women. A mammography tech operates x-ray equipment to perform various mammography related procedures. Positions patients for examination, evaluates the films for clarity, explains procedures and educates women about the role of regular mammography in preventive breast health.



For Additional Information: QR Code:

http://portals.clevelandclinic.org/healthscienceseducation/ExploreaCareer/ CareerOptions/MammographyTechnologist/tabid/7194/Default.aspx Video Link: https://www.youtube.com/watch?v=B4k7YDXzQao

Cardiovascular Imaging (CI) Specialty*

Job Description: Cardiovascular technologies are both invasive, such as cardiac catheterization, and noninvasive, such as ultrasound technology. Cardiovascular technologists work with physicians to prepare patients for heart tests and treatments using these technologies. CI technologists are typically responsible for: explaining procedures to the patients; monitoring patients' health during the procedure and assisting the physician as needed.





For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/diagnostic-medical-sonographers.htm Video Link: Ultrasound - https://www.youtube.com/watch?v=-_MfJRrbnIY Video Link: Interventional - https://www.youtube.com/watch?v=cOmSMS3GW7I

There are 2 other specialties we should note:

Diagnostic Medical Sonography/Ultrasound (DMS) Specialty*

Job Description: Diagnostic medical sonography utilizes high frequency sound waves to produce dynamic visual images of organs, tissues, or blood flow inside the body. These images aid physicians in their diagnosis and care of the patient.



For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/diagnostic-medical-sonographers.htm Video Link: https://www.youtube.com/watch?v=27aD_oSrQTE&list=PLirgxJFbtsmI 2Ak2p3HhK7q2vsq1uyFRB&index=49

Positron Emission Tomography (PET) Specialty*

Job Description: A PET tech will give radioactive drugs and monitor patient utilizing machines to evaluate their reaction internally. PET is a technique used in nuclear medicine for displaying a three-dimensional image of processes that occur in the body. This technique involves detection of gamma rays which are transmitted into the body. The rays are then detected with special equipment and methods such as a positron releasing radionuclide tracer.



For Additional Information: QR Code:

https://www.bls.gov/ooh/healthcare/nuclear-medicine-technologists.htm Video Link:

- https://www.youtube.com/watch?v=AJcIJkE8K5M
- * Once you are in the field of Radiology you will have to research each of these specialty options and advanced educational opportunities to determine training requirements.

Radiologist (MD)

Job Description: Radiologists are medical doctors (MDs) or doctors of osteopathic medicine (DOs) who specialize in diagnosing and treating diseases and injuries using medical imaging techniques, such as x-rays, computed tomography (CT), magnetic resonance imaging (MRI), nuclear medicine, positron emission tomography (PET) and ultrasound. Radiologist physicians are usually board certified by the American Board of Radiology (for a doctor of medicine) or the American Osteopathic Board of Radiology (for an osteopathic doctor); an indication of a high level of training, and demonstrated excellence in the field.

Educational Requirements: Education is extensive and includes completion of a bachelor's degree program, medical school, and a residency. After graduating from medical school, an aspiring radiologist must complete additional years of a radiology residency, which is a combination of specialty medical education and paid on-the-job training. These physicians may also complete a fellowship of one to two additional years of specialized training in a particular subspecialty of radiology, such as breast imaging, cardiovascular radiology or nuclear medicine.

Salary Range: \$372,913 to \$437,207 per year



For Additional Information:

QR Code: www.onetonline.org/link/summary/29-1069.10 Video Link: https://www.youtube.com/watch?v=k0rWScAt32w

Interventional Radiologist (MD/DO Specialty)

Job Description: Interventional radiology is a medical sub-specialty of radiology utilizing minimally-invasive image-guided procedures to diagnose and treat diseases in nearly every organ system. The concept behind interventional radiology is to diagnose and treat patients using the least invasive techniques currently available in order to minimize risk to the patient and improve health outcomes.

Educational Requirements: Interventional radiologists are medical doctors with additional six or seven years of specialized training after medical school. They have also completed a one or two-year fellowship program after their diagnostic radiology residency. They are certified by the American Board of Radiology (ABR).

Salary Range: \$469,800 to \$513,000 per year

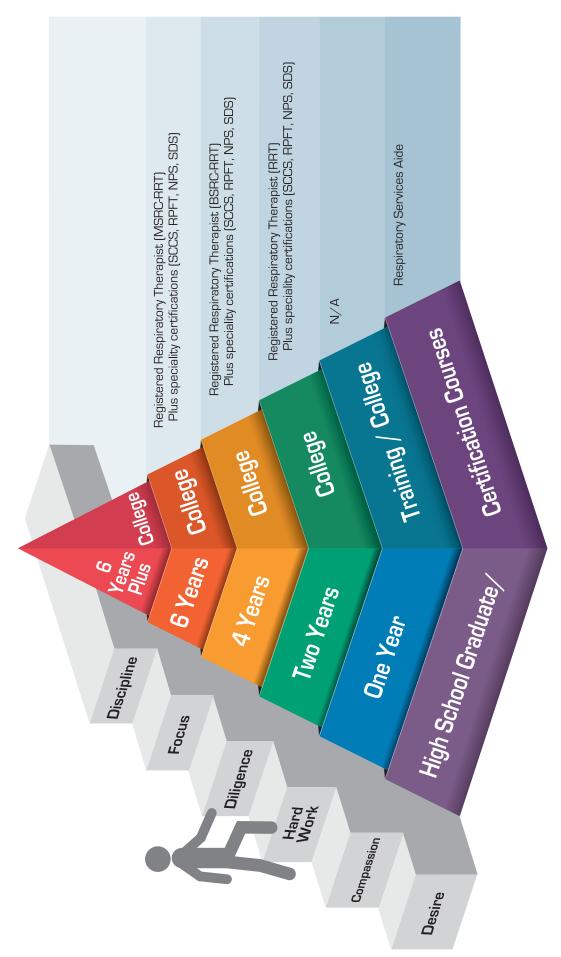


For Additional Information:

QR Code: https://www.sirweb.org/patient-center/ Video Link: https://www.youtube.com/watch?v=C82UiDhJdtU



Respiratory Care Services Career Pathways



RESPIRATORY CARE SERVICES

Respiratory Services Aide

Job Description: Performs any combination of following tasks to assist personnel in Respiratory Therapy Department: cleans, disinfects, and sterilizes equipment; delivers oxygen tanks and other equipment and supplies; prepares inventory records; examines equipment to detect worn tubes, loose connections, or other indications of disrepair; starts equipment and observes gauge measuring pressure, rate of flow, and continuity to test equipment; and notifies supervisor of malfunction and maintenance needs.

Educational Requirements: This is an entry level position, high school diploma or GED is required. Some medical terminology is helpful in securing this on-the-job training position.

Salary Range: \$25,000 to \$32,000 per year

For Additional Information: QR Code: N/A Video Link: N/A

Certified Respiratory Therapist (CRT)

Job Description: Assists in the diagnosis, treatment, and management of patients with pulmonary disorders. Collects and analyzes sputum, blood, and breath specimens to determine levels of oxygen, carbon dioxide, and other gases/or infection. Respiratory therapists perform chest physiotherapy on patients with chronic lung disease to remove mucus from their lungs and make it easier to breathe.

Educational Requirements: As of January 2015, this certificate is no longer valid for licensure in the state of California; you must successfully pass the Registered Respiratory Therapist (RRT) examination. (See below)

Salary Range: N/A



For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/respiratory-therapists.htm Video Link: https://www.youtube.com/watch?v=sHSUzA9uM34

Registered Respiratory Therapist (RRT)

Job Description: Assists in the diagnosis, treatment, and management of patients with pulmonary disorders. Collects and analyzes sputum, blood, and breath specimens to determine levels of oxygen, carbon dioxide, and other gases. Specific duties may include giving oxygen to patients, measuring lung capacity, monitoring oxygen concentration in blood and using equipment such as ventilators and may administer aerosol medications.

Educational Requirements: Successful graduation from an accredited college with a minimum of an associate's degree in Respiratory Care. You may sit for the RRT certification after passing the National Board of Respiratory Certification general respiratory therapy examination called the Therapist Multiple Choice (TMC) examination. The TMC Examination is designed to measure essential knowledge, skills, and abilities required of entry-level respiratory therapists, as well as determine eligibility for the Clinical Simulation Examination. There are two established cut scores for the TMC Examination. If you achieve the lower cut score, you earn your CRT credential (not valid for work in CA). However, if you achieve the higher cut score, you become eligible for the Clinical Simulation Examination. Once you have passed both the TMC and the Clinical Simulation Exam, you earn the RRT credential, and satisfy the examination requirement for licensure in the state of California.

For California licensure: http://www.rcb.ca.gov/applicants/forms/exam_schd_info.pdf

Salary Range: \$59,000 to \$77,000 per year



For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/respiratory-therapists.htm Video Link: https://www.youtube.com/watch?v=von5MYeflwI

R.R.T. and Specialty Certifications

Job Description: Respiratory care refers to the treatment of disorders affecting a person's respiration, or ability to breathe. All respiratory care providers see patients with a wide variety of breathing disorders, from asthma to diseases such as tuberculosis and emphysema. However once you are an established RRT you may specialize in a particular area serving a distinct population of patients. Specialty credentials offered by The National Board for Respiratory Care offer many options. They are as follows:

Adult Critical Care Specialty Credential (ACCS) Certified Pulmonary Function Technologist (CPFT) Advanced Pulmonary Function Technologist (RPFT) Neonatal/Pediatric Specialty (NPS) Sleep Disorder Specialty Credential (SDS)

At this time each credential has a prerequisite that must be met before you are eligible to sit for the examination. However, if you graduate from an accredited Respiratory Care Associate's degree program and have at least one year of clinical experience, you may sit for most of the examination specialties listed above. Note: These requirements may change in the future.



For Additional Information:

QR Code: http://www.aarc.org/careers/how-to-become-an-rt/speciality-credentials/ Video Link: https://www.youtube.com/watch?v=ZEII1_02sCg

R.R.T. and Advanced Degrees

Job Description: Degree advancement in respiratory care is an educational program designed specifically to meet the needs of practicing respiratory therapists with an RRT who, having already completed an accredited respiratory care program, obtains advanced education and training in respiratory care. While all RRTs provide care to many of the same patients, advanced degree practitioners have more education and tend to make a better salary than 2 year associate's degree respiratory therapists. Many RRTs with Bachelor's and/or Master's degrees find more opportunities for career advancement such as senior RRT, case manager, or clinical specialist. An advanced degree also provides the RRT with an educational pathway to becoming a manager, formal educator, or researcher.

Educational Requirements: Currently there are only 2 educational institutions in California who offer a BS degree in Respiratory Care. They are Modesto Junior College (pilot Bachelor's degree program starting in 2017) and Loma Linda University (both entry level BS and a one year BS for AS degree RRTs). In addition, only Loma Linda University offers a Master's degree in Respiratory Care. There are other out of state opportunities, but each program is structured differently, so it is important to review the program curriculum and requirements carefully before committing to a program of study.

Salary Range: \$60,000 to \$75,000 per year



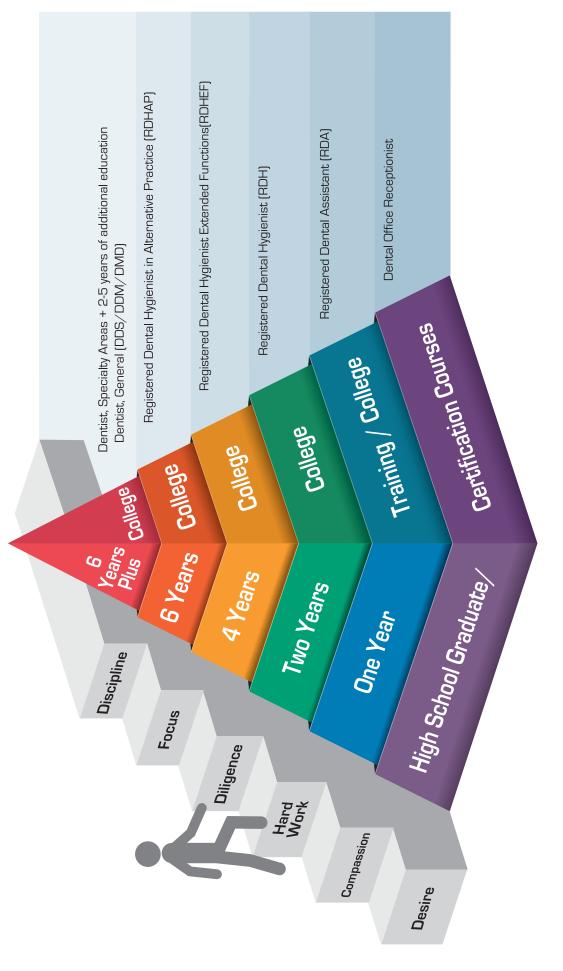
For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/respiratory-therapists.htm Video Link: https://www.youtube.com/watch?v=upASVZ4vG_E



DENTAL SERVICES

Dental Services Career Pathways



Dental Office Receptionist

Job Description: Responsible for greeting and assisting patients. Receptionists make appointments for patients and maintain their accounts. They help coordinate the dentist's schedule and bill patients and their insurance companies.

Educational Requirements: Receptionists typically need a high school diploma and good communication skills in concert with computer literacy. Bi-lingual skills are preferred. A course in medical terminology is helpful in securing employment.

Salary Range: \$28,000 to \$30,000 per year



For Additional Information:

QR Code: https://www.bls.gov/ooh/office-and-administrative-support/receptionists.htm Video Link:

https://www.youtube.com/watch?v=v9Ynpybc5cg

Registered Dental Assistant (RDA)

Job Description: Registered dental assistants perform many tasks, ranging from assisting dentist with patient procedures (preparing cements/impressions) to common office duties such as answering the phone, confirming and scheduling appointments, managing dental records and procuring insurance information. In California, registered dental assistants may also: polish patient's teeth, remove sutures/dressings, procure full mouth x-rays, administer topical medication, give fluoride treatments and take teeth impressions all under the direction of a licensed dentist.

Educational Requirements: Most dental assisting programs take about 1 year to complete and lead to a certificate of completion. Some colleges offer 2 year programs leading to an associate's degree. You will find dental assisting programs at your local community college or private technical schools. The Dental Board of California monitors and approves all Registered Dental Assisting educational programs. Be sure your college is listed on their website at: http://www.dbc.ca.gov/applicants/rda/courses.shtml

Salary Range: \$35,000 to \$40,000 per year



For Additional Information: QR Code: https://www.bls.gov/ooh/healthcare/dental-assistants.htm Video Link: https://www.youtube.com/watch?v=fHfvp5Cz30M



Registered Dental Hygienist (RDH)

Job Description: A Dental Hygienist (RDH) provides education, clinical and therapeutic services to the public in an effort to maintain and promote good oral health. They also remove soft/hard deposits from teeth, teach patients how to practice good oral hygiene and provide other preventative dental care services. Dental Hygienists (RDH) also take dental x-rays, examine patient's teeth and gums, record the presence of disease in the mouth, administer medications and anesthetics, place and carve filing materials and smooth metal restorations.

Educational Requirements: Dental hygienists (RDH) need an associate's degree in dental hygiene. Programs typically take 2 years to complete, and offer laboratory, clinical, and classroom instruction. Areas of study include anatomy, physiology, nutrition, radiography, pathology, medical ethics, head and neck anatomy, and periodontics, which is the study of gum disease.

High school students interested in becoming dental hygienists should take courses in biology, chemistry, and math. Most dental hygiene programs also require applicants to have completed at least 1 year of college prior to admission. Specific entrance requirements vary by school. There are 16 CA Community Colleges that offer Dental Hygiene programs.

In California, some Registered Dental Hygienist (RDH) have additional training and education and may function as "Registered Dental Hygienist Extended Functions (RDHEF)" or "Registered Dental Hygienist in Alternative Practice (RDHAP)". Individuals who practice in expanded roles will hold advanced degrees such as a Bachelor's/Master's degree.

Salary Range: \$72,000 to \$97,000 per year



For Additional Information: QR Code: https://www.bls.gov/ooh/healthcare/dental-hygienists.htm Video Link: https://www.youtube.com/watch?v=QPqPKsHcNsI





Dentist, General (DDS /DDM/DMD)

Job Description: Dentists routinely examine, diagnose, and treat diseases, injuries, and malformations of teeth and gums. A dentist may treat diseases of nerve, pulp, and other dental tissues affecting oral hygiene and retention of teeth. They may also may fit dental appliances and provide preventive and restorative dental care.

Educational Requirements: All dental schools require applicants to have completed science courses, such as biology and chemistry, before entering dental school. Students need at least a bachelor's degree, although no specific major is required. However, majoring in a science such as biology, might increase one's chances of being accepted. Requirements vary by school.

College undergraduates who plan on applying to dental school usually take the Dental Admission Test (DAT) during their junior year. Admission to dental school can be competitive. Dental schools use this test along with other factors, such as grade point average, interviews, and recommendations, to admit students into their programs.

For more information on Dental Admission Test (DAT), visit American Dental Association's Admission Test information page.

Dental school programs are four years in duration and include coursework in subjects such as local anesthesia, periodontics (the study of oral disease and health), and radiology. All programs at dental schools include clinical experience in which students work directly with patients under the supervision of a licensed dentist.

Completion of a dental program results in one of three degrees: Doctor of Dental Surgery (DDS), Doctor of Dental Medicine (DDM), and Doctor of Medical Dentistry (DMD). For a review of dental specialties (such as an Oral & Maxillofacial Surgeon), which require between 2-5 years additional years of education, visit American Dental Association's Careers in Dentistry.

Salary Range: \$150,000 to \$210,000 per year



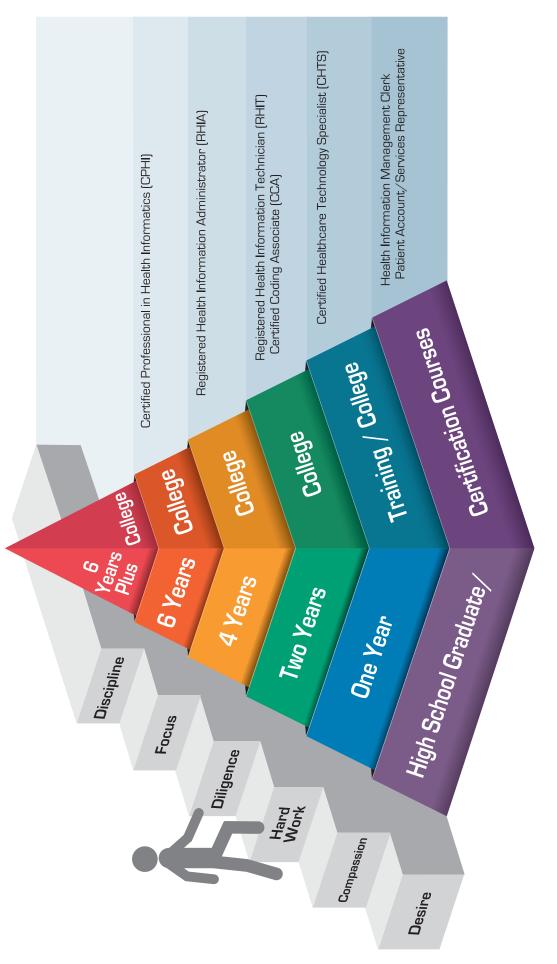
For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/dentists.htm Video Link: https://www.youtube.com/watch?v=zt5abAU6cWE









Patient Account/Services Representative

Job Description: A patient account representative may work in a hospital, doctor's office, or other medical facility. Duties may include: patient access, scheduling, appointment registration, insurance verification, explanation of hospital policies, account resolutions.

Educational Requirements: High school diploma or graduation equivalency degree (GED). A student may take college courses or pursue a certificate in medical office management. Excellent customer service skills and computer literacy are required. Bilingual skills are preferred.

While professional certification is not required, it is offered through the American Association of Healthcare Administrative Management. Becoming certified demonstrates proficiency and knowledge of standardized diagnosis and accounting codes used in the health industry.

For more information, visit American Association of Healthcare Administrative Management site: http://www.aaham.org/

Salary Range: \$32,000 to \$37,000 per year



For Additional Information:

QR Code: https://www.bls.gov/ooh/office-and-administrative-support/information-clerks.htm Video Link: https://www.youtube.com/watch?v=GQ6xC4QhzM8

Health Information Management Clerk (Or Medical Records Clerk)

Job Description: Compile, process, and maintain medical records of hospital or clinic patients in a manner consistent with medical, administrative, ethical, legal, and regulatory requirements of the health care system. Also maintains record availability by processing charts into the department, retrieves medical records by following chart-out procedures, and delivers charts to assigned areas of the hospital by following established routing procedures.

Educational Requirements: While no licensing or certification is required to become a health information clerk, most health care providers require high school diploma or graduation equivalency degree (GED). You must be computer literate, and have knowledge of medical terminology. Some college courses and experience is preferred.

Salary Range: \$37,000 to \$45,000 per year



For Additional Information:

QR Code: https://www.bls.gov/ooh/office-and-administrative-support/information-clerks.htm Video Link: https://www.youtube.com/watch?v=NfIW-9ZZwzk

Certified Healthcare Technology Specialist (CHTS)*

Job Description: A CHTS maintains computer systems and software, tests systems and diagnoses IT problems within a healthcare facility. An often computer-intensive profession, you'll work with medical coding software to create and maintain patient files within a database, ensuring data integrity and regulatory compliance.

Also as a CHTS, you'll primarily be responsible for maintaining and updating the computer systems and medical records used in hospitals, physicians' offices and a variety of healthcare facilities. Other types of health-related businesses, such as insurance companies, often hire IT professionals with a specialization in specific types of healthcare software and networking systems.

Educational Requirements: This is a new occupational title (2017) and California community colleges are just now implementing new 6 month certificate training programs. Although, on-the-job training as well as AS/BS degree programs are still options when planning for health information management career. As this field continues to advance, educational requirements will be defined further for this role. For national certification information please see AHIMAs website at: http://www.ahima.org/certification/chts

Salary Range: Estimate \$35,000 to \$48,000/year depending on education and experience.



For Additional Information:

QR Code: Bureau of Labor Statistics does not have any information on this emerging job title. Video Link: https://www.youtube.com/watch?v=n34PNmLNDtY

Certified Coding Associate (CCA)*

Job Description: A certified coding associate works to organize and manage health information through a codified system of records management. The associate translates information about diseases and procedures used by healthcare providers into numeric or alphanumeric codes. Results of the coding are used for purposes of reimbursement, the assessment of clinical care and medical research. The majority of certified coding associates work in hospitals, but they can also work in doctors' offices, ambulatory care centers and long-term care facilities.

Educational Requirements: Certified coding associates must have formal training in medical coding with either an associates or bachelor's degree in Health Information Management Coding, and at least six months of experience using ICD-10-CM and CPT coding. Strong computer skills and proficiency with electronic medical records and health information management software is also required.

For certification, an associate must pass a national medical coding exam that measures one's understanding of medical terminology, disease processes, pharmacology, ICD-10-CM and CPT medical record coding. Certified Coding Associate (CCA) examination is offered by the American Health Information Management Association (AHIMA) and/or the American Academy of Professional Coders (AAPC).

For more information, see AHIMA's website at: http://www.ahima.org/certification/CCA For more information, visit AAPC website at: https://www.aapc.com/medical-coding/

Salary Range: \$32,000 to \$57,000 per year



For Additional Information: QR Code: Bureau of Labor Statistics does not have any information on this emerging job title. Video Link: https://www.youtube.com/watch?v=_0tbRAx2Xgc

Registered Health Information Technician (RHIT)*

Job Description: Registered Health information technicians have the following duties and responsibilities: review the patients' records to ensure the quality of medical records by verifying their completeness, accuracy and proper entry into computer systems; use computer applications to assemble and analyze patient data for the purpose of improving patient care or controlling costs; often specialize in coding diagnoses and procedures in patients records for reimbursement and research. An additional role for RHIT is cancer registrars – compiling and maintaining data on cancer patients.

Although most RHITs work in hospitals, they are also found in other healthcare settings including office-based physician practices, nursing homes, home health agencies, mental health facilities, and public health agencies. In fact, RHITs may be employed in any organization that uses patient data or health information, such as pharmaceutical companies, law and insurance firms, and health product vendors. Outlook for future employment opportunities is very positive.

Educational Requirements: Most employers are now requiring a degree, credential and experience for this position. Associate degree programs are offered at many community colleges in addition to proprietary private educational institutions. Baccalaureate level programs have been slow to catch on in the west, but many out of state institutions offer degree online courses. With experience, the RHIT credential holds solid potential for advancement to management positions, especially when combined with a bachelor's degree.

Graduates of health information technician programs are eligible to take an exam and be certified by the American Health Information Management Association (AHIMA) as a Registered Health Information Technician (RHIT). For more information: http://www.ahima.org/certification/RHIT

Salary Range: \$24,000 to \$43,000 per year for an Associate's Degree (starting) \$42,000 to \$60,000 per year for a Bachelor's Degree (with some experience)

For Additional Information: QR Code: Bureau of Labor Statistics does not have any information on this emerging job title. Video Link: No videos are available for this occupation at this time.

Registered Health Information Administrator (RHIA)*

Job Description: A health information administrator is responsible for the upkeep of patients' medical records in a hospital or other health care facility. They design and manage health information systems to insure they meet medical, legal, and ethical standards. Accurate records are necessary for research, insurance claims, legal actions, evaluation of treatment and medications prescribed, and for instruction of various medical personnel. Health information administrators also help in assisting the medical staff in evaluating the quality of health care that patients receive in a particular health facility. Health information administrators work in hospitals, home health agencies, insurance agencies, consulting firms, government agencies, outpatient clinics, health care computing industries, long-term care facilities, and private industries where they are valued members of the management team.

Educational Requirements: Students interested in health information administration must complete a baccalaureate degree program from an accredited institution, which is generally 4 years in length. Graduates are then eligible to take the national RHIA examination offered by the American Health Information Management Association (AHIMA). For more information: http://www.ahima.org/certification/RHIA

Salary Range: \$40,000 to \$95,000 per year



For Additional Information:

Bureau of Labor Statistics does not have any information on this emerging job title. Video Link: https://www.youtube.com/watch?v=aAp3OT8cKak



Certified Professional in Health Informatics (CPHI[™])*

Job Description: As a CPHI you will be overseeing and managing large healthcare organizations health information systems with focus on the following areas: data analysis and utilization, data reporting, data management, privacy & security, health information systems processes, database management, health informatics trainings and project management.

Educational Requirements: Master's degree in health informatics or closely related field. Currently there are only 3 universities in California that offer this degree: UC Davis, University of San Diego and the University of San Francisco.

Salary Range: Estimate \$85,000 to \$143,000/year (Payscale.com)

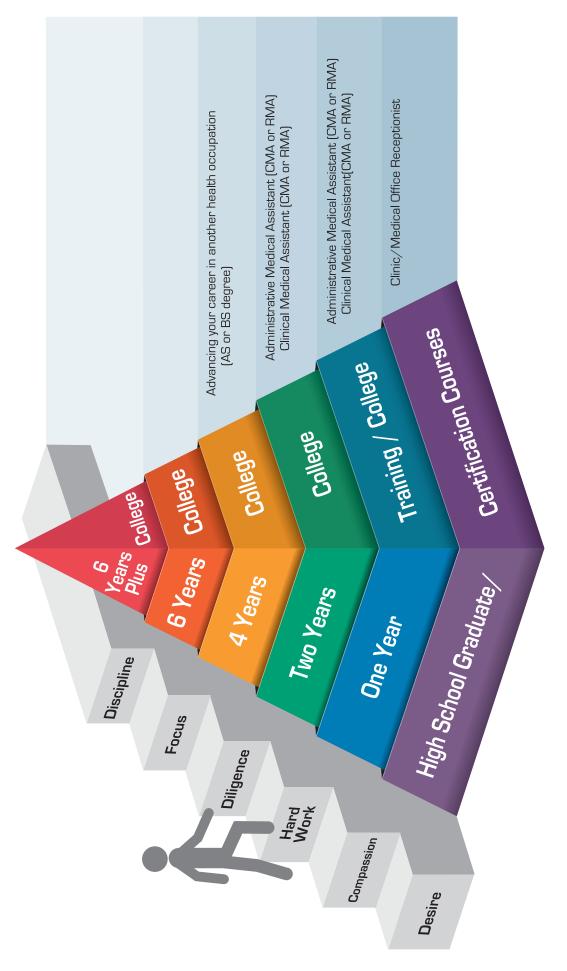


For Additional Information: QR Code: Bureau of Labor Statistics does not have any information on this emerging job title. Video Link: https://www.youtube.com/watch?v=o4VsFaXs bY

***Please note:** This field in healthcare is still emerging and changing rapidly to keep up with the shifts in healthcare systems nationwide. Before starting on your educational journey, it is highly recommended that you spend time on the websites listed above to confirm that your educational institution is accredited and that the education you receive is still valid in the workplace and enables you to sit for national certification. For a list of accredited programs, visit Commission on Accreditation for Health Informatics and Information Management Education (CAHIM) at: http://www.cahiim.org/



Medical Assisting Career Pathways



MEDICAL ASSISTING SERVICES

Job Description: A clinic or medical receptionist is responsible for basic clerical tasks such as answering phones, greeting patients and visitors, and scheduling appointments. Most medical receptionists work in a physician's office, dentist's office, clinics or other medical facility.

Educational Requirements: High school diploma or graduation equivalency degree (GED). Knowledge of office procedures may be obtained from a certificate or associates degree in a business program including administrative processes and procedures, preparing patient charts, and basic computer skills. A course in medical terminology is helpful in securing employment.

Salary Range: \$27,000 to \$30,000 per year



For Additional Information: QR Code: https://www.bls.gov/ooh/office-and-administrative-support/receptionists.htm Video Link: https://www.youtube.com/watch?v=s4QIXTfSyPk

Administrative Medical Assistant

Job Description: Administrative medical assistants keep records, answer phone calls, order supplies, handle correspondence, bill patients, complete insurance forms and transcribe dictation. They may keep financial records, handle credits and collections and other bookkeeping duties. They greet patients, schedule appointments, obtain medical histories, arrange hospital admissions and schedule surgeries.

Educational Requirements: Most employers require a high school diploma and some college training or courses. Administrative Medical Assistants need to know medical terms and office procedures. Computer literacy with typing skills between 60 and 90 words per minute and the ability to use medical software programs (Electronic Medical Records) are now basic requirements. Certificates or degrees from a local adult school or community college are helpful to secure employment.

Salary Range: \$27,000 to \$34,000 per year



For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/medical-assistants.htm Video Link: https://www.youtube.com/watch?v=dusQoC61Zww



Clinical Medical Assistant

Job Description: Clinical medical assistants perform a variety of tasks in the clinical setting in doctor's offices and clinics. Clinical duties may include recording vital signs, taking medical histories, preparing patients for examination, assisting the physician during an exam, collecting blood or other lab specimens and administering medications as directed. They also complete and maintain patient records, schedule appointments, arrange for hospital admissions, and provide health information to patients and families.

Educational Requirements: Most employers prefer graduates from formal training programs in medical assisting such as those offered by many adult schools or community colleges. The length of programs vary depending where you take them and if you are receiving a certificate of completion (not to be confused with a "Certified Medical Assistant" – see below) or an associate's degree. Medical Assisting programs and course are available in almost every community either by high schools, ROPs, adult schools or community colleges.

Salary Range: \$30,000 to 36,000 per year



For Additional Information:

QR Code: No additional information is available for this occupation at this time Video Link: https://www.youtube.com/watch?v=6jbS5bLzQoU

Note: Most employers prefer MA candidates who are proficient in both administrative and clinical areas. Many educational institutions offer "combined" medical assisting programs.

Certified or Registered Medical Assistants (CMA or RMA)

In today's competitive labor market, many employers prefer or require medical assisting certifications. There are three certifying agencies that are recognized in California:

- American Association of Medical Assistants (AAMA) awards the Certified Medical Assistant (CMA) credential;
- American Medical Technologists agency awards the Registered Medical Assistant (RMA) credential;
- California Certifying Board for Medical Assistants (CCBMA) awards the California Certified Medical Assistant (CMA) credential.

Students desiring certifications attend and graduate from an accredited medical assisting programs. Be sure the program you choose is accredited through either the Accrediting Bureau of Health Education Schools (ABHES) or the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Otherwise, you will need to wait to sit for an examination after you have obtained several years of work experience. Each of the above credentials have slightly different eligibility requirements.



For Additional Information:

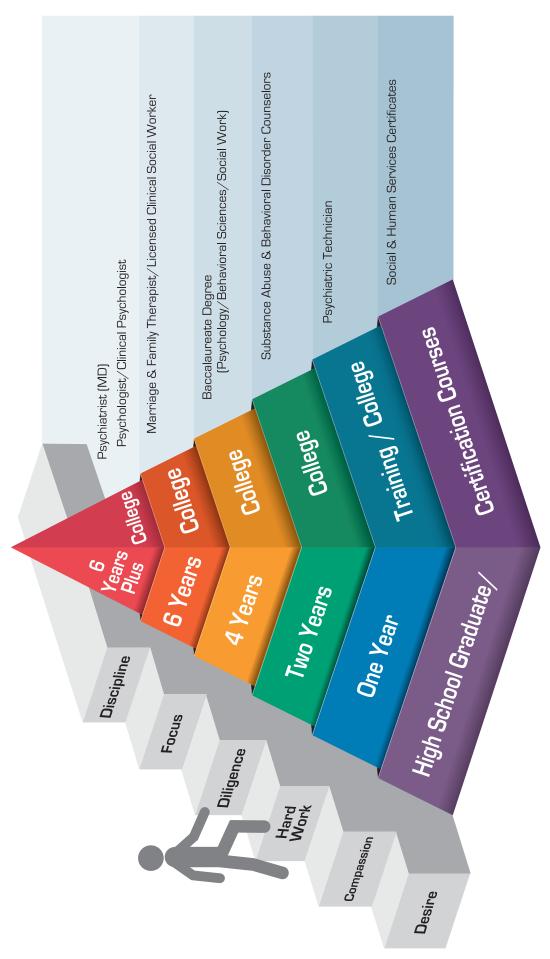
American Association of Medical Assistants website at: www.aama-ntl.org American Medical Technologists website at: www.americanmedtech.org California Certifying Board for Medical Assistants website at: http://www.ccbma.org/

Advancing Your Career in Medical Assisting and Beyond

In the role of a medical assistant you will come into contact with a wide variety of healthcare professionals in the office in which you work, but also with others in out-patient clinics, ambulatory care centers, radiology centers, to name just a few. With this increased exposure, many medical assistants decide to return to college to advance their career in another area of healthcare. In a recent study by the Public Policy Institute of California, Health Training Pathways at California Community Colleges (December 2016), it was found that medical assistants are least likely to stop attending community college after they have earned their first short-term certificate. Many return to college and complete an associate's degree in nursing which significantly increases annual earnings.



Behavior & Mental Health Career Pathways



Job Description: Social and Human Service Assistants provide many types of assistance to people in the community, from determining eligibility for welfare and health programs and counseling on child care to helping clients with physical and mental problems and those involved with drug and substance abuse. They help determine and locate appropriate social service agencies such as those providing health care and physical and mental rehabilitation. They work under the direction and supervision of nurses, counselors, social workers, psychologists, or other professionals and may be a member of a treatment team.

Educational Requirements: Human Services can be a challenging major in college due to slight variations in educational focus and depending on the type of client you wish to serve upon completion. Most community colleges offer program of study in "Human Services" as short-term certificates and/or 2 year degrees (which may or may not be transferable). Your focus within human services can be (but not limited to): Drug & Alcohol/Substance Abuse; Geriatric Mental Health Services; Developmental Disabilities; Patient Advocacy; Sociology and Psychology.

If you plan to advance your career with additional education, be sure the college and program you are attending is transferable. Otherwise a short-term certificate program can give you enough education to land your first job.

Note: There are several state or national organizations which offer "certification" for para-professionals in this area. For more information visit: Addiction Technology Transfer Center Network at www.nattc.org

Salary Range: \$37,000 to \$41,000 per year



For Additional Information:

QR Code: https://www.bls.gov/oes/current/oes211093.htm#st Video Link: https://www.youtube.com/watch?v=141edaJISJ8

Psychiatric Technician

Job Description: A psychiatric technician is a mental health professional, normally working under the direction of psychiatrists and/or psychiatric registered nurses. They provide hands-on direct care to developmentally or emotionally disabled people, as well as those suffering from mental illnesses such as psychosis and dementia. Treatment measures include basic nursing care, administration of oral and injectable medications, use of specialized machinery and/or instruments and documentation of observations and care in nursing records.

Educational Requirements: Must be at least 18 years of age and have a high school diploma or GED. A 1 year certification training program offered by a community college or other accredited school is also required. Equivalent college coursework combined with work experience may be substituted (for veterans with military training and some apprenticeship programs). Following training, psychiatric technicians must pass a written examination and be licensed by the state of California. For more information, please see the Board of Vocational Nursing and Psychiatric Technicians at: http://www.bvnpt.ca.gov/

Salary Range: \$58,000 to \$62,000 per year



For Additional Information:

QR Code: http://www.bvnpt.ca.gov/licensees/psychiatric_technician.shtml Video Link: https://www.youtube.com/watch?v=IU6mSOueN_U

Substance Abuse & Behavioral Disorder Counselors

Job Description: Substance abuse and behavioral disorder counselors (paraprofessional) advise people who suffer from alcoholism, drug addiction, eating disorders, or other behavioral problems. They provide treatment and support to help the client recover from addiction or modify problem behaviors.

Educational Requirements: Many community colleges offer courses in "Addiction Studies" in which counseling is embedded in the 2 year associate's degree program.

Salary Range: \$30,000 to 58,000 per year



For Additional Information: QR Code: https://www.bls.gov/ooh/community-and-social-service/ substance-abuse-and-behavioral-disorder-counselors.htm Video Link: N/A

Bachelor's Degrees (Social Work, Psychology, or Behavioral Sciences)

Job Description: In this occupational area, there are no specific job titles connected with the major at the Baccelaureate level.

Educational Requirements: There are 10 California State Universities (CSU) that offer BA degrees in Social Work. If you are certain that you want to become a master's prepared LCSW/MFT then it is possible for you to attend a CSU and major in social work /psychology/behavioral sciences. However if you choose this route, be mindful of GPA requirements for admission to graduate programs (>3.2 GPA) and that you will not have any "job ready" skills when you complete your bachelor's degree. Early career counseling and educational planning is needed in order for you to maximize your educational pathway.

Another option is to explore psychology, sociology, human sciences courses at a community college and transfer to a CSU after 2 years. This option would require that you know which college you want to attend and that you take "UC/CSU Intersegmental General Education Transfer Curriculum (IGETC)" so that you would be eligible for admission as a junior at a CSU. Again, it would be imperative that you have a good college counselor that you can work with in order to stay on track and be success with your transfer efforts.

Salary Range: N/A



For Additional Information:

Student Transfer Information System – "ASSIST" http://www.assist.org/web-assist/welcome.html QR Code: N/A Video Link: N/A





Mental Health Counselor & Marriage and Family Therapists (MFT)

Job Description: Mental health counselors or marriage and family therapists help people manage and overcome mental and emotional disorders and problems with their family and other relationships. They listen to clients and ask questions to help the clients understand their problems and develop strategies to improve their lives. They may deal with issues associated with addictions and substance abuse; family, parenting, and marital problems; stress management; self-esteem; and aging.

Educational Requirements: Applicants need a master's degree in psychology, clinical mental health counseling, marriage and family therapy, or a related mental health field. A bachelor's degree in most fields is acceptable to enter a master's program. Counseling programs prepare students to recognize symptoms of mental and emotional disorders and to use effective counseling strategies. Marriage and family therapy programs teach students about how marriages, families, and relationships function and how these relationships can affect mental and emotional disorders.

Salary Range: \$50,000 to \$60,000 per year



For Additional Information:

QR Code: https://www.bls.gov/ooh/community-and-social-service/ mental-health-counselors-and-marriage-and-family-therapists.htm Video Link:

https://www.youtube.com/watch?v=O-6fB0IWXEU

Job Description: (choose specialty below)

Healthcare Social Workers

Provide individuals, families, and groups with the psychosocial support needed to cope with chronic, acute, or terminal illnesses. Services include advising family care givers, providing patient education and counseling, and making referrals for other services. Healthcare social worker may also provide care and case management or interventions designed to promote health, prevent disease, and address barriers to access to healthcare.

Child, Family & School Social Workers

Provide social services and assistance to improve the social and psychological functioning of children and families and to maximize the family well-being and the academic functioning of children. School social workers may assist parents, arrange adoptions, and find foster homes for abandoned or abused children. In schools, they address such problems as teenage pregnancy, misbehavior, drug abuse and truancy.

Educational Requirements: Master's degree programs in social work (MSW) prepare students for work in their chosen specialty by developing clinical assessment and management skills. All programs require students to complete supervised fieldwork or an internship (can be several years). Social workers must also be licensed by the CA. Department of Consumer Affairs, Board of Behavioral Sciences.

For more information, visit the BBS which outlines other counselor opportunities at the Masters level as well: http://www.bbs.ca.gov/consumer/what_is.shtml

Employers prefer to hire counselors who have graduated from programs accredited by the Council for Accreditation of Counseling & Related Educational Programs. http://www.cacrep.org/

Note: When choosing programs at the Master's degree level there are many options regarding the type, specialty and focus of the program. Please do significant research to be sure your education and training is in the area where you want to work. There are lots of choices here for a successful career!

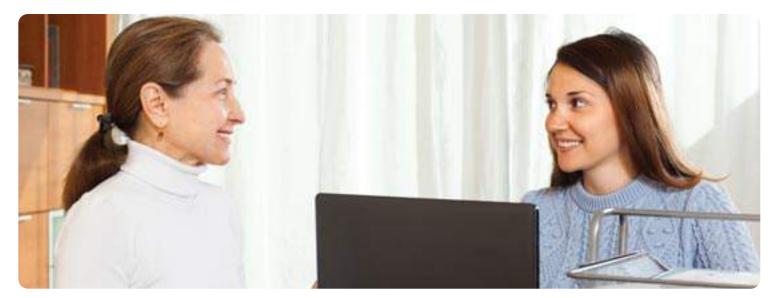
Salary Range: \$84,000 to \$97,000 per year (Kaiser) \$60,000 to \$106,000* per year (Public School District)





For Additional Information: QR Code: Healthcare Social Workers: https://www.bls.gov/OES/Current/oes211022.htm

Child, Family and School Social Workers: https://www.bls.gov/oes/current/oes211021.htm Video Link: https://www.youtube.com/watch?v=y2acXu2BX0s





Psychologist/Clinical Psychologist*

Job Description: Clinical psychologists diagnose and/or evaluate mental and emotional disorders of individuals through observation, interview, and psychological tests. They also formulate and administer programs of treatment. They can work in out-patient and in-patient mental healthcare facilities, private practices, and academic settings. Clinical psychologists who work for a college or university often take on additional teaching and research responsibilities.

Educational Requirements: Most clinical counseling and research psychologists need a doctoral degree. Students can complete a Ph.D. in psychology or a Doctor of Psychology (Psy.D.) degree.

Salary Range: \$68,000 to \$87,000 per year



For Additional Information: QR Code: https://www.bls.gov/oes/current/oes193031.htm Video Link: https://www.youtube.com/watch?v=9ZaLipDgFZQ

* Again, there are lots of educational options here, do your research!

Psychiatrist (MD)

Job Description: A psychiatrist is a physician who is trained in the medical, psychological, and social components of mental, emotional, and behavioral disorders. They utilize a broad range of treatment modalities, including diagnostic tests, prescribing medications, psychotherapy, and helping patients and their families cope with stress and crises.

Educational Requirements: After earning a bachelor's degree, aspiring psychiatrists must complete four-years of medical school. Following successful graduation from medical school, a residency, as well as the possibility of a fellowship, is required which may take up to four additional years. Upon completion of the residency, they may begin to practice after passing a medical licensing exam and a board certification exam in psychiatry.

Salary Range: \$180,000 to \$225,000 per year

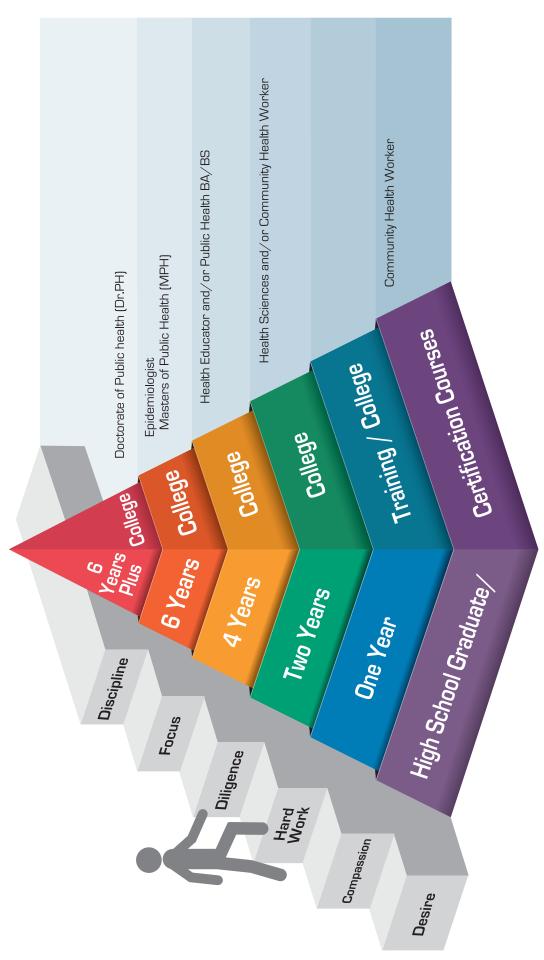


For Additional Information: QR Code: American Psychiatric Association - https://www.psychiatry.org/ Video Link: https://www.youtube.com/watch?v=WNG7QwpNu1k





Public & Community Health Career Pathways



PUBLIC & COMMUNITY HEALTH

Community Health Worker

Job Description: A Community Health Worker assists individuals and communities in adopting healthy behaviors. They conduct outreach for medical personnel or health organizations to implement programs in the community that promote, maintain, and improve individual and community health. They may provide information on available resources, provide social support and informal counseling, advocate for individuals and community health needs, and provide services such as first aid and blood pressure screening.

Educational Requirements: Community health workers usually have a high school diploma and complete a brief period of on-the-job training. However, most jobs now require some postsecondary education which may cover topics such as wellness, ethics, and cultural awareness, among others. Education programs lead to a short-term certificate or a 2-year associate's degree and include clinical internship hours at a healthcare agency. Currently there are 4 CA. community colleges who offer this program.

Salary Range: \$36,000 to \$44,000 per year



For Additional Information:

QR Code: https://www.bls.gov/ooh/community-and-social-service/health-educators.htm#tab-1 Video Link:

https://www.youtube.com/watch?v=69csBE4y1Uo

Health Educator (AS/AA/BA/BS in Public Health Sciences)

Job Description: Provide and manage health education programs that help individuals, families, and their communities maximize and maintain healthy lifestyles. Collect and analyze data to identify community needs prior to planning, implementing, monitoring, and evaluating programs designed to encourage healthy lifestyles, policies, and environments. May serve as a resource to assist individuals, other healthcare workers, or the community, and may administer fiscal resources for health education programs.

Educational Requirements: Employers prefer bachelor's degree in health education, health promotion or public health*. Some health educator positions require a master's or doctoral degree. Graduate programs are commonly in community health education, school health education, public health education, or health promotion. A variety of undergraduate majors may be acceptable for entry to a master's degree program.

- * A word about education in the Public Health sector, there are literally hundreds of educational options in this field both at the BS/BA level as well as in advanced degrees. Please take time to explore all of the options available to you at each step of your educational journey. Working with a knowledgeable counselor and talking with public health professionals is very beneficial. To help explore your options visit:
 - Council on Education for Public Health (CEPH) to find an accredited program in your area of interest. https://ceph.org/accredited/search/
 - Schools of Public Health Application Service (SOPHAS) By using SOPHAS, you are able to complete one application via an online website and send one set of documents to a centralized service. SOPHAS will verify your coursework for accuracy, calculate your GPA, and send your application to as many public health schools and programs as you wish. You may also search for programs at: http://sophas.org/program-finder/

Salary Range: \$55,000 to \$66,000 per year



For Additional Information:

QR Code:

https://www.bls.gov/ooh/community-and-social-service/health-educators.htm Video Link:

Health Educator: https://www.youtube.com/watch?v=6dntQt7G5bg Public Health Careers: https://www.youtube.com/watch?v=XwgTfCRYD3s



Job Description: A MPH degree focuses on public health practice, as opposed to research or teaching. The MPH degree combines the study of the biological, physical, psychological, economic, and social forces affecting human health and wellness.

If you hold a master's in public health, there are countless jobs you can pursue. For example, you may work within one of the five core public health classifications; environmental health, epidemiology, health management and policy, or health promotion and behavioral sciences.

Educational Requirements: An undergraduate public health degree is not necessary for graduate study; students of public health come from a variety of educational backgrounds. Some undergraduate degrees, however, may be beneficial when applying to a graduate school of public health. If you are interested in epidemiology or biostatistics, a math or health science major may provide a strong foundation from which to build. For behavioral sciences or health education, consider sociology, anthropology, or psychology as majors.

When considering your graduate study institution, consider the difference between a "school of public health" and "a program". Schools of public health generally offer more concentrations or specializations in concert with the MPH. Many schools of public health also offer dual degree options both at the masters and doctorate levels. UC Berkeley has one of the largest schools of public health in California. Also, please see information above on SOPHAS to find schools & programs.

Salary Range: \$45,000 to \$86,000 per year depending on location and type of employer



For Additional Information:

QR Code: https://explorehealthcareers.org/field/public-health/ Video Link: https://www.youtube.com/watch?v=danW3iK5bdg

Epidemiologist

Job Description: The formal term for public health is epidemiology, or the study of patterns, causes, and effects of health and disease. Epidemiology is based on studying facts and figures combined with case studies to try to find solutions and controls for disease relating to the public. They seek to reduce the risk and occurrence of negative health outcomes through research, community education and public health policy.

Educational Requirements: Epidemiologists need a master's degree from an accredited college or university. Coursework in epidemiology includes classes in public health, biological and physical sciences, and math and statistics. Classes emphasize statistical methods, causal analysis, and survey design. Advanced courses emphasize multiple regression (math), medical informatics, reviews of previous biomedical research, comparisons of healthcare systems, and practical applications of data.

A master's degree in public health with an emphasis in epidemiology is most common, but epidemiologists can earn degrees in a wide range of related fields and specializations. Epidemiologists who direct research projects—including those who work as postsecondary teachers in colleges and universities—have a Ph.D. or medical degree in their chosen field.

Many master's degree programs in public health, as well as other programs that are specific to epidemiology, require students to complete an internship or practicum that ranges from a semester to a year.

Salary Range: \$85,000 to \$102,000 per year



For Additional Information:

QR Code: https://www.bls.gov/ooh/life-physical-and-social-science/epidemiologists.htm Video Link: https://www.youtube.com/watch?v=bwOsxJvHfuw

Doctorate of Public Health (Dr.PH)

Job Description: A doctorate of public health degree emphasizes advanced public health education and training designed to prepare individuals for leadership roles within such institutions as health departments, non-profit organizations, health service, international agencies, and community-based organizations. Accordingly, the emphasis of the DrPH is placed on fostering advanced expertise in developing, implementing, and evaluating evidence-informed public health practice as compared to the PhD whereby the emphasis is on research.

Educational Requirements: A DrPH program develops students in all of the same public health competencies included in the MPH program, but with an emphasis on leadership and the ability to initiate, organize, and pursue the investigation of significant problems or interventions in public health. Most programs are at least two years in length with many adding a third year for field based experience and dissertation. Many individuals who hold this degree oversee large public health divisions in federal, state and county agencies.

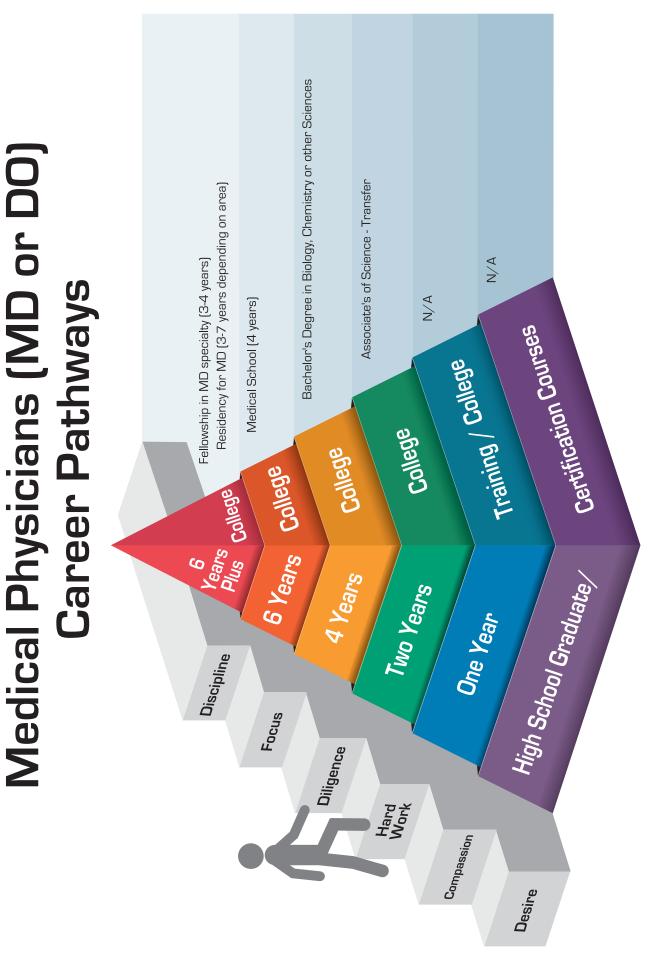
Salary Range: \$134,000 to \$240,000 per year



For Additional Information: QR Code: https://www.bls.gov/ooh/healthcare/physicians-and-surgeons.htm Video Link: https://www.youtube.com/watch?v=xvn3wiHb81E







MEDICAL PHYSICIANS (MD OR DO)

General Information on Becoming a Physician

Doctors provide diagnoses, treatments, and counseling to individuals with illnesses, diseases, or injuries. Some of their many responsibilities include examining patients, collecting patient information, performing diagnostic tests, and discussing test results.

Physicians fall into two main categories: medical doctors (MD) and doctors of osteopathic medicine (DO). Both types of doctors treat patients, but DOs also use preventive medicine and holistic care methods.

A career as a physician offers a variety of specialties to consider, yet the basic educational requirements are similar. It will begin with a required bachelor's degree prior to applying for medical school. Medical schools seek applicants who have a broad educational background, a solid foundation in the biological sciences and experience in healthcare settings.

Typically, during junior year of college, an aspiring doctor will take the Medical College Admissions Test or MCAT, prior to applying to medical school. Content areas that are tested on the MCAT include biology, general chemistry, organic chemistry and physics. The MCAT is a standardized examination that is also designed to assess problem solving, verbal reasoning and writing skills. Applying to medical school can be labor intensive even though there are centralized application processes for both MD & DO colleges. The average student needs to apply to at least 14 schools to gain a seat in medical school. Competition is tough and many students need to reapply the following year before being accepted.

Then it's on to medical school, lasting four years. The first two years usually entail classroom and laboratory work, while the last two years allow students to work directly with patients under the supervision of experienced doctors. Medical school coursework generally covers topics in pharmacology, pathology, anatomy and biochemistry.

The clinical experiences that students participate in (usually in their third year) cover a variety of specialty areas, including neurology, radiology, internal medicine and others. Clinical experiences also give the student a chance to find out what type of residency he or she would prefer to pursue after graduation.

After graduating from medical school, you'll start a residency program. This gives you the opportunity to work directly with patients in a specialty area of medicine. Residents may be responsible for a number of patient care activities, including developing problem lists, performing physical exams and compiling medical histories. Depending on the specialty area, a residency can last anywhere from three and seven years. Most residents usually complete their programs in acute care hospitals.

All states require physicians to become licensed before allowing them to practice medicine. Graduation from an accredited medical school is required before qualifying for licensure. Candidates must also complete a residency training program and pass written exams.

The U.S. Medical Licensing Examination (USMLE) is a three-step examination that is required for MDs. The Comprehensive Osteopathic Medical Licensing Examination (COMLEX-USA) must be taken by those seeking a DO degree. For more information about licensing, see the Medical Board of California: http://www.mbc.ca.gov/

Now that you understand the overall educational steps necessary to become a doctor, let's look at some of the various practices and specialties you might consider.



For Additional Information:

QR Code: https://www.bls.gov/ooh/healthcare/physicians-and-surgeons.htm Video Link: https://www.youtube.com/watch?v=7CfBlvjf9Wg

Family Medicine

Job Description: Family medicine doctors, also known as family physicians, are general practitioners. Family medicine doctors are often the first person whom a patient sees when seeking healthcare services. Family medicine was created specifically to take care of the healthcare of families, and as such, family physicians are trained to take care of patients of all ages.

Typical job duties include taking patient histories, performing or requesting diagnostic tests, making diagnoses, prescribing treatment, and performing follow-up examinations; as well as educating patients in disease prevention and health maintenance. Family medicine doctors also supervise allied health professionals, such as nurses, physician assistants and medical assistants.

Educational Requirements: In addition to steps spelled out above, an aspiring family medicine doctor would require three years of family medicine residency, and passage of all Medical Licensing Examinations.

Salary Range: \$185,000 to \$198,000 per year



For Additional Information:

QR Code: American Board of Family Medicine - https://www.theabfm.org/index.aspx Video Link: https://www.youtube.com/watch?v=AVox6M3Um94

Internal Medicine

Job Description: Internists are personal physicians who provide long-term, comprehensive care in the office and the hospital, managing both common and complex illnesses in adolescents, adults, and the elderly.

An internal medicine physician's primary responsibilities include heath maintenance and disease screening, the diagnosis and care of acute and chronic medical conditions, management of patients with multiple, complex medical problems, and serving as consultants to other disciplines such as surgery, and family medicine. Internists are trained in the diagnosis and treatment of cancer, infections, and diseases affecting the heart, blood, kidneys, joints, and digestive, respiratory and vascular systems.

Educational Requirements: In addition to educational steps stated above, an internal medicine physician must pass the American Board of Internal Medicine's Internal Medicine Certification Examination.

Salary Range: \$196,000 to \$210,000 per year



For Additional Information:

QR Code: American Board of Internal Medicine - http://www.abim.org/ Video Link: https://www.youtube.com/watch?v=Rhyf8o5vJw0



General Surgeon

Job Description: Surgeons are specialized physicians who operate on patients to correct or remove malformations, repair injuries or conduct preventative procedures on patients. They may also conduct examinations on patients and advise them on their medical situations. Many surgeons specialize in one particular field, such as orthopedic, cardiovascular or neurological surgery.

Educational Requirements: After medical school, students typically continue their medical training in residency programs. General surgery residencies need five years to complete their training. Surgeons who wish to focus on a sub-specialties: orthopedic surgery, plastic surgery, or urology for example, must complete an additional 1-3 years of post-doctoral training in fellowship programs.

Salary Range: \$370,000 to \$400,000 per year



For Additional Information: QR Code: American Board of Surgery - http://www.absurgery.org Video Link: https://www.youtube.com/watch?v=AveCMu5N91s

Specialty MD: Obstetrician & Gynecologist (OB/GYN)

Job Description: Obstetrics and gynecology is a diversified specialty concerned with the delivery of medical and surgical care to women. This field combines two specialties: obstetrics, which focuses on the care of women before, during, and after childbirth; and gynecology, which involves the diagnosis and treatment of disorders of the female reproductive system, breasts, and associated disorders.

Obstetrician-gynecologists (Ob-Gyn) often serve as consultants to other physicians. In many cases, the Ob-Gyn is the primary care physician, with whom female patients have regular contact and obtain medical advice and counseling. The specialty also offers opportunities to practice other skills such as laparoscopic surgery, endocrinology, and preventive medicine.

Educational Requirements: Four-year OB/GYN residency programs are where newly graduated medical doctors can study women's reproductive health in depth under the guidance of experienced physicians. Residents complete rotations to evaluate, diagnose and administer care to patients in hospitals and other medical settings. During their residency, physicians specializing in OB/GYN care will also explore subspecialties in the field, such as family planning.

To become highly specialized in the OB/GYN field, physicians can apply for fellowship programs, which last another three years. These programs have both didactic and clinical components to give doctors the knowledge and hands-on experience they need to practice in an OB/GYN subspecialty. Some fellowship options within obstetrics and gynecology include gynecologic oncology, maternal fetal medicine and reproductive endocrinology and infertility.

Salary Range: \$268,000 to \$300,000 per year



For Additional Information: QR Code: https://www.bls.gov/oes/current/oes291064.htm Video Link: https://www.youtube.com/watch?v=16SGnM_hstE

Specialty MD: Emergency Medicine

Job Description: Emergency medicine is the medical specialty dedicated to the diagnosis and treatment of unforeseen illness or injury. Their primary job functions are to resuscitate or stabilize patients and refer them to the appropriate medical departments and/or specialty physicians.

Educational Requirements: Candidates for emergency medicine specialty must pass a qualifying exam and an oral exam after having completed approved residency training.

Salary Range: \$282,000 to \$325,000 per year



For Additional Information: QR Code: American Board of Emergency Medicine - https://www.abem.org/public/ Video Link: https://www.youtube.com/watch?v=46UArj0_qE4

Specialty MD: Cardiovascular Surgeon

Job Description: Often referred to as a "heart surgeon", cardiovascular surgeons operate on your heart and blood vessels to repair damage caused by diseases or disorders of the cardiovascular system.

Cardiovascular surgeons perform many different types of operations, including heart valve repair and replacement, heart defect repair, coronary artery bypass, aneurysm repair, trans-myocardial laser revascularization, and heart transplantation. They also perform operations on the blood vessels in your body, including the aorta—the body's main blood supplier. Heart surgery today may also include the use or implantation of ventricular assist devices (VADs), mechanical devices that "assist" the failing heart by helping it pump blood throughout the body.

Educational Requirements: After completing a general surgery residency, those who wish to become cardiovascular surgeons need to complete an additional 3 to 4-year fellowship in cardiovascular surgery. Once this training is completed, surgeon may sit for the American Board of Medical Specialties certification examination. This examination measures the expertise in diagnosis, management and treatment of patients with a variety of health conditions all related to the heart and vascular system.

Salary Range: \$445,000 to \$495,000 per year



For Additional Information:

QR Code: American College of Cardiology - http://www.acc.org/clinical-topics/cardiac-surgery Video Link: https://www.youtube.com/watch?v=C6NLT8wxAQo



A Note for the Reader:

- **1.** QR Codes Apps to provide QR Code readers are readily available online for both Apple and Droid devices. It is highly recommended to download a few different apps until you find one that works well for you.
- 2. It cannot be stressed enough that if you are interested in a particular health occupation, you need to research the educational pathway on your own! While a skilled counselor can help you on your way, it is impossible for any one person to know all of the possible options in each of these occupations.
- **3.** You are encouraged to also seek out a professional in the occupation you are interested in to interview. Make a list of questions you want to ask including if they would be willing to share their educational experience with you.
- 4. In general, this resource guide only addresses CA. public school options (CCC, CSU & UC) and does not include information on private educational programs and opportunities.
- 5. Unfortunately, most health occupations programs have a limited number of spots for admission each semester (or once a year), therefore in today's competitive world you need to be an outstanding student with excellent grades particularly in the sciences to gain a seat in the program you are seeking. If you do not get into the program on the first try, try again! Persistence can lead to success!

A Note About Sources and References

The original intent of this resource book was to provide just enough information to the reader to initiate interest in health occupations and leave them wanting to know more about a particular area or pathway. The full intent was to utilize information and data exclusively from the Bureau of Labor Statistics (BLS) and the BLS Occupational Handbook, thus making footnotes unnecessary. However, once into the development of the book it was clear that the BLS is behind on newer and emerging health occupations thus requiring exploration into other resources for information.

While it may be said the methods used were non-academic in nature, as editor the decision was made to move the book forward toward completion instead of stalling publication to cite each and every piece of information. Also, with today's easy internet access, information contained in this book can be quickly "googled" to confirm information and/or tailor information so that it is individually pertinent or more recent.

Listed below are the main resources used for this publication in order of frequency:

- 1. Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-2017 Edition, Occupation Title Specific on the Internet at https://ww.bls.gov/ooh/healthcare.htm
- 2. Summary and description of what the occupation does from BLS (above).
- 3. Salary Ranges primary information is from the Bureau of Labor Statistics, "State & Area Data May 2016". However, it has been tailored using maps showing employment by California counties. Salary ranges in this document are for the Central Valley Region (Stockton to Bakersfield). In areas outside of this region salaries will be higher.
- 4. In cases where the BLS did not have occupational information and data, occupational specific professional organization websites were searched for the data needed. Often a plethora of information was found with many sites showing "career" tabs with videos. Most of these excellent resourced websites are listed in the text of this book and may or may not have a QR Code to accompany them.
- **5.** Health occupational specific information for certificates, AS/AA degrees offered by the CA Community Colleges originates from the Health Workforce Initiatives' website Statewide Health Occupations Directory at: www.ca-hwi.org.
- **6.** Additional information was sometimes found by just "Googling" the occupational title. For salary information, occasionally "PayScale.com, Salary.com or Indeed.com" was used for current wage information.
- 7. When in doubt, or when there was confusing or conflicting information, healthcare professionals (or faculty) who work in the field were asked for confirmation and/or suggestions.

Acknowledgements:

This book would have not been possible without the efforts and support from the following individuals: Lita Wallach, Allyson Keller, Margarita Martinez, Stephanie Doria, Amelia Sweeney, Belen Kersten, Cindy DeLain, Bonnie Hunt, John Cordova, Linda Zorn, Brenda Fong and Tom Redemer.

About California's Community Colleges

Currently serving over 2.1 million students at 114 college campuses, California's Community Colleges (CCCs) are the largest system of higher education in the nation. CCCs offer a wide range of educational opportunities: basic courses in math and English, short-term certificates, vocational workforce trainings and Associate degree programs along with preparation for transfer to four year educational institutions. The CCC's were originally created with a foundational belief that higher education should be available to everyone; today the CCCs are one of the most open and accessible systems of higher education in the world.



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About the Health Workforce Initiative

The California Community Colleges Chancellor's Office in concert with the Division of Workforce and Economic Development are addressing skills and jobs mismatch while preparing California's workforce for 21st century careers. The Division collaborates with employers, organized labor, K-12 partners, and system-wide community colleges to close the skills gap and to foster successful student completion which leads to employment.

The Health Workforce Initiative is an integral part of this Division and its Doing What Matters for Jobs & the Economy campaign, investing funding and resources in industry sectors that are key to California's economic growth. Doing What Matters for Jobs & the Economy is a concerted effort among California Community Colleges to partner with business and industry while working together to find solutions to regional workforce issues pertaining to California's high growth sectors. The goals of Doing What Matters for Jobs & the Economy are to supply in-demand skilled workers for employers, create relevant career pathways and stackable credentials, promote student success and get Californians into open jobs.

This document was developed utilizing grant resources set aside by the Division of Workforce and Economic Development to engage young minds by showcasing the diversity of opportunities available in the health sector. Health careers provide good wages and flexible working schedules while simultaneously engaging one in altruistic endeavors which frequently touch the human heart.

For more information on the Health Workforce Initiative, please visit: www.ca-hwi.org





