

When Untapped Talent Meets Employer Need

The Boston Foundation's Allied Health Strategy

Prepared for

The Boston Foundation

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About the Boston Foundation

The Boston Foundation, Greater Boston's community foundation, is one of the oldest and largest community foundations in the nation, with assets of \$733 million. In Fiscal Year 2010, the Foundation and its donors made more than \$82 million in grants to nonprofit organizations and received gifts of close to \$83 million. The Foundation is made up of some 900 separate charitable funds established by donors either for the general benefit of the community or for special purposes. The Boston Foundation also serves as a major civic leader, provider of information, convener, and sponsor of special initiatives designed to address the community's and region's most pressing challenges. For more information about the Boston Foundation, visit www.tbf.org or call 617-338-1700.

About Scott Hebert

Scott Hebert is an independent consultant who brings 30 years of experience evaluating and operating initiatives aimed at assisting disadvantaged individuals and communities. During his professional career, Mr. Hebert has conducted a wide range of participatory, formative and summative evaluations, focusing especially on workforce development, economic development, and comprehensive community change initiatives. Mr. Hebert also has more than a dozen years of experience as a practitioner in the design and implementation of community revitalization programs at the local and state levels. Building on this practical experience, over the past two decades, Mr. Hebert also has provided strategic planning and technical assistance services to a wide range of community initiatives and local and state agencies.

UNDERSTANDING BOSTON is a series of forums, educational events, and research sponsored by the Boston Foundation to provide information and insight into issues affecting Boston, its neighborhoods, and the region. By working in collaboration with a wide range of partners, the Boston Foundation provides opportunities for people to come together to explore challenges facing our constantly changing community to develop an informed civic agenda. Visit www.tbf.org to learn more about Understanding Boston and the Boston Foundation.

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An Evaluation of the First Three Years of the Allied Health Initiative

Prepared by

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The Boston Foundation would like to thank, first and foremost, the hospitals that participated in the first three years of the Allied Health Initiative and the dedicated staff who helped to guide the work. Some of the staff members have moved on to other positions or organizations, but we associate them here with the hospitals they worked with during the Initiative. They include, in alphabetical order, **Beth Israel Deaconess Medical Center:** Mark Estrada, Joanne Pokaski and Lisa Zankman; **Boston Medical Center:** Evelyn S. Hecht, Kate Hurd, Diane Loud, Olga Merchant and Constance Raleigh; **Partners HealthCare:** Mary Jane Ryan, Harriet Tolpin, and Geoffrey Vercauteren. We thank the employees of the AHI hospitals who took part in the “AHI participant focus groups” conducted as part of the evaluation.

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Finally, we thank Scott Hebert for his hard work evaluating the Initiative, which is reflected in this detailed report, and all of the participants who are working very hard to move themselves into family supporting careers and jobs.

Preface

In June of 2006, Bob Herbert, an op ed writer for *The New York Times*, wrote an article titled “Untapped Talent.” It began by setting the context as, “a time when the American dream has moved all but completely out of the reach of low-paid and poorly educated individuals,” and went on to describe a public-private partnership launched by the Boston Foundation, called SkillWorks, as an encouraging national model for offering opportunity to low-income individuals. SkillWorks’ goal was, and remains, improving the skills and career opportunities of our area’s low-wage workforce in a number of industries, including health care, which in Boston is dominated by some of the best hospitals in the world.

The next year, the Boston Foundation worked closely with three of Boston’s premier medical centers to launch a bold, employer-led initiative that focuses on tapping the hospitals’ own low-skilled, low-income workers to receive the education and training they need to fill the skilled jobs the hospitals offer. The hospitals include Beth Israel Deaconess Medical Center, Boston Medical Center and Partners HealthCare—and a unique aspect of our approach was to provide funding directly to those hospitals.

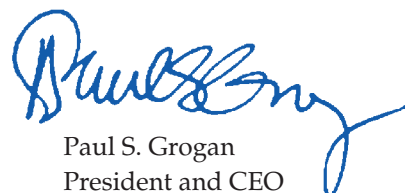
This report evaluates the first three years of what came to be called the Allied Health Initiative, a period during which the Boston Foundation invested \$1.5 million, with a commitment of some \$13 million in additional support pledged by the hospitals.

As the Initiative moved forward, the only setback faced by the hospitals was the need to provide more basic education to its workers than they had anticipated. The hospitals met that challenge and proceeded to create a model that has proven to be remarkably successful.

This Initiative unfolded during the most serious economic climate this country has faced since the Great Depression, but the commitment of the hospitals remained firm and the work proceeded. The hospitals met all of their goals and then some. Hundreds of low-income workers received the education they need to lift themselves and their families out of poverty and into professions that hold great promise. The Initiative is moving into its second three-year period and hospital leaders have embraced it—and an unexpected collaboration developed among the hospitals and continues to this day.

We at the Boston Foundation see our work in education—from pre-school through adult education—as a pipeline and we make investments in interventions at each stage of this pipeline and encourage others to do the same. We think there is a moral imperative to do this, and we know there is an economic necessity. With thousands of baby boomers retiring every day and slow population growth, our workforce will depend on those who are born and educated in Boston—and on immigrants who come here seeking the American dream.

We often use the term “human capital” to describe those who make up our workforce, but it is important to understand that behind that phrase are real people. And today the needs of these people just happen to align perfectly with the needs of our city. They need us to open doors and help them pass through—and we need them to build our future. The Allied Health Initiative is a positive model for opening some of those doors and we encourage other foundations and medical centers to consider testing this model in their communities.



Paul S. Grogan
President and CEO
The Boston Foundation

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1.

Introduction from the Boston Foundation

In 2007, the Boston Foundation, one of the oldest and largest community foundations in the United States, was focusing a great deal of its energy on the central role that human capital would play in the city's and region's future. The Boston Indicators Project, a project of the Boston Foundation and Greater Boston's civic community, had just released a report titled *A Time Like No Other: Charting the Course of the Next Revolution*.

The report was remarkably prescient in its prediction that Greater Boston—and indeed all of America's urban centers—were swiftly becoming part of an accelerating and competitive global economy, one in which human knowledge and technical expertise would be its most precious commodities. At the same time, Boston's workforce was literally declining and labor shortages were appearing in every sector. In addition, the Indicators Report and other research had revealed that talented people were leaving the area because of the high cost of living in Boston.

Two groups were identified as neither participating in the economy nor preparing to participate. The first is the very large number of immigrants who come to Greater Boston with a tremendous amount of hope, but without English proficiency or the kinds of skills the economy needs. In 2007, some 28 percent of Bostonians were foreign-born (a figure that today is only rising)—and without these newcomers, the population would be declining. If these immigrants are working at all, they are stuck in low-paying jobs, unable to improve their lives or those of their families. The second group consists of young people living in Boston's inner-city neighborhoods—primarily African Americans and Latinos—who are dropping out of school in large numbers or completing high school without the ability to do college work and compete for the kinds of jobs the economy is creating.

In this context, the Boston Foundation began thinking in terms of an “opportunity pipeline,” which extends through all levels of education, including adult education and job training. In 2007, the Foundation already

was making significant investments in interventions at each stage of this pipeline.

At the far end of the pipeline, the Foundation had created and funded SkillWorks, a workforce development initiative that was also funded by the City of Boston and a number of other foundations. In its first five years, SkillWorks already had provided training for 2,700 people to work in the health care, automotive and hotel industries. That same year, SkillWorks had provided a model for a national program called the National Fund for Workforce Solutions, formed by the U.S. Department of Labor and large foundations.

Of the areas addressed by SkillWorks, there is little doubt that the health care industry is by far the most important to Boston and the region it anchors. Its hospitals are world-renowned and the health care sector and the numerous industries that feed it and extend from it are vital to the current and future economy of the region. Boston's medical centers are here to stay and will always offer employment on virtual every rung of the employment ladder.

Among the industries that were experiencing the greatest mismatch between their workforce needs and qualified workers were Boston's world-class medical institutions. In fact, leaders at Beth Israel Deaconess Medical Center told the Boston Foundation that they had a number of jobs available in the allied health professions—and that they wanted to tap their own employees for training, but were finding that many staff members simply didn't have the basic skills they needed to advance into a profession.

From these conversations, the Allied Health Initiative (AHI) developed. Three participants joined the initiative, including Beth Israel Deaconess Medical Center, in special partnership with New England Baptist Hospital, Boston Medical Center and Partners HealthCare—and the Boston Foundation made a commitment of \$1.5 million in funding for the first three years of what would be a six-year initiative.

The Foundation and the hospitals felt that it was important to have the Initiative be employer led and be a true partnership, so that the work would continue beyond its initial phase and the programming would become an ongoing professional pipeline for hospitals and their employees.

This evaluation by Scott Hebert reflects the first three years of the Allied Health Initiative, during which time the three hospitals committed a total of \$13 million to the Initiative and have institutionalized many of the programs and approaches tested and refined.

While the economic climate has shifted dramatically over the last three years, recent Census figures have only confirmed what local researchers had been maintaining for years—Massachusetts has one of the slowest population growth levels in the country, with the majority of the growth that does occur coming from immigrants. Where three years ago, the fear had been that the lack of skilled workers would slow down economic growth in an increasingly competitive global economy, now the concern is that the lack of skilled workers could make it difficult to fill jobs that will be in high demand as the economy recovers—jobs that require some kind of higher education and skills training.

The Allied Health Initiative has been a true partnership, with the Boston Foundation’s funding providing the flexibility the hospitals wanted to adapt the program to fit their needs and those of their employees. The Initiative embraced the “pipeline” concept by investing in low-income workers with entry-level jobs and providing them with the educational background they need to advance into allied health positions.

In addition to meeting its basic goals, the Initiative also sparked a collaboration among the three hospitals that continues to enrich their work and their goals as they move into the next three years. A sense of regional identity is something the Boston Foundation brings to all of its grantmaking and civic leadership—from its work with area nonprofits, to the LaWare Leadership Forum, a group of business leaders setting an agenda for the future, to the Boston Indicators Project, which views its work in the context of regional viability and mutual support among those cities and states that make up the region. During the Allied Health Initiative, the collaborative impulse that grew over the course of the three years represented a cultural shift—away from a sense that the hospitals operate solely in competition

with each other and toward a mutual understanding that strength comes from collective work and shared knowledge. In the process, it has provided a model that we hope can be used by hospitals throughout the region and country and that may be adaptable to other industries.

In the spirit of partnership that has characterized this initiative since its earliest days, this report describes the unique approach taken by each hospital and the results of their ideas, efforts, setbacks and successes.

The Boston Foundation recently formalized its commitment to supporting the full pipeline of education and job training through its participation in the Boston Opportunity Agenda. Announced in June of 2010, the Agenda represents the first time that the City of Boston and the Boston Public Schools have come together with all of the city’s leading public charities and many of its foundations with a community-wide goal of achieving greater opportunity and economic mobility for all of Boston’s residents. The lessons learned during the Allied Health Initiative will inform the work of the Boston Opportunity Agenda, which hopes to set a national standard for collaboration around a shared set of goals, driven by data and accountable through regular reports to the community.

The ultimate goal, for the rest of the Allied Health Initiative, the Boston Opportunity Agenda and for all of the Boston Foundation’s work is to make Boston a city of upward mobility where everyone has the chance to achieve the American dream.

2.

Executive Summary

In 2007, the Boston Foundation launched the Allied Health Initiative, a workforce development initiative created in close partnership with several Boston hospitals. This new initiative was informed by the success of a major public/private partnership called SkillWorks, which was created by the Boston Foundation in 2003 with the City of Boston and a group of other local funders. In just five years, SkillWorks already had trained some 2,700 people to work in health care and two other industries and had served as a model for the national Fund for Workforce Solutions, formed by the U.S. Department of Labor and large foundations.

The Allied Health Initiative (AHI) was designed to respond to a serious need voiced by leaders of Boston hospitals about current and anticipated shortages of allied health professionals. The Foundation was impressed by the hospitals' expressed interest in training their own entry-level employees as a way both to fill the jobs they had vacant and offer life-altering opportunities to their own employees.

The Pipeline Approach

The Initiative sought to address these shortages by investing in the development of a series of pre-allied health educational "pipelines." These pipelines were seen as an ideal mechanism to help entry-level and low-income workers develop the skills, academic readiness, and certifications they need to advance into critically-needed allied health positions—in the process giving them a chance to gain family-supporting careers that would markedly improve their lives.

The Boston Foundation believes that the pipeline framework, with its emphasis on academic readiness, was a powerful formula for low-income workers, because it is adaptable to the shifting and evolving demands of various health occupations. The pipeline approach also leverages investments by Boston hospitals in technical training, while at the same time encouraging additional investments in preparatory education. And it provides

transferable, on-the-job benefits for both workers and employers.

The Hospital Partners

The Boston Foundation made AHI grants to three sets of hospital partners: Beth Israel Deaconess Medical Center/New England Baptist Hospital; Boston Medical Center; and Partners HealthCare. The Foundation committed a total of \$1.5 million in AHI funding to these partners, leveraging an additional \$13 million from the hospitals. The Boston Foundation's contributions were intended to be spent over the first three years of the initiative. The matching resources from the employers are being applied over a six-year period, to help ensure that the key activities at the participating institutions continue after the Boston Foundation's funding ends.

The Boston Foundation intentionally structured AHI to be "employer led," because it sees the hospitals as the key drivers of improved allied health workforce development practices. To foster this role, each participating employer in the Allied Health Initiative has been encouraged to define the range of allied health occupational categories that are the specific focus of its efforts.

Flexibility by Design

The employers participating in the Initiative were given a great deal of flexibility. They were able to determine the precise methods needed to address their allied health labor shortages and to build out their own pipelines. Reflecting the "employer-led" orientation, the hospitals also were the direct recipients of the Foundation's grant funds—as compared to SkillWorks and other Boston Foundation workforce initiatives, where the funding typically has gone to nonprofit organizations that work with employers. In the technical assistance being provided by the Foundation's consultants to the employers, the Foundation sought to be collaborative rather than directive. And the Foundation's staff

endeavored to be extremely flexible in responding to requests from the hospitals for refinements to their project designs as the initiative unfolded.

A Brief Summary of the Conclusions

The Allied Health Initiative represented a bold and ambitious undertaking by the Boston Foundation. As an employer-led initiative, AHI was expected to operate in a distinctly different fashion from previous workforce development efforts. The Foundation hoped that this employer-led approach would lead to greater leverage and scale, and more sustainable outcomes. In contrast to initiatives that support good programs and help some people, but end when foundation funding terminates, the Boston Foundation was looking to create permanent institutional and system capacity.

The results, after three years of the Initiative, indicate that in many respects the Foundation's initial assumptions and expectations have been validated. The employers appreciated the fact that the Foundation trusted their instincts and intentions, rather than being prescriptive. The employers' ability to control the funding and use it in flexible ways has had a major impact on employer engagement and institutional change.

The funding also had a "bigger bang," in terms of the influence on these employer institutions than the Foundation anticipated. Even though the grantees are large health care institutions with extensive resources, they believe that AHI funding has brought capacities to their HR systems and workforce development efforts that would not have been possible otherwise.

The Foundation's funding—and the prestige associated with it—raised the credibility of workforce efforts within the hospitals, led to much more investment being devoted to these efforts, a faster pace of achieving scale, and a greater sense of institutional ownership. Moreover, the Foundation's emphasis on the creation of new infrastructure provided an incentive for the institutions to try new things. The Initiative created an environment of innovation and experimentation in the hospitals' workforce efforts, even during a time of fiscal austerity.

Changes in the Financial Environment

Since the Initiative unfolded over the course of a serious economic downturn, the immediate labor shortages that prompted its launch have temporarily disappeared. The hospitals are seeing less voluntary turnover among their employees and when vacancies occur, they are not necessarily taking steps to fill those positions. On the other hand, since the academic preparation and training associated with the Initiative takes several years, it has the potential to help hospitals prepare for the new demand for workers that will happen when the economy recovers.

The Characteristics of Participating Workers

The employers found that many of the workers seeking to enroll in the AHI programs had lower than expected college readiness levels—lacking the basic math, English and reading skills necessary to take college-level courses. They also found that some workers needed to upgrade their basic competencies to satisfy the expanding technical requirements of their current positions. What all this meant was that many of the AHI participants needed to complete a series of more basic educational steps before they would be ready to enroll in allied health training programs, or to be considered for higher-level positions.

Again, the AHI sites responded positively to this situation. The grantees devoted more emphasis to their pre-college courses, and built out earlier elements of their pipelines. And where appropriate, or requested by hospital departments, they addressed gaps in basic technical competencies relating to workers' current jobs.

Numbers of Workers Assisted

Each grantee generally met or exceeded its performance targets for the number of workers who were "touched" by the AHI efforts. But overall they did less well in terms of moving workers into formal allied health training programs or into more advanced positions. The key reasons for this were the lower than expected college readiness levels, and the substantial decline in available allied health job openings.

Each of the hospitals tracked their AHI participants in somewhat different ways, which makes it challenging to produce precise aggregate figures for AHI as a whole. However, we can say with confidence that through June of 2010 more than 1,250 employees at the hospitals received assessment and counseling services through AHI. Of these, more than 750 took academic courses (either pre-college or college-level courses). And approximately 230 of the AHI participants have enrolled in health training programs, some at community colleges, some through on-line programs, and some at in-house allied health training programs offered by the hospitals.

The Pipeline Infrastructure and Institutional Change

The grantees' accomplishments relative to building their pipeline infrastructure are more positive. Each hospital has articulated more complete and transparent allied health pipelines. The employers have a greater capacity to respond flexibly to a wider array of worker needs and as we have noted, particularly the needs of lower-skilled workers requiring foundational skills.

AHI also has fostered broad cultural changes throughout the institutions. The AHI efforts have greatly expanded the number of employees that are aware of the career development opportunities available to them. Only a portion of these have taken full advantage of these opportunities to date. However, according to the hospital representatives, the awareness of these opportunities is encouraging greater numbers of workers to think more intentionally about their careers, and about pursuing additional education and skill development.

Collaboration Among the Hospitals

While it was not envisioned as part of the initial AHI program design, after an initial resistance to pursuing common activities, it became clear that the grantees were very interested in hearing more about what each other was doing, and seeing if there could be more opportunities for cross-site learning. There now is an unprecedented level of peer learning and collaboration among the three major health care employers, which represents a cultural shift from past relationships. Their collective efforts have significantly increased "employer

voice" in discussions regarding the region's higher education system, and offer the possibility of substantial systems change. These broader efforts have proven to be very time-consuming for the hospitals' representatives, however. For these individuals to sustain their efforts, it will require the employers and/or funders to make explicit allocations of resources to support the continuation of these activities.

Making the Business Case to Sustain the Pipeline Efforts

According to senior hospital leadership, AHI efforts have not yet made the business case in measurable "dollars and cents" terms. However, they acknowledge that many of their programs have not yet reached sufficient scale. Nonetheless, the AHI has achieved strong internal buy-in among the managers and leadership of the institutions and represent a very distinct shift in their institution's workforce development philosophy. As framed by one senior HR official, "We now see our role as preparing people for careers, and not just their next position."

Observations and Takeaways

Based on the evidence, it appears that the Allied Health Initiative has achieved most of the objectives that the Foundation had originally articulated for its first three years. The AHI employers, building on the foundation of their previous workforce development efforts, have substantially enhanced the capacity of their allied health pipelines. They also have invested heavily in the earlier stages of the pipelines, and not just on those workers who could advance quickly.

The Initiative has served as a catalyst that encouraged these large institutions to create new human resources and workforce development infrastructure. This new infrastructure not only meets their business needs, but also creates opportunities for workers to gain marketable credentials and move up the economic ladder.

The experience to date indicates that the Foundation was correct in its assumption that it could secure the employers' commitment to continuing their pipeline efforts over six years, even if the Foundation only invested in the first three years. This was a risky

assumption under the best of circumstances, but the risk was heightened substantially by the economic downturn. Nonetheless, the employers feel cautiously optimistic about their ability to sustain the new practices that have been implemented and the enhanced capacities that have been built, at least over the balance of the six-year life of the initiative.

The commitment to sustaining the pipeline efforts is a reflection of the broader belief held by the leadership of these hospitals about the importance of investing in their incumbent workforce. But in no small measure the continuing support for the specific pipeline efforts was reinforced by the tangible successes that the AHI activities were able to demonstrate in each of the institutions.

With the Allied Health Initiative, the Boston Foundation and its hospital partners have created a model for employer-led workforce development initiatives that has considerable potential for further replication. While this model will not be a good fit for all industries or all employers, it is most promising for larger employers who can spread the costs of the effort over a larger base and are likely to experience more vacancies and jobs that need to be filled.

The Allied Health Initiative was a bold undertaking by the Boston Foundation. In thinking that this new grant program could have a significant impact in influencing the investment decisions of very large institutions, the Boston Foundation had big—and perhaps somewhat audacious—ambitions. However, over its first three years, the AHI initiative has proven to be very successful in fostering the establishment of increased workforce development capacity and improved HR practices in each of the participating employer institutions. And this success has occurred despite the fact that AHI was being implemented in remarkably challenging economic times.

The AHI experience to date offers a variety of valuable lessons to the philanthropic and workforce development fields in terms of providing an investment model for fostering larger scale, sustainable impact. With the continuing efforts of the hospitals involved, and with replication of the model by other funders and employers, the potential for greater institutional and system impact is considerable.

3. Overview

The Allied Health Initiative (AHI) is a workforce development initiative that was launched in 2007 by the Boston Foundation in partnership with a number of Boston's leading hospitals. AHI was designed to respond to the need voiced by leaders of Boston hospitals regarding existing and anticipated shortages of allied health professionals. It also was designed to provide opportunities for entry-level and low-skill incumbent workers to develop the skills, academic readiness, and certifications that they need to successfully pursue satisfying careers in health care.

The allied health workforce represents approximately 60% of the staffing of health care providers, and includes over 80 professions. Research on Boston hospitals conducted in 2005-2006 showed that vacancy rates for a sample of seven allied health professions ranged from 6% to 16%, exceeding the vacancy rates for Registered Nurses.¹ The vacancies, and related expenses for recruitment, overtime, and the use of higher-cost temp workers and "travelers," were seen as negatively impacting the capacity of the hospitals to grow and continue to provide high quality services.

The research analysis and the experience of the Boston hospitals at the time suggested a number of underlying causes for the allied health staffing shortages. These included a limited supply of qualified candidates for allied health education programs and positions, as well as the capacity constraints of existing allied health training programs. Regarding the latter, the 2005-2006 research suggested that the demand for allied health workers would continue to exceed the supply of graduates, despite planned growth in training programs.

AHI was created by the Boston Foundation to support the hospitals in addressing the various factors causing the allied health workforce shortages. With the AHI, the Boston Foundation chose to follow a three-pronged strategy:

- Build on Boston hospitals' existing investments in workforce development to create a pre-allied health education "pipeline" that helps people

advance into critically-needed allied health positions including respiratory therapists, surgical technicians, radiological technicians, and others;

- Focus on preparing current employees for advancement to professional training programs leading to allied health positions; and
- Fund efforts to create or expand programs to prepare workers for, and enroll them in, allied health degree and certificate programs.

The Boston Foundation believed that this pipeline framework, with its emphasis on improving the academic readiness of low-skilled workers considering allied health careers, made sense because:

- It could be designed in an adaptable fashion, so it would not be dependent on the shifting demands for specific occupations;
- It would provide higher leverage by taking advantage of existing investments by Boston hospitals in technical training, while encouraging additional investments in preparatory education; and
- The benefits would be transferable since improved academic readiness was seen as having on-the-job and marketplace payoffs for both workers and employers, even relative to individuals who do not move on to technical degrees.²

The Boston Foundation has made AHI grants to three sets of hospital partners: Beth Israel Deaconess Medical Center/New England Baptist Hospital; Boston Medical Center; and Partners HealthCare. The Boston Foundation committed \$1.5 million in AHI funding to these grantees, to be spent over the first three years of the initiative. The Foundation's investment has been matched by approximately \$13 million in commitments from the hospital partners. The matching resources from the employers are being applied over a six-year period, to help ensure that the key activities at the participating institutions continue after the Boston Foundation's funding ends.

It is important to note that, in developing AHI, the Boston Foundation decided to take a new approach to designing and implementing a workforce development initiative. The Foundation intentionally structured the AHI to be “employer led.” The Foundation saw the hospitals as the key drivers of improved allied health workforce development practices. To foster this role, each participating employer in the Allied Health Initiative got to define the range of allied health occupational categories that would be the specific focus of its efforts. It also got to determine the precise methods that it would be taking to address shortages in those areas and to build out its “pipeline.”

Reflecting the “employer-led” orientation, the AHI application process involved the submission of a business plan by each employer applying to the initiative, rather than requiring a structured response to a detailed RFP. The employers also are the direct recipients of the Foundation’s grant funds (as compared to previous Boston Foundation workforce initiatives where the funding typically has gone to nonprofit, community-based organizations that work with employers). Further, in the technical assistance being provided by the Foundation to the participating AHI employers, the TA providers have sought to be collaborative rather than directive. And the Foundation staff have endeavored to be extremely flexible and as responsive as possible to requests from the individual AHI employers for changes in their project designs as their efforts evolve.

At the beginning of the Allied Health Initiative, the Boston Foundation articulated its expectations for the progress that would be evident at the end of the first three years of AHI operations. Specifically, the Foundation was hoping to see that:

- The employers’ strategies for extending their allied health pipelines were in place and, as necessary, have been refined based on their experience to that point;
- There is evidence that the added components of the pipelines have helped incumbent workers to make progress towards advancement and/or the institutions to fill critical vacancies;
- The added components are viewed as a critical part of each employer’s array of Human Resources practices and, as a result, there is a commitment by the employers to sustain this new infrastructure as part of a continuing focus on the development and advancement of low-skilled workers; and

- For the new practices that have proven particularly effective, confirmation of the employers’ intention to take such practices to greater scale.

This AHI evaluation report was prepared at the end of the third operational year of AHI, and assesses the extent to which the Boston Foundation’s expectations for the initiative to this juncture have been met. It examines whether the AHI employer-grantees have been able to implement the strategies that they proposed and, if so, what have been the results to date. It also examines any refinements that they have made in their strategies, and the reasons for such changes. As part of this, the report looks at the challenges that each grantee has faced to date in implementing its AHI efforts, and those that are anticipated in the future.

The report explores whether the employers feel that their business needs are being met. It also looks at the employers’ plans for sustaining or expanding the pipeline infrastructure that has been built. Additionally, it looks at the roles that the Foundation staff and consultants have played in supporting the AHI grantees, and the possible implications of the AHI experience for other workforce development initiatives.

In the section which follows, we begin the assessment by briefly describing each of the three AHI grantees. The profiles describe the specific objectives and strategies of the grantees, their implementation experiences and accomplishments in building out their pipelines and helping workers to advance, and their plans for sustaining their efforts in the future.

The profiles are then followed by a final section of the report that presents common themes across the AHI grantees, and some overall conclusions regarding the efficacy and replicability of the AHI model. It reviews the grantees’ experience with some of the key features of the AHI program model. It examines the pattern across the employer sites in how the AHI teams have adjusted to changes in the economic environment and to issues that have emerged in their operational experience. It also assesses the extent to which the grantees have met their desired objectives. Finally, the concluding section provides some recommendations about the due diligence process that might be used by other funders considering replication of the AHI model.

4.

Profiles of the Allied Health Initiative Grantees

Beth Israel Deaconess Medical Center (BIDMC)

Objectives and Strategies

Prior to its application for AHI funding, BIDMC already had implemented three “pipeline” programs to help its incumbent workers prepare for better-paying jobs in health care. These pipeline programs trained BIDMC employees to become research administrators, surgical technologists, and nurses, with the latter two training programs being offered in collaboration with a local community college. In the selection processes for these programs, BIDMC found that many otherwise talented employees tested as not yet ready to do college-level work.

BIDMC’s proposed AHI effort, which it termed the “Employee Career Initiative” or ECI, was intended to build on this foundation and increase the scope and scale of its workforce development efforts. In particular, BIDMC hoped to prepare more employees to pursue college-level programs. To accomplish these objectives, BIDMC put in place the following ECI program components and services with its AHI funding:

- A career and academic counselor available to all employees of BIDMC and New England Baptist Hospital (NEBH), which is a partner with BIDMC in the AHI effort;
- Improved employee access to information on allied health careers and academic, financial, and career resources;
- Opportunities for formal academic assessment and the creation of academic and career plans;
- A pre-pipeline program that is readily accessible year-round for all employees interested in advancing their healthcare careers;

- Pre-college courses and college-level science courses offered on-site at no cost to employees; and
- Tutors for employees who are struggling with classes.

The Boston Foundation approved up to \$500,000 in funding over three years for the ECI activities. The two hospitals pledged a matching contribution estimated at over \$4 million for the six years of the initiative.

Implementation Experience and Accomplishments

In the three years since BIDMC’s AHI effort commenced, the ECI program administrator/career counselor has established an extensive network of relationships with both BIDMC and NEBH departments and individual employees. This has greatly promoted the visibility of ECI throughout the two hospitals. BIDMC representatives also indicate that “word of mouth” has become a significant contributor to ECI enrollment, as employees who previously enrolled tell their colleagues about their positive ECI experiences. In addition, BIDMC recently launched a new internal hospital website that includes a workforce development portal which provides a stronger internet presence for ECI and the other career advancement programs and resources at the hospital. As a result of these developments, manager and worker awareness of the available career advancement supports is more widespread across BIDMC and NEBH.³

During the first three years of the Initiative, over 429 employees have registered in ECI. BIDMC has found that the characteristics of the employees registering in ECI generally have been well-aligned with the initiative’s intended target population: 74 percent of the 429 enrollees have a high school diploma or GED but no college degree, and 78 percent of the ECI participants have identified a career goal in either allied health (39% of enrollees) or nursing (also 39%).⁴ However, the initial

College Placement Test scores of ECI enrollees revealed low levels of college readiness. Slightly less than half (47%) of employees taking the Accuplacer placement tests through ECI scored at the college level for reading, one-quarter (24%) scored at the college level for writing, and only 8% scored at the college level for math. These college readiness levels were significantly lower than those BIDMC originally had anticipated, and meant that the employees would require more pre-college courses and longer time periods to achieve advancement.

One of the things that is particularly impressive about the ECI experience is the on-going refinements that BIDMC has implemented over the first three years of AHI to respond to these low readiness scores, and to improve employee access to, and success in, the educational courses being offered.

BIDMC's basic strategy has been to bring community college classrooms on-site to the hospital, and to schedule them around work shifts, in order to make enrollment in these classes more convenient for employees at BIDMC and NEBH. However, in recognition of the low college readiness scores, BIDMC established pre-college math, reading, and English classes in addition to science classes targeted to allied health careers. And BIDMC took additional steps to facilitate participation and to support the employees enrolled in these classes. For example, the hospital established a special parking program for the BIDMC and NEBH employees taking on-site classes that provides free parking for ECI students after 5 pm. BIDMC also negotiated for the Bunker Hill Community College (BHCC) professors teaching the on-site classes to use the same textbooks each semester if possible, so that BIDMC could offer ECI participants a book rental policy to keep book costs low for students.

The ECI program coordinator also closely monitors participation in the courses, and intervenes with employees when an individual misses more than two classes, and/or when a student's exam scores are in the C level or below.

In Year 2, the project staff found that the ECI's passing rate for its math classes was averaging 62 percent. Concerned with this result, they met with their training partners at BHCC to brainstorm ways to improve these pass rates. BIDMC representatives report that through these conversations, they discovered that the ECI passing scores were higher than those for BHCC's campus-based math classes. Nonetheless, BIDMC decided to

implement a series of strategies to boost the performance in its on-site, pre-college math classes. These strategies include:

- Students who are taking a math course for the first time are required to complete a "math experience survey" to help inform the instructor about the student's math comfort level; and
- Students who pass a class with a C or C+ can only take the next level course if they agree to be matched with a tutor from the start of class. Additionally, the instructor administers an assessment test in the first session of the next class to more precisely gauge the student's proficiency.

In Year 3 the ECI participants achieved a passing rate of 72 percent in the on-site, pre-college math courses.

As a further step, in Year 3, the ECI began offering a series of "student success" workshops designed to equip the ECI employees taking classes with the necessary academic and life tools to be successful in their courses. These workshops were initially targeted to students that had received a C or below in previous courses, and to students that had shown test-taking anxieties. The first workshop, "Study Smarter," provides students with time management skills, steps to avoid procrastination, and strategies to take better lesson notes and to improve reading comprehension. The second workshop, "Out-Smarting Your Tests," addresses test anxiety, test preparation, and test-taking strategies. Feedback from participants in the first two workshops, conducted by BHCC on-site at BIDMC, was positive. According to BIDMC staff, the hospital intends to offer future rounds of the workshop itself, rather than through a contract with BHCC, in order to refine the delivery and content of these sessions to better meet the needs of ECI participants.

BIDMC also has worked out an agreement with BHCC that will allow the hospital to run the Accuplacer assessment test itself in the future without having to hire a BHCC proctor to administer each round of the College Placement Test. This will save the ECI money, and will allow it to conduct the test on a more frequent basis (including offering individual sessions for employees with unconventional schedules). BIDMC also is planning to begin offering an Accuplacer prep workshop to introduce new ECI participants to the academic assessment tool, and to show them how to be most effective in taking the computer-based test.

To date, ECI reports that more than eighty-nine percent (383) of the 429 individuals who registered in ECI are still employed at BIDMC (348) and NEBH (35). In addition, through 6/30/10:

- Three-hundred and ninety-two employees (91% of those registered in ECI) have met one-on-one with the ECI program administrator for a counseling/career planning session; this exceeded by 31 percent ECI's original 3-year target of 300 employees with written educational plans.
- The ECI has conducted 22 rounds of Accuplacer academic placement tests, with 226 employees taking the placement tests on-site over the three years of AHI to date.
- The ECI has offered eight semesters of courses at BIDMC, including 19 pre-college courses in math, reading and English, and 6 college-level courses in chemistry, biology, and anatomy and physiology that are prerequisites for many allied health training programs.⁵ Two-hundred and forty-eight employees have taken one or more of these courses.⁶
- One hundred and twenty employees have progressed to college level work in math, English, and/or reading, which represents 80 percent of ECI's original 3-year goal.⁸ Though it fell somewhat short of its goal relative to participation in college-level courses, BIDMC nonetheless takes pride in the fact that 69 percent of the employees who started at pre-college levels in reading, English, and/or math when they enrolled in ECI have progressed to college level in at least one area.

The employees who participated in the BIDMC focus group for this study lauded the convenience of the on-site courses, and the supports that ECI provides in helping workers to take advantage of them. They also reported that the instructors for these on-site courses have been consistently engaging and caring. According to one of the focus group participants:

The professors make you love the classes. Even the math instructor – she makes it interesting, and brings energy [to the subject].

The focus group participants also acknowledged that, while the pathway to their career goals might be a long one, they “see the light at the end of the tunnel.” This has been aided, they say, by the ECI staff making the steps in the advancement process more transparent, and

by encouraging them at each step along the way.

The one criticism that the BIDMC focus group participants voiced related to the logistics of scheduling space for the classes. The participants reported that, because of limited space at BIDMC for meetings and classes, the start of some classes was occasionally delayed while waiting for staff holding a meeting in the space to vacate it. Also, two concurrent classes shared a space with a temporary divider wall that proved inadequate in terms of muting sound between the classes.

In addition to improving the allocation of class space, the focus group participants also encouraged BIDMC to consider offering a set of courses specifically scheduled for employees who work a night shift.

Sustaining the Work

Through its AHI funding and activities, the ECI has helped BIDMC to establish a more comprehensive and seamless portfolio of advancement resources that employees can access at any time. **Figure 1** shows the pipeline programs that BIDMC offered during ECI with AHI funding, while **Figure 2** highlights the programs and resources that the hospital currently offers and plans to continue.

As shown by Figure 2, BIDMC has been able to complement its AHI-funded efforts with pipeline programs supported through other sources, such as the Medical Laboratory Technician and Patient Care Technician training programs. ECI participants receive advance notice about openings in these programs, and represent a substantial number of the enrollees and graduates of the recent rounds of these training programs. Representatives of the workforce development team noted that the existence of the specialty pipeline programs also helps with enrollment in the more foundational pre-college classes, because “it makes the ultimate endpoint more transparent and real for employees [in the foundational classes].”

The visibility and success of the ECI efforts also seem to be contributing to a broader “culture of opportunity” at BIDMC. BIDMC representatives report that, in addition to increased employee awareness about available training and supports, the hospital’s managers now see that helping their staff to advance is a fundamental part of their supervisory responsibilities. This attitude change

FIGURE 1

BIDMC Pipeline Programs with AHI Funding

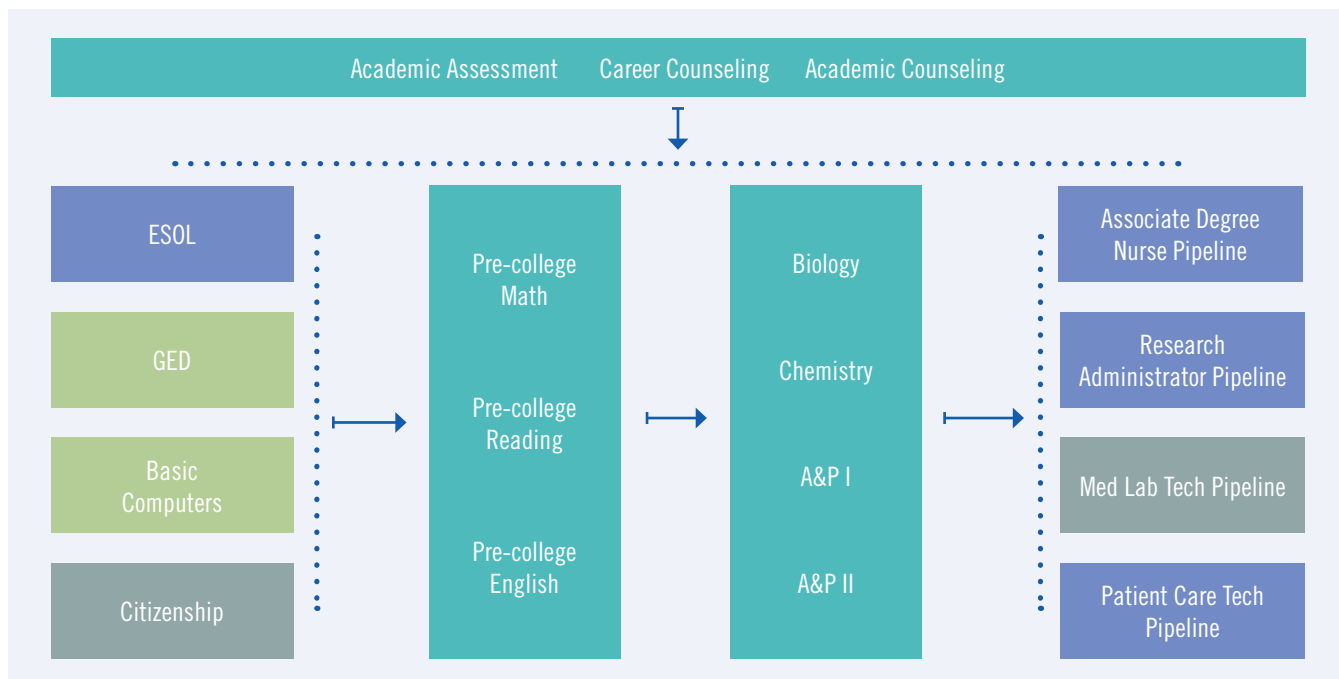
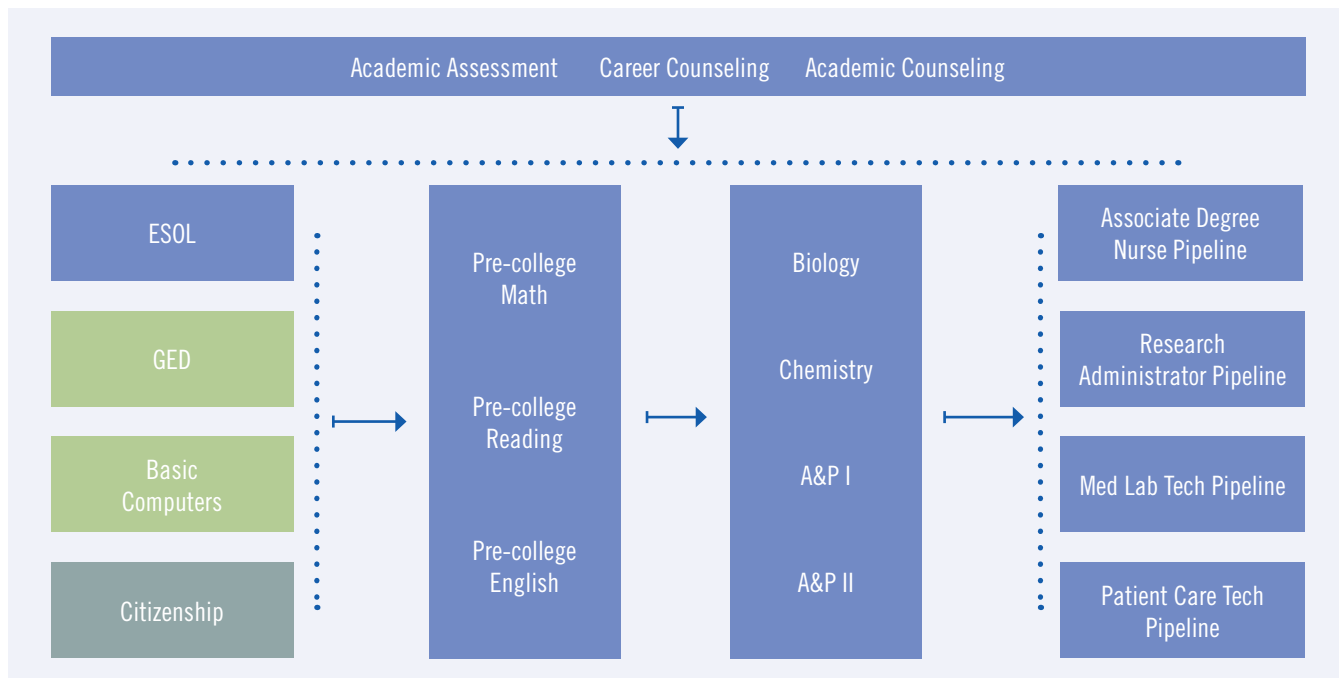


FIGURE 2

BIDMC Current Programs and Resources



BIDMC funded
 AHI funded
 SkillWorks funded
 Other funded

is a reflection of the “top-down” emphasis that BIDMC senior leadership is placing on helping incumbents to progress along career pathways.⁸ But it also has been influenced by the managers’ own recognition of the improvements in morale, confidence, and performance of the employees participating in ECI.

As one measure of the “reach” of the workforce development efforts, BIDMC representatives estimate that at least 10% of its workforce has already been “touched” by one or more of the services outlined in Figure 2. And if one looks just at employees in entry- or lower-level positions, the representatives believe that the percentage may be closer to 30%.

The value of BIDMC’s emerging comprehensive workforce development model, and ECI’s successes to date, have not only been recognized internally at the hospital, but externally as well. BIDMC has been asked to present the model at hospital conferences in Massachusetts and North Carolina and via teleconference to a hospital system in Israel. Partly as a result of its ECI efforts, BIDMC also has been featured as a model employer in a report to the Mott Foundation, and won the Gould Award for Education and Workforce Development from the Associated Industries of Massachusetts.

BIDMC representatives stress that the support from top leadership was critical in making the initial commitment to the AHI effort, and will be equally important in maintaining the infrastructure that has been built. Over the course of the last three years, BIDMC has matched the Boston Foundation’s funding with \$2,019,280 of its own investment in the ECI activities, slightly exceeding the hospital’s initial projections for its match over that time period. BIDMC expects to allocate an additional \$2 million to its ECI-related efforts over the next three years, fulfilling its AHI 6-year match commitment to the Boston Foundation.

Using BIDMC operating funds, the hospital currently intends to sustain the ECI core elements indefinitely, including: academic assessments and career advising; the developmental English, reading, and math classes and college-level science classes held on-site; the on-site Accuplacer college readiness assessments; student success workshops; volunteer tutors; and web-based information and resources.

BIDMC also is interested in broadening its ability to provide career counseling to all its employees. In this regard, BIDMC’s workforce development team is particularly interested in offering workshops and services related to:

- Applying on-line for jobs at BIDMC;
- Writing an effective resume;
- Using performance reviews as a tool to help employees plan for career advancement;
- Guiding employees in how to ask for feedback from supervisors; and
- On-going career planning.

BIDMC also would like to build additional pipeline programs, to complement the six that the hospital already has in place.⁹ The workforce development team also would like to find ways to expand BIDMC’s partnerships with community-based organizations to provide more internships and entry-level jobs for community residents. BIDMC’s capacity to pursue these expanded activities will depend, however, on identifying additional resources, and may need to be deferred until the economic climate improves.

Boston Medical Center (BMC)

Objectives and Strategies

Prior to applying to the Allied Health Initiative, the Boston Medical Center (BMC) already had established substantial skill development programming for its employees. In April 2005, following a year of research and planning, BMC launched an effort to integrate its various training and support components into a continuum of coordinated workforce development services. The goal of this effort was to establish a pipeline of employees advancing toward careers in the Medical Center’s high vacancy areas that pay family-supporting wages. BMC’s workforce development continuum was designed to offer multiple points of entry, meeting employees “where they are at” in their educational journey. It also was designed to provide supports tailored to the specific requirements that workers needed to address in order to advance in their careers. Elements of the continuum included:

- Context-based health career skills and pre-college level courses at BMC, including pre-college classes

provided by Roxbury Community College (RCC), and contextualized Health Care Career Skills classes in Medical Terminology, Math for Health Care, Pre-Nursing, and Radiology.

- BMC’s “on-site college”, offering undergraduate certificate programs and master’s degree classes in partnership with area colleges and universities; and
- Career and educational advising, available to applicants and participants in the President’s Scholarship Fund (which pays the up-front educational costs for workers returning to school).

The continuum was intended to help BMC meet its annual VSSC (Volume, Satisfaction, Safety, and Cost) business goals, as well as to respond to the educational needs of employees seeking advancement. Its workforce development efforts were envisioned as addressing the VSSC goals by increasing employee productivity and, through reducing staff vacancies, by lowering the costs associated with overtime and the use of travelers.

BMC saw the Allied Health Initiative as an opportunity to further build-out its continuum of workforce development services and its pipeline of workers advancing in allied health careers. More specifically, BMC proposed to use the AHI funds to:

- Create on-site training specialists in Central Processing¹⁰ and Radiology¹¹, and accelerate advancement of employees from Rad Tech I (General Radiology) to Rad Tech II (Advanced Modality, such as mammography), in order to improve BMC’s pipelines for these crucial allied health categories;
- Increase the capacity of BMC’s Organizational Development & Training (OD&T) department to conduct employee outreach and career coaching, to allow more employees to access BMC’s workforce development services and to participate in 1-on-1 career coaching or small group career advising sessions; and
- Expand BMC’s Health Care Careers skills courses, to double the number of class hours offered, and to increase participation in its Basic Skills courses (e.g., ESOL, Adult Diploma Program, and Introduction to Computers).

The Foundation approved up to \$499,995 in funding over three years to BMC for these activities. BMC made a commitment to match the Foundation’s funds with an estimated \$6,586,682 of its own resources over the six years of AHI.

Implementation Experience and Accomplishments

With the Boston Foundation’s permission, BMC’s team used the first year of AHI as an extended “planning and development” phase, spending the time to refine its strategies and lay the groundwork for implementation through extensive discussions with operational departments. BMC feels the flexibility that the Foundation demonstrated in allowing BMC to focus on these planning activities was absolutely critical to the success that the Medical Center subsequently experienced with its key AHI strategies.

During the first year of the initiative, the BMC OD&T staff leading the AHI effort made a number of significant refinements in their focus and approach relative to the activities aimed at the Central Processing and Radiology departments. Shortly after the AHI grant was awarded, for example, there was a change in the managerial leadership of BMC’s Central Processing Department (CPD).¹² The new manager, who was concerned about the competencies of the existing CPD staff, felt it was critical to first focus on “up-skilling” the incumbent CP Technicians before developing a pipeline for more advanced positions. In response to this shift in the priorities of the CP department, BMC’s AHI project team took a number of actions. First, the team worked closely with the CP department and BMC’s Human Resources, Labor Relations, and Compensation staff to redesign the Central Processing job descriptions. The revised job descriptions that were developed reflect the increased technological skills now required in this field. The descriptions also were designed to anticipate the emerging industry trend for board certification of employees in Central Processing roles.

Next, BMC’s Senior Workforce Development Specialist worked with the CP training team (including the Clinical Educator) to create competency assessment tools that reflected the new CPD Tech I and CPD Tech II job descriptions. Once these assessment tools were developed, they collaborated to conduct a CP occupational site audit and to construct a competency map for the CP department. This baseline audit, which included individual written assessments for each of the 42 front-line incumbent CP employees, documented a basic skills gap within the CP department. In response to this assessment, the team developed a Central Processing Foundational Skills Checklist as a guide to support the

integration of core basic skills into the training curriculum for incumbent workers. The CP training team then used this checklist to develop a training curriculum structured around nine core competencies. To increase efficiency in addressing CP staff skill gaps, the training team divided the incumbents into two training cohorts, reflecting each individual's existing competency level. After some experimentation, the AHI team also developed an innovative approach to the CPD training that "blended" clinical instruction with basic adult education to support individuals with lower levels of education and/or a lack of previous formal training.

BMC was initially scheduled to begin its in-house CP competency training in February 2008. However, commencement of this training was delayed due to the need to complete negotiations with union representatives (from 1199 SEIU) on issues of wage progression and skill attainment. During the first half of Year 2, BMC reached agreement with its union partners relative to the CPD certification procedures. All CPD employees without certification were granted 15 months to secure this credential.¹³ BMC agreed to cover all costs for the in-house CPD training as well as the required fees for initial certification tests. Also, BMC agreed to provide a \$1,500 bonus to employees achieving the certification. The in-house CPD training began on June 11, 2008, with 15 CP employees enrolled. By the end of the third year of AHI, 44 employees (both CPD incumbents and new BMC hires) had enrolled in the in-house training. In addition, during the second year of AHI, BMC continued to invest in CPD's skills enhancement with the dedication of a full-time Central Processing trainer to support on-going competency assessment and coaching for the employees enrolled in the training.

BMC found that its blended training approach resulted in higher rates of completion and certification than previously had been achieved by providing the clinical training alone. Out of the initial incumbent group, all but five participants passed the certification. In addition, 17 individuals who passed certification have been promoted to CPD Tech II, including all of the new CPD hires. Moreover, three individuals have been promoted to CPD Tech III, and one individual promoted to CPD Supervisor.

As noted above, during the first year of AHI operations, BMC also revised its approach to the delivery of training in its Radiology department. In the summer of 2007, the

manager of the Radiology department concluded that the department would not be able to meet its production needs with a single trainer on staff, as had been proposed in the AHI application. Instead, the Radiology department moved to having multiple staff serve as trainers for different modules of the curriculum.

The first AHI grant year was spent designing the instruction and curriculum. This "planning year" allowed BMC to create a uniform and organization-specific curriculum and set of performance standards for Radiology. The Radiology department also structured its curriculum in a way that allowed new employees not only to learn about general radiology, but also to get hands-on experience relative to a variety of modalities. The Radiology training was organized into three phases: BMC Radiology Orientation; Observation; and Work-based Learning internships, including direct work with patients in modality procedures. As part of these efforts, observation checklists were developed for four modalities (CT, Interventional Radiology, Mammography, and MRI). These refinements to Radiology's training approach were viewed as mechanisms to both open up the pipeline to more candidates and to shorten the time it takes for General Radiology Techs to become qualified to work in the advanced modalities.¹⁴

In the first half of Year 2, BMC further modified to its Radiology training curriculum and methodology. These modifications were seen as necessary when two of the original candidates decided not to become MRI Technologists once they were exposed (through the internship program) to the daily responsibilities associated with this position. In response to this experience, BMC developed an Interest Form for its Radiology internship program, and instituted more rigorous screening procedures.

By June 30, 2010, eleven individuals had been hired as Rad Tech I's and enrolled in the in-house modality internship program, modestly exceeding BMC's three-year goal (of 10 enrollees). Seven individuals were hired as Rad Tech II's with modality specializations, including three of the former program interns.¹⁵

In addition to these department-specific efforts, throughout the first two years of AHI the OD&T staff conducted general outreach across BMC and continued to offer an array of Basic Skills and Health Career Skills courses to employees. In addition, the AHI grant allowed BMC to expand its career coaching capacity. By

the end of Year 2, BMC's AHI team had contact with 495 employees interested in career opportunities and career advancement within the hospital. BMC's AHI career coaches had held educational planning sessions with 121 employees. One-hundred and forty-four employees had enrolled in the Health Career Skills Courses, 22 in college 090-level courses, and 50 in credit-bearing pre-requisite courses.¹⁶

During Year 2, the career coaches observed a growing trend of BMC employees with "established" careers becoming increasingly interested in gaining more skills or switching their careers. Related to this, BMC also saw an increase of interest and demand for its Health Care Career Skills classes, with classes filling up very quickly. BMC representatives speculated that these emerging patterns were due to employee concerns about job security.

These concerns reflect the serious financial challenges that BMC has been facing. The economic downturn and budget restrictions resulting from Massachusetts Healthcare Reform (that affected the level of state reimbursements) have forced BMC to implement strict cost reduction measures, including hiring freezes and job cuts.¹⁷ These actions have impacted the AHI activities in a number of ways. They have meant significant changes in the labor requirements of the BMC departments, with fewer opening and advancement opportunities for employees in the near future.

As a result, OD&T and the AHI team have been forced to think harder about how best to assess the evolving personnel needs of departments and employees, and to develop appropriate responses. This analysis requires having better data to track conditions and predict cycles of demand. At the end of Year 2, the OD&T staff noted that the AHI experience already had helped them to improve their data capacity relative to collecting more systematic data on employee characteristics. The data collection tools and databases developed as part of AHI provided OD&T with increased capacity to know its target audience and their needs more precisely.

The budget restrictions and staffing cuts also led BMC to adopt a different strategy for employee educational advancement in Year 3 of AHI. BMC could not afford to maintain all its in-house courses (and concluded that some of the introductory classes had limited value¹⁸). It has ended some of the in-house classes. This was done in order focus its reduced financial resources on

preserving the courses it felt were better aligned with areas of workforce need, and better targeted to address employee challenges and promote advancement. It also has turned to its relationships with internal and external partners to provide additional educational opportunities and support for incumbent employees. In particular, it is looking to its union partners (and the union's control of the Training and Upgrading Fund) to provide employees with access to ESL, adult basic education and GED courses, and classes on computer literacy.

In addition, during Year 3 the human resources and workforce development staff at BMC were reorganized, and the OD&T unit was renamed the Organizational Effectiveness department. Over the course of the year, there were significant reductions in the organizational and workforce development staff, from 10 individuals to 3. In part as a result of these staffing reductions in Organizational Effectiveness, a decision was made to place more responsibility on individual employees to locate education and up-skilling resources for themselves.¹⁹

The decrease in the numbers of open positions and new hires at the Medical Center,²⁰ the reduction in the in-house classes, plus turnover and cuts in BMC's workforce development staff, all combined to cause a decline in the number of "first time" employee participants who had contact with the AHI team in Year 3 (124 individuals, down from 334 in Year 2).

Sustaining the Work

BMC representatives feel that they have made very substantial gains in building pipeline infrastructure in the Central Processing and Radiology departments. With the updated CPD job descriptions, for example, there is a much more transparent pathway for advancement within the CP department. The in-house CPD training curricula that have been developed also provide greater capacity for BMC to help employees progress along that pathway. Because of these pipeline enhancements, the AHI team reports, individuals in the CP department see more opportunities for career mobility. Moreover, one BMC representative stated, the upgrading of competencies has generated "a tectonic shift in culture" in the CP department. There are now higher expectations relative to skills and productivity. As a result, employees working in the CP department are viewed more as professionals (when previously they were seen as little more than dishwashers). The

improvement in standards and competencies in the CP department also has dovetailed well with a concurrent BMC initiative to redesign Operating Room procedures. This is helping to make the “business case” for both the CPD upgrades and the overall AHI effort.

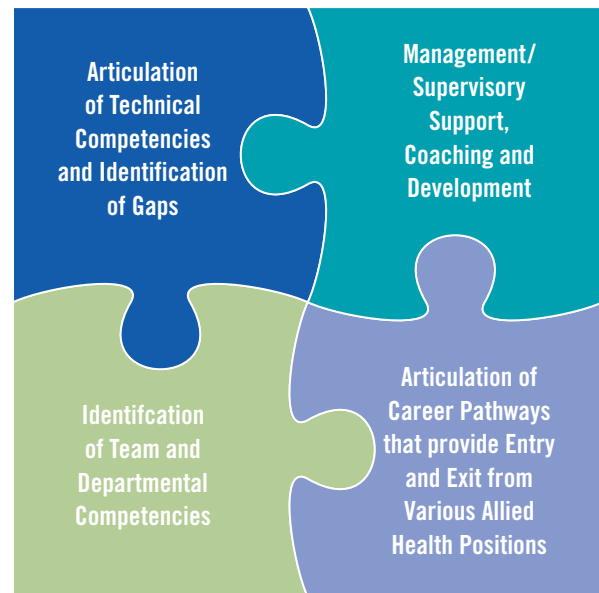
The Central Processing effort also fostered significant improvements in BMC’s working relationship with its labor partners. When the AHI initiative started at BMC, the AHI team reportedly experienced some tensions with union representatives, who were described as feeling that they had not been sufficiently consulted in the development of the AHI proposal. However, the AHI team and their labor partners collaborated very effectively around the Central Processing work in tying the CPD job competencies to the job descriptions.²¹ The implementation of consistent job descriptions and clear performance standards, on which the union has signed off, has resulted in substantially fewer grievances from CPD employees. This has significantly eased tensions around labor issues, and made it easier for management to promote greater productivity.

The AHI resources also have helped the Radiology department to substantially enhance its staff training infrastructure. The Radiology department’s pipeline now incorporates two distinct tracks for building capacity and meeting its staffing needs. For recent graduates from general radiology programs, the Radiology department uses the internships to expose these individuals to all the advanced modalities. Once they have had this exposure, these individuals can subsequently choose a specific modality for more in-depth training. For radiology staff that have worked longer at BMC (and have been selected by their supervisors), the Radiology department provides cross-training that focuses on a key modality. These staff develop the necessary skills so they are ready to move into openings as they occur, which meets departmental needs and promotes employee advancement more generally. These training efforts are immensely aided by having the fully-documented, in-house Radiology curriculum in place, which the AHI grant supported, rather than relying on a single training instructor.

It is also noteworthy that BMC views the tools and protocols that were developed for the CP and Radiology departments as an approach that can be replicated in other BMC departments. The Operational Effectiveness

FIGURE 3

The Boston Medical Center Operational Effectiveness Department’s Four-Step Model



department has formalized this approach as a four-step model, as shown in **Figure 3**.

BMC expects to apply variations of this model, with the foundational skills checklists and competency mapping tools, across the Medical Center. The Organizational Effectiveness department currently is assessing the feasibility of using the model to enhance competencies among BMC’s Surgical Technicians and Certified Nursing Assistants. In their work with other departments to upgrade skills competencies, the Operational Effectiveness staff also anticipate using the “blended learning model”, the training approach developed during the CPD experience that focuses on the incorporation of clinical knowledge with reading for information and test-taking skills.

In addition, despite personnel cuts that have significantly reduced the number of Organizational Effectiveness personnel, the Medical Center is maintaining a full-time career coaching position for the immediate future, reflecting the BMC’s belief in the value of that role. BMC also feels it now has in place a structured, supported career planning process for employees. This process involves an initial assessment (including use of the Accuplacer test to precisely determine college

readiness) and discussion of an individual's aptitudes, interests, personality, values and skills; it also provides the employee with objective feedback about his/her educational options.

The standardized assessment and data collection tools, and the BMC AHI team's extensive outreach, have substantially improved BMC's knowledge of the skill levels and educational needs of incumbents throughout the Medical Center's allied health pipeline.²² The Organizational Effectiveness unit also has strengthened the link between its workforce development efforts and operational departments aligned with allied health careers throughout BMC. Organizational Effectiveness staff now have greater visibility and are invited to sit in on more labor planning discussions by departments because of the success achieved with the CPD and Radiology departments. It is coordinating on-going informational meetings with recruiting staff and line department managers to continue to refine its understanding of the skills and experience needed for hard-to-fill positions in these departments. The Organizational Effectiveness staff also believe that they are doing a better job leveraging the array of HR resources, products, and relationships (both internal and external) in a more systematic way to address employee and department needs. They feel that BMC overall has an improved HR capacity to respond to future Medical Center openings in allied health and/or other hard-to-fill positions than what existed pre-AHI.

However, the daunting financial challenges facing BMC raise serious questions about the Medical Center's future capacity to sustain its pipeline infrastructure and to capitalize on the knowledge that has been gained over the past three years. This is reflected in the uncertainty of BMC's ability to fully meet its 6-year AHI match commitment and to maintain its coaching staff and key in-house courses indefinitely, unless substantial additional grant funds are secured.

Also, the Organizational Effectiveness staff is to be credited for attempting to be creative in using its partnerships and external relationships to maintain educational opportunities for employees in a time of very tight fiscal resources. But it is still too early to determine whether this partnering approach, and the shift of more responsibility to employees to identify educational resources, can be effective in promoting worker skill and career advancement at significant scale.

Partners HealthCare

Objectives and Strategies

Partners HealthCare System (Partners or PHS) saw the Allied Health Initiative as a way to build on the lessons it had learned from its earlier workforce development efforts.²³ In these earlier efforts, Partners had seen the value of working with the Boston Foundation and other grantees in pursuing improvements in workforce development practices. The Partners team was committed to exploring innovation and fresh thinking in the workplace, and in finding better ways of dealing with labor shortages and promoting employee advancement.

To that end, Partners and its participating affiliates in this initiative²⁴ proposed to use the AHI funds from the Boston Foundation to:

- Develop an internal allied health pipeline to address current and anticipated staffing shortages, and to increase the diversity of Partners' allied health workforce;
- Use technology to increase the accessibility and scale of Partners' workforce development efforts; and
- Develop an employer culture that values workforce development as both a support for employees and an effective response to business needs.

In its Letter of Intent for pursuing AHI funding, Partners expressed a specific interest in the opportunity that AHI afforded to test "technology as an enabler" of education and career advancement for incumbent workers, both for pre-college preparation and for health care specialty training. In focusing on experimenting with distance learning, Partners arguably was taking the most innovative approach among the three AHI grantees. Partners was motivated to look at alternatives to on-site classes because it had experienced disappointing results with more traditional classroom training approaches in its earlier SkillWorks-related efforts. The distance learning tools were seen as a strategy to efficiently reach larger numbers of employees (i.e., to achieve scale), to provide employees with easier access to training, and to offer not only training but also the supports that entry-level workers need to achieve college readiness.²⁵

To complement its technological efforts, Partners also proposed to incorporate program features and supports that had proven effective in its previous and on-going

workforce development initiatives. These include: career information for employees; coaching & educational counseling and planning for participants; engagement of human resources professionals and managers; internal leadership support; and tracking of participating employees' progress over time.

Partners envisioned three distinct sets of employees for its pipeline activities, with specific AHI program elements for each:

- **Incumbent workers who are not yet ready for college level work:** Partners sought to prepare these workers for admission into allied health programs within three years through providing: expanded information on allied health career options, educational programs, and financial supports; one-on-one career coaching; and assessment and targeted educational remediation through web-based educational software.
- **Employees taking pre-requisite courses or already enrolled in allied health programs:** For these incumbent workers, Partners' AHI goals were to increase their retention, accelerate progress in their educational progress, and improve graduation rates through: career coaching; access to on-line tutoring for all their college-level, required courses in allied health programs; and increased financial assistance.
- **Entry-level imagining technologists:** For these employees, Partners' goals were to facilitate career mobility through supporting Rad Tech workers moving into advanced imagining modalities (CT, MRI, and Mammography) and, in the process, increasing entry-level imagining position openings for other incumbent workers. Partners planned to achieve these objectives, in part, through collaboration with Bunker Hill Community College in developing on-line classes for advanced modality certificate programs.

The Boston Foundation approved \$401,667 in funding for Partners to support these activities.²⁶ Partners pledged a matching contribution of an estimated \$2,289,118 over the six years of the initiative.

Implementation Experience and Accomplishments

Partners achieved early AHI success in its use of technology relative to its web-based Radiology Advanced Modality training. In the first year of its AHI efforts,

Partners and Bunker Hill Community College partnered to develop on-line certificate programs for Mammography, CT, and MRI radiologic modalities.²⁷ An initial group of twenty Partners employees enrolled in the web-based Advanced Modality training. By the middle of Year 2, two of these workers already had completed their on-line coursework in Mammography, passed their national certification exams, and received promotions and salary increases. These promotions opened up two entry-level radiologic positions for other incumbent workers.

BHCC has maintained the on-line advanced modality courses (with a new round of classes each fall), and to date, a total of 31 Partners employees have taken advantage of this web-based training, 16 have graduated, and 5 have passed national registries and are working in their new fields. In addition, the feedback on the on-line training from both the training participants and the radiological managers in the hospitals has been very positive.

On the other hand, Partners' initial experience relative to acquiring on-line tools for its "career starter" employees²⁸ was more mixed. Partners originally secured the rights to customize and use "off-the-shelf" web-based college preparatory and tutoring software. By the middle of Year 2, Partners employees' use of the SMARTHINKING tutoring software had been limited, but their feedback was generally favorable. Partners elected to continue to offer access to this tutoring software for its employees. In contrast, however, Partners found that the feedback from employees who had used the college preparatory components of the web-based package was much less positive. In response to this finding, in January 2009 Partners decided to explore alternative web-based packages for its college preparatory tools. The AHI team investigated several options, and after considerable research and consultation, decided to acquire another off-the-shelf, web-based program for developmental courses on math and writing.

In its subsequent distance learning efforts, Partners AHI team acknowledged the importance of having a course advisor to work with all enrolled employees. This reflected the lesson that Partners had learned in its initial foray in using distance learning about the importance of having "human interaction" incorporated in these technological approaches – i.e., the training cannot rely on technology alone. The AHI team also had developed

a better appreciation of the upfront support that employees – even workers who use computers on a regular basis in their jobs – often need in order to develop confidence in using on-line learning technology.

In Years 2 and 3, a major emphasis of the Partners AHI effort was the development of tools to improve the capacity of employees to use on-line learning technology. For example, toward the end of Year 2, Partners worked with a consultant to develop a two-week, on-line learning readiness course, termed ORC. As part of the enrollment process for this course, interested employees complete a general on-line learning readiness assessment covering basic computer skills, prior distance learning experience, and comfort with various on-line learning formats. The ORC course itself introduces the students to the terminology, basic skills and course layouts common to on-line courses. It also provides them with a learning experience that simulates most on-line college courses, by having the students follow an on-line syllabus, participate in an on-line forum, conduct internet-based research, and complete assignments by set due-dates. At the beginning of Year 3, two cohorts of employees (consisting of a total of 68 individuals) enrolled in the two-week ORC course, and 45 of them (66%) completed the course. Partners administered a survey to the employees who participated in the ORC classes, and the responses were very positive. Ninety-five percent of the 43 respondents who completed the survey indicated that they were either highly likely or likely to take an on-line college course having completed ORC. In addition, 96% of respondents indicated an interest in additional on-line classes on topics such as time management and study skills, and 100% reported that they would recommend ORC to their colleagues.

The Partners AHI team was pleased by the initial ORC results. However, they recognized that the true test of the course's effectiveness would be the extent to which employees who completed ORC were successful in a college-level on-line class. As an appropriate next step for employees and a test of ORC's effectiveness, Partners identified an on-line Medical Terminology course offered by Quinsigamond Community College (QCC).²⁹ Twenty Partners employees who completed ORC enrolled in the six-week Medical Terminology course offered by QCC during its first Summer 2010 session. Seventeen of those enrolled successfully completed the course, with the remaining three students being given

an extension by their QCC instructor. This outcome was particularly impressive since the QCC course was delivered in an accelerated format – that is, a course normally taught over 15 weeks was delivered in a 6-week summer session.³⁰

For this study, a focus group was held with a small sample of employees from Brigham and Women's Hospital who had taken both ORC and the on-line Medical Terminology course. The participants praised ORC, and indicated that the course not only prepared them for taking on-line courses but also taught them important lessons about time management and self-discipline. On the other hand, they found the accelerated pace of the Medical Terminology course very challenging (one participant indicated that it was "the most intense course I've ever taken – and even more intense than some graduate courses [in her experience].") Their successful completion of the Medical Terminology course, however, has given them more confidence about their ability to take on demanding educational courses in the future.³¹ The participants also reported that they are able to apply their enhanced time (and stress) management skills, and their improved familiarity with medical terminology, in their current positions.

During Year 3, in addition to its other technology efforts, PHS also began working with QCC to develop appropriate on-line developmental math classes. The AHI team undertook this effort in response to the documented need of its employees to improve their basic math skills to qualify for allied health programs, and because of Partners' previous disappointing experience both with more traditional classroom-based courses and some "off-the-shelf" web packages. Partners also addressed the feedback received from the ORC participant survey by beginning the development of three additional on-line courses focusing on study skills, time management, and financing a college education. Partners views these new courses, together with ORC, as serving as the foundation of a "comprehensive on-line college preparation program", now referred to by PHS as the OCPP.

In another AHI activity initiated during Year 3, Partners has been working with BHCC to establish an on-line Pharmacy Tech certification program. This effort is being pursued in response to a request from the Brigham & Women's Hospital (BWH) Pharmacy Department for an on-line program to certify current pharmacy technicians to meet increased departmental require-

ments. The AHI team, the BWH Pharmacy Department, and BHCC collaborated to select an on-line certification program developed by PassAssured, a firm that has offered web-based Pharmacy Technician training for several years.

Throughout the three years of AHI, Partners also offered one-on-one coaching to its AHI participants. During Year 3, the coaches focused particularly on supporting the AHI participants enrolled in the ORC and Medical Terminology courses. In addition, the coaches have developed the capacity to conduct the College Preparatory Test (CPT) regularly on-site at the Partners hospitals. The Partners AHI coach now administers the CPT on a monthly basis at Massachusetts General Hospital. The BWH career coach has been trained by Partners' AHI coach, and has been approved by BHCC's Placement Testing staff to administer the CPT at Brigham & Women's Hospital.

Outcomes Achieved to Date

Over its first three years of AHI operations, Partners fell short of its goal for the number of AHI participants advancing into college programs. In large part, this is due to the lower-than-expected college readiness levels of many AHI enrollees that has required more pre-college remedial and foundational education steps. However, it also reflects the fact that the process of identifying and/or developing the appropriate technology took more time (and iterations) than expected. This translated into fewer employees being able to access the educational technology during the first three years of AHI than Partners had originally hoped.

Nonetheless, the AHI efforts have reached thousands of employees through Partners workforce development website. Partners senior management feels that the AHI effort has been successful in bringing real visibility to allied health positions and career ladders to reach higher skilled, higher paying jobs. The Partners AHI team also reports that its AHI participants are more diverse than the Partners workforce overall. This information appears to validate the Partners project design team's original belief that AHI could contribute to PHS's efforts to improve the gender, racial, and ethnic diversity of its allied health workforce and its other health care professional categories. And it is worth mentioning that a representative of Partners senior leadership

mentioned the AHI initiative's ability to engage a very diverse group of incumbent employees was one of the most notable achievements of the initiative.

During the past three years, Partners' AHI effort has entailed an intentional R&D process, involving experimentation and several rounds of mid-course corrections. The AHI team has experienced some disappointments – such as the initial software packages that were tested for use for college prep courses, and a recent decision to forgo developing on-line Medical Assistant training.³² But Partners has gained knowledge from these experiences and adjusted its strategies accordingly. It has learned, for example, the value of getting a precise assessment of each employee's computer literacy and college readiness as early as possible, in order to steer them to the most appropriate on-line tools and courses. Partners also has learned that “off-the-shelf” software packages sometimes can meet its needs. But in some instances it's ultimately been more efficient and effective for Partners to develop its own web-based tools, in order for the technology to appropriately reflect the hospitals' requirements and their employees' levels of readiness and need for supports.

Overall, Partners has been very encouraged by the results to date of its AHI distance learning efforts. It sees the web-based approach as a mechanism to offer such advanced training more frequently and efficiently. It also sees the value of offering the advanced modality training not just to PHS employees, but to a regional or national audience of radiologic workers seeking to advance their careers. In fact, this broader reach may be necessary if the on-line training in advanced modalities (or in other health care specialties) is to reach significant scale, because the demand for such training among workers in a single health care system or city is bound to be limited.

In contrast, the use of web-based training for more basic college preparatory courses and on-line tutoring appears to have greater potential for meeting the needs of a larger number of individuals, even within a single health care institution.

The Partners AHI team acknowledges that, but for the Foundation's support, it would have been difficult to mobilize the resources and attention to try the new technology. The AHI team was able to achieve more traction and support internally than what might have been possible otherwise because Partners leadership

felt accountable to the Boston Foundation – the Foundation’s support put these efforts at the top of the Partners workforce development agenda, and led to more internal resources being applied.

Because of the economy and its impact on hiring, Partners has not yet been able to implement the complete allied health pipeline that it had envisioned. But it has been successful in building out the early components of the pipeline through the use of the technological tools. These tools are helping employees to acquire foundational skills that are not only relevant to allied health positions but are transferrable to a range of career pathways; this means that the employees will be poised to move ahead when the economy improves and opportunities present themselves. And as we have seen from the comments of the focus group participants, these skills also help employees to work “smarter” in their existing positions.

The AHI experience also has changed the workforce culture at Partners in significant ways.

Managers and Human Resources professionals at the Partners affiliates who were once skeptical of the distance learning approach are now convinced that it can be an important tool for promoting career advancement and meeting their needs for more skilled workers. (In fact, the HR manager of one affiliate hospital characterized the distance learning technology as “the best thing since sliced bread.”)

The AHI effort and the successes it has achieved also have fostered a more comprehensive workforce development vision within PHS, and a broader commitment to building the necessary infrastructure. According to a member of PHS’ leadership, the AHI activities meant “we needed to put in place an oversight group that could coordinate a lot of moving pieces of the Partners system.” This led to creation of a senior level group, involving representatives from the hospital affiliates, that has been meeting monthly. This group not only monitors the AHI activities but also conducts strategic planning for other workforce development initiatives. The PHS leadership representative noted, “Partners hadn’t had such a forum in the past, and it became the place to pursue this [workforce development] work on a lot of operational levels.”

The AHI oversight group has led to unprecedented cooperation across Partners affiliates, and relationships being strengthened between the workforce develop-

ment/HR professionals and the operating managers and departments. Partners’ workforce development staff feel that, as a result, there is a better ability to work with both departments and employees in designing appropriate workforce development services and supports. The relationships also have provided opportunities to explore more strategic and comprehensive workforce approaches at the participating affiliates. According to one senior manager, the visibility of AHI is having a multiplier effect – when the operating departments saw that workforce development was an area that was having success, and was receiving positive attention from senior PHS leadership, it motivated them to develop and promote their own workforce initiatives.

The AHI effort also is seen as having stimulated what a representative of Partners’ senior leadership characterizes as “exciting conversations with several higher education institutions, and with colleagues at other hospitals, that would not have happened but for AHI.”

The AHI experience also has allowed Partners to enhance PHS’s career coaching infrastructure. Partners representatives express the view that there now is much greater acceptance of the value of career coaching across the three most involved hospital affiliates in the initiative.³³ This is one measure of the culture change that the AHI team had hoped to promote in the Partners system. The Partners AHI team anticipates being able to maintain all the existing coaching positions and, as the economy improves, perhaps to expand the coaching capacity across the affiliates.

Partners’ AHI efforts also are fostering some broader system effects. One example of this is Bunker Hill Community College’s increased training capacity that was achieved through the development of the three on-line Advanced Modality Medical Imaging programs. These programs are accessible to PHS employees, employees of other Boston hospitals, and individuals across Massachusetts and New England, and have the potential to be utilized nationally.

In the view of the Partners AHI team, there also has been a positive “system” impact achieved through the peer learning that has occurred among the AHI grantees. Entities that previously saw each other primarily as competitors have been sitting together on a regular basis to identify and resolve common workforce issues, and to share strategies on how best to reach and advance employees.

Sustaining the Work

Partners’ senior leadership sees the pipeline infrastructure that has been built by AHI as something that is important to sustain. The leadership anticipates that the priority it has assigned to the AHI activities will be reflected in the Partners human resources and workforce development budgets developed for fiscal year 2011 and beyond (even though this means, in the current economic climate of institutional belt-tightening, that cuts will need to occur in other areas for those departments). Partners expects to fulfill its financial commitment to the AHI effort over the balance of the six years. To date, Partners has contributed \$1.127 million in match for the AHI activities, and it expects to fully satisfy its pledged 6-year match by providing an additional \$1.162 million in match over Years 4 through 6.

When asked to reflect on the Foundation’s original expectation for a six-year commitment from the AHI employers, one of Partners AHI team asked rhetorically whether it was reasonable to ask employers to

make a commitment of that duration, given the rapid changes that can take place (and have occurred) in the economy and health care environment. But a member of Partners’ senior leadership indicated that though a six-year commitment would be a “tougher conversation to sell” in today’s economy, if it had the choice to make again he felt reasonably certain that Partners still would be “more likely than not to sign-on.” This is a reflection of the enormous value that PHS leadership feels it has received from the initiative and the support of the Boston Foundation – in “the expected and unexpected, in the tangible and intangible [benefits], and in the progress and learning [that has occurred].”

In addition to continuing its current array of AHI activities, Partners also hopes to expand its workforce development efforts further, as illustrated in **Table 1**. Obviously, the state of the economy and the financial environment within the health care sector will impact the pace at which Partners can pursue this broader workforce development vision.

TABLE 1

The Evolution of Workforce Development for Incumbent Works at Partners HealthCare: The Boston Foundation as Catalyst

Before SkillWorks and the Allied Health Initiative	During the First Three Years of the Allied Health Initiative	Goals for the Rest of the Allied Health Initiative and Beyond
A few, small entity-based programs focused on specific workforce needs	System-wide resource that supports entity efforts and identifies system opportunities	System-wide workforce planning and increased collaboration across entities and pipeline programs
Core services provided by external vendors	Internal capacity for coaching, data collection and analysis, and program development	Expanded capacity and inclusion of all PHS entities
Departmental sponsorship with little visibility and limited HR involvement	Increased visibility at system and entities with HR engagement at all levels	Workforce development as a high visibility central system priority
Limited capacity for sustainability and scale	Sustained budget support; potential to achieve significant scale	Significant scale with participation of employees at all levels
Little participation in external workforce discussions and projects	Active participation in local and national workforce conversations	Recognized national leadership

Source: Partners HealthCare presentation to the Boston Foundation (September 28, 2010)

5. Conclusions

Key Features of an “Employer-led” Initiative

In launching AHI, the Boston Foundation had emphasized the innovative “employer-led” structure of the initiative. As an employer-led initiative, AHI was expected to operate in a distinctly different fashion than workforce development efforts headed by community-based organizations and/or where the allowable activities have been narrowly defined. The Foundation also hoped that this employer-led approach would lead to greater leverage and scale, and more sustainable outcomes. In contrast to philanthropic initiatives supporting good programs that help some people, but that end when the foundation’s funding terminates, the Foundation was looking to AHI to create more permanent institutional and system capacity.

The results after three years of AHI operations indicate that in many respects the Foundation’s initial assumptions and expectations for the Allied Health Initiative have been validated. The AHI employer-grantees have appreciated the Foundation’s supportive role and the fact that the Foundation has trusted their instincts and intentions, rather than being prescriptive. And the AHI employer-grantees who had prior experience in more traditional workforce development efforts confirm that, indeed, AHI has been a very different and more positive experience.

The AHI employers’ ability to control the funding, and to use it in flexible ways, has had a major impact on employer engagement and institutional change. The AHI grantees argue that, in their view, the coordination of workforce development projects involving multiple partners generally works best when the employer has a strong role. In part, this is because the employers have the best sense of where their job opportunities are and what the requirements are for each position. However, the AHI grantees noted that in many workforce development initiatives led by nonprofit organizations or training providers, the employer often receives no money to pay for the operational infrastructure necessary at its end to make the coordination work. As a

result, the employer is not fully engaged and the overall project may suffer. In the view of the employer-grantees, AHI represented a welcome departure from this approach, providing resources that the employers could use in a flexible way for both services and the coordination of activities.

The AHI funding provided by the Foundation also had a “bigger bang,” in terms of influence on these employer institutions, than the amount of the Boston Foundation’s funding might have led one to anticipate. Even though the AHI grantees are large health care institutions with extensive resources, the AHI teams at the hospitals believe that the AHI funding has brought capacities to their HR systems and workforce development efforts that would not have been possible otherwise. The Foundation’s funding (and the prestige associated with it) raised the credibility of the hospitals’ workforce efforts within the institutions, and led to much more institutional attention and investment being devoted to these efforts. It is clear that some portion of the \$13 million in employer match commitments that was leveraged by the Foundation’s \$1.5 million in grants probably would have gone to the hospitals’ workforce activities in the absence of AHI. However, senior officials at two of the grantees estimated that approximately one-third of their match contributions to date represent “new money” that, but for AHI, would not have been available for workforce efforts.

Moreover, the AHI funding and the Foundation’s emphasis on the creation of new infrastructure provided an incentive for the institutions to try new things which they might not have otherwise undertaken. Senior leadership at the hospitals indicate that, without the motivation provided by AHI, inertia would have caused the institutions to be reluctant to expand workforce services or to experiment with new approaches for worker advancement. Such reluctance would have become even more pronounced as the economic downturn intensified. However, AHI created an environment of greater acceptance of innovation and experimentation in the hospitals’ workforce efforts, even during a time of fiscal austerity.

It is important to note that the AHI employers' willingness to devote attention and resources to the AHI efforts was most of all a result of their fundamental commitment to helping their workers to advance. This leadership commitment predated AHI.

However, the employers' support for the AHI efforts also was enhanced by their sense of ownership of the specific activities being undertaken with the AHI funds. This sense of ownership derived in part from the flexibility that the Foundation provided to the employers to customize their strategies to meet their institution's specific needs. The employers were able to build their AHI programs based on what they understood to be the skills and supports that their incumbent workers most needed for advancement, and the most suitable approaches for achieving those skills. This flexibility led to the employers' adopting pipeline development strategies with their funds from the Foundation that differed significantly across the AHI grantees: BIDMC sought to create on-site pre-college and college-level classes, and a more holistic capacity to support worker advancement; BMC largely focused on responding to the skills needs of particular departments and occupational categories; and Partners adopted an on-line technological approach to educational advancement.

The control of funds also gave the employers the ability to demand much more accountability from training contractors and other provider partners. They were able to choose the training vendors whom they felt would best meet their needs. The employers also had more clout in negotiating with those providers around issues such as training schedules, course content, and quality of instructors. And if the training efforts ran into problems, the employers were in a position to take corrective action quickly (more quickly than they would have been able, for instance, if they had to operate through a CBO middleman³⁴). Knowing that they had the ability to switch providers gave the employers more leverage. It made it easier for them to demand responsiveness on the part of the contractors for making adjustments in the design of courses or services, and to insist that the providers meet the employer's quality standards. As a result, the employers felt they got higher quality, more efficiency, and better results from their contractors.

In addition to the opportunity that AHI offered the employers to pursue innovative approaches, the funding leveraged by the AHI effort also was substantial

enough to allow the AHI teams to take a multi-faceted approach to building-out the workforce services in their hospitals. The hospitals feel that AHI has resulted in more infrastructure being established and at a faster pace (or as one hospital official framed it, AHI provided "the ability to get to scale in a timely way"). A representative of one AHI grantee reported, for example, that the AHI resources have "allow[ed] for a big change in practices, and the ability to set up a whole system, rather than a little amount to 'tweak' here or there." The representative indicated that had the institution been required to launch these programs using only the hospital's operational funds, they would have been implemented much more slowly and incrementally. Another one of the AHI grantees reinforced this view, indicating that the AHI resources allowed the health care institution to develop more permanent, systematized solutions, rather than ad hoc responses to staffing needs. This individual also noted that the AHI effort has provided her hospital with the opportunity to explore replication across departments, promoting greater scale and efficiencies.

The hospitals' AHI teams also found that the 3-year funding commitment from the Boston Foundation was instrumental. It proved to be long enough for the hospitals to go through a more deliberate trial-and-error R&D process in testing and refining their AHI strategies. The duration of the 3-year first phase of AHI meant that the AHI teams were not so dependent on having to achieve success "right out of the box." They could experiment, learn what worked and didn't work, and then make appropriate adjustments in their approaches. In fact, the timely and effective mid-course adjustments made by each of the hospitals in response to their operational experience and changes in the health care and financial environment were one of the notable features of AHI.

Adjusting to Changing Environments and Operational Experience

The AHI grantees found that there was a variety of factors that forced them to adjust their strategies, and posed challenges relative to meeting their performance targets and overall objectives. But, as we shall discuss, in most cases the AHI teams at the hospitals were able to respond to these challenges in a positive manner.

Changes in Leadership and Staffing

The changes in leadership and staffing that occurred at some of the participating hospitals was one of the factors requiring adjustments in the AHI grantees' approaches. When there was management turnover in key departments, for example, the new managers sometimes demanded significant changes in the focus and timing of the AHI activities. Perhaps the clearest example of this was at BMC, where the new manager of the Central Processing department decided that the basic competencies of existing CP Tech I's needed to be addressed before efforts to support staff advancement to higher positions could be pursued. Rather than resisting such adjustments to priorities, the AHI teams embraced these as opportunities to demonstrate responsiveness to the needs of the operational departments, and to create closer working relationships. Across the AHI grantees, one can see a variety of examples of closer collaboration of the AHI teams and HR staff with the operational departments occurring as they designed and implemented training activities. As a result, there now is more acknowledgement by the supervisors and managers in the departments about the value of the workforce development contributions relative to an improved working environment and productivity.

Some of the AHI grantees also experienced turnover in their AHI staff or in key HR positions which had an effect on their activities and approaches. While the BIDMC AHI staffing was stable throughout the first three years of AHI, the Partners AHI team experienced some modest staffing changes, with turnover in its career coaching position and in the position of HR director for one of its affiliate hospitals. In contrast, BMC experienced a complete turnover in its entire AHI team since the time it submitted its AHI proposal, in addition to significant changes in the senior leadership of the Medical Center.

While this AHI staff turnover caused some declines in capacity at the affected grantees (at least temporarily), it also provided some opportunities for cross-grantee collaboration. For example, the BIDMC career coach provided briefings on his outreach and counseling methods to the new coaches hired at Partners.

Changes in the Financial Environment

Changes in the economy and health care funding environment have had a significant effect on the operations

of the AHI programs at the hospitals. Across the country, the economic downturn has negatively impacted hospitals in a variety of ways. When individuals lose their jobs, many also lose their private health insurance coverage. A national analysis³⁵ has shown that the increase in unemployment rates has led to a decline in hospital admissions and patients seeking elective surgery, and an increase in the proportion of patients unable to pay for care. There also has been a dramatic increase in Medicaid expenditures – the largest and fastest growing portion of many state budgets. As states attempt to balance their own budgets, many are seeking to limit Medicaid reimbursements that they provide to hospitals, widening the gap between the hospitals' expenses and revenues.³⁶ Finally, with the stock market decline, there also has been a decrease in the value of hospitals' investments and endowments, and in the charitable giving upon which many health care institutions depend.

To varying degrees, all of the AHI employers have been affected by the economic downturn. One thing they have experienced in common is that the labor shortages that were a motivating factor for the creation of the Initiative have largely disappeared, at least in the short term. The hospitals are seeing less voluntary turnover among their employees; their incumbent workers, less confident about their chances of finding alternative employment, are holding onto their current jobs. And when vacancies occur, the hospitals are not necessarily taking steps to fill those positions. They are trying to do more with fewer staff, and have implemented slow-downs in hiring or outright freezes. However, since the education and training associated with AHI takes several years, it is reasonable to assume that AHI will help the hospitals prepare for an economy that is once again healthy and producing jobs.

With the decline in the number of allied health openings, each of the AHI teams had to revise its strategies for supporting workers in advancing along the pipeline. And in instances where the hospitals' budget cuts also impacted the HR staffing levels and available resources, such as in the case of BMC, the AHI staff needed to identify less costly approaches (at least in terms of internal hospital resources) for pursuing these strategies. In trying to respond affirmatively to the financial challenges, the BMC AHI team have used this situation as motivation to develop stronger relationships with a variety of internal and external partners. The BMC AHI

team hopes that these partners (the unions, the Private Industry Council, community colleges, etc.) can serve as alternative sources of support for educational opportunities for the Medical Center's workers.

The Characteristics of Incumbent Workers

Another factor to which all the AHI teams had to adjust relates to the characteristics of the employees who approached them for assistance. The AHI teams found that many of workers seeking to enroll in the AHI programs had lower than expected college readiness levels. These individuals lacked the basic math, English and reading skills necessary to take college-level courses. Although the AHI teams had expected this to some extent, the readiness scores for many individuals were much lower than the AHI teams would have predicted. They also found that some workers needed to upgrade their basic competencies to satisfy the expanding technical requirements of their current positions. What all this meant was that many of the AHI participants would need to complete a series of more basic educational steps before they would be ready to enroll in allied health training programs, or to be considered for higher-level positions.

Again, the AHI sites responded positively to this situation. The AHI grantees devoted more emphasis to their pre-college courses, and/or built out earlier elements of their pipelines (such as Partners' On-line Readiness Course, to prepare workers to take on-line courses). And where appropriate, or requested by hospital departments, they addressed gaps in basic technical competencies relating to incumbents' current jobs.

The AHI sites' focus on more "foundational" education, and on earlier stages in the pipeline, had numerous benefits:

- It addressed the reality of "where the employees were at" and what many workers need if they are to advance;
- The foundational skills which the workers are acquiring through the AHI courses are relevant to the educational pathways for a variety of health care positions; and because these skills are applicable to a range of career paths, workers are not so locked into one occupational option for which employer demand may wane;³⁷ and

- It motivates workers to pursue educational advancement even during an economic downturn, and positions them to be ready to take advantage of employment opportunities that will emerge when the economy improves.

Meeting Their Outcome Objectives

For the first 3-year phase of AHI, each of the AHI grantees had articulated objectives in two general areas:

- At the worker level: Specific numbers of incumbent employees to be assisted, and numbers of workers to advance to allied health positions or formal allied health training programs within three years; and
- At the system level: Building-out defined elements of its allied health pipeline infrastructure.

How well did the AHI grantees do in accomplishing these objectives by the end of their third year of operations?

Relative to the numbers of workers assisted, the AHI grantees' results were mixed. Each grantee generally met or exceeded its performance targets for the number of workers who were "touched" by the AHI efforts, developed educational and/or career advancement plans, and/or enrolled in some pipeline activities. But the AHI grantees overall did less well in terms of moving workers into formal allied health training programs or into more advanced positions. The key reasons for this have been noted earlier – lower initial college readiness levels, and a substantial decline in available allied health job openings.

The grantees' accomplishments relative to building their pipeline infrastructure are more positive. Each hospital has articulated more complete and transparent allied health pipelines. Each also is taking a more comprehensive approach to supporting the advancement of its workforce. The employers have a greater capacity to respond flexibly to a wider array of workers needs, and as we have noted, particularly the needs of lower-skilled workers requiring foundational skills.

Central to this enhanced capacity to support worker advancement is the career coaching that each of the AHI grantees has instituted or expanded as an essential element of its pipeline strategies. The hospitals' commitment to establish and maintain these coaches reflects the

institutions' recognition of the valuable role that these coaches play in helping workers to realistically assess their current skill levels and options for advancement, and to develop and pursue educational and career plans.

The AHI grantees also are improving their data systems and capacities to more accurately assess their institutions' labor needs and trends, to better anticipate fluctuations in demand, and to design effective and timely responses to those demands. They are demonstrating an enhanced capacity to "function smarter" overall. As we have seen from the individual grantee profiles, they also have used the data on their experiences with their current AHI strategies to identify what's working and what's not, and to determine where they have needed to make refinements to courses and services to improve outcomes.

AHI also has fostered broader cultural changes throughout the institutions. The AHI efforts have greatly expanded the number of employees that are aware of the career development opportunities available to them. Only a portion of these have taken full advantage of these opportunities to date. However, according to the hospital representatives, the awareness of these opportunities is encouraging greater numbers of workers to think more intentionally about their careers, and about pursuing additional education and skill development.

As noted above, the AHI activities also have promoted a more collaborative approach between department managers and supervisors and the HR and workforce development staffs. And in some cases, the AHI efforts have eased tensions between management and organized labor. These groups are now working together more frequently as partners in defining specific workforce needs to be addressed and proposed solutions, and in implementing desired responses.

The departments are increasingly viewing the tools and approaches that have been developed and refined through the AHI effort as important resources in addressing their operational challenges. The managers and supervisors are voicing more support for the pipeline efforts, because they have seen how those efforts can help their employees and their operations. One result of this is more supervisor referrals of employees to take part in the AHI activities. And these improved relationships are seen as a key mechanism that will help to embed and institutionalize the AHI practices on a longer-term basis.

Collaboration Among the AHI Grantees

One area of unanticipated AHI activity and impact relates to the collaboration that has occurred among the AHI grantees. When the Boston Foundation was first having discussions with senior leadership from the hospitals relative to the proposed design of AHI, the leaders stressed that they did not want to be forced to take a uniform or collaborative approach in addressing their allied health labor shortages. As we have seen, the Foundation responded to this by giving each AHI grantee considerable discretion in defining its individual strategies for building out its allied health pipeline.

Because of the strong opinions that the hospital leaders had voiced, when AHI first got underway the Boston Foundation's staff were somewhat reluctant to involve the three grantees in any kinds of common activities. However, the Foundation's staff began to hold periodic "update" sessions involving all three AHI teams – that were made up of the hospitals' HR and workforce development professionals – and over time an interesting consensus began to emerge. It became clear that the AHI teams were very interested in hearing more about what each other was doing, and in seeing if there could be more opportunities for cross-site learning. Each grantee wanted to maintain its ability to frame its own strategies – i.e., they did *not* want to take a "one size fits all" approach – but each also wanted to learn from its peers if possible. The AHI teams understand that the hospitals frequently are dealing with common problems; accordingly, they want to see what the other institutions have done relative to those problems and to learn from that experience. As one grantee framed it: "We want to see whether we are on the same page as our colleagues. And we want the opportunity to get ideas that may benefit us in the future in our [own] workplace."

It is important to acknowledge the processes that promoted an environment conducive to such peer learning. The AHI grantees credit the Boston Foundation staff and consultants with creating a "safe space" for the AHI group, so that the grantees felt comfortable candidly discussing the trial-and-error route each has followed with its respective AHI efforts. The Boston Foundation staff also have shown patience with the process through which the grantees collectively have defined their common interests, allowing such issues to emerge naturally, rather than trying to force the agenda. As one hospital official stated, over time the grantees have

learned to trust each other and “to let the substance drive the work, rather than a sense of competitiveness.”

This trust-building has led to a series of one-on-one collaborations between AHI grantees, as well as some collective efforts involving all three grantees. Relative to the one-on-one exchanges, the Boston Medical Center, which was the first of the grantees to address the challenge of defining and upgrading the competencies of its CPD technicians, shared its approach and lessons learned with BIDMC at the request of the latter institution. And (as we’ve previously noted), when Partners experienced turnover in its career coaching positions, the BIDMC career coach – who has been particularly effective in employee outreach and support – was asked to brief the newly hired coaches at the Partners affiliate hospitals on his successful methods. Similarly, the HR director of one of Partners’ affiliates met with the new AHI coordinator brought on-board at BMC in Year 3, offering advice to help her in getting up to speed as quickly as possible.

In the periodic cross-site meetings with the Foundation, it also became apparent that all three AHI grantees were interested in exploring options for collective action to increase the responsiveness of community colleges to the employers’ needs. The AHI grantees were particularly interested in the possibility of working with the colleges to create common curricula across the educational institutions that were more aligned with the employers’ skill requirements. This effort was intended to ensure increased consistency in the skill levels of graduates of the colleges’ health care-related programs. It also was meant to make it easier for students (including hospital employees who are part-time students) to transfer credits among educational institutions.

The Boston Foundation used its influence to engage the state’s Department of Higher Education around this issue. This has led to the creation of a Boston Region Hospital/Higher Education Workforce Group, made up of representatives of health care employers (including all three AHI grantees), community colleges and four-year educational institutions, and the state’s Higher Education department. As a test case for the establishment of standardized training programs across educational institutions, the working group is in the process of creating a common curriculum for Patient Care Technicians.

In another collaborative activity involving all three AHI grantees, representatives of the AHI teams have joined with other representatives of the health care industry, local public higher education institutions, the Boston Private Industry Council, and other important workforce development actors to form the Boston Healthcare Careers Consortium. This group, chaired by BIDMC’s director of workforce development, has developed a very focused agenda involving action items that it feels can be accomplished in a year. The group’s priorities include improved labor market information sharing, development of a central clearinghouse for student resources, identification of best practices for fostering greater employer engagement, and a comprehensive statement on alignment issues.

In discussing their collaborative activities the AHI grantees admit that, depending on the topic being addressed, they are not always able to arrive at agreement on the way to proceed. They note that there are still some tensions and significant differences in perspectives among them about the agenda for collective action. Nevertheless, they stress that, while there may not be a consensus on every topic, there is at least a productive and continuing dialogue on an array of common issues. And the AHI grantees emphasize that there also has been a more “consistent employer voice [among the hospitals] in meetings with outside groups [such as the Higher Education department and community colleges], rather than constant one-upmanship.” They feel this unified voice has been crucial, for example, in getting the Higher Education department to take up the issue of common curricula across community colleges. The AHI grantees also are reaching out to involve additional major health care employers in their collective efforts, to further strengthen the employer voice.

Making the Business Case to Sustain the Pipeline Efforts

This report has described a broad range of activities that the AHI sites have undertaken and some of the accomplishments they have achieved. A central question remains, though. To what extent do the hospitals feel that their business needs are being met by these AHI efforts and the pipeline capacity that has been built? That is, have the AHI efforts been successful in making the “business case”?

According to the AHI teams and senior hospital leadership interviewed for this evaluation, the AHI efforts have not yet made the business case in measurable “dollars and cents” (i.e., financial) terms. The hospital representatives have described a couple of reasons for this. Perhaps most important, many of the problems that were contributing to the hospitals’ costs and that AHI was specifically designed to address have been alleviated by the economic downturn. These include the high turnover, difficulties in finding candidates for hard-to-fill positions, and extensive use of travelers that the hospitals experienced prior to AHI, but are no longer evident. These were the factors that had been envisioned for measuring AHI’s return on investment.

In addition, however, the AHI teams acknowledge that many of their efforts have not yet reached sufficient scale. That is, the numbers of employees impacted to date, though substantial, have not been large enough to affect the hospital’s (or even a department’s) bottom line in easily measurable ways.³⁸

Nonetheless, according to interviews conducted with the hospitals, the AHI efforts have achieved strong internal buy-in among the managers and leadership of the institutions. The managers and leadership of the hospitals emphatically state that they view the pipeline efforts as helping to meet their institution’s business needs. Some of these endorsements come from managers that have been directly involved in designing and implementing the AHI strategies. These individuals have seen the tangible results of the strategies on their employees and on their department’s operations.

But the AHI teams have built an even broader base of institutional support by being very intentional about keeping senior leadership informed about the successes the AHI efforts have achieved over time. The AHI teams have provided periodic analyses for management and presentations to senior leadership. They also have published regular articles in hospital newsletters and on hospital websites highlighting success stories. According to one of the hospital grantees, for example, the AHI activities and the hospital’s other workforce development efforts “are generating 10-15 ‘good news’ stories a year” for her institution. The AHI teams also have made a point to invite hospital leadership to attend the various AHI graduation ceremonies. External recognition relating to the AHI efforts, such as BIDMC receiving the Gould Award for Education and Workforce Develop-

ment from the Associated Industries of Massachusetts, also reinforces the hospital leadership’s perception of the value of the pipeline efforts.

What has been somewhat surprising, however, is the level of support evident from the employers for investments in the developmental education efforts, given that these efforts aren’t expected to have an immediate payoff in terms of employees progressing to more advanced positions. It appears that the employers’ embracing of those efforts was the result of a gradual process. When the hospitals determined that their AHI participants’ competency and/or college readiness levels often were lower than expected, they “bit the bullet” and devoted more attention and resources to more basic and remedial education efforts.

The employers acknowledge that their investments in such foundational education in some respects represent a very distinct shift in their institution’s workforce development philosophy. As framed by one senior HR official, “we now see our role as preparing people for careers, and not just their next position.” The employers are now willing to invest in this more developmental training because they feel it can:

- Help improve workers’ confidence and skills in their existing positions;
- It can help the institution respond to changes in industry standards relative to basic competencies;
- It builds employee morale, and through supporting the employees in their career aspirations, reinforces workers’ perception of the institution as “an employer of choice;” and
- It can be used as a building block to create a more complete pipeline to a variety of advanced health care positions for their incumbent workers, and not just in allied health occupational categories. As such, it can help the institutions begin to prepare for their increased labor needs when the economy eventually recovers.³⁹

The employers recognize that such investments reflect a long-range focus, looking beyond the current economic cycle. They feel it will have some short-term benefits, but the major pay-offs will be down the road. The HR official commented:

“We see how valuable it is to get everybody to go back to school, and saw how giving employees these educational opportunities made every-

one feel great. But we also understand it's a long-term play. "

The buy-in of leadership is reflected in the willingness of the AHI employers to make every effort to sustain the infrastructure that has been built, primarily using their own funds,⁴⁰ despite the difficult financial environment. For example, BIDMC is committed to sustaining all the elements of its Employee Career Initiative (ECI), including: its academic and career advising; its on-site college readiness assessments, pre-college courses, and college-level science courses; its student success workshops and tutoring; and web-based information and resources. Additionally, BIDMC is exploring fund-raising in order to build additional pipeline programs to train entry-level billing clerks, and to help its Medical Laboratory Technicians advance to Medical Technologist positions.

Partners also plans to continue many of the key elements of its AHI-related programming and services for the foreseeable future. The capacity that Partners will sustain includes its Online Learning Readiness course and the Radiology Advanced Modality on-line training programs. It also includes maintaining two career coaches, as well as the Partners in Careers and Workforce Development website which serves as a career information and exploration resource for all PHS employees. Partners also will expand the utilization of the Efforts to Outcomes (ETO) software package as a workforce data and reporting system for its pipeline efforts. In collaboration with local community colleges, Partners also expects to expand its web-based readiness and advancement resources, including an on-line developmental math course and an on-line option for Pharmacy Technician certification.

The shape of the future pipeline efforts are least certain at the Boston Medical Center, because of the serious financial challenges being faced by that institution and that are dominating the attention of its senior leadership. But even at the Medical Center, several department heads and the HR and legal staff appreciate how the AHI initiatives to date have improved their capacities to upgrade skill levels and to work more collaboratively with the unions. There is a genuine interest at BMC in applying its successful training approach to other departments, as well as a commitment to maintain career coaching capacity and to leverage educational resources through its partnerships.

Concluding Observations and Key Takeaways

This report has largely focused on the AHI employers, and in many respects this is appropriate because the Boston Foundation designed AHI to be an employer-led initiative. But we would be remiss if we failed to acknowledge the role of the Foundation's staff and consultants in making sure that the vision became a reality. In its management of the AHI initiative, the Boston Foundation staff and consultants have consistently shown respect for the "employer-led" principle that was articulated early in the initiative's design, and a commitment to serving as a supportive partner to the employers. From the AHI grantees' standpoint, this approach to oversight of AHI has worked very well, and they see it as a model for philanthropic investments in workforce development efforts that they hope is replicated.

But in addition to being supportive and responsive to the AHI sites as their efforts evolved, the Boston Foundation staff also were very intentional in reinforcing a message about the broader importance of this initiative, and in promoting accountability for results. The Boston Foundation's Director of Programs, who served as the Foundation's program officer for AHI, regularly met with the individual AHI teams at the hospitals. These sessions were used to review progress and, if necessary, to discuss possible mid-course adjustments. In addition, the Boston Foundation's CEO personally contacted the senior leadership of the participating hospitals periodically to emphasize his continuing interest in this initiative and excitement about the infrastructure being built.

Based on the evidence in the individual AHI site profiles, it appears that AHI has achieved most of the objectives that the Foundation had originally articulated for the initiative's first three years. The AHI employers, building on the foundation of their previous workforce development efforts, have substantially enhanced the capacity of their allied health pipelines. They also have invested heavily in the earlier stages of the pipelines, and not just on those workers who could advance the quickest. Thus, the AHI initiative served as a catalyst that encouraged these large institutions to create new HR and workforce development infrastructure. This new infrastructure not only meets their business needs, but also creates opportunities for workers to gain marketable credentials and move up the economic ladder.

The experience to date indicates that the Foundation was correct in its assumption that it could secure the

employers' commitment to continuing their pipeline efforts over six years, even if the Foundation only invested in the first three years of the initiative. This was a risky assumption under the best of circumstances, but the risk was heightened substantially by the economic downturn. Nonetheless, the AHI employers feel cautiously optimistic about their ability to sustain the new practices that have been implemented and the enhanced capacities that have been built, at least over the balance of the 6-year life of the initiative. The commitment to sustaining the pipeline efforts is a reflection of the broader belief held by the leadership of these hospitals about the importance of investing in their incumbent workforce. But in no small measure the continuing support for the specific pipeline efforts was reinforced by the tangible successes that the AHI activities were able to demonstrate in each of the institutions over the AHI's first three years.

While it was not envisioned as part of the initial AHI program design, the extent of the cooperative activities that has occurred across the AHI grantees has been a very pleasant surprise. There now is an unprecedented level of peer learning and collaboration among the three major health care employers. And their collective efforts (with the Boston Region Hospital/Higher Education Workforce Group and the Boston Healthcare Careers Consortium) have significantly increased "employer voice" in discussions regarding the region's higher education system, and offer the possibility of achieving some substantial system changes. These broader system change efforts have proven to be very time-consuming for the hospitals' representatives, however. For these individuals to sustain their efforts, it will require the employers and/or funders to make explicit allocations of resources to support the continuation of these activities.

With the Allied Health Initiative, the Boston Foundation has come up with a model for employer-led workforce development initiatives that has considerable potential for further replication, as the AHI grantees have noted. However, it is important to recognize that the AHI model probably will not be a good fit for all industries, or for all employers within a sector. For example, in considering replication of this program model, it seems to make the most sense to focus on employers that have adequate scale, similar to the large hospital institutions that were the AHI sites. Larger employers will be able to spread the costs of the effort over a bigger base; they also are more likely to have sufficient turnover to ensure

there will be vacancies that will need to be filled and to offer other advancement opportunities.

The AHI experience to date also suggests that this program model will be most effective when implemented by employers who already have a proven commitment to, and considerable prior experience with, in-house efforts to upgrade the skills of their incumbent workforce. The employers need to understand the demographic trends in their sector and believe that proactive steps to enhance the capacity of their workforce are essential. It also seems to be very helpful if the employer has an interest in exploring innovative approaches and a tolerance for trial-and-error R&D processes. The capacity and expected stability of the staff team that will be overseeing the workforce initiative, and the employer's overall financial health, also appear to be crucial factors in predicting an employer's ability to maximize the benefits of its implementation of the model.

These lessons from the AHI experience identify some important selection criteria that funders interested in replicating the AHI model should incorporate into their due diligence processes with employers. They also provide some flags for mid-course interventions by the funders.

The Allied Health Initiative was a bold undertaking by the Boston Foundation. In thinking that this new grant program could have a significant impact in influencing the investment decisions of very large institutions, the Boston Foundation had big – and perhaps somewhat audacious – ambitions. However, over its first three years, the AHI initiative has proven to be very successful in fostering the establishment of increased workforce development capacity and improved HR practices in each of the participating employer institutions. And this success has occurred despite the fact that AHI was being implemented in remarkably challenging economic times.

The AHI experience to date offers a variety of valuable lessons to the philanthropic and workforce development fields, in terms of providing an investment model for fostering larger scale, sustainable impact. With the continuing efforts of the AHI grantees, and with replication of the model by other funders and employers, the potential for greater institutional and system impact is considerable.

Endnotes

- ¹ Source: *Allied Health Workforce Research Findings*, Oxendine, Coffman, and Soodalter-Toman, January 2006.
- ² See *The Boston Foundation Allied Health Initiative: Challenges and Opportunities*, November 2006 Presentation to the TBF Program Committee, prepared by Jobs for the Future, Inc., and WorkSource Partners, Inc.
- ³ A focus group held with a small sample of ECI participants reinforced the importance of “word of mouth” as an outreach and recruitment mechanism for ECI. Although the employees participating in the focus group indicated that they had seen information about ECI on the BIDMC website and in the hospital’s newsletters, almost all the participants also indicated that recommendations from co-workers had played a part in their decisions to take advantage of ECI activities.
- ⁴ BIDMC representatives feel the initial level of ECI enrollee interest in nursing is, in part, a reflection of employees’ lack of familiarity with alternative career paths. According to the ECI career counselor, “a lot of people’s gut reaction is to become a nurse because they’re unaware of other career options, but when they learn about allied health job options, [over time] they are more likely to seriously consider them.”
- ⁵ All classes took place on-site at BIDMC, except for the lab components of the science courses, which were held on alternating Saturday mornings at Bunker Hill Community College’s Charlestown campus.
- ⁶ The ECI fell slightly short of its 3-year goal for the number of employees enrolled in at least one *pre-college* course (175 actual enrollments versus a goal of 195). However, these ECI participants enrolled in as many as six pre-college courses each. Forty-seven percent of course enrollees registered for two or more classes. Twenty-five percent enrolled in three or more classes.
- ⁷ While the underperformance relative this goal was fairly modest, ECI was less successful in achieving its target for the number of employees enrolling in college-level pre-requisite courses (92 actual enrollments versus a 3-year goal of 180). BIDMC attributes this result to the lower-than-expected college readiness levels of ECI enrollees that required them to first take multiple pre-college courses in math, reading and English. (The BIDMC employees who participated in the focus group session for this study provided an illustration of this situation. At the time of the focus group, the four employees collectively had taken 22 ECI-sponsored courses; 16 of these were pre-college courses in math, reading and English, and only 6 were college-level science or pre-requisite courses.)
- ⁸ Some of the mechanisms that BIDMC leadership has put into place to reinforce this message include annual employee surveys (in which each manager gets feedback on whether their staff feel they have opportunities for advancement), and formal training for all managers on coaching techniques (including career coaching).
- ⁹ BIDMC existing pipeline programs are: Associate Degree Nurse; RN to BSN; Medical Laboratory Technician; Patient Care Technician; Research Administrator; and Central Processing Department Technician Career Ladder.
- ¹⁰ The Central Processing department is responsible for sterilizing instruments, accurate packing, and just-in-time distribution of surgical kits at BMC. In addition, the CP department is viewed by BMC as a gateway to a clinical career path for frontline service employees.
- ¹¹ The Radiology department is responsible for all inpatient and outpatient medical imaging needs in multiple sites within BMC.
- ¹² A new Director of Operative Services/Central Processing (OS/CP) was appointed.
- ¹³ The CPD employees not achieving certification by the end of that period would be subject to termination. However, BMC and the union agreed to make efforts to find them other positions at BMC.

¹⁴ BMC estimates that the average training period has been reduced from two years to one year.

¹⁵ According to BMC, the grant funding for training in the modalities not only allowed these program interns to be promoted, but also supported the creation of a new supplemental position in Mammography Ultrasound; this position represents both a skill and pay upgrade from the basic Mammography and Ultrasound positions.

¹⁶ These numbers only represent the “non-union” BMC staff directly supported by the AHI grant. Medical Center representatives point out that the large majority of BMC staff who are enrolled in credit-bearing allied health coursework is supported by the union’s Training and Upgrading Fund (TUF), which BMC finances.

¹⁷ In December 2008, facing \$114 million in state budget cuts, BMC announced that it would need to lay-off or cut the hours of 250 employees and reduce other spending. The job cuts and reduction in work hours represented the elimination of 130 full-time positions. On September 13, 2010, BMC announced another round of job cuts, this time reducing the Medical Center’s workforce by 119 individuals as part of an effort to reverse losses projected to reach \$175 million by the end of the fiscal year. BMC also implemented two hiring freezes over the past three years. (Sources: *White Coat Notes* on boston.com, article by Elizabeth Cooney, December 17, 2009; *The Boston Globe*, articles by Kay Lazar, on December 18, 2009 and September 14, 2010.)

¹⁸ For example, BMC terminated the non-credit-bearing “Allied Health Exploration” course, which OD&T concluded had no true benefits for either workers or the Medical Center.

¹⁹ However, the AHI career coach is still trying to mobilize supplemental educational resources for BMC employees whenever possible. Recently, she was able to leverage funding from the Boston Private Industry Council (PIC) and use BMC’s relationship with Bunker Hill Community College (BHCC) to gain access to a BHCC course for 25 Medical Center employees.

²⁰ BMC representatives noted that, when AHI began, BMC had a daily average of approximately 250 open positions; now, it is estimated that BMC has an average of less than 25 posted openings each day.

²¹ The union also has become very enthusiastic about the pipeline opportunities that AHI is fostering, and is adopting many of the features of BMC’s AHI approach to educational advancement in its Training and Upgrading Fund activities.

²² As one representative of Organizational Effectiveness put it: “It is critical to understand what we have to work with [in terms of incumbent skill levels]. Before [AHI], we’d want to move individuals from point ‘a’ to point ‘f’; now we know we first need to move them from point ‘a’ to point ‘c’, before we can move them to point ‘f.’”

²³ Among these previous efforts was PHS’s *Partners in Career and Workforce Development (PCWD)* project, which was undertaken as part of Phase 1 of the Boston Foundation-funded SkillWorks initiative (2003-2008).

²⁴ These entities include Brigham and Women’s Hospital (BWH), Faulkner Hospital, Massachusetts General Hospital, Spaulding Rehabilitation Hospital, and Boston-area PHS skilled nursing facilities.

²⁵ It also was anticipated that because employees could participate in the web-based classes from home whenever it was convenient, the technology would reduce the need for granting employees release time to pursue education. In some of Partners’ previous workforce development efforts, negotiating release time had been a continuing challenge.

²⁶ Originally, TBF’s funding was only going to be available through Year 3. However, Partners requested and received approval from TBF at the end of Year 3 to use its funding balance in Year 4.

²⁷ Each of these programs consists of an on-line course, a clinical practicum at a Partners hospital, and preparation for the advanced modality certification examination.

²⁸ The “career starters” include individuals from two of Partners’ targeted groups: incumbent workers not yet ready for college work, and employees taking prerequisite courses or enrolled in allied health training programs.

²⁹ The content of this course provides a good introduction to the medical field, and the material is relevant to the current jobs of many Partners’ incumbent workers enrolled in AHI. Perhaps more important, Medical Terminology is a required course in most allied health training programs.

³⁰ Eighteen more Partners employees enrolled in the Medical Terminology course during QCC's second Summer 2010 session. In addition, QCC is planning to conduct a research project comparing the course outcomes of the AHI enrollees with those of other Medical Terminology students with similar demographic characteristics and educational backgrounds, but who lack the ORC preparatory experience.

³¹ Interestingly, when asked whether they preferred classroom-based or on-line courses, the focus group participants (who admittedly represent a very small sample of employees) indicated their preference was either for classroom-based courses or a hybrid approach. Their responses reflect a desire for more in-person interaction and support from both instructors and fellow students; they also suggest that it takes more than one or two on-line classes for individuals to become fully comfortable with the distance learning approach.

³² The decision to abandon development of the Medical Assistant training was a reflection of the state of flux in the medical profession regarding the respective roles of medical assistants and nurses, and Partners' hesitancy to invest in development of curriculum until these issues are resolved.

³³ They are Brigham & Women's Hospital, Massachusetts General Hospital, and Faulkner Hospital.

³⁴ One AHI employer contrasted its AHI experience with its previous participation in a workforce development effort led by a community-based organization (CBO). In this earlier initiative, when concerns about a training provider arose, the employer sometimes found it challenging to work through the CBO to get the concerns addressed in a timely way. Based on this experience, the employer concluded that although some CBO-led initiatives have a lot of partners, the partnerships may not necessarily be productive or effectively managed.

³⁵ "New Report Details Impact of Economic Downturn on Patients and Hospitals", press release from the American Hospital Association (November, 19, 2008).

³⁶ For example, one of the AHI grantees indicated that her hospital is only reimbursed "60 cents on the dollar" for its Medicaid-related expenses.

³⁷ In fact, the focus on the more developmental educational stages in the pipeline is exactly what TBF hoped AHI would accomplish. It fits into TBF's vision of a flexible pipeline that can respond to changes in economic conditions.

³⁸ One possible exception to this is BMC's work with its CPD and Radiology departments, in which the monetary benefits of reduced turnover, fewer grievances, and increased productivity might be measurable. However, to date BMC's Organizational Effectiveness department has not conducted such an analysis.

³⁹ For their part, the workers appear willing to pursue more basic academic training if they can see (because the pipelines are now more transparent) how this training can ultimately help them to advance their careers. The continuing support of the career coaches also appears to be a crucial factor in keeping the employees motivated along their sometimes lengthy educational pathways.

⁴⁰ We should acknowledge that there will be some TBF funding for each of the AHI employers in Year 4. None of the AHI sites fully expended their TBF grant allocations in Years 1-3, and the Foundation is allowing the AHI grantees to apply some portion of their carry-over balances to support the continuation of the AHI activities in Year 4.