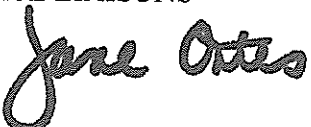


TRAINING AND EMPLOYMENT NOTICE	NO. 10-10
	DATE September 30, 2010

TO: STATE WORKFORCE AGENCIES
STATE WORKFORCE LIAISONS

FROM: JANE OATES 
Assistant Secretary

SUBJECT: Release and Availability of Employment and Training Administration's
(ETA) *Allied Health Access (AHA!) Guidebook: How to Develop Programs
for Youth in Allied Health Careers*

1. Purpose. To announce the release and availability of ETA's *Allied Health Access (AHA!) Guidebook: How to Develop Programs for Youth in Allied Health Careers*.

2. Background. On May 23, 2010, President Obama signed the Patient Protection and Affordable Care Act of 2010 into law. This landmark health care reform bill is one of the most expansive pieces of legislation enacted in decades and requires the federal government, as well as the private sector, to implement numerous changes to existing policies and practices over the next several years. Through its measures, this legislation will greatly increase the need for primary care in this country; thereby increasing the number of jobs in allied health in support of primary care. In response to the bill's passage, and consequently, the need to meet the demand for skilled workers in the health care industry, the Department of Labor (DOL) is making considerable investments in projects that focus on preparing participants for employment in the health care sector. This *Allied Health Access Guidebook: How to Develop Programs for Youth in Allied Health Careers* is one of many resources in support of that effort.

Other DOL efforts include:

- Awarding more than 30 percent of its grants under the High-Growth Job Training Initiative (HGJTI) and the Community-Based Job Training Grants (CBJTG) to programs that train workers for careers in the health care sector. Within these grants, approximately 60 percent of health care grants were directed to nurse training.
- Awarding of 39 grants, authorized by the American Recovery and Reinvestment Act of 2009 (Recovery Act) to provide training for healthcare subsectors such as Health Information Technology, Long-Term Care and Allied Health occupations. These grants support community colleges, community-based organizations, state workforce agencies and other public entities to deliver training that leads to employment in a range of health care fields and other growing industries.
- Awarding of four grants authorized by the Recovery Act to promote virtual service-delivery models in healthcare careers. One grant, awarded to the American Association of Community Colleges, will be used to develop a Healthcare Virtual Career Platform

**EMPLOYMENT AND TRAINING ADMINISTRATION
U.S. DEPARTMENT OF LABOR
WASHINGTON, D.C. 20210**

that assists individuals to explore and pursue health care careers. Three grants were awarded to national community organizations, Goodwill Industries International, the International Association of Jewish Vocational Services and SER-Jobs for Progress National Inc., which will assist individuals in career exploration in healthcare and other emerging and in-demand careers. These grants will help ensure access to appropriate computer technology equipment is available, and that staff and customers have adequate computer literacy and are aware of online career resources. The Healthcare Virtual Career Platform is under development and may be accessible to the public in summer 2011.

3. Publication Description. The health care industry as a whole – and especially the allied health care sector – has great promise for employing youth and young adults. Occupations in the allied health care field are not only in hospitals and doctors’ offices. There are growing numbers of positions needed in long-term care facilities, rural and urban health care centers and clinics, specialty facilities in rehabilitation therapies, firms providing administrative services to insurance companies, medical and dental practices, and many more.

While some allied health opportunities are in highly technical, demanding specialties, many allied health careers are open to anyone with a good basic education (e.g. a high school diploma or GED), good work habits – the “soft skills” of punctuality, communication, teamwork and reliability – and a modest amount of training. Just as important, many of these jobs can be used as excellent entry points to a career pathway leading to better pay and a bright future. National credentials, which can be earned in as little as six months to two years, are offered as alternatives to more lengthy and costly undergraduate degrees.

For these reasons, an allied health career can be an excellent field for youth who are at-risk, out-of-school, or have some other barrier to employment. Initial entry into the field is relatively easy, but it is important that the various career pathways that are available beyond these entry-level positions are presented. With the right support and encouragement, many individuals may find a successful long-term career in allied health. Although the beginning of the path may be an entry-level position, additional education and professional development can quickly lead to ever-increasing levels of responsibility and compensation.

The purpose of the *Allied Health Access Guidebook* is to provide youth program planners and service providers with practical information about allied health occupations in order to create or expand programs and services leading to allied health opportunities for youth and young adults. The guidebook has five sections. These include:

- What is Allied Health?
Description of the industry as well as the current and projected demand
- Allied Health Occupations
Basic labor market information on specific occupations and various career pathways
- Developing Programs for Youth in Allied Health Careers
Practical steps to creating a program in local areas
- Case Studies
Examples of programs developed around the country with valuable lessons learned

- Appendix
 - Additional resources to assist in program development

The intent of this guidebook is to provide a useful tool for program planners as they begin to assess the potential for an allied health program in their area, develop a program, and implement a plan. In addition, a simple checklist is provided on the first page of the appendix that may prove useful to youth service providers and planners as they begin to think about what is needed to start an allied health program in their community.

4. Availability. The *Allied Health Access (AHA!) Guidebook* may be downloaded at www.workforce3one.org under the Youth Services Directory. The HGJTI and CBJTG grant activities is available in the Investment Center (<http://www.doleta.gov/brg/grants>) and information on the Recovery Act awards is available online at http://www.doleta.gov/factsheet/ARRA_Health_and_Other.pdf.

5. Attachment. The *Allied Health Access (AHA!) Guidebook: How to Develop Programs for Youth in Allied Health Careers*.

U.S. Department of Labor Employment and Training Administration

Allied Health Access

How to Develop Programs for Youth in Allied Health Careers



This guidebook was prepared by TATC Consulting, Inc. under Contract No. DOLJ061A20356, Task Order DOLB091A20980, for ETA'S Division of Youth Services. While our intent was to accurately represent information obtained from State and local program operators and other sources, the content does not necessarily represent the official opinion or policy of the U.S. Department of Labor, Employment & Training Administration.

TABLE OF CONTENTS

Introduction	1
Allied Health Program Development Checklist	4
What Is Allied Health?	5
Allied Health Occupations	7
▶ Allied Health Categories	7
▶ In-Demand Occupations	10
Developing Programs for Youth in Allied Health Careers	13
▶ Guidance in Planning the Program.....	14
▪ Step 1: Local Area LMI Research.....	14
▪ Step 2: Partnership Building.....	15
▶ Guidance in Administering Programs	17
▪ Step 1: Informing Youth about Opportunities in Allied Health.....	17
▪ Step 2: Assessment.....	18
▪ Step 3: The Career Pathway and Career Planning	19
▪ Step 4: Managing the Transition Process.....	22
▪ Step 5: Supporting and Training Staff	23
Case Studies	24
▶ Baltimore, MD - Securing Strong Hospital Partners	25
▶ Eugene, OR - Using Technology to Introduce Allied Health in a Summer Program	28
▶ Lehigh Valley, PA - A Community-wide Transformation to Focus on Health Careers	31
▶ Los Angeles, CA - A Major Urban Commitment to Preparing Older Out-of-School Youth for Allied Health Opportunities	35
▶ Louisiana - Area Health Education Centers (AHECs) Have a Positive Impact on Summer Programs	39
▶ Northern Virginia - A Strong Community College and WIB Initiative.....	42
▶ Salem, OR - WIB, Community College, and Medical Center Collaborate on Curriculum Development	45

APPENDIX

▶ LEARN MORE ABOUT ALLIED HEALTH/ALLIED HEALTH OCCUPATIONS	47
▶ LABOR MARKET INFORMATION	48
▶ FULL OCCUPATION TABLES	50
▶ ADDITIONAL OCCUPATION TABLES	54
▶ CAREER PATHWAYS.....	56

PICTURED ON COVER:

- ▶ Robert Avery
U. of MD Hospital – Baltimore
- ▶ Tiffany Monroe
U. of MD Hospital - Baltimore
- ▶ Ahrea Felton-Hynes
Health Occupation Career Academy - Lane Workforce Partnership, Eugene, Oregon
- ▶ Juan Hernandez
Health Occupation Career Academy - Lane Workforce Partnership, Eugene, Oregon

INTRODUCTION

Setting the Context

On May 23rd, President Obama signed the Patient Protection and Affordable Care Act of 2010 into law. This landmark health care reform bill is one of the most expansive pieces of legislation enacted in decades and requires the federal government, as well as the private sector, to implement numerous changes to existing policies and practices over the next several years. Through its measures, this legislation will greatly increase the need for primary care in this country; thereby increasing the number of jobs in allied health in support of primary care. In response to the bill's passage, and consequently, the need to meet the demand for skilled workers in the health care industry, the Department of Labor is making considerable investments in projects that focus on preparing participants for employment in the health care sector. This guidebook is one of many resources in support of that effort.

The health care industry as a whole – and especially the allied health care sector – has great promise for employing youth and young adults. Occupations in the allied health care field are not only in hospitals and doctors' offices. There are growing numbers of positions needed in long-term care facilities, rural and urban health care centers and clinics, specialty facilities in rehabilitation therapies, firms providing administrative services to insurance companies, medical and dental practices, and many more.

While some allied health opportunities are in highly technical, demanding specialties, many allied health careers are open to anyone with a good basic education (e.g. a high school diploma or GED), good work habits – the “soft skills” of punctuality, communication, teamwork and reliability – and a modest amount of training. Just as important, many of these jobs can be used as excellent entry points to a career pathway leading to better pay and a bright future. National credentials, which can be earned in as little as six months to two years, are offered as alternatives to more lengthy and costly undergraduate degrees.

For these reasons, an allied health career can be an excellent field for youth who are at-risk, out-of-school, or have some other barrier to employment. Initial entry into the field is relatively easy, but it is important that the various career pathways that are available beyond these entry-level positions are presented. With the right support and encouragement, many individuals may find a successful long-term career in allied health. Although the beginning of the path may be an entry-level position, additional education and professional development can quickly lead to ever-increasing levels of responsibility and compensation.

The purpose of this guidebook is to provide youth program planners and service providers with practical information about allied health occupations in order to create or expand programs and services leading to allied health opportunities. The guidebook has five sections:

- ▶ **What is Allied Health?**
Description of the industry as well as the current and projected demand
- ▶ **Allied Health Occupations**
Basic labor market information on specific occupations and various career pathways

- ▶ **Developing Programs for Youth in Allied Health Careers**

Practical steps to creating a program in your local area

- ▶ **Case Studies**

Examples of programs developed around the country with valuable lessons learned

- ▶ **Appendix**

Many more resources to help you develop a program

We hope this guidebook proves to be a useful tool as you start to:

- 1) Assess the potential for an allied health program in your area,
- 2) Develop your program, and
- 3) Implement your plan.

To help you, a sample checklist is provided on the next page. We recommend you print this page out and offer it to your entire team. It may prove useful as you think about what is needed to start an allied health program in your community as well as a simple scratch sheet for you to jot down notes as you go through the rest of this guidebook.



ALLIED HEALTH PROGRAM DEVELOPMENT CHECKLIST

<p>Initiate Project</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Assemble Team <input type="checkbox"/> Review this Guidebook <input type="checkbox"/> Conduct Research: <ul style="list-style-type: none"> <input type="checkbox"/> Labor Market Information <input type="checkbox"/> Market Research <input type="checkbox"/> Assess resource requirements
<p>Plan Program</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Build Partnerships: <ul style="list-style-type: none"> <input type="checkbox"/> Community-Based Organizations <input type="checkbox"/> Educational institutions <input type="checkbox"/> Employers <input type="checkbox"/> Unions <input type="checkbox"/> Workforce system <input type="checkbox"/> Others <input type="checkbox"/> Develop Program: <ul style="list-style-type: none"> <input type="checkbox"/> Determine Occupation Targets/Pathways <input type="checkbox"/> Develop Curriculum and Materials <input type="checkbox"/> Establish Application Requirements <input type="checkbox"/> Define Credentials <input type="checkbox"/> Develop Outreach Plan: <ul style="list-style-type: none"> <input type="checkbox"/> Determine Target Audience <input type="checkbox"/> Select Distribution Channels
<p>Execute Program</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Train Staff <input type="checkbox"/> Distribute Outreach Materials <input type="checkbox"/> Begin Enrollment <input type="checkbox"/> Prepare Program Assessment and Evaluation

WHAT IS ALLIED HEALTH?

The occupation titles doctors and nurses usually come to mind when we think of the health care industry. Although lists differ, allied health represents at least 40 different professions.¹ Generally speaking, allied health encompasses the broad range of support services associated with providing health care. So what exactly is allied health?

The Patient Protection and Affordable Care Act (HR 3590) defines the term “allied health professional” as meaning an individual who graduated with an allied health professions degree or certificate, and is employed as an allied health professional in a health care setting. The Association of Schools of Allied Health Professionals expands upon its definition to include occupational titles and categories of services within the health care field.

DEFINITION OF ALLIED HEALTH

Allied Health professionals are involved with the delivery of health or related services pertaining to the identification, evaluation and prevention of diseases and disorders; dietary and nutrition services; rehabilitation and health systems management, among others. Allied health professionals, to name a few, include dental hygienists, diagnostic medical sonographers, dietitians, medical technologists, occupational therapists, physical therapists, radiographers, respiratory therapists, and speech language pathologists.

Allied health workers are found in virtually every sector of the health care industry. Metropolitan areas, which service larger populations, usually offer many different health service jobs due to the presence of:

- ▶ larger hospitals,
- ▶ more clinics,
- ▶ rehabilitation centers, and
- ▶ nursing and long-term care facilities.

Rural areas are also experiencing a critical shortage of allied health professionals for their operations. These settings include:

- ▶ community health centers,
- ▶ walk-in clinics, and
- ▶ private medical, dental, and mental health practices.

Also, a number of positions exist outside the traditional patient care environment. For example, public and private entities provide ambulances; medical equipment and supply manufacturers produce and sell products which require sales and maintenance professionals.

¹ http://www.healthpronet.org/ahp_month

Health care as a whole is one of the fastest growing industry sectors in the nation. In December, 2009, Bureau of Labor Statistics predicted that of the 30 fastest-growing occupations from 2008 to 2018, 17 will be in health care or medical research and that employment in health care is projected to increase by 21 percent or 1.6 million jobs. Acute workforce shortages and projected growth exist for allied health occupations in particular, such as medical assistants, respiratory therapists, pharmacy technicians, diagnostic medical sonographers, paramedics, and radiological and other technicians. BLS projects that by 2016 medical assistant occupations are expected to grow by 35 percent, paramedic occupations are expected to grow by 19 percent and radiological technicians by 15 percent.

RESOURCE LINK

“The allied health professions represent about 60 percent of the health care workforce and about 6 million jobs.”

Health Professions Network
<http://www.healthpronet.org/>

Allied health specifically is likely to evolve over the next several years, and it will almost certainly continue to grow with the rest of the health care industry. There is a strong present demand for allied health workers and the current trends suggest dynamic growth in the near and medium future. Part of the reason for this growth is that a “graying” population of baby boomers will require and demand more medical care, more rehabilitation, nursing and long-term care. This increasing demand will involve not only new facilities and services, but more employees needed across a wide range of occupations requiring varying levels of education and training.

Of the 24 occupations identified in this guidebook as being in-demand, all but one are projected to experience double digit growth from 2008 to 2018 (see Appendix). The projected need over this same period, due to growth and replacement needs, is estimated at a staggering 2.45 million positions.



ALLIED HEALTH OCCUPATIONS

The workforce system can play a vital role to help meet the needs of the allied health field by creating a pipeline of candidates prepared for these jobs. Assisting young adults at the outset to prepare for entry-level positions and guide them through the career planning process will help to ensure that a steady flow of trained workers are available. In order to help you understand the allied health industry, this section further defines the field and provides examples of several potential career pathways.

Allied Health Categories

Understanding the occupations in allied health is a first step in determining the possible pathways. There are a variety of ways to view the allied health care sector. For example, ExploreHealthCareers.org suggests that “allied health professions fall into two broad categories: technicians (assistants) and therapists/technologists.”

AllAlliedHealthSchools.com organizes their school listings as follows:

- ▶ Health Programs (e.g. dental assistant, medical transcription, etc.),
- ▶ Communication Sciences (e.g. audiology),
- ▶ Health Administration,
- ▶ Laboratory Sciences (e.g. medical lab technician, phlebotomy technician),
- ▶ Public Health,
- ▶ Physical Therapy, and
- ▶ Occupational Therapy.

This guidebook offers the categories of Diagnostic, Medical Services, Non-Direct Care and Rehabilitation as suggested by a report titled [An Analysis of Allied Health Occupations in the Commonwealth: Technical Report of the Allied Health Working Group](#) produced by the Pennsylvania Center for Health Careers in May, 2008².

These categories will form the basis for additional discussion on potential pathways later in this guidebook. Again, this list is not definitive and you may find other groupings that are more readily recognized by employers and/or educational institutions in your area.

The tables on the next two pages are from this report. The categories they use to describe allied health are provided with a sampling of occupations in that category and a brief description.

Note: Page numbers referenced in parentheses on the charts on the next page indicate the page in the original report.

IMPORTANCE OF ALLIED HEALTH

“The Governor and the PCHC recognize the importance of allied health occupations across the Commonwealth, especially given the growing shortages facing allied health workers who provide patient care and perform behind-the-scenes functions that enable the health care system to function effectively and efficiently.”

[An Analysis of Allied Health Occupations in the Commonwealth: Technical Report of the Allied Health Working Group](#), p. 1.

² <http://www.portal.state.pa.us/portal/server.pt?open=18&objID=490346&mode=2>

Diagnostic	Medical Services
<p>Cardiovascular Technologists and Technicians</p> <p>“Cardiovascular technologists and technicians assist physicians in diagnosing and treating cardiac (heart) and peripheral vascular (blood vessel) ailments.” (p. 18)</p>	<p>Dental Assistants</p> <p>“The duties of a dental assistant are among the most comprehensive and varied in the dental office and may include patient care, office, and laboratory tasks.” (p. 62)</p>
<p>Medical/Clinical Lab Technicians</p> <p>“Medical and clinical laboratory technicians prepare specimens and operate automated analyzers and perform manual tests in accordance with detailed instructions.” (p. 28)</p>	<p>Emergency Medical Technicians and Paramedics</p> <p>“Emergency medical technicians and paramedics determine the nature and extent of the patient’s condition while trying to ascertain whether the patient has preexisting medical problems at the scene of an emergency. Emergency medical technicians and paramedics provide appropriate emergency care and, when necessary, transport the patient to a hospital.” (p. 82)</p>
<p>Radiological Technologists</p> <p>“Radiological Technologist is the term that describes the medical personnel working in various imaging disciplines and specialties that use ionizing radiation (x-ray) and non-ionizing radiation for diagnostic medical imaging, interventional procedures, and radiation therapy.” (p. 49)</p>	<p>Medical Assistants</p> <p>“Medical assistants perform administrative and clinical tasks to keep the offices of physicians, podiatrists, chiropractors, and other health practitioners running smoothly.” (p. 93)</p>

Note: See also the Additional Occupation Descriptions section in the Appendix, page 52.

TECHNICIANS

“Technicians are trained to perform procedures, and their education lasts less than two years. They are required to work under the supervision of technologists or therapists. This part of the allied health field includes physical therapy assistants, medical laboratory technicians, radiological technicians, occupational therapy assistants, recreation therapy assistants, and respiratory therapy technicians.”

<http://ExploreHealthCareers.org/alliedhealthprofessions>

Non-direct Care	Rehabilitation
<p>Dental Lab Technicians</p> <p>“Dental laboratory technicians fill prescriptions from dentists for crowns, bridges, dentures, and other dental prosthetics. Dentists send a specification of the item to be manufactured, along with an impression (mold) of the patient’s mouth or teeth. Then they create the crowns, bridges, dentures, and dental prosthetics by manipulating molds, pouring the prosthetic materials, and shaping the prosthetics” (p. 137)</p>	<p>Occupational Therapists</p> <p>“Occupational therapists help people improve their ability to perform tasks in their daily living and working environments. Occupational therapists work with individuals who have conditions that are mentally, physically, developmentally, or emotionally disabling.” (p. 208)</p>
<p>Medical Appliance Technicians</p> <p>“Medical appliance technicians construct, fit, maintain, and repair braces, artificial limbs, joints, arch supports, and other surgical and medical appliances....Medical appliance technicians are also referred to as orthotic and prosthetic technicians.” (p. 156)</p>	<p>Speech-language Therapists</p> <p>“Speech-language therapists assess, diagnose, treat, and help to prevent speech, language, cognitive-communication, voice, swallowing, fluency, and other related disorders. They counsel individuals and their families concerning communication disorders and assist them in learning communication-enhancing techniques to use at home.” (p. 233)</p>
<p>Pharmacy Technicians</p> <p>“Pharmacy technicians perform routine tasks to help prepare prescribed medication for patients such as counting tablets and labeling bottles. They work under the supervision of a pharmacist and refer questions regarding prescriptions, drug information, or health matters to a pharmacist” (p. 190)</p>	<p>Respiratory Therapists</p> <p>“Respiratory therapists evaluate, treat, and care for patients with breathing or other cardiopulmonary disorders. Respiratory therapists assume primary responsibility for all respiratory care therapeutic treatments and diagnostic procedures.” (p. 117)</p>

THERAPISTS & TECHNOLOGISTS

“The educational process for therapists or technologists is more intensive and includes acquiring procedural skills. In addition, students of therapy/technology learn to evaluate patients, diagnose conditions, develop treatment plans, and understand the rationale behind various treatments in order to judge their appropriateness and potential side effects. Educational curricula teach students to evaluate patients’ responses to therapy and make appropriate decisions about continued treatment or modification of treatment plans.”

<http://ExploreHealthCareers.org/alliedhealthprofessions>

Note: See also the Additional Occupation Descriptions section in the Appendix, page 52.

In-Demand Occupations

With the sample occupations referenced on the previous page in mind, here is more specific data, at the national level, about occupations for which demand is generally the highest. In the tables on the following pages, information is drawn from the Bureau of Labor Statistics (BLS) regarding the most in-demand occupations that fall within the allied health sector (see the Appendix for complete tables, including SOC numbers).

These tables show the full depth and breadth of opportunities in allied health at a national level. It is important to note that, as these lists demonstrate a full range of education and training options make entry into allied health possible. A few occupations are included even though they are technically not allied health - nursing aides and home health aides - because they are often a first step on a career path to an allied health opportunity.

There are two tables dividing the occupations into two tiers. The *First Tier* represents those occupations for which many in the field (field, generally speaking, refers to the workforce system and educational institutions) have indicated they have or are developing programs to meet a need in their area. These occupations also require less extensive training and/or education than other allied health occupations, making them more accessible to youth program target populations. The *Second Tier* represents those occupations for which Bureau of Labor Statistics data indicates a demand. Demand in your local area may be different, therefore only use this information as a starting point for your own research and development purposes.

KEY TERM

SOC: Standard Occupational Classification

"... used by Federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data."

<http://www.bls.gov/SOC/>

DEMAND

"These are jobs that are in-demand. Participants who pursue these careers can write their own ticket."

Career Coach
Sinai Hospital - Baltimore



FIRST TIER (Numbers rounded to nearest thousand)

2008 National Employment Matrix Occupation Title	Total Job Openings*	Median Annual Wages	Typical Education and Training Category
Nursing Aides, Orderlies, and Attendants	422,000	\$23,850	Post-secondary vocational award
Medical assistants	218,000	\$28,300	Moderate-term on-the-job training
Pharmacy Technicians	182,000	\$27,710	Moderate-term on-the-job training
Medical and health services managers	99,000	\$80,240	Bachelor's or higher degree, plus work experience
Medical records and health information technicians	70,000	\$30,610	Associate degree
Radiologic Technologists and Technicians	68,000	\$52,210	Associate degree
Emergency Medical Technicians and Paramedics	62,000	\$29,330	Post-secondary vocational award
Surgical Technologists	46,000	\$38,740	Post-Secondary vocational award
Respiratory Therapists	41,000	\$52,200	Associate degree
Medical Transcriptionists	24,000	\$32,060	Post-Secondary vocational award
Cardiovascular Technologists and Technicians	19,000	\$47,010	Associate degree
Diagnostic Medical Sonographers	17,000	\$61,980	Associate degree

Note: See also the Additional Occupation Descriptions section in the Appendix, page 52.



SECOND TIER (Numbers rounded to nearest thousand)

2008 National Employment Matrix Occupation Title	Total Job Openings*	Median Annual Wages	Typical Education and Training Category
Home Health Aides	553,000	\$20,460	Short-term on-the-job training
Medical Secretaries	189,000	\$29,680	Moderate-term on-the-job training
Dental Assistants	161,000	\$32,380	Moderate-term on-the-job training
Dental Hygienists	98,000	\$66,570	Associate degree
Medical and Clinical Laboratory Technicians	55,000	\$35,380	Associate degree
Medical and Clinical Laboratory Technologists	53,000	\$53,500	Bachelor's degree
Physical Therapist Assistants	31,000	\$46,140	Associate degree
Dental Laboratory Technicians	15,000	\$34,170	Moderate-term on-the-job training
Occupational Therapist Assistants	12,000	\$48,230	Associate degree
Dietetic Technicians	10,000	\$26,080	Post-Secondary vocational award
Ambulance drivers and attendants, except Emergency Medical Technicians*	6,000	\$22,410	Moderate-term on-the-job training
Orthotic and Prosthetic Practitioner	2,000	\$62,590	Bachelor's degree

* Due to both growth and replacement needs (2008-2018)

Note: See also the Additional Occupation Descriptions section in the Appendix, page 52.

KEY TERMS

Short-term on-the-job training: Skills needed for a worker to become fully qualified can be acquired during a short demonstration of job duties or during 1 month or less of on-the-job experience or instruction.

Moderate-term on-the job training: Skills needed for a worker to become fully qualified can be acquired during 1 to 12 months of combined on-the-job experience and informal training.

Post-secondary vocational award: These programs lead to a certificate or other award, but not a degree. Some such programs last only a few weeks, while others may last more than a year.

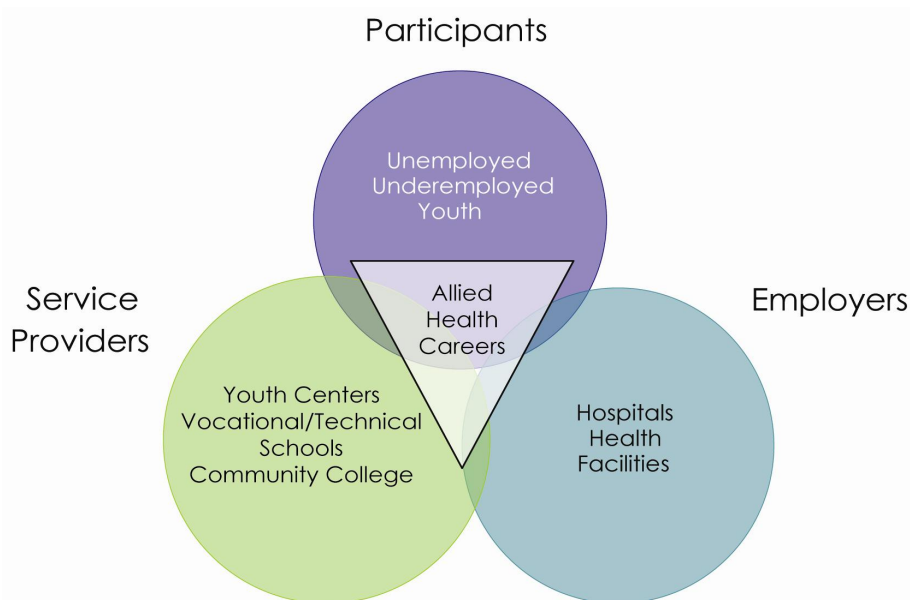
Occupations in this category include some that require only the completion of a training program and some that require individuals to pass a licensing exam after completion of the program before they can work.

http://www.bls.gov/emp/ep_nem_definitions.htm#education

DEVELOPING PROGRAMS FOR YOUTH IN ALLIED HEALTH CAREERS

This section provides information for local planners on developing allied health career programs for youth with barriers to employment. It also provides guidance on administering programs, particularly for staff providing services to participants. This process starts with an analysis of the local labor market to determine the presence of opportunities in the various allied health occupations.

The next step is securing the fundamental partnerships that are essential for a successful program. As set out in the graphic below, those partners include: services supporting youth entering into the program, the service providers, trainers, and educators for activities during the program, and the employers - in most cases hospitals and other health care facilities. In this section we start with labor market information analysis, focus on partnership development, and then examine the features required for the administration of a successful program that provides the career pathway for participants through to employment in an allied health occupation. For each step, we will reflect the experience of seven local areas which have been successfully supporting youth through their career pathway. The full case studies for these local programs are included in the next section of the guidebook.



CASE-IN-POINT: USING LABOR MARKET INFORMATION

The Lehigh Valley Workforce Investment Board has worked to align education and training institutions with employer and employee needs. Education, workforce planning and economic development have been interconnected to ensure that workers have the skills training and educational background needed to be competitive for higher wage jobs and career advancement.

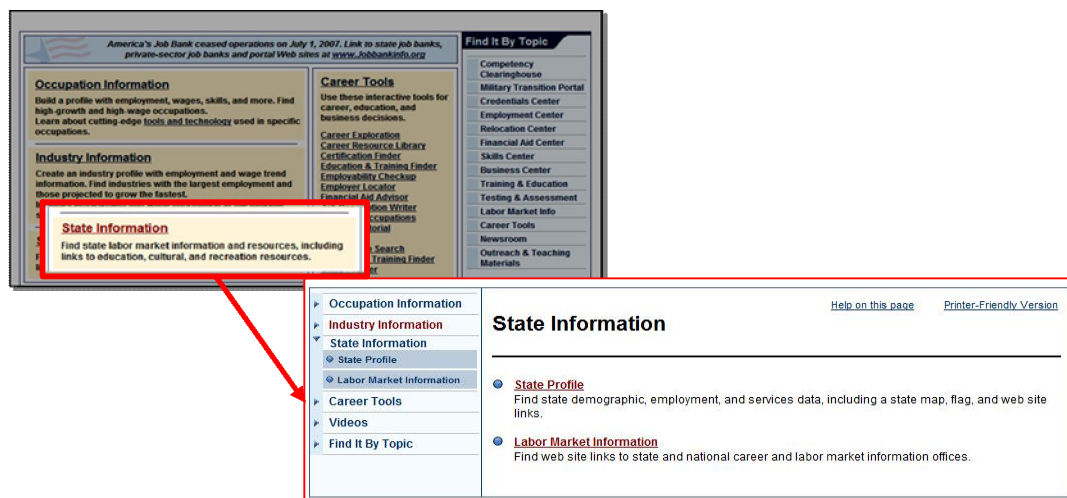
See [A COMMUNITY-WIDE TRANSFORMATION TO FOCUS ON HEALTH CAREERS Case Study](#), p. 31 for more information.

Guidance in Planning the Program

An important first step is determining the level of employment and future opportunities in allied health in your community.

Step 1: Local Area LMI Research

Start by going to the CareerOneStop.org Web site and conduct research on your state as well as neighboring states.



Click the [State Profile](#) link and after selecting the state of interest, you will find radio button options to see which occupations have:

- ▶ the fastest growth rate,
- ▶ the most openings,
- ▶ the largest employment,
- ▶ declining employment, and
- ▶ highest pay.

CASE-IN-POINT: USING LABOR MARKET INFORMATION

Lehigh Valley, Pennsylvania is a good example of an area taking a comprehensive approach to labor market planning. With the closure of several major industries, including Mack Trucks, Mont Blanc Pens, and Circuit City's distribution centers, the area undertook a comprehensive survey and study of labor market projections to determine the economic impact, identify future employment opportunities, and determine potential business opportunities and jobs which might provide a livable wage for community residents.

The educational and skills requirements of the jobs were also assessed. The study determined that health careers offered not only a solution to the "jobs" crisis in the community, but also provided an opportunity to address concerns with the quality of health care as well. It was determined that the Lehigh Valley would need to develop a comprehensive health system in the counties that make up the Valley, with a primary feature being the training and development of a health care workforce.

See [A COMMUNITY-WIDE TRANSFORMATION TO FOCUS ON HEALTH CAREERS Case Study](#), p. 31 for more information.

In addition, you can search occupations by the amount/type of education and training needed (e.g. post-secondary education, or bachelor's degree or higher). Finally, you can find the largest employers and other state information resources.

Clicking the [Labor Market Information](#) (LMI) link will take you to a list of states. Select the one of interest and you will be presented with a summary list of resources that will give you state specific LMI. Most states have a wide array of LMI resources available to the public and are happy to help provide as much targeted data as possible.

Every jurisdiction and workforce area should build its strategy on local and regional realities. In no occupational area is this truer than in allied health. Inform yourself on the specifics in your area in order to develop a program that meets employer needs and provides opportunities for young adults in your community.

Step 2: Partnership Building

Developing an allied health program for youth requires the inclusion of three principal partners:

- ▶ The agencies responsible for recruiting and enrolling the youth, and supporting them on their career pathway
- ▶ The institution responsible for training and/or educating the youth
- ▶ The health industry employers

In most situations, recruiting and enrolling the youth will be the responsibility of community-based organizations. Training and education for allied health occupations is often provided by community colleges, but this can vary based on the specific occupation. Employers are most often hospitals and other major health care providers. Other partners can be included, such as agencies providing supportive services.

Partnering is critical because taking a young person through an extended career pathway to eventual employment in an allied health occupation can involve several steps along the way, and the path needs to be coordinated and integrated whenever possible.

What are the incentives for partnering? In many if not most communities, there is a shortage of candidates for allied health occupations. Hospitals and other health care employers should be interested in programs and services that can help them recruit candidates to address those shortages. Those same institutions are also concerned about community relations, and want to be involved with programs that serve the needs of the community as well. Partnerships can also serve to leverage services and resources that extend the reach of the program.



CASE-IN-POINT: DEVELOPING PARTNERSHIPS

The City of Baltimore's Health Care Careers Alliance program includes strong partnering arrangements. Their program has been operating for nearly six years, and includes features that reflect their commitment to continuous improvement.

- ▶ **Strategic planning** - all of the partners, including the three hospitals, are members of the WIB Youth Council
- ▶ **Program design** - with the support of the Mayor's Office of Employment Development (MOED), each partner participated in curriculum design and they developed the system for credentialing
- ▶ **Coordinating services** - the hospitals employ career coaches who work with participants from the time that they are recruited and enrolled, through their training, hiring, and subsequent education
- ▶ **Leveraging resources** - MOED cooperates with the Department of Social Services and other agencies to make their services available to the program at no cost to the project

See [SECURING STRONG HOSPITAL PARTNERS Case Study](#), p. 25 for more information.

Partnering in rural settings and other underserved areas can be enhanced through area health education centers (AHECs). AHECs are academic and community partnerships that provide health career recruitment programs for K-12 students and increase access to health care in medically underserved areas. AHECs address health care workforce issues by exposing students to health care career opportunities that they otherwise would not have encountered, establishing community-based training sites for students in service-learning and clinical capacities, providing continuing education programs for health care professionals, and evaluating the needs of underserved communities.

Guidance in Administering Programs

Programs guiding youth through a pathway to employment in allied health occupations take many forms, as exemplified by the case studies in the next section. Such programs can focus on in-school youth as early as middle school to point students in the direction of allied health opportunities. In contrast, programs can be directed to older out-of-school youth who require specific assistance to transition them through education and training and on to employment in an allied health occupation or one leading to allied health. The following sections provide information to assist program staff, particularly those offering direct services to participants.

Step 1: Informing Youth about the Opportunities in Allied Health

A critical first step is to inform a young person about health occupations and specifically about allied health opportunities. The purpose of this guidebook is to introduce staff to allied health in order to be better prepared to guide youth. Young people will want to know:

- ▶ What do people do in an allied health occupation?
- ▶ How much do these jobs pay?
- ▶ How long do I have to go to training or school to qualify?
- ▶ Will I be able to get a job after I prepare?

CASE-IN-POINT: OUTREACH

The Lane Workforce Partnership in Lane County, Oregon provides information through a Web-based tool on the career pathway for several allied health occupations. The Web site identifies the starting options on the career pathway, points to the course work required for certification, and then points to the target occupation. When you click on the occupation, the site links you to a full description of the job that is provided by the Oregon Employment Department.

See **USING TECHNOLOGY TO INTRODUCE ALLIED HEALTH IN A SUMMER PROGRAM Case Study**, p. 28 for more information.

The Baltimore Alliance for Careers in Health Care offers a Web-based tool providing career maps and information on available services. This tool organizes health careers (including allied health) into three categories - technician, patient care, and administrative, and groups occupations by the length of training required. It also lists the most in-demand occupations in the Baltimore area, and links to the U.S. Department of Labor Career One Stop Web site which provides full information on each of those occupations.

See **SECURING STRONG HOSPITAL PARTNERS Case Study**, p. 25 for more information.

Two of the case study sites use charts and posters that have proven helpful in informing young people and providing answers to the questions above.

There are other excellent techniques for introducing young people to allied health. Job shadowing is an approach being used by the Lehigh Valley, Pennsylvania Workforce Investment Board program and the ECHO program in Lafayette, Louisiana.

Several of the case study sites also use work experience and internships to expose participants to health care work settings.

RESOURCE LINK

Lane County, Oregon

<http://www.lanecc.edu/pathways/maps/healthservices-overview.html>

Step 2: Assessment

An objective assessment is a fundamental aspect of all youth employment programs. It is particularly important when entering a career pathway to an allied health opportunity.

The following elements should be considered when designing the assessment feature of an allied health program:

- ▶ **Interest in entering the allied health field** - Candidates for programs leading to allied health opportunities should first understand health occupations in general in order to express their interest in entering the field. A variety of career discovery tools are available to help guide young people and potentially spark their interest in the field. One example is the "Discover Career Planning Tool" (<http://actapps.act.org/eDISCOVER>) used by the Reconnections Health Care Training Academy in Los Angeles.
- ▶ **Knowledge of what is involved and expected of personnel working in the health care field** - Assessment can be undertaken with the support of Web-based information and videos, or directly through job shadowing or work experience. Information on requirements for entering the field, such as being "drug free" or having no criminal history are also available on these sites. See the appendix under "Learn More About Allied Health/Allied Health Occupations" for sources of Web-based information.
- ▶ **Basic skills capabilities** - Specific allied health occupations and the training to prepare for those jobs often require a specific skill level in reading and mathematics. Assessing basic skills levels is the first step in addressing deficiencies. Several of the case studies include the capability to assess basic skills competencies and the programs providing basic skills remediation.
- ▶ **Commitment to the field, employer, and specific occupation** - As participants proceed through the steps in their program, there should be a mutual assessment of the degree of commitment to the field, occupation, and anticipated employment site. Allied health involves a wide variety of work situations, many of which are very rewarding but demanding and stressful. Many young people will be drawn to the challenge and stimulated by it, but others may find that this is not the type of work they want to pursue. The Baltimore Health Care Careers Academy provides the opportunity to learn about several occupations before committing to a specific career pathway. The Los Angeles Reconnections Health Care Training Academy uses a "Most to Benefit" rating tool and interviews to discern the participant's anticipated level of engagement in the program before proceeding with the occupational training phase.

CASE-IN-POINT: ASSESSMENT

Participants in the Los Angeles program are enrolled initially with no stipends in a 20 hour orientation period. During this period candidates take the CASAS test, sign into the Discover Career Planning Tool, which is the foundation for the Individual Educational Plan, participate in a psychometric assessment, and complete the "Most to Benefit" rating tool. The rating tool is used to assess the candidate's readiness for the Reconnections Academy. Participants also take a work readiness assessment prior to transitioning into the classroom activity.

Discover Career Planning Tool: <http://actapps.act.org/eDISCOVER>

See [A MAJOR URBAN COMMITMENT TO PREPARING OLDER OUT-OF-SCHOOL YOUTH FOR ALLIED HEALTH OPPORTUNITIES Case Study](#), p. 35 for more information.

Step 3: The Career Pathway and Career Planning

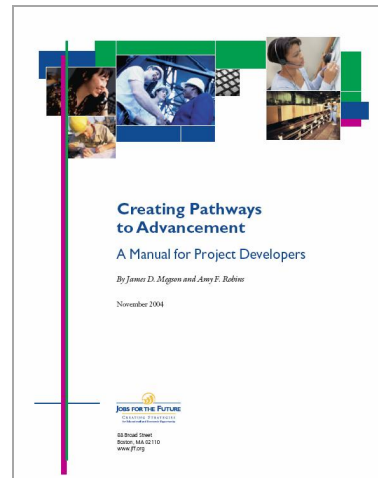
A career pathway is, simply put, a road map that helps a person considering entering a particular field understand the full range of jobs available to them. Like a road map, career pathways do not necessarily prescribe any particular path a person should take. Rather, it provides information on the additional education and training needed to advance within a field and what increase in wages can be expected. For example, a person may start as a medical records clerk but with experience and ongoing education, he/she can move up the career ladder, becoming a medical records technician, then a medical record coder, and ultimately a certified medical record coder.

Career pathways are particularly important for young adults with barriers to employment. By understanding that an entry-level position is just a first step, youth can realistically plan for their future and have a better understanding of what is needed for long-term success. This approach also benefits employers who need a steady pipeline of workers at all levels of their organization.

While numerous examples of career pathways exist, you should work with local employers and educational institutions to develop career pathways most relevant to your area. A number of resources are available to help you do this (see Appendix, p. 54). In particular, Jobs For the Future offers a guide specifically for helping low-skilled workers understand career pathway opportunities and bases their work on a project in a hospital.

A systematic approach calls for the careful judgment of program designers to assemble all the tools needed, then the informed judgment of case managers or other front-line workers with youth in assembling an individualized plan. Based on the case studies and other sources, the following is a menu for program and service strategies along the allied health career pathway:

RESOURCE LINK



<http://www.workforce3one.org/view/1834/info>

Please note: Workforce3One is a free resource but requires registration.

SERVICES AND STRATEGIES:	EXAMPLE OR RESOURCE:
Short-term subsidized or unsubsidized placement (summer or otherwise)	<ul style="list-style-type: none"> ▶ Internships in a range of occupational areas The Baltimore Health Care Careers Alliance provides internships in a range of occupational areas, such as: <ul style="list-style-type: none"> ▪ Admitting Specialist ▪ Patient Care Technician ▪ Radiology Patient Aide (see the Baltimore case study) ▶ The ECHO program in Lafayette, Louisiana provides training in a clinical setting, including such areas as pharmacy and dietetics (see the Louisiana case study)
Work readiness training	<ul style="list-style-type: none"> ▶ Initial six-week period in Baltimore includes work readiness and other pre-placement skills such as CPR and first aid (see the Baltimore case study) ▶ The ECHO program in Lafayette, Louisiana provides work readiness training in such areas as job applications, interviewing, understanding employer expectations, and problem solving skills.
Literacy and numeracy remediation, based on academic assessments	<ul style="list-style-type: none"> ▶ The Los Angeles "Reconnections Health Care Training Academy" provides a focus on basic skills remediation based on the CASAS assessment completed at program entry (see the Los Angeles case study)
Bridge programs	<ul style="list-style-type: none"> ▶ Northern Virginia Community College (NOVA) and the Northern Virginia WIB administer a "bridge" program that allows high school seniors interested in health careers to be co-enrolled in NOVA during their senior year, and upon graduation receive certification in an allied health occupation (see Northern Virginia case study)
GED and high school options for those without diplomas	<ul style="list-style-type: none"> ▶ Baltimore provides GED preparation support during the initial six-week cycle of their program (see the Baltimore case study)
Career fairs with allied health employers, matching openings with candidates	<ul style="list-style-type: none"> ▶ Area Health Education Centers provide a wide range of information on local health careers and employers (see http://bhpr.hrsa.gov/grants/area.htm) ▶ The Baltimore program provides an opportunity for participants to explore a range of opportunities at the three hospitals, including eight occupational areas. During the initial six weeks of training, they have the opportunity to interview and match with the job that best fits their interest (see Baltimore case study)
Short-term, certificate training	<ul style="list-style-type: none"> ▶ The Los Angeles Reconnections Health Care Training Academy provides the most comprehensive pathway to allied health opportunities. Their program includes five specific training courses leading to certification and placement (see the Los Angeles case study and flow chart)
Long(er)-term, certificate training	<ul style="list-style-type: none"> ▶ The Northern Virginia Community College Bridge program provides longer-term certificate training in radiology (see the Northern Virginia case study)

SERVICES AND STRATEGIES:	EXAMPLE OR RESOURCE:
	<p>Baltimore through its hospital partners supports program graduates in the pursuit of longer-term certificate training. (see the Baltimore case study)</p>
Apprenticeships	<ul style="list-style-type: none"> ▶ Apprenticeship offers important career pathway opportunities in several allied health occupations (see the two briefing papers and other apprenticeship information at http://www.doleta.gov/OA/) <p>See Appendix, p. 46 for more information on these papers.</p>
Enrollment in associate degree community college programs	<ul style="list-style-type: none"> ▶ The three case studies that feature community colleges - Lane, Chemeketa, and Northern Virginia Community College all have extensive AA degree programs in allied health (see the case studies)
Enrollment in bachelors degree college programs	<ul style="list-style-type: none"> ▶ Baltimore's career pathway opens up the possibilities of long-term training, including a bachelors degree (see the Baltimore case study)
Retention support activities and follow up with all placement sources	<ul style="list-style-type: none"> ▶ Baltimore works effectively at supporting participants during their follow-up period. Career coaches continue to guide program graduates and encourage them to continue on their career pathway (see the Baltimore case study)

Importance of Post-Secondary Education

A major concept and foundation for expanding allied health careers in Lehigh Valley is the notion that “the new high school diploma is an associate degree”. It is reinforced and discussed with students, older and out-of-school youth, displaced workers and mature workers. This AA degree along with certified training in allied or professional health careers and jobs in the expanding regional health system, guarantees that workers will receive a livable and expanding wage in the Lehigh Valley community.

Executive Director - Lehigh Valley WIB



Step 4: Managing the Transition Process

The journey from program entry through to employment in an allied health occupation is often a long one, and providing for a smooth transition from one stage to the next is critical to the success of the journey. Three program features can help make the transition succeed.

- ▶ **A carefully designed program.** The key element to success is a carefully and thoroughly designed program that details how participants move from one activity to the next. The Los Angeles Reconnections Health Care Training Academy is an excellent example. Following initial recruitment and orientation to the world of work and health care, participants spend 167 hours in work experience, job shadowing and occupational mentoring. These activities are followed by a transition point when the case manager and participant review the experience to date and jointly make a decision whether to continue on the health care career track. If the decision is to continue, then the next stage of the program is entry into the formal training period, with assessment and testing to determine which career area is best for the participant, and whether basic skills remediation is needed to ensure success in the specific health care training. At each stage, the participant and case manager work closely together to set the plan for the next stage, and ultimate employment in the allied health job.
- ▶ **A strong case manager or career coach.** Another key element to successful transitioning is the role of a case manager or career coach that can assist the young person throughout the process. The career coach for the Baltimore Health Care Careers Alliance is involved with the participant each step along the way. The coach is employed by the hospital where the participant will be placed in their internship and is involved with the initial selection of participants. The coach then guides the youth in determining which hospital and set of occupations best suits their skills and interest. This includes arranging visits to the hospitals and interviews with the coach at that hospital. When participants complete their initial six weeks of training, they transition to their six weeks of work experience at the selected hospital. By this time, they are well acquainted with their coach and with their work at the hospital. During the six week internship, participants and coaches work on placement in full-time employment. Once placed, the coach continues to work with them during the one year follow up period and beyond. During this timeframe, they progress along their career pathway with the support of the coach and the employing hospital. Participants are guided into training opportunities that will enable them to reach their career goal.
- ▶ **A committed and enthusiastic participant who is involved in his or her case management.** Key to successful transitioning is a participant who fully understands the pathway, is involved with the decision making, and is enthused about the opportunities ahead of them. The effective provision of information and support can help a youth become prepared and excited for the journey.



Step 5: Supporting and Training Staff

Preparing and supporting staff is critical to creating and maintaining a successful program. It is essential for all staff providing direct services to participants to have a full picture of the resources available in the community, both specific to allied health as well as the health care industry as a whole. This broad context will ensure staff understand and appreciate all of the potential career pathways that their participants may undertake. The workforce investment board and its related organization are the primary source of information about the community and as such can be instrumental in supporting your staff. The information they have and acquire on an ongoing basis can be readily shared with staff through periodic in-service training, social service requests or other supports. Community colleges, often key partners in the workforce development system, can do the same through recommending current and upcoming course offerings and career pathway developments.

Another important resource in many areas is the area health education center (AHEC). AHECs are academic and community partnerships that provide health career recruitment programs for K-12 students and increase access to health care in medically underserved areas. The work of the AHECs can be seen in their role in the ECHO program in Lafayette, Louisiana (see the case study). Staff development and training for ECHO is coordinated by the local AHEC and conducted through state trainings, in-service sessions, and parent/student orientations.



CASE STUDIES

The following section presents case studies on seven programs which have successfully incorporated opportunities for access to allied health occupations into their youth services design. These programs are cited in several places in the first section of the guidebook. The studies represent a range of strategies. Some are specifically summer programs and others focus on older out-of-school youth. The case studies provide a variety of approaches that can assist local officials in planning programs, resources for more information about allied health and contact information for each of the studies.

- ▶ Baltimore, Maryland – Page 25
Health Care Careers Alliance
Securing strong hospital partners

- ▶ Eugene, Oregon – Page 28
Lane Workforce Partnership
Using technology to introduce allied health in a summer program

- ▶ Lehigh Valley, Pennsylvania – Page 31
Lehigh Valley Workforce Investment Board
A community-wide transformation to focus on health careers

- ▶ Los Angeles, California – Page 35
Reconnections Health Care Training Academy
A major commitment to preparing older out-of-school youth for allied health opportunities

- ▶ Louisiana – Page 39
ECHO (Exploring Careers in Health Occupations)
Area Health Education Centers (AHECs) have a positive impact on summer programs

- ▶ Northern Virginia – Page 42
NOVA (Northern Virginia Community College) and The SkillSource Group (WIB)
A strong community college and WIB initiative

- ▶ Salem, Oregon – Page 45
Enterprise for Employment and Education (Workforce Investment Board), Chemeketa Community College, and the Willamette Valley Medical Center
WIB, community college, and medical center collaborate on curriculum development

SECURING STRONG HOSPITAL PARTNERS

▶ Health Care Careers Alliance

Baltimore Workforce Investment Board Youth Council
Baltimore, MD

The Health Care Careers Alliance is a partnership among Civic Works (Baltimore's Urban Service Corps) and three leading Baltimore hospitals (Johns Hopkins Health Systems, Sinai Hospital of Baltimore, and the Incorporated University of Maryland Medical System) that prepares youth, ages 18 – 21, for entry-level jobs in the health care industry. The alliance provides job training sessions for 75 participants each year and then places them in internships at the partner hospitals. Upon successful completion of an internship, Health Care Careers Alliance participants are offered full-time jobs earning a minimum of \$8.50 per hour with benefits. Since its inception in 2004, the Health Care Career Alliance has served 537 out-of-school youth: 91% completed the training; 84% received credentials in Allied Health; 81% were placed in unsubsidized employment related to allied health; and 43% enrolled in post-secondary education or advanced occupational skills training related to allied health upon completion of the program.

RESOURCE LINK

BACH Career Guide

www.baltimorealliance.org/careers/index.html

PLANNING

In 2004, the Baltimore Workforce Investment Board identified the six principle growth industries. Health care represented the industry with the greatest growth potential. Through a competitive request for proposal, the Health Care Careers Alliance, Civic Works and three local hospitals responded. The program has been in operation for six years; and has expanded to include the Baltimore Alliance for Careers in Health Care (BACH). Founded in 2005, BACH is dedicated to eliminating the critical shortage of qualified health care workers in Baltimore by working with local agencies, health care institutions and other organizations to create opportunities for residents to pursue careers in health professions.

PARTNERS

The strength of the Health Care Careers Alliance is in its partnerships. The three hospitals represent the major health care providers in the city. The strong partnership is exemplified by the cooperative development of a common program design utilized by all three hospitals, the commitment to hire graduates, and the leveraging of resources such as the mutual development of certification requirements and working together to place participants in the most appropriate internship.

In addition, all of the partners serve on the Workforce Investment Board's Youth Council, where they have the opportunity to work on strategic issues together. The Mayor's Office of Employment Development (MOED) provides oversight, policy leadership, and guidance to the project. Technical support is provided to the partnership by the MOED Youth Career Development Services Division.

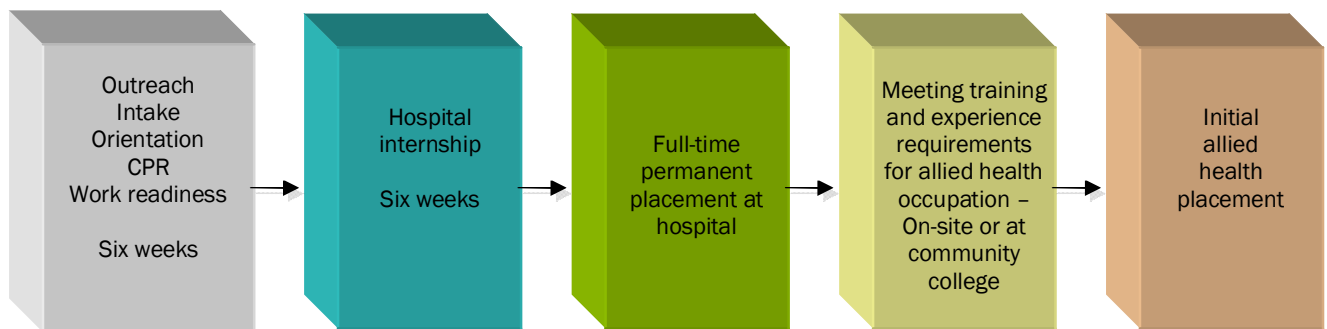
THE PROGRAM DESIGN AND CAREER PATHWAY

The program is divided into two six week segments. The first segment includes work readiness, CPR certification, academic classes including GED preparation, and communications. After the first two weeks, participants receive a stipend. During the fifth week, participants tour the three hospitals and have an opportunity to observe the variety of internship assignments available to them.

These include:

- ▶ Admitting Specialist
- ▶ Client Services Representative
- ▶ Floor Technician
- ▶ Medical Records Clerk
- ▶ Patient Care Technician
- ▶ Patient Transporter
- ▶ Radiology Patient Aide
- ▶ Materials Management

HEALTH CARE CAREERS ALLIANCE CAREER PATHWAY



A career coach is designed to serve the participants enrolled at each of the hospitals. During the first six week phase, the career coach interviews and assesses participants, assists with securing support services such as child care, and assists participants with the selection of an appropriate internship. During the second six weeks, the career coach assists the participants and site-supervisors to ensure the success of the internship. During the course of the internship, the career coach develops the full-time employment opportunity for the participant.

The career coach utilizes the credentialing tool that has been developed and approved by all three hospital partners to ensure the integrity of the credential. These industry credentials expand the opportunity for participants to work in the partner network of hospitals as well as their additional facilities associated with each partner hospital. Permanent placement most often occurs in the hospital where the internship was provided.

Career coaches have also been successful in guiding youth to careers that require formal education in a post-secondary setting such as surgical technician and respiratory therapist. These career occupations require two years of study at the local college or community college in addition to on-site work experience before certification can be achieved.

Once employed, youth are eligible for career development through their employing health care facility. Career coaches continue to support their developmental growth by promoting additional training and education at local colleges and the Baltimore City Community College which offers a wide array of allied health training programs. This follow-up service is provided for a minimum of 12 months.

SKILLS TRAINING

Initial skills training is provided by Civic Works and occurs during the first six weeks of the program. During this time, participants receive instruction in first aid, CPR, and soft skills; which staff prefer to call "essential skills". Training in specific occupational areas is provided through the subsequent six week internship. Skills training beyond the point of permanent hire are supported by the respective hospitals, and can include in-house training and, more importantly, tuition reimbursement at local colleges and institutions for further training in their career path.

PREPARING STAFF

The three career coaches are the core staff for the program. Career coaches must have expertise in providing services to youth as well as comprehensive knowledge of the health care facilities in the area and in-depth knowledge of community resources. MOED provides regular in-service training on administrative requirements and current information on available social services in the community.

CONTACT: **Alice Cole** Mayor's Office of Employment Development
Director, Youth Career 101 W. 24th Street
Development Services Division Baltimore, Maryland 21218
Telephone: 410.396.6722
acole@oedworks.com

USING TECHNOLOGY TO INTRODUCE ALLIED HEALTH IN A SUMMER PROGRAM

▶ Health Occupations Career Academy Program

Lane Workforce Partnership
Eugene, OR

The Lane Workforce Partnership is the workforce board serving residents in the Lane county area. The Partnership implemented a summer youth employment experience which utilized technology to introduce youth to careers and career pathways in health careers that included a wide variety of careers in allied health. This summer employment program enrolled 19 youth, 12 (63%) in school and 7 (37%) out of school. Of the youth enrolled in the Academy, 95% completed the training component and 100% went into subsidized training.

The nature of this program was to introduce youth to careers in allied health over a short period of time which did not result in credentialing or unsubsidized employment.

PLANNING

In 2009, the Lane Workforce Partnership's "Health Care Workforce Report" was conducted, emphasizing health care as one of the top growing industries; with growth projections of 23% from 2008 to 2018. Lane Community College was awarded a grant to develop career pathways in three of the targeted areas: health care, green jobs and construction/trades.

PARTNERS

Partners included the Health Occupations Career Academy Program (CAP) which provided training and educational instructors from Lane Community College; and the Lane Workforce Partnership, which provided contract management. Formal training classes were held at the Community College, while work experience and job shadowing sites were developed at health care facilities throughout Eugene and Springfield.

THE PROGRAM DESIGN AND CAREER PATHWAY

CAP provided an introduction to a variety of careers in the field of allied health. The participants spent their classroom time in a technology environment studying the Community College's standard medical terminology curriculum. They spent four hours per day, four days per week, for four weeks until they demonstrated mastery of the curriculum. The Career Pathways information was an integral part of the instruction. Each youth was co-enrolled in the WIA program and as a Lane Community College Academy student. The benefit of co-enrollment was that participants were able to earn dual credits for both high school and college. The college is a long-term partner in local workforce development efforts and answered the Summer Jobs and Careers Program RFP from the local area WIB.

CAP developed integrated pathways to educate youth on the variety of opportunities in the health industry. The models include training and education requirements needed to acquire each progressive step. The Visual Integrated Health Career Pathways can be viewed online.

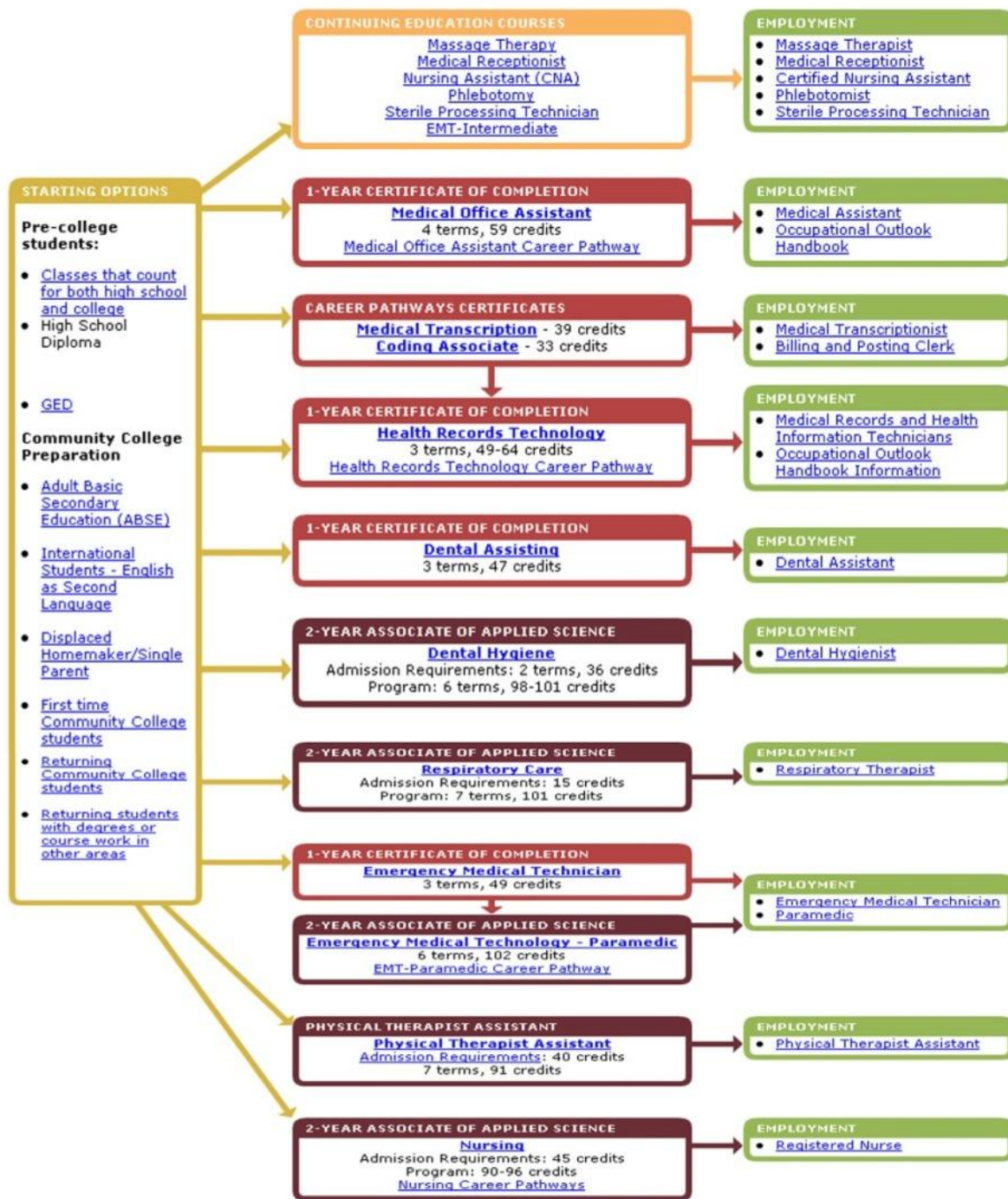
RESOURCE LINKS

Lane Workforce Partnership's Health Care Workforce Report

http://www.laneworkforce.org/Press_Publications/HealthCareReport.pdf

Labor Market Information

<http://www.qualityinfo.org/olmisj/OlmisZine>



The career-centered pathway model allows youth with varied levels of education and experience to enter the pathway at the appropriate entry point. This model provides information on: educational requirements, types of careers and current job openings within each cluster, and certifications and/or degrees required. CAP's electronic pathways model illustrates how post-secondary education and unsubsidized employment are aligned through a pathway schematic.

CAP's seven week schedule included:

- Hands-on Lab at Lane Community College: Monday and Tuesday - 9 am – 12 noon.
- Co-op Seminar: Wednesday - 9 am – 11 am. Explore workplace readiness, personal finance, health careers exploration, career pathways, résumé writing and mock interviews.
- Work Experience: Thursday.

The primary focus of this summer program was to provide paid work experience and occupational training in health care careers and introduce participants to career pathway models identifying additional certificate training or post-secondary education required to advance in this field. At the conclusion of the summer program eligible older youth, ages 22-24, were enrolled in the WIA Adult program, where they could be afforded the opportunity to enroll in training programs in the health care industry. All participants received the opportunity to earn up to five college credits from Lane Community College: one college credit for every 36 hours spent at the work experience location and two college credits for the “Hands-on Lab”.

Local health care providers benefited from this program by utilizing the CAP summer program participants as their pool of prospective employees.

RESOURCE LINKS

CAP Pathway Schematic

<http://www.lanecc.edu/pathways/maps/healthservices-overview.html>

SKILLS TRAINING

Students learned basic health/patient care skills, explored a variety of health professions, developed skills in workplace readiness, and completed a First Aid/Adult CPR course. After completion of the medical terminology class, participants were provided work experience or job shadowing in a health care setting supervised by a preceptor/mentor. Participants were able to utilize their basic skills training at their worksites. Lane Community College provided these opportunities at its own Health and Dental Clinics and through cooperative education placement and the college's strong relationship with area health care facilities such as Peace Health Hospital, Cascade Occupational Health, Good Samaritan and Eugene Speech and Hearing.

CONTACT:

Paula M. Medaglia
Senior Program Coordinator
paulam@laneworkforce.org

Lane Workforce Partnership
300 Country Club Road, Suite 120
Eugene, OR 97401
Telephone: (541) 682-7225
Fax: (541) 686-3570

A COMMUNITY-WIDE TRANSFORMATION TO FOCUS ON HEALTH CAREERS

▶ Lehigh Valley Workforce Investment Board, Inc.

Lehigh Valley, PA

The Lehigh Valley Workforce Investment Board, Inc. has given priority to the development of health careers to enhance employment opportunities and to support the needs of residents of the community. All programs include a focus on the health field, including summer youth employment and several other youth serving activities.

PLANNING

A focus on health occupations became paramount in the Lehigh Valley when several large corporations closed, relocated or downsized, including Mack Trucks and Circuit City's distribution centers and a number of others. The Lehigh Valley WIB developed a strategy for this large group of newly unemployed workers that included determining the economic impact and identifying potential employment and business opportunities that could provide a livable wage for community residents. Through this process, the Lehigh Valley WIB determined that health careers offered not only a solution to the jobs crisis, but also an opportunity to address concerns with the quality of health care as well. It was determined that the Lehigh Valley would need to develop a comprehensive health system, including capacity for employment and training. The WIB has worked to align education and training institutions with employer and employee needs.

A survey conducted by the Lehigh Valley WIB suggested that the following careers are high priority in the Lehigh Valley Community. These include: home health aides, nursing aides, orderlies and attendants, medical and clinical laboratory assistants, radiologic technologists, respiratory technicians, dental hygienists and assistants, pharmacy technicians, phlebotomists, medical transcriptionists and medical record and health information technicians.

According to the Lehigh Valley WIB, allied health career clusters were targeted because they:

- ▶ Provide above average wages.
- ▶ Incorporate high-technology knowledge.
- ▶ Have synergy with existing Lehigh Valley assets to minimize impact on land, energy and other resources.
- ▶ Expand upon established positive competitive positioning in the U.S. and globally.
- ▶ Have a high value-added component in the local economy.

PARTNERS

A partnership with existing health providers became the foundation for the system. These partners include but are not limited to: the Lehigh Valley Health Care Industry Partnership, the Community Action Committee of Lehigh Valley, Lehigh Valley Health Network, St. Luke's Hospital and Health Network, Cetronia Ambulance Corps, Health Network Laboratories, and Coordinated Health Services to name a few. Lehigh Valley's public school districts, career and technical schools, community colleges and four year institutions remain vital partners within the Valley's health care network. Employer partners include all hospitals, all ambulatory health care facilities, nursing and residential care facilities, and research facilities and are the basis for the development of the Valley's new regional health system and health services network. The Executive Director of the Lehigh Valley WIB stated that a major concept for expanding allied health careers in the Valley is the idea that "the new high school diploma is an associate's degree." It is reinforced and discussed with students, older

and out-of-school youth, displaced workers and mature workers. An associate's degree, along with certified training in allied or professional health careers and jobs in the expanding regional health system, ensures that workers will receive a livable and expanding wage in the Lehigh Valley community.

THE PROGRAM DESIGN AND CAREER PATHWAY

The Lehigh Valley WIB has developed a career pathways program that provides a scope and sequence of academic and technical courses to prepare students for careers based on their interests and abilities. The Lehigh Valley program has been designed to help elementary and middle school students learn about themselves and careers, and allows high school students to take courses in one of four career clusters, including Arts/Humanities, Health Sciences and Human Services, Engineering/Industrial and Business/Communications. Youth are provided with a variety of options that guide them as they develop pathways, career ladders and portfolios that will enable them to grow in selected career areas. These include:

- ▶ **Career Force** is the PA CareerLink® Lehigh Valley youth programming brand strategically targeted to ages 14-24 and designed for youth with barriers to employment. PA CareerLink® Lehigh Valley provides youth with opportunities for: work experience, career awareness, education, basic skills training, occupational training, internships, and job shadowing and community service projects.

Other components of Career Force include:

- ▶ **Summer Youth Employment** activities are designed to offer and engage youth in work readiness, job information and career exploration. For example, St. Luke's Hospital and Health Network's Next Step Health Career Program prepared youth to transition into successful entry-level careers in the health care environment. Participants received training and work experience in occupations such as Patient Care Assistant, Unit Clerk, Dental Assistant, Office Assistant, Security, Emergency Department Admissions Attendant and Laboratory Assistant.
- ▶ **School-to-Careers Program** engages in-school youth in work experience activities during their 11th and 12th grade. These activities provide a hands-on task oriented experience in selected careers. Youth who remain in this activity for the two year period are generally employed by the health care or public agency to which they are assigned. Many receive tuition support to attend technical or community colleges.
- ▶ **The Health Care Exploration Program** is an out-of-school youth program with St. Luke's Hospital and Health Network that provides an externship, targeted training and clinical activities for youth who have dropped out of school as well as those who have completed their secondary education or GED. Youth participate in classroom, clinical and externship activities for certification and practical experience. Most are employed by the externship site and/or are provided with scholarships to area community colleges.
- ▶ **Career Gates Educational Media Series** was developed by the Lehigh Valley WIB, Lehigh Valley Business Education Partnership, PA CareerLink® Lehigh Valley and the Public Broadcasting System. This multi-part series provides students with a glimpse inside local companies creating awareness about growth industries in the Lehigh Valley and is a model that has been implemented across Pennsylvania. Career Gates provides a virtual tour of the Lehigh Valley industry clusters, including health care.

- ▶ **Career Cruising** is a web-based network that brings together education and industry to help students achieve their goals and address the communities' workforce development needs. The network provides tools for students and young adult career searchers.
- ▶ **CareerLinking Academy** is an innovative career exploration program, targeted for students in grades 10-12, aligned to the Pennsylvania Department of Education's Academic Standards for Career Education and Work. The Academy assists students in making quality career decisions with interactive activities including career assessments, interviewing techniques, résumé and application preparation, job shadowing, college tours and employability skills. This successful model has been implemented with a focus on health careers in partnership with employers such as Good Shepherd Rehabilitation Network.

The Lehigh Valley WIB supports an integrated education, economic and workforce development transformation strategy that begins in high school, develops pathways into post-secondary education, work readiness, and provides access to the Lehigh Valley's workforce system, PA CareerLink® Lehigh Valley. The Health Career Pathway begins with the 19 High Schools and three Career and Technical schools that utilize Career Pathways, Career Cruising and Career Gates. These career-focused educational resources reach 47,375 secondary students.

CareerLinking Academy has served 687 students by offering presentations by allied health business and industry leaders, work-based learning opportunities and tours of local health care facilities. The 665 youth served through the workforce system, Lehigh Valley Career Force, received career awareness activities with an emphasis on allied health occupations. Fifty-five youth received targeted allied health training through initiatives at local hospitals, health focused work experiences and individual training opportunities. Of these youth: 84% completed training; 24% received a certificate or credential; 65% youth were placed in subsidized employment related to allied health; 31% of youth placed in unsubsidized employment related to allied health during or upon completion of the program; and 20% of youth were enrolled in post-secondary education or advanced training/occupational skills training related to allied health upon completion of the program.

RESOURCE LINKS

Career Cruising www.careercruising.com

SKILLS TRAINING

Public schools and career and technical schools are the major educators and trainers of in-school youth in the Lehigh Valley Community. Youth have access to training in most allied health career areas. In-school youth are introduced to health careers by workforce coordinators that are assigned by the Lehigh Valley WIB to provide career exploration activities, job preparation and referrals for tutorial services that are career-related. They also provide referrals to skills development in targeted careers. Schools in Lehigh Valley host, with area health education centers and hospitals, career days for youth beginning in middle school. The WIB hosts industry tours, job shadowing days, and targeted career information days and assigns mentors to participants, who display an interest, for up to two weeks per school year. Youth are engaged in summer employment activities and many opt to engage in the school-to-career program during their 11th and 12th grade school year. This program provides on-site work experience in health careers including allied health. Upon graduation, several youth are hired by the health care facility and/or given scholarships to area community colleges with the provision that they will continue to work or return to work

at the externship site after they have completed a specified certification or degree. Youth who are out-of-school are often referred by PA CareerLink® Lehigh Valley for training via Individual Training Accounts or industry sponsored scholarships to technical schools and community colleges.

The Lehigh Valley Community Health Connectors is a collaborative partnership designed to develop and educate six community health workers for the Lehigh Valley region. The Lehigh Valley WIB is the fiscal agent for the project as well as the recruiter for potential trainees. The community health workers serve in the following capacities:

- ▶ serving as personal connectors who advocate for the newly unemployed,
- ▶ assisting clients in accessing support for identified needs and linking with resources,
- ▶ assisting clients in completing forms as well as help with navigating through the social service and health care systems.

Upon completing training, the Community Health Workers are placed in not-for-profit health and human services agencies across the Valley. These workers continue to receive support and mentorship from the Area Health Education Center (AHEC).

CONTACT: Nancy Dischinat Lehigh Valley Workforce Investment Board, Inc
Executive Director 1601 Union Boulevard, PO Box 20490
ndischinat@lvwib.org Lehigh Valley, PA 18002-0490
Telephone: 610-432-4087

A MAJOR URBAN COMMITMENT TO PREPARING OLDER OUT-OF-SCHOOL YOUTH FOR ALLIED HEALTH OPPORTUNITIES

- ▶ **Reconnections Health Care Training Academy**
Los Angeles Community Development Department
Los Angeles, CA

By virtue of its extensive experience with programs for out-of-school youth and its knowledge of the opportunities in the health field, the Los Angeles Community Development Department has developed a comprehensive program designed to support youth through a whole career pathway to allied health employment.

PLANNING

In 2004, the City of Los Angeles Workforce Investment Board Youth Council, the Greater Long Beach Workforce Investment Board Youth Council, and the U. S. Conference of Mayors commissioned a “One Out of Five” report on youth that were out-of-school and out-of-work in Los Angeles and Long Beach. The report stated that “additional schooling is clearly an important pathway to developing the literacy and occupational skills that are demanded in the labor market.” The report noted, however, that an alternative to developing these in-demand skills is through work experience. Work experience offers the opportunity for youth and young adults to develop the skills and behavioral traits such as teamwork, communication skills and punctuality that are highly prized by employers. A large body of evidence suggests that early work experience can have a significant long-term impact on the future labor market outcomes of youth.

RESOURCE LINK

“One Out of Five”

http://cdd.lacity.org/pdfs/wib/YouthSummit_Report_2004.pdf

Over the next 20 years, California’s population will grow by 10.2 million people, and at the same time, the numbers of residents over 65 will more than double. The State projects that it will need more than 340,029 new allied health workers in the next 10 years.

The documented need has motivated the city to address the challenge of gaps of qualified workers in the allied health field by developing quality programs for its disconnected and dropout youth. In particular, these programs have been designed to address the challenges of low educational levels and high unemployment rates of youth ages 16-24.

The Reconnections Health Care Training Academy (Reconnections Academy) has become the City of Los Angeles’ allied health career training program for older and out-of-school Youth ages 21-24. The Reconnections Academy has been designed to provide: educational upgrades, training in an allied health career, an internship, certification and employment in allied health career occupations. The Reconnections Academy has enrolled 150 out-of-school youth in its first year of operation. At the time of this report, the Academy had set a goal to enroll at least 120 (80%) of its youth at the community college to receive skill credentials. Of those who complete their occupational skills training, the Academy’s goal is to place at least 80% in subsidized employment in allied health positions.

PARTNERS

The Reconnections Academy involves multiple partners to support not only the operation of the program, but a diverse set of agencies to enhance each of the communities where the

project is administered. The program is designed to support these health care partners with a flow of trained and prepared health care employees.

The program partners with the Los Angeles Community College system, the Youth Opportunity Movement (YOM) sites, faith-based partners, local hospitals and care facilities and community-based organizations in the community. The YOM includes over 30 partners in education and employment. These partners include employers, the Los Angeles school district and Board of Education and East Los Angeles Community College.

In addition, the Reconnections Academy has been developed with multiple administrative partners such as community and faith-based organizations and YOM's in Watts and Boyle Heights. Additional partners include but are not limited to Managed Career Solutions, Los Angeles City College, City of Los Angeles Health Care Career Ladder Training Program, East Los Angeles Doctor's Hospital, The Watts Health Center, St. Francis Hospital, Good Samaritan Hospital, UCLA Geffen School of Pre-Hospital Medicine, other private and public health care employers, The City of Los Angeles (Community Development Department and other departments), the WIB and numerous other community and neighborhood organizations and groups.

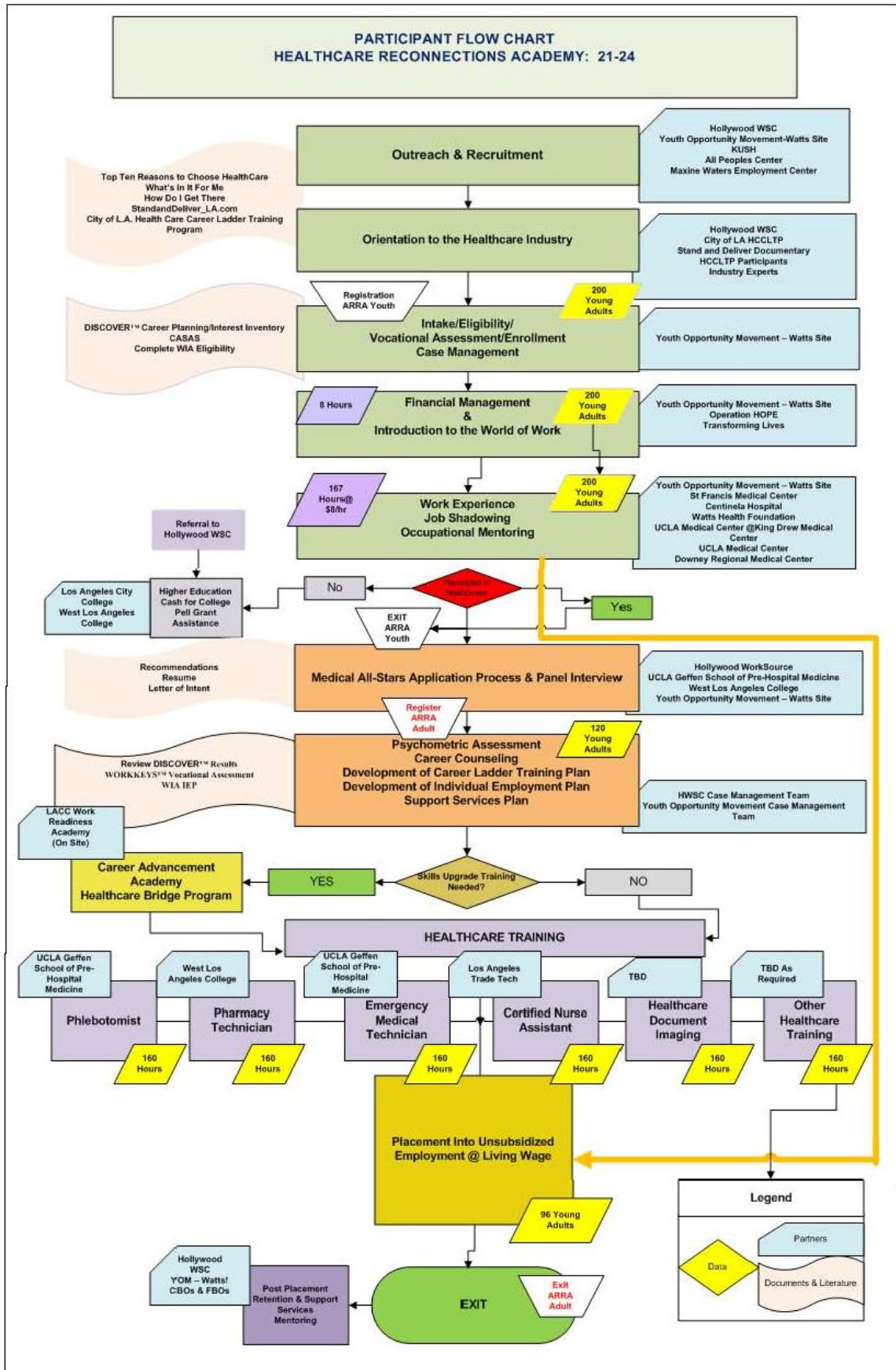
THE PROGRAM DESIGN AND CAREER PATHWAY

The primary goal of the Reconnections Academy is to combine employment opportunities, training in sectors with a high-growth potential (allied health), and basic skills remediation. The intent is to serve 1,100 older out-of-school and out-of-work disconnected youth who are not being served either through the workforce system or education system from January 1, 2010 to March 31, 2011. The Academy will start by helping participants earn their high school diploma or GED. The Reconnections Academy directly links the city's workforce system to the public education system. The Academy includes a combination of subsidized employment, with training in high-growth, private sector businesses. The program will assist the participant in obtaining a good job that will place them on a pathway to a career.

The Reconnections Academy is conducted in four stages: orientation, classroom training, work experience and job placement. The program cycles last about six months. New cohorts of 20 to 30 participants start about every 30 days. Although multiple allied health trainings are available through community colleges and technical schools, the primary occupations of choice for the Reconnections Academy are Certified Nursing Assistant, Home Health Aides, Emergency Medical Technician, Dental Hygiene, Respiratory Therapy and Medical Assistant. Participants are engaged in orientation and assessment at the YOM Boyle Heights and YOM Watts centers. The orientation, which includes assessments and general academic testing, is a joint effort conducted by YOM case managers, designated program administrative staff and members of the job prep and placement team. Classroom training is taught on-site. Selected trainings are held at partner community colleges and at the training schools affiliated with the Reconnections Academy. Clinical and work experience activities are done at partner hospitals, health care centers and medical facilities in the Los Angeles area.

Supportive services, directed counseling and case management activities are ongoing to enhance retention and to resolve long-term challenges which could hamper job placement and retention.

LOS ANGELES "Reconnections Health Care Training Academy" FLOW CHART



SKILLS TRAINING

The Reconnection Academy's mission is to upgrade the educational level and provide skills training and work experience for youth and to transition and place participants into allied health occupations. Participants are enrolled in a 20 hour orientation period. During this period candidates take the CASAS test, sign into the Discover Career Planning Tool, which is the foundation for the Individual Educational Plan, participate in a psychometric assessment, and complete the "Most to Benefit" rating tool. The rating tool is used to assess the candidate's readiness for the Reconnections Academy. This includes a review of the candidate's progress and an interview to confirm their commitment to the allied health field. Participants also take a work readiness assessment prior to transitioning into the classroom activity. A review is done to determine if participants have a criminal record that will hinder their entry in an allied health occupation. An interview is conducted with each participant to determine their commitment to the field and the Reconnections Academy. As participants successfully complete the orientation process (stage 1), they are enrolled in the classroom training component (stage 2), which lasts 90 days. Upon completion of the classroom training activity, participants are enrolled in the work experience segment for 140 hours (stage 3). After completing their work experience, participants are moved to job placement (stage 4). Participants are paid for stages 1 through 3. They are also given incentives which can include: cash bonuses, support services, fees for certifications, uniforms and transportation. The classroom training curriculum is employer driven. Skills training is provided in:

- ▶ Phlebotomy
- ▶ Pharmacy Technician
- ▶ Emergency Medical Technician
- ▶ Certified Nurse Assistant
- ▶ Health Care Document Imaging

PREPARING STAFF

Ongoing staff development takes place at each center to support quality program development and performance. Each partner involved with the Reconnections Academy and the City of Los Angeles provides: on-going staff trainings; bridge phone calls to provide technical training and information; Web conferences and Department of Labor Webinars; and social services networking meetings. The Los Angeles City Training Academy provides training activities and staff development in areas that will enhance performance and staff growth and development.

CONTACT: Lisa Salazar, Director
Telephone: 213-744-7191
lisa.salazar@lacity.org

City of Los Angeles Community Development
Department
OneSource Youth Opportunity System
Human Services & Family Development
Division
1200 W 7th Street, 6th Floor
Los Angeles, CA 90017

RESOURCE LINK

Discover Career Planning Tool

<http://actapps.act.org/eDISCOVER>

AREA HEALTH EDUCATION CENTERS (AHECs) HAVE A POSITIVE IMPACT ON SUMMER PROGRAMS IN LOUISIANA

▶ ECHO (Exploring Careers in Health Occupations) Lafayette, LA

Exploring Careers in Health Occupations (ECHO) is a six week summer program developed to enable in-school and out-of-school youth to learn about and experience career opportunities in health care. Participants do so by taking part in classroom instruction, work experience and job shadowing at local hospitals and health care facilities in several parishes (counties) in southwest Louisiana. ECHO and other programs in Louisiana were strongly influenced, coordinated and implemented by the Area Health Education Centers (AHECs). AHECs are academic and community partnerships that provide health career recruitment programs for K-12 students and increase access to health care in medically underserved areas. AHECs address health care workforce issues by exposing students to health care career opportunities that they otherwise would not have encountered, establishing community-based training sites for students in service-learning and clinical capacities, providing continuing education programs for health care professionals, evaluating the needs of underserved communities and placing health care professionals in those communities.

PLANNING

Surveys and studies conducted by U.S. Department of Labor's Bureau of Labor Statistics, the Louisiana Workforce Commission, the AHECs and Louisiana State University all indicate that health care occupations will show major growth and opportunities in the allied health field and in other professional health occupations. As a result of Southwest Louisiana AHEC's and Central Louisiana AHEC's emphasis on recruiting for health care occupations, 68% of the youth in high schools in the Lafayette and Alexandria area are considering health occupations as a career goal.

The Southwest Louisiana Area Health Education Center has had a substantial impact on the area with its focus on recruitment into health careers. The organization was formed in 1991 to fill a recognized need for better coordination of regional health and education programs. Southwest Louisiana Area Health Education Center has a 19 year history of administering numerous grants and contracts to coordinate, implement, and evaluate community-based health and education programs for target populations.

RESOURCE LINK

Area Health Education Centers

<http://bhpr.hrsa.gov/grants/area.htm>

Southwest Louisiana AHEC

<http://www.swlahec.com>

The Central Louisiana AHEC

<http://www.clahec.org>

PARTNERS

The ECHO partnership is a collaboration of the local Workforce Investment Boards (WIB), Southwest Louisiana AHEC, Goodwill Industries, Acadian Ambulance, Inc. and their Emergency Medical Services (EMS) training center, the National EMS Academy (NEMSA), and the support and cooperation of a vast array of community medical facilities. The ECHO partnership grew out of another Southwest Louisiana AHEC program, HeaRTS (Health Care Recovery Training Systems), a grant administered by Southwest Louisiana AHEC that places individuals in free health care training for a variety of occupations. More than 30

organizations from the health care industry, education and training, workforce development and community-based organizations have been active in HeaRTS. The partners support the project's activities through recruitment, providing education and training, hiring completers of the program and mentoring. ECHO 2009 participants who chose to pursue a health care career were eligible to take advantage of free health care education and training through HeaRTS. Thus, ECHO served as a feeder program for HeaRTS.

THE PROGRAM DESIGN AND CAREER PATHWAY

The goals of the ECHO program are to:

- ▶ Provide opportunities for students to work in a health care environment,
- ▶ Expose students to career opportunities in health care,
- ▶ Provide students with positive health care role models,
- ▶ Educate students about skills and requirements for health care professions,
- ▶ Increase the participant's work awareness and positive work habits and attitudes that will assist the participant in demonstrating an understanding the world of work and employer expectations.

During the first week, students participate in an orientation at the National EMS Academy and while there, they receive skills training. During the second week, the students participate in Goodwill Industries' Work Readiness Program. During the third through sixth week, students receive two hours each day of classroom health career instruction at a health care provider worksite and six hours per day of on-site work experience. Classroom instruction is provided in conjunction with the clinical worksite work experience which includes general information on health careers and occupations. This component supplements the clinical and experiential learning of the program. The on-site work experience allows participants to rotate among certain designated career areas, such as surgery, nursing stations, physical therapy, pharmacy, ICU, and dietetics. Participants are able to job shadow a variety of professionals, with the opportunity to ask questions and determine if they are interested in one or more health careers. To round out the participants' clinical experience, field trips are made to other types of facilities, such as long-term nursing centers, funeral homes, rehab centers, and forensic laboratories. Many participants, who were enrolled in ECHO and have obtained a high school diploma or GED, have chosen to enter the health care field. Selected careers include but are not limited to: Emergency Medical Technician, Certified Nursing Assistant, Nursing and Radiology. Overall, ECHO has served 70 youth; 60% in-school youth and 40% out-of-school youth. Over 90% of the youth completed skills training. All of the youth became certified in Cardiopulmonary Resuscitation (CPR), First Aid, Health Insurance Portability and Accountability Act (HIPAA), Occupational Safety and Health Administration (OSHA) and Blood Borne Pathogen training and were employed in allied health positions during the program. Upon program completion, approximately 8% were placed in employment related to allied health, 17% students enrolled in allied health training and another 13% enrolled in post-secondary education unrelated to health care.

SKILLS TRAINING

Skills training at the National EMS Academy include:

- ▶ American Heart Association Cardiopulmonary Resuscitation (CPR) certification training;
- ▶ American Heart Association First Aid certification training;
- ▶ HIPAA - The Health Insurance Portability and Accountability Act of 1996 compliance review;

-
- ▶ OSHA - Occupational Safety and Health Administration standards training as well as Bloodborne Pathogens safety training;
 - ▶ HAZMAT - Hazardous Materials and Items safety training;
 - ▶ Vital signs presentation;
 - ▶ Proper technique for lifting, moving, and positioning patients.

Skills training for Goodwill Industries' Work Readiness Program include:

- ▶ How to complete a job application;
- ▶ Preparing a professional résumé;
- ▶ Writing a cover and follow-up letter;
- ▶ Developing interviewing skills;
- ▶ Recognizing and utilizing a variety of job search methods;
- ▶ Comprehension of employment related laws;
- ▶ Understanding employer expectations: attendance, punctuality, positive attitude, and dependability;
- ▶ Identifying effective coping and problem solving skills.

PREPARING STAFF

Staff development and training is coordinated and conducted via state trainings, in-service sessions, and parent/student orientations by the local Area Health Education Centers. The ECHO Program's HearTS partnership actively provides training and support for the ECHO team as they work with participants to assist in career path development, admission criteria as well as financial assistance information. Staff and partners regularly interact to ensure compliance with occupational requirements and are a part of the didactic training to ensure that they can support participants in literacy and other academic areas that might hinder comprehension or advancement.

CONTACTS: **ECHO**
 Mimi Fuselier, Director
 Workforce Development
 Southwest Louisiana AHEC
 Telephone: 337-989-0001
 careers@swlahec.com

A STRONG COMMUNITY COLLEGE AND WIB INITIATIVE

- ▶ **NOVA (Northern Virginia Community College)**
Springfield, VA
- ▶ **The SkillSource Group / Northern Virginia Workforce Investment Board**
Vienna, VA

Community colleges are major providers of allied health care training. Northern Virginia Community College (NOVA) and the Northern Virginia Workforce Investment Board (WIB) through its agent the SkillSource Group (SSG) are developing a strong working relationship around training and placement in health care careers. The goal of this program is to offer training and support to youth to ensure their entrance into the healthcare career tracks in the community college system. As a result of this program there are 300 to 350 students placed into Allied Health programs each year.

PLANNING

In 2005, Northern Virginia Community College, in collaboration with the Northern Virginia Workforce Investment Board and major regional health care providers and educators, commissioned a study to determine the scope and impact of the nursing and allied health care worker shortage in northern Virginia. This empirical study determined the current and future demand (to 2020) for registered nurses and twenty-three allied health professions and resulted in a 14-step action plan to address the following goals:

- ▶ Increase capacity within the health care education and training system
- ▶ Develop and sustain an on-going supply of people interested in pursuing health care careers
- ▶ Nurture Innovation

This study resulted in the expanded training, recruitment and placement of qualified staff.

From 2006 to 2010 the Virginia General Assembly awarded \$1.945 million to increase educational capacity in the region's colleges and universities with nursing programs, to both maximize the number of new registered nurses and increase the supply of nursing faculty. The region's health care providers contributed \$2.4 million. These funds were distributed to the five colleges and university nursing programs; each focused on expanding enrollment in different aspects of nursing education.

Now known as NoVaHealthFORCE, this collaborative effort of northern Virginia leaders in health care, business, colleges and universities, government, community organizations, and economic development authorities recognizes the need to develop a long-term, business-driven, sustainable strategy to address the shortage. NOVA's Medical Education Campus (MEC) has taken the lead in training older youth, displaced workers and individuals who seek educational upgrades to expand their career options.

PARTNERS

The strength of NOVA's allied health occupations training development is the strong partnership developed by NOVA's MEC, which has also developed an extensive number of employer partners, hospitals and health care providers. Students placed in clinical training with these employers often receive a job offer upon graduation. The SSG and the Northern Virginia WIB leverage the NOVA MEC in collaborating on behalf of the jobseekers within the Northern Virginia Workforce System. Partners include but are not limited to most hospitals and health centers in the Northern Virginia and the Metropolitan Washington, DC area, the

Northern Virginia Training Center, Inova Health Systems, Health Care Corporation of America, the Virginia Community College System (includes NOVA MEC) and a number of physician's offices in the community. NOVA MEC hosts job fairs, has career counselors and coaches on staff and an extensive workforce development unit to support placement. Most students are placed at the end of their clinical rotation by their host site. The WIB is assessing the possibility of placing a One-Stop Center at the MEC campus.

THE PROGRAM DESIGN AND CAREER PATHWAY

Through a U.S. Department of Labor Community-Based Jobs Training Grant, the college partners with the Fairfax County Public Schools to provide a high school *Bridge Transitional Program* in radiology. This high school transitional program offers participants dual enrollment through their high school (if applicable) or the nearest NOVA campus. It enables youth to take the prerequisites for radiology while in high school. Upon graduation, students who participate and complete the prerequisites for radiology will be eligible for program placement for the fall semester. Program placement is contingent upon applying and receiving acceptance into the radiology program. As a result of the Bridge Program, new entrants in radiography have increased from 30 to 35 per year to 45 new entrants per year.

Participants receive academic support and advisement as well as individual support from the MEC Bridge coordinator. This coordinator provides advising, career exploration activities, and tutorial support, if needed, and coordinates participant activities and services at the MEC for these young people.

The nursing and allied health programs at the MEC are supported by career counselors and faculty in each curriculum. Students are introduced to career ladders for each occupation, specific classes that are required, salary levels and educational and skills levels needed to grow in each field.

A good example of an allied health career at MEC is health information management. This allied health course specifically targets individuals that are interested in health careers that are more non-clinical in nature. An example of an educational ladder that leads to a career ladder is:

- ▶ Coding – Certification
- ▶ Health Information Management–Associate Degree can lead to certification as a Registered Health Information Technician
- ▶ Health Information-Management: Bachelors Degree can lead to certification as a Registered Health Information Administrator

SKILLS TRAINING

NOVA has several allied health careers programs in its portfolio. These include:

Associate Degrees offered in Nursing (RN), Medical Laboratory Technology (MLT-ASCP), Physical Therapist Assistant (PTA), Radiography-Diagnostic Imaging (RT-R), Diagnostic Medical Sonography (RDMS), Respiratory Therapy (CRT) and (RRT), Health Information Management (RHIT), Dental Hygiene (RDH), and Emergency Medical Services (EMT-P).

Certificate Programs offered in Credit - Radiation Oncology, Clinical Coding, Phlebotomy, and Basic Emergency Medical Technician (EMT-B). Advanced (RT-R required) - Breast Imaging, Computer Tomography and Magnetic Resonance Imaging.

Numerous pre-employment and health care career enhancement programs are offered by the MEC's Workforce and Continuing Education Division.

Each program has a curriculum committee that offers input in course and curriculum. This ensures that the curriculum meets the needs of the prospective employers. Some courses are available online. All of the allied health classes are held on the MEC campus in Springfield, VA. In fact, the MEC is the only community college campus in Virginia that is solely dedicated to nursing and allied health education. General education courses may be taken at any of the six NOVA campuses. The College contracts with a large number of Metropolitan Washington, DC health care facilities and community-based agencies for clinical instruction. Human patient simulation laboratories also serve to augment clinical education.

PREPARING STAFF

Professional staff development is ongoing at NOVA to meet accreditation requirements. The MEC works continually to expand the choices of occupational areas that are available for potential students. The administration has been successful in its effort to ensure that the team is current on new trends in instruction, that equipment is modern and up-to-date and that participants are competitive when they graduate.

CONTACT:

David A. Hunn
President and CEO
Telephone: 703-752-1606
David.hunn@myskillssource.org

Ms. Gerry Hofler
Program Manager
NOVAHealthForce
8300 Boone Blvd., Suite 450
Vienna, VA 22182
Telephone: 703-822-6528
ghofler@nvcc.edu

WIB, COMMUNITY COLLEGE, AND MEDICAL CENTER COLLABORATE ON CURRICULUM DEVELOPMENT

- ▶ **Enterprise for Employment and Education (Workforce Investment Board - WIB)**
- ▶ **Chemeketa Community College**
- ▶ **Willamette Valley Medical Center**
Salem, OR

Collaboration among the local WIB, the Chemeketa Community College, and the Willamette Valley Medical Center to develop a curriculum for Certified Nursing Assistant (CNA) II created new opportunities under constrained circumstances. This project opened the way for CNA I's to move from their current positions at nursing homes and other health care centers to qualify for CNA II positions at hospitals. In doing so, their pay was improved and there was much greater opportunity to access career pathways into other allied health occupations.

PLANNING

Enterprise for Employment & Education (Enterprise) is the Workforce Investment Board for Region 3 which includes Yamhill, Polk and Marion Counties. The health care industry contributes significantly to the area's economy, employing over 22,000 persons in August 2009, 13 percent of Marion, Polk and Yamhill county employment. Of the 25 occupations with the most vacancies, six were health care occupations, specifically: registered nurses, medical and health services managers, nursing aides, radiology, CAT and MRI technicians, licensed practical and vocational nurses, and physical therapists. The area has eight hospitals, and the Salem hospital in the state capital is one of the area's three largest employers. The state psychiatric hospital in Salem is expanding and will have a huge need for health care professionals, including Certified Nurse Assistants (CNA) and Psychiatric Technicians. There are also 22 nursing homes, 32 mental retardation, mental health and substance abuse facilities, and 140 community care facilities for the elderly in the three-county area. More than 800 CNAs will be needed in the area over the next ten years.

Health care is the only industry in the three-county area that has gained jobs over the past year. According to area industry projections for 2008-2018, the health care industry will have a growth rate nearly triple that of all-industry growth.

Enterprise and Chemeketa Community College (CCC) have an extended history of collaboration in providing education, training and placement to jobseekers. They work together on grants, special projects, customized training, and economic development to recruit business to the area, and have a partnership that is instrumental to supporting the local workforce.

PARTNERS

Enterprise, Chemeketa Community College and other local training providers developed a project that will serve and train participants in selected specialty areas. The program works with area high schools to provide career exploration/pathways and training in selected allied health fields that will lead to certifications or post-secondary diplomas/degrees. The program's objective is to utilize a wide range of activities in different colleges which include curriculum development, weekend classes and WIA and industry partner recruitment, retention and job placement. The project works with more than 4,600 participants at several colleges and training schools in the region. The program has proven successful in

its effort to educate and train large numbers of health care professionals. The college has worked hard to meet the workforce needs of the community and has gained the support of the employer and health care community that it was designed to serve.

Chemeketa Community College designed a number of short-term certificate programs to enhance their career opportunities, provide a ladder for growth in the health field and to provide its participants with a livable wage. From this partnership experience emerged the commitment to develop the Certified Nursing Assistant (CNA) II training.

The following Certificates and/or AA Degree trainings are also offered by Chemeketa Community College: Dental Assisting, Emergency Medical Service, Health Information Technology, Medical Transcription, Medical Coding, Basic Nursing Assistant, Nursing and Pharmacy Technician/Pharmacy Management, Speech-Language Pathology Assistant.

THE PROGRAM DESIGN AND CAREER PATHWAY

Chemeketa Community College received American Recovery and Reinvestment Act funding from the WIB to provide a Certified Nursing Assisting Level II (CNAII) program that was Oregon State Board of Nursing (OSBN) approved. The purpose of the project was to give Certified Nursing Assistants Level I the opportunity to develop their career path and skill sets from being able to work in long-term facilities to working in expanded hospital settings and having the ability to move up a career path in the hospital. Enterprise and Chemeketa enrolled 10 youth in the program. The contract included 66 hours of training, 24 in a clinical setting.

The staff of Willamette Valley Medical Center, Chemeketa Community College and Enterprise wrote the curriculum, recruited currently certified CNA Level I youth between the ages of 16 and 24, hired OSBN approved faculty to teach the course, contracted with Willamette Valley Medical Center to provide the clinical sites, and arranged the classroom and skills lab training rooms at Chemeketa's McMinnville Health Care Education Center.

Eleven youth were trained in the CNA Level II curriculum and participated in training and observation for a total of 24 hours in a clinical setting at the Willamette Valley Medical Center. One hundred percent of the students completed the CNA Level II class and were awarded state certifications of Certified Nursing Assistant Level II. These youth will be able to work in hospitals where they can earn a better wage and have better opportunities for job advancement.

While this project was modest in size, it required significant coordination and commitment among the three agencies to succeed.

SKILLS TRAINING

This case study focuses on the development of the CNA II curriculum which was used for the first time in the training of the summer participants. The full curriculum can be found at http://www.osbn.state.or.us/OSBN/CNA_InformationPage.shtml. For students who complete an initial certification along their career pathway, the college works to provide other options beyond the college both formally and informally. Students are also connected

RESOURCE LINK

<http://www.chemeketa.edu/classes/catalog/programs.html>

II Curricula

CNA Level I and

<http://www.state.or.us/OSBN/CNAInformationPage.shtml>

to the employer community while completing their clinical trainings. Coursework at the college covers the following occupations:

- Nursing
- Pharmacy Technician/Pharmacology
- Dental Assistant
- Health Services Management
- Health Information Technology
- Medical Transcription
- Emergency Medical Service

CONTACTS: **Pat Grose, Executive Director**
Enterprise Employment & Training
626 High St NE Suite 305
Salem, OR 97301
pgrose@workforce-solutions.net
Telephone: 503-581-4505

Holly Nelson, Coordinator
Chemeketa Community College
McMinnville Health Care Education Center
306 NE Norton Lane
McMinnville, OR 97128
holly.nelson@chemeketa.edu
Telephone: 503-584-7542

APPENDIX

LEARN MORE ABOUT ALLIED HEALTH/ALLIED HEALTH OCCUPATIONS

COMMISSION ON ACCREDITATION OF ALLIED HEALTH EDUCATION PROGRAMS:

- ▶ Twenty Allied Health Occupations with Additional Sources of Information
- ▶ “CAAHEP is the largest programmatic accreditor in the health sciences field. In collaboration with its Committees on Accreditation, CAAHEP reviews and accredits over 2000 educational programs in twenty-two (22) health science occupations.”
<http://www.caahep.org/>

HEALTH PROFESSIONS NETWORK

“The Health Professions Network is a group of health care professionals who represent the diverse specialties of allied health professions, including provider organizations, educators, accreditors, credentialing agencies and administrators. The group works together in a cooperative and interactive manner on issues relevant to workforce development and the delivery of health care in the United States.”

<http://www.healthpronet.org/>

ASSOCIATION OF SCHOOLS OF ALLIED HEALTH PROFESSIONALS

ASAHP offers this site as a comprehensive resource for current professionals, students, and anyone generally interested in the allied health field. Specific areas of interest are the Links and Resources and Students sections of the site.

<http://www.asahp.org>

EXPLOREHEALTHCAREERS.ORG

“ExploreHealthCareers.org is a free, multi-disciplinary, interactive health careers Web site designed to explain the array of health professions and provide easy access to students seeking information about health careers. This Web site is a joint initiative involving national foundations, professional associations, health career advisors, educational institutions, and college students.”

Allied Health Professions - <http://www.explorehealthcareers.org/en/Field.1.aspx>

American Medical Association – Health Care Careers Directory

The AMA's Health Care Careers Directory lists information about 81 careers in health care and more than 8,100 accredited educational programs in those fields.

Listed under Allied Health are files for the following:

- ▶ Anesthesiologist assistant
- ▶ Anesthesia technologist/technician
- ▶ Athletic trainer
- ▶ Cardiovascular technologist
- ▶ Electroneurodiagnostic technologist
- ▶ Medical illustrator
- ▶ Orthotics and prosthetics
- ▶ Polysomnographic technologist
- ▶ Respiratory therapist
- ▶ Surgical assistant

-
- ▶ Emergency medical technician-paramedic
 - ▶ Exercise science Kinesiotherapist
 - ▶ Medical assistant
 - ▶ Surgical technologist
 - ▶ Perfusionist

<http://www.ama-assn.org/ama/pub/education-careers/careers-health-care.shtml>

APPRENTICESHIP:

- ▶ Two new briefing papers issued by the Office of Apprenticeship, Employment and Training Administration, U. S. Department of Labor include a listing of apprenticeships in health care.
 - Using Registered Apprenticeship to Build and Fill Health Care Career Paths. <http://www.doleta.gov/OA/>
 - Using Registered Apprenticeship to Build and Fill Career Paths in Health Information Technology. <http://www.doleta.gov/OA/>

LABOR MARKET INFORMATION

- ▶ **Bureau of Labor Statistics (BLS)**

BLS provides extensive amounts of information on occupations in terms of employment size, projected employment growth, earnings, the most significant source of post-secondary education or training, educational attainment, opportunities for self-employment and part-time work, and unemployment rate. See also the full tables for the occupations referenced in this guidebook below, starting on page 48.

- **Industry at a Glance: Health Care and Social Assistance**
<http://www.bls.gov/iag/tgs/iag62.htm>
- **Projections Data**
<http://www.bls.gov/data/#projections>
- **Regional Resources**
<http://www.bls.gov/data/#regions>

- ▶ **Career One Stop**

The CareerOneStop Web site is a tool to help [job seekers](#), [students](#), [businesses](#), and [career professionals](#). Sponsored by the [U.S. Department of Labor](#), it provides information on the following:

- Exploring careers
- Education and Training
- Résumés and interviews
- Salary and benefits
- Job Search
- People and places to help

www.careeronestop.org

▶ Job Corps

Job Corps is a free education and training program that helps disadvantaged young people, ages 16-24, learn a career, earn a high school diploma or GED, and find and keep a good job. Job Corps is a residential program that offers training in a variety of health care careers including allied health. Information on the occupational training offered in the Job Corps Center nearest a young person's residence can be located on the official Job Corps website.

<http://www.jobcorps.gov>.

▶ State and Regional Labor Market Information Web Sites

While we cannot provide an exhaustive list here, be sure to investigate the information available on your state labor market information Web site.

- State Labor Market Information Locator

<http://www.careeronestop.org/red/StateLaborMarketInformation.aspx>

▶ O*Net Online

“The O*NET program is the nation's primary source of occupational information. Central to the project is the O*NET database, containing information on hundreds of standardized and occupation-specific descriptors. The database, which is available to the public at no cost, is continually updated by surveying a broad range of workers from each occupation. The database also provides the basis for our Career Exploration Tools, a set of valuable assessment instruments for workers and students looking to find or change careers.”

- Health Care and Social Assistance

<http://online.onetcenter.org/find/industry?i=62&g=Go>

Note on Tables that Follow: Job openings are all in thousands and are a combination of growth and replacement needs.



FULL OCCUPATION TABLES - SORTED BY PROJECTED TOTAL JOBS OPENINGS

2008 National Employment Matrix Title and SOC		Employment (thousands)		Total job openings*	Percent Growth Rate	Median annual wages	Most significant source of education and training category
		2008	2018				
Home Health Aides	31-1011	921.7	1,382.6	552.7	50	\$20,460	Short-term on-the-job training
Nursing Aides, Orderlies and Attendants	31-1012	1,469.8	1,745.8	422.3	19	\$23,850	Post-secondary vocational award
Medical assistants	31-9092	483.6	647.5	217.8	34	\$28,300	Moderate-term on-the-job training
Medical Secretaries	43-6013	471.1	596.6	189.0	27	\$29,680	Moderate-term on-the-job training
Pharmacy Technicians	29-2052	326.3	426.0	182.0	31	\$27,710	Moderate-term on-the-job training
Dental Assistants	31-9091	295.3	400.9	161.0	36	\$32,380	Moderate-term on-the-job training
Medical and health services managers	11-9111	283.5	328.8	99.4	16	\$80,240	Bachelor's or higher degree, plus work experience
Dental Hygienists	29-2021	174.1	237.0	98.4	36	\$66,570	Associate degree
Medical records and health information technicians	29-2071	172.5	207.6	70.3	20	\$30,610	Associate degree
Radiologic Technologists and Technicians	29-2034	214.7	251.7	68.0	17	\$52,210	Associate degree
Emergency Medical Technicians and Paramedics	29-2041	210.7	229.7	62.0	9	\$29,330	Post-secondary vocational award
Medical and Clinical Laboratory Technicians	29-2012	155.6	180.7	54.6	16	\$35,380	Associate degree
Medical and Clinical Laboratory Technologists	29-2011	172.4	193.0	53.3	12	\$53,500	Bachelor's degree

2008 National Employment Matrix Title and SOC		Employment (thousands)		Total job openings*	Percent Growth Rate	Median annual wages	Most significant source of education and training category
		2008	2018				
Surgical Technologists	29-2055	91.5	114.7	46.3	25	\$38,740	Post-secondary vocational award
Respiratory Therapists	29-1126	105.9	128.1	41.4	21	\$52,200	Associate degree
Physical Therapist Assistants	31-2021	63.8	85.0	30.5	33	\$46,140	Associate degree
Medical Transcriptionists	31-9094	105.2	116.9	23.5	11	\$32,060	Post-secondary vocational award
Cardiovascular Technologists and Technicians	29-2031	49.5	61.4	19.1	24	\$47,010	Associate degree
Diagnostic Medical Sonographers	29-2032	50.3	59.5	16.5	18	\$61,980	Associate degree
Dental Laboratory Technicians	51-9081	46.0	52.4	15.3	14	\$34,170	Moderate-term on-the-job training
Occupational Therapist Assistants	31-2011	26.6	34.6	11.8	30	\$48,230	Associate degree
Dietetic Technicians	29-2051	25.2	28.7	9.9	14	\$26,080	Vocational award
Ambulance drivers and attendants, except Emergency Medical Technicians	53-3011	22.2	24.5	6.2	10	\$22,410	Moderate-term on-the-job training
Orthotic and Prosthetic Practitioner	29-2091	5.9	6.8	2.1	15	\$62,590	Bachelor's degree

***FOR ALL TABLES, ALL JOB OPENINGS DUE TO GROWTH AND REPLACEMENT NEEDS (THOUSANDS)**

SORTED BY MEDIAN ANNUAL WAGE

2008 National Employment Matrix Title and SOC		Employment (thousands)		Total job openings*	Median annual wages	Most significant source of education and training category
		2008	2018			
Medical and health services managers	11-9111	283.5	328.8	99.4	\$80,240	Bachelor's or higher degree, plus work exp.
Dental Hygienists	29-2021	174.1	237.0	98.4	\$66,570	Associate degree
Orthotic and Prosthetic Practitioner	29-2091	5.9	6.8	2.1	\$62,590	Bachelor's degree
Diagnostic Medical Sonographers	29-2032	50.3	59.5	16.5	\$61,980	Associate degree
Medical and Clinical Laboratory Technologists	29-2011	172.4	193.0	53.3	\$53,500	Bachelor's degree
Radiologic Technologists and Technicians	29-2034	214.7	251.7	68.0	\$52,210	Associate degree
Respiratory Therapists	29-1126	105.9	128.1	41.4	\$52,200	Associate degree
Occupational Therapist Assistants	31-2011	26.6	34.6	11.8	\$48,230	Associate degree
Cardiovascular Technologists and Technicians	29-2031	49.5	61.4	19.1	\$47,010	Associate degree
Physical Therapist Assistants	31-2021	63.8	85.0	30.5	\$46,140	Associate degree
Surgical Technologists	29-2055	91.5	114.7	46.3	\$38,740	Post-secondary vocational award
Medical and Clinical Laboratory Technicians	29-2012	155.6	180.7	54.6	\$35,380	Associate degree
Dental Laboratory Technicians	51-9081	46.0	52.4	15.3	\$34,170	Moderate-term on-the-job training
Dental Assistants	31-9091	295.3	400.9	161.0	\$32,380	Moderate-term on-the-job training
Medical Transcriptionists	31-9094	105.2	116.9	23.5	\$32,060	Post-secondary vocational award
Medical records and health information technicians	29-2071	172.5	207.6	70.3	\$30,610	Associate degree
Medical Secretaries	43-6013	471.1	596.6	189.0	\$29,680	Moderate-term on-the-job training
Emergency Medical Technicians and Paramedics	29-2041	210.7	229.7	62.0	\$29,330	Post-secondary vocational award
Medical assistants	31-9092	483.6	647.5	217.8	\$28,300	Moderate-term on-the-job training
Pharmacy Technicians	29-2052	326.3	426.0	182.0	\$27,710	Moderate-term on-the-job training
Dietetic Technicians	29-2051	25.2	28.7	9.9	\$26,080	Post-secondary vocational award
Nursing Aides, Orderlies, and Attendants	31-1012	1,469.8	1,745.8	422.3	\$23,850	Post-secondary vocational award
Ambulance drivers and attendants, except Emergency Medical Technicians	53-3011	22.2	24.5	6.2	\$22,410	Moderate-term on-the-job training
Home Health Aides	31-1011	921.7	1,382.6	552.7	\$20,460	Short-term on-the-job training

SORTED BY EDUCATION & TRAINING NEEDED

2008 National Employment Matrix Title and SOC		Employment (thousands)		Total job openings*	Median annual wages	Most significant source of education and training category
		2008	2018			
Dental Hygienists	29-2021	174.1	237.0	98.4	\$66,570	Associate degree
Diagnostic Medical Sonographers	29-2032	50.3	59.5	16.5	\$61,980	Associate degree
Radiologic Technologists and Technicians	29-2034	214.7	251.7	68.0	\$52,210	Associate degree
Respiratory Therapists	29-1126	105.9	128.1	41.4	\$52,200	Associate degree
Occupational Therapist Assistants	31-2011	26.6	34.6	11.8	\$48,230	Associate degree
Cardiovascular Technologists and Technicians	29-2031	49.5	61.4	19.1	\$47,010	Associate degree
Physical Therapist Assistants	31-2021	63.8	85.0	30.5	\$46,140	Associate degree
Medical and Clinical Laboratory Technicians	29-2012	155.6	180.7	54.6	\$35,380	Associate degree
Medical records and health information technicians	29-2071	172.5	207.6	70.3	\$30,610	Associate degree
Orthotic and Prosthetic Practitioner	29-2091	5.9	6.8	2.1	\$62,590	Bachelor's degree
Medical and Clinical Laboratory Technologists	29-2011	172.4	193.0	53.3	\$53,500	Bachelor's degree
Medical and health services managers	11-9111	283.5	328.8	99.4	\$80,240	Bachelor's or higher degree, plus work experience
Dental Laboratory Technicians	51-9081	46.0	52.4	15.3	\$34,170	Moderate-term on-the-job training
Dental Assistants	31-9091	295.3	400.9	161.0	\$32,380	Moderate-term on-the-job training
Medical Secretaries	43-6013	471.1	596.6	189.0	\$29,680	Moderate-term on-the-job training
Medical assistants	31-9092	483.6	647.5	217.8	\$28,300	Moderate-term on-the-job training
Pharmacy Technicians	29-2052	326.3	426.0	182.0	\$27,710	Moderate-term on-the-job training
Ambulance drivers and attendants, except Emergency Medical Technicians	53-3011	22.2	24.5	6.2	\$22,410	Moderate-term on-the-job training
Surgical Technologists	29-2055	91.5	114.7	46.3	\$38,740	Post-secondary vocational award
Medical Transcriptionists	31-9094	105.2	116.9	23.5	\$32,060	Post-secondary vocational award
Emergency Medical Technicians and Paramedics	29-2041	210.7	229.7	62.0	\$29,330	Post-secondary vocational award
Dietetic Technicians	29-2051	25.2	28.7	9.9	\$26,080	Post-secondary vocational award
Nursing Aides, Orderlies, and Attendants	31-1012	1,469.8	1,745.8	422.3	\$23,850	Post-secondary vocational award
Home Health Aides	31-1011	921.7	1,382.6	552.7	\$20,460	Short-term on-the-job training

Additional Occupation Descriptions

Note: This list is a continuation of the occupation descriptions offered on pages 7 and 8.

Ambulance Drivers and Attendants, Except Emergency Medical Technicians

Drive ambulance or assist ambulance driver in transporting sick, injured, or convalescent persons. Assist in lifting patients.

Dental Hygienists

Clean teeth and examine oral areas, head, and neck for signs of oral disease. May educate patients on oral hygiene, take and develop X-rays, or apply fluoride or sealants.

Diagnostic Medical Sonographers

Produce ultrasonic recordings of internal organs for use by physicians.

Dietetic Technicians

Assist dietitians in the provision of food service and nutritional programs. Under the supervision of dietitians, may plan and produce meals based on established guidelines, teach principles of food and nutrition, or counsel individuals.

Home Health Aides

Provide routine, personal health care, such as bathing, dressing, or grooming, to elderly, convalescent, or disabled persons in the home of patients or in a residential care facility.

Medical and Clinical Laboratory Technologists

Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease. May train or supervise staff.

Medical and Health Services Managers

Plan, direct, or coordinate medicine and health services in hospitals, clinics, managed care organizations, public health agencies, or similar organizations.

Medical Records and Health Information Technicians

Compile, process, and maintain medical records of hospital and clinic patients in a manner consistent with medical, administrative, ethical, legal, and regulatory requirements of the health care system. Process, maintain, compile, and report patient information for health requirements and standards.

Medical Secretaries

Perform secretarial duties utilizing specific knowledge of medical terminology and hospital, clinic, or laboratory procedures. Duties include scheduling appointments, billing patients, and compiling and recording medical charts, reports, and correspondence.

Medical Transcriptionists

Use transcribing machines with headset and foot pedal to listen to recordings by physicians and other health care professionals dictating a variety of medical reports, such as emergency room visits, diagnostic imaging studies, operations, chart reviews, and final summaries. Transcribe dictated reports and translate medical jargon and abbreviations into

their expanded forms. Edit as necessary and return reports in either printed or electronic form to the dictator for review and signature, or correction.

Nursing Aides, Orderlies, and Attendants

Provide basic patient care under direction of nursing staff. Perform duties, such as feed, bathe, dress, groom, or move patients, or change linens.

Occupational Therapist Assistants

Assist occupational therapists in providing occupational therapy treatments and procedures. May, in accordance with State laws, assist in development of treatment plans, carry out routine functions, direct activity programs, and document the progress of treatments. Generally requires formal training.

Orthotics and Prosthetics

Assist patients with disabling conditions of limbs and spine or with partial or total absence of limb by fitting and preparing orthopedic braces or prostheses.

Physical Therapist Assistants

Assist physical therapists in providing physical therapy treatments and procedures. May, in accordance with State laws, assist in the development of treatment plans, carry out routine functions, document the progress of treatment, and modify specific treatments in accordance with patient status and within the scope of treatment plans established by a physical therapist. Generally requires formal training.

Surgical Technologists

Assist in operations, under the supervision of surgeons, registered nurses, or other surgical personnel. May help set up operating room, prepare and transport patients for surgery, adjust lights and equipment, pass instruments and other supplies to surgeons and surgeon's assistants, hold retractors, cut sutures, and help count sponges, needles, supplies, and instruments.

Source: <http://online.onetcenter.org>

Career Pathways

State Career Clusters

“The States’ Career Clusters Initiative (SCCI) is an initiative established under the National Career Technical Education Foundation (NCTEF) to provide **Career Clusters** as a tool for seamless transition from education to career in this era of changing workplace demands. SCCI helps states as they connect career technical education (CTE) to education, workforce preparation, and economic development.”

- ▶ **Health Science**

<http://www.careerclusters.org/clusters/16cc.php?cluster=hs>

- ▶ **Therapeutic Services Pathway**

http://www.careerclusters.org/resources/pos_ks/KSChart/2008/HS-148-KSChart.pdf

- ▶ **Diagnostic Services Pathway**

http://www.careerclusters.org/resources/pos_ks/KSChart/2008/HS-149-KSChart.pdf

- ▶ **Health Informatics**

http://www.careerclusters.org/resources/pos_ks/KSChart/2008/HS-150-KSChart.pdf

- ▶ **Support Services**

http://www.careerclusters.org/resources/pos_ks/KSChart/2008/HS-151-KSChart.pdf

- ▶ **Biotechnology Research and Development Pathway**

http://www.careerclusters.org/resources/pos_ks/KSChart/2008/HS-152-KSChart.pdf

National Consortium for Health Science Education

The National Consortium for Health Science Education (NCHSE) serves as the cluster lead for the health science career cluster....NCHSE’s role as the cluster lead is to serve as a clearinghouse for health science research, products, services and technical assistance for the implementation of the health science framework. The consortium develops new products and promotes information-sharing, techniques, and methods to aid in the development and implementation of the health science career cluster.

http://www.healthscienceconsortium.org/health_science_cluster.php

- ▶ **Health Science Career Specialties/Occupations Model**

<http://www.healthscienceconsortium.org/docs/health-science-model-9-09.pdf>

Creating Pathways to Advancement: A Manual for Project Developers

“Pathways to Advancement” exemplifies a growing field of practice in career ladders and low-skilled worker advancement models. The Pathways model presents a framework for providing publicly funded employment and training services that meet the needs of employers, job seekers, and incumbent workers - particularly those in low-wage, low-skill jobs. ‘Creating Pathways to Advancement’ is a guide for Workforce Development Councils and Workforce Investment Boards.”

<http://www.workforce3one.org/view/1834/info>

Please note: Workforce3One is a free resource but requires registration.

Partnership Development

United States Department of Labor, Employment and Training Administration

▶ Ideas for Developing Partnerships with Community Colleges

“Community colleges are working with local workforce development entities to provide an academic bridge to out-of-school youth. Below are some specific tips for partnering with workforce communities with community colleges. Further information on connecting to community colleges can be found on the Community College Initiative Web site.”

http://www.doleta.gov/youth_services/connect_community_colleges.cfm

▶ Ideas for Partnering with Employers

“State and local workforce investment systems are partnering with businesses nationwide. Workforce development professionals are building effective collaborative efforts to prepare youth to respond to business needs and skill demands in the labor market. To obtain information about employer/workforce partnerships, visit The Business Relations Group or Workforce3One Web sites.”

http://www.doleta.gov/youth_services/employers_coner.cfm

Area Health Education Centers

Area Health Education Centers (AHECs) are academic and community partnerships that provide health career recruitment programs for K-12 students and increase access to health care in medically underserved areas. AHECs address health care workforce issues by exposing students to health care career opportunities that they otherwise would not have encountered, establishing community-based training sites for students in service-learning and clinical capacities, providing continuing education programs for health care professionals, and evaluating the needs of underserved communities.

<http://bhpr.hrsa.gov/grants/area.htm>

CVS Workforce Initiatives

CVS has developed a number of public and private partnerships in order to recruit talent that reflects the communities where CVS stores are located.

Their partners include nonprofits, schools, faith-based organizations and government agencies to find applicants who want to work but face barriers to employment. Through a variety of programs, they provide job skills training, work experience, and vocational and career advancement opportunities.

Some of these programs include:

- CVS Regional Learning Centers
- Welfare to Work
- Job Corps Pharmacy Technician Training Programs
- Workforce Development Partnership Programs
- CAPS (Career Prescription for Success):

Given the growing needs of an aging population and the greater use of medication in general, employment of pharmacy technicians is expected to grow faster than average for all occupations through 2012. The Employer Handbook for CVS's Career Prescription for Success (CAPS) program details a Registered Apprenticeship program for pharmacy technicians. CAPS targets recruitment in neighborhoods with high unemployment rates and provides paid apprenticeships for the occupations of Pharmacy Associate and Pharmacy Technician.

RESOURCE LINK

CVS Workforce Initiatives

<http://info.cvscaremark.com/our-company/corporate-responsibility/workplace/workforce-initiatives>

- Pathways to Pharmacy:
Pathways to Pharmacy is a nationwide internship program started in 2002. It aims to help

disadvantaged youth get started in a pharmacy career. Participants get training, mentoring and support, as well as financial assistance. Since its inception, the program, now located in almost 40 cities, has helped approximately 1,800 high school students a year.

RESOURCE LINK

Employer Handbook

<http://wfsolutions.workforce3one.org/page/details/2000914150131264288>

For more information on CVS Caremark Workforce Initiatives, contact PJHarbour@cvs.com.
Or by mail at: CVS Caremark Workforce Initiatives, 939 Route 146, Bldg. 600, Clifton Park, N.Y. 12065