

## CTE: THE KEY TO ECONOMIC DEVELOPMENT

### Health Care:

Accounted for

# \$ 2.7 trillion

in 2011—18% of U.S. gross  
domestic product<sup>1</sup>



**Employs 18 million people<sup>2</sup>**



**Experienced 90% real-wage  
growth for health care  
professionals from 1983-2010<sup>3</sup>**

What is the pathway to these  
fulfilling and essential careers?

**Career and Technical Education!**



Association for Career and Technical Education  
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*Connecting Education and Careers.*

# Health Care

One of the foremost sectors of the U.S.  
economy, health care:

- tops the list of key industries in many states
- includes not just cutting-edge medical technology and services, but also information technology, STEM, finance, business and marketing
- requires high-skilled workers

### What jobs are available in health care?

Unlike other fields in which technology-fueled productivity has reduced labor needs, health care is and will remain labor intensive.<sup>4</sup> Another 6.6 million job openings will be available in the sector by the end of the decade. Professional and technical health care occupations—nurses, pharmacy technicians, diagnostic medical sonographers, medical technologists, occupational therapists and more—will grow the fastest of all occupations in the United States through 2020, by 31 percent, followed by health care support occupations, such as veterinary assistants, dental assistants and medical transcriptionists.<sup>5</sup>

The nation will need to maintain a supply of trained professionals to meet these demands. Shortages are projected for nurses and other medical professionals, as well as for health care practitioners in rural areas.<sup>6</sup> In addition, gaps are reported in the emerging field of health informatics: Online postings for these jobs jumped 53 percent from 2007 to 2012.<sup>7</sup>

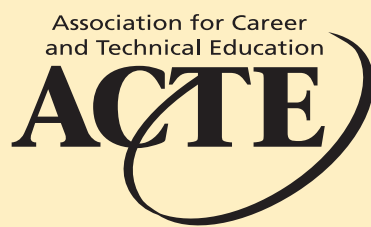
By 2020, 82 percent of health care jobs will require some postsecondary education, including 25 percent that will require an associate degree and 17 percent that will require some college, such as a postsecondary certificate.<sup>8</sup> Health care occupations require academic, employability and technical skills, including skills in operating and monitoring medical equipment, recording and tracking patient progress, and addressing safety concerns and patient needs. In addition, 11 percent of jobs in health care are found in marketing, sales and service; business, management and administration; and education and training.<sup>9</sup> Just a few of the health care careers available and in demand include:

- health information technicians
- radiologic technicians
- dental hygienists
- occupational therapists
- nuclear medicine technologists
- hospital administrators
- doctors
- nurse educators



## Endnotes

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## How does CTE prepare the health care workforce?

Career and technical education prepares high school, postsecondary and adult students for careers in health care through:

- the national Career Clusters® Framework—including Career Clusters and pathways in health science, IT, STEM, business management and administration, and education and training—which outlines course progressions that help students explore career options and prepare for college and career success.
- CTE courses in surgical technology, optometrics, EKG technology, phlebotomy, pharmacy assisting, health informatics, EMT and more, all integrated with rigorous academics.
- work-based learning experiences, such as hospital-based classrooms, laboratory facilities and clinical internships.
- career and technical student organization enrichment experiences, such as HOSA-Future Health Professionals industry-based competitions in public health, dental science, medical math, pharmacology and more.<sup>10</sup>
- opportunities to earn stackable certificates, degrees and industry-recognized certifications through such programs as the Health eWorkforce Consortium, which is developing a variety of certificate and degree options to grow the health IT workforce.<sup>11</sup> In addition, the National Science Foundation, Bellevue College in Washington and the Healthcare Information and Management Systems Society are developing an entry-level technician certification for the field.<sup>12</sup>

## What are promising programs in health care?

The **Monticello High School Health and Medical Sciences Academy** in Virginia has a mission to empower students to utilize 21st-century skills while exploring health science career opportunities. The school offers multiple pathways to suit student interests and plans, from routes to becoming an EMT, surgical technologist or certified nurse assistant through industry certification, to careers in biotechnology, radiology and sonography that lead to further education at the associate degree level, to occupations that require an advanced degree. Curriculum is integrated and includes content in biology, health and medical science. The Academy utilizes community partnerships to design curriculum and facilitate work-based learning experiences, such as clinical rotations followed by a senior-year internship. Industry and education partners include the University of Virginia, Phthisis Diagnostics, the Defense Intelligence Agency, Afton Scientific Corporation, Martha Jefferson Hospital and Piedmont Virginia Community College.<sup>13</sup>

The **Health Careers Collaborative of Greater Cincinnati** is a regional employer-led initiative designed to address the sector's talent shortages. HCC has successfully created career pathways with multiple entrance and exit points for low-skilled, unemployed and disadvantaged individuals to enter and advance in a health care career. According to the HCC website, participants have earned more than 4,000 credentials since 2007.<sup>14</sup> Further, HCC provides student support services, career planning assistance, job placement and retention services. Employer partners include UC Health, Cincinnati Children's Hospital Medical Center, TriHealth and Mercy Health, collaborating with such educational partners as Cincinnati State Technical and Community College, Great Oaks Career Campuses and Gateway Community and Technical College.<sup>15</sup>