

Greater Metro Denver Healthcare Partnership May 2014



Executive Summary

The Greater Metro Denver Healthcare Partnership (the Partnership) includes three workforce regions, key post-secondary educators and virtually all the major hospitals and ambulatory care systems in the Metro Denver region. The Partnership has focused on four in-demand and difficult-to-fill occupations, and based on that success, has now added five additional critical occupations to the project. Because of its success, the Partnership has been sustained beyond the initial grant period (July 1, 2011 - June 30, 2013) and continues to identify diverse sources of funding.

Results produced through December 2013 include:

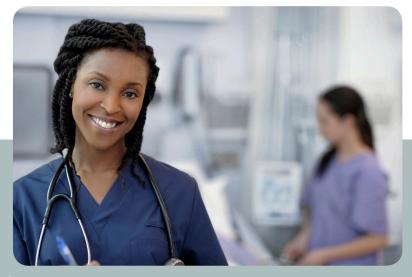
- Number served 153
 - 97 new enrollees
 - 56 incumbent workers from eleven partner facilities
- 79 of the 97 new enrollees have completed training
- Of these, 70 have obtained employment (89%)
- Impact to-date is measured based on the difference in pre- and post-training earnings for three of the targeted occupations (Medical Laboratory Scientist, Medical Laboratory Technician, and Bachelor of Science in Nursing)
 - Aggregate difference in earnings is over \$1.6 million
 - Total cost for training was \$345,772
 - Cost/benefit ratio was 4.72

In addition, training 50 experienced Healthcare professionals as Clinical Scholars significantly increased the experiential portion of the region's healthcare training pipeline. One partner healthcare institution indicated that they were able to increase their new BSN placement capacity by 36%.

Overall, the Partnership has exceeded all of its initial goals and is now focusing on new targeted occupations as the project moves forward.

"The Partnership offers a neutral ground for sharing information with the employers and for gathering information from the healthcare industry in a comprehensive and dynamic way..... Workforce Centers have truly listened to the Colorado healthcare industry and have responded specifically to industry partners needs."

-Mary Riebe, Kaiser Permanente



Report

The Greater Metro Denver Healthcare Partnership (Partnership) is an industry-led, workforce, education and economic development collaborative designed to meet the hiring, retention, and training needs identified by six of the largest hospital systems and ambulatory care facilities in the Greater Metro Denver area. The Partnership provides direction and solutions to meet the healthcare industry's workforce needs.

The Partnership's Business Executive Committee leads the mission, directs funding decisions and evaluates results inclusive of the following healthcare systems: University of Colorado Hospital, Denver Health, Children's Hospital of Colorado, Kaiser Permanente, HealthONE, Centura Health and most recently, Exempla Lutheran. The Partnership convener is the Colorado Urban Workforce Alliance (CUWA). Workforce centers participating in the Partnership include: Arapahoe Douglas Works!, Adams County Workforce and Business Center, Denver Economic Development and Workforce Center and most recently, the American Job Center serving Jefferson, Gilpin and Clear Creek.

The ultimate goal is to help competing hospital systems and ambulatory care facilities throughout metro Denver cooperate in anticipating and filling critical skill gaps in their aggregate labor force on a sustainable basis with the support of local workforce centers and educational institutions. Critical occupations were identified and acted to ensure the regional training pipeline would continually supply workers with the necessary skills to fill these occupations. Results were so successful that additional critical occupations have been identified and the Partnership is seeking additional funds and partners for sustainability.

"Thanks for your vision and support for our Colorado healthcare community! I recently heard someone call "healthcare" a "team sport." And rightfully so. The more I read about coming health professional shortages ahead of us, the more grateful I am that we have CUWA, Arapahoe/Douglas Works!, Adams Co., Denver, Jefferson County, the Colorado Workforce Development Council and many others on our side."

-Mary Riebe, Kaiser Permanente















Background

In 2008, two separate Workforce Investment Boards (WIBs), Arapahoe/Douglas and Adams County, independently identified healthcare as a high growth industry in their respective regions. When these independent efforts were brought to the attention of the local directors, they agreed to collaborate.

In May, 2009, The Colorado Department of Labor and Employment (CDLE) and the Colorado Workforce Development Council (CWDC) jointly awarded funding to super-regions throughout the state. Funding was provided to regional workforce partnerships to plan a sector strategy. In July, 2009, Adams County Education Consortium (ACEC) received a planning grant from CDLE to develop a sector strategy in healthcare on behalf of the two workforce regions. ACEC acted as the convener of this project. They partnered with the Adams County Workforce and Business Center, which served as the fiscal agent for the grant. ACEC also developed strategic partnerships with the WIBs of Adams County and Arapahoe/Douglas Counties, which led to the creation of the Greater Metro Denver Healthcare WIB subcommittee. The planning grant also resulted in partnerships with private and public healthcare businesses and educational institutions through meetings and strategic planning forums. One of these forums was held for over 50 employers in the region and provided information about high-demand occupations and healthcare workforce trends. Additionally, during the planning grant, industry surveys gathered information about the current and future training and education needs for a skilled workforce.

Overall, the planning grant served as a method to understand the area's needs and led to the creation of the Greater Metro Denver Healthcare Industry Partnership. The Partnership applied for and received an implementation grant from CDLE. CUWA, formerly Metro Denver Workforce Board, served as the convener and Arapahoe/Douglas Works! served as the fiscal agent for this implementation funding. The Denver WIB and Workforce Center also joined the Partnership at the time of the grant application.

The Partnership was a direct response to challenges identified by local healthcare employers. The project sought to find ways to address the shortage of qualified applicants for open positions in the region's healthcare facilities. Through research and discussion with employers, the Partnership identified a need to improve access to training and to increase availability of qualified candidates for the following occupations: Nurses (ADN, RN, BSN), Medical Laboratory Technicians, Medical Laboratory Scientists and Surgical Technicians.



Implementation began on March 1, 2011, and the Project Manager started 4 months later in June 2011.

"I have truly valued the opportunity to provide input into setting the direction of the WIB in order to meet employer's needs. In addition, it has been a great place to collaborate in a neutral environment with other organizations sharing the same goal of ensuring our industries have qualified candidates for our job openings. I am very impressed with the outcomes such as the formation and funding of the Greater Metro Denver Heathcare Partnership which I anticipate will result in major achievements in improving the workforce available for my industry. The leadership and staff have been a pleasure to work with and I look forward to another results oriented year on the board."

-Mame Furhman, Univeristy of Colorado Hospital

Project Goals

- Develop an industry driven partnership to review human capital needs and workforce challenges in the region in order to create a talent development pipeline for the local healthcare industry;
- Develop a streamlined process so that job seekers accessing workforce center services are informed of occupational opportunities in the healthcare sector;
- Strengthen the use of the workforce system's services by Partnership members and organizations; and,
- Develop a fundraising strategy to create a sustainable partnership model.

Project Structure

Greater Metro Denver Healthcare Partnership has partners from regional employers and the healthcare industry, economic development, educational institutions and government agencies (See Appendix A). It meets bi-monthly and involves discussions and updates on current work, decisions about where to concentrate resources, funding and sustainability, as well as updates from the Project Manager on the work of the established subcommittees. Each subcommittee is a working group that focuses on different areas of the Partnership.

Business Executive Committee consists of human resources executives and employers from the healthcare industry and is charged with determining the direction of the project, targeted occupations and investment of training dollars into the recommended training programs.

ADW HC Leadership Team consists of administrators from Arapahoe/Douglas Works! and CUWA and ensures that the project meets all fiscal and regulatory requirements of the grant.

Subject Matter Expert Work Group consists of professionals in each of the targeted occupations who are charged with recommending training programs for the targeted occupations and suggested changes to curricula to meet industry standards.

Process and Procedure Work Group consists of front line supervisors and case managers from the workforce regions and are charged with developing a streamlined process for consistent, strategic and standardized efforts across the three workforce regions. This includes identifying and enrolling qualified incumbent and unemployed participants in the training programs validated by the Business Executive Committee and Subject Matter Expert Work Group.

Training and Education Work Group consists of Partnership members who are responsible for reaching out to the region's healthcare employers and collecting information about their anticipated hiring needs. Based on information received, the group identifies appropriate educational institutions and partners that can meet the identified need(s) through education and training.

Workforce Triage Team consists of a designated Business Services Team member from each of the workforce regions to work with the Denver Area Healthcare Recruiters Association (DAHCRA) to determine qualifications for targeted jobs and for identifying, screening and referring qualified employees within Connecting Colorado. They also assist in providing customized recruitment events for the recruiters.



Training Enrollments

Grant and local Individual Training Account (ITA) funding were used to support training in the four initial targeted occupations: Nursing, Medical Laboratory Technicians, Medical Laboratory Scientists and Surgical Technicians. Over a 2 ½ year period (July 2011 through December 2013), the following number of individuals received training:

- 153 individuals enrolled in training programs
- 97 new trainees and 56 incumbent workers
- 79 unemployed trainees completed training to date
- On average, 89% entered employment rate across the participants
- 56 incumbent workers from 11 partner hospitals and/or ambulatory medical facilities (Nursing and Sterile Processing)

Training Outcomes and Return on Investment

There have been significant outcomes as a result of the training in the targeted occupations:

Medical Laboratory Scientist

The Partnership enrolled a total of 38 new trainees in the Medical Laboratory Scientist program at the Colorado Center for Medical Laboratory Science, of which 29 successfully graduated and obtained their certification. All 29 are employed for a 100% Entered Employment Rate (EER).

- Training funds expended for the 29 graduates were \$177,928
- Pre- and post-training increase in earnings averaged \$12.24/hour
- Aggregate difference in earnings was \$738,067; this is the value added to the regional economy through training done by the Partnership
- Cost/Benefit Ratio (\$738,067/\$177,928) was \$4.15 in value-added earnings for every public dollar spent

"I graduated from the Colorado Center for Medical laboratory Science. They prepped us well for the national certification board exams and I passed them on the first attempt. I was offered a full-time job shortly before graduation, and today was my first day. My starting salary is \$21.50/hr, with health and retirement benefits."



-Jessie H., Medical Laboratory Science Student

Bachelor of Science in Nursing

The Partnership enrolled and provided tuition assistance for 25 new trainees in the Bachelor of Science in Nursing (BSN) program through Metro State University. To date all 25 graduated and 21 participants have become successfully employed for an 84% Entered Employment Rate.

- Training funds expended for the 25 graduates were \$100,000
- Pre- and post-training increase in earnings was \$10.79/hour
- Aggregate difference in earnings was \$471,307; this is the value added to the regional economy through training done by the Partnership
- Cost/Benefit Ratio (\$471,307/\$100,000) was \$4.71 in value-added earnings for every public dollar spent

Medical Laboratory Technician

The Partnership enrolled a total of 40 new trainees in the Medical Laboratory Technician program at Arapahoe Community College. To date, 27 have graduated and 21 participants have become successfully employed for a 77.8% Entered Employment Rate. Thirteen participants are still in training.

- Training funds expended for the 27 graduates were \$67,844
- Pre- and post-training increase in earnings was \$9.71/hour
- Aggregate difference in earnings was \$424,133; this is the value added to the regional economy through training done by the Partnership
- Cost/Benefit Ratio (\$424,133/\$67,844) was \$6.25 in value-added earnings for every public dollar spent

"I don't know how I would have completed my internships without the help of the Workforce Center. They have been a huge help and support to me not only financially but in other ways as well!"

-Med Lab Tech Student

Clinical Scholars

The Partnership enrolled a total of 50 incumbent workers in Clinical Scholar training through the Colorado Center for Nursing Excellence. All 50 successfully completed the training. In the past few years there has been a critical shortage of clinical teachers and preceptors in the region's hospital system, thus limiting the numbers of nursing students and new hires who could be trained in the Metro area. The Subject Matter Experts (SME) have reported that their newly trained Clinical Scholars were much more self-assured and willing to take on increased student placements. The SME's have also reported that the nurses who had participated in the Clinical Scholar training seemed to be happier in their professions and felt greater confidence in their skills subsequent to the training. Training 50 additional Clinical Scholars significantly increased the experiential portion of the training pipeline. One partner healthcare institution indicated that they were able to increase their student placement capacity by 36%.

"This is a great opportunity to do something that really makes a difference and I am glad to help!"

-Lee Ann Kane, SME, Denver Health and Hospitals

"Thank you so much for your Partnership in helping us acquire additional Clinical Scholars. It is a huge satisfier for the nursing students and the staff."

Challenges

The Industry Leaders have reported that it took a lot of time to create "trust" and secure "group consensus" among industry representatives regarding the value of working together to address workforce issues in the regional healthcare system. One industry leader described this as "Coop-ition" where competitors finally learned to cooperate, understanding that all of their mutual employment needs could better be met cooperatively. The Industry Leaders have also stated that it took a long time for the workforce system and industry to "speak the same language".

A challenge that the workforce system experienced with the Partnership was the difficulty in streamlining all of the local policies and procedures across the workforce regions. This commitment to collaboration included intake forms and procedures, training caps (ITA amounts) and residency requirements. This has resulted in creating communication and cooperation between sister workforce regions, making additional sector partnerships more feasible going forward.

Best Practices and Lessons Learned (Effective Strategies)

Industry-Led with a Focus: All activities of the Partnership were industry led in order for the Partnership to be successful. The targeted occupations, training solutions, and investment of training dollars was directed by the industry and implemented by the workforce regions and educational programs. In addition, the healthcare industry leaders made a conscious decision to work primarily with hospitals and ambulatory care facilities.

Dedicated Project Manager: The Partnership has reported that having a dedicated Project Manager to convene all of the meetings, bring together appropriate personnel dependent upon the task at hand and provide reports and updates on all project outcomes has been invaluable.

Neutral Location Base: The project has always been housed at a neutral location, the Aurora Chamber of Commerce. The Project Manager's office has been located at the Chamber and most meetings have been hosted at the Chamber. Having the project housed at the Chamber brought economic development support to the project.

Workforce Regional Approach and Streamlined Workforce Procedures: The workforce regions took a cooperative metro-wide approach to support the healthcare industry. The workforce regions strategized new ways of enrolling and supporting participants by using a streamlined and centralized "Operations Manual" so that there was consistency across the regions. Also, the workforce regions provided single points of contact when working with recruiters and holding customized recruitment events and activities.

Subject Matter Experts: The Partnership convened industry professionals within the targeted occupations in an effort to standardize training so that it was acceptable to all participating hospital and ambulatory care systems. The Subject Matter Experts provided firsthand experience and insights about employee skill sets and the qualities that are needed for success in these critical occupations. This breakthrough improvement led to effective communication of specific industry standards to be addressed by educators, and increased the overall quality of cooperation within the Partnership.

"The Project Manager has done a wonderful job of bringing 7 competing hospitals together to work hand in hand with everyone on this project. It's just plain exciting."

-Kevin Hougen, President, Aurora Chamber of Commerce

"Mucho Thanks to you! You've been such a great advocate for our career!"

-Sharon Minor, Medical Laboratory Scientist, Kaiser Permanente

Screening: In the first year of the effort, the Partnership identified sterile processors as a career path to the surgical technologist. Accordingly, six candidates entered training, one dropped out, and none were able to pass the state credential upon completion of training. No Subject Matter Experts were involved in the screening, selection criteria and/or enrollment into this training. Subsequently, Subject Matter Expert teams were identified around each remaining targeted occupation, and as part of their work set criteria for acceptance into training and/or funding where this was not already in place through training institutions. As a result, this dramatically improved the success of students enrolled in the Medical Lab Technician and Clinical Scholar Training.

Targeted Occupations: The Partnership vetted healthcare industry data and made a conscious decision to select a few targeted occupations to start the project. Therefore, only four occupations were selected that addressed the most critical common needs of all Partners. The Partnership sought ways to address the shortage of qualified applicants for these open positions in the region's healthcare facilities. As a result of this focus, the industry experienced a quick success which built trust in the workforce development system and its ability to meet the healthcare industry's needs.

Specific Roles and Expectations: All work group and committees have a clear outline of what is expected. For example, the Subject Matter Expert work groups received clear direction from the Partnership concerning their scope of work, time commitment, number of meetings and support from their hospital administrators.

Tracking and Reporting Metrics: The Project Manager communicated updates regularly regarding outcomes of the project. These updates included:

- The number of individuals enrolled in training
- Incumbent workers enrolled in training and which healthcare system they represented
- Money invested in training from the Partnership and workforce regions
- Training outcomes
- Pre- and post-training salaries
- Career advancement
- In-kind and leveraged funding
- Overall economic impact and cost/benefit ratio

These metrics were reported to all members of the Partnership on a regular basis.



Additional Outcomes:

- The Greater Metro Denver Healthcare Partnership (Partnership) received national recognition and presented at the National Governor's Association Summit in 2013 and the National Association of Workforce Boards for 2013 and 2014;
- The Partnership presented at Colorado's State Sector Summit for 2012, 2013 and 2014;
- The Partnership was evaluated independently by Rutgers University, which was contracted by the Colorado Department of Labor and Employment;
- The Partnership developed a video that has been used within Colorado and nationally as a healthcare sector best practice;
- The Project Manager presented at the State of Maryland's Sector Partnership Planning Grant Conference in January, 2014;
- The Partnership increased membership by adding the Denver Area Health Care Recruiters Association, Lutheran Exempla hospital system and the American Job Center serving Jefferson, Gilpin and Clear Creek regions; and,
- The work of the Partnership has resulted in a replicable model for sector partnership formation and success throughout the United States.



July 1, 2011 - December 31, 2013

Appendix A

Adams County Economic Development

Adams County Education Consortium

Adams County Workforce and Business Center

Adams County Workforce Investment Board

Arapahoe Community College

Arapahoe/Douglas Works!

Arapahoe/Douglas Workforce Investment Board

Association of Operating Room Nurses

Aurora Chamber of Commerce

Central Colorado Area Health Education Center

Centura Health

Children's Hospital of Colorado

City and County of Denver Workforce Investment

Board

Colorado Center for Medical Laboratory Science

Colorado Center for Nursing Excellence

Colorado Urban Workforce Alliance

Community College of Aurora

Denver Area Health Care Recruiters Association

Denver Health and Hospital Authority

Denver Office of Economic Development

Denver Office of Economic Development - Workforce

Development

Denver South Economic Development Partnership

Front Range Community College

HealthONE/Spalding Rehabilitation Hospital

Kaiser Permanente Colorado Region

Lutheran Exempla

Metro State University

Platte Valley Medical Center

The American Job Center serving Jefferson, Glipin and

Clear Creek

Tri County Health Department

University of Colorado Hospital

WELLS Simulation Center

Bibliography

Emery, J., Holwell, P., & Gardner, D. (2014). *Greater Metro Denver Healthcare Partnership Report*. Centennial: Arapahoe/Douglas Works!

Holwell, P. (2014). Compilation of Industry & Occupational Data, and Calculation of Economic Impact. Centennial: Arapahoe/Douglas Works!

McKay, H., Michael, S., Barrett, L., Edwards, R., & Stanik, L. (2013). *Colorado SECTORS Initiative: Greater Metro Denver Healthcare Industry Partnership.* Denver: Rutgers, The State University of New Jersey, School of Management and Labor Relations.

Online Resources

Colorado Department of Labor & Employment

Economic Modeling Specialists, International

Wanted Analytics, Help Wanted Online



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