INVESTING IN THE FUTURE HEALTH CARE WORKFORCE

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INTRODUCTION

As the U.S. population grows and ages and more Americans gain access to insurance through the Patient Protection and Affordable Care Act (ACA), demand for health care services and the personnel to provide those services will continue to rise.[1,2] However, experts have been predicting ongoing workforce shortages in the health care professions,[3,4] and many Americans may find it difficult to access needed health care services in the future. Health plan foundations improve access to health care for the residents of their respective market areas through community investments and are currently playing a critical role in bolstering the U.S. health care workforce.

In this issue brief we summarize current factors impacting the health care workforce in the U.S. and highlight health plan foundation efforts to ensure that a stable number of physicians and other health care professionals continue to practice in their communities. We conclude by examining opportunities for foundations to have a real impact on the supply of health care providers and access to care in the years to come.

STATE OF THE HEALTH CARE WORKFORCE

Changing population demographics in the U.S. coupled with a shift in the quantity, type and geographic location of providers making up the health care workforce have contributed to rising disparities in access to health care providers for many Americans. In this section we review factors influencing the outlook for the health care workforce.

Current and Future Shortages

The U.S. is currently facing a shortage of many types of health care workers and research suggests the demand for physician services will increase considerably faster than supply in the years ahead.[5,6] Demand for physician services is projected to increase more than 26 percent by 2025 based solely on the increasing size and age of the population, with the majority of the projected increase attributable to the anticipated growth of the population.[7] Additionally, the number of Americans living with chronic disease is escalating, further compounding the increased need for health services.[8] Likewise, demand for nursing services is expected to increase in the years to come, and many schools of nursing are struggling to increase enrollment levels.[9] While the total number of registered nurses in the workforce has increased in recent years, experts project a shortage of 260,000 registered nurses by 2025.[10] Across the health professions, there is particular concern about shortages of personnel who can provide primary care, chronic/long-term care, behavioral health, and oral health.[11,12,13]

Geographic Maldistribution of Providers

Even in professions having an adequate supply of health care workers, access can still be a problem in many parts of the country because providers are concentrated in some areas and too widely dispersed in others.[14] A recent report by the Robert Wood Johnson Foundation suggests that the distribution of health care providers may be more critical to health care access than the number of providers in a state.[15] Rural communities and inner city neighborhoods are most at risk for provider maldistribution. For example, these areas have fewer primary care physicians per capita than other urban and suburban areas. At the same time, these communities generally have higher proportions of low-income and minority residents, who often have the greatest need to see primary care providers.[16]

Provider Diversity

The U.S. population is becoming increasingly diverse with racial minority populations growing at a faster rate than non-Hispanic whites.[17] Furthermore, minority populations generally comprise the largest share of residents in medically underserved areas.[18] Research shows that people are more comfortable and report greater satisfaction with health care providers who are of the same race,[19] and minority health professionals are more likely to deliver health care in underserved communities.[20] Both factors imply a need to increase the supply of minority health care providers as a way to improve access to care for minority and underserved populations. Despite recent increases in their medical school graduation rates, however, minorities are still underrepresented among medical school graduates.[21] Therefore, ongoing attention to ensure cultural and racial diversity within the health care workforce remains important.

Impact of the Affordable Care Act

While it remains uncertain how many states will proceed with the optional Medicaid expansion, with full implementation of all of the insurance expansion provisions of the ACA, an additional 32 million men, women and children will be eligible for health insurance coverage.[22] This is likely to result in increased demand for health care services and place added pressure on an already strained workforce. Recent estimates from the Department of Health and Human Services indicate that 1.1 million young women have already gained health insurance coverage through the ACA, and another 13.5 million women will gain access to insurance coverage through other provisions of the ACA by 2016.[23] Because women utilize more health care services than men[24] and are likely to have more than one regular provider (typically a primary care physician and an OB/GYN), this increase in their insurance coverage may result in amplified demand for primary care and some specialties.[25] The rate of uninsured children is also expected to decrease by 40 percent upon full implementation of the ACA,[26] which could result in increased demand for pediatric services. African Americans, Asian Americans and Pacific Islanders, and Latinos are among the minority populations who are underinsured but are expected to gain greater coverage by 2016.[27,28,29] Research suggests that in general many of the newly eligible populations, including women, children and minorities, do not have a usual source of care currently and will likely seek primary care services once they obtain health insurance coverage.[30]

HEALTH PLAN FOUNDATION EFFORTS

As important grantmakers in their respective markets, health plan foundations make targeted investments in programs, research and community efforts for the benefit of the health and well-being of all residents in their areas. In this section we share information on several health plan foundation grant programs and initiatives designed to improve the health care workforce in their respective states and communities.

Studying Statewide Workforce Capacity

In order to understand the scope and nature of current workforce shortages, foundations are supporting surveys of workforce capacity in their states. The Blue & You Foundation for a Healthier Arkansas is funding the Arkansas Center for Health Improvement (ACHI) to conduct a 12-month research study to determine primary and specialty care capacity, understand consumer access needs, investigate use of physician extenders, and propose strategies to address anticipated workforce shortages. To assess workforce capacity, ACHI will survey physicians and office managers to collect information on their locations, hours, services provided, and use of physician extenders (including nurses, advanced practice nurses, and physician assistants). They will also forecast the demand for and supply of primary care providers by county through 2020 to identify areas of potential shortages. ACHI will assess the consumer perspective by conducting fifteen focus groups across the state to collect information on the medical services consumers use routinely, the availability of primary care providers, wait times, and use of the emergency room due to access problems. In addition, ACHI will examine advanced practice nurse and physician assistant scope of practice laws to determine what services these professionals are permitted to provide in the state and will evaluate any impediments to the use of physician extenders, including financing mechanisms that prohibit reimbursement for their services. Finally, ACHI will develop strategies to expand access in underserved areas, including possible enhancement of the scope of practice laws. Aiming for

a final report that will be perceived as credible by the medical community, the report will include a discussion of the viability and pitfalls of each recommended strategy, as well as alternative strategies and any dissenting opinions from within the medical community. The findings and recommendations will be presented at a statewide leadership summit in the fall of 2012 for discussion and possible future legislative action.

Blue Cross Blue Shield of Massachusetts (BCBSMA) Foundation is supporting the state's Board of Registration in Medicine to analyze statewide workforce capacity by incorporating a new survey into the online licensing application required of all practicing physicians. The survey, administered on a biennial basis, will yield data on the number of full-time equivalent physicians in each specialty area, which will be utilized to map physician availability relative to the density of Massachusetts residents, particularly in low-income communities.

Supporting the Current and Future Health Care Workforce

Scholarships and Loan Repayment Programs

With more than 80 percent of medical students graduating with loans to repay, debt has become a deterrent for many prospective medical school students.[31] Furthermore, many would-be primary care physicians opt for higher paying specialties to alleviate their debt more quickly. In order to retain interest in primary care, Arkansas Blue Cross and Blue Shield has awarded funding to the University of Arkansas for Medical Sciences to endow scholarships for third and fourth year medical students who have expressed interest in practicing primary care in rural areas of Arkansas.

Debt repayment programs for new physicians have been successful in improving provider recruitment and retention in medically underserved areas across the country.[32] Recognizing the maldistribution of providers in the state, BlueCross BlueShield of North Carolina (BCBSNC) Foundation provided a five-year $10 million dollar grant to endow a loan repayment fund for North Carolina's Community Practitioner Program. The loan repayment program provides five years of support to physicians who work in medically underserved communities, targeting providers who are not otherwise eligible for state or federal loan repayment monies. The NC Office of Rural Health and Community Care, which administers state and federal loan repayment, has collaborated with the program to create a on-line retention module that will improve both programs' ability to identify and address issues that influence provider retention.

Mentorship Programs

In addition to funding loan repayment programs, BCBSNC Foundation supports the Family Medicine Interest and Scholars Program of the North Carolina Academy of Family Physicians Foundation. The Scholars Program provides medical students who are interested in primary care the opportunity to engage in a preceptorship with a seasoned primary care physician for three consecutive years. The program's goal is to increase the percentage of North Carolina trained medical students who commit to a residency in primary care by approximately 50 percent and to increase the percentage of those who elect to stay in North Carolina for their residency training to at least 75 percent. The first group of scholars is now completing the third year of medical school, and they report that lasting bonds have been formed with their physician mentors and their patients.[33]

While physician recruitment and retention issues are of paramount importance in bolstering the health care workforce, nurses are also consistently cited as critical members of the primary care workforce.[34] Many areas of the United States, including North Carolina, are facing a nursing shortage.[35] In an effort to ease the school-to-work transition for newly licensed nurses in North Carolina and increase first job retention rates, BCBSNC Foundation funded the Foundation for Nursing Excellence to implement the Transition to Practice Program (TTPP). The project began in 2006 with a study to determine what elements were significant in nursing transition experiences. The study found that the quality of the new nurse/nurse preceptor partnership had a direct impact on how the new nurse felt about his or her job skills competence and that higher levels of self-reported competency are associated with fewer clinical mistakes. The TTPP then completed an extensive literature review on best and promising practices in new nurse transition programs and held two conferences to discuss these practices. Although results showed that the nursing preceptor was a critical component to a successful transition, no consistent guidelines for preceptors currently existed in the state. The TTPP used

the knowledge gained through the study to test and evaluate strategies and tools such as online learning modules and face-to-face simulation exercises that could be used to prepare preceptors for their essential role in helping recently licensed nurses transition to practice. The preliminary results have found the learning modules to be effective in training nurse preceptors, and the modules are now available nationally.

Training Opportunities

Recognizing the importance of oral health to overall health and seeing a shortage of dentists and oral health professionals in Arkansas, The Blue & You Foundation has provided funding to the University of Arkansas for Medical Sciences to establish the state's first college of dentistry. Funds will be used to develop the school's strategic plan and to develop the school's physical infrastructure.

The Blue & You Foundation is also supporting the Using Distance Education training program of a local technical college to address the acute workforce shortages experienced in rural areas of Arkansas. This program will help students in rural areas obtain an Associate of Allied Health degree in anesthesia technology through training in traditional classroom settings as well as through an advanced level distance education program at up to six different sites around the state.

Investing in Community Health Workers

The ACA identified community health workers (CHWs) as important members of the health care workforce. However, long before the ACA was passed in 2010, Blue Cross Blue Shield foundations in Massachusetts and Minnesota recognized CHWs as vital partners in providing health services to poor and underserved communities.

BCBSMA Foundation has funded the Massachusetts Association of Community Health Workers (MACHW) for ten years through twelve grants totaling over $435,000, supporting work to strengthen the identity of CHWs, foster CHW leadership, and promote integration of CHWs in the health care, public health and human service sectors. These efforts have led to tremendous development of this profession over the period. CHWs were formally recognized in Massachusetts in the state's 2006 health care reform legislation, which included a charge to conduct a study of the use, funding and impacts of CHWs in Massachusetts. CHWs subsequently were instrumental in helping more than 400,000 uninsured people enroll in health insurance programs under the state's health reform efforts.[36] Recommendations for a sustainable CHW program in the state were published in a report in 2009, including a specific recommendation for stronger workforce development through certification programs for CHWs. Further strides have been made to secure CHWs within the Massachusetts health care landscape since then, including ongoing leadership and development opportunities. In 2010 the state became the first in the country to pass legislation to establish a certification board for CHWs. It will begin soon and be responsible for developing standards and the certification process.

Blue Cross Foundation (Minnesota) has also supported an extensive CHW project for over ten years in order to promote health in underserved communities and strengthen the cultural competence of health and service organizations serving the state's increasingly diverse population. The efforts have helped to develop partnerships and coalitions that have resulted in impressive concrete outcomes throughout the state. For example, the foundation provided seed funds for the Healthcare Education-Industry Partnership to develop the Minnesota Community Health Worker Alliance, which went on to oversee the development of a statewide standardized curriculum for CHWs offered in the Minnesota State Colleges and Universities System. The curriculum was the first of its kind in the nation and the Alliance is currently exploring how to offer it online in order to expand the training opportunities in the state. The foundation also commissioned the National Fund for Medical Education at the University of California-San Francisco Center for the Health Professions to conduct the first national study of sustainable financing mechanisms for CHWs. Findings from this research showing a positive return on investment for the dollars spent on training and employing CHWs led to 2007 legislation approving the direct hourly reimbursement of CHW services under Medicaid. Minnesota remains the only state that reimburses for CHWs in clinical settings.

Blue Cross Foundation currently funds two additional projects to support CHWs who provide services in Minnesota's underserved communities. The Deaf Community Health Worker Project focuses on empowering deaf people to become active participants in their own

health by assisting immigrants, refugees, senior citizens and cancer survivors with hearing impairments through the use of diagrams and pictures to explain medical information and ensure adherence to recommended care. These CHWs also accompany patients to medical appointments, leading to an estimated preliminary savings of 40 percent from a reduced number of missed appointments due to interpreter services.[37] The second grant is a research project at the Mayo Clinic to explore how CHWs in primary care improve health outcomes for immigrant patients. Results will be available at the end of 2013.

Supporting Team-Based Care

The patient-centered medical home (PCMH) is an evolving and increasingly common model that aims to manage patients' health holistically through team-based coordinated care, case management, and a comprehensive approach to quality and safety.[38] Health plan foundations have begun to support PCMHs not only because of their potential to improve quality and reduce costs, but also because they recognize that this team-based model can help to extend the availability of limited primary care providers.

For example, in Arkansas the Blue & You Foundation has funded three grants to support PCMHs as a strategy to help alleviate the shortages of primary care physicians experienced in most areas of the state. The first grant is to the University of Arkansas for Medical Sciences to support the school's internal medicine clinic as it seeks accreditation to become a PCMH. Blue & You Foundation is also funding the Arkansas Academy of Family Physicians to assist three for-profit clinics in becoming PCMHs. These clinics are poised to provide more than 600,000 Arkansans with comprehensive primary care services. Under the third grant, Blue & You Foundation is working with the Community Health Centers of Arkansas to help all 73 Arkansas Community Health Center charity care clinics achieve PCMH accreditation. The clinics participate in monthly meetings to work through issues in obtaining accreditation, which is expected to support improved quality and health care delivery for more than 150,000 people in 54 counties in Arkansas.

Supporting Safety Net Providers

Free clinics provide medical and dental services to the underserved populations in many states, and health plan foundation funding directed toward these clinics ensures that vulnerable populations have access to high-quality health care. In fact, health plan foundation support is often critical to the continued operation of clinics and the retention of health care providers who work there.

Blue & You Foundation has provided support to two clinics providing care to the state's uninsured and undocumented populations. This support enabled the Northwest Arkansas Free Health Center to expand clinic hours to better serve their more than 13,500 patients and hire additional staff including a nurse practitioner. Similarly, the Harmony Health Clinic in Little Rock was able to extend hours of operation, hire a clinic coordinator and a Spanish language interpreter, and increase the number of volunteer dentists and dental assistants available to serve the uninsured residents of the area. Blue & You Foundation has also funded a mobile dental health clinic that visits elementary schools and summer school programs in seven Arkansas counties for a week at a time to provide dental health services to underserved children.

BCBSNC Foundation has supported the North Carolina Association of Free Clinics since 2003 in order to increase the impact, expand the reach and maintain the quality of North Carolina's free clinics. Most recently, as part of a $22 million dollar, ten year investment from BCBSNC Foundation, the free clinics have focused specifically on clinical outcomes. As a result of this initiative, North Carolina was the first state where free clinics consistently report on quality of care through their state association. This practice is now being replicated in other states. Specifically focused on diabetes and cardiovascular disease, this program has demonstrated that many free clinics in North Carolina provide care on par with other providers in the state. In 2011, 44 of 52 free clinics reporting on their blood pressure control results demonstrated better outcomes than the state average for federally qualified health centers (FQHCs), and 21 of 50 clinics match or exceed FQHC's results for diabetes control. Through this partnership, BCBSNC Foundation helps to cover clinics' general operating costs, with the amount of support determined by clinic size (number

of patient visits) as well as patient health outcomes; individual clinic grants for 2010 outcomes ranged from $2,000 to $50,000.

BCBSNC Foundation is also working to increase access to oral health care providers in North Carolina by supporting 21 community dental clinics that treat the underserved. Through a grant to Safety Net Solutions, the Foundation provides technical assistance and practice management consulting to clinics to help them identify opportunities to improve operational and financial performance. Among the first ten participating clinics, the net bottom line improved from an aggregate deficit of just under $3.5 million to under $2.5 million over the course of a year. Each of the clinics engaged in this process started in the red, with deficits ranging from $80,000 to $1 million. Today, many are inching toward the black while increasing access to dental care for more North Carolinians. At the same time that they were lowering their operating losses, these clinics added another 5,000 patients and provided an additional 25,000 procedures. To further this effort, BCBSNC Foundation has also supported a full-time staff person to serve as a dental practice consultant in the North Carolina State Office of Rural Health. The dental practice consultant provides technical assistance for safety net practices with a focus on sustainable practices.

OPPORTUNITIES AHEAD FOR FOUNDATIONS

In addition to the promising health plan foundation investments described in the previous section, there are also many opportunities on the horizon for foundations to have a profound impact on the future health care workforce. In this section we highlight several of these opportunities.

Preparing Workers for Future Health Care Jobs

There are many areas of anticipated growth in the health professions that will exacerbate the need for more workers in the years ahead. The Bureau of Labor Statistics (BLS) predicts that home health aides, physical therapists, and mental health counselors will experience the most rapid growth in jobs available between 2010 and 2020[39] and that registered nurses, licensed practical and vocational nurses, nursing aides, home health aides, and medical assistants will see the largest growth in the number of jobs.[40] Non-physician clinicians, including nurse practitioners and physician assistants, along with community health workers, are also expected to be rapidly growing professions. Foundations are working to meet this growth in demand and can continue to do so through scholarships, loan repayments, education, training and certification programs, all of which encourage entry into various health occupations expected to be in high demand in the future.

Ongoing Analysis and Evaluation of Workforce Capacity

As strategies are developed to meet our workforce challenges, there is a need for data to identify priority

Fastest Growing Health Occupations[i]: 2010–2020

- Home health aides
- Biomedical engineers
- Physical therapist assistants
- Physical therapist aides
- Health educators
- Medical scientists, except epidemiologists
- Physical therapists
- Mental health counselors
- Diagnostic medical sonographers
- Occupational therapy assistants
- Medical secretaries
- Dental hygienists
- Audiologists

Source: "Employment Outlook 2010-2020: Occupational Employment Projections to 2020." *BLS Monthly Labor Review*, January 2012.

[i]Occupations identified by the BLS as those experiencing the highest percent growth between 2010 and 2020.

geographical areas and occupations so limited resources can be targeted most effectively. Through its National Center for Health Workforce Analysis, the Health Services and Resources Administration (HRSA) is developing a national uniform Health Professions Minimum Data Set (MDS) to facilitate analysis and comparison over time and across states, jurisdictions and professions. Many states will need to improve the type and quality of workforce data they collect in order to contribute the necessary data to the national system to ensure consistent, uniform comparisons. Foundations will be able to utilize the data set to analyze and evaluate workforce issues in their specific states and can help the states update their workforce-related databases and data collection activities to be consistent with MDS elements and standards.

Exploring Scope of Practice Expansions

Foundations can help to leverage scarce physician resources by promoting strategies that enable assistive, supportive health workers to practice at the top of their education and skill levels. Ensuring this effective deployment of the health care workforce requires addressing organizational, reimbursement and scope of practice barriers. Broadening state scope of practice laws for advanced practice nurses (APNs) and physician assistants (PAs) is one way to expand primary care capacity, especially given that some studies estimate APNs can provide up to 80 percent of the care currently provided by primary care physicians.[41] Foundations can serve as neutral conveners or play other supportive roles to facilitate discussions between states, the private sector and academia, who are ultimately responsible for making key decisions impacting the use and supply of health workers such as APNs and PAs.

Promoting the Advancement of Team-Based Care

Patient-centered medical homes have been making significant gains as stakeholders across the country have become part of a groundswell of interest and investment in the model. As discussed earlier, several foundations are already actively supporting the development of PCMHs and team-based care. Non-physician health professionals, such as community health workers, are particularly well-suited to assist provider practices and hospitals as they seek to build teams to provide comprehensive care under PCMH models. The National Committee for Quality Assurance (NCQA) 2011 medical home recognition standards permit APNs and PAs to lead PCMHs where allowed by state law, and there has generally been a growing acceptance of these providers as leaders of PCMHs, especially in rural areas where primary care physicians are in short supply.[42] At the federal level the Centers for Medicare and Medicaid (CMS) is also committed to strengthening the primary care system under PCMH models through the "Comprehensive Primary Care Initiative," which provides public and private funding for primary care functions not currently supported by fee-for-service (FFS) payments, including an opportunity for participants to share in any net savings generated through the program.[43] Foundations can continue to support the development of PCMH pilot projects in their markets, assist clinics seeking PCMH accreditation, or encourage existing PCMH efforts to involve non-physician health professionals in these new models of team-based care.

Promoting Prevention and the Public Health Workforce

The ACA's prevention provisions direct substantial funds toward investments in clinical and community prevention activities, research and tracking, and the public health infrastructure and training.[44] Specific examples include the following:

- Federal, state and community initiatives to use evidence-based interventions to address tobacco control, obesity prevention, HIV-related health disparities, and better nutrition and physical activity
- State, local and tribal public health infrastructure to advance health promotion and disease prevention through improved information technology, workforce training, and regulation and policy development
- Training of public health providers to advance preventive medicine, health promotion and and quality of health services in medically underserved communities.[45]

These funds assist the current health care workforce by expanding state and local capacity to provide

preventive health services. Foundations can leverage or supplement federal funding to states and local entities to support public health workers and sustain programs serving vulnerable populations.

CONCLUSION

The breadth and variety of programs supported by health plan foundations, coupled with the impressive financial commitment, are clearly having an impact on sustaining the workforce in many states and communities. While the nation faces looming health care workforce shortages, this is also a time of great opportunity given the many public and private sector initiatives to transform our health care delivery and payment systems through team-based care. Health plan foundations will continue to be critical partners, in concert with other stakeholders, especially federal, state and local governments, in securing a stable and productive workforce to meet the health care needs of all Americans.

ENDNOTES

[1]The United States Census Bureau. Population Profile of the United States, National Population Projectons. Available at: http://www.census.gov/population/www/pop-profile/natproj.html. Accessed April 19, 2012.

[2]Administration on Aging. Aging Statistics. Available at: http://www.aoa.gov/AoARoot/Aging_Statistics/index.aspx. Accessed April 19, 2012.

[3]Dill MJ, Salsberg ES. The Complexities of Physician Supply and Demand: Projections through 2025. Association of American Medical Colleges and the Center for Workforce Studies, 2008. Available at: https://members.aamc.org/eweb/upload/The%20Complexities%20of%20Physician%20Supply.pdf. Accessed May 7, 2012.

[4]American Association of Colleges of Nursing. Nursing Shortage fact sheet, April 2012. Available at: http://www.aacn.nche.edu/media-relations/fact-sheets/nursing-shortage. Accessed June 14, 2012.

[5]Association of American Medical Colleges, Center for Workforce Studies. Recent Studies and Reports on Physician Shortages in the U.S., August 2011.

[6]Dill MJ, Salsberg ES, 2008.

[7]Ibid.

[8]Dower C, O'Neil E. Primary care workforce in the United States. The Robert Wood Johnson Foundation. July 2012(22).

[9]American Association of Colleges of Nursing – Nursing Shortage fact sheet, April 2012. Available at: http://www.aacn.nche.edu/media-relations/fact-sheets/nursing-shortage. Accessed June 14, 2012.

[10]Buerhause P. The Recent Surge in Nurse Employment: Causes and Implications. Health Affairs 2009;28(4):657-668.

[11]Bodenheimer T, Pham HH. Primary Care: Current Problems and Proposed Solutions, Health Affairs 2012;29(5):799-805.

[12]Salsberg E. Health Workforce Trends, Challenges and Opportunities. Presentation during NIHCM Foundation webinar April 2012.

[13]Ibid.

[14]Goodell S, Dower C, O'Neil E. Primary care workforce in the United States. Robert Wood Johnson Foundation, The Synthesis Project, policy brief 22, July 2011.

[15]Ibid.

[16]Ibid.

[17]US Census Briefs. Overview of Race and Hispanic Origin: 2010. Issued March 2011. Available at: www.census.gov/prod/cen2010/briefs/c2010br-02.pdf. Accessed June 14, 2012.

[18]Cohen JJ, Gabriel BA, Terrell C. The Case for Diversity in the Health Care Workforce. Health Affairs 2002;21(5):90-102.

[19]Laveist TA, Nuru-Jeter A. Is Doctor-patient Race Concordance Associated with Greater Satisfaction with Care? Journal of Health and Social Behavior 2002;43:296-306.

[20]Saha S, Shipman SA. Race-Neutral Versus Race-Conscious Workforce Policy To Improve Access to Care. Health Affairs 2008;27(1):237-245.

[21]Dill MJ, Salsberg ES,2008.

[22]Health Care Providers and the Affordable Care Act. Available at: Hppt://www.healthcare.gov/news/factsheets/201/07/health-care-providers.html. Accessed June 14, 2012.

[23]Cuellar A, Simmons A, Finegold, K. The Affordable Care Act and Women. Office of the Assistant Secretary for Planning and Evaluation. March 20, 2012.

[24]United States Department of Labor: General Facts on Women and Job Based Health. Available at: http://www.dol.gov/ebsa/newsroom/fshlth5.html. Accessed June 14, 2012.

[25]Ranji U, Salganicoff A. Women's Health Care Chartbook: Key Findings from the Kaiser Women's Health Survey. Kaiser Family Foundation, May 2011.

[26]Kenney,G, Buettgens M, Guyer J, Heberlein M. Improving Coverage for Children Under Health Reform Will Require Maintaining Current Eligibility Standards for Medicaid and CHIP. Health Affairs 2011;30(12):2371-2381

[27]Robinson W, Finegold K. The Affordable Care Act and African Americans. Office of the Assistant Secretary for Planning and Evaluation, 2012.

[28]Chu R, Wong D, Robinson W, Finegold K. The Affordable Care Act and Asian American and Pacific Islanders. Office of the Assistant Secretary for Planning and Evaluation, 2012.

[29]Henderson A, Robinson W, Finegold K. The Affordable Care Act and Latinos. Office of the Assistant Secretary for Planning and Evaluation, 2012.

[30]Kaiser Commission on Medicaid and the Uninsured. The Uninsured and the Difference Health Insurance Makes. The Kaiser Family Foundation, 2010. Available at: www.kff.org/uninsured/upload/1420-12.pdf. Accessed May 29, 2012.

[31]Chen. P. The Hidden Costs of Medical Student Debt. The New York Times. July 28, 2011.

[32]Pathman DE, Konrad TR, King TS, Taylor DH, Koch GG. Outcomes of States' Scholarship, Loan Repayment, and Related Programs for Physicians. Medical Care: Official Journal of the Medical Care Section, American Public Health Association 2004;42(6):560-568.

[33]InspiredNC website. Available at: http://inspirednc.org/?grantee=charles-rhodes. Accessed May 5, 2012.

[34]Naylor MD, Kurtzman ET. The Role of Nurses in Reinventing Primary Care. Health Affairs 2010, 29(5) 893-899.

[35]The Trust for America's Health. State Facts: Nursing Shortage Estimates, 2010. Available at http://healthyamericans.org/states/states.php?measure=nursingshortage. Accessed May 4, 2012.

[36]Deval P, Bigby JA, Auerbach J. Community Health Workers in Massachusetts: Improving Health Care and Public Health. Report of the Massachusetts Department of Public Health Community Health Worker Advisory Council. Massachusetts Department of Public Health, December 2009. Available at: http://www.mass.gov/eohhs/docs/dph/com-health/com-health-workers/legislature-report.pdf. Accessed May 14, 2012.

[37]Ancheta J. Bridging barriers, expanding access, improving health. Presentation during National Institute for Health Care Management (NIHCM) Foundation webinar April 5, 2012.

[38]Roadmap to Better Care Transitions and Fewer Readmissions. Available at: http://www.healthcare.gov/compare/partnership-for-patients/safety/transitions.html. Accessed April 30, 2012.

[39]U.S. Bureau of Labor Statistics. Employment Outlook 2010-2020: Occupational Employment Projections to 2020. BLS Monthly Labor Review, January 2012.

[40]Ibid.

[41]Institute of Medicine. The Future of Nursing: Leading Change, Advancing Health. National Academies Press, 2010.

[42]Berenson R, Devers K, Burton R. Will the Patient-Centered Medical Home Transform the Delivery of Health Care? Robert Wood Johnson Foundation, August 2011.

[43]The Center for Medicare and Medicaid Innovation. One Year of Innovation: Taking Action to Improve Care and Reduce Costs. Centers for Medicare & Medicaid Services, February 2012. Available at: http://innovations.cms.gov/Files/reports/Innovation-Center-Year-One-Summary-document.pdf. Accessed May 1, 2012

[44]U.S. Department of Health and Human Services. Affordable Care Act: Laying the Foundation for Prevention. Available at: http://www.healthreform.gov/newsroom/acaprevention.html. Accessed May 1, 2012.

[45]Ibid.

NIHCM Foundation Health Care Workforce Issue Brief Resource List	
Resource	**URL**
Advancing Community Health Worker Practice and Utilization: The Focus on Financing and *Funding CHW Programs and Services in Minnesota: Looking to the Future (Supplement)* Dower C, Know M, Lindler V, O'Neil E. National Fund for Medical Education & UCSF Center for Health Professions. 2006.	http://futurehealth.ucsf.edu/Content/29/2006-12_Advancing_Community_Health_Worker_Practice_and_Utilization_The_Focus_on_Financing.pdf http://futurehealth.ucsf.edu/Content/29/2006-12_Funding_CHW_Programs_and_Services_in_Minnesota_Looking_to_the_Future.pdf
The Affordable Care Act and Women Cuellar A, Simmons A, Finegold K. Office of the Assistant Secretary for Planning and Evaluation. U.S. Department of Health and Human Services. Updated March 2012.	http://aspe.hhs.gov/health/reports/2012/ACA&tWomen/rb.shtml
Area Health Resources File Health Resources and Services Administration	http://arf.hrsa.gov
The Blue Cross Blue Shield of Massachusetts Foundation	http://bluecrossmafoundation.org/
Blue Cross Foundation (Minnesota)	http://www.bcbsmnfoundation.org/
BlueCross BlueShield of North Carolina Foundation	http://www.bcbsncfoundation.org/
Blue & You Foundation for a Healthier Arkansas	http://www.blueandyoufoundationarkansas.org/
Community Health Workers in Minnesota: Bridging Barriers, Expanding Access, Improving Health Blue Cross and Blue Shield of Minnesota Foundation. 2010..	www.bcbsmnfoundation.com/download.cfm?oid=11842
Community Health Workers: Part Of The Solution Rosenthal EL, Brownstein JN, Rush C, Hirsch G, Willaert A, Scott J, Holderby L, Fox D. *Health Affairs* 29, no. 7 (2010): 1338–1342.	http://content.healthaffairs.org/content/29/7/1338.abstract
The Complexities of Physician Supply and Demand: Projections Through 2025 Salsberg E, Dill MJ. Center for Workforce Studies, Association of American Medical Colleges November 2008	https://members.aamc.org/eweb/upload/The%20Complexities%20of%20Physician%20Supply.pdf
Transition to Practice Program *Program Overview and Summary of Findings* Foundation for Nursing Excellence	http://www.ffne.org/transition-to-practice-program
Family Medicine Interest and Scholars Program Inspired NC	http://inspirednc.org/?grantee=charles-rhodes

NIHCM Foundation Health Care Workforce Issue Brief Resource List	
Resource	**URL**
Massachusetts Association of Community Health Workers	http://machw.org
Massachusetts Board of Certification of Community Health Workers	http://www.mass.gov/dph/boards/chw
Massachusetts Board of Registration in Medicine	http://www.mass.gov/massmedboard
Matching Supply to Demand: Addressing the U.S. Primary Care Workforce Shortage Carrier E, Yee T, Stark L. National Institute for Health Care Reform. December 2011.	http://www.nihcr.org/PCP_Workforce.pdf
National Center for Health Workforce Analysis at the Health Resources and Services Administration	http://bhpr.hrsa.gov/healthworkforce/
New Report Shows Affordable Care Act Has Expanded Insurance Coverage Among Young Adults of All Races and Ethnicities Office of the Assistant Secretary for Planning and Evaluation. U.S. Department of Health and Human Services. March 2012.	http://aspe.hhs.gov/health/reports/2012/YoungAdultsbyGroup/ib.shtml
Primary care health workforce in the United States The Synthesis Project, The Robert Wood Johnson Foundation. May 2011..	http://www.rwjf.org/pr/product.jsp?id=72579

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