



EXPLORE CAREER PATHWAYS AT MARQUETTE GENERAL HOSPITAL

Live, Work & Stay in the Upper Peninsula.

“Contrary to popular myth, health care—
not automotive, not education, not agriculture—
is Michigan’s largest employer.”

— *Orrin E. Bailey*
CEO, Michigan Works! The Job Force Board



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THE JOB FORCESM BOARD

Dear Students:

Michigan Works! The Job Force Board developed this book to inform students of the career options available at Marquette General Health System. The vision of this board is to support education and career opportunities for youth in the region.

The vision of this Board is to support education and career opportunities for youth in the central Upper Peninsula. Supporting Career Preparation activities, the Board wanted to develop a tool that your guidance counselors, parents and teachers could use to increase your awareness of occupations within the healthcare industry. It is designed for you to research not only the occupation, but educational institutions as well.

Because of the need to meet this industry's worker shortages, the Job Force Board formed an alliance with healthcare providers across the Upper Peninsula. This group of individuals, called the Healthcare Roundtable, is working together to develop resources to meet the demands of the industry. In partnership with the region's Youth Committee and Educational Advisory Group, the Healthcare Roundtable is focused on educating youth and the community about employment opportunities in healthcare. We want youth to remain in the Upper Peninsula to live and to work.

Healthcare continues to be the fastest growing industry in this region. Because of this, the region does not have enough workers to meet the demand. The Job Force Board's Healthcare Roundtable is focusing on this industry shortage. Healthcare representatives feel it is important that their future workforce know what career opportunities exist within the healthcare industry.

Because students are familiar with the Career Pathways, the book focuses on additional occupations that are not included in the Health Sciences Pathway. The "Explore Career Pathways at Marquette General Health System" is designed to give youth an introduction to the Healthcare Industry by describing the occupation and identifying its pathway.

Marquette General Health System was instrumental in the development of this project. Staff reviewed the job descriptions and wrote personal comments as to why they chose their individual careers.

On behalf of the Job Force Board, I invite you to imagine the possibilities of living and working in the Upper Peninsula while exploring opportunities in healthcare.

Sincerely,

A handwritten signature in black ink that reads "Willard Carne". The signature is written in a cursive style and is followed by a long horizontal line that extends to the right.

Willard Carne
President



Dear Students:

Thank you for taking the time to investigate health care as a potential career opportunity. As you will see when reviewing the information provided in this booklet, there are many attractive jobs within the health care field. The key is finding the one that is right for you!

Why is healthcare a good fit for you? If you like working with people, data, or technology, a career in healthcare might be just what you're looking for. The health field is diverse- jobs range from positions that require on-the job training and/or specialized training to those that require a high school, associate's, bachelor's, master's, or doctorate degree. The diversity of positions is also reflected in the variety of skills and knowledge required for the positions. Some positions require strong communication or organizational skills, others require strong math skills, mechanical ability or a substantial knowledge base in science. You can match your skills and interests, whatever they are, to a job in healthcare.

Why Marquette General Health System? Not only does MGHS provide healthcare including home health and clinic services throughout the U.P., Marquette General Hospital is a state-of-the-art regional medical center that is proud to offer premier services with the most advanced technologies available. It offers a wage and benefit package to employees that is highly competitive with other employers. With comprehensive, quality care, we rank among the best in the Midwest. The Upper Peninsula is a four seasons playground where people who enjoy boating, hunting, fishing, cultural activities, golfing, and numerous other activities thrive. Marquette has been designated as one of the top five communities in which to live. Marquette General is a great place to be!

On behalf of Marquette General, I would like to extend our best wishes to you as you embark upon this exciting adventure of determining your career path at this time. I hope you find this booklet helpful as you make your decisions. If you find a career fit for yourself in healthcare we look forward to seeing *you* in *our* future. Good Luck!

Sincerely,

William R. Nemacheck
Chief Executive Officer

Bio-Medical Equipment Technician

Job Description

A Bio-Medical Equipment Technician's duties include installing, calibrating, inspecting and repairing bio-medical and related technical equipment to insure safe clinical application of the equipment occurs. Bio-Medical Equipment Technicians read schematics and interpret circuit descriptions of bio-medical equipment; repair diagnostic and therapeutic patient care equipment; design and fabricate electronic test equipment such as battery conditioners; perform scheduled preventive maintenance and safety inspections; keep records of all inspections and maintenance and investigates and evaluates new hospital equipment to insure the equipment meets all requirements for safety and operation.

Career Pathway

Engineering/Manufacturing and Industrial Technology: with courses in Math, Mechanics and the Sciences.

Education Required:

High school and advanced form of training and
Associates Degree in Bio-Medical Equipment Technology or
Four Years of Bio-Medical Equipment Experience or
Three years of Bio-Medical experience and an Associates Degree in Electronics Technology

Where To Go for Necessary Education

DeVry Schools	-		www.devryschools.org
Milwaukee Area Technical College	-	Milwaukee, WI	www.matc.edu
Schoolcraft Community College	-	Livonia, MI	www.schoolcraft.edu
Western Wisconsin Technical College	-	LaCrosse, WI	www.wwtc.edu

Future Outlook

Job growth among medical equipment repairers should be about as fast as the average for all occupations over the projected period. The rapidly expanding healthcare industry and elderly population should spark demand for increasingly sophisticated medical equipment and, in turn, create good employment opportunities in this occupation.

A Personal Testimony...

“The further technology advances, the greater the need for Bio-Medical Technicians. In the past, minimal knowledge of electronics was sufficient, but with the integration of computers into medical equipment the demand for a more versatile technician is rising. Bio-Medical Technicians have the rare opportunity to work on a wide variety of equipment, while being part of a team and taking pride in the fact that the equipment we work on and maintain saves and prolongs lives. If you like electronics, working on state of the art equipment, and people, Bio- Medical Technician just might be the perfect job for you.”

- Randy Lundholm, BioMedical Tech

Cardiac Imaging Tech

Job Description

A Cardiac Imaging Tech assists the cardiologists in performing diagnostic and interventional cardiac imaging department procedures on patients of all age groups. The tech also administers medications, both routine and emergency, as needed to each patient as request and under supervision of the attending physician. Other duties include coding, distributing and maintaining all information which his obtained during each examination and procedure promptly and accurately in accordance with departmental and hospital policies. A Cardiac Imaging Tech performs pacemaker reprogramming and troubleshooting; performs all duties as necessary to initiate and maintain intra aortic balloon/assist life support procedures. A Cardiac Imaging Tech utilizes customer service skills and must comply with all federal, state and licensing requirements design and fabricate electronic test equipment such as battery conditioners; perform scheduled preventive maintenance and safety inspections; keep records of all inspections and maintenance and investigates and evaluates new hospital equipment to insure the equipment meets all requirements for safety and operation.

Career Pathway

Health Sciences: with courses in Biology, Chemistry, Algebra, Psychology, Nutrition, Computer Skills and English.

Education Required:

One Year Nursing Education with 1-2 years of experience.

Two Year Associates Degree

Three Year Diploma

Four Year Bachelors Degree

BCLS Certified, ACLS preferred with preferred experience in an intensive care or cardiac care area with basic knowledge of arrhythmias.

Where To Go for Necessary Education

www.mgh.org

www.nasci.org

One-the-Job-Training

Future Outlook

Employment of cardiovascular technologists and technicians is expected to grow faster than the average for all occupations through the year 2012. Growth will occur as the population ages, because older people have a higher incidence of heart problems. Some job openings for cardiovascular technologists and technicians will arise from replacement needs, as individuals transfer to other jobs or leave the labor force. However, job growth and replacement needs will produce relatively few job openings because the occupation is small.

A Personal Testimony...

“I chose to become a cath lab [Cardiac Imaging] tech because I felt that I needed more of a challenge in my nursing career. Working in the cath lab [Cardiac Imaging] has given me the opportunity to enhance my nursing skills and build confidence in my abilities to push my own limits. It also allowed me to continue to work closely with patients.”

- Theresa Lancour, CCLT

Certified Athletic Trainer

Job Description

Certified Athletic Trainers assess sports injuries, providing appropriate treatment and educating athletes on injury-prevention programs as well as healthy lifestyles. Trainers help with rehabilitation after an injury. Kinesiology is closely related focusing on human movement and physical activity.

Career Pathway

Health Sciences: with classes in Biology, Chemistry and Physics. Some coaching or experience as a team captain is beneficial.

Education Required

A Bachelors Degree and additional certifications

Athletic trainers are certified by the National Athletic Trainers' Association

Where To Go For Necessary Education

Central Michigan University	-	Mt. Pleasant, MI	www.cmich.edu
Eastern Michigan University	-	Ypsilanti, MI	www.emich.edu
Northern Michigan University	-	Marquette, MI	www.nmu.edu
Grand Valley State University	-	Allendale, MI	www.gvsu.edu
Hope College	-	Holland, MI	www.hope.edu
Lake Superior State University	-	Sault Ste. Marie, MI	www.lssu.edu
University of Wisconsin-Madison	-	Madison, WI	www.son.wisc.edu
Western Michigan University	-	Kalamazoo, MI	www.wmich.edu

www.Nata.org

Future Outlook

There is a high demand for this job. Athletic Trainers work closely with schools, hospitals and fitness centers. It is likely that commercial establishments are inclined to outsource their allied health care needs vs. hiring a full-time ATC. It is estimated there are 30,000 businesses with more than 500 employees that could potentially support a full-time ATC.

A Personal Testimonial...

“My choice of Athletic Training as a profession was made in high school. I always wanted to have a career in a health-related field and I always was involved with sports. In my senior year of high school, my principal introduced me to a career in Athletic Training. Working with an injured athlete through the recovery process and seeing them able to return to competition is my favorite part of my job. Athletic Trainers are health-care professionals trained in preventing, recognizing, managing and rehabilitating any injuries that may result due to physical activities. With this said, there should always be a market for Athletic Trainers in the professional sport, collegiate sport, high school sport, clinical, work hardening, fitness centers or any areas with physical activities.”

- Bill Elmblad, ATC

Certified Registered Nurse Anesthetist

Job Description

The Certified Registered Nurse Anesthetists (CRNA) are anesthesia specialists who administer approximately 65 percent of the 26 million anesthetics given to patients each year in the United States. CRNAs are the sole anesthesia providers in nearly half of all hospitals and in more than two-thirds of the rural hospitals in the United States, affording these medical facilities obstetrical, surgical and trauma stabilization capabilities, which cannot be achieved without the CRNA anesthesia services. Additionally, they participate as members of the code blue team, a team of health care professionals who respond to cardiac emergencies.

Career Pathway

Health Sciences: with courses in Health, Math, Biology, Chemistry and Social Sciences.

Education Required

A Bachelor of Science in Nursing (BSN) or other appropriate baccalaureate degree. A current license as a registered nurse. At least one year of experience as a registered nurse in an acute care setting. Graduation with a master's degree from an accredited nurse anesthesia program. As of February 1, 2004, there are 88 nurse anesthesia programs with more than 1,000 affiliated clinical sites in the United States. They range from 24-36 months, depending upon university requirements. All programs include training in university-based or large community hospitals. Pass a national certification examination following graduation.

Where To Go For Necessary Education

American Association of Nurse Anesthetists		www.aana.com
Marquette General Health System	- Marquette, MI	www.mgh.org
Oakland University	- Rochester, MI	www.oakland.edu
University of Michigan—Flint	- Flint, MI	www.flint.umich.edu
University of Minnesota	- Minneapolis, MN	www.nursing.umn.edu
Wayne State University	- Detroit, MI	www.wayne.edu

Salary / Wage Range

As advanced practice nurses, CRNAs practice with a high degree of autonomy and professional respect. They carry a heavy load of responsibility and are compensated accordingly. Reflecting the level of responsibility, CRNAs are on of the best paid nursing specialties. Average annual salary is approximately \$123,000.

Future Outlook

In 1990, the U.S. Department of Health and Human Services published findings indicating a national shortage of almost 54,000 nurse anesthetists. The study concluded that nurse anesthesia educational programs would need to produce between 1,500 and 1,800 graduates annually to meet societal nurse anesthesia demands by the year 2010. Only about 1,000 nurse anesthesia students graduate annually.

A Personal Testimonial...

“I have been a registered nurse (RN) for 25 years and a Certified Nurse Anesthetist (CRNA) for ten years. I pursued the anesthesia track because the autonomy it offers and the financial security it provides. As an anesthetist, I combine anatomy, physiology and pharmacology with compassion. I believe there will always be a need for CRNAs and that the profession is secure.”

- Reata Johnson, RN, CRNA

CT Technologist

Job Description

A CT Technologist instructs patients regarding content and procedures involved in the radiology exam; precisely positions patients in accordance with CT scan protocol; enters correct patient information into computer to properly identify images; utilizes special procedure techniques and protocol for implementing rapid image acquisition during Angiographic procedures; maintains sterile fields while assisting Radiologist/Physician during invasive testing; maintains a working knowledge of all CT, specials and related procedures by keeping current of professional literature, and attending appropriate workshops; utilizes computer patient care system.

Career Pathway

Health Sciences: with courses in Biology, Chemistry, Algebra, English, Business and Home Economics and Computer Skills and Health Occupations.

Education Required

Associates Degree in Radiologic Technologist at an approved ARRT school
ARRT (American Registry of Radiologic Technologists) Certification

Where To Go for Necessary Education

www.arrt.org

Bellin Health Systems	-	Green Bay, WI	www.bellin.org
Ferris State University	-	Bad Axe, MI	www.ferris.edu
Grand Rapids Community College	-	Grand Rapids, MI	www.grcc.cc.mi.us
Washtenaw Community College	-	Ann Arbor, MI	www.washtenaw.cc.mi.us
Kellogg Community College	-	Battle Creek, MI	www.kellogg.edu
Lansing Community College	-	Lansing, MI	www.lcc.edu
Madison Area Technical College	-	Madison, WI	www.matcmadison.edu
Marquette General Hospital	-	Marquette, MI	www.mgh.org
Mid Michigan Community College	-	Harrison, MI	www.midmich.edu

Future Outlook

Employment of CT technologists is expected to grow faster than the average for all occupations through the year 2010. Growth will arise from an increase in the number of middle-aged and older persons who are the primary users of diagnostic procedures.

A Personal Testimony...

“My fondness for working with and helping people as well as a profound interest in the anatomy and physiology of the body is what brought me to the Radiology profession. In the CT Department, I have the privilege of spending time with patients of all ages while performing a variety of CT examinations on all parts of the body. Furthermore, working with various healthcare personnel and physicians provides me with the opportunity to improve my knowledge of the radiology field, normal and abnormal anatomy and numerous pathologies and their origins. With technology advancing so rapidly, the future of this profession can only continue to get more valuable to the healthcare business and more fascinating to the technologists and physicians in this occupation.”

- Tara Rondeau, RTR

Dietician

Job Description

Dieticians learn the fundamental principles of food and nutrition and help educate people on a healthy diet and way to prevent disease. They plan and supervise the preparation and serving of meals in hospitals. Dieticians help to decrease malnutrition, promote health lifestyles and control diseases such as heart disease, high blood pressure and diabetes. They are often in a managerial role that has them training and supervising the food service personnel who prepare and serve the meals. They apply the principles of Food Service, Nutrition, Physiology and Biochemistry to make recommendations for the nutritional management and support of patients.

Career Pathway

Health Sciences: with courses in Biology, Chemistry, Algebra, English, Business and Home Economics and Computer Skills; Health Occupations.

Education Required

Bachelor's Degree from an American Dietetic Association (ADA)
Dietetic Internship
ADA Exam
There are some advanced degree programs

Where To Go for Necessary Education

www.eatright.org

Central Michigan University	-	Mt. Pleasant, MI	www.cmich.edu
Eastern Michigan University	-	Ypsilanti, MI	www.emich.edu
University of Michigan	-	Ann Arbor, MI	www.umich.edu
University of Wisconsin	-	Green Bay, WI	www.uwgb.edu
Wayne State University	-	Detroit, MI	www.cphs.wayne.edu

Future Outlook

Employment opportunities for dieticians are expected to grow about as fast as the average, which is an increase of 10-20% over the next eight years. This is largely due to the emphasis that the medical community is placing on disease prevention through improved dietary habits. The rowing aging population will also increase demand for dieticians because they will need balanced meals and nutritional counseling in nursing homes and assisted living centers.

A Personal Testimony....

"I have been a registered dietician for almost 17 years. During that time, I have gained experience in a hospital clinical setting, a home health setting, and now in an outpatient hospital setting. My job offers me variety and challenges me to continue to grow and develop my skills.

There is no "typical" day for me. One day I might be in the office instructing outpatients on their diets. Another day I might be traveling to another clinic to counsel individuals while another traveling from home to home. The type of nutritional instruction I provide ranges from diabetes to with management to hart disease to digestive disease to eating disorders, etc. There is not end to the possibilities my job offers me.

Much of my job involves educating people about what they can do to improve their health and well-being through nutrition. I receive great delight in watching someone learn something new while being a part of the educational process. There is also an element of listening and being supportive/sensitive to the needs of others is vital to my job. I have always believed myself to have a compassionate ear, when needed.

Over the next five to ten years, I believe there will be an increased demand for registered dietitians. Due to the required diverse curriculum, dietitians are qualified to work in a variety of settings where registered dietitians are needed. These settings can range from a hospital (either clinical or administrative), to health clubs, to clinics to restaurants, to mental health agencies, to professional sports teams and other athletes, to drug companies, to research companies, etc. Registered dietitians are currently required to complete 75 hours of continuing education every five years. Currently there are areas where a registered nurse can specialize: pediatrics and nutrition support. There are also certifications in pediatric, adolescent and adult weight management. I believe that research will continue to reveal more of the vital role nutrition plays in health and, as a result, more specialty areas will surface. When the increased availability of specialization and certification, and the almost certain insurance reimbursement, the demand for qualified individuals to provide accurate nutritional services will increase, and those qualified individuals are registered dietitians.”

- Carol Holman, Registered Dietitian

Dietetic Technician

Job Description

Dietetic Technicians work with and under the supervision of a registered dietitian. They assist in planning and implementing nutritional programs and services. They may specialize in areas such as food service management or nutritional care. Dietetic Technicians are responsible for counseling and educating patients on proper nutrition that will lead to a healthy and productive lifestyle.

Career Pathway

Health Sciences: with courses in Biology, Chemistry, Algebra, English, Business and Home Economics and Computer Skills.

Education Required

Bachelors Degree (Junior status seeking Dietetic Program)

Complete a dietetic technician program accredited/approved by the [Commission on Accreditation for Dietetics Education \(CADE\)](#) of the American Dietetic Association (ADA), including 450 hours of supervised practice experience in various community programs, health care, and food-service facilities.

Where To Go for Necessary Education

www.eatright.org

Madison Area Technical College	-	Madison, WI	www.matcmadison.edu
Milwaukee Area Technical College	-	Milwaukee, WI	www.matc.edu

Future Outlook

Employment opportunities for dietitians are expected to grow about as fast as the average, which is an increase of 10-20% over the next eight years. This is largely due to the emphasis that the medical community is placing on disease prevention through improved dietary habits. The growing aging population will also increase demand for dietitians because they will need balanced meals and nutritional counseling in nursing homes and assisted living centers.

A Personal Testimony...

“If you have an interest in science and nutrition, then a career as a dietetic technician may be for you to become a dietetic technician, you must have a high school diploma or equivalent. Students must complete an accredited dietetic technician program. These programs are usually two years in length combining classroom and supervised clinical experience.

The dietetic technical career is very rewarding because you assist in shaping the public’s food choices and provide nutritional assessment and counseling to those with illness and injury. Technicians often screen patients to identify nutrition problems and provide the patient with nutritional education about their diet.

Dietetic technicians work with registered dietitians in a number of different healthcare settings, such as hospital, public health nutrition programs and long-term care facilities.”

-Kimberly Tapio, Dietetics

Financial Advisor/ Pre-Billing Coordinator

Job Description

Financial Advisors perform front-end cycle analysis to identify and implement processes, which assure accurate billing. They interview patients and provide explanations of financial responsibility during pre-admission, admission and at discharge. They review pre-billing requests that require pre-authorization of services. They contact patients or physicians as appropriate to obtain information omitted from various applications. They need to remain current and knowledgeable of all third party eligibility standards, billing criteria and processing requirements.

Career Pathway

Business, Management, Marketing and Technology: with courses in Health, Biology and Computer courses.

Education Required

An Associates Degree
Equivalent education in a related field
Medical Terminology Course

Where To Go For Necessary Education

Alpena Community College	-	Alpena, MI	www.alpena.cc.mi.us
Gogebic Community College	-	Ironwood, MI	www.gogebic.cc.mi.us

Future Outlook

The demand for this job is growing rapidly as healthcare organizations across the country recognize the need to coordinate benefits prior to providing the service. The pre-verification of insurance benefits and the fast pace at which the government is implementing mandated changes in reimbursement methodologies will continue to promote the need for more financial advisors and pre-billing coordinators in the healthcare industry.

A Personal Testimonial...

“I enjoy my profession as Supervisor in Central Billing, as I look at this as a daily challenge. I enjoy the contact with other hospital staff, and being the billing department, the contact with the employees and the third party payers. Each day to me is a learning process, due to the aspects of the governmental policies, managed care providers, and each payer we deal with. We are awarded the ability to continue training in what we do, and encouraged to seek information. I see this as work that will carry into the future, as there will always be a need for good billing people.”

- Dianne Kangas, Supervisor Central Billing

Licensed Practical Nurse

Job Description

Most licensed practical nurses (LPN) provide bedside care. They take vital signs such as temperature, blood pressure, pulse and respiration. They also treat bedsores, prepare and give injections, apply dressings and insert catheters. LPNs observe patients and report adverse reactions to medications or treatments. They collect samples from patients for testing; perform routine lab tests, feed patients and record food and liquid intake and output. They help patients with bathing, dressing and person hygiene, keep patients comfortable and care for their emotional needs. In states where the law allows, they may administer prescribed medicines or start intravenous fluids. Some experienced LPNs supervise nursing assistants and aides.

Career Pathway

Health Sciences: with courses in Biology, Chemistry, Algebra, Psychology, Nutrition, Computer Skills and English.

Education Required

A High School Diploma

State approved practical nursing program

All states require LPNs to pass a licensing examination after completing an approved practical nursing program. Classroom study and supervised clinical practice includes patient care related subjects such as anatomy, physiology, medical surgical nursing, pediatrics, obstetrics, psychiatric nursing, and administration of drugs, nutrition and first aid.

Where To Go For Necessary Education

Bay College	-	Escanaba, MI	http://www.baydenoc.cc.mi.us/
Gogebic Community College	-	Ironwood, MI	www.gogebic.edu
Lake Superior State University www.mihott.com	-	Sault Ste. Marie, MI	www.lssu.edu
Milwaukee Area Technical College	-	Milwaukee, WI	www.matc.edu
Northern Michigan University	-	Marquette, MI	www.nmu.edu

Future Outlook

Employment of LPNs is expected to grow as fast as the average for all occupations through 2008 in response to the long-term care needs of a rapidly growing population of very old people and to the general growth of healthcare. However, LPNs seeking positions in hospitals may face competition as the number of hospital jobs for LPNs declines. Hospital jobs will decline because the number of inpatients, with whom most LPNs work, is not expected to increase as much. As in most other occupations, replacement needs will be a major source of job openings. Employment of LPNs in nursing homes, home health care and physician offices is expected to grow faster than average. Nursing homes will offer the most new jobs for LPNs as the number of aged and disabled persons in need of long-term care rises.

A Personal Testimonial...

“I chose nursing as a career after my grandmother was diagnosed with cancer. I experienced first hand the impact that nursing played in the support system of our family. I enjoy every aspect of the Licensed Practical Nurse role from promoting the health and well being to caring for and providing comfort and support in a time of need I enjoy the technical duties of dispensing medications and performing procedures as well as providing patients and family members with the education they need to continue with the best care possible for them at home. The future looks positive for the LPN role. It’s not only economical, but medicine is constantly changing and more responsibilities are being delegated to the LPN.”

- Shannon Kauppila, LPN

Maintenance Mechanic/Boiler Specialist

Job Description

The Maintenance Mechanic Attendant works under the direct supervision of the Plant Operations Manager.

The Attendant inspects gauges, valves, air compressors, pumps, heat exchangers and other associated equipment; collects water samples from boilers, water softeners and condensing towers; adjusts and repairs steam usage equipment and air conditioning equipment throughout the facility; performs welding repairs on designated equipment; assists with various custodial duties; operates and services mechanical refrigeration units. Attendants record information on a routine basis relating to equipment and utility operation and submit written reports of problems, changes, and required repairs and malfunctions to the following shift Attendant(s) and to the Plant Operations Manager.

Career Pathway

Engineering/Manufacturing and Industrial Technology: with courses in English, Welding, Math and Computers.

Education Required

High School diploma or equivalent

Pass the Mechanic Education and Certification for Healthcare exam (MECH)

Knowledge of arc and oxyacetylene welding and burning

One year previous experience as a Boiler Room/Plant Attendant; or

Completion of hospital training program

Where To Go for Necessary Education

Bay College	-	Escanaba, MI	www.baydenoc.cc.mi.us
Michigan Tech University	-	Houghton, MI	www.mtu.edu
Northern Michigan University Jacobetti Cntr	-	Marquette, MI	www.nmu.edu
Northeast Wisconsin Technical Institute	-	Marinette, WI	www.nwtc.edu

Future Outlook

Growth may be limited by the trend toward repairing and retrofitting, rather than replacing, existing boilers; the use of small boilers, which require less onsite assembly; and automation of production technologies. However, demand for more boilermakers may stem from environmental upgrades required by Federal regulations such as the Clean Air Act.

A Personal Testimony....

“Boiler maintenance is an essential part of supporting the physical plant operations of any large facility. Boiler/heating fuel costs take up a large part of many plant operating budgets. With advances in building efficiency technology it is important for the boiler specialist to stay well informed on ways to keep costs down, which results in thousand of dollars in annual savings. I chose the field for the challenge and the hands-on work; also the interaction between supervisors and engineers in the planning of operations to better serve our facility. The future of the job is secure and positions are sometimes hard to fill due to limited opportunities to gain experience. Experience either comes from service in the Navy or an employer willing to offer on the job training. Another source would be the boilermakers union; however these positions are more oriented to the manufacture, installation and start-up of new boilers.”

- Brett Young, Clinical Engineering

Medical Lab Technologist, ASCP

Job Description

Medical Technologists must be able to work and make sound judgments with minimal direct supervision; perform and document a variety of laboratory testing reliably and according to procedure; evaluate complex laboratory systems utilizing quality control techniques; communicate effectively and prioritize many tasks appropriately. In some hospitals, Medical Technologists do the same work as Medical Lab Technicians. Some labs reserve the more complex testing for the Medical Technologist.

Career Pathway

Health Sciences: with courses in Algebra I, Algebra II and Geometry, Biology and Chemistry, one Physical Science and one Lab.

Education Required

Bachelor of Science Degree in Medical Technology

One year of clinical experience in addition to the education may be required.

Additionally the Medical Technologist needs American Society of Clinical Pathologists (ASCP) certification, or needs to be eligible for such certifications that involve additional study and successful completion of a certification program.

Where To Go For Necessary Education

Ferris State University - Big Rapids, MI www.ferris.edu

Medical Technologist programs are available at most state universities.

www.mihott.com

Northern Michigan University - Marquette, MI www.nmu.edu

St. Norbert College - Green Bay, WI www.snc.edu

Future Outlook

The Laboratory Technologist occupation is similar to many other medical professions in that higher numbers of qualified individuals will be required as the baby boom generation ages. There will be an increasing demand for more and more tests on a regular basis and Medical Laboratories will require significantly more technologists than are currently graduating from accredited programs.

A Personal Testimonial...

“I chose to go into Medical Technology because it allowed me to combine my interests in medicine with an occupation that was both in demand and had a favorable work environment. The educational background was broad enough to provide the foundation to continue on into other careers such as medical and equipment sales, research, industry development and graduate school; but, overall I found laboratory medicine to be my best fit. The important features of working in Medical Technology are flexible scheduling, comfortable working conditions, reasonable wages and benefits, and, historically, strong job security. These factors plus the ability to work independently while still being part of a larger healthcare team has convinced me that this is the best choice for me.”

- Cory Blight

Medical Transcriptionist

Job Description

A Medical Transcriptionist listens to the dictation of all members of the medical staff and allied health professional staff and then types out what is dictated into a report format that is included in each patient's medical record. Maximum accuracy is required; corrections without changing the meaning of the dictation are also necessary. Maintaining patient confidentiality is absolutely critical. Effective communication with physicians and co-workers is also critical.

Career Pathway

Business, Management, Marketing and Technology: with courses in English, Typing Computers, Health and Sciences.

Education Required

High School Diploma or equivalent

Medical Transcription training

Certification as a Medical Transcriptionist

Also classes in Medical Terminology, Anatomy & Physiology and Computer Classes

Where To Go For Necessary Education

Fox Valley Technical College	-	Appleton, WI	www.fvtc.edu
Muskegon Community College	-	Muskegon, MI	www.muskegon.cc.mi.us
Macomb Community College	-	Warren, MI	www.macomb.edu
Madison Area Technical College	-	Madison, WI	www.matcmadison.edu
North Central Michigan College	-	Petoskey MI	www.ncmc.cc.mi.us
Northeast Wisconsin Technical College	-	Green Bay, WI	www.nwtc.edu
Oakland Community College	-	Auburn Hills, MI	www.oakland.cc.edu

Future Outlook

This field is becoming highly competitive and computerized. There are many at-home agencies and companies that are providing services across the country. Opportunities are limited only by the technical abilities of the individuals.

A Personal Testimonial...

"I chose this field originally because I wanted a skill that I could learn quickly, and then earn some money to go on further in college to obtain my goal of becoming a teacher. Along the way, I found out how much I enjoyed transcribing, especially in a hospital setting, as there are so many different dictators and variety of reports to type. I also chose this profession because I can get a job anywhere as a transcriptionist, as it is a specialize field and is hard to fill, in case I have to move anywhere because of my husband's job. With my current job, I enjoy the flexibility I am able to have. I take great pride in my work and knowing that I am part of a team in this hospital."

- Christie Pruett, MGH Transcriptionist

Neurophysiology (Electroneurodiagnostic Technician)

Job Description

The Electroneurodiagnostic (END) Technician performs a variety of tests on patients, using sophisticated medical technology, which help to discover a variety of brain disorders. Some of the tests performed include electroencephalograms, epilepsy monitoring, nerve conduction and evoked potentials. The information received from these tests assist physicians in the determination of an accurate diagnosis, which further dictates the formulation of an effective treatment program. Neurology specializes in diagnosis and treatment of all types of disease or impaired function of the brain, spinal cord, peripheral nerves, muscles and autonomic nervous systems.

Career Pathway

Health Sciences: with classes in Biology, Human Anatomy, Math and Grammar.

Education Required

A High School Diploma with a strong background in Sciences and Math as well as good communication skills.

Post high school certificate programs are also available.

Where To Go For Necessary Education

www.aset.org

Carnegie Institute

- Troy, MI

<http://carnegie-institute.com>

St. John's Hospital

- Chicago, IL

www.stjohns.org

Western Wisconsin Technical College

- Lacrosse, WI

www.wwtc.edu

Future Outlook

Employment opportunities are abundant. Particularly strong growth areas are polysomnography and the specialty areas of long term monitoring for epilepsy and intraoperative monitoring. There is a continuous need for well-educated electroneurodiagnostic technologists, and the demand grows as new labs open and existing labs expand.

A Personal Testimonial...

“Right after high-school, I was looking to get into a field that was both interesting and challenging. Neurophysiology Tech or EEG Tech as it was then called fit the bill. The training programs are most all Associate Degree programs and have expanded to include all areas of neuro monitoring: brain waves, brain and nerve responses and spinal cord monitoring. I spend time in the Operating Room monitoring spinal and brain surgeries, in the Neonatal and adult intensive care units, and I also work with outpatients. Technologists help diagnose disorders of the central nervous system. As a technologist, I work with patients, physicians and other healthcare workers as part of a team.”

- Jeanne Keiler, BS, R, EEG/EPT, RPSGT, CNIM Director of Neurophysiology

Patient Representative/ Physician Biller

Job Description

The Patient Representative/ Physician Biller processes assigned accounts, identifies and resolves complex billing and collection problems, and tracks progress of assigned accounts until they are ultimately collected within established collections guidelines. In order to accomplish these tasks, the Patient Representative/Physician Biller does the following: prepares and submits claims to primary, secondary, and tertiary insurance companies and follows-up to collect the submitted claims; establishes payment arrangements with patients; collects delinquent accounts; remains current on all new policies and procedures that affect medical billing; works collaboratively with other billers; efficiently uses all available computer technology and programs; and takes initiative and uses resourcefulness in problem solving.

Career Pathway

Business, Management, Marketing and Technology: with course is Algebra or a higher-level Math course, Biology, English and Computer Skills.

Education Required

A High School Diploma with billing and collections experience

A two-year medical office/billing Associates Degree

Where To Go For Necessary Education

Bay College	-	Escanaba, MI	www.baydenoc.cc.mi.us
Gogebic Community College	-	Ironwood, MI	www.gogebic.cc.mi.us
Northwestern Community College	-	Traverse City, MI	www.nwc.edu

Future Outlook

There will continue to be a high demand for qualified candidates with knowledge of the medical business environment.

A Personal Testimonial...

“Working as a Clinic Patient Account Representative was a career choice I was unaware of at MGH, however, working in the field of insurance and reimbursement has allowed me to help our patients. Because I do work with Behavioral Health and there are so many “exceptions” of how and if we get reimbursed, I find myself taking extra time to help our patients get their claims paid and their accounts cleared up. There is great satisfaction when a patient calls to thank me for helping them to get their claims paid because many of our patients seek our service because of stress due to financial problems.”

- Lisa Taylor, Patient Account Representative, Central Billing Office

Phlebotomist/Lab Assistant

Job Description

The Phlebotomist draws blood samples from the patients to be used for a variety of tests ordered by the patients' physicians. Phlebotomists must be able to provide direct patient care with concern, compassion, professionalism and attention to detail. They must be able to practice infection control, understand sample requirements, prioritize appropriately and communicate effectively.

Career Pathway

Health Sciences: with courses in Algebra, Biology, Geometry, Chemistry, Computer Skills, Physics, Health Occupations, English and Physical Education.

Education Required

A High School Diploma with a strong background in Sciences and Math as well as good communication skills.

One year of clinical experience in addition to the education may be required.

Additionally the Phlebotomist needs American Society of Clinical Pathologists (ASCP) or American Society of Phlebotomy Technicians (ASPT) certification, or a Medical Assistant exam.

Where To Go For Necessary Education

www.ascp.org

Bay College

- Escanaba, MI

www.baydenoc.cc.mi.us

Fox Valley Technical College

- Appleton, WI

www.fvtc.edu

Northern Michigan University

- Marquette, MI

www.nmu.edu

Future Outlook

As the baby boom generation ages, there will be more patients who need medical tests and the need for phlebotomists will continue to grow.

A Personal Testimonial...

"I've been a lab assistant for twelve years. I enjoy the work, my hours and the new challenges every morning on meeting and getting blood from the new patients. Everyday is different, not boring. The time flies by."

-Marsha Rivard, Lab Assistant

Physical Therapist Assistant

Job Description

Physical Therapist Assistants work under the supervision of a physical therapist. Their duties include assisting the physical therapist in implementing treatment programs according to the plan of care, training patients in exercises and activities of daily living, conducting treatments, using special equipment, administering modalities and other treatment procedures, and reporting to the physical therapist on the patient's response.

Career Pathway

Health Sciences: with courses in Biology, Chemistry, Physics, Health, Art and Social Sciences.

Education Required

An Associates Degree

Where To Go For Necessary Education

Baker College	-	Flint, MI	www.baker.edu
Delta College	-	Bay City, MI	www.delta.edu
Finlandia University	-	Hancock, MI	www.finlandia.edu
Henry Ford Community College	-	Dearborn, MI	www.hfcc.edu
Milwaukee Area Technical College	-	Milwaukee, WI	www.matc.edu
Mott Community College	-	Fenton, MI	www.mcc.edu
Northeast Wisconsin Technical College	-	Green Bay, WI	www.nwtc.edu
Western Wisconsin Technical College	-	LaCrosse, WI	www.wwtc.edu

Specific colleges and universities offering a program are always evolving. See www.APTA.org web site for locations of current programs.

Future Outlook

Employment opportunities are expected to be good for Physicians Assistants (PA), particularly in areas or settings that have difficulty attracting physicians, such as rural and inner city clinics. Employment of PA is expected to grow much faster than the average for all occupations through the year 2010 due to anticipated expansion of the health services industry and an emphasis on cost containment.

A Personal Testimonial...

"I became interested in physical therapy after my grandfather had a stroke. After helping him through rehab, I realized that this was a career I would enjoy. What I enjoy most about this job is working with people. I work with clients from infants to elderly in the acute care setting. It's always a great feeling when you are working with a patient who can't get out of bed, and by the time they go home, they are walking. The future of this job is good. Physical therapy is a growing field with new opportunities every day."

- Sabrina Elledge, PTA

Physical Therapist

Job Description

Physical Therapists evaluate and treat people with disease or health problems that have resulted in physical limitations. The Physical Therapist works with patients of all ages and with physicians from many different specialties. They teach patients proper exercises and use a variety of equipment and activities to help patients strengthen muscles and improve mobility, restore function and to relieve pain.

Career Pathway

Health Sciences: with courses in Psychology, Biology, Physics, Chemistry, Statistics, English, Professional Writing, and Humanities.

Education Required

High School Diploma or Equivalent

Where a very few Bachelors degree programs remaining. Most physical therapy programs require a Masters Degree and/or doctoral level education.

Where To Go For Necessary Education

Central Michigan University	-	Mt. Pleasant, MI	www.cmich.edu
Grand Valley State University	-	Allentown, MI	www.gvsu.edu
Marquette University	-	Milwaukee, WI	www.mu.edu
Oakland University	-	Rochester, MI	www.oakland.edu
University of Michigan-Flint	-	Flint, MI	www.flint.umich.edu
University of Wisconsin-LaCrosse	-	Lacrosse, WI	http://uwlax.edu
University of Wisconsin-Madison	-	Madison, WI	www.son.wisc.edu
Wayne State University	-	Detroit, MI	www.cphs.wayne.edu

Specific additional colleges and universities offering a program are always evolving.

See www.APTA.org web site for locations of current programs.

Future Outlook

Employment of physical therapists is expected to grow faster than average for all occupations through 2012 as a result of the increasing number of individuals with disabilities or limited function spurs demand for therapy services.

A Personal Testimonial...

“This being 2004, I have been a practicing Physical Therapist for 15 years now. I first became interested in this field when I received physical therapy for an athletic injury I sustained in high school. Since graduating in 1989 from the University of Minnesota-Program in Physical Therapy, I have seen many changes in the profession, some for the good of the clients, some not so good. Through all the changes however, physical therapy has remained a challenging and rewarding career.

This profession has a wide variety of possible venues to treat clients, in and numerous opportunities to advance your training through continuing education courses. As a Physical Therapist, you have the flexibility to build a unique niche for yourself simply by choosing an area of interest to you and focusing on building skills that will promote improved function for the clients you treat. Through my ten years of working at MGHS, I have been able to pursue my interests in treating gait dysfunction and balance

disorders. This field is currently experiencing a growing involvement in the treatment of vestibular disorders, one type of balance disorder found to respond quite well to physical therapy intervention. Working with clients who suffer from dizziness and vertigo offers me the opportunity to work with other professionals as part of a treatment team—physiatrists, general practice physicians, neurologists, ENT physicians, occupational therapists and psychologists to name a few.

A positive change in our profession is evidenced in the fact that many continuing education courses now offered provide competency certifications, highlighting the therapists newly gained skills. Another fairly recent change in this field is the conversion of many of the professional programs from Masters Degree to Doctorate Degrees. The full advantages of making this shift are yet to be experienced, but if implemented correctly, our patients will reap the greatest benefits.

Although sustaining an injury myself was not a pleasant experience, it did expose me to what has turned out to be a rewarding and exciting career, one that threats a wide variety of diagnoses and an equally interesting base of patients.

- Jeanette Miles, PT

Radiologic Technologist

Job Description

The Radiologic Technologist facilitates the radiographic demonstration of anatomy to diagnose the medical status of the patient. In other words, the technologist takes a variety of different types of x-rays of patients so that their physicians can make an accurate diagnosis. The Radiologic Technologist usually specializes in one of the many sub-specialties of Radiology, such as Nuclear Medicine, Computed Tomography (CT) Scanning, Magnetic Resonance Imaging (MRI), Ultrasound, and Mammography.

Career Pathway

Health Sciences: with classes in Math, Physics, Chemistry and Biology.

Education Required

A high school diploma or equivalent is required for entry into a radiography program.

A two or four year degree in Radiologic Science. There are additional certification programs available in the various sub-specialties of Radiology.

Where To Go For Necessary Education

Grand Rapids Community College	-	Grand Rapids, MI	www.grcc.edu
Lake Superior College	-	Duluth, MN.	www.lsc.mnscu.edu
Lansing Community College	-	Lansing, MI	www.lansing.cc.mi.us
Madison Area Technical College	-	Madison, WI	www.matcmadison.edu
Marquette General School of Radiology	-	Marquette, MI	www.mgh.org
Milwaukee Area Technical College	-	Milwaukee, WI	www.matc.edu

Future Outlook

The laboratory field has a similar outlook as other medical professions. Many in the field are near retirement within the next 10-15 years and, of course, with the next generation of baby boomers, health care providers will be needed to supply an ever-increasing demand for technical services. As the baby boom generation ages, there will be more patients who need the tests.

A Personal Testimonial...

“Most of my life I have know that upon graduation of high school I wanted to continue my education and direct it toward the health field. Knowing that the health field has such a wide variety of choice, I knew I could find something suitable to my liking. As I grew older and researched the field of Radiology/X-ray, I found there was more to the occupation than merely x-rays. Given the chance to pursue a career as a Radiographer doesn’t necessary mean one has to stop there. Though some continuing education may be needed, Ultrasound, Nuclear Medicine, MRI, CT scanning and Interventional Special Procedures, Cardiac Imaging and Mammography are many of the area’s capable of continuing on to.

Radiology is very gratifying job. Everyday brings new people, different experience and new scenarios. Technology is always changing, so we are always learning new things. My job is very interesting. I work with a wonderful group of people, I get to be part of a great hospital and I love my job.”

- Robin Kommes, RT (R) (M)

“I really enjoy connecting with people and I love technology. Learning new things and applying/adapting them to actual day to day happenings; that’s what got me into medical imaging and that’s what’s kept me around for over 26 years. I embrace change, challenge and opportunity. Being a radiographer offers me options for the changing times in my personal priorities and/or professional life. Keeping in mind the opportunities I have pursued in the past and staying abreast with what’s currently happening in the greater medical community, assures me that being a Radiographer will continue to offer me challenges and choices in this very vital branch of the healthcare business.”

- Judith L. Straubel, R.S. R.T.R (M)

Registered Nurse

Job Description

Registered Nurses work to promote health, prevent disease, and help patients cope with illness. They are advocates and health educators for patients, families, and communities. When providing direct patient care, they observe, assess, and record symptoms, reactions, and progress and assist in convalescence and rehabilitation. Registered Nurses also develop and manage nursing care plans, instruct patients and their families in proper care, and help individuals and groups take steps to improve or maintain their health. While state laws govern the tasks Registered Nurses may perform, it is usually the work setting that determines their day-to-day job duties.

Career Pathway

Health Sciences: with courses in Biology, Chemistry, Algebra, Psychology, Nutrition, Computer Skills and English.

Education Required

- Two Year Associates Degree
- Three Year Diploma
- Four Year Bachelors Degree

Where To Go For Necessary Education

Bay College	-	Escanaba, MI	www.baydenoc.cc.mi.us
Bellin College of Nursing	-	Green Bay, WI	www.bcon.edu
Eastern Michigan University	-	Ypsilanti, MI	www.emu.edu
Ferris State University	-	Big Rapids, MI	www.ferris.edu
Grand Valley State University	-	Allendale, MI	www.gvsu.edu
Lake Superior State University	-	Sault Ste. Marie, MI	www.lssu.edu
Michigan State University	-	East Lansing, MI	www.nursing.msu.edu
Northern Michigan University	-	Marquette, MI	www.nmu.edu
Oakland University	-	Rochester, MI	www.oakland.edu
Saginaw Valley State University	-	Saginaw, MI	www.svsu.edu
University of Detroit—Mercy	-	Detroit, MI	www.udmercy.edu
University of Michigan	-	Ann Arbor, MI	www.nursing.umich.edu
University of Wisconsin	-	Madison, WI	www.son.wisc.edu
Western Michigan University	-	Kalamazoo, MI	www.wmich.edu

Future Outlook

Employment of Registered Nurses is expected to grow faster than the average for all occupations through 2008, and, because the occupation is large, many new jobs will result. There will always be a need for traditional hospital nurses, but a large number of new nurses will be employed in home health, long-term care facilities, and ambulatory care. Nursing is the largest healthcare occupation with over 2 million jobs. Nursing is one of the ten occupations projected to have the largest number of new jobs. Earnings are above average, particularly for advanced practice nurses who have additional education or training.

A Personal Testimonial...

“When I was young, I always admired nurses and their professionalism, helping and caring for other people, and making a difference in their lives. For the last 10 years, I have worked on the Cardiac/Stepdown Unit. Not only teaching patients and family members about tests and their diagnosis, but also meeting their needs in a difficult time is very fulfilling to me. Marquette General Hospital is a

Regional Medical Center with advanced technology, teaching and research. Working at this institution ensures me that my nursing skills are always up to date with the latest technology.”

- Cathy Rayome, Registered Nurse

Respiratory Therapist

Job Description

Using sophisticated technology, the Respiratory Therapist performs a variety of treatments and diagnostic tests on patients who have breathing difficulties. Patients range from infants to the elderly and some of the tests include: pulmonary function studies, electrocardiograms, stress testing, sleep studies and arterial blood gas measurements. These technicians also provide ventilator management of critically ill patients. Respiratory Therapist also participates in education programs aimed at smoking cessation and public awareness of the dangers of cigarette smoking. Additionally, they participate as members of the code blue team, a team of health care professionals who respond to cardiac emergencies and trauma.

Career Pathway

Health Sciences: with one year high school Algebra and one year additional high school Math; Chemistry.

Education Required

A High School Diploma with a strong background in Sciences and Math as well as good communication skills

An Associates Degree in Respiratory Therapy

Where To Go For Necessary Education

Ferris State University	-	Big Rapids, MI	www.ferris.edu
Madison Area Technical College	-	Madison, WI	www.matcmadison.edu
Mid State Technical College	-	Marshfield, WI	www.witechcolleges.com
Milwaukee Area Technical College	-	Milwaukee, WI	www.matc.edu
Northeast Wisconsin Technical College	-	Green Bay, WI	www.nwtc.edu

Future Outlook

There is a very high demand for this career. As medical technology continues to progress, there will always be new tests and treatments available for physicians to prescribe and Respiratory Technicians will be needed to administer them. Smaller hospitals may provide the opportunity to diversify and build skills in more areas such as Intensive Care Unit, Emergency, Pediatrics and Nursery. Additionally, as the baby boom generation ages, there will be more patients who need respiratory services.

A Personal Testimonial...

“My job as a Respiratory Therapist has kept me challenged and interested over the years. It’s never boring. In just one day, I may be called upon to teach a patient and his family, call a physician and make recommendations for care, set up a mechanical ventilator, administer inhaled medications, test a person for asthma, draw blood from an artery to measure “blood gases,” and to be present at a high risk delivery. Another day may find me called to do pre-op teaching and testing on person going for a coronary artery bypass, assist with resuscitation of a drowning victim in the Emergency Department, go in an ambulance to another hospital to pick up a sick baby and help take a patient on a ventilator to cat scan. Like nurses, we give bedside care around the clock, 365 days a year, to patients who range in age from premature infants to the elderly.”

We RTs work throughout the hospital with a wide variety of health care workers. Other healthcare professionals including physician rely upon us as the experts in pulmonary treatments, medications and diagnostic procedures.

We manage state of the art life support equipment such as ventilators. We are important members of resuscitation, trauma and transport teams and tend to be involved in the care of the sickest and most seriously injured patients in the hospital.

Because RTs are specialists, our jobs contain high levels of responsibility. A truly successful RT will be a good communicator, self confident, but not brash, and posses well developed people skills. Due to the widespread healthcare worker shortage, job opportunities in RT are currently the highest they've ever been and this is likely to continue as the baby boomers age."

- Julie Mower, RRT

Sleep Technician / Polysomnographer

Job Description

Using sophisticated technology, the Sleep Technician performs a variety of tests on patients who have sleep disorders. Patients range in age from infants to the elderly and some of the tests include; night – time sleep studies, nap studies, and CPAP titrations. The information received from these tests assists physicians in the determination of an accurate diagnosis that further dictates the formulation of an effective treatment program. Sleep Technicians also participate in education programs aimed at increasing public awareness of the importance of quality sleep. Some Sleep Technicians have a respiratory therapist degree prior to entering this profession.

Career Pathway

Health Sciences: with courses in Biology, Chemistry and Algebra.

Education Required

A High School Diploma with a strong background in Sciences and Math as well as good communication skills

An Associates Degree in Respiratory Therapy with additional training in sleep medicine.

Where To Go For Necessary Education

www.aptweb.org

Madison Area Technical College - Madison, WI www.matcmadison.edu

Degree programs in Polysomnography are just beginning to be offered at larger technical schools.

Future Outlook

There is a very high demand for this career. As medical technology continues to progress, there will always be new tests and treatments available for physicians to prescribe and Sleep Technicians will be needed to administer them. As the public awareness of sleep medicine increases, the demand for service will also rise. This will assure solid opportunities for growth as a professional sleep technician.

A Personal Testimonial...

“I became a PSG Tech because everyone spends 1/3 of their life sleeping. Every system of the body is dependent on the sleep including the heart, lungs, brain and digestion. Additionally sleep affects mood and performance. Good sleep is part of good health and when people don’t get good sleep, their health and happiness are adversely affected. Helping people to sleep well can really make a difference in their lives. The job combines patient care skills, a good knowledge of general anatomy, technical expertise and Computer Skills. Sleep medicine has advanced rapidly in the past ten years and there is no stopping it now as many of the mysteries begin to unfold.”

- Jeanne Keiler, BS, R.EEG/EPT, RPSGT, CNIM, Director of Neurophysiology

Speech and Language Pathologist

Job Description

The Speech and Language Pathologist evaluates and treats people with diseases or health problems, which have resulted in speech/language/hearing/swallow disorders. Many times these patients have had a stroke, but sometimes they have been born with the problem or it may have been the result of a traumatic injury.

Career Pathway

Health Sciences: with courses in Science, Health and related courses.

Education Required

A Bachelors Degree

Masters Degree

Where to Go For Necessary Education

Central Michigan University	-	Mt. Pleasant, MI	www.cmich.edu
Eastern Michigan University	-	Ypsilanti, MI	www.emich.edu
Michigan State University	-	E. Lansing, MI	www.asc.msu.edu
Northern Michigan University	-	Marquette, Mi	www.nmu.edu
Wayne State University	-	Detroit, MI	www.wayne.edu
Western Michigan University	-	Kalamazoo, MI	www.wmich.edu

Specific colleges and universities offering a program are always evolving. See www.ASHA.org web site for locations of current of programs.

Future Outlook

Employment of Speech-Language Pathologists and audiologists is expected to grow much faster than the average for all occupations through the year 2010. Because hearing loss is strongly associated with aging, rapid growth in the population age 55 and over will cause the number of persons with hearing impairment to increase markedly. The number of Speech-Language Pathologists and audiologists in private practice will rise due to the increasing use of contract services by hospitals.

A Personal Testimonial...

“Speech Pathology is a very diverse career and we are fortunate that we are able to choose our jobs depending on our areas of interest. This is the primary reason I personally chose speech pathology as my career path. No matter what your interest, there are job opportunities working in every state of life from premature infants in the Neonatal Intensive Care Unit to geriatric patients in nursing homes. You have to enjoy working with people and providing education to families. As Speech Pathologists we become very involved in patient’s lives by helping them regain skills they have lost after a stroke, traumatic brain injury or even heart surgery. Seeing patients regain their independence and learn how to function in society with their disabilities is one of the most rewarding aspects of the job. The future of speech pathology is as diverse as the patients we serve. It is necessary that we work to maintain the quality of care we provide our patients. We will have an increasing role as the advocates for our patients’ needs with respect to the constant changes in our healthcare system.”

-Audra Kohler, CCC

Switchboard Operator

Job Description

The Switchboard Operator operates the hospital's telephone system to relay incoming, outgoing and interoffice calls. This includes paging authorized personnel and physicians in a variety of situations and monitoring hospital alarm systems for a variety of emergencies. The Switchboard Operator cordially receives and directs patients and visitors and provides exceptional customer service in all external and internal encounters.

Education Required

A High School Diploma or Equivalent
Previous experience in an office setting for at least one year
Windows based computer experience

Where To Go For Necessary Education

No special programs available. General course work in Secretarial Science at technical colleges.
Communications equipment operators receive their training on the job.

Future Outlook

There is a high demand for individuals who have exceptional customer service and organizational skills. This position leads into other areas where the skills and abilities to effectively communicate with the public are very important. Many employers will hire the individual with excellent communication skills and then spend more time on training that individual on the technical skills aspects of the job. Being service oriented is harder to teach than the technical job skills. Employment of switchboard operators is projected to decline through 2012, due largely to new labor saving communications technologies, the movement of jobs to foreign countries, and consolidation of telephone operator jobs.

A Personal Testimonial...

"I chose the profession of a switchboard operator at MGH, since I enjoy the communications aspect of my duties in a healthcare setting. The future is encouraging for anyone interested in challenging himself or herself as an operator in our Regional Health Care Facility at MGH. It certainly has been and continues to be a challenging and rewarding experience for me. It has been beneficial to my family and myself."

-Regina Kyllonen, Comm/Switchboard

"As a Switchboard Operator, I like knowing that I'm helping people, whether it's distraught family members or fellow employees. I am responsible for getting them in touch with who they need to talk to. While the switchboard is the center of communications in a hospital, it's very fulfilling to be part of a team that helps save people's lives. It makes me feel good knowing that people can depend on me. I feel secure in my job because the healthcare industry is always growing. Although there may be advances in technology, a switchboard operator will always be needed."

- Michelle Godkin, Switchboard Operator

Ultrasonographer

Job Description

Using sophisticated ultrasound technology; the Sonographer performs a variety of tests on patients of all ages. Some of the testes include: 2D M mode Echo, Doppler Echo, Transesophageal Echo, Stress Echo, and Nuclear Echo. The information received from these tests assist physicians in the determination of an accurate diagnosis, which further dictates the formulation of an effective treatment program.

Career Pathway

Health Sciences: with courses in Math, Anatomy and Physiology, Biology, Physics, Computer Science and Typing.

Education Required

A High School Diploma with a strong background in Sciences and Math

An Associates Degree in Radiology followed by a one-year internship

An Associates Degree in Echocardiography followed by a one-year internship

Where To Go For Necessary Education

Jackson Community College - Jackson, MI

www.jccmi.edu

Lansing Community College - Lansing, MI

www.lansing.cc.mi.us

Marquette General Hospital is developing on-site training

www.mgh.org

Milwaukee Area Technical College offers a program in echocardiography. Their ultrasound program is a pre-requisite. www.matc.edu

Most technical colleges or Hospitals that offer a radiology program will also offer programs in echocardiography.

Future Outlook

There is a very high demand for this career. Sonographers are very difficult to recruit. As medical technology continues to progress, there will always be new tests available for physicians to prescribe, and Sonographers will be needed to run them. Additionally, as the baby boom generation ages, there will be more patients who need these tests.

A Personal Testimonial...

I chose Ultrasound as a profession because I wanted an independent type of job that was healthcare related and very progressive. It requires a two year degree, which as a female with the prospect of having a family and wanting flexible hours, not having to put in four or more years of school, to work in a job I enjoyed and being able to get paid a very good hourly wage was very appealing. The opportunities in this field are wide open. It is a growing modality and extremely rewarding. You work closely with the physicians you service and are an integral part of patient care. It challenges you and keeps you progressive in your work environment."

- Kathleen J. Weber, Ultrasound

Unit Clerk

Job Description

The Unit Clerk plays an important role in the smooth running of all nursing units and in all areas where patients first come in to contact with the healthcare system. The Unit Support Representative defines, captures, analyzes, transforms, transmits and reports patient specific data. This data includes demographic information, pre-billing information and all information related to the care of the patient.

Career Pathway

Business, Management, Marketing and Technology: with courses in Algebra, Biology, Chemistry, Computer Skills, Data Processing and English with an introduction to Health Occupations.

Education Required

A High School Diploma or Equivalent
Medical Terminology Class
Computer Course Work

Where To Go For Necessary Education

www.ahima.org

Lansing Community College	-	Lansing, MI	www.lansing.cc.mi.us
Macomb Community College	-	Warren, MI	www.macomb.edu
Madison Area Technical College	-	Madison, WI	www.matcmadison.edu
Milwaukee Area Technical College	-	Milwaukee, WI	www.matc.edu
Muskegon Community College	-	Muskegon, MI	www.muskegon.cc.mi.us

Schools that offer both the Medical Terminology class and computer course work.

Future Outlook

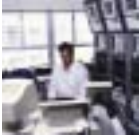
The position of the Health Unit Coordinator is in very high demand. It is becoming a more recognized career path. Opportunities for certification are available. This growth is primarily due to overall growth in all health related professions. As the population continues to age, healthcare needs will increase and the need for unit coordinators will be enhanced because of the need for efficiency and cost effectiveness in hospitals.

A Personal Testimonial...

“When I took this job, I had no idea what a Unit Clerk did. I have come to realize that this is one of the most essential jobs in the hospital. We are in charge of transcribing all of the orders, ordering all of the tests and appointments, answering phone calls pertaining to the care of the patients and transferring those calls to the appropriate nurses. I like this job because it is more challenging than most of the jobs I have held. You have to be able to handle pressure and become an expert at multi-tasking. As the future comes, I see the need for the Unit Clerk being the same as it is now. With the change in technology the nurses and doctors don’t have time to keep up on everything for the proper data entry, and that is where we come in. We continue to expand out knowledge and abilities to see what the process of patient care is being carried out.”

- David Neuffer, Unit Clerk

Career Pathways



Arts and Communications: careers related to the humanities, the performing, visual, literary, and media arts.



Business, Management, Marketing, and Technology: careers related to all aspects of business including accounting, business administration, finance, information processing and marketing.



Engineering/Manufacturing and Industrial Technology: careers related to technologies necessary to design, develop, install, or maintain physical systems.



Health Sciences: careers related to the promotion of health as well as the treatment of injuries, conditions, and disease.



Human Services: includes careers in childcare, civil service, education, hospitality, and the social services.



Natural Resources and Agriscience: careers related to natural resources, agriculture, and the environment.

Resources

Marquette General Health Systems www.mgh.org

United States Department of Labor Bureau of Labor Statistics. www.bls.gov. Occupational Outlook Handbook

www.flahec.org

www.mshealthcareers.com

www.mycareereducation.org

www.nhealthcareers.com

www.wihealthcareers.com

www.mihott.com

www.jobforce.org