

Eastern Center for Arts and Technology

Allied Health Program Review

2024-2025

Occupational Advisory Committee Members

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Allied Health Program Review Occupational Outlook Report

Data collected from the U.S. Department of Labor, Bureau of Labor Statistics (BLS), Occupational Outlook Handbook, modified last August 29, 2024, indicates that employment of health care professionals is expected to grow faster than average for all occupations through 2033. Nine of the 20 occupations with the highest projected percent of change of employment between 2023-2033 are health care related including nurse practitioners (46%), data scientists (36%), medical and health service managers (29%), physician assistants (28%), physical therapy assistants (25%), occupational therapy assistants (22%), home health and personal care aides (21%), substance abuse, behavioral disorder, and mental health counselors (19%) and epidemiologists (19%). The average increase is 4-5% which means an increase of 6% or higher categorizes that career as having a “bright outlook” and is the benchmark for labeling faster growing careers (ONET, 2024).

According to the BLS, employment in healthcare occupations is projected to grow at a much faster than the average rate for all occupations from 2023 to 2033. About 1.9 million openings on average, are projected each year in health occupations due to employment growth and the need to replace workers who leave the occupations permanently. Healthcare related occupations have a bright outlook as categorized by ONET, meaning as stated above, that they are projected to grow faster than average with employment increases of 6% or more over the period 2023-2033 for the US nationwide and projected to have 100,000 or more job openings over the period of 2023-2033 for the US nationwide (ONET, 2024).

The median annual wage for healthcare practitioners and technical occupations (such as dental hygienists, physicians and surgeons, and registered nurses) was \$80,820 in May 2023, which was higher than the median annual wage for all occupations of \$48,060. Healthcare support occupations (such as home health and personal care aides, medical transcriptionists, and occupational therapy assistants) had a median annual wage of \$36,140 in May 2023, which was lower than the median annual wage for all occupations (BLS, August 29, 2024).

Please see below for individual professions and their projected increases from the Bureau of Labor Statistics (BLS):

Healthcare Occupation	Projected Job Increase 2023-2033
Registered Nurse	6%
Licensed Practical Nurse	4%
Nurse Practitioner, Nurse Anesthetists, Nurse Midwives	40%
Physician and Surgeon	4%
Physician Assistant	28%
Occupational and Physical Therapist	11- 14%
Radiology, MRI, Ultrasound Technician	6%
Respiratory Therapist	13%
Dental Hygienists	9%
Home Health and Personal Care Aides	21%

The increasing demand for healthcare occupations is influenced by the following factors:

- The increased aging population, which leads to a higher demand of healthcare professionals.
- Healthcare being a hands-on occupation, not a job that can be outsourced.
- Advances in medicine and healthcare leads people to survive severe illness and injury, increases life expectancy rates, and can require additional long-term therapies and healthcare.
- The demand for outpatient and at-home healthcare services has increased due to the expense of being in a hospital setting and the pandemic.

- Vacancies are needed to be filled with competent health professionals due to the employment growth and the need to replace workers who leave the occupations permanently.

The Allied Health Occupational Advisory Committee has reviewed the outlook projected by the employment data and concluded that it is an accurate assessment of the state of the healthcare industry and its needs. Current employment opportunities are on the rise in the local area not only in the hospital settings but also in outpatient settings. For example, a local job search by zip code for a radiology technician produced 187 positions available in the area. EASTERN graduates from the Allied Health program will be able to continue their education to have the opportunity to achieve a future career in the healthcare industry. The continuation of the Allied Health program was unanimously supported as the need for skilled healthcare professionals is supported by the current data.

Student Completion, Placement, and Follow-Up Information

Graduate data for the four-year period 2020, 2022, 2023, and 2024, indicates that 98.225% of all students completed all tasks for the career objective and received a final grade of 70% or above. This surpassed the goal set for 73% completion rate. The year of 2021 was an outlier with 0% completion of students in the career objective tasks due to the Covid 19 pandemic as well unforeseen circumstances of a teacher replacement mid-year due to illness. The overall placement for entry into related occupations, related schooling, or entrance into the military post graduation was 76.56%, under the targeted 84%, due to lack of response from graduates to the surveys. We have improved our system in reaching the students post-graduation from EASTERN and in 2024, Allied Health had 100% placement. Allied Health students earning NOCTI competent over the five-year 95.26%, with 40.22% of the students earning NOCTI Advanced. In the four years, 2020, 2022, 2023, and 2024, 99.55% of Allied Health students earned an industry certificate in Healthcare Provider First Aid/CPR/AED. The year of 2021 was an outlier due to Covid 19 with zero students being certified. Enrollment in Allied Health over the five-year period was 88.26%.

Previously, the Allied Health program had 100% enrollment and a waitlist. Due to the waitlist, Allied Health expanded the program to two teachers in the 2022 school year and in 2023 went back to a one teacher program but increased the class size from 15 students to 1 teacher to 25 students to 1 teacher per session. Currently, the Allied Health program has 21 students in the AM session and 15 students in the PM session for a total of 36 students. The Allied Health program has also had some setbacks with the clinical shadowing portion of the class. Allied Health started a relationship with a long-term care nursing and rehabilitation facility, Christ's Home in 2023. Due to the Covid-19 pandemic, Abington-Jefferson Hospital has not taken high school students back into the hospital. In 2024, the Allied Health program did sign a contract with Abington-Jefferson Hospital to return to their facilities, but it was postponed until September 2025. A clinical aide position was created to assist the teacher three days a week in the 2023-2024 school year and requires the assistant to have a license in PA to supervise the clinical experience. Christ's Home allows the program to bring students in the AM session with a supervision ratio of 6 students to 1 clinical assistant and in the PM session the ratio drops to 5 students to 1 clinical assistant due to the memory care (dementia unit) not being able to accommodate students in the afternoon session. Clinical shadowing is still approximately two days a week.

The OAC believes that the Allied Health program is an essential program for students wishing to pursue a career in the healthcare industry. The program equips students with a foundation that facilitates success in a post-secondary education setting and gives students opportunities that provide insight to a career in the healthcare industry. The dual enrollment courses prepare the students for the vigorous academic expectations in postsecondary programs relating to health occupations. The clinical experience component of the program allows students to observe healthcare occupation tasks and job duties up close.

Allied Health Program Description

The Allied Health program is intended to be a college preparatory program. The students enrolled have an interest in pursuing a medical/health science career following high school. The one-year senior only program is designed for students

with rigorous academic preparation who plan to continue their education in college to prepare for a career in the health industry. The Allied Health program is competitive and helps to develop students' study skills and academic readiness for those pursuing a career in health and medicine. Students in Allied Health will have clinical experiences partnering with health professionals currently at Christ's Home in the Memory Care (Dementia) Unit, Rehabilitation Unit, Medical Surgical Unit, and Life Skills and Enrichment Department. The program is contracted with Abington-Jefferson beginning in September 2025 and has an additional partnership with Luther Woods Nursing and Rehabilitation Center. Throughout the program, students are given the opportunity to interact with healthcare professionals who act as mentors and role models. This unique opportunity provides students with a first look at the many healthcare careers available to them and enables them to make informed career choices.

Additionally, the Allied Health program offers the potential of earning college credits at Montgomery County Community College in the dual enrollment program for a reduced rate. Students will pay 1/3 of the cost of the class. Students can earn up to 6 college credits in the program. The classes offered are HCP 224 Medical Terminology and MAS 114 Medical Law and Ethics. Both courses are essential for students pursuing healthcare careers.

Areas of study include:

Anatomy & Physiology	Patient Care Skills
Infection Control	Sterile Technique
Principles of Disease & Injury	Vital Signs
Communication	Principles of Nutrition
Health Care Delivery Systems	Safety & Emergency Care
Medical Law & Ethics	Medical Terminology
Medical Math	End of Life Care
Mental Health	Rehabilitative & Restorative Care

Skills and Enrichment:

ECSI Healthcare Provider First Aid/ Cardiopulmonary Resuscitation/ AED

OSHA 10 Certification

Stop the Bleed

Resume and Health Care Portfolio

Interview Skills

Clinical Shadowing

Guest speakers from healthcare disciplines

Educational experiences/ field trips

Trends in the Healthcare Industry

Technology

Technology is fully integrated into the healthcare industry, from electronic health records to smart alarms for continuous monitoring of patient safety or automatic medication dispensing systems to virtual appointments and smart applications.

Technology is an integral component of the Allied Health classroom to fully prepare EASTERN graduates in the healthcare industry. Technology in the classroom will familiarize students with the technology that they will need to utilize and operate to be successful in the outpatient and inpatient settings.

The classroom setup includes a new SMART board with technology for the teacher and students to use interactive lessons.

Students currently have a large Allied Health lab area that is equipped with six hospital beds and medical equipment. Replacement/purchase of an electronic blood pressure machine, doppler, and TENS (nerve stimulation) unit has been noted as needed due to equipment malfunction. Furthermore, the addition of an electrocardiogram machine and an ultrasound machine would benefit the students.

The use of computer-based simulation in healthcare education has become a vital resource. With the clinical experiences becoming competitive and the nature of

unpredictability in observing certain health issues, the use of simulated patient scenarios provides the students with information and realistic experiences that they need to effectively access, diagnose and treat the patient. It is a safe environment in which students can make mistakes, which is something that can be detrimental in a real clinical setting with ill patients. The skills learned in the simulation can be practiced outside of a real clinical setting, in association with the material that is being presented in class using the simulation technology. The more opportunities the students have to critically think and process the simulation, the more proficient they will become in preparation for their healthcare careers. EASTERN Allied Health program currently has two high fidelity mannequins used for simulation of vital signs and phlebotomy arms used to learn how to draw blood. Long range plans to expand the simulation include purchasing an ultrasound machine and a simulation model of a hand for taking blood glucose, this is used for diabetic patients. Additionally, adding a washer and dryer to the Allied Health lab for the linens used for lab skills.

Structure of the Industry

Employment in the healthcare industry requires a post-secondary education or certification. The state of Pennsylvania requires a 76% pass rate on the health specific certification or licensure exams to obtain the licensure and/or certifications needed to practice in the medical field. The emphasis in the healthcare industry is for all workers to have a bachelor's degree level of education and the trend is moving towards a master's or doctorate level degree in many fields. For example, a physical therapist entry level is now a doctorate degree, and a Physician Assistant and Nurse Practitioner are master's level degrees. This has made the industry very competitive for acceptance into post-secondary healthcare programs. In addition, advancements in the medical field happen daily which requires healthcare professionals to adapt quickly and accept that lifelong learning is a part of their path to maintain the certification and licensures. The Allied Health program provides a foundation that prepares graduates for education at the university level. The exposure to science, medical terminology, and hands-on experience assists the students to make an informed career decision and achieve success in their program of choice.

Types of Employees/Skills Required in the Healthcare Industry

As stated above, students that wish to pursue a career in the healthcare industry are required to commit to further education and lifelong learning. Graduates of the Allied Health program will enter secondary education with a strong educational base that will give them the “head start” or advantage for their future career path. Allied Health professionals must have a solid understanding of the human body including anatomy and physiology, disease processes, medical law and ethics used in medical practice, mathematical skills to deliver care, and medical terminology which is the language used in the health field. In addition to the academic knowledge and the clinical/practical skills, Allied Health professionals must possess the following qualities and traits of a healthcare worker to ensure success in the healthcare industry:

- Critical thinking skills
- Communication skills
- Empathy/compassion
- Attention to detail
- Emotional stability
- Organizational skills
- Physical stamina

All healthcare professionals are required to obtain and maintain a license, certification, or registration once all the academic requirements are fulfilled. The healthcare professional must complete continuing education credits to retain their credentials. Furthermore, most healthcare occupations require a basic life support cardiopulmonary resuscitation certification/first aid certificate. Some job requirements within the healthcare profession may even depend upon additional advanced certification such as American Heart Association Advanced Cardiac Life Support (ACLS) or Pediatric Advanced Life Support (PALS), telemetry or electrocardiogram (EKG) certification, or phlebotomy (blood draw) certification to perform some of the more critical healthcare occupation duties required dependent on your career path. Students can acquire the CPR/First Aid certification within the Allied Health program.

Program Recommendations

- Seek to preserve the Allied Health Program as an honor course with all participating schools.
- Continue to cultivate the contract with Montgomery County Community College (MCCC) for EASTERN faculty to provide the six (6) credits each year including HCP 224 Medical Terminology three (3) credits, and MAS 114 Medical Law and Ethics three (3) credits for the students as part of the MCCC Dual Enrollment Program Pathway.
- Pursue approval to purchase simulation software including an ultrasound machine and blood glucose simulation hand model.
- Review the list of career objectives and add to the current list to reflect the growing interest in other healthcare professions.
- Follow protocols to replace broken electronic medical equipment; automatic blood pressure monitor, doppler, and TENS (nerve stimulation) unit.
- Explore the viability of offering additional certifications such as electrocardiogram (EKG) technician certification and phlebotomy certification in the Allied Health Program.
- Obtain expanded learning opportunities in addition to the clinical shadowing at Christ's Home.

Recommendations with Timeline

School Year 2025-26

- Revise Career Objectives
- Healthcare education simulation software **\$2500**
- Recertify instructors in CPR/First Aid Instructor certification **\$250** (ESCI)
- Purchase GlucoHand- Digital Glucometer Simulator device for **\$2188** (GTSimulators)
- Acquire Biocare Digital Electrograph Machine **\$1299** (wellue.com)

School Year 2026-27

- Healthcare education simulation software **\$2500**
- Purchase Tri-scan Max Portable Ultrasound Scanner device for **\$3599** (Dr. Sono-drsono.com)
- Mobile Trolley Cart and Premium Carry Bag for Ultrasound **\$1099** (drsono.com)
- Replace TENS unit HIDOW XPD12 **\$399** (Hidow)
- Washer/Dryer LG Wash Tower Stacked Laundry Center with 4.5-cu ft Front Load Washer and Electric 7.4-cu ft Dryer **\$1698**

School Year 2027-28

- Healthcare education simulation software **\$2500**
- Replace Automatic Blood Pressure Machine **\$2500**
- Replace Doppler **\$500**
- Mobile Monitor Stand **\$350**
- Explore the costs of initial certification of instructors in EKG and/or Phlebotomy to provide student certification in the future **\$700-2700**

Total Estimated Costs: \$23,582