

# From Classroom to Employment: Who Is Hired in Boston's Healthcare Sector?

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## INTRODUCTION

Nineteen percent of all of the jobs in the City of Boston are in healthcare, yet we do not fully understand the pathways into a sizable portion of the entry-level positions in this field. While many people talk about the ‘skill gap,’ there is also a significant “information gap.” Job seekers often lack sufficient information to make informed choices about which programs and degrees will connect them to occupations. Without reliable program outcome data and employer hiring preference data, career pathways are often described in the abstract. This can lead to misalignment between programs and employer demand, and impose substantial costs. Job seekers may spend time and money on a program that does not connect them to the job for which they sought training. Employers face higher recruitment costs if there are not enough job candidates who have the training and experience that they prefer. This brief is based on a 2013-2014 pilot project led by the Boston Healthcare Careers Consortium to understand the employment prospects of graduates from healthcare-specific programs at community colleges, and to understand employer hiring preferences for entry-level hires.

## BACKGROUND

The Boston Healthcare Careers Consortium is a cross-sector community of healthcare providers, educators, labor organizations, state and city government, and other workforce development community-based organizations. The Consortium formed in 2010 in an effort to provide coordination and alignment to the many resources and actors involved in the recruitment, preparation, and placement of job seekers and incumbent employees in healthcare. Participants wanted to understand this complex web and make sure that all of this activity resulted in effective connection of Boston residents and others to fulfilling jobs and careers with the right skills for success.

At the time this Consortium was formed, a number of employers were already making significant investments in their workforce. Through the process of supporting and guiding their employees toward obtaining credentials needed for advancement, these employers encountered a number of similar challenges. In sharing these challenges around the Consortium table, the employers realized that workforce and education systems were not optimally aligned for their employees’ educational success. Employers spent a good amount of their time counseling their employees to navigate the workforce and education systems and wondered whether they could be a partner in making the systems more navigable for all students.

In 2011, the Consortium released *Critical Collaboration*, a set of recommendations to set the stage for future shared work. These recommendations were in service of providing greater clarity, information sharing, and alignment for job seekers, incumbent workers, employers, and training providers. *Critical Collaboration* presented two recommendations specifically focused on improving transparency for workers and employers:

- encourage employers to research and publish hiring preferences for specific occupations, and
- encourage community colleges to research and publish information on hiring outcomes for the graduates of their programs.

Currently, information of this kind is not being gathered and shared, despite the value it would add. It would inform job seekers about the education/training paths to their career interests and the job placement outcomes after program completion. In addition, outcome data informs program leadership about graduates’ success and supports decision-making about adjusting, growing, or shrinking programs to respond to industry trends.

## REGIONAL AND NATIONAL IMPLICATIONS

The Healthcare Careers Consortium is not the only entity that would like more information to help people make smart choices about where and how to invest time and financial resources in postsecondary education and training. Consumers of all types are interested in this data. In fact, in the 2013 Higher Education Research Institute survey, three of the top five reasons students cited for going to college were related to employment and earnings outcomes, including “to be able to get a better job” (86 percent), “to get training for a specific career” (77 percent), and “to be able to make more money” (73 percent).<sup>1</sup>

The federal Department of Labor places a premium on successful employment outcomes. For those training providers receiving Workforce Investment Act dollars, failure to meet performance standards results in removal from the approved vendor list and losing potential revenue until they can document improved outcomes. Many community-based organizations and a selection of community college programs in Boston have been meeting this standard since WIA was launched in 1998, and have been using the data to their advantage in recruiting students and in communication with potential funders. These funding resources have been in decline for years and are tiny compared to the investments made in community colleges in the form of federal Pell grants and direct student loans. In fiscal year 2014, the city of Boston had fewer than 300 individual training accounts to distribute to jobseekers through the One-Stop Career Centers.

Policy makers are also placing a higher value on student employment outcomes after their educational experience. In June 2011, the Obama Administration released final guidance for Gainful Employment regulations.<sup>2</sup> These regulations were an early effort to protect students from exploitive practices at for-profit institutions. Programs at for-profit institutions and certificate programs at nonprofit and public institutions are subject to meeting the “gainful employment” standard in order to continue to be eligible to receive federal financial aid.<sup>3</sup>

The Obama Administration also launched the College Scorecard and proposed a college ratings system to increase the metrics by which a school and program can be held accountable to the public. Currently, the scorecard captures information about costs, graduation rate, loan default rate, median borrowing, and employment. While the federal government has not established the necessary channels to provide specific employment outcomes by program by school, it does include the following language for visitors to the Scorecard:

*The U.S. Department of Education is working to provide information about the average earnings of former undergraduate students at [Insert College] who borrowed Federal student loans. In the meantime, ask [Insert College] to tell you about how many of its graduates get jobs, what kinds of jobs they get, and how much those graduates typically earn.*

Locally, Massachusetts Attorney General Martha Coakley launched a consumer awareness campaign to educate prospective students about making informed choices before taking out student loans to pay for education and training. Included in the student checklist are questions such as:

- What is the school’s job placement rate in my chosen career field for graduates of the program I am considering?
- What is the average starting salary in my chosen career field?
- Does the school provide career placement services and/or counseling?

As a result of the public awareness campaign and a number of complaints filed to the Attorney General’s Office, new consumer protection regulations were released in November 2013 to address problems experienced by consumers when enrolling in some for-profit colleges and occupational training schools throughout the Commonwealth. After public hearings in Boston and Springfield, the regulations are being finalized to incorporate feedback and should be submitted to the Secretary of State and published before January 2015. The new regulations would require all for-profit and occupational schools in Massachusetts to provide accurate

information to the public, prohibit misleading advertising practices, and address unfair lending practices. In accordance with these regulations, schools would be required to disclose, in their advertisements and recruitment literature, accurate and readily comparable information about tuition and fees, placement statistics, graduation rates, and program completion time.

Finally, in fiscal year 2015, Massachusetts may implement its new community college funding proposal which will be tied to each school's ability to improve graduation rates, contribute to the state's workforce needs and help more students thrive. Within three years, roughly half of each school's allocation after its base-operating subsidy should depend upon these benchmarks. The other half will be determined by course credits completed.<sup>4</sup>

## INTERVENTION

In October 2012, with financial support from SkillWorks and the City of Boston's Skilled Careers in Life Sciences Initiative, the Consortium released a request for proposals to existing Consortium partners to participate in a community of practice focused on data collection and publication. Currently, data on placement and hiring is not being collected, and the Consortium hoped that a pilot study would incent forward-thinking employers and colleges to try to do this work.

Three colleges applied and were invited to be part of this pilot project: Quincy College, Roxbury Community College, and Bunker Hill Community College. Each collected and analyzed two years of data related to employment outcomes of graduates in healthcare and life sciences training programs. For each program, colleges reported not only program completion rates, but rates of hire, the names of specific employers hiring graduates, and the positions graduates secured. (See side bar for complete lists of data fields.)

Two employers joined together to collaborate on a single application. Brigham and Women's Hospital and Boston Children's Hospital also collected and analyzed two years of data, looking at hiring trends in selected allied health roles for each institution. The employers reported the number of hires by specific occupation in the last two years, the percentage of those hires who were new graduates, and the programs and schools that new graduate hires had attended.

The grantees met quarterly over the course of a year to discuss progress in heretofore-uncollected data and strategies for overcoming logistical barriers, and to share resources. Both employers and colleges encountered challenges in obtaining the data, working with multiple information management systems, and appropriately sharing complex data sets.

Despite the best efforts of those involved, it became clear that much work was still required in this area. For example, in the most successful pilot, one college's surgical technology program enrolled 28 students over two years. Twenty-two students successfully completed the program and at least 15 of them were hired into a training-related job within 12 months of graduation. On the other end of the spectrum, one college graduated 91 students from its medical assistant program and was able to connect with just 15 graduates, six of whom had training related jobs. Without real data to track trends over time, we do not know whether the rest of these graduates are connecting to training-related employment and are seeing a return on their investment of time and money.

# APPROACHES AND RESULTS

## COLLEGES

On the college campuses, the deans or department heads of institutional research/advancement led the research efforts.

### METHODS FOR GATHERING DATA

- Utilized data collected from accreditation processes of specific programs.
- Mailed and emailed surveys.
- Developed and mailed postcards and other promotional materials.
- Provided pizza parties in classrooms to familiarize students with the project and its goals and to alert them to incentives (gift cards) for completing the survey.
- Leveraged cross-campus relationships where students might have strong personal connections, such as with the program director or career services staff.
- Collected alternate email addresses from alumni relations office, career center staff, and faculty.
- Offered access to resources and assistance through the alumni services office and website.

### LESSONS LEARNED

- Bunker Hill Community College used the pilot funds to create a new role of labor market research assistant, which the college plans to sustain beyond the grant pilot.
- Each campus had varying levels of conversation about policy changes around student information, such as collecting and storing multiple email addresses for students, not just college email addresses. This is a common practice among community-based training providers who see far fewer students than the colleges but have significant experience in tracking and reporting on student outcomes.
- The colleges leveraged resources from other departments, such as alumni and career services, in pursuit of shared positive student outcomes.
- Programs that had the most complete data and significant positive student outcomes were also the ones with program leaders who were actively engaged in placing students after training.
- Institutional data leaders benefited from partnering with employers to get data. Working together, they were able to identify program graduates who were now working for the employers.
- Colleges were asked to determine whether jobs were training related. In many ways, the responses were subjective. Moving forward, there should be a clear standard on how to make this determination.

# students applied

# students enrolled

# students successfully completing

# passed licensing exam within 1 year of completion

# completed an internship as part of program

# hired into a training-related role within 6 months

# hired into a training-related role within 12 months

Avg. hourly wage of those hired within 12 months of graduation

List of de-identified students with:

- List of internship sites & department
- If employed: the job title; name of employer; whether benefits were offered; status of full time, part time, or per diem; whether the student was hired by the internship host.

#### *Programs*

- Medical billing & coding
- Medical assistant
- Phlebotomy
- Nursing
- Surgical technology
- Biotechnology & compliance
- Medical laboratory technician
- Biotechnology
- Pharmacy technician
- Medical office specialist
- Central sterile processing

## EMPLOYER DATA ELEMENTS

# hired in a specific year

# new graduates

Salary range for new graduates

List of de-identified new hires, with detail on:

- Program of study
- College/training program
- Whether or not they had an internship at the hospital

### *Occupations*

- Medical assistants
- Administrative assistants
- Phlebotomists
- LPN
- Surgical technologist
- Medical lab technicians & technologists
- Clinical lab technologists
- CNA
- Patient care technicians
- Pharmacy technicians

## EMPLOYERS

Tackling the issue of identifying who gets hired and describing their qualifications does not get much easier when considered from the employer perspective, though the employers do have the distinct advantage in that they are primarily researching individuals who are still directly affiliated with their institution.

### METHODS FOR GATHERING DATA

- Created an occupational crosswalk based on hiring qualifications and position responsibilities at both hospitals.
- Conducted data pulls from the systems that track applicants, a separate pull from employee data systems, and direct contact with department managers.<sup>5</sup>
- Combined and matched data at employee level.
- Surveyed employees through email and face-to-face visits in their departments to gather information that was not available through data systems.
- Organized raffles with iPads and Nooks as prizes to spur a strong rate of return to the survey.

### LESSONS LEARNED

- For the hospitals, this research provided useful data for the workforce development departments about the range of backgrounds that employees in comparable roles possessed.
- Employers use multiple information systems to capture all of the information that they collect on an individual, from applicant to employee. Often, these systems do not talk to each other and data must be aggregated manually.
- The data will be shared with internal career coaches to educate them and employees about who is getting hired into key roles and how they advance within the institution.
- Both Boston Children's Hospital and Brigham and Women's Hospital utilized a combination of methods to quantify internship data. There are a number of formal and direct pathways into internship programs for both organizations; however, there is no one central repository to hold the details that will effectively quantify the impacts of internships and their relationship to hiring practices. Students arrive at both institutions through multiple channels. Some come through formal relationships with schools and are processed in a formal way that affords an opportunity to capture data on the students. Some are more informal and result from relationships that an individual manager has with an instructor at a college which might not have a formal institution relationship. Getting underneath all of the ways that students arrive at each hospital was instructive for centrally-assigned workforce development staff.

## RECOMMENDATIONS

The Boston Healthcare Careers Consortium's investment in a data pilot with three colleges and two employers did not result in an optimal data set that a consumer could use. However, we learned a great deal about what it might take to accomplish this. Workforce outcomes as they relate to postsecondary education are going to continue to be a priority for student consumers and their families, as well as for public policy makers who are stewards of a significant public investment in higher education. Following the pilot, the Boston Healthcare Careers Consortium makes the following recommendations.

### **1. Any education or training provider who delivers occupational and vocational training should be reporting on outcomes.**

Program outcome data is critical information for consumers with limited time and resources. In addition, given radical changes in the delivery of healthcare, it will be important to understand how demand expands and contracts by occupation area. The act of paying attention to the data at a program level should improve outcomes and foster a tighter feedback loop between educators and industry.

### **2. In order to make sense of the data collected by training providers, the Commonwealth needs to play a leading role in creating an information portal that allows consumers to search for and access information on key education and employment metrics for career training programs, including those offered by higher education institutions.**

The Consortium supports SkillWorks and Workforce Solution Group's recommendation for the next governor of Massachusetts to support efforts that "measure and report results of education, training, and employment programs in a comprehensive way across all public systems."<sup>6</sup> As mentioned previously, federally-funded workforce programs have historically required this level of data collection and provide an experiential reference point upon which to build a more comprehensive and integrated system. Many job seekers engage with multiple systems over the course of their careers and in order to fully understand the impact of multiple investments across systems, the Commonwealth needs a place to aggregate and integrate this information.

In a recent brief, CLASP (the Center for Law & Social Policy) outlines three strategies for states to undertake to promote data collection,

which could be implemented even within existing data systems.<sup>7</sup>

- Choose a reliable source for employment and earnings data, such as Unemployment Insurance wage records and Social Security Administration earnings data, which cover most workers.
- Gain access to cross-state or national employment data needed to determine outcomes for students and graduates who cross state lines.
- Adopt a legally-permissible process to collect and match student records with earnings data to calculate aggregate results for these metrics while protecting individual privacy.

### **3. Many colleges will need support to adjust to this change in reporting requirements.**

Institutional research and advancement departments have a leading role to play as advocates for quality data on campus, collecting data across departments, providing technical assistance, and ensuring data integrity and quality across the institutions. This activity will need to be resourced through redeployment of career development and program staff capacity and/or with new resources. Massachusetts should increase the pace at which state systems are adapted to apply employment and earnings measures to postsecondary education and training programs.

### **4. Employers are critical partners in making sure that information is available to consumers about how people connect into their jobs, and in providing information to colleges to guide system planning.**

Through the data pilot, we learned that employers, with focused effort and respect to employee privacy, could and willingly did share information with colleges on their program graduates who were hired. We also learned that they are willing to continue to do this on an on-going basis. Additionally, employers can provide critical feedback on interns and new hire performance. When employers share hiring-preference data, they can start a conversation with programs as to why they prefer to hire the graduates of particular programs. With this kind of feedback back loop in place, the Consortium could explore developing some kind of annual or biannual planning exercise in which employers share their projected hiring plans and identify those occupations that are likely to be prepared through community college programs. Ideally, through this sharing of data, colleges and employers can proactively identify opportunities to jointly develop programming in high-need occupations.



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## FOOTNOTES

1. John H. Pryor, Kevin Eagan, Sylvia Hurtado, et al., "The American Freshman: National Norms Fall 2010," Higher Education Research Institute at UCLA. 2011. <http://www.heri.ucla.edu/PDFs/pubs/TFS/Norms/Monographs/TheAmericanFreshman2010.pdf>.
2. "Obama Administration Announces New Steps to Protect Students from Ineffective Career College Programs." US Department of Education. June 2, 2011. <http://www.ed.gov/news/press-releases/gainful-employment-regulations>.
3. A program would be considered to lead to gainful employment if it meets at least one of the following three metrics: at least 35 percent of former students are repaying their loans (defined as reducing the loan balance by at least \$1); the estimated annual loan payment of a typical graduate does not exceed 30 percent of his or her discretionary income; or the estimated annual loan payment of a typical graduate does not exceed 12 percent of his or her total earnings. <https://www.federalregister.gov/articles/2011/06/13/2011-13905/program-integrity-gainful-employment-debt-measures>.
4. "Governing," November 2013. <http://www.governing.com/topics/education/gov-massachusetts-bet-on-performance-college-funding.html>.
5. Brigham and Women's Hospital used PeopleSoft and direct contact with department managers. Boston Children's Hospital utilized Brass Ring, PeopleSoft, and direct contact with department managers.
6. "Building Massachusetts' Skills to Compete: Recommendations for the Next Governor of Massachusetts." SkillWorks and Workforce Solutions Group. July 2014.
7. Tim Harmon, Neil Ridley, Rachel Zinn. "Workforce Results Matter: The Critical Role of Employment Outcome Data in Improving Transparency of Postsecondary Education and Training," Center for Post-Secondary and Economic Success at CLASP. April 2014. <http://www.clasp.org/resources-and-publications/files/2014-04-29-CLASP-Workforce-Results-Paper.pdf>.



## BOSTON HEALTHCARE CAREERS CONSORTIUM

American Student Assistance	Harbor Health Services	Massachusetts Senior Care Foundation
Bay State College	Harvard Vanguard Medical Associates	Massasoit Community College
Benjamin Franklin Institute of Technology	Jewish Vocational Service (JVS)	MassBay Community College
Beth Israel Deaconess Medical Center	Jobs for the Future	Middlesex Community College
Boston Career Link	Laboure College	New England Center for Arts and Technology
Boston Children's Hospital	Lahey Clinic	Northeastern University
Boston Medical Center	Massachusetts Attorney General's Office	Partners for a Skilled Workforce
Boston Private Industry Council	Massachusetts College of Pharmacy	Partners HealthCare
Boston Public Health Commission	Massachusetts Community College Transformation Agenda	Partners HealthCare at Home
Brigham and Women's Hospital	Massachusetts Council for Home Care Aide Services	Quincy College
Bunker Hill Community College	Massachusetts Department of Higher Education	Roxbury Community College
Cambridge College	Massachusetts Eye and Ear Infirmary	SkillWorks
Cambridge Public Health Commission	Massachusetts General Hospital	Sociedad Latina
City of Boston, Mayor's Office of Jobs and Community Services	Massachusetts Immigrant and Refugee Advocacy Coalition	Spaulding Rehabilitation Hospital - Boston
City of Cambridge	Massachusetts League of Community Health Centers	St. Mary's Center for Women and Children
Commonwealth Corporation	Massachusetts SEIU 1199 Training and Upgrading Fund	The Work Place
Dana-Farber Cancer Institute		Tufts Medical Center
East Boston Neighborhood Health Center		University of Massachusetts - Lowell
Fenway CDC		
German Centre		