

## **HEALTH CARE AND LIFE SCIENCES PATHWAY**

#### What are Career Pathways?

Career Pathways are a sequence of training and education programs designed to develop a person's academic and technical skills. By obtaining stackable credentials and developing new skills a worker can advance over time to successively higher levels of education and employment in a given industry or occupational sector.

#### **Understanding the Basics**

Soft skills, such as interpersonal skills, professionalism, and dependability, are important in all industries and occupations. Health Care and Life Sciences careers often involve interactions with patients and other team members so active listening and communication skills are also important.

Health Care and Life Sciences also have a set of industrywide technical competencies that represent the knowledge and skills needed to be successful in these industries. With the need for privacy and confidentiality prevalent in these industries, workers need to have knowledge of Health Industry ethics, laws and regulations, and be able to keep accurate and confidential documentation. Patient interaction, infection control, understanding of drugs and medications, and knowledge of scientific methods and technology are only some of the skills needed for success in these industries.

## **STEM Career Pathways**

Science, Technology, Engineering and Mathematics (STEM) pathways are usually technical in nature, and play a key role in developing new products and technological breakthroughs. STEM occupations are some of the most in-demand and highest paying jobs in Missouri.

**Science**: Diverse occupations in Physical, Life and Natural Sciences. Science workers can be involved in research, development, and design; as well as outdoor field work.

**Technology**: Data connect people and businesses on a global scale, and an unprecedented number of firms need information technology employees.

**Engineering:** Occupations, including drafters, technicians, and engineers, develop and test new products we use every day.

**Mathematics:** Is as part of many occupations and can be used to analyze data and help solve real-world problems in engineering, sciences, or other fields.

## WHO'S HIRING?

#### Health Care

Hospitals Ambulatory Health Care Serv. Educational Services

SSM Health Care BJC Healthcare Mercy Health

#### **Dental**

Ambulatory Health Care Serv. Administrative, Support & Employment Services Hospitals

Pacific Dental Services Inc. Aspen Dental Heartland Dental

### **Life Sciences**

Prof./Tech. Services Chemical Manufacturing Educational Services

Pfizer Washington University Merck & Company (Millipore Sigma)

## **DENTAL PATHWAYS**

NOW OCCUPATIONS One-Twelve months of on-the-job training NEXT OCCUPATIONS Long-term OJT, Certificate, Assoc. Degree LATER OCCUPATIONS Bachelor's Degree or Adv. Degree

**Dental Laboratory Technician** 

Dental Hygienist Dental Assistant Dentist Oral & Maxillofacial Surgeons

### **Specialized Skills**

Although Dental Laboratory Technicians are typically an entry level job, some employers may require a vocational certificate or associates degree. Dental Laboratory Techs need a general knowledge of repair and the dental fabrication process. Next occupations require more advanced skills obtained through specialized training, such as taking X-rays, patient education, and knowledge of dental procedures and instruments. Later occupations in this pathway generally require a Doctorate degree.

Dental Hygienist Certification

**Certified Dental Assistant** 

#### **Certifications and Software**

**Dentrix Dental Software** 

Practice Management Software

LIFE SCIENCES PATHWAYS

NOW OCCUPATIONS<br/>One-Twelve months of on-the-job trainingNEXT OCCUPATIONS<br/>Long-term OJT, Certificate, Assoc.DegreeLATER OCCUPATIONS<br/>Bachelor's degree or Adv. DegreeSee other Life Sciences categories for<br/>job opportunities.Chemical TechnicianChemist<br/>Biologist

Chemist Biologist Biochemist Biological Technician

### **Specialized Skills**

Occupations in this pathway require specialized training and skills. Knowledge of Biology, Chemistry and Laboratory Equipment and Procedures are essential to workers in these occupations. Technicians need to be able to interpret data and prepare reports to assist Chemists and Biologists in developing new products and knowledge. Innovative thinking, problem solving skills, and accurately gathering and checking data are needed when performing research and experiments.

#### **Certifications and Software**

American Society For Quality (ASQ) Certification SAP

Project Management Certification (PMP)

UNIX



# **HEALTH CARE PATHWAYS**

NOW OCCUPATIONS

One-Twelve months of on-the-job training

Personal Care Aide Home Health Aide Orderly Pharmacy Technician Occupational Therapy Aide Medical Secretary NEXT OCCUPATIONS Long-term OJT, Certificate, Assoc.Degree

Nursing Assistant Licensed Practical/Vocational Nurse Diagnostics Medical Sonographers Occupational Therapy Assistant Medical Records /Health Info.Techs. Radiologic Technologist/Technician Emergency Medical Techs & Paramedics Medical Assistants LATER OCCUPATIONS

Bachelor's degree or Adv. Degree

Registered Nurse Nurse Practitioner Advanced Practice Psychiatric Nurse Nurse Midwives Pharmacist Occupational Therapist Radiologist

### **Specialized Skills**

Entry-level specialized skills include administrative support, scheduling, patient care, patient bathing, and meal preparation. Knowledge of basic medical terminology is also useful in entry-level occupations. More advanced skills such as treatment planning; administering medications, critical care patient support and providing patient education and instruction require specialized training or on-the-job experience. Most of the Later jobs in this pathway require a graduate degree or Doctoral degree. Knowledge of HIPAA rules and regulations is a crucial skill across all pathway levels and occupations.

#### **Certifications and Software**

Registered Nurse CertificationICD-10-CM Coding SoftwareFirst Aid CPR AEDICD-9 Coding SoftwareCertified Nursing AssistantMEDITECHBasic & Advanced Cardiac Life Support CertificationMicrosoft Products

### Why consider a career in Health Care?

Health Care is the largest employing industry in Missouri. The Health Care industry has over 10,000 employers that provide jobs to over 300,000 people in more than 200 different occupations across the state, with the sector projected to grow faster than most industries.

Long term employment projections from the Missouri Economic Research and Information Center show Health Care occupations are projected to be the fastest growing occupational group in Missouri during the 2014 to 2024 projections decade, representing about 1 in 5 new jobs.



Current demand for Health Care occupations is also high. In 2016 employers posted over 65,000 job ads for Health Care occupations. A recent survey from the Missouri Hospital Association shows vacancy rates reaching all time highs, with staff nurses having the highest vacancy statewide at 15.9%.

The Health Care industry provides a variety of work opportunities for every interest. From jobs that directly care for patients to careers that keep the whole system going, important jobs are waiting to be filled.



# **OCCUPATION PROFILE**

### **Community Health Workers and Health Educators**

Employees in these occupations assist individuals and communities to adopt healthy behaviors, and provide and manage health education programs that help individuals, families, and their communities maximize and maintain healthy lifestyles. Community Health Workers and Health Educators may conduct outreach to implement programs in the community that promote, maintain, and improve individual and community health. They may also provide information on available resources, advocate for individuals and community health needs, and provide services such as first aid and blood pressure screening. Community Health Workers and Health Educators may work with individuals or groups to give advice on issues related to general health, such as diet and exercise, or to help people learn to manage specific health conditions, such as diabetes. As a result, good customer service and communication skills are necessary.

Employment of health educators and community health workers is projected to grow 13 percent from 2014 to 2024, faster than the average for all occupations. Health educators and community health workers will be needed to show patients how to get access to healthcare services, such as preventive screenings.

### Entry Wage: \$26,985 | Average Wage: \$42,010 | Experienced Wage: \$49,525



### Who's Hiring?

Community Health Workers and Health Educators job ads have risen from an average of 90 per quarter in 2012 to nearly 150 ads in the 3<sup>rd</sup> quarter of 2017.

Express Scripts St. Louis

BJC Healthcare St. Louis

SSM Health Care St. Louis

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#### Sources:

Data for this analysis has been extracted using Burning Glass Technologies Labor/Insight<sup>tm</sup> tool which collects information from over 35,000 web sources, including job boards, newspapers, and employer websites. While this analysis presents a broad picture of hiring activity and serves as a measure of labor demand, it does not capture openings that are filled through other networks. Other sources include the Employment and Training Administration, Competency Model Clearinghouse for information available on selected industries in this report. Wage data is 2016 Occupational Employment Survey, Bureau of Labor Statistics.



MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT