

## **career guide** FIND YOUR HEALTH CARE CAREER!



missourihealthcareers.com

## key

## SALARY

\$ \$	\$ \$	\$ \$25,000 or lower	
\$ \$	\$ \$	\$ \$25,001 to \$39,999	
\$ \$	\$ \$	\$ \$40,000 to \$59,999	
\$ \$	\$ \$	\$ \$60,000 to \$99,999	
\$ \$	\$ \$	\$ \$100,000 or higher	

## **JOB OUTLOOK**

<b>* * * * *</b>	4.9% increase or lower
****	5% - 9.9% increase
****	10% - 14.9% increase
****	15% - 19.9% increase
$\star$	20% increase or higher

## **EDUCATION**

	High school diploma or equivalent
<del>33333</del>	Postsecondary non-degree award or Associate's degree
	Bachelor's degree
	Master's degree
	Doctoral or professional degree

Data for salary, job outlook and education infographics were compiled from Missouri 2012-2022 Occupational Projections, published online by the Missouri Economic Research and Information Center (MERIC) within the Missouri Department of Economic Development. When positions in this publication were not directly comparable to a position in MERIC's data, U.S. Bureau of Labor Statistics, data for salary, job outlook, and education is used.

# MISSOURI HEALTH

# So you're thinking about a health care career — well, you've made a great decision!

When most people think of health care careers, they think of doctors and nurses. The thing is, though, there are so many other jobs within health care that it can be a dizzying experience to narrow your options.

- You may want to work in the lab or take pictures of the body through X-rays or computed tomography.
  You might want to work with people who have special dietary needs, hearing loss or breathing problems.
- You could find a job in management, finance or human resources. Or, maybe you'd prefer to be behind the scenes and do your work as a medical librarian or administer and maintain the health provider's computer network.
- You could help a child with a lisp, a dad who can no longer use an arm or a grandmother who needs to regain her strength.

The point is there are a lot of opportunities in health care, and not all of them require interacting with patients in a hospital bed — in fact, most don't. Think about your options as you thumb through this career directory.

Connect with us online for more information!

## www.missourihealthcareers.com



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## administration/office support

Administration is the business side of health care. If you work in a hospital, office support and administrative positions play an important role in ensuring employees — like nurses, doctors and lab technicians — have the resources and equipment to provide excellent care for patients. Professionals in hospital administration monitor the hospital's finances and risk to ensure that the hospital and its employees comply with necessary state and federal regulations.



Executive secretaries provide high-level administrative support by conducting research, preparing reports or handling requests for information. They prepare correspondence, receive visitors, arrange conference calls and schedule meetings. They also may train or supervise lower-level clerical staff.



Medical secretaries perform secretarial duties using specific knowledge of medical terminology and hospital, clinic or laboratory procedures. The duties may include scheduling appointments, billing patients, and compiling and recording medical charts.



Health care marketing managers work in the public relations, communications or policy creation departments of hospitals, health care organizations, biotech companies and federal health agencies. They plan, direct or coordinate marketing policies and programs to determine the demand for services offered by a hospital. They also monitor trends that indicate the need for new services.



Medical and health services managers plan, direct or coordinate medical and health services in hospitals, clinics, managed care organizations or similar organizations. Through review and analysis, managers may help reduce risk and improve service.

general and operations managers Salary Growth

General and operations managers plan, direct or coordinate the operations of an organization. They develop policies, manage operations and plan the use of material and human resources. They review financial statements and reports and may oversee staffing. An organization may also call these positions the chief operating officer or general manager.



Chief executive officers direct the hospital or health system and develop plans and policies to lead the organization. They also coordinate activities at the highest level of management with the help of managers and supervisors.

## financial services

Although hospitals exist to care for sick and injured people, their financial operations are complex and require professionals to monitor and track the hospital's finances.



Billing and account collectors keep track of overdue accounts, receive payments and post payments to a patient's account. Collectors locate and notify customers of past due bills, usually by telephone or sometimes by letter. They may locate people by checking with the post office, telephone companies, credit bureaus or former neighbors to obtain the new address.



Bookkeepers and accounting clerks perform a number of tasks, such as posting transactions in ledgers, correcting financial errors and preparing financial statements. As an accountant or bookkeeper, they are part of a team of financial record-keepers responsible for updating and maintaining accounting records, calculating, posting and verifying financial data.



Accountants help ensure that a hospital runs efficiently and its financial records are kept accurately. Accountants analyze and communicate financial information. They prepare, analyze and verify financial documents to provide information to hospital administrators. Many accountants also offer budget analysis, and financial and investment planning.



Hospital billing clerks are hospital office employees responsible for reviewing medical records, communicating with insurance companies and billing patients. They use computer software and knowledge of insurance and billing practices to correctly translate verbal descriptions of diagnoses and procedures into numerical codes.

## human resources

Human resource professionals in hospitals may work in various positions such as employment and placement, compensation and benefits, training and development or employee relations.



Human resource specialists maintain employment records and explain human resource policies, procedures, laws or regulations. They screen, recruit, interview and place workers, and help match potential employees to positions in the hospital. They are responsible for ensuring that employees are satisfied and work to the best of their ability.

health care recruiters

Health care recruiters assist in finding qualified professionals to fill positions in the health care industry. They may write and place job ads, participate in job fairs, review resumes and job applications, conduct interviews and check references for job applicants. Health care recruiters understand the health care field and are proficient in keeping track of the various applicants' credentials, certifications and licensure.



Compensation, benefits and job analysis specialists conduct programs of compensation and benefits and job analysis for hospitals. They may specialize in specific areas, such as position classification and pension programs. Part of the job is making sure the hospital is following the law, and they help plan and improve how the employer selects, promotes, compensates, evaluates and trains employees.



Training and development specialists analyze training needs, design and conduct training, and develop programs to improve individual and organizational performance. Hospitals recognize that training offers a way of developing skills, and improving productivity and the quality of work. It builds employee loyalty and improves morale.

## ADMINISTRATION



Human resource managers are the highest-level administrator of a hospital's human resources department. Human resource managers are responsible for all aspects of a hospital's hiring and firing processes, training and development programs, and ensuring that the hospital's compensation (salary and benefits) is competitive with other businesses.

## education and research

These professionals work to leverage research and education in hospitals and promote health care improvement strategies through scientific research and quality educational initiatives.



Health educators provide and manage health education programs that help individuals, families and their communities maximize and maintain healthy lifestyles. They collect and analyze data to identify community needs prior to planning, implementing, monitoring and evaluating programs. They may serve as a resource to assist individuals, other health care workers, or the community, and may administer fiscal resources for health education programs.



Genetic counselors help educate people about their chances of inheriting genetic disorders or diseases using information from a patient's family medical history. They explain possible testing options and provide support to patients and family members. They also might educate other health care professionals, students and the public about genetic disorders.



Clinical data managers are directly involved with clinical research for pharmaceutical and biotechnology companies and other public, private and academic-related research centers. They oversee all aspects of program-related data, from design and framework to collection, processing, storage, retrieval and more, maintaining compliance with the U.S. Food and Drug Administration and other regulations.



Clinical research coordinators evaluate and analyze clinical data. They work with investigators of projects to evaluate research protocols, prepare for clinical trials and experiments, seek approval from regulatory and ethics committees, implement experiments and trials and collect data. They may supervise research analysts.



Health specialties teachers teach courses in health specialties' fields such as dentistry, laboratory technology, medicine, pharmacy, public health, therapy and veterinary medicine. They plan, evaluate and revise curricula, course content, materials and methods of instruction.

## clinical laboratory services

Professionals in clinical laboratory services perform tests on blood and other bodily fluids (like amniotic fluid or fluid around the lungs) to find disease, infection and chemical imbalances in patients. These tests are very important in choosing the best way to treat patients. These professionals work with highly sophisticated equipment to run these important tests.



Phlebotomists are health care professionals who are trained to draw blood from a patient in a safe and sanitary manner. Phlebotomists may draw blood samples, collect fluid or tissues samples or collect specimens for testing. They may transport specimens or fluid samples from collection sites to laboratories.



Medical laboratory technicians, also known as clinical laboratory technicians, perform routine medical laboratory tests for diagnosis, treatment and prevention of disease. They prepare blood, urine and tissue specimens for analysis. They use sophisticated equipment to look for bacteria, parasites and other microorganisms. Medical laboratory technicians might analyze the chemicals in fluids or match blood to help people get the right blood type in a transfusion.



Medical laboratory technologists prepare samples for analysis, monitor testing procedures, and analyze results for infection or chemical composition. They work in all areas of a clinical lab and perform a wide variety of tests on body fluids, including blood, urine or spinal fluid, to determine the presence of normal or abnormal components. Some tests are very complex and will detect cancer, HIV/AIDS or diabetes. Technologists confirm and report the results to doctors and other health care professionals.



Histotechnologists and histologic technicians prepare body tissues to be examined by a pathologist. To prepare tissues for analysis, they might section and stain tissues, embed them in paraffin or plastic, or prepare frozen sections of tissues directly from the operating room. They also operate sophisticated equipment, such as microscopes and microtomes.



Cytotechnologists strain, mount and study cells and cellular abnormalities to detect evidence of cancer, hormonal abnormalities and other pathological conditions. Cytotechnology professionals often work with pathologists to determine whether cells show signs of precancerous lesions, infections and other malignancies.

## CLINICAL LABORATORY SERVICES



Cytogenetic technologists are laboratory professionals who analyze chromosomes found in biological specimens such as amniotic fluids, bone marrow and blood to aid in the study, diagnosis or treatment of genetic diseases. They count chromosomes and identify the structural abnormalities by viewing culture slides through microscopes, light microscopes or photomicroscopes.



Blood bank technologists collect, label and prepare blood, plasma and other components for transfusions. Using special techniques, technologists are able to collect blood, determine blood type and prepare blood and its components (red cells, white cells, platelets and plasma) for transfusion into a patient. They also search for blood irregularities and process, test and label blood from blood donors.



Pathologists are physicians who diagnose presence and stage of diseases using laboratory techniques and patient specimens. They study the nature, cause and development of diseases. They also may perform autopsies.

## diagnostic imaging services

Diagnostic imaging techniques help narrow the causes of an injury or illness and ensure that the diagnosis is accurate. These techniques include X-rays, computed tomography scans and magnetic resonance imaging.

These imaging tools let a doctor "see" inside the body to get a "picture" of the patient's bones, organs, muscles, tendons, nerves and cartilage. Imaging is a way the doctor can determine if there are any abnormalities.

There are a number of specialties within radiologic technology. Some technicians or technologists perform X-rays, scans, or administer nonradioactive materials into a patient's blood stream to diagnose health problems.

There are several different types of technologists.

- A radiographer works primarily with X-rays or radiographs. X-rays are the most common and widely available diagnostic imaging technique.
- Computed tomography technologists are radiologic technicians who specialize in taking cross-sectional X-ray images of the tissues, bones, organs and blood vessels in an area of a patient's body. The X-rays are used to create a three-dimensional image. The scans that a CT technologist produces help doctors diagnose and treat patients with internal diseases or injuries.
- Magnetic resonance imaging technologists are specialized radiologic technicians who operate MRI equipment to create detailed pictures of internal body structures. They are responsible for preparing patients for their scans and safely using the equipment.

## DIAGNOSTIC IMAGING SERVICES



Radiologic technologists perform X-rays and CAT scans to administer nonradioactive materials into a patient's blood stream to assist physicians in diagnosing medical ailments. They prepare patients for procedures, adjust imaging equipment, position patients and shield them from excess radiation.



Diagnostic medical sonographers use ultrasound equipment to direct sound waves into the body to produce an image or video used for detecting abnormalities in patients. These images show the shape and makeup of body tissues. Diagnostic medical sonographers will observe and care for patients throughout the exam, obtain and record patient history, and maintain records and files. The findings help doctors diagnose diseases, injuries or other conditions.



Nuclear medicine technologists assist physicians and work directly with patients to explain nuclear medicine procedures. They also administer and oversee nuclear medicine and radioactive procedures and substances. In this career, nuclear medicine technologists use unstable atoms to help find and treat disease. The unstable atoms, called radiopharmaceuticals, give off radiation. They administer these to patients and then monitor how the patients' tissues and organs respond.

## DIAGNOSTIC IMAGING SERVICES



Radiation therapists provide radiation therapy to patients as prescribed by a radiologist according to established practices and standards. They review prescription and diagnosis, act as a liaison with physician and supportive care personnel, and prepare equipment such as immobilization, treatment and protection devices. They maintain records, reports and files and may assist in dosimetry procedures and tumor localization.

## career spotlight

#### AUSTIN, TECHNICAL DIRECTOR/ LEAD TECHNOLOGIST



and thank you, it makes it all worthwhile.

## dental

Dental professionals may help people by cleaning their teeth and checking them for any sign of disease. They may educate patients on brushing and flossing, develop X-rays or help treat diseases of the mouth. They also assist the dentist by setting up equipment and keeping records.



Dental assistants assist the dentist and keep patient records. They also set up the patient and dental equipment. They assist the dentist in times of emergency, instruct patients in proper teeth cleaning, monitor supplies and inventory, and may clean and polish hand-held dental instruments.



Dental hygienists clean teeth and remove stains and deposits from teeth. They look at teeth and gums for signs of disease. They educate patients on brushing and flossing, take and develop X-rays, apply fluoride or sealants on teeth, help keep the dental equipment in good working order, and sharpen and sterilize dental instruments.



Dentists care for teeth and gums, and also for the muscles and bones within or supporting the mouth. They do routine procedures such as filling cavities, cleaning teeth and repairing broken ones. They also may perform surgeries within or around the mouth to promote dental health, improve appearance and prevent disease.



Oral surgeons, also referred to as oral and maxillofacial surgeons, diagnose and treat diseases, injuries and defects in the mouth, jaws, neck, face and skull regions. Common treatments include the removal of impacted teeth, reconstructive surgery, lip reconstruction and insertion of dental implants.

## career spotlight MEGAN, CDA, EFDA, DENTAL ASSISTANT

I love working in a fast-paced environment. There is always something to do from sterilization to cleaning rooms. No patient or procedure is the same so you have to think and act fast and even anticipate. Patients compliment my work sometimes, too, and

that makes me feel great. I love making people feel confident about their smiles and showing the home care that they can do. I work for a great doctor and office staff that make my job enjoyable.

## diet and nutrition

The field of nutrition is expanding with growing interest in how food and nutrition affects human health, wellness and prevention of diseases. The opportunities for nutrition professionals are extensive. Individuals who have a passion for food, nutrition and exercise are a good fit for this field. Nutrition professionals teach people about the foods they eat and how food affects their health. In hospitals and nursing homes, they design healthy meals that follow dietary guidelines.



Dietetic technicians are wellness practitioners who develop nutritional plans to promote health, treat illnesses or prevent disease. They assist registered dietitians by helping people learn about the foods they eat. They screen patients to find nutritional problems and provide education or counseling to help them.



Dietitians, or nutritionists, are health care professionals who develop and supervise diet programs that improve public health. They may serve as clinical dietitians in health care facilities, community dietitians in public health centers or management dietitians in food distribution facilities.

## emergency services

Emergency services ensures public safety and health by addressing different emergencies. Some of these positions provide transportation or treatment to those in need while others plan, manage and coordinate disaster response plans.



Ambulance drivers are responsible for transporting patients from an emergency situation to a hospital or other health facility. Many are required to have the requisite training to perform emergency medical procedures as part of the emergency medical team.



Emergency medical technicians assess injuries, administer emergency medical care and extricate trapped individuals. They transport injured and sick persons to medical facilities.



Paramedics are highly trained emergency medical technicians who are responsible for providing care to accident victims. The paramedic profession combines and builds upon the skills of an EMT-Basic and an EMT-Intermediate.

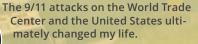
### **EMERGENCY SERVICES**



Emergency management directors plan and direct disaster response or crisis management activities. They provide disaster preparedness training and prepare emergency plans and procedures for natural, wartime or technological (nuclear power plant emergencies or hazardous materials spills) disasters or hostage situations.

## career spotlight

#### JASON, EMERGENCY MANAGEMENT OFFICER (CORPORATE), EMERGENT CARE



As an emergency room nurse, I was approached with the opportunity to take the lead for emergency plan-

ning for my hospital. Although I did not fully understand the impact this type of role can have in health care, I jumped at the challenge and have never looked back. I have since obtained my Bachelor's in Emergency and Disaster Management and I'm a Certified Healthcare Emergency Professional (CHEP). Since 2007, I have molded and shaped an additional "responsibility" into the role of corporate Emergency Management Officer. I am now responsible for all of the emergency planning, mitigation, preparedness, response, and recovery activities for the entire health care system, integrating safety, quality and regulatory measures. Surprisingly, the field of Emergency Management fulfills all of the desires I previously longed for: business, law enforcement, health care, and the military. I interact with experts from each of these fields every day, for a variety of reasons. There is rarely a typical day at the office and there are new threats and vulnerabilities identified on a continual basis. From exercise planning to vulnerability assessments to managing crises; Emergency Management keeps me excited and fulfilled as I indirectly impact patient care and protection. If you're looking for flexibility and enjoy critical thinking, specifically looking at "what-if" scenarios, Emergency Management may just be the career for you.

## health information management

These careers combine medicine and technology. In hospitals, they play a critical role in the delivery of health care through their focus on the collection, maintenance and use of quality data.



Coders are administrative workers in the health care industry who review patient's medical records, and using a universal coding system, assign codes to each procedure for insurance billing purposes. The coding specialists' work allows hospitals and other medical facilities to bill insurance companies for their services.



Medical transcriptionists listen to voice recordings that physicians and other health care professionals make and convert them into written reports. They also may review and edit medical documents created using speech recognition technology. Transcriptionists interpret medical terminology and abbreviations in preparing patients' medical histories, discharge summaries and other documents.

medical records and health information technicians

Medical records and health information technicians compile, process and maintain patient medical records in a manner consistent with medical, administrative, ethical, legal and regulatory requirements of the health care system and numerical coding system.

## HEALTH INFORMATION TECHNOLOGY



Medical librarians work in hospitals, clinics, universities, and academic medical or research centers. They provide access to medical and health-related information for health professionals, researchers, students and patients. The information they provide can assist doctors in treating illness or injury better and faster.



Health information managers handle patient records an important and confidential job. They play a part in the quality of a patient's health care by organizing their medical data. They also are skilled in health care database systems, as well as medical classification systems. Managers have great knowledge of how financial information relates to clinical data, medical legal issues and security systems.

## health information technology

Hospitals, like any other business, rely more and more on technology. A well-functioning electronic network is critical to an efficient health care system. Jobs in health information technology, also called HIT, are varied and may include providing computer support, technical assistance and service to your customer the health care professionals who treat patients.



Computer support specialists provide technical assistance, support, and advice to users within the hospital. They are troubleshooters who find problems and provide technical support for hardware, software and systems. They respond to questions from users and run diagnostic programs to resolve problems. Some specialists install, modify, clean, and repair computer hardware and software.



Computer systems analysts develop, test, expand or modify computer systems to improve efficiency. When problems occur, they review information and performance indicators to locate problems and correct errors by fixing codes. They also work with health care administrators to make sure all agree on the best ways to solve problems and provide new technology to staff.

## HEALTH INFORMATION TECHNOLOGY

information security analysts Salary Growth

Information security analysts protect the security of the computer network. They plan, implement, upgrade or monitor security of networks and confidential information. They ensure appropriate security controls are in place that will keep digital files and vital electronic files safe and respond to computer security breaches and viruses.



Computer network architects design and implement computer and information networks, such as local area networks (LAN), wide area networks (WAN), intranets, extranets, and other data communications networks. They perform network modeling, analysis, and planning, and may design network and computer security measures. Computer network architects are also researchers and may recommend new hardware and software.



Computer systems managers design, install and support a hospital's computer systems. They are responsible for local area networks (LAN), wide-area networks (WAN), network segments and Internet and intranet systems. They maintain network hardware and software, analyze problems and monitor networks to ensure they are available to users. Computer systems managers plan, coordinate and implement network security measures and are responsible for maintaining network efficiency.

## medical careers

These positions often work in hospitals or doctors' offices working directly with the patient doing medical procedures, exams or working the front office.



Medical assistants perform administrative and certain clinical duties under the direction of a physician. Duties may include scheduling appointments, maintaining medical records, billing, and coding information for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examinations and drawing blood.



Physician assistants provide health care services typically performed by a physician, under a physician's supervision. PAs conduct physical exams and provide treatment and counsel patients. They may prescribe medications.

## medicine

Physicians diagnose illness and injury, prescribe and administer treatment, and advise patients about how to prevent and manage disease.

There are two paths to becoming a doctor — allopathic medicine, which leads to an M.D. (medical doctor), or osteopathic medicine, which leads to a D.O. (doctor of osteopathic medicine).



Family and general practitioners are often called primary care physicians, who diagnose, treat, and help prevent disease and injuries. Family practitioners may refer patients to doctors who are experts in certain diseases, called specialists, when further treatment is needed.



Pediatricians diagnose, treat and help prevent children's diseases and injuries. When children become sick, they diagnose and may recommend a treatment plan. Many pediatricians first visit newborns soon after their births.



Internists are physicians who diagnose and provide nonsurgical treatment of disease and injuries of internal organ systems. They provide care mainly for adults who have a wide range of problems with internal organs.



Surgeons are physicians who perform surgery to prevent and treat diseases, repair injuries or restore patient's abilities. Some surgeries are invasive, and others are minimally or non-invasive. They examine patients to obtain information on medical history and surgical risk.



Dermatologists are physicians who specialize in the treatment and care of the skin. They diagnose and treat skin conditions related to the scalp, hair and nails. They perform skin surgery and recommend diagnostic tests based on physical examination findings.



Ophthalmologists are physicians who specialize in treating and diagnosing ailments of the eye. They perform laser surgeries or other types such as cataract, glaucoma, refractive or corneal surgeries. They also provide or direct a patient's postoperative care.



Podiatrists are doctors who specialize in treatment of the feet and ankles. They work with patients to prevent injuries and diagnose and heal existing injuries. Podiatry involves taking X-rays, setting fractures and treating other injuries, as well as prescribing physical therapy and medication.



An OB/GYN, or obstetrician and gynecologist, is a type of doctor who specializes in treating female patients. OB/GYNs can act as a woman's primary doctor, but they also specialize in care related to pregnancies and the reproductive system. OB/GYNs identify, treat and monitor ailments related to the female anatomy, including breast cancer, cervical cancer, pelvic disorders, urinary tract infections and hormonal disorders.



Anesthesiologists are physicians who deliver pain-relieving medications during surgical procedures and monitor patients' vital signs. In addition to working with patients in the operating room, anesthesiologists also provide pain relief services to people who suffer from chronic pain, during labor and delivery, and to patients in the intensive care unit. They work closely with surgeons and other physicians to formulate a treatment plan before, during and after a surgical procedure.



Immunologists are physicians who study the functions and disorders of the immune system. Disorders include asthma, allergies, arthritis, lupus and Crohn's disease. Career paths include direct patient care or research of diagnoses and treatment options.



Hospitalists provide inpatient care in settings such as medical wards, acute care units, intensive care units, rehabilitation centers or emergency rooms. They manage and coordinate patient care throughout treatment.

physiatrists or physical medicine and rehabilitation physicians Salary Growth

Physiatrists are medical doctors or doctors of osteopathy, certified as a specialist in physical and rehabilitation medicine. They diagnose and treat disorders requiring physiotherapy to provide physical, mental and occupational rehabilitation.

sports medicine physicians



Sports medicine doctors prescribe treatments for professional and amateur athletes who are injured. These doctors may work in hospitals and clinics, or with high school, collegiate or professional sports organizations. Specialized training in a sports medicine fellowship program is required.



Urologists diagnose, treat and help prevent benign and malignant medical and surgical disorders of the genitourinary system and the renal glands.

## medical equipment/biomedicine

For being behind-the-scenes, the work they do is so important! They may get equipment ready for procedures and ensure it is working correctly. Medical equipment workers might repair or do regular maintenance on medical equipment.



Medical equipment preparers or sterile processing technicians sterilize, organize and assemble surgical instrument trays and other supplies. They examine equipment to find leaks, loose parts or other visible signs of wear. They may check equipment before use to make sure it is working properly, and maintain records of inventory and equipment use.

medical equipment repairers Salary Growth

Medical equipment repairers test and calibrate equipment and keep records of maintenance, repair and required updates. They take equipment apart, repair and replace any defective parts, and put it back together. They ensure that medical equipment is being used safely and may train health care providers on proper use.



Biomedical engineers work in a relatively new area of health care, one that joins with engineering. They apply engineering principles to solve biological and medical problems. They might design machines like artificial organs, prostheses, instrumentation, medical information systems, and health management and care delivery systems.

## mental and social health

Employees who choose professions in this field assist people who have many types of mental or social difficulties. They might work with a patient's doctor in a hospital or may work at a counseling center. In most cases, they are part of a team that provides treatment to people with mental or social issues.



Health care social workers provide individuals, families, and groups with the support they need to cope with serious illnesses. They advise and support family caregivers, provide patient education and counseling, and make referrals when needed. They also may provide care and manage treatment plans designed to promote health, prevent disease and address barriers to health care access.

substance abuse and behavioral disorder counselors

Counselors provide all-around counseling and treatment. They work under the direction of a patient's doctor and provide counseling and treatment to those with mental health or substance abuse issues. They may work with people who have alcohol, tobacco, drug or other problems, such as gambling or eating disorders. They may work with individuals, families or groups.

## MENTAL AND SOCIAL HEALTH



Mental health counselors work as primary mental health caregivers. They conduct mental health assessments, develop individualized treatment plans and lead therapy sessions. They may make treatment referrals, as needed.



A clinical psychologist's primary tasks are the assessment and treatment of mental health issues, including emotional or social disorders. A clinical psychologist's job responsibilities may include development and supervision of mental health programs. Clinical psychologists can work in private practices, mental health organizations and hospitals, with individuals, families, couples or groups of all ages.



Psychiatrists are physicians who diagnose, analyze and treat mental health disorders. Psychiatrists can work in private practices, mental health organizations and hospitals, with individuals, families, couples or groups of all ages.

#### nursing

Nurses provide care for sick, injured or disabled people. They help people recover from sickness or injury. They may assess a patient's health problems or help teach patients how to be healthy.



Nursing assistants provide basic care to patients under the direction of a nurse. NAs help patients eat and bathe. They may dress, groom or move patients. They give medications or treatments, answer patient calls, and apply clean dressings or bandages under the direction of a nurse or physician.



Licensed practical nurses provide care to sick, injured, recovering or disabled patients and may be supervised by a registered nurse. LPNs administer prescribed medications or start intravenous fluids, noting times and amounts on patients' charts. They also observe patients, note changes in a patient's condition, and take basic vital signs like blood pressure and temperature. Providing care may include dressing wounds and treating bedsores.



Registered nurses care for sick and injured patients. RNs will assess patient health problems and needs, develop and implement nursing care plans and maintain medical records. RNs monitor and record patients' conditions and report any changes to physicians. They maintain detailed reports, record vital signs, and order, interpret and evaluate tests to identify and assess patients' conditions. They work closely with patients and their families.

#### advanced nursing

Advanced nurses have obtained an advanced level of education and can perform tasks that a registered nurse cannot. Some tasks of an advanced nurse include diagnosing and treating illness as part of a health care team. Some nurses focus on health promotion and disease prevention, and some may order, perform or interpret diagnostic tests. Others are educators, teaching students how to care for patients.



Nurse practitioners diagnose and treat both sudden and long-term conditions. They may do physical exams and physical therapy, or order tests and therapies for patients. NPs order, perform or interpret results of blood tests, EKGs and X-rays. They use these tools, along with patient symptoms and medical history, to develop the right diagnosis.



Nurse midwives diagnose and coordinate all aspects of the birthing process. Midwives may work independently or as part of a health care team. Nurse midwives may provide preventive care to women.



Nurse anesthetists prepare and administer anesthesia and oversee patient recovery from anesthesia. Nurse anesthetists might work with anesthesiologists, surgeons, other physicians or dentists. They make sure the patient is getting enough oxygen and monitor a patient's vital signs and responses, such as skin color, pupil dilation, pulse, heart rate, blood pressure or other vital signs.



Instructors teach about nursing in classroom and clinical settings. Nursing instructors lead, develop and organize teaching programs. They keep informed about developments in the field of nursing and may collaborate with other faculty to address teaching and research issues.



Nurse informatics specialists apply the knowledge of nursing and informatics to help design, develop and modify computerized health care systems. Part of this job might be to educate staff and assist in problem solving to promote implementation of the new system. They act as translators between nurses and computer engineers to design systems to assist with data management or resolve problems.



Clinical nurse specialists plan, direct and coordinate the daily patient care activities in a clinical practice. They collaborate with other health care professionals and service providers in areas such as patient discharge or clinical procedures. They also ensure adherence to clinical policies, protocols, regulations and standards, and evaluate programs regarding quality and effectiveness of nursing practices.

#### career spotlight BRIGITTE, R.N., BSN



I chose nursing because I felt that it was a career that would provide many opportunities in the health care field. I was right! I have worked in numerous departments and have had many roles as an R.N. – Medical /Telemetry,

Intensive Care, School Nursing, Surgery, Endoscopy and Cardiology. My work experiences have provided me with various skill sets and numerous experiences that have enhanced my career growth. I enjoy learning and I enjoy the days when I feel like I have made a difference. I am very thankful for the opportunities that my career has provided, and I look forward to further opportunities down the road. Nursing is challenging. It is hard work, but it can also be very rewarding.

#### pharmacy

Pharmacy workers help people by getting medications ready that have been prescribed by doctors and other health providers. They give information about the medicines to patients, recommend the right dose, and also may talk to the patient about side effects.



Pharmacy aides will receive, store and inventory pharmaceutical supplies or medications, check for outdated medications, and notify the pharmacist when inventory levels are low. They may prepare prescription labels, answer customer calls and refer callers to the pharmacist. They may operate a cash register and accept prescriptions for filling.



Pharmacy technicians receive prescriptions or refill requests and make sure information is complete and accurate. They might measure, count, label and record the amounts and doses of medicines, and make sure drugs are stored and secured correctly.



Pharmacists are responsible for filling patients' prescriptions with the correct medicines. They tell them about the medicines and the proper way to take them. Pharmacists work with doctors to choose the right medicines, ensuring they will work with other medications taken by the patient, and explain side effects.

#### career spotlight

#### MIRANDA, INDEPENDENT RETAIL PHARMACIST



Pharmacy is such a rewarding career. I couldn't have picked a better career path. When I was in high school, I struggled with what I wanted to do for the rest of my life. I knew I wanted to do something in the health care field, and always assumed I would be

a doctor. After some thorough reading and thinking, I knew that was not the best option for me. So I looked into what being a pharmacist was like and decided I was interested in pursuing this career path. I then decided to get a job in a pharmacy as a pharmacy technician. After a few weeks, I knew this was the right choice for me. The thing I love most about pharmacy is the patient contact. I love being able to visit with patients when they come in and answer their questions when needed. Getting to know my patients, seeing them on a regular basis and helping solve their problems is what makes my job so great and rewarding. I also like that there are so many different career options for a pharmacist. From retail, hospital to clinical pharmacy, the options are endless depending on what you like to do. A career in the health care field is a great option so definitely take a look at becoming a pharmacist.

#### food services

Jobs in health care aren't just related to medicine and treating patients. A hospital is like a small city, needing all kinds of workers to keep the facility running smoothly, and that includes preparing and serving food. In food service, customers are not just patients and their families, but employees, too.



Cooks prepare and cook large quantities of food for institutions, such as hospitals or cafeterias. Cooks make sure equipment, kitchen appliances and work areas are clean and functional. They clean and cut meats, cook, and serve food to patients, employees or visitors. They also follow food preparation rules to ensure food is healthy and safe to eat.

first-line supervisors of food preparation and serving workers



First-line supervisors of food preparation and serving workers directly supervise and coordinate activities of workers engaged in preparing and serving food. They may inspect supplies, equipment and work areas, and keep tabs on food inventory.



Food service managers are responsible for managing the operations of all food service activities. They must perform many job duties, including duties related to customer service, administration and management.

#### environmental services

People in environmental services make sure that patient rooms, lobby areas and staff rooms are clean and sanitized.



Housekeepers routinely clean patient rooms, nursing units, surgical areas, administrative offices, waiting areas and public restrooms. Using various cleaning chemicals and disinfectants, they wipe equipment, clean furniture, polish floors and vacuum carpets. They make beds, empty trash and restock medical supplies. Housekeepers also collect dirty laundry from all patient areas and distribute the clean linen and hospital gowns to the appropriate floors.



Janitors keep buildings clean and orderly. They perform heavy cleaning duties, such as cleaning floors, shampooing rugs, washing walls and glass, and removing rubbish. They may repair furnaces and boilers, perform routine maintenance activities, notify management of repair needs, and clean snow or debris from sidewalks.



First-line supervisors coordinate work activities of cleaning personnel. They inspect employees' work, plan work schedules and may assist with cleaning duties when needed. In hospitals, supervisors direct activities to stop the spread of infections and coordinate with other departments to ensure areas are cleaned efficiently.

# technical instrumentation

These employees help prepare an operating room or operate complex equipment to help doctors diagnose heart and brain problems. Others in this field operate intricate machines that assist during surgeries or use equipment to provide treatment for cancers.



Surgical technologists assist surgeons, anesthesiologists, registered nurses and other surgical personnel with surgical procedures. They help ensure patient and operating room safety, as well as the functionality and sanitation of surgical equipment.

cardiovascular technologists and technicians



Cardiovascular technologists assist with the diagnosis and treatment of heart issues. They conduct tests on pulmonary or cardiovascular systems of patients for diagnostic purposes. They may conduct or assist in electrocardiograms, cardiac catheterizations, pulmonary functions, lung capacity and similar tests.

electroencephalogram (EEG) or neurodiagnostic technologists



EEG technicians, also known as electroneurodiagnostic or neurodiagnostic technicians, are individuals who use specialized machines to monitor the electrical activity of a patient's brain to observe and diagnose irregularities such as stroke, epilepsy and multiple sclerosis.

#### **TECHNICAL INSTRUMENTATION**



Perfusionists assemble, operate and monitor equipment that keeps oxygen-rich blood pumping through the circulatory system. When cardiac surgeons perform open-heart surgery, they rely on a perfusionist to operate machinery that pumps oxygenated blood through the patient.



Dosimetrists use training in anatomy, physics and radiobiology to calculate effective radiologic treatment doses for cancer patients, while minimizing side effects. This is a highly specialized skill since radiation can shrink the tumor but also can damage healthy tissues and organs. Dosimetrists determine exactly how to deliver the prescribed dose using a 3D computer model of the patient. They also help calibrate radiation equipment and work on research teams to improve radiation techniques.

#### **CAREER SPOTIGHT** WAYNE, NUCLEAR MEDICINE TECHNOLOGIST

I worked as a radiology transporter during college. I was really intrigued by the modalities offered by radiology and all the exams that encompass radiology. Because I knew I wanted to be in the medical field, it felt like a natural fit. I am now a nuclear medicine technologist and happy to be in that field.

# physical therapy

Physical therapy workers help patients of all ages improve their movement or reduce pain. They help patients increase their strength and decrease or prevent problems they may have because of disease or injuries.



Physical therapist assistants help the physical therapist in treating patients. They may assist with exercise, apply hot or cold packs, or perform special ultrasound or electrical treatments. They may help patients increase their strength and assist in developing treatment plans and keeping track of the patient's progress.



Athletic trainers help athletes prevent and recover from injuries. They are health care professionals that diagnose and treat injuries caused by stress to the musculoskeletal system. Trainers also teach injury prevention methods to people who work in jobs that have a high demand of physical activity.

#### THERAPIES AND REHABILITATION



Physical therapists assess patients and create plans to help improve their movement, relieve pain and increase strength. They evaluate the effects of treatment and adjust to maximize the benefits. Physical therapists also test the patient's strength, motor skills and functions, sensory perceptions, and respiratory or circulatory efficiency. They show patients how to perform the prescribed exercises and review progress. Physical therapists help decrease or prevent problems because of disease or injury.

#### occupational therapy

Therapists and assistants help patients restore the skills they need to do daily tasks. The tasks may be related to a person's job, household chores or daily living skills.



Occupational therapy assistants assist occupational therapists in treating patients. They help patients improve their lives and perform daily tasks. They could help a person learn how to move from a bed to a wheelchair or help an injured worker re-learn how he can perform his job. OT assistants also make sure exercises are done correctly and provide assistance.



Occupational therapists use practical movement and exercise to rehabilitate patients with disabilities or injuries. Therapists also may design work or home environments to suit an individual's needs, thereby enabling them to succeed in daily care activities and in the workplace.

# respiratory therapy

Respiratory therapists assess, treat and care for patients with breathing problems. They might help patients who have asthma or need help breathing. They often work throughout the hospital assisting patients with breathing problems.



*Respiratory therapy technicians assist respiratory therapists with monitoring patients and performing diagnostic tests.* 



Registered respiratory therapists or certified respiratory therapists work under a physician's supervision to take care of patients with lung problems. Their patients might have chronic asthma or have suffered a heart attack, stroke, or other disease or illness.

## other therapies and rehabilitation

There are many different types of therapy. People who work in the therapies get to work with patients oneon-one to improve some aspect of their lives and can have a great impact on their health and improvement.



Speech pathologists assess, diagnose and treat disorders related to speech, fluency, language, cognitive-communication and voice. They work with people who have trouble producing speech sounds or who have speech rhythm and fluency problems, such as stuttering. The speech problems that they treat can be congenital, developmental or acquired due to a health problem or disorder.



Recreational therapists work with people who have physical, social or emotional disabilities. They help by providing treatments and recreation activities to people who are ill or disabled. This helps them improve or maintain their physical, mental and emotional well-being. It also helps reduce depression, stress and anxiety.



Orthotists and prosthetists make and fit devices that help people move. A certified prosthetist makes and fits devices that replace the arms or legs of patients who lost them through injury or disease. A certified orthotists designs and fits braces like surgical supports and corrective shoes. Both may use computers to create the devices and tools, like hammers, drills and saws, to manufacture prosthetics.



Rehabilitation counselors help disabled people who may have physical, mental or social disabilities. The goal is to help them get back to satisfying and productive lives. Rehabilitation counselors might counsel patients about job training and help them find jobs. They also may counsel them in adjusting to their new work environment.



Audiologists have studied the science of hearing. They study, diagnose and treat hearing loss and balance disorders. They identify hearing problems and help people improve their hearing. Audiologists conduct ear exams, train clients in speech and lip reading, and teach people how to use hearing aids or other devices.

# financial aid

Financial aid is designed to cover the educational costs that may be difficult to pay. There are four basic types of financial aid: scholarships, grants, work-study and loans.

- Explore all your options. Don't assume you won't be eligible for financial assistance. There are many types available.
- Financial aid can be based on need, income, merit or academics.
- Talk with the schools you are interested in attending.
- Ask your current employer about tuition reimbursement programs.
- Ask your counselor to help you identify information on financial aid.
- Complete the Free Application for Federal Student Aid (FAFSA). It's used to apply for student federal financial aid and is often required by other financial assistance programs.
- Don't limit yourself to just one type of assistance.
- Start early so you don't miss any deadlines.
- Don't be afraid to ask for help.
- Beware of scams do not pay or give your credit card number to anyone who says they will guarantee you a scholarship or a grant.

The cost of an education varies depending on the type of school you choose and your study program. If you'll be working towards a bachelor's degree, you may want to spend your first two years at a community college and then transfer to a four-year school. Community colleges are typically less expensive. Make sure your courses will transfer to the school in which you are interested.

Remember that scholarships may make a more expensive school affordable.

# need additional information? visit the following websites!

Missouri Health Careers www.missourihealthcareers.com

Missouri Hospital Association **www.mhanet.com** 

Missouri Department of Elementary and Secondary Education www.dese.mo.gov

Missouri Department of Higher Education **www.dhe.mo.gov** 

Missouri Economic Research and Information Center www.missourieconomy.org

Missouri Connections www.missouriconnections.org

Missouri Area Health Education Centers www.mahec.org

# missourihealthcareers.com





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