



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

CAREERS IN HEALTH CARE

The medical profession has progressed considerably since the days when barbers performed surgery. _____1._____ are highly trained and educated, and they rely upon many other medical professionals to do tasks that don't require the skill of a medical doctor. Technological advances have greatly increased the need for persons trained in a wide variety of health-related occupations. These paramedical (or allied health) personnel are well trained to do their jobs. Depending upon the function, that training can be received on the job, or it may require as much as two years of training beyond a bachelor's degree.

The most familiar paramedical personnel are _____2._____, who perform both in and out of the hospital. Being a nurse does not require as many years of study as a doctor, but one must be equally dedicated. Caring for sick people demands great patience and a lot of work.

Nurses assist in the operating room and attend to the medical needs of hospitalized patients in accordance with doctors' orders. Some nurses are employed in physicians' offices to do preliminary examinations of patients and other duties that do not require the physicians' personal attention. There are two types of nurses - **registered nurses (RNs)** and **licensed practical nurses (LPNs)**. To become a registered nurse usually requires at least a high school diploma plus two years of college or vocational school nursing courses. There are also college programs in nursing (leading to a bachelor's degree) which take four to five years to complete. Registered nurses have the major responsibility for patient care, acting upon the written direction of the physician. Practical nurses can be certified after one year of post-high-school study, but they earn less money and are given fewer technical responsibilities than registered nurses. Nurses work in all medical settings - hospitals, nursing homes, extended care facilities, outpatient clinics, physicians' offices, and private homes.

Electrocardiograph and electroencephalograph technicians operate diagnostic machines. The electrocardiograph (EKG) machine measures the electrical impulses that occur when the heart beats. The operator attaches electrodes to the chest, arms, and legs of the patient, and the machine makes a paper record (electrocardiogram) of the various responses, which are later read and interpreted by a physician. The electroencephalograph (BEG) records brain waves in a manner similar to the electrocardiograph. The electrodes are placed on the patient's head, and the recording is made while the patient is at rest. Many EKG technicians are trained on the job, while EEG technicians require one or two years of training in a hospital program, vocational school, or college.

_____3._____ operate hemodialysis machines, which take the place of a patient's damaged kidneys. Patients requiring dialysis receive treatments three times a week to relieve their blood of the waste products that they have collected. Dialysis technicians are normally trained on the job. They may work in a hospital, physician's office, or dialysis center.

There are three types of _____4._____. **Diagnostic technicians** take and develop X-rays. They must also be able to read the X-rays to the extent of knowing whether or not the X-ray clearly shows the areas ordered by the physician. **Radiation therapy technicians** provide radiation to

patients in order to destroy tumors or other foreign tissue. **Nuclear medicine technicians** introduce radioactive materials into the patient's bloodstream for diagnosis or treatment of disease or injury. The radioactive substance permits sophisticated X-ray machines to make photographic images of organs that would not be visible using ordinary X-ray techniques. X-ray technicians require a two- to four-year course in radiography after graduation from high school. Most radiation technicians work in hospitals, although some diagnostic technicians may be employed by physicians or chiropractors.

_____5._____ use patient activity in order to help patients recover from physical, mental, or emotional disability. For instance, sewing may be prescribed to help develop fine motor functions that may have been lost because of stroke or trauma. Exercises to develop atrophied or injured muscles are also employed. Occupational therapy requires a high school diploma, two years of college, plus an additional two-year training program. Some colleges offer four-year programs in occupational therapy.

Like occupational therapists, _____6._____ work directly with patients, using exercise, heat, massage, and other physical means to alleviate pain and/or overcome disabilities. A four-year college degree in physical therapy qualifies one for this career.

Both physical and occupational therapists act under the general direction of a physician but prescribe the specific courses of treatment themselves. There are also **occupational and physical therapists' aides** who can work with patients to help them perform the activities prescribed by the therapist.

_____7._____ help people with respiratory ailments (such as asthma, bronchitis, and emphysema) to breathe. They operate various kinds of respirators and oxygen tents and administer the medication prescribed by the physician.

One of the newest of medical careers is that of the **physician assistant**. Physician assistants (commonly called PAs) work under the supervision of a physician and can perform many of the functions of a physician, including certain types of minor surgery.

Emergency medical technicians, sometimes called _____8._____, operate mobile medical facilities, which are equipped to provide emergency medical care to patients away from a hospital and to transport them to a medical facility. Paramedics are trained to deliver cardiopulmonary resuscitation (CPR) to a patient who is not breathing or whose heart has stopped. They also provide intravenous injections and blood transfusions when necessary. Many emergency vehicles are equipped with a telephone line to the emergency room of a hospital so that paramedics can get instructions from a physician as to the treatment to be provided.

There are many careers that do not require as much education or training as the primary paramedical assistants (such as technicians or therapists). **Nurses' aides** assist nurses by performing routine chores. _____9._____ clean, dress, and move patients who are not ambulatory. And there are **EKG and EEG aides** who assist the technicians by preparing patients for administration of the tests. These positions require no more than on-the-job training.

There are also many highly skilled medical personnel who are not primarily employed by hospitals. _____10._____ dispense drugs upon the orders (prescriptions) of physicians. They also advise customers about non-prescription drugs and possible side effects or adverse reactions to drugs. Many pharmacists keep a record of all medications being taken by a customer so that they can alert the customer if the combination of drugs being taken could produce an adverse reaction. **Laboratory technicians** work with microscopes, centrifuges, and other laboratory instruments, examining and analyzing samples of tissues, blood, urine, or other body fluids sent by physicians for diagnostic purposes.

Other types of medical professionals who are not M.D.'s are trained in a particular area of medicine. _____11._____ treat people with foot problems and can perform minor surgery within their area of specialization. _____12._____ examine eyes and prescribe corrective lenses, when

necessary. **Chiropractors** and **naprapaths** treat the skeletal-muscular system by adjusting bones or joints and using heat and massage to relax tightened muscles.

There are literally hundreds of careers in medicine. Some involve direct contact with sick or injured patients. Others involve working in a laboratory doing research or analyzing tissue. One can find a medical career at almost any level of education and training.

RADIOLOGIC TECHNICIANS	PHARMACISTS	
HOSPITAL ORDERLIES		
PHYSICAL THERAPISTS	INHALATION THERAPISTS	
PHYSICIANS	PARAMEDICS	
DIALYSIS TECHNICIANS	PODIATRISTS	OPTOMETRISTS
OCCUPATIONAL THERAPISTS	NURSES	

Feedback:

What is the difference between a paramedical and a medical career?

Which groups of nurses do you know? What are their qualifications? What are their duties?

Which paramedical professions can you name?

What is the difference between an X-ray and an EEG?

Task:

Compare paramedical professions in your country to those in the USA. What are the differences?

Discussion:

What do you think about the work of a nurse in a hospital? Is it too demanding? If so, in which way and what would you suggest to improve the situation?

Adapted from:

<http://www.health-care-careers.org/healthcare-careers.html>