

# Integrating Community Health Workers in Schools

By

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Submitted to the Department of Urban Studies and Planning  
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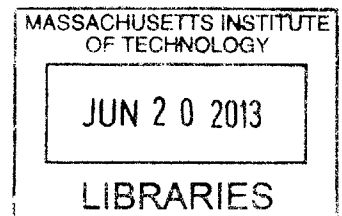
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A handwritten signature in black ink, appearing to read "Roy Williams III".

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## ABSTRACT

The Patient Protection and Affordable Care Act (PPACA) has set the tone for a radically revised health landscape in America that focuses on community-based care. Our health care system, however, has neither the infrastructure nor the vision to properly account for these demands. One possible solution is to redefine how established positions and organizations can be utilized to help accommodate the emerging needs. School-based health centers (SBHCs), for example, have traditionally provided general health services to students and members of the surrounding community. In many low-income neighborhoods, however, the needs of the community members far outpace the capabilities of the SBHCs and local community-based health centers. One promising answer to the need for community-based care is the integration of community health workers (CHWs) in SBHCs. The PPACA has identified CHWs as an integral component of health teams. They serve to connect people who have been historically marginalized to necessary health services and advocate on the behalf of community needs. This commentary proposes the integration of the CHW role into schools to provide comprehensive health-services to more students and community members than can be currently served. The argument begins with an examination of Massachusetts' CHW advocates' struggle to legitimize the field to gain the professional respect of other medical professions. Next, it explores the possibilities of a CHW in a school setting and makes recommendations to improve the viability and effectiveness of the role. It closes with an analysis of different views of community-based care and the role of planning in negotiating future workforce development challenges.

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## Dedication

To my grandfather, the source of my name and strength, Roy Jerome Williams Sr.  
June 11, 1925 – March 16, 2013.

I cannot think of another person who drew as much passion from a dedication to their community and its health as he did. We love and miss you.



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- Waffles
- Saloon thesis pep talks
- Softball
- Thesis.Fun.Group (thank you so much!)
- Hacks
- The Wobble
- Late Night Beantown
- 104 days...
- SCC
- Late Night vipbox.tv

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# CHAPTER 1: INTRODUCTION

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On March 23, 2010, President Barack Obama signed a law that set the tone for a radically revised health landscape in America. The Patient Protection and Affordable Care Act (PPACA) has begun to shift our nation's definition of health from treating sick patients who have the wherewithal and ability to go to a doctor's office to caring for a greater group of people through preventative measures. The act takes initial steps to accomplish this new goal by emphasizing community-based health care and encouraging flexible health provision that responds to the structural issues that plague low-income communities. PPACA achieved its main aim by increasing health insurance coverage for the under- or uninsured; it will cover 32 million more Americans than before – half by private insurance and the other half by Medicaid and the Children's Health Insurance Program (McDonough 2010).

However, due to an aging and growing population and an aging health care workforce, our current system has neither the infrastructure nor the vision to properly account for these demands. The Association of American Medical Colleges estimates that by 2025 the United States will experience a 124,000-physician deficit. Primary care physicians will be even scarcer. By 2020 their deficit is estimated to be 45,000 ("Physician Shortages to Worsen" 2010).

The PPACA has titles dedicated to respond to the changing needs of the United States. One title will build and develop the workforce to provide the new systems of health care and another will create the infrastructure through which to serve them. These titles also explicitly deal with existing entities that could start to close the gap between the qualities of care provided to high- and low-income populations: community health workers (CHWs) and school-based health centers (SBHCs).

Title V (Health Care Workforce) of the PPACA is dedicated towards the development of a workforce to provide care for the newly covered and hard-to-reach patients. In total, the government earmarked \$18.2 billion for workforce development concerns; however, only eight of the 53 sections received direct funding. The other 45 have to fight over appropriations (McDonough 2010).

One of these currently unfunded sections is 5313, which notes CHWs as an important component of health teams. Broadly defined, CHWs have two objectives: 1. Connect people to health care; and 2. Advocate for marginalized people to bring voice to their previously overlooked conditions (Pérez and Martinez 2008). Section 5313 states, "The Director of the Centers for

Disease Control and Prevention, in collaboration with the Secretary, shall award grants to eligible entities to promote positive health behaviors and outcomes for populations in medically underserved communities through the use of community health workers.” This money is to be used for health education outreach, to discourage risky health behaviors, to enroll in health insurance programs and to guide home visitation services (Pub. L. No. 111-148 2010).

Meanwhile, Title IV (Prevention of Chronic Disease and Improving Public Health) of the PPACA covers the infrastructure of prevention. It also reflects the compromises made throughout the legislative process. Public health advocates were left unhappy because major parts of the title did not receive secured funding, and instead must fight over appropriations (McDonough 2010). One aspect that is guaranteed is the Prevention and Public Health Fund. Administered by Health and Human Services, its goal is to support “expanded and sustained national investment in prevention and public health programs to improve health and help restrain the growth in private and public sector health care costs” (Pub. L. No. 111-148 2010). The fund released \$500 million in its first year, which was equally split between the workforce development goals in Title V and the prevention goals from Title IV. In the following years the fund will grow to \$2 billion. The collaboration between prevention and Health and Human Services provides a potential avenue through which to fund CHWs.

During the congressional discussion school-based health centers, which are health clinics located in school environments that provide medical services to students and their families, were highlighted as potential beneficiaries of the Prevention and Public Health Fund money. Two SBHC grants were proposed through Title IV, albeit with very different conclusions. The first grant, which was approved, set aside \$200 million in direct funds for SBHC capital improvements, the last \$50 million of which was granted in the 2013 fiscal year. The second grant laid the foundation for funds to be dedicated to ongoing and operational SBHC costs such as training and employee salaries. This appropriation, however, was never approved.

Both CHWs and SBHCs act as interesting topics of study because they permeate existing structures – the United States health care system and public schools – that have struggled to support low-income populations. However, they simultaneously operate within these institutions in ways that can potentially challenge the oppressive status quo. In short, they offer a new chance to provide culturally appropriate and respectful health care to marginalized people.<sup>1</sup>

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<sup>1</sup> This paper acknowledges the implications of language and the destructive power that words like “marginalized” can have on subgroups. In this instance, “marginalized” and other similar words do not

The landmark passing of the bill came with political maneuvering which affects its chances for implementation. Washington Democrats welcomed potential opponents to the bargaining table from the beginning of the process to help craft the legislation. Many critics claim this action served to weaken the final bill. Jacobs and Skocpol (2010), however, view the move as a strategic tradeoff. The push away from fee-for-service plans will divert a great amount of money from the entrenched institutions within health care: providers, insurance companies and large pharmaceutical firms. PPACA advocates needed their cooperation to weave the bill through congress and thus sought to partner with each of the institutions.

This political strategy has created a unique opportunity. Although the bill began the construction of a new framework of health care, advocates could not push too hard for specifics. Therefore, the actual details of implementation are ripe for creative thinking. It is upon the actors and advocates in the system to define the vision for what community-based care will look like in the United States.

The goal of this thesis is to propose one possible solution for community-based care. It nominates the school as a viable and important model of employment in the CHW domain, thus capitalizing on the workforce development opportunities presented from the PPACA. In order for this intersection to be successful, however, the CHW position needs to be reformed. Currently there is a great deal of opposition from traditional health care providers to relinquish power to non-physician positions in the medical field. A new definition of community-based care will require that the CHW – a position at the heart of any community-minded reform – be transformed into something more than its current perception of a job that lacks the respect regarded to other health care professionals. The goal of this reform is not to admonish the position or its current workers. Rather, it is to acknowledge the CHW position for the good it has already contributed to society and to expose and convince others of the untapped potential it has as a career.

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convey a lack of agency for the people to which it refers. Instead, it refers to the fact that the American institutions of the health care and public schools are not designed to meet these populations' complex needs, thus historically leaving them on the margins of the discussions.

## CHAPTER 2: LITERATURE REVIEW

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The literature review will look closely at both community health workers (CHWs) and school-based health centers (SBHCs) to fully define both terms, as well as investigate their history and development. These histories affect the existing disconnect between the entities' actual and perceived effectiveness, which helps to identify some of the challenges that both CHWs and SBHCs face towards reaching economic sustainability. Finally, the relationship between schools, workforce development and the surrounding community will be highlighted to investigate the potential connections between the fields.

### **Community Health Workers: A Job for the Overlooked**

Despite their current prominence, CHWs are not a new idea; examples of CHWs can be found throughout many different cultures and times. In the United States they have existed in their current recognized form for at least the past 50 years. CHWs first gained national distinction as part of The Great Society programs of the Lyndon B. Johnson presidency that grew from the Civil Rights movement. The government initiated and promoted the experimental positions for entry-level jobs with the explicit intention of long-term career development. The roles have always had social justice at their heart: the Federal Migrant Health Act of 1962 and the Economic Opportunity Act of 1964 both directed CHW outreach to low-income neighborhoods and migrant communities (Pérez and Martinez 2008). In spite of the intended goal of career development, the sometimes-used title of “paraprofessional” relegated CHWs to the side of mainstream medicine.

Over the following 40 years, the positions' prominence waned and rose with changes in national political leadership. The 1970s and 1980s were characterized as the “special projects” period; most CHW work was funded by short-term grants. These grants often were tied to universities, which led to a dramatic increase in the documentation of the positive effects of CHWs. Although greater recognition from both the federal and state level and standardized training marked the 1990s for CHWs, no bills were passed to solidify their standing on either level of government (U.S. Dept of HHS 2007). In fact, it was not until 2009 that the American Public Health Association officially acknowledged the position through a formal definition. One year later the United States government recognized the job as the Department of Labor granted the position a Standard Occupational Classification (#21-1094). CHWs today have as many duties as

they do job titles. Around the country they are commonly known as: health navigators, *promotores*, community health organizers, peer health educators, natural helpers, and community health advocates, among many other names.

The definitions of their roles are just as varied as their titles. Pérez and Martinez (2008) list their core objectives as: 1. Connecting disenfranchised people to health care; and 2. Advocating for marginalized people to bring voice to their previously overlooked conditions. The National Community Health Advisor Study (1998) provides a more precise description of core roles. They state that CHWs should provide cultural mediation between communities and health services, informal counseling and social support, culturally appropriate health education, and basic screening services, as well as advocating for necessary services and building individual and community capacity.

CHWs are different from doctors, nurses and health technicians because they do not have the classical expertise and knowledge gained from an institution; instead they rely on their position as a natural researcher to gain a deep understanding of the communities in which they work to provide a frontline source of both health care and prevention practices (Pérez and Martinez 2008). This difference leads to a unique challenge to CHWs: the absence of traditionally defined expertise. By definition their role prioritizes local knowledge and context of a situation as opposed to higher education's theories and axioms.

The health field, however, has become so medicalized that doctors, nurses and clinicians are thought to possess the answers to all health-related questions. Policymakers and the general public often view this education disparity as a signal that the medical professionals are necessary while CHWs are a nice addition if there are available funds. The PPACA serves as a starting point to bring the CHWs to the forefront of the discussion as opposed to the margins of medicine.

Along with leadership and community organizing skills, the CHW position requires a deep knowledge and understanding of the communities they serve. Therefore, it can provide an option for people who historically have struggled to find gainful employment due to barriers such as education level, language differences and discrimination. The 2007 Community Health Worker National Workforce Study identified that roughly one-third of CHWs had completed high school or received a GED as their highest form of degree, 20% had completed some college work and 31% had at least a four-year college degree. The racial demographics of the workforce are 39% white, 35% Hispanic/Latino, 15.5% African-American, 5% American Indian, and 4.6% Asian and

Pacific Islanders. The CHW workforce is overwhelmingly female (82%), and just over half are in the middle of their working careers (aged 30 – 50).

Reflecting their mission to work with disenfranchised populations, the people served by CHWs are often individuals who lack access to mainstream resources. Special populations served include the uninsured (71%), immigrants (49%), the homeless (41%), isolated rural residents (31%), and migrant workers (31%) (U.S. Dept of HHS 2007).

Despite the job opportunities that the CHW position provides for American citizens who have few other options, it currently does not pay enough to support a family. Two-thirds of the CHW workforce receives payments in exchange for their work, while the remaining one third works on a volunteer basis. The relative proportion of white Americans who work on a volunteer basis is greater than the overall proportion in the workforce, suggesting that more non-white Americans are relying on the job for a significant source of income than whites. Of those CHWs that do get paid, nearly two-thirds receive less than \$13 per hour, while just more than one-fifth receives wages greater than \$15 per hour (U.S. Dept of HHS 2007).

Several assessments of CHW interventions have demonstrated the quantitative successes of connecting marginalized clients to primary care and preventive services. In Denver, CHWs worked with medically underserved men and were successful in shifting care from expensive urgent services to general prevention, with a return on investment of \$2.28 saved for every \$1.00 spent for a total savings of \$95,941 per year to Denver Health, a primary care safety net (Whitley, Everhart and Wright 2006). CHW efforts in El Paso were able to enroll 7000 previously uninsured, eligible individuals in Medicaid over the period of three years, allowing people to get help before an emergency arose (Ro, Treadwell and Northridge 2010).

CHW programs have also proved successful in terms of managing chronic conditions. A 2003 study of West Baltimore residents with diabetes found that CHW assistance saved \$2200 per patient per year, led to a 40% reduction in emergency room visits, a 33% drop in hospital admissions and improvements in patient-report quality of life (Fedder et al. 2003). Colorado residents at risk for coronary heart disease who worked with CHWs experienced statistically significant improvements in diet, weight, blood pressure, lipids and Framingham Risk Score (Krantz et al. 2013).

Despite a growing national consensus around the responsibilities and importance of the role, states' reactions - even among states that support CHWs - have been varied. States such as New Mexico and Virginia passed legislation authorizing studies of the effectiveness and status of



CHWs in the states, but have not enacted much follow-up towards their findings. Meanwhile, Ohio and Texas established credentialing programs that CHWs had to fulfill in order to continue working in a paid capacity. Texas went a step further to support its CHW workforce by directing Health and Human Service agencies to use the certified CHWs in clinical teams when possible (Goodwin and Tobler 2008).

Massachusetts and Minnesota, meanwhile, have fully embraced the position and created statewide organizations that support research, education, and policy advocacy for the role. The difference in states' approaches to CHWs present a potential obstacle to the effectiveness of any national policies that flow from the PPACA with regards to the position.

## **School-Based Health Centers: Increasing Health Care Access to Students**

SBHCs are the latest and most comprehensive form of school health programs, but they are not the first. School health programs began in the 1890s through school nurses. They were originally employed in wealthy schools as a way to segregate immigrant children, who were thought to carry diseases, from the more affluent students. As with most actions that do not generate immediate revenue or savings, school health programs' popularity and government funding rose and fell with school budgets and political whims (Appel 2012).

SBHCs first were championed by legislatures in New York, Connecticut, Delaware, Oregon and Michigan in the 1970s to provide health care to children who previously lacked access (Lear 2007). SBHCs provided some level of basic health services such as health screens or immunizations, with some delivering mental or reproductive health services. The decision regarding reproductive health led to both strong support and vehement opposition, depending on the community's feelings towards sexual education. These examples also highlight the importance of community support; most SBHCs arise from a strong push from the surrounding community to increase health care access (Carpenter 2013).

Although SBHCs vary greatly in the exact services they provide, their common thread is the location in and relationship to a school. The 2008 National Assembly on School-Based Health Care (NASBHC) Census accounted for 1909 clinics and programs connected with schools – 1096 of which offered primary care services.

The student demographics of schools with a SBHC reflect their primary goal of increasing health care access to populations who have historically been under-insured, uninsured or unable

to attain health care. Slightly more than one-third of students in schools with a SBHC are Hispanic/Latino, while only 29.5% are white and just more than a quarter (26.2%) are African-American. Thirty-six percent of SBHCs reported that they only serve the student population of the school, down from 45% from the 2004-2005 Census. The other populations served include students from other schools (58%), school personnel (42%), student family members (42%), out-of-school youth (34%), and other community members (24%).

The increasing rate of service provision to non-students is notable. It suggests that SBHCs already play an important role in the community regarding health care access. More communal use of SBHCs strengthens the argument that SBHCs could act as a key community institution and hub to more than just the students at the school.

There is no singular blueprint to a SBHC. They vary greatly in the services they provide to their users and the composition of their employees. The 1096 SBHCs surveyed in the 2008 NASBHC Census that provide primary care services offer three different models of care. Primary Care is the least intensive and least common, occurring in only 25% of SBHCs. The Primary Care model consists of a nurse practitioner or a physician's assistant under the supervision of a physician. However, the physician's role is normally administrative and is limited in the number of hours spent in a clinical capacity. The most common example is a Primary Care – Mental Health model (39.7% of SBHCs), where the primary care staff is joined by a mental health professional. Lastly, the most comprehensive model is the Primary Care – Mental Health PLUS model (34.9% of SBHCs) where the primary care and mental health staff are joined by other disciplines: the most common of which are health educators, nutritionists, and dental providers. The vast majority of SBHCs carry out the traditional services that one might expect: immunizations, physicals, asthma management, nutrition education, and dispensing of medicine. Additionally, more than 30% of SBHCs offer care for infants of current students (NASBHC Census 2008).

SBHCs do more than just increase access to health care for their students, however. They provide qualitatively different care than community-based health centers through primary, secondary and tertiary prevention methods. Primary prevention relies on a school's policies and environments (such as encouraging exercise or healthy eating), which are made even stronger by the connection to a physical place. Secondary prevention exists through scheduled interventions and early detection efforts for targeted students and community members. Finally, tertiary prevention is delivered through follow-up services and case management (Clayton 2010).

SBHCs staff have differing levels of interactions with other school personnel. Eighty percent of SBHCs are located in a school with a separate school nurse that is employed solely by the school. Of that subset only half of school nurses are co-located within the SBHC. A similar percent of SBHCs are in a school with a mental health provider, but the contrast is starker in terms of their interaction level. Only 18% of the SBHCs in a school with a mental health provider co-locate the position within the SBHC (NASBHC Census 2008). These statistics highlight the reality that the existence of a SBHC in a school is not enough to assume they conduct outreach, either with the external community or the school employees themselves.

Although SBHCs vary in the services they provide and the demographics of their staff, they share similarities in the results they produce for schoolchildren. Multiple evaluations have demonstrated the positive effects SBHCs can have on students and their families. Mental health, in particular, is an area that is positively affected by the presence of a SBHC. Colorado provides an example of the benefits that users experienced. Adolescents with SBHC access were nearly 11 times more likely to schedule and attend mental health or substance abuse appointments than students without access. Additionally, they elected to participate in optional screenings for high-risk behaviors at a higher rate than their peers (Kaplan 1998). McNall et al. (2010) demonstrated changes in students' self-confidence through their behavioral modifications. The study's results showed that Michigan SBHC-users demonstrated a greater satisfaction with their personal health, physical activity and consumed more fruit and vegetable servings than nonusers of SBHCs.

SBHCs have also led to substantially lowered Medicaid costs compared to the traditional model of health care. Wade and Guo (2010) investigated Health-Related Quality of Life (HRQOL) surveys and Medicaid costs to measure if SBHC use is connected with cost savings for students and their families. The HRQOL survey provides two scores as a proxy for a child's health: parents report one value while the children report the other themselves. Wade and Guo found that every time the HRQOL survey results increased by one point there was a correlated decrease in Medicaid costs. As parents' results increased by one point, the Medicaid costs decreased by a significant \$36.39. Additionally, student survey increases were associated with an \$8.94 reduction in Medicaid costs.

Moving beyond individual household savings, Guo et al. (2010) sought to measure the net social benefits of SBHCs on Medicaid in Greater Cincinnati. They demonstrated that the SBHCs provided not only a tangible benefit for students and their families, but also the greater society – which they called net social benefit – through money saved on medical costs and total resources

saved. Their regression estimated a \$1.35 million net social benefit to Greater Cincinnati over three years, while projecting net Medicaid savings of \$533,964. The net social benefit value includes an often-overlooked fact that parents can clock more productive hours at work because they do not need to leave their job to pick up a sick child from school. Consequently, more time at work makes the parent a more competitive applicant for promotion and retention – especially if the employee comes from a low-income background (Appel 2012).

There has been some research conducted to attempt to quantify the academic effect of SBHCs for students, but the evidence has not been conclusive. McCord et al. (1993) found that the more students that frequent an SBHC, the greater the graduation rate of the school. Less definitive, however, is the connection to absences and seat time in the classroom. Three studies found inverse relationships, suggesting that more SBHC use led to fewer student absences (Gall et al. 2000; McCord et al. 1993; Webber et al. 2003), while three others found no link between the two variables (Kisker and Brown 1996; Warren and Fancsali 2000; Williams 2003).

## **Shocks to the System**

CHWs and SBHCs have the potential to serve as alternatives to the dominant form of health care in the United States. This section will discuss the shared challenges they face and why they have not played a larger role. It will conclude with a look at their untapped potential.

### *Shared Challenges*

Despite the vast array of positive outcomes, both SBHCs and CHWs face major challenges to sustainability. The primary issue involves financing. SBHCs struggle to sustain themselves, let alone expand their services, because of funding issues. The majority of SBHCs partner with a local health care organization, which usually use grants and other temporary funds to finance the SBHC. These health partners include community health centers (28%), hospitals (25%) and local health departments (15%). Other sources of sponsorship include nonprofit organizations, universities, mental health agencies, and the governing school system. Although the number of SBHCs not aligned with a health partner is small, it is worth mentioning due to the differences in governance, which include decisions on staffing and professional development for the SBHC employees. The vast majority of financially successful SBHCs are able to overcome start-up and ongoing costs through in-kind donations from the school or other independent funders; more

than two-thirds of SBHCs are not financial responsible for construction costs (66%), maintenance (77%), utilities (82%) or rent (93%) (NASBHC Census 2008).

Although the financial information highlights many problems with funding streams for SBHCs, it is made worse by the fact that it actually conceals the potentially greater number of SBHCs that are not pursued due to the high initial costs – and ignored long-term savings – that the sites bring. In response, SBHCs often have to decide between applying for a Federally Qualified Health Center designation, which leads to greater access of funds through cost-based reimbursements for third-party payers and federal grants, or remaining independent, which permits the health center more autonomy in programming and services, but at the cost of losing additional funds (Swider and Valukas 2004).

Likewise, CHW roles struggle to find access to long-term financing. This reality leaves most CHW positions funded through grants and other soft funding means, which does little to create job stability within the community. Once the funding cycle is complete, the positions are no longer financially sustainable (Martinez et al. 2011; Balcazar et al. 2011). Minnesota, in fact, has been the only state thus far successful in creating somewhat sustainable salaries, as CHW wages are reimbursable under Medicaid (Rosenthal et al. 2010).

The PPACA changed the CHW wage landscape, however, so that reimbursement is no longer the preferred path to payment. Instead, it introduced other viable options for payment including a global payment structure for health teams that prioritizes a group's collective health, but there is still much work to be done in order to secure these payments. These financial challenges not only serve to limit the final health impact that SBHCs and CHWs have on their surrounding communities, but also constrain their efforts to increase their reach, presence and level of interaction with their clients.

Another challenge for CHWs and SBHCs is the push for accountability in both the health and education sector. This focus manifests itself in two ways: a call for standardization and reliable data on which to assess effectiveness. By definition, standardization requires the adoption of regulations that will cater to the average needs of the surrounding population. As a result, some of the more nuanced needs of community members are neglected. The call for standardization threatens to negate the greatest advantage that both entities have – their connection and ability to adapt to their surroundings' needs.

Reliable data on which to promote the program underscore a related issue. Despite the research supporting SBHCs and CHWs, advocates point to the innumerable positive effects that

are beyond quantification, such as decreases in isolation or increases in stability for their clients. Furthermore, when talking about the most economically disadvantaged populations, there is no cure-all that will erase decades of oppression. Current research methods generally only measure health care outcomes, as opposed to more intangible public health outcomes. And even the results that they do measure cannot fully capture the complexity of people's lives. Smyth and Schorr (2009, p. 2) explain, "experimental methods are an especially poor fit with the efforts that could help the most vulnerable populations...our evaluation methods must be modified to embrace this complexity, not simply to control for it as nuisance variables." And although this challenge for demonstrable results may make it difficult to convince policymakers of the viable connection between CHWs and SBHCs, it does not lessen its importance. In fact, if anything, the failures of traditional methods to provide economic freedom for marginalized populations suggests new approaches are needed. Methods that a focus on health outreach and prevention – achieved through the inclusion of CHWs in SBHCs – could provide.

### *The Untapped Potential of Schools and Community Health Workers*

The intersection and interplay between a school and its surrounding community drives this thesis. It is powered by the belief of educational philosopher John Dewey (1978, p. 80) that "the pressing thing, the significant thing, is really to make the school a social centre; that is, a matter of practice, not of theory." It also borrows from the theory of a full-service school, one that "serves as a central point of delivery, a single 'community hub' for whatever education, health, social/human and/or employment services have been determined locally to be needed to support a child's success in school and in the community" (Calfee, Wittwer and Meredith 1998, p. 3). Joy Dryfoos (2002, p. 393), an advocate for full-service schools, continues the thought with: "the operating principles are simple. Children cannot learn unless their basic needs are met; support services for children and families will have little impact unless cognitive development is taken care of."

My belief pushes schools one step further; instead of focusing solely on fulfilling the cognitive development of students, schools should aim to fulfill the community's needs for opportunities for work. A school that offers work opportunities can provide other benefits to the community. Balcazar et al. (2011, p.2200-2201) challenge the current limits of our thinking of the CHW role to explain those benefits:

A key strategy for system changes involves further development of the roles played by CHWs outside the health care system, and, thus, strengthening their role in improving

population health. CHWs have been integrated within many other settings that address health, such as schools... In these settings they are part of community-based approaches to wellness and capacity building. Their efforts here are important for addressing the social determinants of health and combating, through social support (e.g., helping people problem solve), the social isolation brought about by the social stigma and discrimination that can exacerbate existing disease and mental illness and make new cases harder to find or prevent.

The authors acknowledge CHWs' presence in schools and other community-based sites, but these jobs are rare. And when they exist they are infrequently sustainable in the long run precisely because they often focus on the social determinants of health, or the structural barriers to good health that marginalized people face like access to healthy food, safe transportation or good housing. That is the opportunity and challenge for CHWs in a school setting.

The recent shift of the American health system towards one that is locally responsive and more focused on prevention provides an opportunity to explore the potential connections. The literature has looked at the effect that both CHWs and SBHCs have had on their communities independently. It has also examined the ongoing struggles to create a family-sustaining career out of the CHW role. Little attention, however, has been given to the potential in integrating the two entities and to the creativity and discipline required to fit a CHWs into a school structure.

## **Methodology and Research Design**

The previous section laid the foundation for an understanding of what CHWs and SBHCs are, and how they play a role in the lives of people who have been denied access to health care. Now, the argument turns to determine how these two health entities can intersect to create a stronger health infrastructure for low-income people.

To accomplish this, the paper will take a deep look at both CHWs and SBHCs in Massachusetts. Massachusetts was chosen as the site of study for a couple of reasons. States view Massachusetts as an example because of its work to pass the 2006 health care reform law, which became the basis for the PPACA. Additionally, although the PPACA is a national law, the states' views and reactions towards it are greatly varied. Of the 50 states, Massachusetts has one of the friendliest climates to CHWs and SBHCs.

Massachusetts' CHW advocates are following the examples of other states that have expanded the CHW workforce before them and are learning from their experiences. To this point,

Massachusetts is the first state to have the development of the CHW field led by CHWs themselves.

Interviews with stakeholders from both the CHW and SBHC world in Massachusetts provided the foundation for the argument. Some interviewees had a wide range of knowledge of both SBHCs and CHWs, while others provided more detailed knowledge on a specific Massachusetts sector. Interviewees also contributed by referring other interview subjects to delve deeper into the subject.

After the interviews, the content was coded, analyzed and compiled across sectors to determine what role schools could play a work environment for into the CHW workforce and to identify how Massachusetts actors are thinking about the CHW field – especially with regards to reforming the position.

This paper will begin with an examination of Massachusetts' effort to reframe the state's conversation around CHWs and to elevate them to a good job through CHW-led efforts. That section will conclude with recommendations to further push for inclusive CHW use.

The next chapter will explore schools as a viable work environment for CHWs. It will look at Massachusetts' history with SBHCs as well as explore the opportunities and challenges that occur when trying to adapt the CHW role into a school. The chapter will conclude with two case studies of CHW integration in a school. In one case the CHW was inserted into the SBHC; in the other the CHW is an employee of the school. The variances in results are analyzed to explore key differences that result based on the employer.

The paper will resolve with a synthesis of the information presented. It will examine key findings about the CHW-SBHC collaboration, talk about how both entities can support each other going forward, and mention next steps to continue the work started by this paper. It will conclude with an explanation of how planners can aid the promotion of community-based health.



## CHAPTER 3: COMMUNITY HEALTH WORKERS

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As the Affordable Care Act has made efforts to funnel health care out of the hospitals and to the community where it is less expensive and potentially more responsive to local needs, community health workers (CHWs) have proven to be an effective answer. If the CHW position is to play a central role in health care going forward, however, there needs to be an infrastructure to support its workers' compensation. Massachusetts is leading the nation to develop the CHW position by being the first state to have CHWs control the process of their professionalization.

This chapter seeks to determine if the CHW position can sustain a family. It will accomplish that through an examination of the characteristics of a “good job” before looking at the process of professionalization to understand its benefits and risks. It will explore the history and development of the CHW position in Massachusetts, and how that story affects its standing today. Finally, it will close with the remaining obstacles for professional recognition of CHWs and recommendations for how to negotiate these challenges.

### What is a Good Job?

Before we can answer whether or not CHWs are a viable job opportunity for people from low-income communities, we need to examine how to define a “good job.” Any definition of job quality will be somewhat arbitrary; it is difficult to generate a standard list of good job characteristics. The qualities most likely will not be universal, but rather vary by cultural and societal norms and values. Furthermore, even if standards are agreed upon, the metrics used to judge them will not be reliable in any comparative sense due to differences in context (Osterman 2013).

Acknowledging these difficulties, this paper defines a “good job” along six axes:

1. a consistent flow of compensation, composed of a salary and benefits;
2. a clear set of employee responsibilities and an understanding of how the role fits within a larger organization;
3. personal fulfillment: such as a sense of purpose, a chance for self-improvement or respect from other professionals;
4. a career ladder: the opportunity to grow and advance in the field;
5. a balance between work responsibilities and personal interests;
6. and job security.

It should be noted that no job would be able to maximize all six of these axes; instead there are tradeoffs as some qualities indirectly compete with one another. Currently the CHW position provides a strong sense of purpose to its workers, but lacks the respect of its peers to deliver on the other axes. The efforts made by Massachusetts CHWs and their allies document the push to transform the CHW position into a “good job.”

## **The Problem with Professionalization**

Nationally, CHWs have met four main challenges in the effort to move the position from the margins of medicine to mainstream acceptance. The position suffers from inadequate funding, a lack of recognition within the Health and Human Service field, insufficient coordination with Medicaid (which exacerbates the first two challenges because the majority of patients that CHWs work with are usually low-income), and a lack of commonly accepted standards (Family Strengthening Policy Center 2006).

In Massachusetts, these obstacles are noted through low wages, high turnover, and undependable funding streams (Anthony et al. 2009). The struggle of Massachusetts CHWs for professional recognition connects with all the markers of a good job, but their efforts specifically focuses on half the characteristics. CHW advocates are fighting to secure payments, define a clear set of responsibilities, and create personal fulfillment through respect; indirectly CHW advocates are addressing the other three. Consistent compensation will make the CHW job attractive for its target population of low-income workers. And a clear set of delineated tasks and respect within the medical field will convince decision makers to grant the position the dedicated payment streams they seek. Massachusetts CHWs and advocates of their cause believe that the best response to these problems lies through the “increased professional status for the field [which] is expected to help CHWs earn family sustaining wages and attain greater financial stability” (Anthony et al. 2009, p. 4).

Professionalization is, broadly, a process of people engaged in similar activities presenting their case for a salary or other means of livelihood, a job description, and standards of practice, among many other markers of a career. Wilensky (1964) provides a useful framework for the process of professionalization that situates the CHW role along its transition from a set of semi-related tasks to its current efforts to become a career. He identifies five steps that nearly every job undergoes on its path to profession:

1. expansion of the work to fill a full day;

2. the establishment of a training entity;
3. the formation of professional associations;
4. political agitation to get their demands heard and responded to;
5. and, finally, the creation of a formal code of ethics.

The third step is the most important. The formation of professional association often leads to two levels of conflict for the field. One internal tension emerges between the original members who learned through experience and the new entrants who learned through the original workers' expertise. An external struggle develops against neighboring occupations. The CHW field is faced with both of these challenges and its decisions for how to proceed in its actions will determine the future path of the job in Massachusetts.

The decision to pursue professionalization introduces the position to what Epstein describes as the "Faustian bargain: a professional gain at the expense of its ennobling to marginal populations" (1992, p. 154). In this case the "ennobling" refers both to the reduced isolation and greater care for the patient as well as the sense of purpose and ability to make a difference for the CHW. A move towards professionalization has the potential to erase that "ennobling" factor, however, severing the job from its layman's position among the community. Potential problems include a loss of the indigenous qualities that make CHWs successful in the first place such as their local expertise, and the possible exclusion of participants that have traditionally enjoyed the most success in the CHW role. Most CHWs learned through experience as opposed to classical expertise, in which case their lack of education may not meet the standards for the profession. Conversely, those interested in the position may not have the wealth to pay for the fees associated with professionalization (Family Strengthening Policy Center 2006).

Although these challenges are urgent for all fledgling professions, they are exceptionally so for CHWs. Individuals that have previously had limited and unattractive work options are rewarded for their local knowledge of a community. Stakeholders recognized the challenge to professionalization and used the experience of other jobs as a guide (Hogarty 2013).

The childcare industry created the child development associate credential, which opted for peer-based evaluations as opposed to written tests to minimize the barriers to employment in the field. Despite these efforts, childcare workers' experienced no notable difference in their salaries as a result of the professionalization efforts (Rosenthal 1998).

The professionalization efforts within social work worked differently. The field did achieve greater salaries and professional recognition for their efforts. This gain, however, came at the

expense to the position's dedication to social reform and working with people with the greatest social problems (Epstein 1992; Abramovitz 1998)

After defining a “good job,” and examining the risks and benefits of professionalization, the paper now turns to analyze Massachusetts' actors' efforts to create a good job for the CHW workforce. The history of the CHW role in Massachusetts is one of support and collaboration between CHWs and the state, which has led to the opportunity today for CHWs to shape their own future.

## **The Development of Community Health Workers in Massachusetts**

The CHW position reached the first two stages of Wilensky's professionalism spectrum relatively early in their history. There has always been enough work to fill a full-time CHW position; the problem instead has been receiving the respect of their colleagues, which is a struggle that defines CHW efforts today. The second stage, the formation of training entities, was achieved in the mid-1990s as the training organizations the Community Health Education Center (CHEC) and the Central Massachusetts Area Health Education Center (CM AHEC) Outreach Worker Training Institute began leading formalized CHW curricula with the support of the Boston Public Health Commission (BPHC) and the Massachusetts Department of Public Health (MDPH), respectively. CHEC has two sites, one in Boston and one in Lowell; CM AHEC is located in Worcester and provides services throughout Massachusetts and nationally. These centers were founded to bring greater recognition to the job as well as to concentrate and improve the training CHWs received (Mason et al. 2011).

The establishment of a professional association – the third stage – began in 2000. The Massachusetts Association of Community Health Workers (MACHW), the first statewide CHW association, was founded as a collaboration between MDPH and a CHW leader network (Rosenthal et al. 2010). Originally established to bring more attention to the position, the organization now pushes for legislation that supports full integration of CHWs into the Massachusetts workforce, as well as providing opportunities for leadership development by its members (Holderby-Fox 2013).

Later in 2000 MDPH received federal funding to support the nascent network of CHWs. They used the funds to develop statewide CHW policies and to study the existing workforce; this initial report “Essential to Improving Health” was released in 2005 (Mason et al. 2011). The report

presented a first definition for the CHW role in Massachusetts, a demographic profile of the traditional CHW and recommendations for future research (Ballester 2005).

In 2004, the CHW profession entered Wilensky's fourth stage of professionalization through political agitation on the back of legislation introduced by MACHW, the Massachusetts Public Health Association and the MDPH. Following the legislation, MDPH conducted a second analysis that including convening an advisory council, investigating the CHW workforce, and recommendations on how to create it into a sustainable workforce (Mason et al. 2011).

The timing could not have been more fortuitous as the bill was incorporated into the larger 2006 Massachusetts health care reform bill, which eventually became the blueprint for the national PPACA. The Boston Foundation provided money for the subsequent CHW Initiative of Boston through the SkillWorks workforce development program. Local community agency Action for Boston Community Development (ABCD) competed with and beat out several well-qualified applicants for the funds. ABCD was chosen in part because of their extensive history serving low-income communities and because they have trained family planning counselors (a related field to CHWs) for over 30 years. The Boston Foundation's funding provided significant support to the legislation that helped it to pass (Whitaker 2013). The MDPH continued their work on the CHW report throughout this period and released their finalized report explaining their findings to the state legislature in 2010 (Anthony et al. 2009).

The report laid the pillars for CHWs' efforts to respond to the dilemma of the "Faustian bargain" that threatens CHWs' connection to their community. It defined CHW work as consisting of client advocacy, health education, community outreach and health system navigation. The report contrasted CHWs from other health careers

by the activities they perform and by their identity – typically – as members of the communities they serve...CHWs spend significant portions of their time working in community-based settings and in clients' home. This community based-work allows CHWs to reach deep into their communities and to connect people who are isolated and hard-to-reach with needed health and human services. (Anthony et al. 2009, p. 3)

This excerpt demonstrates MDPH's dedication to maintaining the CHW identity as one that is directly tied to the community that they serve.

In order to maintain the connection of the position to people from communities that are not only under-served by health professionals, but also overlooked in terms of employment options, MDPH presented 34 workforce development recommendations grouped into four categories for the sustainability of the CHW position. The report endorsed a statewide identity

campaign for CHWs; a strengthening of the workforce development initiative through CHW training, education and credentialing infrastructure; an expansion of funding mechanisms; and an infrastructure to support the committee's recommendations (Anthony et al. 2009).

The statewide identity campaign standardized the term "community health worker" as the preferred title of the position and created an educational campaign in colleges, health departments and medical centers to use the new title. Strengthening the workforce included recommendations to create multiple points of entry to CHW training, to train supervisors and to create a credentialing system. The funding section has changed since the ratification of the PPACA, but still focuses on expanding payment opportunities. Lastly, the infrastructure system recommended that the Office of Health Equity at the executive office of Health and Human Services be responsible for implementing the next steps for the role.

The CHW position entered Wilensky's fifth stage through the wake of the 2009 report. The report pursued credentialing to demonstrate a common set of skills, knowledge, abilities and experiences inherent to a CHW. Specifically, during the planning sessions CHWs pushed for certification as their official professional recognition. CHWs preferred certification because it is more demonstrative of desirable skills than registration but less restrictive to possible participants than licensure (MACHW 2008a). It is important to note that certification, in this regard, means an authorizing body recognizes members as having reached certain minimum standards – it is not simply receiving a certificate of completion from a granting body.

Wilensky's steps of professionalization provide a roadmap for the efforts of CHW advocates in Massachusetts. But in the fifth stage, there is no prescribed path for them to follow. The next section covers how Massachusetts CHWs have been at the center of the push for greater recognition of the position. Their involvement in legislative efforts, the design of training courses, the involvement of community colleges and the fight for funding has set Massachusetts apart from other states that have attempted to professionalize the CHW role.

## **The Push to Create a Good Job for Community Health Workers**

CHWs and the role's advocates are hopeful that certification will lead to a greater understanding of the job from both insiders and outsiders. The increased clarification of the role will accomplish several characteristics of a good job: it will grant a greater understanding of the job's purpose for the CHWs themselves and, hopefully, more recognition and dedicated salaries from their colleagues, employers and medical institutions. The institutions, in particular, are

resistant to change. This reality establishes a need to define the position as narrowly as possible to convince the institutions to accept it as an essential part of the new model of health care.

At the same time, CHWs also understand the difficulties that professionalization can bring. There is a dual challenge to credentialing: it can change the demographics of the workforce by excluding certain people from participating and it can shift the scope of the work. Together, these are the greatest threats facing the CHW position. If the emphasis of the CHW role is switched to a limited view of skills as opposed to a holistic view of relationship building the CHW position will lose its greatest asset. To remove it completely from its community base would severely limit the workers ability to generate positive outcomes for their clients. Jena Adams (2013), project specialist at CM AHEC, framed the state's efforts by saying, "CHWs [called by many titles] have been around for hundreds of years; our main focus [while professionalizing the workforce] is to maintain the integrity of the CHW as unique role as part of the communities in which they work."

Massachusetts' efforts with CHWs have been the first in the country to have CHWs play a prominent role in the discussion of the profession's design. The belief is that the inclusion of CHWs in the process will provide the best strategic decisions to maximize the benefits while minimizing drawbacks of professionalization. In fact, the push itself for certification came from CHW themselves (Holderby-Fox 2013; Adams 2013). MACHW conducted seven regional meetings with 132 participants in 2008 to ensure CHWs had a chance to add their voice to the advisory group's decisions on certification. CHWs responded that they wanted to be credentialed as long as the perks of professionalization were realized (MACHW 2008b). While they acknowledge the tension between professionalization and community-based work, both CHWs and their allies agree that the potential positives will outweigh the negatives – as long as they create the political infrastructure to implement the changes responsibly (Whitaker 2013).

### *Legislative Efforts*

This political vision is carried out in part through the inclusion of CHWs in the decision-making method of the certification process. Recommendation 2.6 from the 2009 CHW Report led to Chapter 322, Acts of 2010: "An Act to Establish a Board of Certification of CHWs." It stated that the board should be constructed "with balanced representation from CHW workforce, CHW employers, CHW training and educational organizations, and other engaged stakeholders" (Anthony et al., p. 9). The board will establish:

1. requirements for education, training and experience for certification;
2. practice standards;
3. standards for educators and trainers/programs;
4. set fees and application procedures;
5. and, set up accountability processes: complaints, disciplinary actions, and revocation of certification.

To maintain the CHW influence, CHWs play an important role in the certification process. They have four of the eleven seats on the Board of Certification as well as an expanded role on its Advisory Board. The board hears ideas for certification, which includes provisions for “grandmothering” experienced CHWs into certification. They consider other states’ legislation and how to adapt it for their purposes. For example, Ohio was one of the first states to pass a CHW certification bill that can serve as a guidepost. The nurses of Ohio, and not the CHWs, however, directed that law. As a result, the law allows for disciplinary action to be taken if CHWs encroach upon any of the duties of a registered nurse.

In a different approach than other states that had preceded them, MDPH and MACHW did not prescribe a top-down procedure for certification, but rather set the structure for how the decisions would be made by installing CHWs on the board (Hirsch 2013). The belief is that inclusion of CHWs will begin the process of creating the infrastructure to allow CHWs to experience the greatest gains from professionalization. Lisa Renee Holderby-Fox (2013), executive director of MACHW and a CHW herself, explained MACHW’s position by acknowledging that, “there are going to be challenges [to professionalization], but the potential damage will be reduced if CHWs are a part of the conversation.”

Additionally, CHWs pushed for the certification legislation to act as a Title Act only. This designation means that only the holder of a current and valid certificate may use the title “certified community health worker.” But the certificate program does not require an individual to obtain a certificate to practice as a CHW. In fact, CHWs do not need to be certified to be hired into the position, but it should be available as a professional development option once the person assumes the role (Gorodetsky 2013).

Keeping the bill voluntary has been an ongoing issue for CHW advocates. During the bill’s time in legislation, there was an effort to alter the bill so that all CHWs would have to participate in a mandatory licensing process. However, CHWs so strongly believed that certification should be voluntary that MACHW threatened to withdraw support of the legislation if the mandatory language was included. Their efforts prevailed as the amended language was removed (Mason et



al. 2011). The push to maintain the voluntary nature of the certification was an active step away from a complete professional structure that CHWs saw as leading to a medicalization that might have led the role away from its community roots. The bill's connection to the Massachusetts health care law allowed its supporters to stand their ground regarding the insistence on maintaining its voluntary status.

### *Training Courses*

The training and education courses offered by the community-based training organizations also reflect the influence and recommendations of CHWs. The community-based training sites, CHEC, CM AHEC, and potentially others will support the certification process. Together they have collaboratively planned a core competencies curriculum that prepares participants for their role as a CHW. The core competencies include lessons around community outreach, individual and communal assessment, communication (particularly cross-cultural) and a general course on public health. CHEC offers modules on leadership development and community organizing, while CM AHEC offers additional training for supervisors of CHWs (Hogarty 2013; Adams 2013).

The core competencies are structured around taking implicit CHW knowledge and calling attention to it so it becomes explicit and marketable to employers. The trainings are based in the theories of participatory education and adult learning to reduce potential anxieties participants may feel returning to a learning environment. CHW participants start to see themselves as a public health professional during the trainings because they better understand the value that they bring to the field (Gorodetsky 2013).

The lack of a career ladder is a concern for the position in terms of creating a job with opportunities for advancement. The training courses are designed for people who are already employed as a CHW; the sites do not focus on getting people into jobs (Gorodetsky 2013). Rosenthal (1998) presents two options for advancement: management and specialization. In Massachusetts the management positions are somewhat rare for CHWs because they normally go to people with advanced degrees in public health who have not previously worked as a CHW. Gail Hirsch (2013), director at the Office of Community Health Workers at MDPH, focuses on Rosenthal's second path towards a career ladder: "advancement doesn't necessarily mean to another job, although [CHWs] might welcome the opportunity, but rather within the field there is a chance for a diversification of different tasks and responsibilities." This different approach to

progression is important to consider in terms of the creation of a career ladder for CHWs because until they gain greater respect and recognition from the rest of the medical field it is a challenge to focus on promotion through new titles.

To create better partnership in the role, the training sites also do extensive work with CHW supervisors because they often do not have experience as a CHW. The sites offer training sessions to supervisors to educate them on working with CHWs. The lessons are co-facilitated with a CHW for two reasons: 1. to lend some legitimacy to the curriculum through the CHW perspective, and 2. to model a collaborative work environment for both CHWs and their supervisor. The classes also provide a strategic message to supervisors regarding the importance of cultural competence. It exposes them to the work CHWs do and some of the challenges the workers may have themselves in communicating with the more widely recognized professional (Gorodetsky 2013). The further development of CHW supervisors could also help to create a more defined career ladder for CHWs.

### *The Role of Community Colleges*

Community colleges expand access within the CHW field to continuing education opportunities. Massachusetts' community colleges were first involved through two grants, the aforementioned Boston Foundation grant, and a Department of Labor grant to improve the responsiveness of community colleges to Massachusetts' labor needs. The CHW field was identified as an important sector in the Massachusetts economy. Massbay and Bunker Hill community colleges, with the input of CHWs, developed a curriculum to fulfill the commonwealth's needs. Community colleges consulted CHEC and CM AHEC, as well as CHWs, to determine the core competencies needed for a one-year certificate or an associate's degree.

The community colleges already had aligned courses for some of the community-based training centers' core competencies, and merely had to tweak the curriculum to fully match the offerings of CHEC and CM AHEC. This was the case for competencies based in "hard" sciences like assessment design and public health. Other times they had to create completely new courses that they had not previously offered. These courses included a focus on outreach and communication. The existing relationship between the community colleges and CHW advocates decreased the design difficulties in courses that are best delivered in community contexts. Overall, the process was rather quick; once the courses were designed the programs were ready to run in only a short manner of time.

Community colleges help the movement for CHW recognition because they can expand CHW training options and fill holes that community-based sites cannot. The community-based sites are nearing the limits of their resources and can only offer so many trainings per year; a community college, with its greater resources, can greatly expand the number of courses offered.

Additionally, community colleges can offer students grants and other forms of financial aid to participate in their programs. Community-based trainings just began charging a nominal fee for their courses, but even this small amount means they lose some willing participants (Hogarty 2013). Lastly, introducing the CHW curriculum to a community college not only provides an opportunity for greater advancement in the CHW field, it also opens doors to higher education access in general for people who may have lacked that access beforehand. CHWs recognized this reality and pushed for transferrable credit from early in the professionalization process (MACHW 2008b).

Community colleges, however, are not a cure all for the CHW field. There are some limits to the benefits that community colleges can provide – especially noting MACHW’s goal to maintain the position’s responsiveness to its communities. CHW advocates recognize the importance of community colleges, but they want the colleges to operate as complements to community-based trainings, and not as substitutes that will replace their importance (Holderby-Fox 2013). For a community-based position like CHW, it is especially important that trainings reflect the realities of patients’ life, a strength that CHEC and CM AHEC have gained through their reputation in the community through their nearly 20 years of experience. Community colleges would need to engage in a significant outreach program in order to possess that same connection to the lives of the patients CHWs will serve.

Additionally, there is an added challenge of the access of community colleges. Community colleges can open the position to people who do not have experience in the contexts that a CHW would work. There is no doubt that people can learn respectful interactions, but it may take longer for people who are not from the community to learn the cultural nuances that pervade the CHW interactions. More importantly than lost efficiency, however, the expansion in opportunity has the possibility to freeze out the people with the highest barriers to employment. Though some may characterize this belief as one of an insular community that wishes to keep outsiders out, it can also be seen as a field that wishes to continue to provide opportunities to the people who are systematically denied others.

A final challenge is student recruitment for the CHW courses at the community colleges. The numbers for students enrolled in the program have been low because the field is not well defined. This problem highlights a chicken-and-egg problem because community colleges are being used to strategically increase the professional profile of the CHW field, but it will take more positional clarity before community college students see it as a worthwhile profession. In fact, Maxine Elmont (2013), human services program coordinator at Massbay Community College, shared that some students have used the CHW track as a launching pad for other careers, and have switched to nursing because its boundaries are better understood.

### *The Fight for Funding*

Though wages and benefits are often the first thing that people list as an indicator of job quality, they are a result of the value that a position has proven, and not the cause. This fact explains the intensive efforts MACHW expends to demonstrate the power that CHWs can contribute to a medical team.

The realities of CHW payment demonstrate the need to fight for better funding. The 2005 Massachusetts CHW Survey conducted by the MDPH calculated that the average CHW full-time employee salary was \$23,000 per year. That salary was \$6,000 less than the overall state average. Interestingly, despite the range in education attainment of CHWs, the average salary showed no increase from an increase in education. In fact, CHWs with college degrees earned \$13,000 less than their college graduate peers (Ballester 2005).

The low pay is both a cause of and a symptom of the lack of respect that the CHW position has garnered from its medical colleagues. The low wages (and volunteer work) suggest to outsiders that the position is not necessary to deliver respectful health care. The pay also is a result of the field not valuing the role; the medical institutions have fought to maintain as much care provision under their purview as possible in order to preserve their funding sources.

CHWs are funded mostly through soft grant funds that have set termination dates. Not only are the grants temporary, but they are also usually linked to a specific disease or outcome within a community that prevents comprehensive action from the grant-supported CHW (Spencer, Gunter and Palmisano 2010). In Massachusetts, the MACHW website defines a CHW as “a public health professional who promotes full and equal access to necessary health and social services by applying his or her unique understanding of the experiences, language and culture of the communities he or she serves.” The temporary and limited status of grants prevents CHW

jobs from paying sufficient living wages and also severely undercuts CHWs from connecting with their patient holistically. Instead, the CHW works with the patient on one intervention until the grant period expires.

The PPACA provides promising paths to CHW payment through its incentives for coordinated and cooperative team-based models of health care provision. Some models of this new care include Patient Centered Medical Homes, Guided Care and Accountable Care Organizations. At the heart of these initiatives is the belief that more resources should be spent on frontline workers to improve prevention outcomes and to reduce the expensive medical care necessary if chronic diseases are not well managed. Under these arrangements the health teams would receive bundled or global payments for minimizing backend health care costs.

In order to accomplish the inclusion of CHWs into the bundled payment strategy, MACHW, MDPH, and other state agencies have turned to a multi-pronged approach. The first component is the 2009 Report's recommendation to conduct a statewide identity campaign. These steps include developing a common language for CHWs and conducting more research to scientifically verify their effectiveness. State agencies have continued their advocacy for the position. They reach out to insurers, legislators and clinicians through events like CHW Day at the State House to convince policymakers of the power of CHWs. The advocacy also includes a general push towards a more comprehensive understanding of health as opposed to a sole focus on health care.

Although the new models of care are a step towards comprehensive and preventative care, there are still some details that need to be worked out. In theory, the newly imagined health team is supposed to place the patient, not the medical service provider, at the center of health care. But without the seamless integration of CHWs, the health team is merely a realignment of the same old players (Balcazar et al. 2011). This opportunity to reform health care delivery is the true value of CHWs. The CHW position is not one that is supposed to exist independently. Instead, it works best as a part of a team where people have clear tasks and are working towards the common goal of better health outcomes (Whitaker 2013).

A reorganization of the roles of a health team will not provide all the answers towards funding. Although the current vision of health teams improves upon the outdated model of only treating the sick, it still stops short. Health now focuses on preventative care for all patients, regardless of whether or not they are seeking medical care at the moment (Noble 2013). What the system needs, however, is a push towards a health care system that works to improve health

outcomes for all people in the population regardless of whether or not they are ill (3.0: A New Operating System for Public Health 2012). This push for more comprehensive care intersects with CHWs and the services they provide as a community liaison through their outreach responsibility.

While CHW inclusion in Accountable Care Organizations would cover CHWs directly involved in health care provision (such as reminding patients to get shots or go to the doctor) through certified health entities, it would leave CHWs working through a community-based organization exposed. This dichotomy is not one that is unique to CHWs, but it is especially important in this context because interventions on the social determinants of health have a greater impact than increasing health care access for marginalized populations (Bedell 2013; Hirsch 2013).

## **Recommendations and Next Steps**

This chapter set out to document the professionalization of the CHW position and to assess if the role is a viable career option for Massachusetts' diverse CHW workforce. The CHW influence over the certification process has resulted in gains to the job that increase its chances of becoming a family-sustaining career that remains connected to the communities and people they serve. That said, there still is more work to be done.

The struggle for CHW input granted CHWs a voice on the Board of Certification that should be used to influence the certification process. The board is already working to create provisions that allow practicing CHWs to “grandmother” into certification based on previous experience. The advisory board should push for expanded understanding of the standards of CHW work. The standards should include a certain percentage of time to be dedicated towards public health and prevention goals including community outreach and organizing, and move beyond the narrow target of greater health care access.

The Board of Certification also has the power to influence the standards for CHW educators and trainers. The standards should preference the existing community-based training entities CHEC and CM AHEC to build off the affinity for communities that the CHW position possesses. This objective can be accomplished by creating requirements that are more flexible for community-based training sites and through granting greater professional benefits for CHWs who certify themselves through these sites. Additionally, the board should work to generate a greater connection between community college CHW courses and CHEC and CM AHEC to ensure that all training centers will benefit from each other and improve the development of the field. The

community college courses can implement strategies to reflect the community-based nature of the CHW position and the community-based training sites can benefit from access to the greater resources of community colleges.

The board can also use the community-based training sites to strengthen the career ladder for the CHW position. They should recommend that training sites expand upon CM AHEC's work to advertise CHW positions. Although this practice is not applicable for a majority of CHWs because they already have employment, a greater awareness of job openings will strengthen the relationship between CHWs and their employers. Increased knowledge of positions will also provide more opportunities for the diversity of the CHW role.

Community-based trainings can further the advancement of the CHW position by defining different paths to promotion, whether it is through new titles such as supervisor or increased duties, responsibilities and autonomy in the role. If the latter option is chosen, the gains in autonomy should be clearly defined by the Board of Certification to avoid a situation similar to Ohio's where the law punishes CHWs for encroaching on the responsibilities of nurses.

Finally, MACHW and its state partners should continue to fight for increased funding opportunities. They should convene the variety of partners with which CHWs intersect (health care partners, community-based organizations, insurers, legislators, etc.) to convince them of the importance of the CHW role. A combination of quantitative studies that exhibit cost savings and qualitative case studies that demonstrate success is needed to inform the conversation surrounding CHWs (Whitaker 2013). There is an opportunity to pursue funding through the traditional paths of disease-specific CHW interventions. These one-off projects can serve as evidence to the position's value even if they fall short of sustainability. If this strategy is pursued, however, it is of the utmost importance to craft a corresponding plan to broaden the subsequent conversation to utilizing CHW interventions in a holistic and multi-faceted manner. This approach would help to avoid compartmentalizing CHW work into the same narrowly focused projects that currently pose threats to CHW job security.

## CHAPTER 4: SCHOOL-BASED HEALTH CENTERS

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After exploring the possibility of CHWs providing good jobs to people lacking traditional marketable skills, the argument now turns to the possibility of school-based health centers acting as their work environment. This chapter will examine the SBHC landscape in Massachusetts before investigating the enabling and constraining factors of interacting with a school site. Finally, two examples of CHW integration in a SBHC will be explored below to determine what the intersection between the two entities could look like.

### The School-Based Landscape

Massachusetts has a welcoming relationship with SBHCs. There are 51 SBHCs located in 23 cities and towns throughout the Commonwealth. Nearly two-thirds of SBHCs are located in high schools, and almost three-fifths of the SBHCs are sponsored by a partnering community health center. In the latest round of request for proposals from the state, 34 SBHCs secured state-funded contracts; a total of 66% of Massachusetts' SBHCs. Fifteen SBHCs received federal grants from the first appropriation for capital improvements from the PPACA for a total amount of \$3,675,369 (Carpenter and Blinn 2013).

The push for SBHCs in MA, similar to national trends, usually comes as the result of a community process, either through a Community Needs Assessment or a targeted community push. The relationships needed to support a complex process like SBHC approval are not ones that are formed overnight, instead the process relies on strong leadership, deep relationships and a team comprised of community members, a partnering health entity, the school, and many others that are dedicated towards accomplishing its goals (Blinn 2013; Carpenter 2013). The inclusive process may bring delays and difficulties in producing a consensus. It can prove fruitful in the future, however, as a strong, diverse group of relationships can pay great dividends for later efforts of community engagement because the groundwork for cooperation has already been laid.

Once a task force is formed to demand a SBHC, the stakeholders enter a negotiation process to determine the services to be offered and where in the community to locate the site. The most common obstacle SBHCs face at this point is a battle over what type or if any reproductive health services to offer at the SBHC. Once this potential obstacle is resolved, then it is up to the development team to obtain funding, which usually takes the form of a variety of



grants or in-kind providers. If funding is obtained, the leaders need to ensure the SBHC meets the standards required by MDPH regulations (Carpenter 2013).

### *Challenges of School-Based Health Center Integration*

There are a variety of school factors that can facilitate or hinder the success of the SBHC and, by extension, any CHWs that may work there. The first potential challenge is the issue of physical space. SBHCs are usually retrofitted into a school, which means that their layout may not be optimal for the services they provide. The amount of space the school is willing to donate to the SBHC and the approach to shared hallway spaces are factors that can either create a welcoming or uninviting environment for SBHC users and employees.

Another potential challenge is time. Because of their mission to connect low-income populations to health access, SBHCs are frequently set in public schools that are struggling by our traditional measures of school success (Kidd 2013). The limited metrics focus on absolute learning and often put students who need the most academic help at a disadvantage. This focus on test performance makes time at a “failing school” always at a premium, and often several interventions and interventionists have to compete for the same limited time within a daily schedule.

Another challenge comes from the politics of school relationships. Relationships between SBHC staff and their housing school exist on two levels: connections with school leadership staff and also with the teaching, support and other staff that work at the school. School leadership can aid a seamless integration of the SBHC through promotion of a school-wide message of partnership and patience. Both staffs need to be primed to share information with each other and understand that they both work to put children first even if they employ different methods to achieve it.

The actual act of exchanging information can be a challenge: both entities have privacy barriers in HIPPA (which provides health privacy to individuals aged 12 through 18) and FERPA (the restricted rights to education records that parents and students have) that restrict what can be shared (Blinn 2013). This obstacle also presents an opportunity to integrate CHWs, who specialize in information exchanges, if schools and SBHCs can figure out how to collaboratively face the legal barriers head on.

Patience is important because any time an entity with established roles takes on reform, roles and responsibilities can get muddled and confuse all parties. Growing pains are to be expected in the beginning of any realignment, so it is important for school leadership to

understand the potential of the SBHC collaboration to explain to both parties what to expect from the partnership (Kidd 2013). In trying to link CHWs to SBHCs, this need for certainty further highlights the importance of completely defining the CHW role through the certification process.

SBHC personnel, school faculty and staff need to have a trusting and open line of communication to maximize each other's usefulness. A natural alliance between the school support staff (social workers, guidance counselors, and others) and SBHC staff can form because both focus on issues that happen outside the classroom. However, the relationships should be extended to not only support staff, but also to teachers to provide comprehensive care for the students at the school. There is a great deal of information on both the school side and the health side; so solid relationships need to be fostered to create the referral patterns for "warm handoffs" between different parties (Carpenter 2013). This warm handoff is already an essential component of the CHW role and should be emphasized even more in a school context.

### *Challenges within the School-Based Health Center*

Another set of considerations for the viability of SBHCs to employ CHWs comes from the SBHC structure itself. It is an established entity with its own form, history and regulations that the CHW position would have to mold to in order to fit. One challenge is the uniqueness of each SBHC. Antonia Blinn (2013), program director at the Massachusetts Association for School-Based Health Care, highlighted this fact by saying, "if you've seen one SBHC, you've only seen one SBHC." This adaptability to its surroundings – in a manner similar to CHWs – is both a blessing and a curse. It can lead to responsive outcomes that are specifically tailored for their particular populations, but it also limits the opportunities to make broad implementation plans for the system.

Another example of the duality of SBHCs' uniqueness is the differences in their employment choices. With the exception of at least one licensed medical professional (usually a nurse practitioner or physician's assistant) employee profiles at SBHCs vary greatly depending on the health center and the needs of a particular school. For example, Chelsea High School has one full time head nurse practitioner, while Revere High School, which is under the same health umbrella at Massachusetts General Hospital, has two part time nurse practitioners. Both have front desk coordinators (albeit with different titles), but the other roles vary. Among the employees are a family planning counselor, a nutritionist, and even an acupuncturist who was obtained through external grant funding (Hampton 2013; Wilcox 2013). Casted in a positive light,

as long as the health partner is convinced of the need for CHWs, they could be easily inserted into their SBHC system. The flexibility inherent in the staffing allows for innovation, but there is no guarantee that the flexibility will extend past the one SBHC.

The partnering health entity, and not the school, has control over most of the aspects that determine the quality of a work environment, including control of the staffing. The majority of SBHC jobs are filled by health partner employees that enjoy working with children. Most of the professional development is also run through the health partner. SBHC employees have the same professional development courses and conference opportunities as other health partner employees. The difference between the two entities, however, is the presence of MDPH. The state agency conducts SBHC-specific trainings that focus on implementations of new systems, data collection and sharing best practices among SBHC staffs (Wilcox 2013).

A career ladder does not exist in the SBHC in the same way that it does in other medical professions. Although the positions vary across SBHCs, they are fairly constant over time within any one site. The opportunity to advance is not accomplished through new titles at the SBHC, but rather by way of increased duties and responsibilities. These benefits add more prestige to the job, but not necessarily more wages and definitely not more time in which to accomplish them (Wilcox 2013).

The promotion challenges are not inherent to the SBHC setting, however. They exist because medical professionals who were able to switch jobs fairly easily due to their recognized skills traditionally filled the jobs. There was never a reason to develop a ladder for workers who did not need one. The inclusion of CHWs in SBHCs presents a different challenge that would need to be addressed, however. Similar to the CHW advocacy process, proponents of the role need to create the career ladder to combat the difficulties in career progression for people who lack the skills traditionally recognized to compete for promotion.

## **Case Studies**

Despite the aforementioned challenges, there are newly initiated efforts to integrate CHWs into a school setting. One is a MDPH-sponsored initiative, while the other is powered by Roca, Inc., a powerful community-based organization. Both groups recognize the power CHWs have in leading to positive health outcomes for marginalized populations and have faced the challenges to implementation head on because they believed in the importance of CHWs.

### *School-Based Health Center Community Health Worker Initiative*

In 2012 the MDPH required its new cycle of SBHC grantees to employ a CHW. Thirty-four SBHCs received state funds and now have to determine how best to implement the position into their organizational structure. Although MDPH's inclusion of the CHW position is a sign of institutional support, the Request for Response (RFR) language provided only a short CHW definition, its core competencies and its expected contribution to overall health without going into much detail on how the role would fit into the existing system of SBHCs. The RFR emphasizes CHWs' unique perspective and their standing as a member of the community that they serve. It can be reasoned from this explanation of the role that the intent is for CHWs to assist with outreach (including greater SBHC use and family involvement) as well as ensuring the SBHC achieves cultural competency for its users (MDPH 2012).

A supplemental appendix of the MDPH RFR provides more clarity around the CHW position. The supplemental document provides a framework for how the CHWs will be used, including both the beginning of a set of tasks for them and measures to ensure that there is a chance for personal fulfillment. It includes an in-depth job description as well as the expectations of the MDPH-funded agencies with regards to how CHWs should be implemented. The first task the SBHC must complete is the development of an Outreach Plan. Within this document the SBHC must delineate their outreach objectives, their target population with which they will work, and metrics to assess their outputs and outcomes of the SBHC.

The hosting health agency of the SBHC also needs to create an Internal Agency Plan for CHWs. The plan should provide their CHWs with material guidelines of their work, training and continuing education opportunities, supervision and support, networking opportunities, a good work environment, fair compensation, and full integration into the work team.

Lastly, there are two operational measures that the SBHC must accomplish. It is required to provide at least 28 hours of training per year per CHW with an intended goal of 42, and at least one hour of direct supervision to the CHW every two-week period (MDPH 2012).

The decision to include CHWs as a requirement of the funding structure of SBHCs comes from MACHW and MDPH exploring new linkages under which to expand statewide CHW use in non-traditional CHW sites (Holderby-Fox 2013). The initiative depended on the relationship forged between MACHW and the MDPH, and their common interest in expanding the scope of the CHW role. In addition to the effort to increase CHW recognition, the grant cycle provided

opportunities for synergy between the MDPH departments of school-based health care and community health workers (Hirsch 2013).

MDPH relied on the existing CHW infrastructure in the state that it helped build to promote the new initiative. MDPH asked the CM AHEC Outreach Worker Training Institute, to develop the curriculum for the customized trainings because CM AHEC had experience adapting its core competency training to a variety of settings. To craft the specialized curriculum, CM AHEC submitted a pre-survey to participants to inform the curriculum's design. The goal behind these efforts was to include as many people as possible to recognize the wide range of incoming skills that the CHW employees will enter the field with. Jena Adams, project specialist at CM AHEC, had previously worked with SBHCs in California and reviewed the curriculum before it was used to instruct CHWs from each of the grant-receiving schools.

The training courses took place on three Tuesdays during March and April in 2013. The courses were similar to the core competencies trainings in that they used strategies such as adult learning techniques and reflection to address the competencies for CHWs in a school setting. The competencies taught included an introduction to community health, communication assessment, interpersonal and communal awareness, cultural responsiveness, and documentation (Wilcox 2013). The importance of interpersonal boundaries and confidentiality concerns for CHWs working in a school setting was reinforced throughout (Adams 2013).

The first cohort of CHW training participants was comprised entirely of a variety of pre-existing SBHC employees. The majority of the participants were the front desk employees, or patient service coordinators, but there also were medical assistants as well as one social worker (Vega 2013). The diversity of participants allowed for more challenging and engaging conversation about what it means to include a CHW at a SBHC site. At the end of the three sessions, MDPH officially granted the participants a certificate of completion (which is distinct from the certification process that is still being developed by the Board of Certification).

Although the initiative is still within its infancy stages there are already lessons that can be gleaned from its progression thus far. Many people are excited about the idea of implementing the CHW role into a SBHC, but have questions about how it will work in practice (Hampton 2013). A common theme expressed was the desire for a greater sense of clarity and direction around the CHW position (Hampton 2013; Wilcox 2013). Due to the short existence of the program and the support that MDPH is giving the position, it is probable that this clarity is

forthcoming. The prevailing thought, though, is that the current understanding of the role is not clear enough to proceed.

Emily Wilcox (2013), nurse practitioner at Revere High School SBHC, expressed a common concern, “[I] hope there is substantial change in the CHW role, and it’s not the same people performing the same tasks with a different title. There are some tasks, like health system navigation and insurance access that SBHCs already handle to varying degrees of success. But there are other tasks, such as outreach – either within the school or out into the community – that could use a dedicated position to improve a SBHC’s impact.” This thought was shared by other school employees who expressed that just because a SBHC is located in a school does not mean that they have a strong connection to the rest of the school environment (Kidd 2013). CHWs at a SBHC could provide the missing piece to help achieve the connection between the health center and school.

Wanda Vega (2013), a patient service coordinator at the Chelsea High School and participant in the initial SBHC-CHW training, found the trainings helpful and appreciated the networking opportunities they provided. She was excited to take advantage of the training to apply her medical knowledge to working with youth. Other participants loved that it was interactive: they described the majority of time as speaking of their own experiences to generate consensus.

Vega shared similar thoughts to CHWs who have taken the regular core competencies training. Although she was familiar with some of the concepts covered in the course, she appreciated generating a common language and explicitly recognizing the skills necessary to be a CHW in a school setting. After reflecting she still felt that she needs to discuss her role with her supervisor. She expressed excitement at the new role and leadership that came with it, but was hesitant to act yet because she did not feel empowered and does not want to over step her boundaries and start doing someone else’s work (Vega 2013).

Others felt the program could be adapted in the training stages. Antonia Blinn (2013), a founding board member of MACHW, thinks the core competency trainings have identified the true skills needed to be an effective CHW. However, for the CHW positions in a SBHC, she believes the curriculum makers should adjust the trainings to focus on short-term and traumatic stressors that students have to deal with every day in a school setting that adults do not.

The CHW training initiative is in its beginning stages, but with the financial and structural support of MDPH, it is promising. Greater clarity of the CHW roles is needed as well as a strategy

to increase the pool of people from which SBHCs hire. The next case study highlights the some aspects that the MDPH could employ in their definition of a CHW in a SBHC context and how differences in integration can affect the position.

### *Chelsea High School's Pregnancy and Parenting Initiative*

In 2012 Roca, Inc., a Chelsea, Massachusetts community-based organization dedicated to working with neglected youth wrote a grant to MDPH to expand their Chelsea Teen Pregnancy and Parenting Initiative. The grant language included a halftime Guidance Counselor position through Chelsea Public Schools that included responsibilities traditionally associated with a CHW. Christine Kidd, a former employee of Roca, Inc., was hired to fill the position. Although her role is not a perfect match to the CHW position that MACHW, MDPH and others are developing in Massachusetts, it is similar enough to provide a different perspective as to how a CHW position could play out within a school setting.

The grant described the Guidance Counselor as a person who will work with in-school individual pregnant and parenting students to develop innovative credit accumulation options and access to flexible scheduling. They will also act as a liaison to represent the pregnant and parenting teens in student support team meetings to communicate high expectations to their success with principals and school and educational program staff...Finally, the Guidance Counselor...will serve as a liaison between Chelsea Public Schools and the Roca, Inc. Youth Workers. (Roca, Inc. 2012)

This work served as 50% of Kidd's responsibilities within the school, with the other half coming from her work as the 9<sup>th</sup> Grade Outreach Worker, which was paid for by Title G innovation funds from the No Child Left Behind Act. The greatest difference between Kidd's role and the MDPH initiative is that Kidd is an employee of the school, as opposed to the SBHC. This difference led to her to be primarily responsible for academic outcomes. However, her experience at Roca, Inc. led her to take a more comprehensive approach of support that included the social determinants of health, which meant that Kidd also supported her students outside of the classroom. This expanded view of support provides a model for how CHW work could look through the lens of a school.

Despite the use of the term "Guidance Counselor", Kidd's work could easily be described as that of a CHW; her tasks aligned with several of MDPH's defined roles of a CHW. Although she was directly responsible to the school administration, her involvement with the pregnant and parenting students meant she worked closely with Jordan Hampton, the lead nurse practitioner at the Chelsea High School SBHC. Kidd was responsible for building the individual and community

capacity of her students, providing culturally appropriate health information, providing and connecting students with the services they need, and advocating for the needs of both the individual students as well as the larger community of pregnant and parenting students.

Her position was not seen as a threat to guidance counselors because Chelsea High School had clearly demarcated roles for each set of interventionists. The high school employed a pyramid structure that defined roles for Kidd, the guidance counselors, and the social workers. Kidd was at the top of the pyramid and focused on universal interventions through her position as the 9<sup>th</sup> Grade Outreach Worker. The guidance counselors offered the next level of target interventions to smaller subsets of students. Finally, social workers are the providers of last resort and delivered intensive interventions to the smallest and most well-defined subgroup.

Kidd performed the first level of intervention for students and relied on collaboration with other staff members for support. If there was an issue she was not qualified to address, she referred the student down the pyramid to more intensive forms of support. Although she was not authorized to provide therapy, her relationship with students led to many of their interactions to be therapeutic (Valdez 2013). These experiences draw attention to the similarities between Kidd and CHWs; she had the soft skills and know-how to ask the right questions to help students navigate the system and to advocate for themselves.

Kidd accomplished these tasks through several initiatives she championed at Chelsea High School. She described one of her most important roles as an advocate – both for young adults as students and as health clients. In addition to obtaining make-up work for when pregnant and parenting students took leave, she also coordinated monthly support groups with Hampton for them at school. Additionally, she implemented systems to ensure completion of tasks that were previously overlooked.

Although some of her tasks were already handled by school employees and required a shuffling of expectations, most were either done inefficiently or overlooked altogether (Hampton 2013). For example, Kidd collaborated with the school's staff to institutionalize the pregnant leave program form (which was already written before she had joined the staff), and made sure both students and teachers understood what was expected from both of them before the student took their temporary leave.

Kidd (2013) also characterized her work as that of mediation and navigation between different bureaucratic institutions and sectors of school and community systems: “there are a lot



of soft skills needed to navigate the health and education systems that our students were just not equipped with to handle completely on their own.”

In discussion Kidd highlighted several components of her job and her performance that made her successful in the role. First, she requested flexible hours for her position. Although this made her unable to collect overtime payment like other school employees, she felt it was more appropriate to have a timetable that was not directly tied to the school schedule (Kidd 2013). This flexible schedule allowed Kidd to not only work with students outside of class, but also provided her built-in time to form coalitions with Roca, Inc. and other community-based organizations. Although working with external partners was always a part of the original grant, Kidd (2013) characterized her intentional decision on where to work as a fundamental difference between schools and community-based outreach work: “the school setting is good for delivery of services for probably around 75% of kids; the school works to bring them in. However, there are others that you have to reach out for. You have to have the mentality that you will bring the support and services to them.” This is the power that the CHW position in a school can have. By acting as a component of the school CHWs would have access to a large group of students that are usually neglected for health issues. However, it is the role’s influence as a social connector that can fill in the gaps that the school cannot.

In addition to working outside the school’s walls, Kidd also had increased autonomy within the school due to her strong interpersonal relationships. Through Kidd’s previous work with Roca, Inc. she had developed relationships with the not only Chelsea High School staff, but also the superintendent and assistant superintendent of Chelsea Public Schools. These relationships allowed her to push harder in advocacy for her students than possibly another person without her political capital could have (Hampton 2013). In addition to relationships with her supervisors, Kidd also had cultivated strong bonds with other employees at the school. She has a strong relationship with Hampton; they talk on average twice a day to exchange information and referrals to develop health and academic plans for their students. Additionally, her dual role of Guidance Counselor and 9<sup>th</sup> Grade Outreach Worker has balanced her responsibilities so that she is not perceived in the school as being pigeonholed into one narrowly defined silo. She credits this dual purpose with helping her to foster strong relationships with teachers, staff, and other support roles like social workers and the school nurse (Kidd 2013).

Although the program has been running for less than two years at the time of this writing, the early returns have the potential to open the eyes of policymakers. By the end of the first year,

the dropout rate of pregnant and parenting students decreased by 27%, from 37% to 27%. This figure works out to about five more students that are still in school and on the path to graduation, which the Massachusetts Alliance on Teen Pregnancy estimates could save the state a total of \$2.3 million over the lifetime of the five students, not to mention the increased outcomes for the students themselves (Massachusetts Alliance on Teen Pregnancy 2012). Furthermore, all pregnant and parenting students not only had access to health care for themselves and their child, but also knew how to advocate for their needs if they were not being met. In its second year, 16% of the pregnant and parenting students are on the Chelsea High School honor roll, a figure greater than that of the overall student body (Kidd 2013). Finally, due to the position's success, Chelsea Public Schools has decided to write the position into the district's budget going forward meaning it will no longer be reliant on temporary grant funding to exist.

## CHAPTER 5: CONCLUSIONS

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As the case studies demonstrated, a few actors in Massachusetts are starting to incorporate CHWs into SBHCs. However, there are still a variety of challenges that the position would face if CHWs were implemented in schools across the state. The first challenge stems from the novelty of the position in a school setting. This first wave of employees would not only be filling a position that would most likely be new in the school context, but they would be creating pathways for future CHWs to follow. There would be a great deal of pressure, both known and unknown, that the CHWs would face in order to get the position “right,” and it is important that the CHW receives training around these obstacles and how to develop a proactive response in advance.

In addition to the challenge of being a trailblazer, there are additional obstacles that need to be addressed to make the position work in a school. The first difference to note is how the CHW position would vary based on the employer.

### **Employer Differences**

As the case studies demonstrated, the employer of the CHW matters. Each employer, school or SBHC, has its own challenges and opportunities that shift the role and responsibilities of the CHW. The most important differences that would influence the role are issues of payment and professional development, job language, and access to information.

The question of who funds the CHW position and provides its professional development will have to be immediately addressed by each employer. Although both public schools and health care providers are under attack to decrease their spending, building the position into a school or SBHC health budget has different implications for the long-term viability of the role. If the school health team at a SBHC could be incorporated into a medical team, there is the possibility of economic sustainability.

One way to acquire funding is for the health partner of the SBHC to decide that CHWs are an essential component of a health team and fund the position as a part of their organizational structure. Alternatively, a SBHC could gain the title of Accountable Care Organization (or another similar health team), and it could include CHWs through the global payments structure. Classifying a SBHC as a health team makes sense on several levels: the population under their

purview is easily defined (the users of the school and their families), the SBHC is easily located within the community at the school, and the SBHC promotes prevention strategies as well as increasing primary care.

On the other hand, if the CHW is employed through the school, there is a different set of obstacles to funding that the position will face. One avenue for payment is through disease-specific grants, but that would expose the role to the same challenges that CHWs are struggling to avoid. An additional path involves advocacy at the school district level to include the CHW position as an outreach liaison between the community and the school. The emphasis on community outreach highlights the second obstacle to a successful implementation – the language of the title.

It may be easier to sell a school or a district on the idea of a Community Outreach Worker, a role that many schools already employ, than a CHW. The inclusion of “health” in the title Community Health Worker may be too foreign for a school’s decision-making board to include (Hampton 2013). While this potential obstacle may seem like a small matter of semantics, there actually is quite a bit of weight behind this decision. “Health” in the context of a school-employed CHW would have to go beyond health care access and include the social determinants of health. The CHW position would consider not only a student’s physical and mental condition, but also the structural obstacles that students face in their school interactions. If the school board hiring staff does not understand the idea of connecting health through all aspects of an intervention, the connection between “health” and school will not be made, and the CHW position would fail. One way around this obstacle could be to frame the position in terms of “academic health” and discuss what it means for a student to be academically healthy (Kidd 2013).

Access to resources will also be an important factor in how the role develops. A CHW employed through a SBHC not only has access to students’ medical records, but also has access to the resources of the partnering health entity (Hampton 2013). This access provides a wealth of information and services that could be deployed in the school to address various needs or strengthen existing assets. A CHW hired through the school could be granted access to the students’ academic performance and the academic support services the school and school district provide. Regardless of the employer, the CHW would only receive access to a portion of the information and thus they would need to coordinate between both the school and the health center.

The differences in access could also lead to difficulties in information exchange, which underscores the importance of relationships between school personnel. Kidd, in her role as a school employee, had more experience working with a wide variety of school staff, including teachers, administration, and other support staff members. Although not all relationships were deep in nature, she did have a passing knowledge of most people on campus. SBHC staff, on the other hand, have a different level of interaction with the school staff. Hampton, in her role as head of the Chelsea SBHC, had very deep relationships with the academic support staff including social workers and guidance counselors, but more shallow interactions with school staff (Hampton 2013). Despite these natural alignments of interactions, it is important for the CHW employee to be comfortable bridging any gaps that the position presents.

## **Position Recommendations**

Despite the differences in employer, there is an opportunity and a necessity to connect CHWs with SBHCs. As Balcazar et al. (2011) mention, the role should address the social determinants of health to fight the isolation that marginalized people feel from mainstream resources. In addition to broader recommendations presented for CHWs earlier in this argument, the recommendations for CHWs in a school comprise two sets of proposals: one for the employees who fill the role, and one for the work environment to enable the CHW job to be successful.

### *Community Health Worker Recommendations*

**Outreach is key.** Almost everyone interviewed agreed that using a CHW in an outreach role is a natural extension of the role's abilities. What is interesting, though, is that there are two levels of outreach that the CHW should be responsible for: one for the external community and one that faces inward towards the school.

CHWs excel because of their relationship and understanding of a particular community context, so it makes sense for them to handle community outreach with the SBHC. Despite the good work being done within SBHCs, some employees felt that there still were many students and parents who were unaware that the SBHC existed (Wilcox 2013). CHWs could host orientation events to the SBHC at the beginning of each school year and could advertise services at local community institutions that serve students. Additionally, CHWs should also have parent outreach as one of their core components. Using health (as opposed to academics) as the draw to

the school, CHWs could help alleviate the fear and anxiety that some parents feel in engaging the school (Carpenter 2013). CHWs can rely on their previous training and expertise to help parents navigate both the health and school systems.

The need to build internal connections within the school is just as important as the external outreach. The presence of a SBHC is not a guarantee of collaboration between the school and the SBHC. Therefore, part of the CHW job should involve the education of other school staff about the existence of the SBHC and proactive planning on how the two entities can work together effectively.

These interactions could play out through dedicated time in faculty meetings for the CHW to provide status updates on the SBHC, having the CHW join faculty during common planning to discuss specific students, or speaking with administration regarding any school-wide health trends they are noticing. This need for integration of CHWs into the school schedule highlights the challenges to finding time for interventions. School administrators will need to support collaborative scheduling for it to work.

Although this mediating work would be in a new setting, it is not that different from what CHWs already do. CHWs are adept at relating information between different sectors; they are successful because they are able to translate information from medical institutions to citizens and vice versa. The only difference now is that CHWs need to learn the language of schools, in addition to their knowledge of medical systems.

**Focus on organizing and advocacy around the social determinants of health.** The CHW outreach work with the school should include a focus on the social determinants of health and how they affect the students at the school. An emphasis on a more comprehensive view of health creates an easier path to collaboration with school staff. The CHW can frame health issues as ones that directly affect teachers through their students' performance. One of the end goals of the CHW role in a school should be to build the capacity of their clients to advocate for their needs.

**Maintain traditional aspects of CHW work.** This paper has examined the need to expand the role and scope of CHWs, potentially at the disregard of one of the position's traditional missions: increasing health care access. The role, however, should continue services like health insurance enrollment programs. Approximately 12% of Massachusetts children are not enrolled in insurance programs when they first enter the SBHC and they will need assistance in becoming insured (Blinn 2013). Students and their families will still need assistance navigating a

health care system that is not designed to fit the needs of low-income families. These facts suggest that even as the role shifts to fit its new school setting, it will need to retain its traditional CHW roots to be successful.

### *Enabling Environment Recommendations*

**Define a career ladder.** CHWs and the SBHC setting share a similarity in that there is not a well-defined path for advancement. Instead of treating this obstacle as a dead end, however, more work is needed to determine what an appropriate promotion would look like specifically for a CHW in a school. CHWs should start with the basic expectations of a CHW (providing cultural mediation, basic screening services, and building knowledge and capacity, among other duties), and then can add more tasks as they demonstrate proficiency in their current role. The extra responsibilities could include any number of specialization pathways to advancement, including leading or supervising a health-focused youth group, designing school-wide interventions or writing grants to obtain funding to expand their scope of work.

At the same time, the staffing body should provide ample professional development opportunities for the CHW in the school. These sessions should have the dual focus of improving CHWs in their current role, while preparing them for the next position if they desire to leave.

**Keep the position flexible in action, but well defined in protocol.** Kidd was able to accomplish much in her role partly because of the flexible schedule she created for herself. The assortment of responsibilities and people that the proposed CHW role will have to interact with means it needs to be adaptable to a variety of schedules, and not strictly set to the school timetable. The position could opt for a fixed schedule or a variable one that is set each week as needed.

A flexible position means CHWs will also have to set their own limits and boundaries to the job. Due to CHWs' work in underserved areas, there often is a motivation to provide as much help as possible, sometimes to the peril of the CHW themselves (Hogarty 2013). If a flexible schedule is chosen, then a supervisor needs to ensure that CHWs are fulfilling their duties outside of the school as well as finding a balance to maintain their drive and passion in the role.

The flexibility that the role enjoys, however, needs to be well bounded by the definition of the position. If the expectations of the role are clear, then there will be fewer antagonistic battles over turf. The boundaries are not only to protect the CHW role, but all positions affected. For

example, clear delineation of roles will protect guidance counselors from school districts opting to cut costs and filling their positions with unqualified CHWs.

**Hire CHWs from the community to be served.** For a variety of reasons, SBHCs should seek to employ a member from the surrounding community to fill the CHW role. First, someone from the community has a greater chance of understanding the everyday life experiences of the clients they will work with. This has the potential to provide credibility for both the CHW position and the person fulfilling the role. Hiring from the community will also help to develop the position as a legitimate career option for students. For students who are interested in community health, the presence of a CHW who shares their background can be inspirational as they seek to define their own future career aspirations. Finally, the integration of a CHW in a school will lead students to recognize CHWs as a given and indispensable member to any health team, much like how we view doctors and nurses today.

This recommendation is easier said than done, and, as such, will need a dedicated strategy in order to attract and cultivate the people who would best fill the role. SBHCs and schools should work with community organizations to identify leaders from the community and partner with the community-based training sites to provide the training.

## Implications

While the PPACA pushes for community-based care, there is not widespread agreement over what the term means. Integrating CHWs in schools is one proposed solution to the problem, but it is far from the only possible one. Visions of community-based care depend greatly on specific contexts and are difficult to generalize.

There are other visions for community-based care, although each emphasizes the community in a different way. Some private venture capitalist firms support an expansion of the CHW workforce – but at the expense of nurses in an effort to drive down costs for health providers. CVS offers MinuteClinics, clinics based in retail settings that take advantage of their geographic convenience while striving to be a primary care provider to a limited number of medical afflictions. While MinuteClinics increase health care access, what is less certain is how much they change greater concerns of population health. In fact, in some cases they serve to further fragment the health care system because there are doubts regarding how continuous the care is with other forms of primary care (Blinn 2013). These examples are not exhaustive, but serve to highlight two of the potentially dangerous interpretations of community-based care.



Conversely, there are some definitions of community-based care that are more aligned with the proposal of this paper – definitions that create a place for teamwork and shared responsibility as opposed to competition and fragmentation. One such entity is Commonwealth Care Alliance (CCA), a non-profit care delivery system based out of Massachusetts. Similar to Chelsea High School’s form of interventions, CCA intentionally flipped the traditional direction of interaction; CHWs are the first actors in the system, and a physician is only seen after a patient is referred to them.

CCA has been successful in the two cultural reforms needed for their vision of community-based care: they have placed the patient at the center of care and have increased the amount of respect and trust between all levels of health professionals. The services provided to patients are wide-ranging and even include transportation to and from church to decrease social isolation (Porter and Baron 2008). Their success is also predicated on a restructuring of health professionals. According to one CCA physician, “I am not the head of the primary care team, the nurses are” (Porter and Baron 2008, p. 12). Although the position is different, the sentiment is the same: different levels of health workers working together to improve population health. The objective is the care of the community. It is not to minimize costs or maximize fee-for-service revenues.

The design of a new CHW position begs the question of how do planners intersect with the process of workforce development and defining community-based care. As previously mentioned, the details of PPACA’s implementation are ripe for creativity, but the potential for new thinking only exists if new people are part of the planning process. Planners should enter the field to prevent against “corrupt” visions of community-based care. Rather than avoiding the institutions, planners should engage them to convince them of their responsibility to quite literally share the wealth. Planners can assemble the community to start the connections that become the basis for the visioning group. Once the conversation starts, it can go any number of directions. The community could decide to inspect its housing stock to see if there is a correlation with illnesses. Or instead they could opt for greater safety so that people can be outside more. Whatever the final choice may be, the important part is that residents come together to have the conversation. This is what the CHW role should develop into, but it may need planners who can see the bigger picture initially to get the project underway.

The new vision of a CHW role shows that the objective for an economically healthy area is not the number of jobs produced, but rather the quality and meaning people derive from their

work. Planners can listen to the communities' opportunities and needs, and work upwards to connect it to greater economic movements to keep wealth and interactions local.

My opinion on community-based practices places the care back in the school. Many public schools have lost their connection as a social center to the neighborhood in which they are located. The schools' goal should be to improve academic outcomes, and to again be a pillar of the community. Medical Director of Baystate Brightwood Health Jeff Scavron (2013) corroborates, "nothing is more important than having the people of the neighborhood have confidence in their school." Although it will be a long and uneasy process, this confidence can be rebuilt. It involves a more comprehensive view of education, health, safety and personalized recognition – all qualities that can be delivered through a school if its vision is creative and complex. It can be rebuilt through community engagement and demonstrated results. Hiring the CHW position from the community can be a good first step towards both goals.

This stance calls for greater research on CHWs nationwide. A limitation of this paper is the Massachusetts focus. Although the commonwealth has a friendly relationship towards CHWs, it is far from the only state that promotes the position. More research is needed to make the connections between different states' views and actions towards CHWs. This research should continue to expand on the work to validate CHW and SBHC effectiveness to convince policymakers of their importance, but it should also take a more qualitative look at both fields. It should seek to answer how do both entities' practices differ by context, and more importantly, why? The reasons why CHWs and SBHCs have gained the respect of the medical profession in some circumstances is the missing link to generate a winning political strategy. The motivations for acceptance of the positions can then be adapted to fit various community environments across the country. The creativity and flexibility derived from these solutions will provide greater clarity of what community-based care means in different contexts across the country.

## REFERENCES

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- "3.0: A New Operating System for Public Health." 2012. *UCLA Public Health*. Retrieved from: <http://ph.ucla.edu/sites/default/files/article-downloads/fsph.nov2012.health3.o.pdf>.
- Abramovitz, Mimi. 1998. "Social work and social reform: An arena of struggle." *Social Work* 43 (6) (November): 512-526.
- Adams, Jena. 2013. Project Specialist at CM AHEC. Personal Communication.
- Alvillar, Monica, Jennie Quinlan, Carl H. Rush M.R.P., and Donald J. Dudley M.D. 2011. "Recommendations for Developing and Sustaining Community Health Workers." *Journal of Health Care for the Poor and Underserved* 22 (3): 745-750.
- Anthony, Stephanie, Rebekah Gowler, Gail Hirsch, and Geoff Wilkinson. 2009. "Community Health Workers in Massachusetts: Improving Health Care and Public Health." Massachusetts Department of Public Health Community Health Worker Advisory Council.
- Appel, Dave. 2012. Director of Montefiore School Health Program. Personal Communication.
- Balcazar, Hector, E. Lee Rosenthal, J. Nell Brownstein, Carl H. Rush, Sergio Matos, and Lorenza Hernandez. 2011. "Community Health Workers Can Be a Public Health Force for Change in the United States: Three Actions for a New Paradigm." *American Journal of Public Health* 101 (12) (December): 2199-203.
- Ballester, Gail. 2005. "Community Health Workers: Essential to Improving Health in Massachusetts." Retrieved from: [http://www.raconline.org/communityhealth/chw/files/massachusetts\\_survey2005.pdf](http://www.raconline.org/communityhealth/chw/files/massachusetts_survey2005.pdf).
- Bedell, Jane. 2013. Assistant Commissioner & Medical Director Bronx District Public Health Office NYC Dept of Health & Mental Hygiene. Personal Communication.
- Blinn, Antonia. 2013. Program Director, Massachusetts Association for School-Based Health Care. Personal Communication.
- Calfee, Carol, Frank Wittwer and Mimi Meredith. 1998. *Building a Full-Service School : A Step-by-Step Guide*. San Francisco: Jossey-Bass.
- Carpenter, Nancy. 2013. Executive Director Massachusetts Association for School-Based Health Care. Personal Communication.
- Carpenter, Nancy, and Antonia Blinn. 2013. "A Briefing Document: Recommendations to Sustain, Promote and Grow Massachusetts School-Based Health Centers in the Era of Health Reform". Massachusetts Association for School-Based Health Care.
- Clayton, Serena, Teresa Chin, Samantha Blackburn, and Cecilia Echeverria. 2010. "Different Setting, Different Care: Integrating Prevention and Clinical Care in School-Based Health Centers." *American Journal of Public Health* 100 (9) (September): 1592-6.

- Dewey, John. 1978. *The Middle Works of John Dewey, Volume 6, 1899-1924: Journal articles, book reviews, miscellany in the 1910-1911 period, and How We Think (Collected Works of John Dewey)*. Carbondale: Southern Illinois University Press.
- Dryfoos, Joy. 1998. "School-based health centers in the context of education reform." *The Journal of School Health*. 68 (10) (December): 404-408.
- . 2002. "Full-Service Community Schools: Creating New Institutions." *The Phi Delta Kappa* 83 (5) (January): 393-399.
- Elmont, Maxine. 2013. Human Services Program Coordinator, Massbay Community College. Personal Communication.
- Epstein, William M. 1992. "Professionalization of Social Work: The American Experience." *Social Science Journal* 29 (2) (April): 153.
- Family Strengthening Policy Center. 2006. *Community Health Workers: Closing Gaps in Families' Health Resources. Policy Brief No. 14*. Retrieved from: <http://www.nationalassembly.org/fspc/documents/PolicyBriefs/Brief14.pdf>.
- Fedder, DO, RJ Chang, S Curry and G Nichols. 2003. "The effectiveness of a community health worker outreach program on healthcare utilization of west Baltimore City Medicaid patients with diabetes, with or without hypertension." *Ethnicity and Disease* 13 (1) (Winter): 22-27.
- Gall, G, ME Pagano, MS Desmond, JM Perrin and JM Murphy. 2000. "Utility of psychosocial screening at a school-based health center." *Journal of School Health*. 70:292-298.
- Goodwin, Kristine and Laura Tobler. 2008. *Community Health Workers: Expanding the Scope of the Health Care Delivery System*. Retrieved from: <http://www.ncsl.org/print/health/chwbrief.pdf>.
- Gorodetsky, Tatyana. 2013. Director, Outreach Worker Training Institute at CM AHEC. Personal Communication.
- Guo, Jeff J., Terrance J. Wade, Wei Pan, and Kathryn N. Keller. 2010. "School-Based Health Centers: Cost-Benefit Analysis and Impact on Health Care Disparities." *American Journal of Public Health* 100 (9) (September): 1617-23.
- Hampton, Jordan. 2013. Nurse Practitioner, Chelsea SBHC. Personal Communication.
- Hirsch, Gail. 2013. Director, Office of Community Health Workers, Division of Primary Care and Health Access at MDPH. Personal Communication.
- Hogarty, Peggy. 2013. Program Director, Community Health Education Center, Boston Public Health Commission. Personal Communication.
- Holderby-Fox, Lisa Renee. 2013. Executive Director, Massachusetts Association of Community Health Workers. Personal Communication.
- Jacobs, Lawrence R. and Theda Skocpol. 2012. *Health Care Reform and American Politics: What Everyone Needs to Know*. Oxford: Oxford University Press.

- Kaplan, David W., Ned B. Calonge, Bruce P. Guernsey and Maureen B. Hanrahan. 1998. "Managed care and school-based health centers: use of health services." *Archives of Pediatrics and Adolescent Medicine*. 152 (1) (January): 25-33.
- Kidd, Christine. 2013. District Outreach Worker, Chelsea High School. Personal Communication.
- Kisker EE, RS Brown. 1996. "Do school-based health centers improve adolescents' access to health care, health status and risk-taking behavior?" *J Adolsec Health*. 18:335-343.
- Krantz, MJ, SM Coronel, EM Whitley, R Dale, J Yost and RO Estacio. 2013. "Effectiveness of a community health worker cardiovascular risk reduction program in public health and health care settings." *American Journal of Public Health* 103 (1) (January): 19-27.
- Lear, Julia G. 2007. "Health at School: A Hidden Health Care System Emerges from the Shadows." *Health Affairs* 26 (2) (March/April): 409-419.
- Mason, Terry, Geoffrey W. Wilkinson, Angela Nannini, Cindy Marti Martin, Durrell J. Fox, and Gail Hirsch. 2011. "Winning Policy Change to Promote Community Health Workers: Lessons From Massachusetts in The Health Reform Era." *American Journal of Public Health* 101 (12) (December): 2211-6.
- Martinez, Jacqueline, Marguerite Ro, Normandy William Villa, Wayne Powell, and James R. Knickman. 2011. "Transforming the Delivery of Care in the Post-Health Reform Era: What Role Will Community Health Workers Play?" *American Journal of Public Health* 101 (12) (December): e1-5.
- MACHW (Massachusetts Association of Community Health Workers). 2008a. "Policy Brief Part 2: On Credentialing." Retrieved from: <http://www.machw.org/documents/policybriefIIfinal.pdf>.
- MACHW (Massachusetts Association of Community Health Workers). 2008b. "Policy Brief: Part 3 of 3." Retrieved from: <http://www.machw.org/documents/policybriefIII.trainingprogram.pdf>.
- MACHW (Massachusetts Association of Community Health Workers). "Who Are CHWs?" Accessed February 20, 2013. [http://www.machw.org/index.php?option=com\\_content&view=article&id=25&Itemid=131](http://www.machw.org/index.php?option=com_content&view=article&id=25&Itemid=131).
- Massachusetts Alliance on Teen Pregnancy. 2012. "Not the Exception: Making Teen Parent Success the Rule. A Case Study on the Chelsea High School Expectant and Parenting Student Liaison". Retrieved from: <http://www.massteenpregnancy.org/sites/default/files/MATP-Chelsea-Report-2012-12.pdf>.
- McCord MY, JD Klein, JM Foy and K Fothergill. 1993. "School-based clinic use and school performance." *Journal Adolescent Health*. 14:91-98.
- McDonough, John E. 2012. *Inside National Health Reform*. Reprint: University of California Press.
- McNall, Miles A., Lauren F. Lichty, and Brian Mavis. 2010. "The Impact of School-Based Health Centers on the Health Outcomes of Middle School and High School Students." *American Journal of Public Health* 100 (9) (September): 1604-10.

- MDPH (Massachusetts Department of Public Health). 2012. *Request for Response for School-Based Health Centers*.
- NASBHC Census. 2008. *School-Based Health Centers: National Census School Year 2007-2008*. Retrieved from: <http://ww2.nasbhc.org/NASBHCCensusReport07-08.pdf>.
- Noble, DJ, and LP Casalino. 2013. "Can Accountable Care Organizations Improve Population Health?: Should They Try?" *JAMA* 309 (11) (March 20): 1119-1120. doi:10.1001/jama.2013.592.
- Osterman, Paul. 2013. Professor of Human Resources and Management at the Sloan School of Management. Personal Communication.
- Patient Protection and Affordable Care Act. Pub. L. No. 111-148 2010.
- Pérez, Leda M., PhD and Jacqueline Martinez. 2008. "Community Health Workers: Social Justice and Policy Advocates for Community Health and Well-being." *American Journal of Public Health* 98 (1): 11-4. <http://search.proquest.com/docview/215094192?accountid=12492>.
- "Physician Shortages to Worsen Without Increases in Residency Training." 2010. Association of American Medical Colleges. Retrieved from: <https://www.aamc.org/download/150584/data/>.
- Porter, Michael, and Jennifer Baron. 2008. "Commonwealth Care Alliance: Elderly and Disabled Care". Harvard Business School.
- Rieto, Barbara A., James W. Button and Kenneth D. Wald. 2000. "Politics and the success of school-based health centers." *The Journal of School Health*. 70 (8) (October): 331-337.
- Ro, Marguerite J., Henrie M. Treadwell and Mary Northridge. 2003. *Community Health Workers and Community Voices: Promoting Good Health*. Retrieved from: [http://www.communityvoices.org/uploads/chw\\_final\\_00108\\_00042.pdf](http://www.communityvoices.org/uploads/chw_final_00108_00042.pdf)
- Roca, Inc. 2012. Chelsea Teen Pregnancy and Parenting Initiative Grant Proposal.
- Rosenthal, E. Lee. 1998. "Community Health Advisors - A Career in Development." In *Summary of the National Community Health Advisor Study*, ed. Erna Koch.
- Rosenthal, E. Lee, J. Nell Brownstein, Carl H. Rush, Gail R. Hirsch, Anne M. Willaert, Jacqueline R. Scott, Lisa R. Holderby, and Durrell J. Fox. 2010. "Community Health Workers: Part Of The Solution." *Health Affairs* 29 (7) (July): 1338-42.
- Scavron, Jeff. 2013. Medical Director of Baystate Brightwood Health. Personal Communication.
- Smyth, Katya Fels and Lisbeth B. Schorr. 2009. "A Lot to Lose: A Call to Rethink What Constitutes "Evidence" in Finding Social Interventions that Work." Malcolm Wiener Center for Social Policy Working Paper Series. Available at: <http://www.hks.harvard.edu/ocpa/pdf/A%20Lot%20to%20Lose%20final.pdf>.
- Spencer, Michael S, Kathryn E Gunter and Gloria Palmisano. 2010. "Community Health Workers and Their Value to Social Work." *Social Work* 55 (2) (April): 169-177.

- Swider, Susan M. and Amy Valukas. 2004. "Options for Sustaining School-Based Health Centers." *The Journal of School Health* 74 (4): 115-8.  
<http://search.proquest.com/docview/215673842?accountid=12492>.
- U.S. Dept of HHS. 2007. *Community Health Worker National Workforce Study*.
- Valdez, Kelli. 2013. 9th Grade Leader - Peer Learning Communities, Chelsea High School. Personal Communication.
- Vega, Wanda. 2013. Patient Services Coordinator, Chelsea SBHC. Personal Communication.
- Wade, Terrance J. and Jeff Jianfei Guo. 2010. "Linking Improvements in Health-Related Quality of Life to Reductions in Medicaid Costs among Students Who use School-Based Health Centers." *American Journal of Public Health* 100 (9): 1611-6.  
<http://search.proquest.com/docview/747120243?accountid=12492>.
- Warren C and C Fancsali. 2000. *New Jersey School-Based Youth Services Program: Final Report*. New York: Academy for Educational Development.
- Webber MO, KE Carpiniello, T Oruwariye, Y Lo, WB Burton, DK Appel. 2003. "Burden of asthma in inner-city elementary schoolchildren." *Arch Pediatr Adolesc Med*. 157:125-159.
- Whitaker, Joan. 2013. Director of Health Services, Boston ABCD. Personal Communication.
- Whitley, Elizabeth M., Rachael M. Everhart and Richard A. Wright. 2006. "Measuring Return on Investment of Outreach by Community Health Workers." *Journal of Health Care for the Poor and Underserved* 17, no. 1: 6-15.
- Wilcox, Emily. 2013. Nurse Practitioner, Revere SBHC. Personal Communication.
- Williams K. 2003. *Final Evaluation of the 2002-2003 Youth and Family Centers Program*. Dallas, TX: Dallas Independent School District, Division of Evaluation and Accountability.