THE CHALLENGE OF INCLUSIVE HUMAN CAPITAL DEVELOPMENT:

Lessons from Boston’s Healthcare Sector

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ABSTRACT

The pathways to enter and move up in the American labor market look very different today than fifty years ago, in part due to the erosion of traditional coordination between employers, workers, and training providers. Navigating this new reality disproportionately weighs on individuals facing limited access to education and additional barriers to employment. Some cities have experimented with sector-specific workforce development strategies to address these challenges.

Using the healthcare sector in Boston as a case study, this thesis traces the evolution of one such strategy and discusses the impact of these programs on the employment outcomes for participants. Four decades of work has resulted in meaningful changes in the internal processes of some large employers and has broadened the conversation around the need to address labor market challenges. Yet these efforts have led to limited improvements in post-training employment outcomes for low-skilled individuals.

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Introduction

INTRODUCTION AND RESEARCH QUESTION

The pathways to enter and move up in the American labor market look very different today than fifty years ago. Globalization and outsourcing combined with technology and increased automation have led to a new landscape of employment characterized by a fragmentation of traditional coordination between employers, workers, and training providers, low union membership, decreased job security, and shortened job tenure. In recent decades the nation has also experienced rising income inequality, lagging educational achievement, a declining real value of the minimum wage, and a polarization of the labor market resulting in a “hollowing out” of jobs for workers with midlevel skills. The challenges to navigating this new reality fall disproportionately on the shoulders of the nation’s least advantaged residents who face low levels of educational attainment and additional barriers to employment.

In a broad sense, this thesis explores the strategies that cities and metropolitan areas can employ to address these challenges in labor market polarization and the middle-skilled jobs gap that exacerbate income inequality. Cities regularly make economic development decisions that can—but do not inherently—have positive implications on employment opportunities. Forward-thinking economic development strategies address demand (for workers by employers providing good jobs and opportunities for career advancement) in tandem with supply (of qualified individuals to work in those jobs) and focus on sectors with a wide range of middle-skill job opportunities. Investing in a strong system of education, training, and workforce development that is linked to a region’s major economic sectors can help ensure that disadvantaged populations can participate in the prosperity of the nation’s vibrant cities and metropolitan areas.

More specifically, this thesis traces the evolution of the system of workforce development around the healthcare sector in Boston as a primary case study. Practitioners have identified the rapidly expanding healthcare sector as uniquely poised to offer employment and career advancement for low-skilled individuals through a “job chains” or “career ladder” approach and a sector-based workforce
development strategy. Hospitals, which are increasingly attached to medical campuses, are among the largest employers in many central cities. Their employment decisions have a large impact on local economies. Many healthcare occupations are service-based and at low risk of being outsourced or mechanized and are also projected to continue growing over the next decade. For these reasons, healthcare-focused workforce development programs and partnerships are particularly promising in improving access to human, social, and cultural capital resources for disadvantaged populations.

In Boston, eighteen percent of all jobs are in the healthcare sector, with fourteen percent in hospitals alone. Healthcare institutions are key anchor institutions in the city. Boston has a well-documented and long-established ecosystem addressing workforce development with a consistent focus on healthcare and allied health occupations. While a substantial body of literature addresses the impacts of specific programs, little is written providing a broader understanding of the forces that shaped the system over time. This thesis steps back to answer the questions: How did the system around workforce development in healthcare get to where it is today? Where are the successes? Where are the points of tension? This thesis concludes with action steps for Boston's case and key findings around building sector workforce development strategies more broadly.

1.2 RESEARCH METHODOLOGY

Primary research was comprised of (1) observation of two meetings of the Boston Healthcare Careers Consortium in 2014, each attended by over 40 stakeholders; and (2) nine semi-structured interviews with representatives from a wide range of individuals in the workforce development system including major healthcare employers, community-based training organizations, local community colleges, the Boston Private Industry Council, the Commonwealth Corporation, and the Mayor's Office of Jobs & Community Services. Most interviewees were also involved in the Boston Healthcare Careers Consortium. All interviews were conducted in-person and lasted approximately one hour each. Secondary research included academic literature, publicly available reports from local and national research institutions, and labor market data from the Department of Labor and the Executive Office of Labor and Workforce Development of the Commonwealth of Massachusetts.
**Chapter Two** introduces the key concepts and literature that underpin this thesis. It begins by explaining the changing structure of the American labor market and the increased national focus on income inequality, economic mobility, and the shrinking middle class. It addresses how cities and metropolitan areas play a role in addressing these challenges by employing particular demand (economic development) and supply (education and workforce development) policies and practices. It walks through how economic development decisions can—but do not inherently—have positive implications on employment opportunities, and how workforce development is the other side of the equation that is equally important in building employment opportunities. This chapter ends by addressing why healthcare is a particularly good sector to examine in exploring these questions.

**Chapter Three** sets the stage for understanding the context of the healthcare sector in Boston. It outlines three dimensions: (1) the size, composition and growth of the health care sector overall for MA and Boston; (2) the occupational composition, trends, and challenges within the health care sector and Boston in particular; and (3) federal and state policies shaping the landscape of workforce development around healthcare.

**Chapter Four** walks through the history and evolution of workforce development in Boston's healthcare sector. It traces the forces and trends that shaped the system to where it is today. This chapter ends with a discussion of the ongoing Boston Healthcare Careers Consortium, the latest and most robust partnership bringing a wide range of stakeholders together to address systemic labor market challenges.

**Chapter Five** summarizes the outcomes of forty years of work. It outlines some laudable results in impacting the internal processes of some large employers and expanding the conversation to involve a wider range of stakeholders. It also addresses the data available revealing mixed outcomes for individuals with low levels of education and training that these programs aim to serve.

**Chapter Six** outlines the challenges in the evolving system of workforce development along four dimensions: (1) how to be responsive to the needs of workers seeking training and jobs, (2) how to adapt to changes within the sector and employers, (3) how to navigate employer needs and balance them with the
reality of career development, (4) how to fund and sustain partnerships, services, and infrastructures to deal with the above challenges. The end of the chapter will outline steps for action to address these challenges moving forward.

Chapter Seven concludes with reflections on how Boston’s experience can inform other cities aiming to develop sector workforce development strategies. It also addresses the limitations of the workforce development field in influencing labor market outcomes.
A brief discussion of labor market policy and workforce development

2.1

THE changing structure of the AMERICAN LABOR MARKET AND THE INCREASED NATIONAL FOCUS ON INCOME INEQUALITY, ECONOMIC MOBILITY, AND THE SHRINKING MIDDLE CLASS

On December 4th, 2013 President Obama declared America's "dangerous and growing inequality and lack of upward mobility" as the "defining challenge of our time." The narrative of inequality is closely tied to a growing body of research that highlights decreased economic mobility—the likelihood that a child will occupy a different position on the income ladder than his or her parents did—in metropolitan regions across the country. Becoming a productive member of the American workforce is central to the national narrative around what brings both social value and produces economic mobility—what President Obama describes as "middleclass America's basic bargain that if you work hard, you have a chance to get ahead." While many researchers cite the wide range of structural forces at play influencing the capacity of many to participate in this "middle-class bargain," an individual's education and employment opportunities undoubtedly play a large role. Our mechanisms for understanding how rising income inequality and strained economic mobility interact with the health of our economy more broadly are limited. However, if we do think that worsening inequality damages our nation's ability to function efficiently at its fullest potential, as initial research suggests, then how do we best promote equitable growth and employment opportunities? The issue is ripe to examine and tackle more directly.

The pathways to enter and move up in the American labor market look very different today than fifty years ago. After World War II, the combination of the expansion of public colleges, the GI Bill, and strong labor unions created "the largest middle class the world had ever seen." During this period all levels of the income distribution expanded at fairly similar rates. However, the middle class has been shrinking for decades. Since the 1970s average wages have not kept up with the pace of economic growth and productivity gains. While the nation saw increased productivity in the 1990s, the benefits of growth have been concentrated at the top end of the income distribution. This earnings inequality

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1. Obama, "Remarks by the President on Economic Mobility."
2. Chetty et al., Where Is the Land of Opportunity?.
3. Obama, "Remarks by the President on Economic Mobility."
4. Kornbluth, Inequality for All.
has been a major contributor to the nation’s high levels of income inequality.\(^5\)
Meanwhile, the American public education system, crucial to the nation’s prosperity in the first half of the twentieth century, failed to keep pace with technological advancement.\(^6\)

The combined forces of globalization and technology have led to fundamental changes in the structure of the nation’s economy. Fragmentation of the traditional coordination between employers, workers, and education and training providers, coupled with outsourcing and increased automation, has led to profound changes in the distribution of skills and a “hollowing out” of jobs held by workers with midlevel skills.\(^7\) A reduction in training within firms, decreased job security, low union membership, and shortened job tenure are prominent features of the new landscape of employment. However, many recognize that a large number of middle-skill occupations—those requiring more than a high school diploma but less than the equivalent of a 4-year degree—continue to generate ample employment opportunities.\(^8\) This is of particular concern to regional planners and policymakers, who recognize that a skilled workforce is indispensable to regional economic growth.

This reality has important implications for the future productivity and competitiveness of the country. Major changes in the labor force from the last 50 years looking forward include:\(^9\)

1. Slower growth of the labor force: The civilian labor force grew from 62 million in 1950 to 141 million in 2000, an annual rate of 1.6 percent per year. Demographers predict a growth rate of 0.6 percent annually from 2000 to 2050, when the labor force is projected to reach 192 million.
2. Increased female participation in the labor force in the last 50 years: 47 percent of women in the labor force in 2000, up from 30 percent in 1950 (2.6 annual growth rate). The number of working women is projected to reach 92 million by 2050, assuming an annual growth rate of 0.7 percent.
3. An aging and retiring Baby Boom generation.
4. A more racially and ethnically diverse labor force. Looking forward, many economists are predicting labor and skill shortages that are cause for alarm.

The need to address the nation’s changing labor market goes beyond

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competitiveness and productivity. Being able to work and enjoy the fruits of one's own labor has long been one of the most fundamental tenants of American democracy. Abraham Lincoln was a deep advocate that “free labor — the just and generous, and prosperous system, which opens the way for all — gives hope to all, and energy, and progress, and improvement of condition to all.” Economic opportunity and employment have long been a central component in the struggle for civil rights. Labor and civil rights activist A. Philip Randolph organized and led the first predominantly black labor union, The Brotherhood of Sleeping Car Porters, to address racial discrimination, poor working conditions, and low wages in the porter industry. He then became a major organizing force behind the 1963 March on Washington where Dr. Martin Luther King delivered his famous “I Have A Dream” speech in front of over 200,000 demonstrators. While this March is widely remembered for King's speech, it was formally organized to address economic opportunity and employment and was officially “The March on Washington for Jobs and Freedom.”

Over the subsequent fifty years, the American social safety net became increasingly tied to employment requirements. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996, which represented a fundamental shift in the federal government's approach to welfare and cash assistance to the poor, added a workforce development component to welfare legislation and tied many benefits to employment requirements to encourage work through the Temporary Assistance to Needy Families (TANF) program. The Earned Income Tax Credit (EITC), which provides low-income workers a wage supplement in the form of a tax credit, has been expanded multiple times since its establishment in 1975 and is often lauded as the government's most effective policy for fighting poverty and encouraging work. While such a heavy reliance on stringent work requirements is recognized by some as a predominantly cultural distinction between the “deserving” and “undeserving” poor, it is the current reality of how the nation structures many social welfare programs and policies. Addressing our changing economic and labor structures is as much about productivity and competitiveness as it is about being recognized as a valuable member of society in the American narrative.

Cities and metropolitan areas are the frontlines of income inequality and economic mobility. Big cities are more unequal by income than the rest of the country, according to the most recent U.S. Census Bureau data, and some are
more unequal than others. A growing body of research is drawing attention to the decreasing levels of economic mobility in U.S. metropolitan regions, even though cities have high concentrations of employment opportunities. This research points to a general consensus that metro areas with higher income segregation by neighborhood—areas with pockets of concentrated wealth and concentrated poverty—is highly correlated with lower economic mobility, though there is significant variation between metro areas across the country.

This inequality is manifested in limited access to resources for human capital (knowledge and skills), social capital (networks and resources embodied in personal and group relationships), and cultural capital (cultural know-how to navigate the social world to one's benefit) development in disadvantaged communities. In metropolitan regions, these disparities are also often reflected spatially in residential segregation, "spatial mismatch" between affordable housing and employment centers, and limited public transportation options. A wide range of policies have sought to address these challenges with limited success.

Nonetheless, metropolitan areas remain fertile grounds to experiment with policies and programs to address challenges of inequality and employment. In the face of gridlock in the federal government and economic stagnation, public, private, and nonprofit leaders on the city and metropolitan level are uniquely poised to test and adapt new strategies. Outcomes from recent mayoral elections have reflected the urgency of addressing metropolitan inequality.

ECONOMIC DEVELOPMENT DECISIONS CAN—but do not inherently—have positive implications on employment opportunities.

State and local economic development has major implications for the potential employment opportunities for the workforce of a metropolitan region. Traditional state and local economic development policies focus on real estate transactions

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12 Alan Berube, All Cities Are Not Created Unequal.
13 Chetty et al., Where Is the Land of Opportunity?; Sharkey and Graham, Mobility and the Metropolis: How Communities Factor Into Economic Mobility.
14 Kain, "Housing Segregation, Negro Employment, and Metropolitan Decentralization."
17 Notably Bill de Blasio in New York City, Marty Walsh in Boston, Ed Murray in Seattle, and Betsy Hodges in Minneapolis. Alan Berube, All Cities Are Not Created Unequal.
and business tax incentives with the primary goal of boosting job growth. Increasing job growth can be considered in terms of labor demand and labor supply policies. Labor demand policies include overall public spending and taxes, state business taxes and tax incentives, spatially targeted incentives such as Empowerment and Enterprise Zones, customized real estate development services, and clustering of interdependent firms for horizontal integration. Labor supply policies include high quality preschool, summer school programs, high school career academies, improving teacher quality, work-based job training, and policies aimed at creating a high quality of life to attracted talented individuals and families. Economic development efforts combine labor demand and supply policies around various strategies such as traded sector cluster development, entrepreneurial development and small business support, and commercial district revitalization.  

However, economic development is not synonymous with economic prosperity for everyone. Anticipated spillover effects from major development projects do not necessarily equate to gains in standards of living for disadvantaged communities. Public sector subsidies for project financing are often given without job creation targets or requirements. Historically, the economic development field has focused on business growth and job creation with little concern for job quality, who is employed, and who benefits more broadly from this growth. Communities of color and neighborhoods of concentrated poverty often face additional barriers to employment that typical economic development strategies do not address. Formerly incarcerated people, whose numbers have been increasingly rapidly in recent decades and disproportionately come from low-income and minority communities, face additional barriers to employment which are particularly acute.

In principle, few would argue with the idea that economic and workforce development strategy should be linked. Urban planners and economic development officials regularly cite that a skilled workforce and quality job opportunities is an important component of a strong business climate. Community Benefits Agreements and the promise of “first-source” hiring policies are sometimes included in economic development negotiations as a way to ensure that jobs created for a particular project directly benefit local residents. Expanding these demand-side policies, often called “linkage programs,” tend to have little political traction in the United States and are considered unwarranted interference in the private market by conservatives and “corporate welfare” by
In practice, economic development strategy decisions made by state and local public agencies are often disconnected from strategies for educating and training a strong workforce needed to meet espoused “job creation” claims or even pledged hiring goals. Within state and municipal governments, economic development is functionally and administratively separate from workforce development. Yet if the primary benefit of traditional economic development policies is a labor market benefit, then policymakers should consider economic development policies integrated with local labor market policies. History has shown that investment in educational institutions and knowledge sharing has been a key ingredient to successful cities throughout American history.24 Cities are increasingly recognizing the importance of considering human capital development as a critical component of their economic health. A broader definition of economic development policy encourages more comprehensive considerations in making decisions, such as who has access to the jobs, what wages they pay, and how to better integrate local labor supply and demand policies. This approach is often known as “job-centered economic development.” Its advocates contend that economic sectors should be evaluated not on their potential for growth but also on their ability to provide opportunities and advancement for low-skilled workers.22

Currently, evaluations of economic development programs rarely adequately measure the local welfare effects of employment generation. To appropriately account for the costs and benefits, some argue that practitioners should employ a “job chains” analysis to quantify the chain reaction that a new job sets off in a local labor market.23 The creation of a new job in a regional labor market—for example, if a facility expands—sets off a chain of job vacancies. Existing workers make welfare-improving moves, leaving a new vacancy to be filled by either another worker or an individual not currently participating in the labor force. Job chains analysis measures the multiplier effects triggered by a new job entering the regional labor system. In general, job chains initiating with high-skilled job openings are longer than those started with openings in mid- and low-skilled jobs. However employment gains tend to be concentrated among workers in

21 Edward Glaeser, Triumph of the City.
22 This thesis will use the term “low-skilled” to refer to individuals with low levels of educational attainment or training desirable for employment in the modern economy in order to be relevant to the existing literature on employment and labor market policy. This term is not meant to equate skill level with human value or contribution to society more broadly.
23 Felsenstein and Persky, “Evaluating Local Job Creation.”
higher wage groups or already employed and are less efficient for workers at the lowest rungs of the job ladder.

Researchers also found external between-firm moves to be more effective than internal within-firm moves at improving opportunities for low-skilled workers.\textsuperscript{24} This suggests that two components are especially important in promoting jobs-centered economic development: (1) Sectors that induce growth and job opportunities for high-skill jobs and have a long job chain that trickles down to job vacancies for entry-level workers. (It is important to recognize that trickle-down can also be less efficient when vacancies are initiated higher up the wage hierarchy.) (2) Clusters of organizations and institutions in the same sector that allow for efficient external between-firm moves for workers as they climb the job chain ladder.\textsuperscript{25}

This model stresses the importance of focusing on employment opportunities in the middle of the wage distribution: “At base, our results suggest that if local and regional officials are seeking to maximize returns on economic development subsidy, they should concentrate on industry sectors in which job chains are medium length and where vacancies generated by job growth fall solidly in the middle of the earnings distribution.”\textsuperscript{26} Careful attention to training and educational requirements for those occupations, combined with a strong understanding of the opportunities for job advancement within institutions (such as within a hospital or urban medical campus), can ensure that states and cities leverage their economic development investments to maximize both efficiency and distributional fairness.\textsuperscript{27}

\textbf{2.3 WORKFORCE DEVELOPMENT IS THE OTHER SIDE OF THE EQUATION THAT IS EQUALLY IMPORTANT IN BUILDING MIDDLE-SKILL JOBS.}

Economic development is too often poorly linked with efforts to improve human capital development. Promoting industry sectors compatible with employment opportunities that fall in the middle of the earnings distribution is only half the battle. Educating and training a workforce to fill those jobs in a particular sector requires a sophisticated education and workforce development strategy. The concept of “workforce development” is distinct from job training or job placement—it focuses on long-term job retention and career advancement to promote lasting economic self-sufficiency. The failure of high schools, colleges, and employer training—the “first chance” system—to prepare individuals for

\begin{itemize}
\item \textsuperscript{24} Ibid.
\item \textsuperscript{25} Ibid.
\item \textsuperscript{26} Nelson and Wolf-Powers, “Chains and Ladders.”
\item \textsuperscript{27} Ibid.
\end{itemize}
the workforce has led to the emergence of community colleges and “second chance” employment and training programs.

There is no coordinated workforce development “system” in the United States, but rather a fragmented series of policies and programs, including high school equivalency degrees (GEDs), basic skill remediation, English as a second language, on-the-job work experience, dislocated worker and reemployment programs, and skill upgrading for incumbent workers. While the field has seen successes and identified best practices, the political landscape of workforce development, both nationally and regionally, remains fragmented.

Different populations face different types of challenges. Many unemployed individuals lack even basic skills and often need remedial education before entering occupational training. Many face significant obstacles due to instability in their lives that makes it difficult to manage work and training. For some, the relatively small increase in earnings (as compared to a food service job, for example) in the short-term is not enough to justify the cost, time, and energy required to enter a training program. These barriers range from the stigma associated with place of residence to limited transportation options to arrive at work to low educational attainment or workplace skills to qualify for well-paying jobs. Social service organizations have sought to overcome these barriers through childcare and transportation subsidies, remedial education and basic skills training, and coaching and support services. However, in contrast to economic development efforts viewed as contributing to the broader well being of the city, these services are typically seen as individual social assistance programs.

While the shortcomings of workers is the focus of literature and policy debates, hiring decisions of employers, particularly in the low-wage labor market, often present an equally significant barrier to employment. Employers find desirable skills such as trustworthiness or dependability not “directly observable at the time of hiring,” though these judgments run the risk of reflecting and reinforcing broader societal prejudices against disadvantaged populations. Cities and states are resistant to implementing policies or requirements on firms that directly impact labor demand—such as hiring preferences, raising the minimum wage, or what could be viewed as excessive development linkage fees. These efforts are seen as disincentives for firms who could locate in other cities or states with more generous or less onerous policies. Research has revealed that “in general, economic developers are loath to mix private sector job creation with social services and poor people; they fear sending the wrong signals about the local

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28 Weir, Politics and Jobs: The Boundaries of Employment Policy in the United States; Giloth, Workforce Intermediaries for the Twenty-first Century.

Emerging workforce development models known as workforce intermediary programs are seen as promising in developing human, social, and cultural capital for disadvantaged populations and providing value-added benefit to firms. Over the past decade, their “dual customer” orientation has gained traction to address both the supply and demand side of the labor market: improve self-sufficiency and career progression for low-skilled and hard-to-employ individuals while also delivering employers a workforce that allows them to remain globally competitive. Workforce intermediaries have emerged as programs and organizations that have the unique position to assemble the right mix of targeted good jobs, develop pre-employment and hard skills training, provide professional advice and case management support, and maintain long-term relationships with the employers and program graduates. These programs are often run through community colleges. Researchers note a shifting role of community colleges as public sector organizations which are acting as de facto employment and training agencies with the ability to shape not only the number of hires as a subsidized firm, but also who from the region gains access to high-paying high-tech jobs, therefore building in the ability to be more sensitive to equitable outcomes.

Another challenge is the lack of clarity in the steps required for an individual to enter and move up in a particular field rather than cycle through an endless “revolving door” of low-paid, entry-level positions. Practitioners have identified the promise of the “career ladder” or “pipeline” strategy: a set of linked, flexible, systemic steps through which people at various levels of skill, educational attainment, and work experience can progress and respond to the demands of the labor market. Workforce development efforts to support this strategy include mapping out career advancement pathways in a particular industry and aligning education, on-the-job training, and coaching to support an individual’s ability to advance through those steps. Pipeline programs may focus internally, supporting frontline workers move to higher-skilled positions, or externally, helping local residents access entry-level job opportunities, often called “community pipelines.”

These strategies are often more suited to particular economic sectors and occupations. “The occupational distributions of new jobs strongly affect the degree to which jobs translate into local welfare improvements.”

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33 Felsenstein and Persky, “When Is a Cost Really a Benefit?”
strategies employ a range of tactics to promote access to jobs (by removing barriers to entry and advancement) and improving the quality of jobs (by advocating for policies that improve wages, benefits, and working conditions) in a particular high-growth industry. A growing number of regional sector strategies take a systems approach to workforce development, typically on behalf of low-income individuals, to engage the wide range of actors that influence a region’s labor market. This approach seeks to: (1) target a specific industry or cluster of occupations and develop a deep understanding of business competitiveness and workforce needs; (2) intervene through a credible organization or set of organizations; (3) support workers in improving their range of employment-related skills; (4) meet the needs of employers to improve their ability to compete within the marketplace; and (5) create lasting change in the labor market system to the benefit of both workers and employers.34

A number of best practices reveal the potential of the sector strategy model. The BioWorks program in North Carolina has been particularly successful in aligning effective, targeted training with employer recruiting. Over time officials have been able to influence the hiring practices of firms in ways that favor traditionally disadvantaged groups with low levels of formal education.35 Boston also has a robust workforce development landscape in healthcare with a wide range of public and private programs to train and link residents with jobs in one of the region’s most important economic sectors.36 The Baltimore Alliance for Careers in Healthcare is another national model developed as part of the “Jobs to Careers” initiative funded by the Robert Wood Johnson and Hitachi Foundations in Baltimore, Maryland. The program incorporates remedial education, on-the-job training opportunities, and mentoring.37 Sector strategy models are promising because they “improve the ‘fit’ between workers and employers—not only by building the skills of workers, but also by changing how the employment system itself meets the needs of those workers.”38

34 Maureen Conway et al., “Sectoral Strategies for Low Income Workers: Lessons from the Field.”
35 Lowe, “Job Creation and the Knowledge Economy.”
36 Profile of the Current Educational & Training Opportunities for Boston’s Healthcare Workforce.
38 Maureen Conway et al., “Sectoral Strategies for Low Income Workers: Lessons from the Field.”
WHY HEALTHCARE IS A PARTICULARLY GOOD SECTOR TO LEARN FROM

The experience of the healthcare sector provides valuable insight into strategies to align workforce development and middle-skill employment opportunities into a high-growth sector in a regional economy. The healthcare sector is particularly well-suited for a number of reasons.

1. **Healthcare is among the largest and most stable sectors of the U.S. economy.**

Healthcare is consistently an industry immune to extreme fluctuations in the business cycle. Even during the 2007-9 recession when total nonfarm employment was down by 7.5 million jobs and the unemployment rate hit 10 percent, employment in the healthcare industry still increased by 428,000 jobs.³⁹ Federal stimulus packages funded hospitals through additional Medicaid subsidies and increased health-related expenditures during the recession. While this growth rate was lower than in the previous two recessions, likely due to the heightened cost of health care and slowed national health spending, it still often serves as a crutch to an ailing economy. Healthcare-related occupations and industries are projected to add the most new jobs between 2012 and 2022 according to the Department of Labor: “Total employment is projected to increase 10.8 percent, or 15.6 million, during the decade. ... The health care and social assistance sector is projected to grow at an annual rate of 2.6 percent, adding 5.0 million jobs... [accounting] for nearly one-third of the total projected increase in jobs.”⁴⁰

The hospital industry—general medical and surgical hospitals (or acute care hospitals), psychiatric hospitals, and specialty hospitals—is the backbone of the healthcare sector. The nation is seeing changes in health care delivery. The proliferation of single-specialty hospitals is drawing resources away from many large, general medical hospitals. An aging population increases the demand for nursing and long-term residential care facilities. However, the healthcare sector is already experiencing labor shortages. Economists project these shortages will escalate as the nation’s growing and aging population places greater demand on health care services. Additionally, the shifting national conversation and increased recognition of the importance of comprehensive and preventative care highlights other challenges. Changing demographics in the U.S. highlight the increasingly important need to address health needs for immigrant and minority populations. A more diverse labor force in hospitals would help break down language and cultural barriers to improve care.

³⁹ Wood, “Employment in Health Care.”
Education requirements for jobs in Healthcare and Social Assistance

2. Practitioners have identified the rapidly expanding healthcare sector as uniquely poised to offer employment and career advancement for low-skilled individuals through a “pipeline” or “career ladder” approach.

Healthcare is a service-based sector at low risk of outsourcing or mechanization. Despite new models of patient care that introduce technology into the workplace, “health care is a distinctly high-touch, labor-intensive enterprise. And it depends in part on workers at the front lines of care: nursing assistants, housekeepers, medical assistants, unit secretaries, dietary service workers, and a host of others who work 24/7 to answer call lights, empty bed pans, pass trays, or draw blood.”

According to the Department of Labor, the healthcare sector is broken into four sub-sectors: ambulatory care (outpatient care, hospitals (inpatient care), nursing and residential care facilities (long-term inpatient care), and social assistance. Approximately half of the people who work in the sector belong to “healthcare occupations” which are either professional (requiring at least an associates degree) or healthcare support workers (requiring a certificate of completion of a job training program). This thesis will predominately focus on hospital workers providing inpatient care, who make up just over a third (37%) of the sector and fourteen percent of Boston’s workforce.

According to the BLS, 29% of jobs in healthcare and social assistance require no post-secondary education, 21% require postsecondary non-degree, 28% require an associate’s degree, 4% require a bachelor’s degree, and 9% require an advanced degree. However, the median salary for the majority of those occupations that typically do not require post-secondary education fall below the Massachusetts state median wage of $42,730. Those requiring higher levels of education have higher wages beyond the state median wage. Figure 1 below displays hourly wages for select healthcare occupations.

Hospitals require workers with a wide range of skill levels. Employment in the hospital industry can be characterized as a “career ladder,” with a series of rungs requiring different levels of education. Typically, the first rung on the “career ladder” includes environmental services not requiring an advanced degree, such as cleaning rooms, serving meals, and transporting patients. The next rung includes entry-level technicians, administrative assistants, and paraprofessional workers such as nursing assistants and typically requires basic certification or training beyond a high school degree. The next rung requires specialized certification or an associate’s degree. This rung can be divided into two fields:

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42 Pieta Blakely and Gene White, Massachusetts Healthcare Chartbook.
technical fields (such as a lab technician, radiologic technologist, or surgical technician) and patient care fields (such as medical assistant, practical nurse, or registered nurse). A more detailed explanation of the occupational composition of healthcare professions is provided in the following chapter.

In an occupation with a long career ladder, vacancies are multiplied through the job chains effect: “The vacancies initiated by employment growth in hospitals accomplish two things simultaneously: they have a substantive impact on unemployed and discouraged workers, and they create work in the middle of the
wage scale, in moderately skilled, moderately paid positions.\textsuperscript{43} This potential for job chains in hospitals must be matched with an effective workforce development infrastructure to help move individuals into new jobs.

3. Healthcare institutions are often anchored in a particular geographic region and invested in the economic health of the surrounding communities.

Hospitals, which are increasingly attached to medical campuses, are among the largest employers in many central cities. They invest heavily in facilities and specialized equipment that anchors them in a region. Acute care hospitals, as key components of medical campuses, play an essential role in expanding knowledge and innovation, training medical professionals, building the export base of the region, and influencing the future trajectory of the healthcare industry. A growing body of research highlights the significant contributions of these anchor institutions—and other “eds and meds” such as large research universities—to the health of the local economy.

In some cities across the country, hospital and university anchor institutions have recognized that “their expanding economic impact and connection to their location strategically position them to produce targeted community benefits if they leverage their resources effectively. Specifically, as economic engines, anchors are well situated to catalyze place-based community revitalization strategies if they consciously choose to do so.”\textsuperscript{44} Anchor strategies include local procurement policies that redirect purchasing to local and diverse businesses, expanding workforce development and hiring for local residents, and aligning real estate and housing development to enhance local commercial business investment. Furthermore, anchor institutions focused on healthcare have a strategic role to play in influencing local economic forces that impact health disparities and the social determinants of health for at-risk populations in the first place.

\textbf{CHAPTER CONCLUSION}

In sum, the combined forces of globalization and technology over the past fifty years have led to profound changes in the distribution of skills and a “hollowing out” of jobs held by workers with midlevel skills. Metropolitan areas are fertile grounds to experiment with policies and programs to address challenges of inequality and employment. Existing sector-specific workforce development strategies employ a range of tactics to promote access to jobs and improving the quality of jobs in a particular high-growth industry.

\textsuperscript{43} Nelson and Wolf-Powers, “Chains and Ladders.”

\textsuperscript{44} David Zuckerman, Hospitals Building Healthier Communities: Embracing the Anchor Mission.
Community and workforce development practitioners in recent years have seen "a convergence occurring as economic development literature uncovers the importance of central city medical facilities to economic growth, workforce development literature stresses the potential of sector strategies in healthcare, and the literature in healthcare administration focuses attention on the importance of workforce training and employee satisfaction to quality of care." This thesis will analyze the efforts of Boston, widely regarded as one of the best practice cases for building strong partnerships and investing in workforce development in healthcare.

45 Nelson and Wolf-Powers, "Chains and Ladders."
The case of the healthcare sector in Boston

3.1 CHAPTER INTRODUCTION

Massachusetts, and the Boston metropolitan region in particular, has one of the most evolved landscapes of workforce development in the healthcare sector of any region in the country. As discussed in the previous chapter, many "middle skill" jobs—certainly those in healthcare—require very specific academic credentials and certifications. This reality demands a more intentional approach to align education and training pathways with job opportunities. Healthcare is such an established sector in Massachusetts that practitioners have had time to experiment with a wide range of approaches to workforce development that respond to industry needs. The healthcare sector in Boston provides a particularly unique lens through which to analyze the potential of industry-specific workforce development efforts to both improve opportunities for low-skilled workers and meet the needs of employers in a high-growth sector. In the words of labor economist Paul Osterman, "If it can't be done in Boston, it can't be done."46

The following chapter sets the stage for understanding the context of the healthcare sector in Boston by outlining three dimensions: (1) the size, composition and growth of the healthcare sector overall for MA and Boston; (2) the occupational composition, trends, and challenges within the healthcare sector and Boston in particular; and (3) federal and state policies shaping the landscape of workforce development around healthcare.

3.2 THE SIZE, COMPOSITION, AND GROWTH OF THE HEALTH CARE SECTOR OVERALL FOR MASSACHUSETTS AND BOSTON

The Commonwealth overall

Both the state of Massachusetts and the city of Boston have long invested in the human capital development of its citizens. Urban economist Ed Glaeser ties the Boston region's success to the early days of its founding in the early 17th century: "Boston's human capital mattered because the city and its region had little worth exporting."47 Over centuries the region's economy has reinvented itself in response to national and global economic trends, from the early days...
of global shipping trade in the 18th and early 19th centuries to manufacturing in the mid-19th century to today’s knowledge economy strong in biotechnology and healthcare.

Over the last several decades, the Commonwealth has lost over one-third of its historically strong manufacturing base. It has experienced a structural shift in the labor market towards a more diversified knowledge-based economy with professional, education, and health services now representing the sectors with the strongest job growth. Today, the Commonwealth of Massachusetts has the most highly educated workforce of any state in the country, driven by knowledge and innovation industries and supported by a large number and high concentration of world-renowned institutions of higher education. The unemployment rate has historically remained below national levels. As shown in Figure 2, when the national unemployment rate was 4.0% nationwide in 2000, Massachusetts experienced 2.8% unemployment. In 2010 after the 2008-9 recession, unemployment was 8.5% in Massachusetts but 9.6 nationally.

**Figure 2: Unemployment rate, 2000-2013**

*Data from the Commonwealth of Massachusetts and the Bureau of Labor Statistics*

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49 “Closing the Massachusetts Skills Gap: Recommendations and Action Steps.”
However the Commonwealth still faces a number of challenges moving forward. Barriers to pursuing education, training, and employment impact fall disproportionately on the shoulders of its least advantaged residents. A thorough understanding of employment requires a more rigorous analysis of other measures of labor underutilization. A 2013 report from the Northeastern Center for Labor Market Studies highlighted the strikingly unequal distribution of labor market problems across socioeconomic groups across Massachusetts: “These widening socioeconomic disparities in labor market problems have contributed in an important way to the growth of earnings and income inequality in our state over the past decade. We are no longer a true ‘Commonwealth’ and the consequences are quite severe.” Overall their research determined that the least well educated, low income group of workers was 25 times more likely to be underemployed and 18 times more underutilized in 2012-13 than their best educated, more affluent peers in the Commonwealth.50

The Commonwealth also faces challenges of low population and labor force growth. The Commonwealth has one of the lowest rates of population growth in the country and any growth it is experiencing is predominantly due to an influx of immigrants. The immigrant population of Massachusetts has grown at a pace of 2.3 percent annually and 22.7 percent from 2000 to 2008-2010.51 Its workforce is also aging at a rate that exceeds the nation as a whole. Young workers between the ages of 16 and 24 are disproportionately unemployed across the state. This is concentrated among younger workers with low levels of educational attainment. Across the state, those with a high school degree or less represent 32.1 percent of the civilian workforce but 50.5 percent of the unemployed.52

Approximately 44 percent of jobs in Massachusetts qualify as middle-skill jobs, requiring more than a high school degree but less than a 4-year advanced degree. “Close to two-thirds of the people who will be in Massachusetts’ workforce in the year 2020 were already working adults in 2005—long past the traditional high-school-to-college pipeline.”53 In 2010, wages for middle-skill jobs in the Commonwealth averaged $61,618 per year, well above the state’s median income of $39,700.54

The healthcare sector is a major driver of the state’s economy and has been the

51 “Closing the Massachusetts Skills Gap: Recommendations and Action Steps.”
52 Ibid.
53 Ibid.
54 Massachusetts’ Forgotten Middle-Skill Jobs.
state's largest sector since 1995. Across Massachusetts, thirteen percent of jobs are in healthcare, and just below seven percent are in hospitals alone. In 2011 the sector employed 531,448 workers, which was 50% more than the next largest sector, retail. The sector has remained particularly stable, even as the statewide economy faltered. From 2007-11, total employment in Massachusetts decreased from 3,236,120 to 3,191,604 and the majority of industries and sectors saw a decrease in employment. However the Healthcare and Social Assistance sector continued to grow, adding 42,145 jobs for a total 531,448 workers in the state. General medical and surgical hospitals grew by 5%, or 9,063 workers, the largest growth within the sector. Within that sector, the “healthcare practitioner and technical” occupational group saw the highest growth, gaining 14,320 jobs.

While the Commonwealth has made significant investments in education and training, particularly in K-12 education, is has still under-invested in public higher education and vocational training opportunities. Research reveals high returns on state investments by investing in postsecondary education and training. For example, the Massachusetts Reach Higher Initiative estimates that a Licensed Practical Nurse program costing $7,676 per student would yield a 300% return to the state through increased tax revenue. With a recovering economy and shifting demographics, the state must continue to build a skilled workforce for a changing and increasingly competitive global economy.

### OCCUPATIONAL COMPOSITION, TRENDS, AND CHALLENGES WITHIN THE HEALTHCARE SECTOR AND BOSTON IN PARTICULAR

The healthcare sector in Massachusetts has long been concentrated in the Boston region. The Boston region built off its long history of biomedical research and institutions of higher education and figured out how to export healthcare services and medical technology in recent decades to counter the decline in manufacturing. Today eighteen percent of all jobs are in the healthcare sector, with fourteen percent in hospitals alone. Boston metropolitan region is home to over 25 hospitals and rehabilitation centers, 26 community health centers, 12 assisted living centers, and 35 nursing homes.

Healthcare employment has seen slow and steady growth in Boston over many decades. From 1993-2000 almost all of the City's employment gains

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55 Profile of the Current Educational & Training Opportunities for Boston's Healthcare Workforce.
56 Pieta Blakely and Gene White, Massachusetts Healthcare Chartbook.
57 Massachusetts' Forgotten Middle-Skill Jobs. Page 28.
58 Profile of the Current Educational & Training Opportunities for Boston's Healthcare Workforce.
**Figure 3: Employment in Boston by Industry, 2008-Projected 2018**

*Source: Massachusetts Executive Office of Labor and Workforce Development*

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percent Change 2008-18</th>
<th>2008 Employment</th>
<th>Projected 2018 Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care and Social Assistance</td>
<td>15.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Employed Workers, Primary Job</td>
<td>-2.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>-4.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional, Scientific, and Technical Services</td>
<td>27.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>5.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Services</td>
<td>9.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative Support / Waste Management and Remediation</td>
<td>8.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail Trade</td>
<td>-4.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>3.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Services (Except Government)</td>
<td>9.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>5.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>-19.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>1.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>-0.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>13.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>-16.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td>-1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilities</td>
<td>-13.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unpaid Family Workers, Primary Job</td>
<td>-1.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
were concentrated in hospitals. As shown in Figure 3, the Healthcare and Social Assistance sector is projected to grow by 15.5% by 2018, second only to Professional, Scientific, and Technical Services. Both Massachusetts and Boston never experienced a severe overall healthcare workforce shortage, except for periodic shortages in specific occupations, notably nursing and health technicians. The Boston economy also grew significantly due to the information technology sector. Unemployment dropped to a record low 2.9% in 2000. Overall, competition for healthcare jobs has been strong for decades, though specific occupations have faced periodic shortages at different points in time.

Boston is also the center of cutting-edge healthcare, medical, and biotech research. Boston received $2.1 billion in research funding from the National Institutes of Health in 2010, the highest amount for any city in the nation and over five times the next city on the list. These major investments and rapidly advancing technology in healthcare are continuously transforming workforce needs.

The occupational composition of healthcare jobs in Boston reveals a high concentration of both entry-level and middle skills jobs—those that require more than a high school diploma but less than a four-year degree. Both Healthcare Practitioners and Technical occupations as well as Healthcare Support occupations has job vacancy rates roughly equal to the vacancy rate in Boston in 2013. However 2013 saw vacancies in Healthcare Support occupations for jobs that required only a high school degree or GED at twice the rate of all other occupations, as shown in Figure 4. Vacancy rates for middle-skill jobs in healthcare are up to four times the rates for middle-skill job vacancies citywide.

Figure 5 reveals a more detailed occupational composition for 30 select middle-skill healthcare occupations in Boston and their projected growth through 2020. All but one see positive job growth projections, with an average growth rate of 24%. Furthermore, a significant proportion of employment change is projected to be due to net growth of jobs in the occupation as opposed to replacement. These data confirm that a wide range of middle-skill healthcare occupations will continue to be in demand in Boston in the coming decades. Healthcare will remain a key target sector for workforce development strategies to address the employment needs of move low- and middle-skill individuals in Boston.

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60 2008-2018 Projections.
61 Hutson, “Politics, Jobs and Workforce Development.”
62 “Metro Boston Skilled Careers In Life Scences Initiative (SCILS): Grant Application from The City of Boston, Economic Development and Industrial Corporation.”
While industry and occupational data may suggest trends in future job growth, they are limited in understanding how people move into and between jobs in healthcare. These data do not explain how individuals access specific employment opportunities or how employers make hiring decisions. Furthermore, the nature of healthcare provision is likely to evolve in ways that are difficult to predict. A more nuanced qualitative understanding of the behavior and experience of individuals and employers is required to help policymakers develop effective economic and workforce development strategies. The following chapters will explore the system built over time aiming to both link low-skilled residents with jobs in healthcare as well as help employers address their workforce needs.
FIGURE 5: PROJECTED GROWTH OF MIDDLE-SKILL HEALTHCARE OCCUPATIONS IN BOSTON WORKFORCE INVESTMENT AREA, 2010-2020
Source: Massachusetts Executive Office of Labor and Workforce Development

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Voc/tech required</th>
<th>Associate's degree required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Therapist Assistants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupational Therapy Assistants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veterinary Technologists and Technicians</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiologic Technologists and Technicians</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear Medicine Technologists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diagnostic Medical Sonographers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiovascular Technologists/Technicians</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental Hygienists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical/Clinical Laboratory Technicians</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respiratory Therapists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radiation Therapists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Nurses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Transcriptionists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dental Assistants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Massage Therapists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursing Aides, Orderlies, and Attendants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Technologists/Technicians, All Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Records/Health Info. Technicians</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Licensed Practical/Vocational Nurses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical Technologists</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychiatric Technicians</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Medical Tech./Paramedics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Projected Percent Growth, 2010-2020
FIGURE 6: MAJOR HEALTHCARE INSTITUTIONS IN BOSTON, 2014
Source: MassGIS, ESRI

Cambridge

Mass. General Hospital (MGH)

Brookline

Longwood Medical Area:
Beth Israel Deaconess Medical Center (BIDMC), Dana-Farber Cancer Institute, Children's Hospital, Brigham and Women's Hospital

New England Baptist Hospital

Faulkner Hospital

Tufts Medical Center

Boston Medical Center (BMC)
In understanding the local context, it is important to briefly understand the federal and state policies have played a crucial role in shaping both workforce development and the healthcare sector up to this point.

**Workforce Development Policy**

**In the context of welfare policy:** A heated national debate around reforming welfare policy heightened the focus on the job training needs of adults and directed resources to some of Boston's earliest workforce development initiatives in healthcare. In 1995 the Commonwealth of Massachusetts overhauled its state welfare system to include time-sensitive cash assistance with stringent work requirements through the Transitional Aid to Families with Dependent Children (TAFDC) program. Major federal legislation the following year—The Personal Responsibility and Work Opportunity Reconciliation Act of 1996—followed suit and tied welfare benefits to strict employment requirements. The first few years of the TAFDC saw bleak job placement outcomes, which highlighted the need for comprehensive employment services for welfare recipients. As will be described in the following chapters, many of the workforce development programs around healthcare began as welfare-to-work initiatives responding to these state and national incentives.

**Federal workforce development policy:** In 1998 under President Clinton's second term, Congress passed the Workforce Investment Act (WIA), replacing the Job Training Partnership Act (JTPA) of 1982 as the single largest source of federal funding for workforce development initiatives. In line with the narrative built into recent welfare reform policy encouraging work, WIA represented an attempt to boost business involvement in the delivery of workforce development services.

WIA established Workforce Investment Boards (WIBs), regional bodies authorized to allocate funding and oversee publicly funded workforce development programs. The chief elected official in each region (such as the Mayor in Boston) appoints members to sit on the WIB. At least 50% of the WIB members must be private sector leaders and to represent local industry interests, and the remainder often include representatives from labor unions or educational institutions. WIA also streamlined workforce development services into One-Stop Career Centers which consolidated employment information, job search assistance, and training opportunities for adults receiving welfare assistance,
dislocated workers, and youth. A handful of other federal programs, such as Temporary Assistance for Needy Families (TANF) and housing services through the Department of Housing and Urban Development, also co-located their offices in One-Stop Centers. It also created opportunities for private employers to be reimbursed for the cost of training a long-term unemployed dislocated worker through the On-the-Job Training (OJT) program.

Massachusetts was one of the first states to take steps to consolidate its workforce development system even before 1998 WIA legislation. The Work Place, chartered by the Boston Private Industry Council (PIC) and currently run through JVS, became the first centralized career center (later officially a One-Stop Center) in Boston in 1996. Under WIA, the PIC became Boston’s Workforce Investment Board (WIB), The Mayor’s Office of Jobs and Community Services (JCS) also became responsible for overseeing the city’s workforce development system.64

At the time, WIA was generally considered a significant positive step forward for employers and job-seekers. WIA, designed to be a work in progress in a rapidly changing labor market, was only originally authorized for five years, after which it was supposed to be reformed. However since 2003, Congress has relied on annual appropriations bills to extend WIA’s authorization one year at a time with only minor policy changes that are not necessarily retained in subsequent years. Critics contend that WIA is long outdated and over-emphasizes quick job placement over long-term education and building skills that are crucial to building a competitive national workforce. Federal funding has also decreased dramatically over decades:

After peaking in real terms in 1979 at about $17B, funding declined until 1985, and has either remained flat or declined more since then. By 2003, inflation-adjusted funding had fallen by about 65 percent from its 1979 peak; by 2008, by nearly 70 percent. However, because the real economy has more than doubled in size since 1979, this funding has fallen by about 87 percent in relative terms.65

WIA has evolved to fund a broader range of services for a broader target population over the past several decades as well, so the decline in spending specifically for low-income and disadvantaged populations has been even greater.

Congress made substantial new investments in WIA as part of the American Recovery and Reinvestment Act of 2009 to allow for greater flexibility in how local WIBs allocate resources, and the 2011 Continuing Appropriations Act included $125 million for a new Workforce Innovation Fund. Other proposed reforms include the expansion of career pathways programs and sector-based partnerships, streamlined performance metrics focused on employment

64 ibid.
65 Holzer, “Workforce Development as an Antipoverty Strategy.”
rates, and a five-year authorization period. However many argue that a more substantial overhaul of federal workforce development policy is needed.

*Healthcare Policy*

Boston's workforce development initiatives have also been impacted by federal and state healthcare policy. State-level cost containment measures are putting increased pressure for health care institutions to direct workforce development efforts into those programs with the highest and clearest return on investment. In August 2012, Massachusetts became the first state in the country to enact health care cost containment legislation, known as Chapter 224 of the Acts of 2012. This legislation, set to become effective on November 5, 2012, is projected to result in nearly $200 billion in savings over 15 years. “Cracking the code” on health care costs is a top priority of the Patrick-Murray Administration and considered essential for long-term economic competitiveness in the state.

*Policies and Programs Specific to Massachusetts Targeting Middle-Skill Job Development*

Massachusetts has established a handful of specific education and training programs and policies to address its shortage of middle-skill workers in target sectors across the Commonwealth. These policies and funding streams have played a role in the Boston-specific system to be discussed in the following chapters.

- The **Educational Rewards Grant for Working Adults**, established in 2006, provides financial support for tuition and living expenses for low-income working and unemployed adults to complete their education and training programs. In an evaluation as of 2010, seventy-eight percent of grant recipients had either completed a course of study or were still enrolled in classes.

- The **Extended Care Career Ladder Initiative (ECCLI)**, established in 2000, provides flexible educational opportunities and incentives for nursing staff employed by long-term care providers to improve recruitment, retention, and patient care. Over the past decade the program has trained over 9,000 individuals in nearly 200 nursing home sites and improved worker retention rates.

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66 Stephen Steigleder, “It's Past Time to Reauthorize the Workforce Investment Act.”
67 “Implementing Health Care Cost Containment.”
68 Massachusetts’ Forgotten Middle-Skill Jobs.
69 Ibid.
The Commonwealth's Workforce Training Fund (WTF) provides training grants funded through an employer surcharge on business state unemployment insurance contributions and matched with private funds by successful applicants.70

The Workforce Competitiveness Trust Fund (WCTF) supports sector partnerships. Built on the successes of BayStateWorks and the BEST Initiative, it has served over 6,000 people to date.71

To address skill gaps in the healthcare workforce, the Healthcare Workforce Transformation Fund was established as part of cost containment legislation Chapter 224 in 2012 with the purpose of funding a wide spectrum of employee training and skills upgrading programs within the healthcare industry.

The Commonwealth’s Adult Basic Education/English for Speakers of Other Languages (ABE/ESOL) program addresses the needs of low-skill adults with low English proficiency. In particular, the Learn@Work program allows employers to apply for grants to provide on-site ESOL classes for its employees.

CHAPTER CONCLUSION

This chapter set the stage to understand the context in which Boston’s healthcare-focused workforce development initiatives have developed over time. It outlined three dimensions: (1) the size, composition and growth of the health care sector overall for MA and Boston; (2) the occupational composition, trends, and challenges within the health care sector and Boston in particular; and (3) federal and state policies shaping the landscape of workforce development around healthcare.

The following chapters will walk through the history and evolution of specific workforce development initiatives. It traces the forces and trends that shaped the system to where it is today. This chapter ends with a discussion of the ongoing Boston Healthcare Careers Consortium, the latest and most robust partnership bringing a wide range of stakeholders together to address systemic labor market challenges.

70 ibid.
71 ibid.
The evolution of workforce development in Boston’s healthcare sector

CHAPTER INTRODUCTION

The workforce development "system" around the healthcare sector in Boston has been evolving for over 40 years. Over the past four decades, Boston has seen a transition from small, disconnected efforts to train its workforce to a large, active network of sector-focused workforce development practitioners in large hospitals, community college leaders, public agencies, local community-based organizations, large foundations, and academic researchers. This chapter will trace its evolution since the 1970s through four stages in order to understand the forces that have helped Boston strengthen the potential for career ladder and sector initiatives to expand access to middle skill jobs.

1970 TO MID-1990S

MAJOR PLAYERS INVOLVED: Mayors Ray Flynn and Thomas Menino, Boston Private Industry Council (PIC), Mayor's Office of Jobs and Community Services (JCS), Local community-based training organizations

MAJOR DRIVERS: Political pressure, emphasis on youth services

ACTIVITIES: School-to-work healthcare apprenticeship programs, basic skills training for adults

OUTCOMES: Early initiatives built partnerships between industry, education, and public agencies. The Neighborhood Jobs Trust established a unique flexible funding stream for job training. Federal and state policy heightened the focus on employment and consolidated services.
Early partnerships between major industries, public education, and local authorities built a strong culture around the value of education and training in building a prosperous city. William Edgerly, a prominent banker and education advocate, founded the Private Industry Council (PIC) in 1979 to organize private sector job training strategies in Boston and act as a convener between industry and education. In the 1980s, the PIC coordinated the evolution of the first and second Boston Compact, a school reform agreement between the Boston Public Schools, business, higher education, and Boston Teachers Union, and the Mayor to improve school quality and develop the first Boston Summer Jobs campaign. While predominantly focused on youth services, these early initiatives were important in fostering partnerships between education and industry and developing the capacity of the PIC as a convener.

In 1991, healthcare employers approached city officials expressing a projected shortage of healthcare workers, particularly nurses. In response, the PIC, in collaboration with Boston Public Schools, founded a program called ProTech linking high schools students with apprenticeships in healthcare careers. The program saw high rates of job placement success and gained national attention as a model school-to-career initiative. Former Mayor Thomas M. Menino continued to stress the importance of school-to-work and supported a wide range of youth internship programs, including the third Boston Compact expanding internship programs and promoting experimentation with training in public schools. The 1994 federal School-to-Work Opportunities Act bolstered resources for these local initiatives.

Simultaneously over these decades, the Boston's Neighborhood Jobs Trust has created an additional stream of flexible funding that has allowed Boston to experiment with additional workforce development programs over decades. The purpose of the Trust is to “ensure that large-scale real estate development in Boston brings a direct benefit to Boston neighborhood residents in the form of jobs, job training and related services.” In the words of Alysia Ordway of the Boston PIC, “No other city has Jobs Trust money. It's like pennies from heaven.”

The history of the Neighborhood Jobs Trust dates back to the 1982 mayoral election between Mel King and Ray Flynn. The election galvanized a wide range of community organizers around a sentiment that low-income residents of the

72 “Boston PIC: An Overview.”
73 Alysia Ordway, interview.
74 James and Jurich, “More Things That Do Make a Difference for Youth.”
75 “Boston PIC: An Overview.”
76 “Guide to the Neighborhood Jobs Trust.”
77 Alysia Ordway, interview.
city should benefit from downtown development projects through increased affordable housing provision. Both candidates endorsed linkage policies requiring downtown developers to pay into a trust that would help finance affordable housing in the city. After Flynn won the election he established the Neighborhood Housing Trust (NHT), then the Neighborhood Jobs Trust (NJT) a few years later to address the employment needs of affordable housing residents.

Initially developers fought the policies and threatened to challenge it in court as an unfair tax. The city's lawyers attached the requirements to the zoning ordinance in the city to skirt around legal challenges. Any developer building a commercial structure over 100,000 square feet must pay what is known as a “linkage fee,” based on square footage, into both the NHT and the NJT in order to get development approvals from the city. The jobs linkage fee was originally set at $1 per square foot. It was later tied to inflation and reached $1.67 in 2013.

Today, developers have the option of paying the fee in two ways: as a (1) Jobs Contribution Grant, where the payment goes into the Trust and is administered by the Trustees and the Office of Jobs and Community Services (JCS) or as a (2) Jobs Creation Contribution, where the developer may request funds be to design training programs for workers who will be permanently employed through the development project.78 The Jobs Creation Contribution option is rare, since typically the developer doesn't have control over tenants' hiring decisions. Institutional developers such as hospitals are more likely to utilize this option, though to date only one healthcare institution has gone this route for one project.

The NJT process has evolved over time to be more effective in supporting successful training programs. In the 1980s and 90s the process was run on a deal-by-deal basis. Community organizations with little job training experience approached developers and delivered a training proposal to the Trustees for approval. After a number of unsuccessful training programs, the City developed a Request for Proposals (RFP) process for training providers in the late 1990s. Today JCS operates the programs on performance-based contracts with strong accountability for placing individuals in jobs and involving employers in training program design.79

In the mid-1990s, reforms to federal and state welfare and workforce development policy heightened the focus on employment services for adults and streamlined funding and service provision through Workforce Investment Boards (WIBs) and One-Stop Career Centers.80 While a large number of community-
Based organizations had been providing basic job training and employment services for decades, these higher-level changes consolidated existing efforts and centralized funding allocation. Many of the workforce development programs around healthcare would begin as welfare-to-work initiatives responding to these state and national incentives.

**LATE 1990S TO MID-2000S**

**MAJOR PLAYERS INVOLVED:** Mayor Thomas Menino, Boston PIC, JCS, local community-based training organizations, local community development corporations (CDCs), Boston-area community colleges, The Commonwealth Corporation, The Boston Foundation, emerging workforce development offices in large hospitals

**MAJOR DRIVERS:** Federal and state policy reform, federal grants, skills shortages in healthcare occupations, political pressure

**ACTIVITIES:** Welfare-to-work programs, early models of workforce intermediary programs

**OUTCOMES:** Federal grants allowed for experimentation in workforce development models for the occupations experiencing skill shortages in the healthcare sector and expanded relationships between public agencies, large employers, and community colleges. The Private Industry Council (PIC) became the convener around workforce strategy. Employers dedicated staffing capacity specifically to workforce development for the first time.

A handful of initiatives in the late 1990s and early 2000s, many supported by federal Department of Labor (DOL) grants, addressed skills shortages specifically around healthcare occupations and built the convening capacity of the PIC. Beginning in 1998 the PIC worked with the Massachusetts Long Term Care Federation to develop training projects and curriculum to promote career ladders for certified nursing assistants (CNAs) in the long-term care sector with a $2.9 million dollar DOL. The passage of the Commonwealth’s Extended Care Career Ladder Initiative (ECCLI) in 2000 provided further support for training and education as part of a career ladder in nursing. Simultaneously, a group of community-based organizations organize the Boston Workforce Development Coalition as an attempt to develop citywide strategy around career ladders in...
specific industries, including the growing healthcare sector.81

In 1998, a 4-year, $11.3 million dollar grant from the DOL helped the Boston PIC, JCS, and the Economic Development and Industrial Corporation fund welfare-to-work training programs in Boston. With federal dollars, the PIC and JCS had significant leverage to bring employers to the table, particularly those who were initially skeptical of hiring welfare recipients. The PIC, being the fiscal agent of the DOL grant, solicited proposals for training programs. Two organizations received funding to run programs with the requirement that they place at least twenty welfare recipients into jobs within four months: (1) the Steps to the Future program through Jamaica Plain Neighborhood Development Corporation (JPNDC) and Fenway Community Development Corporation (FCDC), and (2) Project RISE through the non-profit arm of the Partners HealthCare System, Inc. These were the first two large-scale workforce development programs in healthcare in Boston and laid the foundation for the workforce intermediaries they would eventually evolve into: the Boston Health Care and Research Training Institute and the Partners in Career and Workforce Development programs.82

In 2000, the Boston Public Health Commission and the PIC facilitated a series of meetings with healthcare employers about the mismatch between employment needs and the supply of workers. A year later, with funding from a DOL planning grant, the PIC formed the Boston Health Care Consortium, with over 50 stakeholders from a wide range of healthcare employers, professional and trade associations, public agencies, organized labor, community-based organizations, and post-secondary education institutions.83 This was the first large-scale effort to bring together a wide range of stakeholders to share information and develop a cohesive strategy for workforce development in healthcare in Boston. The Consortium did not lead to any programs or policies directly and the meetings did not continue after the grant period. However it built the foundation for key conversations and relationships that would prove to be important down the road. Karen Shack, Senior Program Manager of Workforce Development Strategies at the Commonwealth Corporation who has been involved for over a decade, recalls that the grant “set the stage for the PIC being the convener” around workforce strategy.84

In 2001 the Commonwealth Corporation also funded five career ladder efforts under the BEST (Building Essential Skills Through Training) Initiative, one of

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81 Laurie Sheridan, Career Ladders in Boston: A Summary of Recent Progress.
84 Karen Shack, interview.
which—the Boston Health Care and Research Industry Training Institute—focused on healthcare in Boston. These early efforts represented important first steps in developing a citywide conversation about the importance of career ladders, though state funding for the initiative itself was dramatically cut in the years that followed.85

The Healthcare Skill Shortages grant from DOL in 2001 represented a crucial step towards building sustained capacity towards workforce development strategy in healthcare. PIC staff worked full-time on the grant for three years and developed recruitment tools for pharmacy technician programs and a loan forgiveness program for medical imaging training, two occupations facing shortages at the time.86 Karen Shack, who led the effort at the PIC at the time, developed stronger relationships with employers, particularly with Partners HealthCare, the largest healthcare provider in Massachusetts which owns Massachusetts General Hospital (MGH), Bringham and Women’s Hospital, and Newton-Wellesley, along with a number of others in the Boston region. MJ Ryan, currently the Director of Workforce Development at Partners HealthCare, was the point person on the Skill Shortages grant at the time. The grant channeled enough money that Ryan was hired full-time by Partners HealthCare Corporate, Partners’ larger umbrella organization, to replicate and institutionalize the loan forgiveness program across other hospitals in the Partners network.87

MJ Ryan’s position represented the beginning of workforce development positions within the administration of hospitals. Previously, anyone working on workforce issues in a healthcare institution was either termed a Human Resources director or a Training and Development Director and had roles that addressed short-term needs. While previous grants were helpful in beginning a conversation with a wide range of stakeholders, they were piecemeal and unsustainable. In the words of Karen Shack, “what makes it happen is staff.”88 The commitment of staffing capacity specifically to workforce development efforts within large institutions played a crucial role in institutionalizing the partnerships initiated by earlier programs around long-term workforce strategy for the region.

The Healthcare Skills Shortages grant also involved community colleges to a stronger degree. Clinical occupations, such as nursing, fostered stronger relationships between community colleges and employers due to the need for clinical placements as part of the degree program. Community colleges up to that

85 Laurie Sheridan, Career Ladders in Boston: A Summary of Recent Progress.
86 Karen Shack, interview; “Boston PIC: An Overview.”
87 Karen Shack, interview.
88 Ibid.
point had been used more as vendors for training for non-clinical occupations, such as laboratory technicians, and not active stakeholders in broader systemic coordination. Children's Hospital made an internal decision that pharmacy technicians were required to have a certification to be hired, and the grant provided academic courses to existing employees seeking certification. The grant allowed a greater level of flexibility than past funding sources to open courses to other students, so the PIC coordinated between employers to pool students to fill the pharmacy technician certification class. Through this effort community colleges, large institutions, and public agencies were able to share experiences and knowledge about the challenges involved in helping adult workers return to college.

Around this time, several of the private foundations, led by the Boston Foundation, also became interested in reforming the landscape of workforce development in Boston. Leaders at JCS and the PIC, the two public agencies active in workforce development up to that point, using funds from the Neighborhood Jobs Trust as an additional lever to be a voice at the table in discussing reforms. These conversations again got a wide range of stakeholders at the table to talk about the current workforce development system and share knowledge. The city was able to share experiences and information about what they had learned from their training initiatives up to that point. As Ken Barnes of JCS recalls,

They were making the assumption that lack of employer involvement was one of the things they needed to fix with Boston's workforce development system. And what they discovered, to their surprise, was that we actually have very strong employer involvement in Boston, in part because the federal system really pushed that and in part because Boston, years ago, sort of figured that out and decided that if they want to programs to be successful, then we have to let the employers help design the training programs. 89

The foundations were able to get involved, contribute their own resources, and help steer the conversation.

The outcome was SkillWorks: Partners for a Productive Workforce in 2003. It's goals revolved around three overlapping strategies—workforce partnerships, public policy and advocacy, and capacity building. SkillWorks pools public and private investment to support workforce partnerships focused on specific high-growth industry sectors, including healthcare, hospitality, property services, and automotive services for both incumbent and entry-level workers. To date, it has dispersed three phases of funding. 90 In Phase One, SkillWorks invested $15 million in six workforce partnerships, including two in healthcare: (1) The

89 Ken Barnes, interview.
90 SkillWorks: Partners for a Productive Workforce.
Boston Health Care and Research Training Institute (HCRTI), now known as the Healthcare Training Institute (HTI), and (2) Partners in Career and Workforce Development (PCWD). HTI began as a partnership between JPNDC, Fenway CDC, a CBO, a number of different training providers, and multiple healthcare institutions in the Longwood Medical Area. After the first phase of the grant, JVS was brought in to take over as the primary service provider. In Phase Two of funding, JVS worked with employers to identify different needs, and now runs a range of computer training classes, precollege courses, and career coaching services for a wide range of occupations.91 (2) PCWD is a partnership led by Partners HealthCare, the state's largest hospital and physician organization. After the first phase PCWD did not apply for new public funding. Partners Corporate took it over in 2005 with private funds (Partners Community Health and Partners Human Resources) and still runs programs focused on incumbent worker training.92

LATE 2000S-EARLY 2010S

MAJOR PLAYERS INVOLVED: Mayor Thomas Menino, Boston PIC, JCS, local community-based training organizations, Boston-area community colleges, The Commonwealth Corporation, The Boston Foundation, dedicated workforce development staff in large hospitals, Jewish Vocational Services (JVS)

MAJOR DRIVERS: High vacancy rates in select occupations, lack of capacity for existing training programs, internal buy-in within large employers, political pressure

ACTIVITIES: Grants for employer-led pipeline programs and incumbent worker training in multiple hospitals, pre-college courses, career advising support

OUTCOMES: Further experimentation and a mix of flexible public and private funding sources built capacity within and collaboration between employers, training providers, and public agencies. Key players formed strong relationships and began to coordinate region-wide conversations.

91 Jacqueline Chernoble, interview.
92 The top five permanent occupations PCWD graduates move into within the Partners system as a first job after graduation are Patient Services Coordinator, Unit Coordinator, Operating Room Assistant, Operations Associate, and Ambulatory Practice Secretary, Dena Lerra, interview.
Over the following years, most of the major institutions had established their own workforce development offices, typically within the Human Resources department. Dedicated staffing capacity allowed for sustained partnerships and further experimentation with strong employer investment. For example, leaders at Beth Israel Deaconess Medical Center (BIDMC) told the Boston Foundation that they were struggling to help existing employees advance into job vacancies in higher positions because many lacked basic skills.93 Research revealed vacancy rates for a sample of seven allied health professions ranged from 6% to 16% in 2005-2006. Allied health staffing shortages were characterized by two concerns: (1) employers had a limited supply of qualified candidates and academic and training programs; and (2) existing programs reached maximum capacity. This mismatch is costly in terms of lost productivity, recruitment expenses, overtime, and higher-cost temp workers that hospitals employ to continue to grow and provide quality service. Joanne Pokaski, currently the Director of Workforce Development at BIDMC, was charged with addressing this mismatch within BIDMC in 2004, asking “can we grow our own people into that?”94

Collaboration between employers and foundations and the urgency of high vacancy rates led to further experimentation with models of employer-based training in healthcare with an expanded focus on incumbent workers. In 2007, the Boston Foundation committed $1.5 million to the first three years of the Allied Health Initiative, one of the more collaborative efforts up to that point. Grants to three sets of hospital partners—Beth Israel Deaconess Medical Center/New England Baptist Hospital, Boston Medical Center, and Partners HealthCare—were leveraged with an additional $13 million in funds from the hospitals spread out over a six-year period. The goals of AHI were threefold: (1) create pre-allied health education “pipeline” targeting critically-needed allied health positions; (2) focus on advancing incumbent workers; and (3) create and expand programs for preparation and enrollment into allied health degree and certificate programs.95

The Initiative was intentionally structured to be employer-led. Participating employers specified the range of allied health occupational categories they wanted to target to build out their own pipeline and the precise methods they would use. Each employer applying to the initiative submitted a business plan rather than a response to a structured RFP. Hospitals were direct recipients of grant funding, rather than run it through nonprofit or community-based intermediary organizations. The Boston Foundation provided technical assistance. It provided flexibility: “The Initiative created an environment of innovation and experimentation in the hospitals’ workforce efforts, even during a time of fiscal

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93 Hebert, “When Untapped Talent Meets Employer Need.”
94 Joanne Pokaski, interview.
95 Hebert, “When Untapped Talent Meets Employer Need.”
austerity."96

The three institutions used the funding for different purposes. BIDMC's proposed an "Employee Career Initiative" to develop the capacity for career and academic advising, a pre-pipeline program accessible year-round for employees, on-site pre-college and college-level science courses free of charge for employees, and tutors for employees struggling with classes. Boston Medical Center proposed to use the funds to create on-site training specialists in specific areas (such as radiology skills), increase the capacity of organizational development and training, and dramatically expand BMC's health care career skills courses. However BMC faced serious financial and budgetary challenges with the economic downturn resulting in hiring freezes, job cuts, and other strict cost reduction measures which limited their efforts in the years that followed.

Partners saw AHI as a way to built on its earlier workforce development efforts. They proposed to develop an internal allied health pipeline to address current and anticipated staffing shortages targeted at three distinct sets of employees: (1) incumbent workers who are not yet ready for college level work; (2) employees taking pre-requisite courses or already enrolled in allied health programs; and (3) entry-level imaging technologists. They also proposed to experiment with new technology to assist in their workforce development efforts and improve the internal employer culture in support of workforce development needs. While some of their proposed initiatives saw success, they did not reach the target number of participants, largely due to lower-than-expected college readiness levels among employees who required more remedial education.

The initiative was small in scale. The number of employees impacted were not large enough to affect the hospital's (or even the department's) bottom line in easily measurable ways. Nonetheless, it had strong internal buy-in among management and leadership and allowed for experimentation and flexibility.

Nevertheless, it represented a distinct shift in attitudes toward workforce development within the participating institutions: "As framed by one senior HR official, 'we now see our role as preparing people for careers, and not just their next position.'"97 Employers began to see how incumbent worker training can help the institution respond to changes in industry standards relative to basic competencies, build employee morale and a positive work culture, and be used as a building block to create a more complete pipeline down the road and anticipate future needs when the economy recovers.

96 Ibid.
97 Ibid.
AHI also built communication and information exchange between employers. There was greater acceptance of the value of career coaching across the three most involved hospital affiliates in the initiative. Bunker Hill community college’s increased training capacity can be used by other hospitals and individuals across New England and even nationally. The Initiative also built peer learning and collaboration across hospitals who are accustomed to seeing themselves as competitors. In the words of BIDMC’s Joanne Pokaski: “There are employers who get why this is of value to them and value the exchange... And that’s thing about this field—it’s kind of new. ...We’re all figuring it out together in some ways. So it’s good to have these peers, because there is no other way to learn it. It’s definitely enhanced my relationship with other institutions.”

When employers had more interaction with the system, they began to understand how poorly it was working. As Alysia Ordway of the PIC pointed out, “If these are people supported by employers as big as us and they are having this many problems, what’s happening to people who aren’t attached?” They saw individuals trying to navigate different courses with different names on different schedules counting for a different number of credits. “And it’s amazing how many people, even without us, are trying to put some stuff together on their own with local schools,” reflected Joanne Pokaski. “One of the things we discovered is that the system wasn’t really a system.” These initiatives revealed a clear need to formalize the process for collaboration and recognize and address points of tension in the system.

**4-5**

**TODAY IN 2014**

| 1970 | 2014 |

**MAJOR PLAYERS INVOLVED:** Boston PIC, JCS, local community-based training organizations, Boston-area community colleges, The Commonwealth Corporation, The Boston Foundation, dedicated workforce development staff in large hospitals, Jewish Vocational Services (JVS), SkillWorks, the Boston Healthcare Careers Consortium

**MAJOR DRIVERS:** Internal buy-in, vacancies in select occupations, expanded funding opportunities, political pressure

**ACTIVITIES:** Research on points where the training and workforce development system is not optimally aligned, evaluation and data collection, continuation of pre-employment and incumbent worker training programs

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98 Joanne Pokaski, interview.
99 Alysia Ordway, interview.
100 Joanne Pokaski, interview.
OUTCOMES: Many employers and training providers have well-established workforce development structures in place. The Boston Healthcare Careers Consortium—the latest and most evolved partnership between dozens of employers, public agencies, training providers, and community colleges—acts as an adaptive mechanism to develop a tighter feedback loop between supply and demand for labor in healthcare and address systemic challenges in workforce development.

An infusion of federal funds after the 2008-9 recession led to the formation of the Boston Healthcare Careers Consortium, the latest and most evolved partnership between dozens of employers, relevant public agencies, training providers, and community colleges. In the words of Karen Shack who has been involved with workforce development in Massachusetts for over a decade, “It is, in my opinion, the gold standard.” The Consortium acts as an adaptive mechanism to bring a wide range of stakeholders to the table to share information and develop a tighter feedback loop between supply and demand for labor in healthcare. It was built on the knowledge of past initiatives and established relationships and included a dedicated staff person. Leaders saw this as a way to combine ideas and work together on goals that lots of groups were seeing as necessary.

The project was originally funded through a grant program through the American Recovery and Reinvestment Act and administered by the Commonwealth Corporation. This grant, the Healthcare Skills Gap Partnership grant through the Executive Office of Labor and Workforce Development, was awarded to each of the state’s sixteen workforce investment boards. The project was “a collaborative effort to identify the places where education and training, public workforce, and healthcare industry systems are not optimally aligned.”

The initial charge from the Commonwealth Corporation was to improve educational and training pathways into health care that lead to associate’s degrees. The Commonwealth Corporation’s RFP had two goals: (1) train individuals and get them into jobs and (2) focus on developing a partnership. According to Alysia Ordway, who was the primary staff person on the Consortium for the PIC, “The training was really an afterthought for the Healthcare Careers Consortium. It was really about the partnerships... Basically, we have enough training capacity... but what we wanted to do was follow a cohort of individuals and learn from their

101 Karen Shack, interview.
102 Joanne Pokaski, interview.
experience.” 104 PIC staff worked with career centers, community colleges, and individuals beginning the Medical Assistant certification program at Bunker Hill Community College to trace the process of navigating the system and identify gaps and challenges. The group began following 20 people in 2010 which has risen to 67 people at the end of 2013. 105

The Consortium also began monthly meetings to increase collaboration and establish an open dialogue about what is and is not working. After a series of unconstructive meetings for previous initiatives, Consortium leaders worked to set a precedent of open and productive meetings, recognizing that “people have to feel like their time is well spent and that things are happening because of the meetings.” 106 In June 2011 the first year of the grant, representatives from forty-three entities participated in the meetings, including twenty employers, seven colleges, fifteen training-focused organizations, and a handful of state and local public agencies. By September 2013 representatives from over sixty-seven organizations attended the meetings. At the end of the grant period, participants wanted to continue the meetings. Through 2014 the group meets every other month for two hours.

The Consortium produced two reports: (1) “Profile of Current Educational and Training Opportunities for Boston’s Healthcare Workforce” was released in 2011 to map out, for the first time, all of the certification and degree programs offered in healthcare in the region. (2) “Critical Collaboration” identified common challenges and set goals for improvement such as increasing transparency in hiring preferences, establishing open data about outcomes in job placements from academic programs, and streamlining course requirements and administrative procedures. The Critical Collaboration report gently stressed the need to strengthen the role of community colleges in workforce development and partnerships with employers. Another report by the Boston Foundation in 2011, backed by Mayor Menino, took a more forceful approach, proposing an overhaul of the decentralized system to be centralized and overseen by a governing board, refocus its mission on workforce development, and establish a performance-based funding formula. Leaders at Bunker Hill Community College expressed that these documents were very difficult for the community colleges, and in 2014 both Bunker Hill and Roxbury Community College saw changes in senior leadership.

SkillWorks also has continued to play a major role in supporting and expanding

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104 Alysia Ordway, interview.
106 Joanne Pokaski, interview.
successful workforce development initiatives. It has been nationally recognized as a best practice model through the National Fund for Workforce Solutions. Its funding is designed to help employers to think about what they are trying to accomplish and how to get there.

Initiatives at the federal and state level have also impacted local efforts. On the state level, The Healthcare Workforce Transformation Fund was established as part of Chapter 224, Massachusetts' healthcare cost containment legislation, with the purpose of funding a wide spectrum of employee training and skills upgrading programs within the healthcare industry. In late 2013 the Executive Office of Labor and Workforce Development (EOLWD) and the Commonwealth Corporation released an RFP for planning grants for up to $50,000 each for using the fund. The Pathways to Prosperity Project, a partnership between the Massachusetts Executive Office of Education, Jobs for the Future, and the Harvard Graduate School of Education, is also developing career pathway programs in target industries in three regions in Massachusetts. Amidst state and national conversations around community college reform, the Governor and Legislature launched new policies of performance funding in 2012 and committed $20 million from a federal Department of Labor grant to community college to implement reforms.

4.6 CHAPTER CONCLUSION

Over the past four decades, Boston has seen a transition from small, disconnected efforts to train its workforce in healthcare-related occupations to a large, active network of workforce development practitioners in large hospitals, community college leaders, public agencies, local community-based organizations, large foundations, and academic researchers.

This chapter walked through the outcomes of four phases of activity:

1. From the mid-1970s to the mid-1990s, early initiatives built partnerships between industry, education, and public agencies. The Neighborhood Jobs Trust established a unique flexible funding stream for job training. Federal and state policy heightened the focus on employment and consolidated services.

2. In the late 1990s to mid-2000s, federal grants allowed for experimentation in workforce development models for the occupations experiencing skill shortages in the healthcare sector and expanded
relationships between public agencies, large employers, and community colleges. The Private Industry Council (PIC) became the convener around workforce strategy. Employers dedicated staffing capacity specifically to workforce development for the first time.

3. From the late 2000s to early-2010s, further experimentation and a mix of flexible public and private funding sources built capacity within and collaboration between employers, training providers, and public agencies. Key players formed strong relationships and began to coordinate region-wide conversations.

4. Today in 2014, many employers and training providers have well-established workforce development structures in place. The Boston Healthcare Careers Consortium—the latest and most evolved partnership between dozens of employers, public agencies, training providers, and community colleges—acts as an adaptive mechanism to develop a tighter feedback loop between supply and demand for labor in healthcare and address systemic challenges in workforce development.

The last forty years of workforce development efforts in Boston's healthcare sector have resulted in some meaningful changes in the internal processes of large employers and a broader awareness of the need for system-change approaches to labor market challenges. However, at the end of the day, these workforce development efforts are meant to improve labor market outcomes and standards of living for people with low levels of education and training. So what does all of this work over forty years add up to for the individuals these initiatives are ultimately aiming to serve? The following chapter will explore how, in general, this level of effort over multiple decades has produced mixed results to address these goals.
5.0 Outcomes of forty years of efforts

5.1 Chapter Introduction

The previous chapter traced the evolution of activity of workforce development in Boston's healthcare sector. Over the past four decades it has become a large, active network of workforce development practitioners in large hospitals, community college leaders, public agencies, local community-based organizations, large foundations, and academic researchers. But at the end of the day, workforce development activities are meant to improve labor market outcomes and standards of living for people with low levels of education and training.

These efforts have achieved some notable results in the internal processes of some large employers and an increased awareness and broader conversation of the need to address labor market challenges from many angles. There is limited research on improvements in the quality of training provided, but select long-standing community-based organizations are considered to have refined their instruction over time. Jewish Vocational Services (JVS) in particular has been recognized as an exceptional model for instructional design in English for Speakers of Other Languages (ESOL) and basic computer skills.\textsuperscript{107}

This chapter will first (1) summarize the process-oriented outcomes and then (2) address the question: what does all of this work over forty years add up to for the individuals these initiatives are ultimately aiming to serve? Overall, this level of effort over multiple decades has produced mixed results to address these goals.

5.2 Outcomes of Employers’ Internal Processes

The last forty years of workforce development efforts in Boston's healthcare sector have resulted in some meaningful changes in the internal processes of large employers and a broader awareness of the need for system-change approaches to labor market challenges.

1. Experimentation with employer-led training models over decades has led to the institutionalization of workforce development, particularly incumbent worker training, in key large institutions. Large employers—

\textsuperscript{107} Paul Osterman and Beth Shulman, Good Jobs America: Making Work Better for Everyone. Pages. 105-6.
particularly the Partners Healthcare network and Beth Israel Deaconness Medical Center (BIDMC)—have dedicated staffing capacity and stable internal funding streams for incumbent worker training programs. External political pressures and skill shortages as a result of economic cycles may have played a significant role in the initial formation of many employer-sponsored programs. But over time these efforts have been institutionalized. Internal buy-in from high-level leadership and an internal recognition of the value of investing in training for low-level workers ensures that some version of these programs are likely to continue in the future.

2. **Decades of work has led to some institutionalized funding streams to fund workforce development.** The Neighborhood Jobs Trust is a dedicated funding stream to provide training for local residents unique to the City of Boston. SkillWorks has been widely recognized as a national model for workforce development and continues to pool public and private resources to fund programs and evaluate their effectiveness. The state-level Workforce Competitiveness Trust Fund supports programs in critical industry sectors in Massachusetts and has consistently supported experimentation in healthcare-focused initiatives.

3. **Strong relationships and partnerships built over time have created a high level of trust and institutional memory to build on the successes and challenges of past initiatives.** This is embodied in the Boston Healthcare Careers Consortium, which sees over forty participants from a wide range of backgrounds at its quarterly meetings. However these relationships are reliant on a handful of key individuals in leadership positions who have spearheaded this work over time. It is unclear how future efforts would fare if these specific individuals were to leave.

4. **The conversation around the need for a systemic approach to labor market challenges and workforce development has broadened to engage a wider range of stakeholders over time and increased pressure on policy reform.** The diversity of perspectives present at the April 2014 Consortium meeting—from large employers to community college representatives to public officials to academic researchers—reflected this broadened understanding. Additionally, the work of both the Consortium and the Boston Foundation has increased public awareness of the poor performance of the region’s community college system and pressured for important reform measures.
OUTCOMES OF LABOR MARKET OPPORTUNITIES FOR LOW-SKILLED INDIVIDUALS

So what does all of this work over forty years add up to for the individuals these initiatives are ultimately aiming to serve? At the end of the day, these efforts are meant to improve labor market outcomes and standards of living for people with low levels of education and training. In general, this level of effort over multiple decades has only produced marginal results.

Robust data and evaluations on program outcomes are limited. This section will primarily discuss research completed by third-party analysts of programs funded through SkillWorks grants over the past ten years as well as a thorough return on investment study of training programs through Jewish Vocational Services (JVS). A chart of select outcomes from the 2009 SkillWorks evaluation is presented at the end of the chapter.

This chapter will discuss outcomes of workforce development initiatives based on three overarching goals derived from workforce development literature: (1) hire low-income and low-skilled residents out of the local community, (2) support low-level incumbent workers in upgrading their skills and advance along a career pathway, and (3) improve the quality of jobs.

1. Hire low-income and low-skilled residents out of the local community:

One goal of workforce development is to build the capacity of local residents to acquire education and training to access good jobs with the potential for career advancement that already exist in the healthcare sector in Boston. Pre-employment programs are largely focused on this goal and have the ability to be tailored to address the needs of residents in a specific geographic location. Employer-based programs are overwhelmingly focused on incumbent workers, so many of the achievements listed above around improved internal capacity and partnerships may have minimal impact on the goal of hiring out of the low-income communities of Boston.

According to a 2005 baseline evaluation, pre-employment initiatives funded in Phase I of SkillWorks were largely successful in targeting low-income and low-skilled Boston residents, a high percentage of whom were women and non-native English speakers. Program termination rates were low and graduation rates were generally high (over 80%). Job placement rates at graduation were mixed.
for pre-employment program participants: only 52% of graduates were placed in jobs from PCWD, 57% for HCRTI, and 83% for IIB. Inconsistency in outcome measures and data availability limit the conclusiveness of these evaluations.108

In a 2009 SkillWorks evaluation after five years of work, only one-third of the nearly 2,900 individuals served were in pre-employment programs, with the other two-thirds in incumbent worker programs. At the time of enrollment, approximately half of all participants had only a high school degree, and thirty-seven percent had an annual household income under $25,000. These characteristics varied significantly between pre-employment and incumbent worker program participants, with incumbent workers generally having higher income, lower levels of English as a second language, and a lower percentage of Boston residents. Eighty-seven percent of pre-employment participants graduated from their training programs over five years. The percentage of graduates placed for all programs varied from 52-78 percent. Among those placed, average starting wages ranged from $10.26 to $13.19.109

In particular, Partners in Career and Workforce Development (PCWD) has been relatively successful in placing, retaining, and advancing a large number of pre-employment participants into high-quality jobs. Of the first three years, eighty-one percent of the 137 people enrolled in the program were placed in jobs. After five years 47 percent of participants remained working in the system and close to fifteen percent had received a promotion. The average wage for those placed in year three was $12.32. For those still employed after the first five years the average wage was $15.69 (in 2009 dollars). This program was funded by SkillWorks in Phase I but is now funded internally through Partners. It is therefore not required to meet targets for hiring from local communities moving forward.110

Healthcare training programs tended to serve a higher percentage of Boston residents than non-healthcare programs that received SkillWorks funding. However when compared in terms of other outcome measures such as wages or household income at the time of enrollment, it is not clear that healthcare programs are most effective at improving employment outcomes for the local community. While healthcare is recognized in the literature as a sector particularly well-suited for this purpose, the existing research from Boston’s experience does not clearly support this claim.

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108 Scott Hebert and Beth Siegel, Baseline Report of the SkillWorks Initiative.
109 Amy Minzner et al., Overview of SkillWorks Outcomes: Summary.
110 Amy Minzner et al., Partners in Career and Workforce Development (PCWD).
2. Support low-level incumbent workers in upgrading their skills and advance along a career pathway

Workforce development efforts are increasingly focused on providing training for existing employees to upgrade their skills and advance along a career pathway. Programs sponsored by employers tend to be overwhelmingly focused on incumbent workers as a way to invest in their existing workforce and improve retention rates.

Participants in incumbent worker programs had quite different characteristics than pre-employment participants in the 2005 SkillWorks evaluation. A substantially higher percentage of participants were not Boston residents and came from households that exceeded the Massachusetts Family Economic Self-Sufficiency (MassFESS) standard at enrollment. Program termination rates were low and graduation rates were high just as in the pre-employment programs. It was too early to expect or measure any significant wage and career advancement outcomes.111

According to the 2009 evaluation, more than two-thirds of the nearly 2,900 individuals were served by the five partnerships over the course of Phase I were incumbent workers. Nearly sixty-five percent of participants were enrolled in healthcare-related partnerships. Enrollment declined over five years to slightly more than a quarter of peak enrollment (Year 2). This was due to a number of factors, including scaling down within programs and an increased focus on participants that were already enrolled.112

The rate of progress along educational pathways was slow. For incumbent workers in healthcare-related programs, between 10 and 20 percent of only of those enrolled received promotions as a result of training services. The efforts of all workforce partnerships funded by SkillWorks resulted in less than 6 percent of enrolled participants entering college and less than 2 percent graduating, though these rates were slightly higher for those in healthcare-related partnerships.113

Employers generally expressed satisfaction with pre-employment and incumbent worker training programs, but could not cite specific outcomes such as higher retention rates. Evaluations reiterated that “sector workforce partnerships remain ‘boutique’ projects within the overall workforce system. The vast majority of employers in Boston have not been touched by the activities of SkillWorks.”114

111 Scott Hebert and Beth Siegel, Baseline Report of the SkillWorks Initiative.
112 Amy Minzner et al., Overview of SkillWorks Outcomes: Summary.
113 Ibid.
114 Ibid.
Given the small scale of hires as a proportion of employers’ overall recruitment, it is reasonable to assume that these programs have had minimal impact on the economic competitiveness of participating employers.

Employers cited improved English proficiency among participants as a result of incumbent worker training programs. This benefit may be difficult to measure in retention or promotion statistics and enhanced communication alone routinely prepare individuals for more skilled positions, but is a notable achievement.

While not specifically measuring outcomes, a robust Social Return on Investment (SROI) study evaluated the cost and benefit of JVS’s training services and found a high return on investment (ROI) for a wide range of its training programs. For its Geriatric CNA training program, which began in 2010, the ROI was $1.95 after just one year and $3.50 for the second year, reflecting wage and hour upgrades for some participants as well as a strong demand for these jobs by long-term care employers who encouraged JVS to create the program in the first place. This outcome is considered to be “a strong result for a group consisting almost entirely of limited English speaking immigrants and refugees” and one that “affirms participants’ decision to pursue a skilled nursing career as an alternative to the low-wage jobs most had experienced prior to enrollment.” It is projected to grow to $13.69 after 10 years. Other JVS programs such as the Refugee Employment Service program and Bridges to College and Careers program saw similarly optimistic outcomes.

3. Improve the quality of jobs

Most workforce development initiatives focused on the healthcare sector in Boston have not been explicitly focused on improving the quality of jobs. This is likely due to the fact that even entry-level healthcare jobs already tend to have decent wages and good working conditions. The median wage for a home health aid—one of the most entry-level healthcare occupations that does not even require a high school diploma—is $10.01 per hour across the country. This is two dollars higher than Massachusetts’ $8.00 minimum wage. Healthcare occupations requiring a postsecondary non-degree certificate or an associate’s degree range from $14.12 per hour as a medical assistant to $31.48 as a registered nurse.

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115 Cooney and Lynch-Cerullo, Social Return on Investment: A Case Study of JVS.
# Participant Outcomes of SkillWorks Phase 1 Funding

**Source:** Overview of SkillWorks Outcomes, August 2009. Prepared by Abt Associates and Mt. Auburn Associates. See original report for notes on data collection.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Program acronym</th>
<th>Enrollment</th>
<th>Wages and promotions</th>
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<tr>
<td></td>
<td></td>
<td>Total for pre-enrollment programs</td>
<td>Total for incumbent programs</td>
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<tr>
<td>Healthcare</td>
<td>HCRTI/HTI</td>
<td>421</td>
<td>827</td>
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<td>Healthcare</td>
<td>PCWD</td>
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<td>HCC</td>
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<tr>
<td>Automotive</td>
<td>PACE</td>
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<td>165</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>942</td>
<td>1,957</td>
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</table>

## Characteristics of Participants at Time of Enrollment

<table>
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<tr>
<th>Sector</th>
<th>Program acronym</th>
<th>Pre-empl. Worker</th>
<th>Incumb. Worker</th>
<th>Pre-empl. Worker</th>
<th>Incumb. Worker</th>
<th>Pre-empl. Worker</th>
<th>Incumb. Worker</th>
<th>Pre-empl. Worker</th>
<th>Incumb. Worker</th>
<th>Pre-empl. Worker</th>
<th>Incumb. Worker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare</td>
<td>HCRTI/HTI</td>
<td>98%</td>
<td>58%</td>
<td>59%</td>
<td>40%</td>
<td>5%</td>
<td>35%</td>
<td>56%</td>
<td>35%</td>
<td>93%</td>
<td>47%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>PCWD</td>
<td>81%</td>
<td>59%</td>
<td>19%</td>
<td>49%</td>
<td>2%</td>
<td>6%</td>
<td>91%</td>
<td>80%</td>
<td>96%</td>
<td>25%</td>
</tr>
<tr>
<td>Building services</td>
<td>BSCPP</td>
<td>N/A</td>
<td>43%</td>
<td>N/A</td>
<td>88%</td>
<td>N/A</td>
<td>46%</td>
<td>N/A</td>
<td>34%</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Hospitality</td>
<td>HCC</td>
<td>15%</td>
<td>10%</td>
<td>82%</td>
<td>52%</td>
<td>13%</td>
<td>38%</td>
<td>33%</td>
<td>47%</td>
<td>96%</td>
<td>47%</td>
</tr>
<tr>
<td>Automotive</td>
<td>PACE</td>
<td>66%</td>
<td>44%</td>
<td>51%</td>
<td>78%</td>
<td>6%</td>
<td>11%</td>
<td>83%</td>
<td>67%</td>
<td>71%</td>
<td>80%</td>
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</tbody>
</table>
In sum, the past forty years of work has led to modest sustainable improvements in linking low-skilled individuals with jobs in healthcare and helping them advance along a career pathway. Experimentation with employer-led training models over decades has led to the institutionalization of workforce development, particularly incumbent worker training, in key large institutions. Some institutionalized funding streams and strong relationships and partnerships have allowed stakeholders to learn from the successes and challenges of past initiatives. The conversation around the need for a systemic approach to labor market challenges and workforce development has broadened to engage a wider range of stakeholders over time and increased pressure on policy reform.

However these efforts are ultimately aiming to improve labor market outcomes and standards of living for people with low levels of education and training. Data primarily from evaluations of SkillWorks programs reveal modest gains in enrollment, retention, and wages for pre-employment program participants and considerable gains in ESOL training. While incumbent worker training makes up an increasingly large proportion of overall programs, there is little research that these have significantly improved outcomes for workers or employers. Ultimately the limited existing evaluations suggest that Boston's workforce development programs in healthcare remain 'boutique' projects with modest impact relative to programs in other sectors.
Challenges and action steps for Boston

CHAPTER INTRODUCTION

While these efforts have achieved some notable results, there is still much work to be done. Many workforce development practitioners working in Boston admit that the workforce development “system” really is not a “system” at all. An individual interested in developing a career in healthcare has difficulty navigating a convoluted system of certifications and degrees through a wide array of training classes and community college tracks with different characteristics. He or she struggles to understand what career path would be a good fit or what particular jobs are even in demand at the moment. If an individual already working in a hospital wants to upgrade his or her skills to advance, the opportunities and pathways are unclear.

The following chapter outlines the challenges in the evolving system of workforce development along four dimensions: (1) how to be responsive to the needs of workers seeking training and jobs, (2) how to adapt to changes within the sector and employers, (3) how to navigate employer needs and balance them with the reality of career development, and (4) how to fund and sustain partnerships, services, and infrastructures to deal with the above challenges.

Distinct elements of these challenges are outlined within each dimension. They are labeled high, medium, or low priority based on their relevance to work that has shown to serve the end user—individuals with low levels of education and training looking to improve their career and employment opportunities. This is not to say that all of these challenges are not important. But rather some are both more actionable and more directly relevant to work that has proven to be most effective. The end of the chapter will outline steps for action to address these challenges moving forward.
HOW TO BE RESPONSIVE TO THE NEEDS OF WORKERS SEEKING TRAINING AND JOBS

LOW PRIORITY: Public agencies must make difficult tradeoffs between anticipating long-term trends and addressing pressing, short-term needs.

With tremendous short-term need for employment among unemployed and underemployed individuals, public entities often prioritize focusing more on how to get individuals trained and placed in a job immediately rather than developing strategies over long-term growth industries. Funding reinforces this shortsightedness. JCS, one of the primary public agencies responsible for job training for Boston residents, receives its funding based on specific target populations, such as low-income individuals without work experience, dislocated workers, individuals on unemployment insurance, youth up to age 24, and returned veterans. 117

Public agencies are also responsible for addressing the needs of individuals with criminal offense records who face additional barriers to employment. Many large healthcare employers have blanket policies against hiring people with criminal records. JCS tries to encourage employers to be more nuanced and understand the nature of the offense and whether the blanket policy is appropriate, but as Ken Barnes of JCS reflects, “It will always be an uphill battle... particularly in an economy where they can choose from lots of people.” 118 In order to serve this demographic, JCS has formed partnerships with restaurant employers and culinary arts training programs that are willing to work with individuals with criminal records.

Prioritizing short-term job placement also introduces tradeoffs between placing individuals in a job versus placing them in a good job. JCS targets jobs with benefits and wages at or above the city’s living wage ordinance of $13.67, 119 though even that can be a challenge. “It’s something we struggle with because in some ways it’s a little hard to justify getting folks into such low wage jobs except if you then step back and remember that we are starting with the individual who needs a job,” says Ken Barnes. “We do an ESL class with them first and then we try to get them to come back for a job training program. So hopefully we get them on a career ladder that, eventually over a period of years, gets them up into the $15 an hour range.” 120 They would leave behind a large group of people who clearly need their services if they were closed off to placing people into low-wage jobs.

117 Ken Barnes, interview.
118 Ibid.
119 According to the City of Boston, the $13.76 living wage an hour will stay in effect until June 30, 2014, and is subject to an increase each July 1. “Living Wage Ordinance.”
120 Ken Barnes, interview.
jobs. Efforts to raise the federal and state minimum wage would likely aid in these efforts.\textsuperscript{121}

\textbf{MEDIUM PRIORITY: Pathways to develop a career in healthcare are unclear. Data and information are nonexistent, incomplete, or outdated.} Many people interested in expanding their career options struggle to understand what a job in healthcare actually means in the first place. “People have assumptions that it’s not for them because they don’t like sick people,” says Ken Barnes of JCS, who works to link low-skilled residents of Boston with training and job opportunities. “We help them understand that a hospital is like a small city... and there are a lot of different jobs people might be interested in and comfortable doing.”\textsuperscript{122}

When an individual is interested in working in healthcare, pathways to enter an occupation or develop a career path are ambiguous. One Healthcare Careers Consortium meeting participant noted that “there are a lot of superheroes that can get through it” but ultimately closing the “information gap”—just as the “skills gap”—is critical.\textsuperscript{123} As Joanne Pokaski of BIDMC reflected when asked to imagine the ideal workforce development system,

\textit{...somebody who wanted to get into healthcare would have really good information about different job opportunities, how you get there, what vehicles would get you there, and how likely they are to get you there. ... [Today] there are a lot of programs that promise you a career in healthcare. There are very few that give you data to let you know whether you are actually likely to get there.}\textsuperscript{124}

For example, one major employer decided that new hires for nursing positions would be required to have a bachelor’s degree. An individual may not have access to this type of information before entering a costly and time-consuming certification or degree program in another field. While making employer preferences visible is important, the reality is that there is a diverse set of pathways to enter the healthcare sector and even a specific occupation. For example, a community college representative expressed how difficult it was to track students going through a phlebotomy program because they were hired to begin working before finishing their certificate program and never even applied for graduation.\textsuperscript{125}

Challenges around data and information fall along four dimensions: (1) sharing

\textsuperscript{121} In November 2013 the Massachusetts Senate passed a bill that would raise the minimum wage in Massachusetts from its current \$8 per hour to \$11 per hour by 2016 with future increases indexed to inflation, though the bill has stalled in the House. Steve LeBlanc, “Mass. Minimum Wage Bill Hits Delay at Statehouse.”
\textsuperscript{122} Ken Barnes, interview.
\textsuperscript{123} “Boston Healthcare Careers Consortium Meeting.”
\textsuperscript{124} Joanne Pokaski, interview.
\textsuperscript{125} “Boston Healthcare Careers Consortium Meeting.”
and consolidating existing data between employers, community colleges, training organizations, and public agencies to find places to strengthen relationships and programs; (2) gathering more granular occupational and student outcome data that can clarify patterns in program outcomes, hiring patterns, and long-term career trajectories and making it available to students; (3) developing program alumni networks and mentoring opportunities to move beyond quantitative data and help students understand what it is like to work in these jobs; and (4) further develop coaching programs to help current and prospective students navigate the system.

The Healthcare Careers Consortium has made this challenge central to their focus. Their 2011 publication was one of the first attempts to map out all of the certification and degree programs offered in healthcare in the region, organized by occupation, employer, and program type.\textsuperscript{10} Consortium leaders subsequently launched a data collection pilot program to track graduates of specific occupational programs in community colleges as well as new hires by employers for two years. Outcomes tracked the number of graduates, number of internships and job placements, average hourly wages, and job tenure. Grant recipients discussed their initial findings during the April 2014 Healthcare Careers Consortium meeting, and the full evaluation will be available in a forthcoming publication.

While the data gathered revealed overall positive outcomes in graduation and placement rates, response rates from graduates were low and conclusions from the analysis were limited. The project revealed a number of barriers to collecting useful data.\textsuperscript{127} For example, community colleges expressed how it was difficult to keep in touch with program graduates because their computer system only stores one email address. Their data collection methods relied on self-reported outcomes because they do not have access to state records. One community college administrator suggested that the students with the best job outcomes and from more advantaged backgrounds were more likely to respond to the survey in the first place. Employers noted that different internship models put different levels of emphasis on “hard” technical skills and “soft” interpersonal skills depending on the occupation. More refined data is needed to understand what happens in an internship program that makes it more or less effective for eventually hiring the student.

On a positive note, this effort reveals another way in which the activities of the Healthcare Careers Consortium unearthed unforeseen challenges and points
of tension in the workforce development system. Colleges expressed that this effort helped to start a college-wide conversation about policy reforms to improve data collection processes. They explained how the funding, which many used in conjunction with federal funds, helped ramp up their capacity to gather and analyze data, which is often a prerequisite to apply for particular grants. Workforce development practitioners at the April Consortium meeting noted that this pilot project could be used as a tool to advocate for a broader statewide data sharing efforts through a federal grant to create and expand longitudinal databases of workforce data through the Department of Labor’s Workforce Data Quality Initiative.

HIGH PRIORITY: The decentralized community college system, while involved in training for healthcare professions, is cumbersome to navigate and difficult to measure. The ambiguity in the system as a whole is compounded by challenges in the Massachusetts community college system. For a student trying to put together a series of courses to get a certificate or a degree, the process is bureaucratic and cumbersome to navigate. Curricula aren’t coordinated between schools, making it difficult for a student to understand the requirements for a particular certificate or degree. Employers and foundations began to more fully understand the systemic challenges through their involvement in citywide workforce development conversations such as the Allied Health Initiative. They saw their employees getting caught up in bureaucracies trying to navigate between colleges. Community-based training organizations and employer-based career coaches partner with colleges to help support students through this process. However, these plugs reveal a larger gap in the system.

A series of reports published in recent years have focused on data revealing poor graduation and job placement rates from community colleges. The PIC Critical Collaboration report, the first publication of the Healthcare Careers Consortium in November 2011, stressed the need to strengthen the role of community colleges in workforce development and partnerships with employers. A report by the Boston Foundation later in 2011, backed by Mayor Menino, took a more forceful approach. It proposed an overhaul of the decentralized system to institute a centralized governing oversight board, refocus its mission on workforce development, and establish a performance-based funding formula.

128 Through the Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant Program, a joint initiative between the Department of Labor and the Department of Education authorized through the 2009 American Recovery and Reinvestment Act.

129 “Workforce Data Quality Initiative.”

130 Schneider, Goldberg, and Alssid, “The Case for Community Colleges.”
Getting a clear picture of the impacts of community colleges is in itself a complex question. Community colleges are designed to have very low barriers to entry and provide affordable education and training services to anyone interested. Some students take classes with no intent to earn a degree, which partly contributes to low graduation rates. Some leaders resist the idea that community colleges, which disproportionately serve minority and low-income students, should act primarily as training institutes. This is particularly sensitive at Roxbury Community College: “When the college was founded, there were people who wanted it to be just a training school for the workforce, not something academic,” she said. “The community fought against that. It was really important to bring into the black community a school that was not just about manual training. There’s nothing wrong with working with your hands, but that’s not the only thing we are.”

Even within healthcare-focused degree and certification programs, community colleges face additional barriers. Many individual community colleges have strong programs in allied health professions and courses are designed to fit the employers’ needs. Yet some students are more prepared for these programs than others and racial and socioeconomic diversity varies greatly between occupational programs. Disparities in community college enrollment and graduation rates likely reflect disparities in the quality of secondary education and other factors in persistent intergenerational poverty.

English-language skills have become one of the primary barriers due to the region’s large immigrant population. After legislation through the Office of Civil Rights, community colleges are barred from interviewing students as part of the admissions process, making it very difficult to assess the language skills of incoming students. This has repercussions on job placement, as one of the program directors noted that communication skills has become one of the primary difficulties with students getting jobs. As a result, some colleges have stopped applying for funding with the City of Boston because they were not hitting their targets—largely ESL targets—required for performance-based grants.

Community colleges also face challenges placing students in internships. Laurie McCorry reflects on the severity of this challenge:

*The only thing holding us back on any given day is internship sites. We will develop any program the employers want. Why wouldn’t we? If there is a market for it, we are happy to develop it. But if we can’t get student internships and some sense of employment afterwards, we just can’t go there. It wouldn’t be ethical. ... That’s what we all worry about all the time. Intensely worry about, .... An internship is essentially a four-month interview. ... [There is] a very high correlation between the internships and subsequent employment.*

131 Mary Carmichael, "Community College Changes Urged."
132 Ibid.
Internships require a non-trivial commitment of resources and energy on the part of employers. According to McCorry, this commitment varies between employers. In recent years employers are facing increasing pressures to cut costs and recover from the 2008-9 recession, so the ability to commit additional resources to support internship development may be in part due to the economy.

The last few years have seen a sea change in community college reform on the local, state, and federal levels. Both Bunker Hill and Roxbury Community College have seen changes in senior leadership. Both schools have started dual enrollment programs for high school students. Amidst state and national conversations around community college reform, the Governor and Legislature launched new policies of performance funding in 2012 and committed $20 million from a federal Department of Labor grant to community college to implement reforms. Exactly how these changes to community colleges would impact the landscape of workforce development is unclear, but they would likely assume a larger share of the training responsibilities.

HIGH PRIORITY: “Life happens.” People face a wide array of challenges in committing to and finishing a training program. Whether it is community college courses working towards a certification or an incumbent worker program to upgrade computer literacy, any new commitment can be difficult to integrate into an individual’s existing schedule. For incumbent workers training, getting “release time”—attending training as part of their regular work hours—helps individuals manage additional training with their other commitments. Jacqueline Chernoble of JVS noted that “when we are able to get release time it is tremendously more successful.” Release time policies vary from employer to employer, but employers are increasingly requiring workers to complete training unpaid on their own time.

Support and coaching has proven to be a crucial component to help people take on an additional short-term burden of education in pursuit of a long-term benefit and help them smoothly transition into a new job. Coaching has been integrated into programs at JVS, Partners, and BIDMC, among others. JVS has learned over decades of experience that cohort models—when a group of people move together through a program into specific job openings—are far more effective than programs that target individuals.

Many community college and training programs also require a tremendous amount of remedial education, revealing the failure of “first chance system” of public education. In developing incumbent worker training programs, Joanne

133 Jacqueline Chernoble, interview.
134 Ibid.
Pokaski of BIDMC realized that “there are a lot of great people who don’t have the math skills, don’t have the reading skills, but if they did have those skills we’d be willing to work with them.” While recent years have seen what many consider to be slow, steady progress in improving the school system, there is still a long way to go. JCS and the PIC have worked closely with Boston’s dropout recovery program and a handful of specialty programs for students in their late 20s with poor math and reading to build employable skills. “For all of these things, the resources we have are just a drop in the bucket compared to the need,” says Ken Barnes of JCS.

The region is also experiencing a huge influx of immigrants with varying levels of professional skills but low English proficiency. A training manager at JVS estimated that approximately 90% of the participants they serve are immigrants and English is by far the skill in highest demand. Many immigrants are highly skilled in their home country but lack credentials in the American system in addition to English proficiency. Others are not even literate in their native language and also lack English skills. Barriers to entry into the workplace for this population are particularly large.

Job training is often seen as a one-time occurrence rather than a multi-step process. Program administrators at JCS reflected on how many people who lost work in the 2008-9 recession have been trying to get back into the workforce and retrain for another job. Many have some work experience and some skills but are not up to date with the more recent technology employers are looking for. In an economy evolving so rapidly, perhaps education and job training should be considered something that would be a consistent part of people’s lives for years to come.

6.3 HOW TO ADAPT TO CHANGES WITHIN THE SECTOR AND EMPLOYERS

LOW PRIORITY: Employment trends cannot be generalized across the entire healthcare sector at a single point in time. Instead, each employer faces a unique set of challenges defined by “micro-trends” in the sector. A significant challenge with workforce development nationwide is matching appropriate supply with the actual demand for specific jobs at any given point in time. Many education and training organizations recognize general trends in a particular sector and attempt to provide training to meet that demand. However, as Ken Barnes of the Office of Jobs and Community Services notes, “Sometimes what people

135 Joanne Pokaski, interview.
136 Ken Barnes, interview.
137 Jacqueline Chernoble, interview.
138 Ibid.
recognize as macro trends is not really what we are experiencing in this city, with these particular employers, with the training program." Sometimes this is due to an oversupply of training for a job that is perceived to be in high demand. While nursing is often regarded as a safe bet of an occupation in high demand, a representative of a major employer expressed how they have had difficulty placing graduates from their own internal training program in recent months.

This mismatch can also be attributed to the fact that by the time an individual goes through a specific training program, sometimes the job is either no longer in demand or already obsolete due to changing technology. Alysia Ordway of the PIC recalls a conversation with a dean of a local community college in the early days of the Healthcare Careers Consortium. The dean asked, “Why are none of my medical coders getting jobs?” During the Consortium meeting an employer revealed that the function medical coders provide is quickly getting replaced by technology, and what is really needed is experienced analysts trained to work with computers and interpret the results. The dean ended up canceling the program.

This reality requires constant communication about micro-trends both in Boston and within individual employers. While this feedback loop exists in relationships between specific training providers and employers—for example, between JVS and MGH—it is difficult to operationalize into a broader system. It also requires strong internal communication within employers. The workforce development staff at a particular employer is not always in good communication with internal managers experiencing shortages. The Healthcare Careers Consortium has been the strongest attempt thus far to create a tighter feedback loop to track and understand micro-trends in supply and demand for particular occupations on a regional scale. Consortium meetings allow employers to share specific numbers of job openings with the broader community of community colleges and training organizations to allow a greater transparency in who is doing what. It has also improved internal communication within employers. In the first years of the Consortium, employer participants found that reporting needs in specific occupations “forced them to reach out to parts of their organization they may not have had to before... it helped them develop relationships.”

HIGH PRIORITY: Training models must adapt to workplace changes in hospitals. As the healthcare sector undergoes national shifts, the hospital as a workplace shifts as well. Hospitals are increasingly breaking up hierarchical management structures and working more in teams. As one workforce

139 Ken Barnes, interview.
140 “Boston Healthcare Careers Consortium Meeting.”
141 Alysia Ordway, interview.
142 Ibid.
development practitioner asked, “what does that mean for doctors working with people who don’t have college degrees?”

For example, sector-wide shifts toward integrating more technology and online systems into daily tasks demands that employees must have increasingly higher levels of computer literacy. Jacqueline Chernoble of JVS reported that fundamental and intermediate-level computer skills are the largest and rapidly growing source of demand. Many hospital employers are rolling out online systems for inputting patient data but are surprised to discover that the vast majority of their employees “could not use a mouse, let alone use the system... It takes a long time for people who have never used a computer before to enter a username and password.” These basic skills make daily tasks more efficient and are closely connected to the productivity and quality of service of the hospital as a whole. The urgency around upgrading basic computer skills is immediate.

Training programs must also respond to the economic cycle and an increasingly competitive economic environment. During the 2008-9 recession, workforce development practitioners were concerned how to move people into existing shortages as quickly as possible. In a stronger economy the focus shifts to maximizing productivity for the existing incumbent workforce. Partners HealthCare’s PCWD is an intensive twenty-person training program to prepare formerly low-skilled individuals from metropolitan Boston entry-level positions in hospitals in the Partners HealthCare network. Dena Lerra, Workforce Development Specialist at PCWD, noted how “the stakes are a lot higher now” than ten years ago for all the jobs at Partners. For every open entry-level position requiring a high school degree or GED, “there can be upwards of 200 applicants in a week and a half.” Graduates from their program are competing with a large pool of increasingly competitive applicants.

Employers are also increasingly requiring certifications as a screening mechanism—what has come to be known as “credential creep.” A job training specialist at JVS reflected on a recent situation where new national certification requirements impacted people that worked in the central processing unit (CPU) of two major hospitals. Individuals approaching retirement age who had been working there for decades but only had a high school diploma were suddenly required to be certified to continue their jobs. JVS developed a program to prepare those individuals to take the national certification test. Additionally, certifications are so regulated within a lot of healthcare occupations that if you aren’t using specific skills they go stale.

143 Ibid.
144 Jacqueline Chernoble, interview.
145 Jacqueline Chernoble, interview.
Furthermore, the existing workforce development system is designed to react to the existing occupational structure rather than prepare for anticipated changes. Thus, the system is slow to address the challenges and opportunities created by an increasing focus on preventative care, the Affordable Care Act, and the growing demand for community health workers.

6.4 HOW TO NAVIGATE EMPLOYER NEEDS AND BALANCE THEM WITH THE REALITY OF CAREER DEVELOPMENT

MEDIUM-PRIORITY: It takes time for the value of workforce development to “stick” within employers. The healthcare employers with the most embedded workforce development infrastructure within their institutions have gone through a long evolution to reach that point. As non-profit institutions and teaching hospitals, many of the major institutions have a culture that values employees and is open to experimentation. High-level leadership at major hospitals has championed efforts to address the needs of low-level employees. Joanne Pokaski of BIDMC was hired in 2004 after a senior-level Vice President, who was held in high regard by the President and CEO, wanted to explore strategies to combat a nearly 15% vacancy rate for nursing and a shortage of other allied health professionals.46

Introducing training programs to individual departments within employers requires building relationships and fostering channels for clear communication and feedback. At BIDMC, Joanne Pokaski first intentionally works with managers who are already convinced about the value of training. Her and her staff are careful to make sure their programming is not disrupting the day-to-day operations or surprising managers by introducing programs too quickly. They are careful to include managers in decision-making and not burn bridges with a department.47

When BIDMC first set out to do this work, internal funding through the hospital’s operating budget was limited. Pokaski was able to experiment and expand programming through external grants from the state and the Boston Foundation. These incumbent worker training programs became operationalized internally once people got used to it and recognize its value. Programs at BIDMC now run entirely on an operating budget and the workforce development department has team of four people. “Now departments come to us and say ‘We think we should do a program together,’ and that’s exciting.”

146 Joanne Pokaski, interview.
147 Ibid.
Forming relationships directly with department managers is key. Workforce development offices in hospitals are often in the Human Resources department and can be disconnected from the needs on the ground. For example, training program managers at JVS have learned over time that they are particularly successful is when they are able to work directly with managers and not only the workforce development staff: “Sometimes it’s tricky when you just get pigeonholed within workforce development because HR’s understanding of the landscape is very different than what’s happening on the ground.”

Over time employers have learned what works best for their needs and adjusted programs accordingly. Particular services make more sense for employers to run in-house while others are better contracted out to training providers such as JVS. Non-credential services in specific occupations often make more sense for employers to run in-house so they can run flexible programs that suit their needs and not pay unnecessary tuition. “We can make it two people, we can make it eight people, we can run it when we want, we can run it over and over again... [so we know] we’re running the right size program.” Training providers have developed effective models for improving broad-based basic competencies, such as ESOL through JVS. For training requiring a credential or certification, employers partner with academic programs at community colleges and often run classes on-site.

Programs initially structured as welfare-to-work programs for entry-level workers had to overcome negative biases towards the capabilities of its graduates within institutions. When PCWD began as a pre-employment training program funded with public dollars, many personnel within the Partners HealthCare system viewed it as “The Welfare Program.” It was originally housed in the Community Benefits Department, and its graduates were often viewed as recipients of a special program for hard-to-employ individuals. Over time, PCWD staff put significant resources into building relationships with managers and improving its reputation as a legitimate and valuable service able to meet employer’s needs. PCWD is now internally funded and housed in a new department, Partners Community Health and Partners Human Resources. They have built a strong reputation within the Partners network. When they send out information about program graduates managers often flood them with responses with job openings. The Partners network has long been a major player in citywide workforce development conversations and MJ Ryan,
Partners HealthCare Workforce Development Director, is heavily involved in the Healthcare Careers Consortium.

As major anchor institutions in the city, the hiring and community programming decisions of large hospitals are also inevitably very political. Institutions are concerned with getting along with their neighbors, as Joanne Pokaski of BIDMC explains: “We are the third largest employer in the city. How are we a good employer? And particularly, how do people who live near the hospital feel like they have the ability to connect to jobs in the hospital.”

This consciousness is not just internal to the institutions. Local politicians, state representatives, and Boston’s Mayor Menino have long stressed the need for large employers in the region’s major industry to address the needs of its most disadvantaged residents:

Employers invest in these programs because it is important to Boston’s Mayor Menino. The employers within the Longwood Medical Area [LMA] would like to continue to grow upward and outward and they understand that their ability to get building permits approved by the Boston Redevelopment Authority is tied to the workforce outcomes of neighborhood residents, especially residents living in communities contiguous to the LMA.

While over time many employers have recognized that investing in workforce development has payoffs for their business needs beyond community service, the political pressure they have faced from public officials has undoubtedly been an important incentive. It is also important to keep in mind that not all the major institutions are at the table in the partnerships. Some institutions have more developed workforce development infrastructure than others.

HIGH PRIORITY: While the “dual-customer” approach offers the potential to simultaneously address the needs of employers and low-skilled individuals, ultimately these two groups may have needs too divergent for a single program to serve. As previously discussed, it is difficult for public agencies to focus their resources on anticipating and preparing individuals for long-term trends in a high-growth industry such as healthcare in the face of acute short-term need. Even when they are involved in training for the healthcare sector, they face challenges in addressing the needs of both entry-level workers trying to enter the field and incumbent workers looking to move up the career ladder. While Boston provides a valuable case study to understand how the needs of employers and those of low-skilled job seekers can align, this overlap is ultimately limited.

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152 Joanne Pokaski, interview.
In the words of Ken Barnes of JCS,

*In the workforce development field we pretend—and it’s a useful thing to pretend at times—that we have this dual-customer system: that we are meeting the needs of employers and we are meeting the needs of job-seekers. And I think there are times when that’s true. But I also think we have to not pretend that those needs are identical. We have low-income folks we are trying to help, and their need is for a decent job with a decent paycheck and benefits. That’s not the exact interest that the employers have. Their interest is in keeping their labor costs down and maintaining a reasonable profit margin, if not an unreasonable profit margin. ... And they have to, that’s just the way our system works. ... So those needs are going to overlap at times in ways that are useful for us to take advantage of, but it’s naïve to pretend that employers and job seekers have the same set of interests and we can make everybody happy.*\(^{154}\)

It is important to distinguish between the needs of entry-level workers and those of incumbent workers. Today the responsibility for education and job-readiness for entry-level workers has shifted nearly entirely onto governments or individuals. Large employers “feel like they pay taxes—though you can debate whether they pay enough taxes—but they pay taxes that they feel should support a public education system that should be preparing people for employment, among other things. So they feel like... the public school system is not really doing a good job of preparing people for employment, so therefore there is this remedial training that is required, and it’s government’s job or society’s job to do that, not the employer’s.”\(^{155}\) However, expectations for jobs have increased steadily in an increasingly competitive economy and employers are able to be very selective in hiring decisions.

Public agencies are conflicted about the appropriate use of public resources to fund training for incumbent workers in private companies. Ken Barnes of JCS has determined that “it’s not appropriate to help a for-profit company increase their profit margin at the expense of other private sector companies that aren’t getting the same help from us.”\(^{156}\) Alysia Ordway of the PIC similarly says that the role of the PIC “as a publicly-funded entity is to be the conscious for all of those people who are disconnected.”\(^{157}\)

PIC and JCS have developed two strategies to address this challenge: (1) Take a sectoral approach and justify funding training programs in healthcare but not with specific employers; and (2) Partner with SkillWorks which pools public and private money and funds grants for employer-based incumbent worker training. JCS was initially contributing substantial funds to SkillWorks through the Neighborhood Jobs Trust, but it is now largely funded through private funds.

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\(^{154}\) Ken Barnes, interview.

\(^{155}\) Ibid.

\(^{156}\) Ibid.

\(^{157}\) Alysia Ordway, interview.
Overall SkillWorks has been successful at experimenting with new training models and pushing the question of how to help people move up a career ladder once they've gotten an entry-level job. In the words of JCS's Ken Barnes, they have learned "how [to] get employers to put some skin in the game and not just expect the public sector to do all the work."\(^{158}\)

Over time a few major employers have recognized the value of incumbent worker training and operationalized services within their own institutions. Some have recognized that high turnover among low-level employees is problematic as a business practice and there are benefits to investing in even the lowest levels of its existing labor force. "Working with incumbent workers is a luxury in some ways," says Joanne Pokaski of BIDMC.\(^{159}\) They are already familiar with the workplace culture, they have internal references from previous managers, and they have already been screened once from the institution. In the case of BIDMC and other institutions housed in the Longwood Medical Area, the fact that they are familiar with their commute and can reliably arrive at work on time is another important condition. "That's one of the reasons we focus on incumbent workers, because we know they can get in and out of here. So we do hire a lot of people who live far away, and a lot of them don't make it through the year."

### 6.5 How to fund and sustain partnerships, services, and infrastructures to deal with the above challenges

**LOW-PRIORITY: There is no cohesive workforce development strategy for the region.** Developing a cohesive workforce development strategy for the city, region, and state requires a strong vision and public sector leadership. The report from the first Healthcare Consortium in the early 2000s recognized this:

> It was clear that while individual programs were successful, we did not have an overall strategy for meeting the health care industry's workforce needs. Nor did we have agreement among Boston's health care employers and other stakeholders about priorities for investing public and private resources in workforce preparation programs.\(^{160}\)

Unfortunately many still recognize this deficiency over a decade later. As the workforce director of a major hospital and integral player in the current Boston Healthcare Career Consortium says,

> I don't even think we have a real workforce development strategy as a city. Even in our own silo, I don't think we have a great strategy. I don't think we have a good baseline and understanding [of] 'Here's what we're trying to do as a city.' ... I think we could work with the economic development strategy, but as a field, we are not as strategic as I

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\(^{158}\) Ken Barnes, interview.

\(^{159}\) Joanne Pokaski, interview.

\(^{160}\) *Opportunities for Investing in Boston's Health Care Workforce: A Report for the Boston Health Care Consortium.*
The PIC, as the longtime convener of industry partnerships and the city’s Workforce Investment Board, is well-suited to spearhead a cohesive workforce development strategy. However, the geographic purview of the PIC is currently limited to Boston city limits. Furthermore, integrating workforce development strategy with economic development decisions requires coordination between agencies that are administratively distinct on both the municipal and state level.

**MEDIUM-PRIORITY: Funding to support workforce intermediaries and meaningful partnerships is limited and unstable.** Alysia Ordway of the PIC summed it up well in saying, “There are certain infrastructures that need to be public... Nobody wants to fund the ‘connecting project.’” Each player involved in the system—public agencies, major employers, community colleges, training organizations, and foundations—have unique revenue streams, funding requirements, and goals. Building meaningful partnerships between employers, public agencies, and training providers to support long-term workforce development efforts is in the interest of everyone but under the specific purview of no one. “It’s hard to plan when you are always the next thing to get cut.”

In Boston, key initiatives that strengthened collaboration were experimental projects funded through flexible grants from one-time federal funding streams, as explained in the previous chapter. SkillWorks grew out of funds from The Boston Foundation bolstered by money from Boston’s Neighborhood Jobs Trust. The Healthcare Careers Consortium originated from federal Recovery Act funds channeled through the state and the Commonwealth Corporation. However, those partnerships for long-term planning can easily disappear. The organizers of the Consortium are applying for a Healthcare Transformation grant in order to develop a strategic plan and hire a permanent staffing person to be housed at the PIC to continue to evolve the Consortium.

The Neighborhood Jobs Trust provides an additional stream of funding for workforce development that is unique to Boston. In the late 2000s the city reached a point when federal funding for workforce development was declining and was actually less than the money coming in from the Jobs Trust. However, the strength of this funding stream relies on the city’s real estate development climate. Just before the recession when development was strong, JCS was spending approximately $2 million per year out of the trust. Funding dropped dramatically as development slowed during the 2008-2009 recession, but it is

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161 Joanne Pokaski, interview.
162 Alysia Ordway, interview.
163 Barnes interview.
slowly picking up again as the economy recovers.

HIGH-PRIORITY: Understanding program impact is challenging in and of itself. At the end of the day, these efforts are primarily about helping individuals with low skills connect to employment opportunities and improve their lives. Measuring how well this is being done and understanding who may be left out is itself a challenge. A number of studies have evaluated specific programs. For example, SkillWorks has produced nineteen evaluation reports with Abt Associates and Mt. Auburn Associates since 2004 tracking outcomes of different grant programs, placement rates, and returns on investment.164
Summary of Challenges and Priorities

### How to be responsive to the needs of workers seeking training and jobs
- Public agencies must make difficult tradeoffs between anticipating long-term trends and addressing pressing, short-term needs

### How to adapt to changes within the sector and employers
- Employment trends cannot be generalized across the entire healthcare sector at a single point in time.

### How to navigate employer needs and balance them with the reality of career development
- It takes time for the value of workforce development to "stick" within employers.

### How to fund and sustain partnerships, services, and infrastructures to deal with the above challenges
- There is no cohesive workforce development strategy for the region.

#### Low-Priority

#### Medium-Priority
- Pathways to develop a career in healthcare are unclear. Data and information are nonexistent, incomplete, or outdated

#### High-Priority
- (1) "Life happens." People face a wide array of challenges in committing to and finishing a training program
- (2) The decentralized community college system is cumbersome to navigate and difficult to measure.
- While the "dual-customer" approach offers the potential to simultaneously address the needs of employers and low-skilled individuals, ultimately these two groups may have needs too divergent for a single program to serve.
- Understanding program impact is challenging in and of itself.

- Training models must adapt to workplace changes in hospitals
6.6 **Action Steps for Boston’s Case**

Based on the priorities outlined above, this thesis outlines the following action steps to build on successes and improve access to career and employment opportunities in the healthcare sector for low-skill individuals:

- **Rely on community-based training programs that have proven their excellence over time for basic ESOL and computer skills.** These programs, such as those run through JVS, are already in high demand, have a clear and immediate benefit to workers and employers, and will continue to be crucial to success in the workplace in the future. It is particularly important to retain pre-employment programs to prepare individuals for career paths, but incumbent worker training programs that target basic English and computer skills can also be effective.

- **Operationalize coaching and mentoring models.** A good career coach with appropriate resources can respond to micro-trends and changes in the workplace, be in close communication with community colleges and employers, and help individuals manage education and training in their life commitments. Whenever possible programs should be designed as cohort models so individuals can support each other in the process.

- **Advocate for reform in the community college system** and refine the delivery of content-based training (as opposed to English or basic computer skills). This is a ripe place to focus on collecting and sharing clearer data and incentivizing performance-based metrics to improve outcomes for the wide range of individuals served by the community college system.

- Employers must be involved in the process, but ultimately ample public funds must prioritize addressing the needs of the City’s most vulnerable populations. Employer-led training increasingly focuses on incumbent workers, which has not demonstrated a clear and direct benefit to recipients. Large employers also tend to be heavily influenced by political pressures and economic cycles, which are not necessarily relevant to the needs of low-skill workers.

- **Build stronger data collection and evaluation methods into program design to better understand outcomes.**
Conclusion

Addressing the fundamental labor market issues that improve access and job quality for low-skilled workers and promotes inclusive economic growth requires strategies that go beyond traditional training and job placement programs. The workforce development efforts discussed in this thesis reflect sincere and thoughtful efforts of many people who have devoted their careers to experimenting with solutions to these challenges over decades.

The experience of workforce development initiatives in the healthcare sector in Boston as explored in this thesis provides valuable insights that are transferable to other regions and sectors. Practitioners in Boston used flexible funding streams to experiment with pilot projects and build staffing capacity in large institutions. Many were able to frame workforce development strategy internally to employers as a crucial component of talent retention, long-range planning, and performance upgrading for workers of all skill levels, not just senior management and high-skill staff. Political pressure from Mayor Menino was an additional strong and consistent incentive for major hospital employers to invest in workforce development for local communities. Today, the conversation around the need for a systemic approach to labor market challenges and workforce development has broadened to engage a wide range of stakeholders over time and increased pressure on policy reform.

In considering this case’s applications to other regions, it is important to recognize factors that make healthcare in Boston a particularly unique case. Characteristics of the City of Boston and the healthcare sector has been an easy target for sector workforce development strategies for a few reasons:

- There was already a dense network of stakeholders to develop a peer network for collaboration.
- Programs in healthcare that require on-site clinical placements as part of a certificate or associate’s degree inherently institutionalize relationships between community colleges and employers. Since these baseline relationships already existed for clinical occupations, early efforts to develop more comprehensive
workforce strategy in Boston expanded those relationships over time for non-clinical positions rather than forming them from scratch. This process may be unique to the healthcare sector.

- Training and education for many healthcare occupations must be accredited by a national accrediting body. Since these programs are standardized across the country, students will receive a transferable degree that can be applied to jobs anywhere in the country. This is likely a less risky and more desirable investment for someone looking to go back to school and upgrade his or her employment prospects.

As cities experiment with new programs and strategies, we must collectively continue to critically evaluate the outcomes for the low-skilled and low-income individuals these programs are ultimately aiming to support. Ultimately the limited existing evaluations suggest that Boston’s sector workforce development programs remain ‘boutique’ projects with modest impact on labor market outcomes and standards of living for people with low levels of education and training.

It is also important to recognize that there are limitations of regional economic and workforce development efforts. In the words of Ken Barnes of JCS, “The workforce development system can’t be a solution to a problem that’s much bigger than the workforce development system.” Good jobs depend on strong businesses, and strong businesses depend on a strong business climate, a diversified regional economy, and a distinct and complex set of macroeconomic policies. The level of need for many of the education and training programs reflects the failure of the nation’s primary and secondary education systems. A wide range of other employment policies, such as raising the minimum wage, are beyond the scope of this thesis but would have implications on the themes discussed here.

Ultimately there are many ways to address the polarization of the labor market, declining economic mobility, and rising income inequality, which what may turn out to be, in the words of President Obama, “the defining challenge of our time.” This thesis has aimed to contribute the experience of one case to this broader conversation.

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165 Ken Barnes, interview.
Bibliography


Alysia Ordway, January 20, 2014. Interview with author.


David Zuckerman. Hospitals Building Healthier Communities: Embracing the Anchor Mission. The Democracy Collaborative at the University of Maryland, March 2013.


Karen Shack, April 14, 2014. Interview with author.


Ken Barnes, February 20, 2014. Interview with author.

Kornbluth, Jacob. Inequality for All, 2013. Film.

Laurie McCorry, February 20, 2014. Interview with author.


Martin Gilens. Why Americans Hate Welfare: Race, Media, and the Politics of Antipoverty


“Metro Boston Skilled Careers In Life Sciences Initiative (SCILS): Grant Application from The City of Boston, Economic Development and Industrial Corporation,” n.d.


