

# Transforming the Health Workforce for a *New* New York



Report of the Healthcare Workforce Development Subcommittee  
to the New York State Workforce Investment Board

March 2012

# Contents

## **Executive Summary**

*Overview: Healthcare Workforce Planning in the Context of Emerging Priorities..... I*

*Summary of Key Findings ..... III*

*Recommendations..... VI*

*Action Items and Next Steps ..... IX*

**Acknowledgements.....XI**

**I. Introduction..... 1**

*A. The Purpose and Goals of the State Healthcare Workforce Development  
Planning Grants (HRSA 10-284 ) ..... 2*

**II. The Methodology..... 3**

**III. The Five Workgroups..... 4**

*A. Asset Mapping Workgroup ..... 4*

*B. Data Collection Workgroup ..... 5*

*C. Career Pathways Workgroup ..... 6*

*D. Credentials Workgroup ..... 7*

*E. Rules and Regulations Workgroup..... 8*

**IV. The Center for Health Workforce Studies, Data and  
Other Statistics.....9**

*A. The Health Care Workforce in New York, 2009: Trends in the Supply and  
Demand for Health Workers..... 10*

*B. Other Statistics..... 12*

**V. Complementary Initiatives..... 14**

*A. Governor Cuomo’s Regional Approach to Economic Development..... 14*

*B. Office of Health Information Technology Transformation ..... 15*

*C. The Medicaid Redesign Team ..... 15*

<i>D. The Health Insurance Exchange in New York.....</i>	<i>16</i>
<i>E. Health Profession Opportunity Grants to Serve Temporary Assistance for Needy Families (TANF) Recipients and Other Low-Income Individuals.....</i>	<i>17</i>
<i>F. The Robert Wood Johnson Initiative .....</i>	<i>17</i>
<i>G. Adirondack – Champlain Telemedicine Information Network.....</i>	<i>18</i>
<i>H. New York e-Health Collaborative (NYeC) .....</i>	<i>19</i>
<i>I. Health Efficiency and Affordability Law (HEAL).....</i>	<i>19</i>
<i>J. Columbia University’s Health Information Technology Training Grant .....</i>	<i>20</i>
<i>K. National Health Service Corps Scholarships Program .....</i>	<i>20</i>
<i>L. The Medical Home/Patient Centered Medical Home .....</i>	<i>20</i>
<b>VI. Appendices .....</b>	<b>24</b>
<i>Appendix 1 - Acronyms &amp; Abbreviations .....</i>	<i>24</i>
<i>Appendix 2 - Healthcare Websites .....</i>	<i>28</i>
<i>Appendix 3 - Asset Mapping Workgroup Report .....</i>	<i>32</i>
<i>Appendix 4 - Data Collection Workgroup Report.....</i>	<i>54</i>
<i>Appendix 5 - Career Pathways Workgroup Report .....</i>	<i>60</i>
<i>Appendix 6 - Healthcare Credentials Workgroup Report .....</i>	<i>136</i>
<i>Appendix 7 – Rules and Regulations Workgroup Report .....</i>	<i>154</i>
<i>Appendix 8 - February 2011: Healthcare Panel Discussion .....</i>	<i>162</i>
<i>Appendix 9- Healthcare Workforce Development Subcommittee Partners .....</i>	<i>163</i>
<i>Appendix 10 - References.....</i>	<i>169</i>

## Executive Summary

### Overview: Healthcare Workforce Planning in the Context of Emerging Priorities

To preserve, protect and promote the health of all New Yorkers, a robust, right-sized and responsive healthcare workforce is critical. This would also ensure the health of the New York State economy, especially in upstate areas. Healthcare is an economic driver and a particularly viable sector, encompassing 11.7 percent of all employment in New York State in 2010. It created over 322,400 jobs between 1990 and 2010. During the recession of 2008-2009, when 237,100 jobs were lost throughout all sectors, New York added more than 20,800 healthcare jobs. More recent data shows that the number of healthcare jobs rose in all health sectors between 2008 and June 2011 -- from 21 percent in the home health services sector to 1 percent in nursing care facilities.<sup>1</sup> However, the healthcare job market may soften in some sectors, in some parts of the state due to the recent economic downturn.<sup>2</sup>

Still, healthcare jobs remain one of the major economic drivers in communities. For example, a typical primary care physician provides appropriate preventive care, which leads to reduced morbidity. In addition, this physician is estimated to provide a local economic impact of \$1,036,179 per year through: additional employment, the purchase of goods and services, and the generation of income to other healthcare organizations.<sup>3</sup>

The key to effective healthcare workforce development is creating a timely, comprehensive and actionable health workforce plan that:

- Has buy-in from a majority of stakeholders
- Assures an adequate supply of qualified and culturally competent healthcare professionals

Healthcare workforce planning is now more critical than ever, especially due to the expansion of coverage that will begin in 2014, under the federal Patient Protection and Affordable Care Act (ACA). The ACA's overarching goals are to:

- Expand health insurance for 32 million uninsured Americans
- Achieve delivery system reform that would both:
  - Promote quality
  - Bring healthcare costs under control (to help finance health insurance expansion)

A key provision of the ACA is for states to develop new "health insurance exchanges" that will offer consumers (many currently uninsured) two things:

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<sup>1</sup> New York State Department of Labor, unpublished data, September 2011.

<sup>2</sup> See New York State Center for Health Workforce Studies (CHWS), *The Health Care Workforce In New York, 2009, Trends in the Supply and Demand for Health Workers*.

<sup>3</sup> Robert Graham Policy Center, cited in <http://www.aafp.org/online/en/home/policy/state/emergingissues/econimpact.html>

- Information to help them choose among different health plans
- Premium and cost-sharing subsidies to make coverage more affordable

Because of federal healthcare reform:

- 2.23 million New Yorkers (85 percent of the total non-elderly uninsured in the state) will have access to health insurance
- More than one million uninsured New Yorkers are expected to obtain health coverage<sup>4</sup>

### **The Charge to the Subcommittee**

To address these emerging issues, the New York State Workforce Investment Board formed the Healthcare Workforce Development Subcommittee (HWDS) to better understand New York's:

- Healthcare delivery system
- Workforce development needs
- Effects from the implementation of the ACA

This will help us to develop an actionable workforce plan that will provide guidance to address emerging healthcare needs and inform complementary efforts by New York State agencies, the federal government and other stakeholders. These efforts include:

- President Obama's Jobs and Competitiveness Council
- Governor Andrew M. Cuomo's Regional Economic Development Councils
- The New York State Department of Health's (NYSDOH) Medicaid Redesign initiatives

In late 2010, HWDS applied for and was awarded \$150,000 by the United States Health Resources and Services Administration (HRSA grant 10-284). The grant's overall purpose was to help states develop plans to expand their primary care Full-Time Equivalent (FTE) healthcare workforce by 10 to 25 percent over 10 years. This would help meet the expected demand for healthcare services under the ACA. In New York State, the HWDS would develop a plan to

- 1) Assess the healthcare workforce supply and demand
- 2) Identify geographic areas, occupations and types of health service delivery that have trouble meeting the demand for health services (especially primary care services)
- 3) Design and develop uniform data collection on health professionals across the state

The HWDS identified and formed five workgroups, Asset Mapping, Data Collection, Career Pathways, Credentials, and Rules and Regulations. Each workgroup developed a set of recommendations to meet the goals of the grant. The HWDS Executive Summary presents the key findings, recommendations, action items and next steps, and a plan to address future healthcare workforce challenges. The full report, including appendices, provides additional details of workgroup activities.

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<sup>4</sup> New York State Health Foundation, *Implementing Federal Health Care Reform: A Roadmap for New York State*, [http://www.healthcarereform.ny.gov/research\\_and\\_resources/docs/roadmap\\_for\\_nys.pdf](http://www.healthcarereform.ny.gov/research_and_resources/docs/roadmap_for_nys.pdf)

## Summary of Key Findings

What follows is a summary of the findings of the five workgroups. These include:

- 1. There is a need to develop a “one-stop shop” clearinghouse for primary care workforce resources, which could assess existing primary healthcare needs and identify healthcare workforce shortages.** While current healthcare workforce data collection efforts under way in New York produce excellent information, they do not go far enough. A review of a comprehensive list of available health workforce data reveals substantial data gaps. These are related to workforce supply, production and demand. The biggest challenge to meeting the state’s workforce data needs is the lack of resources for more comprehensive data collection and analyses.

Under a Memorandum of Understanding<sup>5</sup> with the New York State Department of Labor (NYSDOL), the Center for Health Workforce Studies (CHWS) expanded its analysis of healthcare worker supply and demand in New York to include:

- A regional assessment of primary care capacity
- Identification of primary care shortage areas

The assessment found that primary care physicians are not evenly distributed either across the state or within regions. There was wide regional variation in primary care physician capacity. The New York City and Long Island regions have relatively high numbers of primary care physicians per capita. Most upstate regions have much lower numbers of primary care physicians per capita, specifically in the Mohawk Valley, North Country, Central New York, and Western New York regions. There was also a substantial maldistribution of primary care physicians within regions and counties. This is evidenced by the presence of sub-county, primary care Health Professional Shortage Areas (HPSAs) in counties with a seemingly ample supply of primary care physicians.<sup>6</sup>

In addition, the CHWS’s research found that healthcare providers across the state reported recruitment and retention difficulties for a wide array of professions and occupations, including experienced registered nurses. Hospitals reported difficulty recruiting clinical laboratory technologists, health information technology (HIT) staff, and medical coders. New York’s nursing homes and home health agencies statewide reported difficulty recruiting occupational therapists, physical therapists, speech language pathologists,

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<sup>5</sup> The New York State Department of Labor, on behalf of the HWDS, executed a Memorandum of Understanding with the Center for Health Workforce Studies, State University of New York, School of Public Health to expand the scope of the regional reports in its annual New York healthcare workforce report. Specifically, the regional reports include a section on primary care that describes available primary care capacity and shortage areas within each region. Detailed data on the population of the region as well as the health status indicators of the regional population are also included. In its June 2011 report entitled, “The Health Care Workforce in New York, 2009: Trends in the Supply and Demand for Health Workers,” the Center summarized the major issues impacting New York’s healthcare labor workforce.

<sup>6</sup> New York State Center for Health Workforce Studies (CHWS), *The Health Care Workforce In New York, 2009, Trends in the Supply and Demand for Health Workers*.

dietitians/nutritionists, and respiratory therapists. Community health centers reported difficulties recruiting dentists as well as geriatric and psychiatric nurse practitioners.

On a related issue, we need a better definition of “healthcare worker shortage” that more fully considers the relationship between gaps in worker supply/demand and patient outcomes. This is especially true for emerging models of care that include more team-based approaches. Consequently, current efforts to measure profession-specific supply-demand gaps may be less useful as healthcare delivery becomes more team-focused. These models require careful evaluation to better understand their impacts on quality, cost and access.

Recommendation: See Items 1a through c, page 8;

Action Item: See Items 2 and 3, page 10.

**2. Align education and training incentives with industry standards.** Healthcare workers in New York State need to be better prepared to meet the current and emerging needs of the industry. This may require changes to:

- Education and training pathways for all those included in the primary care system
- Duplicate credential requirements for delivery of primary care
- Primary care reimbursement policy (as funds are available)
- Utilization of HIT

To achieve these objectives, New York needs not only a thorough review of the scope of practice for the current healthcare workforce, but also a better set of definitions for the emerging healthcare workforce occupations.

Growing gaps in the educational system, along with the rising costs of a health science education, have affected student and faculty capacity levels. As more people become insured, the demand for primary healthcare services will surely increase. Financial incentives aimed at students, faculty, colleges and training sites for education and/or training in a primary care or allied health profession may bolster New York’s healthcare network to support industry demands with the surge of previously uninsured or underinsured populations. One existing source is Medicaid Graduate Medical Education payments that the State could use to support new and existing primary care physician training positions, as demand for them increases.

Finally, New York must understand and integrate into systems of care emerging HIT such as:

- Telemedicine
- The Statewide Health Information Network for New York (SHIN-NY)
- Electronic medical records

We need to promote them as tools to increase access to healthcare providers and services.

New York has been moving in this direction, with almost \$400 million to date in funding from the Health Efficiency and Affordability Law (HEAL) to advance the State’s HIT

agenda. Between January 2011 and June 2011 (no prior year data), HEAL grant funding helped us:

- Retain some 50 jobs
- Create 46 new positions

The HEAL program funds can be used for positions related to training and implementation support associated with health information technology. A recent grant from the federal Office of the National Coordinator (Department of Health and Human Services) has given Columbia University \$3.8 million in funds to retrain post-BS degree professionals to work in the field of HIT. The State University of New York (SUNY) and the City University of New York (CUNY) are part of a regional consortium for community college programs. They received \$16 million in grant funding to support workforce development for non-credentialed individuals, to help them move into the HIT workforce. The Regional Extension Center (REC) Program in New York State, led by the New York City Department of Health and Mental Hygiene and the New York eHealth Collaborative (NYeC) provides technical assistance to help providers comply with meaningful use standards. This allows providers to qualify for enhanced Medicare and Medicaid reimbursement. Combined, these two REC programs received \$49 million in federal dollars.

Recommendation: See Items 2a, 2b and 2d, pages 8-9;

Action Items: See Items 4a-4c, page 11.

- 3. Increase diversity in healthcare career pipelines and create pathways for advancement.** Healthcare workers often do not reflect the demographics of the population that they serve, nor do they always understand the cultural sensitivities of their patients. New York needs to better identify ways to both increase the diversity of the state's healthcare workforce and train them in the new skills required for team-based, patient-centered models of care. Career pipelines should reflect new or refocused curricula that attract new students to these emerging trends. We must develop clear career pathways to provide advancement opportunities for low-wage health workers.

Recommendation: See Items 2a, 3a and 3b, pages 8-9;

Action Items: See Items 3 and 4c, pages 10-11.

- 4. Assess/redefine scope of practice** for nursing and other healthcare occupations, and review and better define various emerging occupations. Many in the healthcare field, especially those in direct patient care in New York State, cannot practice to the full extent of their education and competency. Others work in fields for which the scope of practice needs better definition. The emerging shift from an inpatient, facility-based care delivery system to a *care management system* (such as a patient-centered medical home -- especially for those with chronic illnesses), gives New York and its stakeholders in the healthcare system an opportunity. This is a chance to redefine the roles of, and develop new roles for, those involved in the delivery of emerging modalities of care. The development of these new workers will:

- a) provide opportunities for people at risk of losing their jobs and for those who have the skills to become key members of the healthcare workforce
- b) assure that patients receive the appropriate levels of care

c) help reduce unnecessary healthcare costs

Recommendation: See Items 2b-c and 4a, pages 8-10;

Action Items: See Item 5, page 11.

**5. Enhance Collaboration.** New York State needs to improve collaboration among stakeholders. This is a key part of the success of any planning process, especially in regard to the healthcare workforce. It would include, but not be limited to, collaboration between and among:

- Job developers in career development and workforce planning (such as regional Area Health Education Centers)
- Educational institutions
- Healthcare providers
- Healthcare-related policy makers
- Community-based organizations
- Government agencies
- Service organizations
- Local health organizations
- Labor unions
- Union-negotiated training funds
- Regional hospitals and other healthcare facilities

New York State also needs a better understanding of how to promote (through regulations, reimbursement policy, or through culture change) the sharing of some provider services across institutional or payer organizations. To reduce costs and expand access to important services, this information exchange must include:

- Care managers
- Health educators
- Pharmacist-educators
- Discharge planners
- Social workers, etc.

To avoid duplication of effort, we also must develop collaboration between the various new workgroups that address the healthcare workforce.

Recommendation: See Items 1a, 1b, 3d, 5a and 5b, pages 8-10;

Action Items: See Items 2, 5 and 6, pages 10-11.

## **Recommendations**

### **1. Assess Primary Healthcare Workforce Needs and Address Shortages:**

**a. Develop a Healthcare Workforce Incentives and Opportunities Clearinghouse.** We need a state-level Clearinghouse to provide the latest information on current funding streams and healthcare opportunities. This would involve State, local and not-for-profit organizations to promote the flow of healthcare information on incentives and opportunities, and provide timely alerts about new opportunities.

- b. **Develop a Healthcare Workforce Data Repository.** We need a repository to spur comprehensive data collection and analysis on the healthcare workforce. This will ensure that all data are uniform and consistent. This Repository will help spread SUNY and CUNY healthcare educational pipeline data. It will build collaborations across agencies, reduce redundancies and create a more streamlined approach to data collection. In a time of dramatic change in healthcare systems, data and information on the healthcare workforce can contribute greatly to informed decision making.
- c. **Maximize Federal and State Health Workforce Incentive Opportunities.** There are some 2.5 million New Yorkers identified as “under-served” for primary care services in New York’s 104 primary care HPSAs. It would require 413 primary care practitioners in these areas to remove the shortage status.<sup>7</sup> We must maximize training opportunities through the Doctors Across New York (DANY) programs and the National Health Service Corps (NHSC) loan repayment and scholarship programs. These and other state and federal initiatives will encourage more qualified applicants to serve in deprived primary care areas, promote better access to primary care services and support healthcare reform.

**2. Align Education and Training with Industry Standards:**

- a. **Provide Financial Incentives for Individuals and Healthcare Education and Training Providers.** Growing gaps in the educational system impair student and faculty capacity levels, and drive up the cost of a health science curriculum. We need financial incentives (such as federal scholarships like the NHSC) for individuals, faculty, colleges and training providers for the education and/or training in a primary care or allied health profession. This may help bolster New York’s healthcare network to support industry demands, as we serve previously uninsured or underinsured people.
- b. **Align Credentialing with Experience and Competency.** Workers with similar credentials, experience and competencies should be able to take the next step in education and training -- without repetition -- to improve their skills and pay scale. Duplicate credential requirements place roadblocks in a career ladder when a person cannot transfer credentials from one healthcare setting to another.
- c. **Develop an Objective, Fact-based Process for Drafting Statutes and Regulations Related to Scope of Practice.** Decision-makers should use objective assessments of current job requirements, work rules and best practices when they develop or amend statutes and regulations. The goal: to allow healthcare workers to practice within the full scope and competency levels of their occupations, as well as to serve their patients in the most cost-effective manner.
- d. **Align Reimbursement Rates with Emerging Service Delivery Models** As the healthcare community responds to the competing pressures of increased consumer demand and limited resources, several innovative service delivery models have emerged. One example is the patient-centered medical home. We need to revisit current reimbursement models (which do not recognize new models) to ensure the efficiencies and savings they offer are both encouraged and adequately compensated. We also should consider expanding reimbursement for services provided by *all* qualified

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<sup>7</sup> U.S. Health Resources and Service Administration, [http://ersrs.hrsa.gov/ReportServer/?HGDW\\_Reports/BCD\\_HPSA/BCD\\_HPSA\\_SCR50\\_Smry&rs:Format=HTML3.2](http://ersrs.hrsa.gov/ReportServer/?HGDW_Reports/BCD_HPSA/BCD_HPSA_SCR50_Smry&rs:Format=HTML3.2). Data as of August 2011. HPSA counts do not include 92 facility-based primary care HPSAs.

practitioners, including, but not limited to, physicians. However, any changes in coverage mandates should be weighed against using quality incentives mixed with bundled (capitated) payments to allow providers some flexibility in how they achieve meaningful outcomes.

### 3. Refocus and Re-Energize Health Career Pipelines:

- a. **Provide Clear Career Pathways and Stackable Credentials**<sup>8</sup> We must identify clear pathways from one education or/and training step to the next to attract high school graduates, incumbent workers, displaced homemakers, underemployed, unemployed, low income and diverse individuals to the healthcare industry. Further, the education and training should include stackable credentials, alternative class schedules and innovative training options.
- b. **Increase Awareness of Primary Care and Allied Health Professions in the Primary and Secondary Education System.** We need to market information to increase awareness about primary care and allied health careers at primary and secondary education levels. This will encourage early career aspirations among students. Advocating and promoting interest in health occupations as early as possible has been a successful “Grow Your Own” concept in other states.
- c. **Expand the Pool of Healthcare Faculty and Instructors.** We must identify where experience and education requirements for instructors in healthcare professions are unduly restrictive. This will help us to expand the pool of healthcare instructors and increase capacity for students interested in careers in allied health or primary care.
- d. **Enhance Articulation Agreements between Community Colleges and University Systems.** New York State and private educational institutions and the New York State Education Department (NYSED) must collaborate to develop and enhance articulation agreements among post-secondary institutions. The next step is to create “core” units of study, so students may transfer between colleges and/or occupations without expensive repetition or overlapping education and training requirements. When we achieve that goal, it would create a seamless academic progression in a desired healthcare occupation.

### 4. Assess/Redefine Scope of Practice:

- a. **Explore Collaboration Agreements to Expand the Ability of Clinicians to Practice in Underserved Areas.** Where feasible, we should modify or remove collaboration agreements to help primary care clinicians provide primary care services in rural and/or HPSAs and promote increased access to affordable healthcare throughout the State.
- b. **Expand Approved Healthcare Settings Eligible for Reimbursement.** A patient’s home is currently not an approved healthcare setting. Therefore it is not typically eligible for reimbursement of healthcare services provided there, unless reimbursed as home care. The focus on reducing healthcare costs might encourage the inclusion of home-based care, as in most cases it would cost less than a nursing home. Again, any changes in

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<sup>8</sup> A credential is considered stackable when it is part of a sequence of credentials that can be accumulated over time to build up an individual’s qualifications and help them to move along a career pathway or up a career ladder to different and potentially higher-paying jobs. US Department of Labor, Employment and Training Administration, Training and Employment Guidance Letter No. 15-10, Increasing Credential, Degree, and Certificate Attainment by Participants of the Public Workforce System, <http://wdr.doleta.gov/directives/attach/TEGL15-10.pdf> (December 15, 2010).

coverage mandates should be weighed against using quality incentives mixed with bundled (capitated) payments to allow providers some flexibility in how they achieve meaningful outcomes in expanded settings.

## **5. Enhance Collaboration:**

**a. Collaboratively Identify Job Duties, Credentials, Education and Training Standards for Emerging Occupations.** We recommend collaboration among healthcare industry representatives, health professional associations, labor unions, union-negotiated training funds and others. Jointly they can identify job duties, credentials, licensing, training, skill sets, and who (agency) will oversee and enforce requirements for support and emerging occupations (as described in the new healthcare service delivery models of the New York State's Medicaid Redesign Team and the ACA). Models resembling the Patient-Centered Medical Home include support and emerging healthcare occupations such as:

- Patient navigator
- Medical assistant
- Community health worker
- Health information technologist

We must consider scope of practice limitations while examining these job titles.

**b. Coordinate planning efforts across State agency workgroups and task forces to avoid duplication of effort.**

## **Action Items and Next Steps**

1. The HWDS will decide on ways and venues for stakeholders to receive and be apprised of the recommendations and next steps described in this report.
2. Convene a task force of key stakeholders to develop recommendations for a Health Workforce Resource Clearinghouse, as well as a statewide Healthcare Workforce Data Repository (Recommendations 1a and 1b above). The task force would also consider, among other issues, the type of agency(ies) that would house, operate and coordinate the Clearinghouse and the Repository and the appropriate stakeholder roles in both. They will also review how other states are addressing primary care delivery in underserved areas, and how to best assess health workforce supply-demand gaps.
3. Convene a Physician Workforce Stakeholder Group to identify ways to maximize financial incentives and awareness for the education and placement of primary care physicians in underserved areas, including the DANY and NHSC programs (Recommendations 1c, 2a and 3b).
4. Explore grant funding opportunities to:
  - a. Conduct a study to identify and describe the job duties and education currently required for new and emerging jobs as a result of healthcare reform/primary care service growth (Recommendations 2b and 5a)
  - b. Convene and staff a committee of healthcare industry and labor union representatives from various regions of the state to review the findings developed in the study described in 4a above, in an attempt to reach a consensus on what standardized job titles and what industry-recognized credentials could be developed for each position (Recommendation 2b)

- c. Convene and staff a joint committee of industry/union reps and educators to develop education/training and retraining programs, certificates, curriculum, and facility and healthcare faculty requirements for such new jobs as part of an articulated career/education pathway that incorporates issues of diversity, stackable credentials, and affordability in the development of a career ladder (Recommendations 3a, 3c and 3d)
5. Use the New York Medicaid Redesign Team's (MRT) workforce flexibility subcommittee as an initial forum for addressing emerging scope of practice issues. These would include, but would not be limited to, redefining the roles of certain types of providers; aligning training and certification requirements with workforce development goals; and increasing workforce flexibility. The MRT would also explore ways in which new or amended rules or regulations are possible to enable clinicians to fully practice within their education and competency levels while providing quality, appropriate and lawful healthcare functions and services in all practice settings. (Recommendations 2b-c and 4a).
6. Empanel a taskforce that includes one member from the President's Job Council, Governor's Economic Development Council, NYSDOH, NYSDOL, NYSED, HWDS and MRT to coordinate all the efforts of these different workgroups and avoid duplication of effort (Recommendation 5b).

## **Acknowledgements**

The development of this report is the result of a collaboration of many people. The Healthcare Workforce Development Subcommittee wishes to thank all of the individuals, agencies and organizations who have contributed to the work which resulted in this report and who continues to participate in workforce development initiatives in the healthcare sector. First, we want to thank the partners who brought their vision to the table and who agreed to coordinate activities and work together as members of the subcommittee. We commend their unwavering commitment to the plan to expand New York State's healthcare workforce.

We would like to thank the workgroup members and their respective agencies and organizations for their dedication, diligence and perseverance. We are indebted to the many subject-matter experts, who gave their time to participate in numerous conference calls and who contributed their expertise to explain and provide relevant information for the work groups' recommendations and reports.

The ambitious charges assigned to the various workgroups provided a platform for intense, multi-disciplinary dialogues that, at times, resulted in some disagreements. We wish to thank Deborah King, Sandi Vito, Caleb Wistar, Barry Gray, Jean Moore, Denise Brucker, and Denise Buckovan, our workgroup team leaders, for their patience and skill in assisting and encouraging each workgroup to reach a consensus.

A very special thank-you to the Healthcare Workforce Development Subcommittee's Vice Chairperson, Deborah King, for her professionalism, passion and willingness to take on this challenge.

We would like to thank those who read drafts of this report and provided many ideas for improvements and how we could pull many separate documents into a final report that reflects the goals and perspectives of the workgroups and subcommittee.

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## I. Introduction

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The passage of the Affordable Care Act (ACA) has emphasized the need for states to quickly ramp up and expand their primary care<sup>9</sup> workforce to increase access to healthcare services for the large number of individuals that formally could not afford quality healthcare. In addition, an aging population is increasing the stress to states' healthcare systems. The ACA includes strategies to expand the primary care workforce throughout the country and to increase access to providers in underserved areas. It proposes to:

- expand tax benefits and exclude student loans from taxes for health professionals working in underserved areas;
- expand the National Health Service Corps;
- focus on career training to develop career pathways in the healthcare industry;
- build primary-care capacity through Medicare and Medicaid funded slots for primary care physicians; and,
- provide financial assistance for students.

To better understand the scope of the burgeoning need for primary care workers, and to develop workforce development strategies to address this need, New York State assembled a state partnership to apply for a healthcare workforce development planning grant. This state partnership serves as the core membership of the Healthcare Workforce Development Subcommittee (HWDS), under the auspices of the New York State Workforce Investment Board (SWIB), the governing body for the workforce development, one-stop services delivery system as designated under the Workforce Investment Act of 1998 (WIA).

The grant stipulated specific partners to participate and the SWIB designated existing healthcare industry members to serve. Additionally, SWIB members nominated key State agencies and stakeholders to complete the HWDS. The following chart depicts the core members of the HWDS:

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<sup>9</sup> For the purpose of this report we have used the Institute of Medicine's definition of primary care: *Primary care is the provision of integrated, accessible healthcare services by clinicians who are accountable for addressing a large majority of personal healthcare needs, developing a sustained partnership with patients, and practicing in the context of family and community*

## The Healthcare Workforce Development Subcommittee Partners

HWDS Partners	Organization
A Healthcare Employer	North Shore Long Island Jewish Health Systems
A Healthcare Labor Organization	Service Employees International Union 1199
A Public Two Year Institution of Higher Education	Schenectady County Community College
A Public Four Year Institution of Higher Education	State University of New York
A Healthcare Information Center	The Center for Health Workforce Studies, SUNY at Albany, School of Public Health
A State Public Secondary Education Agency	New York State Department of Education
A State Federation of Labor	The Workforce Development Institute
A Philanthropic Organization	The New York State Health Foundation
New York State Agencies	Department of Health, Office of Temporary and Disability Assistance, Department of Labor

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### A. The Purpose and Goals of the State Healthcare Workforce Development Planning Grants (HRSA 10-284 )

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The Healthcare Workforce Development Subcommittee (HWDS) applied for and received a \$150,000, one year, Affordable Care Act, State Healthcare Workforce Development Planning Grant: Health Resources and Services Administration Grant (HRSA10-284). The purpose of the grant was to provide resources to states to complete state-level comprehensive healthcare workforce development planning to address health workforce shortages and individual state need and gaps. States were encouraged to develop plans to expand their primary care Full Time Equivalent (FTE) healthcare workforce by between 10-25 percent over 10 years to meet the expected demand for health care services.

The HWDS proposed to accomplish the following steps to align with the grant's requirements:

- Identify the high demand statewide and or regional growth occupations in the healthcare sector.
- Analyze state demographics of uninsured or underinsured individuals to understand where access to healthcare services was limited or unavailable.
- Create an inventory of the existing public and private resources that support workforce development in healthcare.
- Identify gaps and issues with the existing education (secondary and post-secondary) system that inhibited the development of a robust talent pipeline in the healthcare sector.
- Identify career pathways associated with selected primary and direct care occupations.
- Research primary care occupational data and locate the gaps.

- Develop a Memorandum of Understanding with The Center for Health Workforce Studies, School of Public Health, State University of New York at Albany to allocate funds for surveys and data collection of pertinent primary care information.
- Plan and implement programs aimed at increasing the supply of primary and direct care workers by 10 to 25 percent over the next 10 years.
- Disseminate information and recommendations from the HWDS to the public to market activities for recruitment and to increase awareness and interest in healthcare careers.

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## II. The Methodology

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The HWDS's methodology was first to convene stakeholders to review and analyze data to determine strengths, weaknesses, opportunities and threats to the process of expanding the healthcare workforce. The second stage was to implement a plan to coordinate efforts to expand the workforce to meet existing and future healthcare delivery service needs across the state. By successfully completing this state-level planning process, the HWDS hoped to make New York State eligible to apply for an Implementation Grant (HRSA 10-285); a \$1.5 million per year, two year award. The Implementation Grant was to be used to roll out regional healthcare workforce development planning. Unfortunately, in April 2011, the federal budget passed without allocating this second phase funding for healthcare implementation.

Subsequent discussion ensued on how to proceed with a conclusion that these partnerships and all State agencies involved would need to pool their time and resources to continue this work and to agree on priority items in need of further action to implement the growth of the primary care workforce in New York. Once the established workgroups submitted their reports and recommendations and the Subcommittee finalized them, we would submit the planning phase recommendations to the State Workforce Investment Board for its evaluation and perspective. After this process, the Subcommittee would focus on healthcare workforce objectives, strategies and activities by region and across the state.

The Subcommittee nominated Deborah King, the Executive Director of Training and Employment Funds 1199 SEIU, and a State Workforce Investment Board member, to serve as Vice-Chair for the HWDS. The HWDS elected to use a team approach to accomplish its work, designating five workgroups and charging them with specific tasks to accomplish. A team leader was nominated or volunteered to pilot each workgroup along with a Department of Labor staff member as an assistant (Appendix 8).

Funding from the grant was used to commission the Center for Health Workforce Studies, School of Public Health, State University of New York, at Albany, to expand and enhance its statewide surveys to determine the existing and projected business needs in the healthcare industry. The collection of this additional data would be essential to help the HWDS identify occupational shortages, educational and training gaps, population, regional differences and areas in the state where access to healthcare services is limited or unavailable.

In addition, experts in the healthcare industry discussed healthcare workforce issues with workgroup members during a Panel Discussion held in February 2011. Highlights from the discussion are in Appendix 9.

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### III. The Five Workgroups

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The workgroups, which met on an ad hoc basis throughout the duration of the planning period, brought in additional representatives as subject matter experts (SMEs) with the necessary expertise to discuss the topics explored. They brought together a vast store of information, data, ideas and potential work-in-progress initiatives that would expedite the knowledge framework. Members brought experience and a wide network of external contacts, which were useful in developing information access points and were critical in the continued flow of healthcare information.

A list of workgroup members, team leaders and SMEs is provided in Appendix 8.

#### A Brief Synopsis of Each Workgroup's Activities

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##### A. Asset Mapping Workgroup

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The Asset Mapping workgroup's charge was to identify existing federal, State, and private resources used to recruit, educate, or train a skilled healthcare workforce.

#### Key Issues

1. Since there is no identifiable "one-stop shop" for locating resources, a major challenge encountered by the workgroup was the inability to locate and identify every available resource. Therefore, the inventory list of resources compiled by the workgroup (and included in Appendix 3) is not all-inclusive and is subject to change.
2. There is a lack of appropriate partnerships between State, local and not-for-profit agencies to help promote the flow of information on resources as they become available, and alerts when new opportunities arise. In many cases, the workgroup found it difficult to get the full story from one government agency or another about an opportunity co-sponsored via multiple agencies, or to confirm whether a particular opportunity was defunct.

Additional data and information is in the Asset Mapping Workgroup Report, Appendix 3.

#### Recommendations

Based on the key issues identified by the Asset Mapping Workgroup, several recommendations are below:

1. Establish a "one-stop shop" or clearinghouse for primary care workforce resources. There should be a *center* to locate available workforce resources and opportunities, at least for primary care funding, with a staff person deployed to update and keep the opportunities current.
2. Identify appropriate partnerships and/or expand partnerships between State, local and not-for-profit agencies. The center identified above could periodically reach out to other agencies and set up linkages for the flow of information on resources as they

become available, and alerts when new opportunities arise. This center could also convene private foundations, community-based organizations as well as others to explore the creation and funding of new opportunities, as the need arises.

3. Incorporate the various recommendations of the Asset Mapping Workgroup into the function of the NYS Department of Health's Office for the Development of Patient-Centered Primary Care Initiatives, as part of the state's Medicaid Redesign Team recommendations. This office has the broader goal of expanding access to primary care services statewide.

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## **B. Data Collection Workgroup**

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The Data Collection workgroup's charge was to compile and analyze labor market information from the New York Departments of Labor, Health and Education and the CHWS.

### **Key Issues**

1. While current data collection efforts produce excellent information, they are not comprehensive. After reviewing the data table, group members agreed that there were substantial data gaps related to workforce supply, production and demand.
2. The most substantial challenge to addressing the workforce data needs of the state is the lack of necessary resources to sustain more exhaustive data collection and analyses.

Additional information is in the Data Collection Workgroup Report, Appendix 4.

### **Recommendations**

The recommendations of the workgroup reflect a clear understanding of collaborations necessary to remove barriers, address challenges and create a more systematic approach to collecting, analyzing and disseminating data for use in regional health workforce planning.

- Convene a task force that is charged with the development of an implementation plan for the following recommendations:
  1. Identification of a central organization, such as CHWS, to serve as a repository for all state, health workforce data collected to ensure uniformity and consistency in all data that are collected and to support systematic dissemination of data needed for planning purposes.
  2. Increase the availability of State University of New York (SUNY) and City University of New York (CUNY) educational pipeline data for use by regional groups for health workforce planning.
  3. Develop more efficient and cost-effective ways to collect health workforce data that builds collaborations across State agencies, reduces redundancies and creates a more streamlined approach to data collection.

- The task force membership should include representatives from State agencies such as the Departments of Health (DOH), Labor (DOL), and Education (SED), SUNY, CUNY, and CHWS. Additionally, other key stakeholders that will help shape the development of the implementation plan include:
  - Provider associations:
    - Healthcare Association of New York State (HANYS)
    - Home Care Association of New York (HCA)
    - New York State Health Facilities Association (NYSHFA)
  - Professional associations:
    - Medical Society of the State of New York (MSSNY)
    - New York State Nurses Association (NYSNA)
  - Other relevant groups:
    - Service Employees International Union (SEIU)1199
    - Area Health Education Centers (AHEC)
    - The Institute for Nursing – New York State Nursing Workforce Center

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## C. Career Pathways Workgroup

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The scope of work for the Career Pathways workgroup involved identifying career pathways associated with selected primary care occupations and preparing an inventory of existing training and education programs to support these pathways.

The workgroup was also asked to identify promising practices for each occupational group (home health aides, nurses, physician, etc.), in areas such as:

- a) Career information
- b) Guidance programs
- c) Pipeline programs
- d) Innovative teaching/training models for students/residents

### Key Issues

A summary of the highlights, unanticipated results, challenges, gaps, recommendations for solutions, strategies and next steps was developed and is included in the Career Pathways Workgroup Report, Appendix 5.

### Recommendations

1. Support the Robert Wood Johnson Foundation initiative, which calls for nurses to:
  - Practice to the full extent of their education and training.
  - Achieve higher levels of education and training through an improved education system that promotes seamless academic progression.
  - Be full partners, with physicians and other health professionals, in redesigning health care in New York.

By supporting this concurrent initiative, we can provide additional momentum that will increase the probability of success.

2. Require better data collection and information infrastructure to ensure effective workforce planning and policy-making.
3. Advocate and support activities to promote the “grow your own” physician recruitment theory.
4. Promote early career aspirations among students.
  - Provide support for elementary programs that improve math and reading education and career exploration at very early levels.
  - Motivate students to aspire to more than entry-level healthcare jobs and provide them with an educational base, which will allow them to apply to medical schools and graduate level programs.
5. Acknowledge our lack of objective data on and need for further investigation into the field of midwifery (such as anecdotal information on midwifery as a growing career and an in-demand service).
6. Explore and support the recognition of additional positions, including emerging occupations such as patient navigator, medical assistant and community health worker.
7. Identify career pathways with stackable credentials that recognize entry-level steps toward other occupational titles, which are middle-skill jobs that pay living wages. For example, a Patient Navigator might acquire additional skills to serve as an OR/Surgical Tech, X-ray Tech or Sonographer.

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## **D. Credentials Workgroup**

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The Healthcare Credentials workgroup’s charge was to describe the academic and healthcare industry skill standards for high school graduation, for entry into post-secondary education, and for various credentials and licensure.

### **Key Issues**

1. New healthcare occupations are emerging, including community health workers (CHWs), medical assistants, and various health information technology (HIT) occupations. These new occupations lack:
  - standardized role definitions and industry recognized credentials;
  - guidelines in regard to scope of practice; and
  - a designated State agency that has enforcement responsibility.
2. Expanding functions and responsibilities of licensed professions may breach existing statutory limitations on scope of practice for other licensed professions.

3. The Legislature's primary role in effecting any changes to existing scope-of-practice parameters or adoption of new ones was not clearly understood by workgroup members.

Additional information is in the Credentials Workgroup Report, Appendix 6.

## **Recommendations**

1. Conduct research to identify and describe the job duties and education currently required for new and emerging jobs.
2. Convene a committee of healthcare industry representatives to review the above findings and make recommendations regarding credentialing requirements.
3. Convene a committee of industry/union reps and educators to develop education/training programs, certificates, curriculum, etc. for such new jobs -- factoring in diversity and affordability in the development of a career ladder.
4. Convene a committee to study workforce needs in rural areas and those with a low percentage of primary services to address these shortages.
5. Include representatives of DOH and SED on the above initiatives for appropriate input regarding the need for exam/certification/licensing.
6. Have subject matter experts come before the workgroup to inform its members on the legislative process for recommending changes to the scope of practice for any given profession, including enforcement provisions.

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## **E. Rules and Regulations Workgroup**

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The Healthcare Rules and Regulations workgroup's activities included identification of federal or State policies, rules or regulations and any barriers of such, which may prohibit the development of a coherent and comprehensive healthcare workforce.

### **Key Issues**

The Rules and Regulations workgroup examined issues that prohibit the expansion of the primary care workforce. Areas of concern included scope of practice, training and education barriers, healthcare reimbursement, telemedicine, work environment and individual occupational gaps and barriers.

Additional discussion and information is in the Rules and Regulations Workgroup Report, Appendix 7.

### **Key Recommendations**

The prominent recommendations are as indicated below.

1. Convene a scope of practice task force to explore ways in which new regulations or rules could enable healthcare professionals (including licensed and non-licensed), in various healthcare settings, to practice to the full extent of their education, training and competency. The group should consider what changes are possible while maintaining safety and quality of care.
  - The task force would include qualified practitioners in the primary care sector, including advanced practice registered nurses, physician assistants, doctors, and representatives from community healthcare centers, rural healthcare facilities and others who have experience in the expansion of work under new models of care delivery.
2. Revise or remove the requirement for a collaborative agreement between a physician and a nurse practitioner from the nurse practitioner scope of practice. There is precedent for this change; the collaborative agreement requirement was removed from the nurse midwife scope of practice.
3. Seek provider neutral language in all statutes and regulations to allow healthcare occupations, such as advanced practice registered nurses, to practice within their full scope and competency levels.
4. The State should require that all third-party payers provide direct reimbursement for all covered services provided by a qualified practitioner and not limit reimbursement to physicians only.
5. Increase reimbursement to cover the cost of services; expand approved settings to include home care, outpatient clinics, and long-term care facilities; and mandate that third-party payers reimburse for these services.
6. Release less rigorous requirements for the Doctors Across New York (DANY) program to allow for additional qualified applicants in rural and underserved areas.
7. Eliminate onerous regulations, including duplicative credentialing requirements that create impediments, State licensure requirements, malpractice coverage, and duplicative privileging processes.

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#### **IV. The Center for Health Workforce Studies, Data and Other Statistics**

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The Center for Health Workforce Studies, School of Public Health, State University of New York at Albany (CHWS), produces an annual healthcare workforce report. The HWDS provided a portion of its planning grant funds to the CHWS to expand the scope of its regional reports in that annual report. Specifically, the regional reports would describe available primary care capacity and shortage areas within each region and provide detailed data on the population of the region as well as the health status indicators of the regional population. CHWS would collect data from healthcare environments such as hospitals, nursing homes, home care agencies, clinics and Federally Qualified Health Centers (FQHC). The information

collected would identify occupational shortage areas relevant to further the workforce development regional planning and implementation process.

Data-driven information from CHWS reports is an important tool to be successful in regional planning strategies. Local leaders face a number of challenges to boost the healthcare workforce: designing a process of collaboration, defining the practical boundaries of the region, establishing a governance process, finding funding, creating shared regional initiatives, making collective investment decisions, agreeing on clear outcomes and metrics, and determining how to evaluate and adjust<sup>i</sup>.

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## **A. The Health Care Workforce in New York, 2009: Trends in the Supply and Demand for Health Workers**

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In its June 2011 report entitled “The Health Care Workforce in New York, 2009: *Trends in the Supply and Demand for Health Workers*”<sup>ii</sup> the CHWS summarized the major issues impacting New York’s labor force in the healthcare field.

The health workforce - healthcare professionals and others working inside and outside of the health sector and others working in healthcare facilities – is an important component of the nation’s economy, representing more than 9 percent of all workers. Health sector employment is one of the fastest growing employment sectors in the country. Projections indicate sector growth at twice the rate of all other sectors in the U.S. between 2008 and 2018. Not surprisingly, more than half of the fastest growing occupations in the U.S., over that same period, are in healthcare.

Within a decade, an aging America will spend one of every five dollars on healthcare, according to federal projections. Total healthcare spending in the U.S. will double to more than \$4 trillion by 2015. Much of this increase in spending is due to the fact that we are living longer and requiring additional medical procedures as we age.

The aging of our state’s population translates into both increased demand and opportunity for healthcare workers over the next 10-20 years. As more of the state’s Baby Boom generation reaches retirement age and younger workers continue to move out of the state, we may expect to see reduced availability of labor. Worker shortages in certain occupational groups (e.g., community and social services, healthcare support, personal services & tourism), are likely to occur as fewer younger workers will be on hand to replace retirees.

“The Health Care Workforce in New York, 2009: *Trends in the Supply and Demand for Health Workers* report presents a wide array of data about the health workforce in New York. It describes trends in the state’s healthcare workforce by setting, occupation, and region. The key findings of the report include:

***There is wide regional variation in health sector employment.***

In 2009, there were nearly 5,500 health sector jobs per 100,000 population in the Mohawk Valley region, accounting for 14 percent of total employment. The Long Island region had almost 5,350 health sector jobs per capita, representing nearly 13 percent of total

employment. By contrast, the North Country region had fewer than 4,000 health sector jobs per capita, accounting for 11 percent of total employment.

*Statewide, jobs in ambulatory care and in home healthcare grew significantly between 2004 and 2009.*

Between 2004 and 2009, jobs in home healthcare grew by over 28,600, or by 38 percent, and jobs in ambulatory care increased by more than 29,000, or by 11 percent. During the same time, jobs in hospitals increased by almost 22,500, or by 6 percent, while jobs in nursing and personal care facilities declined by nearly 1,500 or by 1 percent. Between 2004 and 2009, jobs in ambulatory care increased in all regions, jobs in hospitals grew in 9 out of 10 regions, and jobs in home healthcare increased in 8 out of 10 regions. Over the same period, jobs in nursing and personal care facilities declined in 5 of the 10 regions in New York.

*Primary care physicians are not evenly distributed either across the state or within regions.*

There was wide regional variation in primary care physician capacity, with the New York City and Long Island regions having relatively high numbers of primary care physicians per capita and most upstate regions having much lower numbers of primary care physicians per capita. There was also a substantial maldistribution of primary care physicians within regions and counties as evidenced by the presence of sub-county, primary care HPSAs in counties with a seemingly ample supply of primary care physicians.

*Healthcare providers across the state reported recruitment and retention difficulties for a wide array of professions and occupations.*

Hospitals, nursing homes, and home health agencies all reported difficulty recruiting experienced registered nurses (RNs). Nursing homes and home health agencies also indicated that the retention of both experienced RNs and newly trained RNs was problematic. However, with few exceptions, providers reported little difficulty recruiting newly trained RNs. This was consistent with findings from the most recent survey of nursing deans and directors, in which a much smaller percentage of respondents reported “many jobs” for their graduates in 2010, compared to 2009.

Hospitals statewide reported difficulty recruiting and retaining clinical laboratory technologists. They also reported that recruitment was problematic for health information technology, including analysts and program managers, as well as medical coders. In half of the state’s regions, hospitals also reported difficulty recruiting pharmacists, with the Hudson Valley and the North Country regions reporting the most difficulties.

New York’s nursing homes and home health agencies statewide reported difficulty recruiting occupational therapists, physical therapists, speech language pathologists, dietitians/nutritionists, and respiratory therapists.

Community health centers reported difficulties recruiting dentists, geriatric nurse practitioners, and psychiatric nurse practitioners.

While the number of RN graduates in New York increased in 2010 compared to 2009, the majority of growth in the number of graduates was attributable to BSN completions for already licensed RNs.

For the eighth consecutive year, the number of RN graduations in New York increased, with 3 percent growth between 2009 and 2010. Deans and directors of RN education programs estimated an 8 percent increase in RN graduations statewide between 2010 and 2011. Of the nearly 250 additional RN graduates in 2010, compared to 2009, 99 percent were RNs completing Bachelor of Science degrees in nursing (BSN degrees).

Deans and directors of RN education programs report a competitive job market for their graduates.

Only 25 percent of RN program deans and directors reported “many jobs” for their graduates, down from 95 percent of them reporting “many jobs” in 2006 and 2007. There was some regional variation, with more than 50 percent of respondents from the North Country and Southern Tier regions reporting “many job openings” for newly trained RNs.

While reviewing the figures for primary care occupations, we must recognize that these statistics do not reflect the increase in demand for healthcare workers when we consider the pending increase of individuals who will be eligible for health insurance and healthcare services as a result of the Affordable Care Act.

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## **B. Other Statistics**

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### United States Census Bureau

Based on population projections from the U.S. Census Bureau, we expect the working-age population (ages 16-64) in New York State to decline by 6.5 percent, or more than 860,000, between 2010 and 2025. This ranks New York State 41st out of the 50 states in terms of percentage change.

The age composition of the working-age population in New York will change dramatically as the 55-64 age group is the only cohort expected to experience growth over this period (+145,000), while the population in the core working-age group (ages 35-54) will decrease by more than 630,000. This development will likely reinforce worker shortage trends since only about 60 percent of New Yorkers in the 55-64 age groups participate in the labor force as compared with 80 percent of those in the 35-54 age groups.

### The New York State Department of Labor

According to New York State Department of Labor, health sector employment in the state grew 19.1 percent between 2000 and 2010, while all other employment sectors combined declined by 3.9 percent. Since 2000, all major components of the healthcare sector gained jobs: ambulatory healthcare (+32.5 percent), hospitals (+6.4 percent), and nursing and residential care facilities (+16.4 percent). Moreover, these gains existed despite a severe recession in recent years.

Growth in the healthcare industry employment is driven more by demographics than by overall economic conditions. Almost all healthcare occupations are expected to be in demand over the next decade as New York State's population continues to age. The healthcare sector consists of three main components:

- Ambulatory healthcare services (NAICS Industry 621)
- Hospitals (NAICS Industry 622)
- Nursing and residential care facilities (NAICS Industry 623)

During 2009, the New York State Department of Labor reported the average weekly wage for ambulatory healthcare services (\$961) and for nursing and residential care facilities (\$639) as having average weekly wage levels below the statewide all-industry average (\$1,111). Average weekly wage levels at hospitals (\$1,147) in 2009 were somewhat above the statewide all-industry average. This is largely a reflection of the mix of occupations in each healthcare industry. In nursing and residential care facilities, the three most common occupations are relatively low-paying and include nursing aide and orderly, home health aide, and licensed practical/vocational nurse.

Between 2008 and 2018, the New York State Department of Labor is projecting more than 6,100 annual job openings for home health aides; nearly 5,000 annual job openings for RNs; and almost 2,400 annual job openings for nursing aides, orderlies, and attendants. There will also be a substantial number of job openings for licensed practical nurses and social workers during the same period.

#### United Hospital Fund: *Health Insurance Coverage in New York*

A June 2010 report from the United Hospital Fund entitled, *Health Insurance Coverage in New York, 2008*<sup>iii</sup> provides an invaluable snapshot of the uninsured in New York. It details income, employment status, age, and other demographic information. It also tracks coverage distribution among workers and low-income New Yorkers and estimates the number of uninsured New Yorkers who are eligible for public health insurance. There is a description of trends in coverage over time. The report is based on the most recent data from the Current Population Survey.

The report's findings included some noteworthy statistics:

- There were 1.4 million non-elderly uninsured residents in New York City (19 percent of the population) and 2.5 million non-elderly uninsured residents in New York State (15 percent of the population).
- New York State's uninsured were largely working adults or their dependents or individuals from low-income families: 8 in 10 uninsured were workers or their dependents; over 60 percent of the uninsured were low-income; and low-income workers represent over half of all of the uninsured workers.
- An estimated 1.1 million (or 42 percent) of uninsured New Yorkers were eligible for public coverage but not enrolled. Another 1.2 million, or 45 percent, of uninsured New

Yorkers had low-to-moderate income that could meet the income standards for subsidized coverage under health reform.

- Between 2006 and 2008, before the full impact of the recession, New York was already experiencing a decline in the rate of employer-sponsored insurance and an increase in the rate of public coverage. Because these trends largely offset each other, the share of the population without coverage remained stable.

#### The Association of American Medical Colleges and the Health Association of New York's Reports

The Association of American Medical Colleges (AAMC) indicated in a September 30, 2010 report, a need for more than 63,000 physicians nationwide by 2015, with a worsening shortage through 2025. Additional information on physician shortages is found in the Healthcare Association of New York's (HANY) Physician Advocacy Survey, *Help Wanted: New York's Physician Shortage Continues to Worsen*<sup>IV</sup>.

#### Medicaid and Child Health Plus

In 2010, 4.7 million people enrolled in Medicaid and another 400,000 children enrolled in Child Health Plus. Of the 4.7 million Medicaid enrollees, 3.6 million are non-disabled children and adults under the age of 64 and 700,000 are disabled. In addition, 16 percent of the non-elderly population living in New York remain uninsured (2.7 million) and 55 percent have employer insurance coverage (9.4 million).

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## V. Complementary Initiatives

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While the HWDS and its various workgroups began planning grant activities, other complementary healthcare initiatives were in various stages of development. These initiatives involved policy changes, studies, assessments, transformations and measures to support the needs of the healthcare industry and workforce development efforts across the state.

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### A. Governor Cuomo's Regional Approach to Economic Development

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The New York State Executive Budget (2011-2012) established 10 Regional Economic Development Councils, chaired by Lieutenant Governor Robert Duffy, to create a more regionally based approach to allocating economic development funding and to act as one-stop shops for all State-supported economic development and business assistance programs in each region. Strategies to revitalize different parts of the state depend upon numerous factors unique to each region and that the best ideas come from the people who live in those regions.

Governor Cuomo proposed a process that will include and engage local stakeholders in developing and executing sustainable long-term, regional economic development strategies. The councils will be supported with \$130 million in capital, reprogrammed from existing resources.

## Highlights of the Regional Economic Development Councils

Each Council is chaired by the Lt. Governor and led by the Regional Director of Empire State Development Corporation (ESDC). The Councils bring together higher education, business, community leaders, and key State agencies (Department of Labor, Department of Environmental Conservation, Department of Transportation, and the State University of New York) to identify key priorities for economic development (public/private partnership). A “bottom up” approach is used for each region to capitalize on its core strengths and focus on job creation. Strategies are based on the specific industry clusters in each region. The first round of competitive grant awards was announced in December 2011. Performance will be monitored to maintain accountability. Common themes will include regionalization, sector/industry clusters, career development for youth, private/public partnerships, and competition for resources.

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### **B. Office of Health Information Technology Transformation**

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Established within the Department of Health (DOH) in 2007, the Office of Health Information Technology Transformation (OHITT) coordinates HIT programs and policies across the public and private healthcare sectors. Its goal is to enable improvements in healthcare quality, increase affordability and improve healthcare outcomes for New Yorkers. These programs and policies will not only ensure that medical information is in the hands of clinicians and New Yorkers so that it guides medical decisions and supports the delivery of coordinated, preventive, patient-centered and high-quality care, but also support clinicians in new prevention and quality-based reimbursement programs and new models of care delivery. OHITT is responsible for advancing New York's Health Information Infrastructure as a key underpinning to many DOH health reforms. The total investment to date in New York's Health Information Infrastructure is over \$840 million, nearly \$440 million in funding through the Health Care Efficiency and Affordability Law for New Yorkers Capital Grant Program, over \$280 million in private sector matching funds and nearly \$120 million in other state and federal programs.

Key Building Blocks and Activities:

- New York State's HIT Strategic Plan
- Policy Framework – Governance and Accountability
- Technical Infrastructure
- Financial Investment and Incentives
- Consumer Engagement
- Research and Evaluation
- Statewide Policy Guidance

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### **C. The Medicaid Redesign Team**

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“It is of compelling public importance that the State conducts a fundamental restructuring of its Medicaid program to achieve measurable improvement in health outcomes, sustainable cost control and a more efficient administrative structure.”

- Governor Andrew M. Cuomo, January 5, 2011

## About The Medicaid Redesign Team

The Medicaid Redesign Team was tasked by Governor Cuomo to find ways to reduce costs and increase quality and efficiency in the Medicaid program for the upcoming 2011-12 Fiscal Year. As part of its work, the Team sought ideas from the public at large, as well as experts in healthcare delivery and insurance, the healthcare workforce, economics, business, consumer rights and other relevant areas.

New York Medicaid spends more than \$53 billion annually to provide healthcare to more than 4.7 million people in need. In effect, Medicaid is the largest health insurance program in New York State. The costs are borne by state, county and federal taxpayers. The Team has been undertaking the most comprehensive examination of New York Medicaid since its inception.

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### **D. The Health Insurance Exchange in New York**

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Under the ACA, each state has the option to set up its own health insurance exchange. For the most part, federal health reform establishes a "floor, not ceiling," allowing states to provide protections greater than those established under federal law. This is good news for New York, which already provides strong consumer protections, such as open enrollment and community rating that ensures access to health insurance coverage without regard to age, sex, health status and occupation. New York will work in partnership with the federal government to implement the federal law and coordinate it with New York law. States also provided input to the U.S. Department of Health and Human Services in developing guidance in a number of areas including consumer assistance and the review and disclosure of premium rate adjustments.

#### The Health Insurance Exchange Design

Federal health reform establishes competitive health insurance exchanges or markets for individuals and small businesses to more easily navigate the healthcare system. A health insurance exchange offers a "one stop shopping" option for consumers to purchase health insurance, that can assist them to select coverage, calculate costs, compare options, and learn about public programs. Health insurance exchanges will start in 2014 and can be operated by individual states or by the federal government. Discussions concerning the design and execution of the New York Health Insurance Exchange are currently underway.

New York's current individual market offers limited coverage options, and exchanges will introduce many new coverage options for people purchasing coverage in the individual and small group market. Larger businesses may eventually be able to seek health insurance coverage for their employees in the exchange.

#### New York's Exchange

As indicated under federal health reform, states have the option either to set up an exchange or allow the federal government to set up an exchange for them. New York will develop an operational plan for its new exchange by January 1, 2013 in order to meet the federal requirement that exchanges are up and running by 2014. The year 2014 is an important date in federal health reform because it coincides with a number of other key building blocks.

## The Minimum Exchange Requirements

Health reform set forth minimum requirements for health insurance coverage offered through the exchanges, including prohibitions on annual and lifetime coverage limits, coverage of preventative care, etc. In addition, through the Exchange, insurers will offer four standardized coverage levels: bronze, silver, gold, and platinum. Insurers in the New York Exchange will offer a range of coverage, with higher levels of coverage costing more and lower levels of coverage costing less.

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### **E. Health Profession Opportunity Grants to Serve Temporary Assistance for Needy Families (TANF) Recipients and Other Low-Income Individuals**

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These grants required a Memorandum of Understanding between partners along with consultation and coordination with the Local Workforce Investment Board (LWIB), the State Workforce Investment Board (SWIB), the New York State Registered Apprenticeship Agency and the State agency responsible for administering the State TANF program. There were four grants awarded to New York State Entities:

1. Schenectady County Community College's project provides education and training in high demand healthcare occupations including, certified nursing assistant, licensed practical nurse, registered nurse and emergency medical technician.
2. Buffalo-Erie County Workforce Investment Board's (BECWIB) project will enroll Temporary Assistance for Needy Families (TANF) eligible adults and other low income individuals into training programs leading to high demand healthcare occupations.
3. Suffolk County Department of Labor's (SCDOL) project included forming the Suffolk County Healthcare Occupational Opportunity for Learning (SCHOOL) initiative. Grant funds will support training for occupations including home health aide, orderlies and attendants, medical biller, clinical medical assistants, laboratory aide assistant, nursing aides, medical assistant, nurse assistant, and pharmacy technician.
4. Hostos Community College's, City University of New York (CUNY), project included the Allied Health Career Pipeline program which would enable enrollees to complete training, internships and examinations to become certified nursing assistants and patient care technicians. The recruitment, retention and supportive services is provided through the One Stop Career Center system.

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### **F. The Robert Wood Johnson Initiative**

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Robert Wood Johnson Foundation (RWJF) and the Institute of Medicine (IOM) launched a two-year initiative to respond to the need to assess and transform the nursing profession. The IOM appointed the Committee on the RWJF Initiative on the Future of Nursing, at the IOM, with the purpose of producing a report that would make recommendations for an action-oriented blueprint for the future of nursing.

The IOM report on *The Future of Nursing: Leading Change, Advancing Health*<sup>v</sup> established eight recommendations.

## New York State Regional Action Coalition's Priorities

While all eight recommendations are critical, the New York State Regional Action Coalition has identified four recommendations as priorities:

- Nurses should practice to the full extent of their education and training,
- Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression,
- Nurses should be full partners, with physicians and other healthcare professionals, in redesigning healthcare in the United States and effective workforce planning; and,
- Policy making requires better data collection and an improved information infrastructure.

The recommendations presented in the report are directed to individual policy makers, national, state, and local government leaders, payers, healthcare researchers, executives, and professionals, nurses, as well as to larger groups such as licensing bodies, educational institutions, philanthropic organizations, and consumer advocacy organizations. Working together, these many diverse parties can help ensure that the healthcare system provides seamless, affordable, quality care that is accessible to all and leads to improved health.

### Implementation and the New York State Steering Committee

New York State was designated as one of five initial pilot Regional Action Coalitions to advance the *Future of Nursing: Campaign for Action*, a collaboration created by the Robert Wood Johnson Foundation and the AARP Foundation. The Future of Nursing, NYS, a nonpartisan entity, is part of a broad national effort to implement the recommendations of the IOM report. The responsibilities of the Future of Nursing, NYS are to engage a diverse group of stakeholders from a variety of sectors, to fashion a state-prioritized list of recommendations, to gain media exposure and build visibility/awareness, to inform policymakers and decision-makers on key issues and to do outreach activities to philanthropies, businesses and other entities for on-going support.

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## **G. Adirondack – Champlain Telemedicine Information Network**

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*Adirondack – Champlain Telemedicine Information Network (ACTION)*. Empire State Development (ESD) and The Research Foundation of SUNY, on behalf of the college at Plattsburgh, announced the launch of the Adirondack-Champlain Telemedicine Information Network (ACTION) in the North Country. This \$9.8 million project included a grant from the Federal Communications Commission under the Rural Healthcare Pilot Program. The project will develop a long-term, leased 239-mile telemedicine network, which will link 48 medical facilities in the northern region. The ACTION system is scheduled for completion and all ACTION sites should be live by the end of July 2012.

ACTION will allow participating healthcare providers to more readily access information, share information, and begin reducing costs for the transfer of medical information through interactive audiovisual media, such as voice, video and data applications, for the purpose of consulting and conducting examinations or remote medical procedures. Members will be

able to create more diverse telemedicine applications, which will improve the long term sustainability of the network.

The potential benefits of developing this state of the art infrastructure include; access to electronic healthcare records as well as healthcare specialists, who are difficult to attract to the North Country region, colleges being able to bring a class right to healthcare facilities and the ability to monitor patients from their homes. In addition, the development of this critical network offers the opportunity and potential for growth of the regional broadband initiative in the future.

Participating hospitals and clinics include Glens Falls Hospital, Champlain Valley Physicians Hospital Medical Center, Alice Hyde Medical Center, Adirondack Medical Center, Elizabethtown Community Hospital, Interlake's Health, Massena Memorial Hospital, and the St. Regis Mohawk Tribe clinic.

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## **H. New York e-Health Collaborative (NYeC)**

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The NYeC (pronounced "nice") was founded by healthcare leaders throughout New York State, with support from the New York State Department of Health, as a public-private partnership serving as a focal point for key healthcare stakeholders. The program will build consensus on health information technology (HIT) policy priorities and collaborate on national, state and regional HIT adoption, implementation and optimization initiatives. NYeC's key responsibilities include:

1. Convening, educating and engaging key constituencies, including healthcare and HIT leaders across the state;
2. Facilitating a two-tiered governance structure for interoperable health information exchange through the Statewide Health Information Network for New York (SHIN-NY) that includes, at the state level setting, health information policies, standards and technical approaches, and at the regional and local level, implementing such policies by Regional Health Information Organizations and Community Health Information Technology Alliances;
3. Evaluating and establishing accountability measures for New York State's HIT strategy.

The HITECH Act of 2009 authorized the establishment of HIT Regional Extension Centers (RECs) to promote physician adoption, implementation and meaningful use of Electronic Health Records (EHRs). NYeC was awarded a cooperative agreement to act as a certified Regional Extension Center for all counties in the state, outside of New York City.

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## **I. Health Efficiency and Affordability Law (HEAL)**

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New York State passed the Health Care Efficiency and Affordability Law for New Yorkers Capital Grant Program in 2004. It is often referred to as the HEAL NY Program. One of two primary objectives of the HEAL NY program includes implementing a 21<sup>st</sup> Century health information infrastructure to support the delivery of high quality care. The NYS Department of Health and the HEAL program has supported four competitive grant rounds for HIT.

The Health Efficiency and Affordability Law (HEAL) has provided nearly \$400 million in funding to move forward the State's HIT agenda. Between January and June 2011, approximately 50 jobs were retained (without HEAL grant funding they would have been lost) and approximately 46 new positions have been created. The HEAL program funds can be used for positions related to training and implementation support associated with HIT.

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#### **J. Columbia University's Health Information Technology Training Grant**

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Columbia University, in New York City, received \$3.8 million in economic stimulus law funding to expand or create programs leading to a baccalaureate degree, master's degree, or certificate of advanced studies in one or more of the following six targeted roles:

- clinical / public health leader;
- health information management and exchange specialist;
- health information privacy and security specialist;
- research and development scientist;
- programmer/software engineer; and HIT subspecialist.

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#### **K. National Health Service Corps Scholarships Program**

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On May 10, 2011, the United States Health and Human Services Secretary, Kathleen Sebelius, announced the opening of the 2011 application cycle for the National Health Service Corps (NHSC) Scholarship Program. The year's scholarships, supported with up to \$28 million of the Affordable Care Act funds dedicated to the NHSC, will help address shortages in the primary healthcare workforce today and for the future.

The NHSC Scholarship Program, administered by the Health Resources and Services Administration (HRSA), awards scholarships to students pursuing a career in primary care. Recipients receive payment for tuition, required fees and other reasonable educational costs, a monthly support stipend, and assistance in finding a practice site upon completion of a training program.

Disciplines eligible for the NHSC scholarship program include physician, dentist (general or pediatric), nurse practitioner (primary care), certified nurse-midwife, and physician assistant. Upon graduation, scholarship recipients serve as full-time or part-time primary care providers between two and eight years at an NHSC site in a high-need Health Professional Shortage Area (HPSA).

"The NHSC Scholarship Program encourages the nation's future medical and oral health providers to choose primary care," said Secretary Sebelius. "The program delivers on our commitment to help address our nation's primary care workforce shortage."

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#### **L. The Medical Home/Patient Centered Medical Home**

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The medical home, also known as a patient-centered medical home (PCMH), is "an approach to providing comprehensive primary care that promotes partnerships between individual patients, and their personal providers, and when appropriate, the patient's family". The

provision of medical homes may allow better access to healthcare, increase satisfaction with care, improve a patient's health and maintain a patient's chronic health condition.

The concept of the medical home has evolved since its introduction by the American Academy of Pediatrics in 1967<sup>vi</sup>. In 1992, the Academy published a policy statement defining a medical home and in 2002, they expanded the definition.

In 2002, seven U.S. national family medicine organizations created the *Future of Family Medicine*<sup>vii</sup> project to "transform and renew the specialty of family medicine." Among the recommendations of the project was that every American should have a "personal medical home" through which to receive his or her acute, chronic, and preventive services. The services should be "accessible, accountable, comprehensive, integrated, patient-centered, safe, scientifically valid, and satisfying to both patients and their physicians." As of 2004, one study estimated that if the *Future of Family Medicine* recommendations were followed (including implementation of personal medical homes), "healthcare costs would likely decrease by 5.6 percent, resulting in national savings of 67 billion dollars per year, with an improvement in the quality of the healthcare provided." A review of the literature published the same year determined that medical homes are "associated with better health, with lower overall costs of care and with reductions in disparities in health."

IBM and other organizations started the Patient-Centered Primary Care Collaborative<sup>viii</sup> in 2006 to promote the medical home model. As of 2009, its membership included "some 500 large employers, insurers, consumer groups, and doctors<sup>ix</sup>."

#### Important 2008–2010 Developments Concerning Medical Homes

- The Accreditation Association for Ambulatory Health Care (AAAHC) began accrediting medical homes in 2009 and is the only accrediting body to conduct on-site survey for organizations seeking Medical Home Accreditation<sup>x</sup>.
- The National Committee for Quality Assurance released *Physician Practice Connections—Patient-Centered Medical Home* (PPC-PCMH)<sup>xi</sup>, a set of voluntary standards for the recognition of physician practices as medical homes.
- In answering a 2008 survey from the American Academy of Family Physicians, then-presidential candidate, Barack Obama, wrote "I support the concept of a patient-centered medical home" and that as president he would "encourage and provide appropriate payment for providers who implement the medical home model"<sup>xii</sup>.
- The New England Journal of Medicine published recommendations for the success of medical homes that included increased sharing of information across healthcare providers, the broadening of performance measures, and the establishment of payment systems that share savings with the physicians involved<sup>xiii</sup>.
- Implementation guidance was provided to patients and providers on how to implement the Joint Principles for these models. The American Medical Association expressed support for the Joint Principles<sup>xiv</sup>.

- A coalition of consumer, labor and healthcare advocacy groups released nine principles that "allow for evaluation of the medical home concept from a patient perspective"<sup>xv</sup>.
- Initial findings of a medical home national demonstration project of the American Academy of Family Physicians were made available in 2009. A final report on the project, which began in 2006 at 36 sites, was scheduled for release in 2010<sup>xvi</sup>.
- By 2009, there were 20 bills introduced by ten states to promote medical homes<sup>xvii</sup>.
- In 2010, seven key health information technology domains were identified as necessary for the success of the Patient Centered Medical Home (PCMH) model. They were tele-health, measurement of quality and efficiency, care transitions, personal health records, registries, team care, and clinical decision support for chronic diseases<sup>xviii</sup>.
- On January 31 2011, the National Committee for Quality Assurance (NCQA) released new standards for its Patient-Centered Medical Home (PCMH) program<sup>xix</sup>. The new standards call on medical practices to be more patient-centered, and reinforce federal "meaningful use" incentives for primary care practices to adopt health information technology.

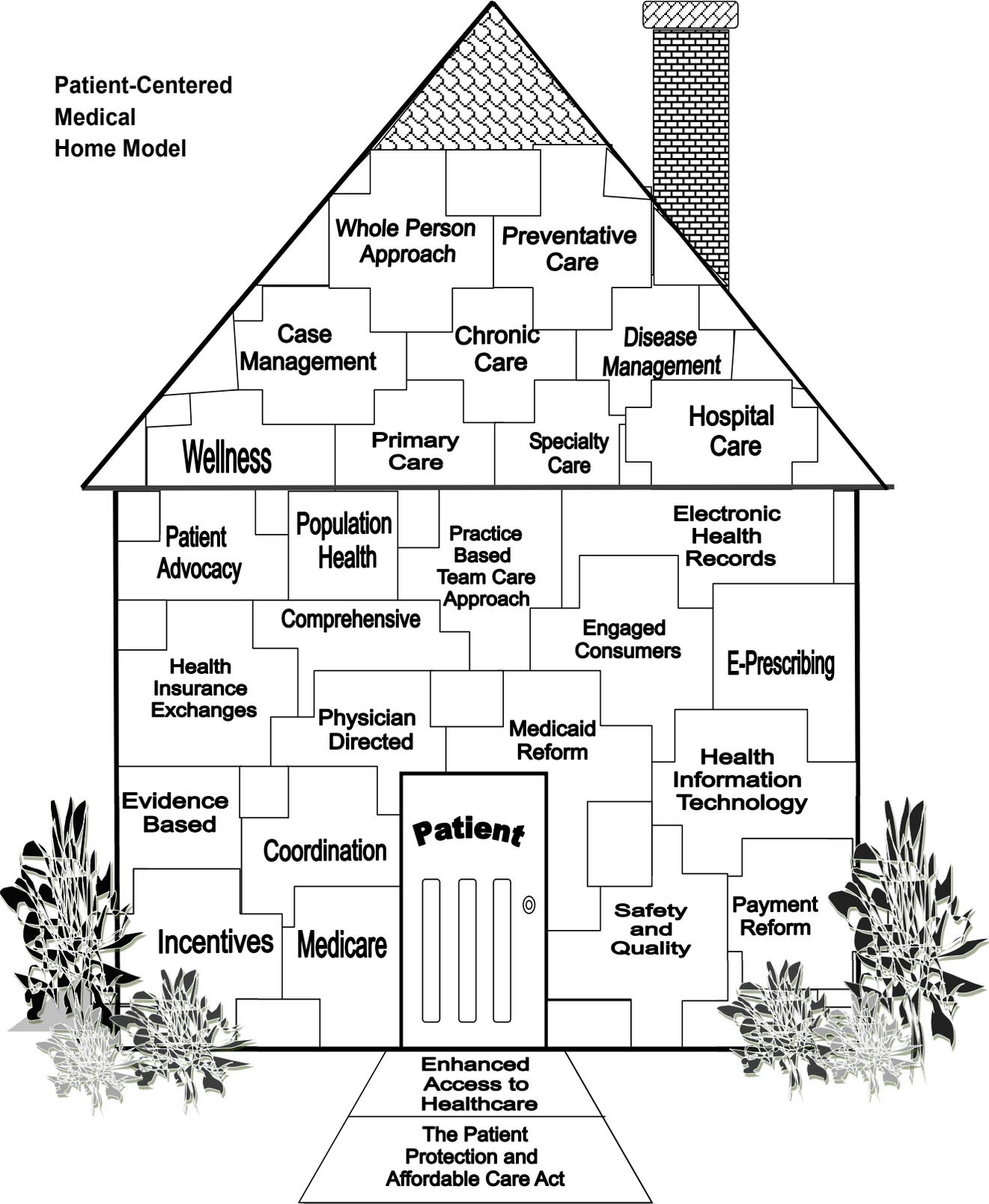
#### Community Health Centers and the Affordable Care Act

For more than 40 years, community health centers have delivered comprehensive, high-quality preventive and primary healthcare to patients regardless of their ability to pay. During that time, community health centers have become the essential primary care medical home model for millions of Americans including some of the nation's most vulnerable populations. With a proven track record of success, community health centers have played an essential role in national recovery and reinvestment efforts and will play a key role in implementation of the Affordable Care Act.

New York State has 52 Community Health Centers, which would be adding key and support staff of all levels in the upcoming years to support the additional individuals seeking primary care services.

A Patient-Centered Medical Home might be similar to the model found on the next page.

**Patient-Centered  
Medical  
Home Model**



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## VI. Appendices

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1. Acronyms & Abbreviations
2. Healthcare Websites
3. Asset Mapping Workgroup Report
4. Data Collection Workgroup Report
5. Career Pathways Workgroup Report
6. Credentials Workgroup Report
7. Rules and Regulations Report
8. Workgroup Members
9. Panel Discussion
10. References

### Appendix 1 - Acronyms & Abbreviations

Acronym	Meaning
AAMC	Association of American Medical Colleges
AARP	American Association of Retired Persons
ABMS	American Board of Medical Specialists
ACA	Affordable Care Act
ACF	Adult Care Facility
ACO	Accountable Care Organization
AH	Adult home
AHEC	Area Health Education Center
ALLIED	trades in healthcare
ALR	Assisted Living Residence
AMA	American Medical Association
ANCC	American Nurses Credentialing Center
ADN	Associate's Degree in Nursing
AOA	American Osteopathic Association
AONE	American Organization of Nurse Executives
APRN	Advanced Practice Registered Nurse
ASAHP	The Association of Schools of Allied Health Professionals
BSN	Bachelor's of Science Nursing
CBO	Congressional Budget Office
CCRO	Continuing Care Retirement Community
CHC	Community Health Center
CHCANYS	Community Health Care Association of New York State
CHHA	Certified Home Health Agency
CMS	Centers for Medicare and Medicaid Services
CNA	Certified Nursing Assistant
CNL	Clinical Nurse Leader
CNM	Certified Nurse Midwife
CNO	Chief Nursing Officer
CNS	Clinical Nurse Specialist
COMLEX	Comprehensive Osteopathic Medical Licensing Exam

## Appendix 1 - Acronyms & Abbreviations

Acronym	<i>Meaning</i>
CRNA	Certified Registered Nurse Anesthetist
DEU	Dedicated Education Unit
DO	Doctor of Osteopathic (medicine)
DRG	Diagnosis-Related Group
EALR or EAL	Enhanced Assisted Living Residence
EHP	Enriched Housing Program
FHBC	Family Health and Birth Center
FQHC	Federally Qualified Health Center
FTE	full-time equivalents
GAO	Government Accountability Office
GNHYA	Greater New York Hospital Association
HANYS	Healthcare Association of New York State
HCA	Home Care Association of New York State
HealthSTAT	Health Students Taking Action Together
HEET	Hospital Employee Education and Training
HHA	Home Health aide
HIT	Health Information Technology
HPSA	Health Professional Shortage Areas
HRI	Health Research Inc.
HRSA	Health Resources and Services Administration
ICU	Intensive Care Unit
IHI	Institute for Healthcare Improvement
ILC	Independent Living Center
INQRI	Interdisciplinary Nursing Quality Research Initiative
IOM	Institute of Medicine
IRA	Individualized Residential Alternative
ISP	Individualized Service Plan
LCME	Liaison Committee on Medical Education
LHCSA	Licensed Home Care Services Agency
LIFE	Living Independently for Life
LPN/LVN	Licensed Practical/Vocational Nurse
LTHHCP	Long Term Home Health Care Program
MD	Medical Doctor
MedPAC	Medicare Payment Advisory Commission
MSN	Master's of Science in Nursing
MUA	Medically Underserved Areas
NA	Nursing Assistant
NAHHA	Nursing Assistant and Home Health Aide
NAQC	Nursing Alliance for Quality Care
NASN	National Association of School Nurses
NCCPA	National Commission on Certification of Physician Assistants

## Appendix 1 - Acronyms & Abbreviations

Acronym	<i>Meaning</i>
NCEMNA	National Coalition of Ethnic Minority Nurse Associations
NCLEX-RN	National Council Licensure Examination for Registered Nurses
NCQA	National Committee for Quality Assurance
NCSBN	National Council of State Boards of Nursing
NFP	Nurse-Family Partnership
NGA	National Governors Association
NHIT	National Healthcare Information Technology
NHWC	National Health Workforce Commission
NLN	National League for Nursing
NMHC	Nurse-Managed Health Clinic
NNCC	National Nursing Centers Consortium
NP	Nurse Practitioner
NQF	National Quality Forum
NRN	Nursing Research Network
NSNA	National Student Nurses Association
NSSRN	National Sample Survey of Registered Nurses
NYASHA	New York Association of Homes and Services for the Aging
NYSACHO	New York State Association of County Health Officials
NYSACRA	New York State Association for Community and Residential Agencies
NYSHCP	New York State Association of Health Care Providers
NYSHFA	New York State Health Facilities Association
NYSHFA	New York State Health Facilities Association
NYSNA	New York State Nursing Association
PACE	Program of All-Inclusive Care for the Elderly
PCA	Primary Care Association
PCA	Personal Care Aide
PCMH	Patient-Centered Medical Home
PCO	Primary Care office
PHL	Public Health Law
RN	Registered Nurse
RWJF	Robert Wood Johnson Foundation
SACME	The Society for Academic Continuing Medical Education
SAMHSA	Substance Abuse and Mental Health Service Administration
SEIU	Service Employees International Union
SNALR or SNAL	Special Needs Assisted Living Residence
SOPP	Scope of Practical Partnership
SSL	Social Services Law
TCM	Transitional Care Model

## Appendix 1 - Acronyms & Abbreviations

Acronym	<i>Meaning</i>
TIGER	Technology Informatics Guiding Education Reform
USMLE	United States Medical Licensing Exam
VA	Department of Veterans Affairs
VANA	Veterans Affairs Nursing Academy
VNSNY	Visiting Nurse Service of New York

## Appendix 2 - Healthcare Websites

Name	Website	Information
New York State Department of Labor/ Labor Statistics	<a href="http://www.labor.ny.gov/stats/index.shtm">www.labor.ny.gov/stats/index.shtm</a>	<b>Occupational &amp; Industry Reports:</b> labor market information From wages to projections to the latest job figures
New York State Department of Labor/ Labor Projections	<a href="http://www.labor.ny.gov/stats/lproj.shtm">www.labor.ny.gov/stats/lproj.shtm</a>	Employment Projections and Jobs in Demand
Oswego County Workforce	<a href="http://oswegocareerladders.com/index.php/healthcare">http://oswegocareerladders.com/index.php/healthcare</a>	Healthcare Careers
O*NET	<a href="http://online.onetcenter.org">http://online.onetcenter.org</a>	Occupational Information: go to <i>Find Occupations</i> , enter occupation in <i>Key Word</i>
US DOL-Bureau of Labor Statistics (BLS) Career Guide to Industries 2010-11 Edition: <i>Healthcare</i>	<a href="http://www.bls.gov/oco/cg/cgs035.htm">http://www.bls.gov/oco/cg/cgs035.htm</a>	Nature of industry, Working Conditions, Employment, Occupations in the Industry, Outlook, Earnings, Sources of Additional Information
American Medical Association	<a href="http://www.ama-assn.org">http://www.ama-assn.org</a>	Education and Careers, Physician Resources, Advocacy
HRSA: Bureau of Health Professions	<a href="http://bhpr.hrsa.gov">http://bhpr.hrsa.gov</a>	Grants, Health Workforce Studies, Shortage Designation, Student Financial Aid, News Updates
Association of American Medical Colleges	<a href="https://www.aamc.org/students/considering">https://www.aamc.org/students/considering</a>	Medical Career; The Road to Becoming a Doctor, Application & Admission Time Frame, Minorities in Medicine, Medical Career Fairs
Center for Health Workforce Studies SUNY (CHWS)  <i>MOU for HWDS data collection</i>	<a href="http://chws.albany.edu">http://chws.albany.edu</a>	Conducts studies of the supply, demand, use, and education of the health workforce; Collects and analyzes data to understand workforce dynamics and trends; Informs public policies, the health and education sectors, and the public.

Name	Website	Information
I-Best : Washington State Board for Community & Technical Colleges	<a href="http://www.sbctc.ctc.edu/college/e_integratedbasiceducationandskillstraining.aspx">http://www.sbctc.ctc.edu/college/e_integratedbasiceducationandskillstraining.aspx</a>	Integrated Basic Education and Skills Training (I-BEST)
National League for Nursing (NLN)	<a href="http://www.nln.org/sitemap/index.htm">http://www.nln.org/sitemap/index.htm</a>	The National League for Nursing promotes excellence in nursing education to build a strong and diverse nursing workforce.
American Association of Colleges of Nursing (AACN)	<a href="http://www.aacn.nche.edu">http://www.aacn.nche.edu</a>	AACN's educational, research, governmental advocacy, data collection, publications, and other programs work to establish quality standards for bachelor's and graduate degree nursing education.
New York State Dept. of Education: License Requirement	<a href="http://www.op.nysed.gov/prof/med/medlic.htm">http://www.op.nysed.gov/prof/med/medlic.htm</a>	General requirements, educational & experience requirements, fees, etc.
New York State Department of Health: Title 10	<a href="http://www.health.state.ny.us/regulations/nycrr/title_10">http://www.health.state.ny.us/regulations/nycrr/title_10</a>	<i>Search Title 10</i> for Scope of Work: example; <i>Nurse</i> , you will obtain a list including: Definition, Nursing Services, Scope of Care, Qualifications, etc.
New York State Dept. of Health	<a href="http://resources.nyahsa.org/nyahsa_org/policy_communications/community_services/n00003360/hha_scope_of_tasks%20updated%203%2009.pdf">http://resources.nyahsa.org/nyahsa_org/policy_communications/community_services/n00003360/hha_scope_of_tasks%20updated%203%2009.pdf</a>	Home Health Aide: Guide to HHA Training and Competency Evaluation, Scope of Tasks
New York Association of Homes & Services for the Aging (NYAHSA)	<a href="http://resources.nyahsa.org/nyahsa_org/about_us">http://resources.nyahsa.org/nyahsa_org/about_us</a>	New York Association of Homes & Services for the Aging (NYAHSA), a not-for-profit, public entity with continuing care providers, including nursing homes, senior housing, adult care facilities, continuing care retirement communities, assisted living and community service providers.
<b>Greater New York Hospital Association (GNYHA)</b>	<a href="http://www.gnyha.org/34/Default.aspx">http://www.gnyha.org/34/Default.aspx</a>	A trade association comprising of nearly 300 hospitals and continuing care facilities, both voluntary and public. Located in the NYC area and throughout the state, as well as New Jersey, Connecticut, and Rhode Island.

Name	Website	Information
<b>Community Health Care Association of New York (CHCANYS)</b>	<a href="http://www.chcanys.org">http://www.chcanys.org</a>	Organizes, educates and advocates on behalf of 60+ federally qualified community health centers and look-alikes located in New York State. Community health centers provide high quality, affordable and accessible primary medical, dental and preventive care to New Yorkers at over 457 sites in urban, suburban and rural settings.
<b>Healthcare Association of New York State (HANYS)</b>	<a href="http://www.hanys.org/about_hanys.cfm">http://www.hanys.org/about_hanys.cfm</a>	To advance the health of individuals and communities by providing leadership, representation, and service to health providers and systems across the entire continuum of care.
<b>Area Health Education Center (AHEC)</b>	<a href="http://www.ahec.buffalo.edu">http://www.ahec.buffalo.edu</a>	Access to quality healthcare and improve healthcare outcomes by addressing the health workforce needs of medically disadvantaged communities and populations through partnerships between the institutions that train health professionals and the communities that need them most.
<b>US Dept. of Health &amp; Human Services Grants/Funding</b>	<a href="http://www.hhs.gov/grants">http://www.hhs.gov/grants</a>	HHS and other federal agencies provide grants, benefit programs for individuals and families, loans, and contracting opportunities.
<b>MediLexicon</b>	<a href="http://www.medilexicon.com">http://www.medilexicon.com</a>	MediLexicon contains searches, information, news and resources for the medical, pharmaceutical and healthcare professional; Medical Dictionary, Abbreviations, etc.
<b>Dictionary of Medical Acronyms and Abbreviations</b>	<a href="http://www.health.am/acronyms/r5">http://www.health.am/acronyms/r5</a>	Medical resource
<b>Healthcare.Gov</b>	<a href="http://www.healthcare.gov/index.html">http://www.healthcare.gov/index.html</a>	Website managed by the <a href="#">U.S. Department of Health &amp; Human Services</a> : Affordable Care Act information, glossary, newsroom, etc.
<b>American Osteopathic Association</b>	<a href="http://www.osteopathic.org/Pages/default.aspx">http://www.osteopathic.org/Pages/default.aspx</a>	Representing osteopathic physicians (DOs) around the world, professional family for DOs and osteopathic medical students, accrediting agency for all osteopathic medical colleges and healthcare facilities.

Name	Website	Information
<b>Hospital Employee Education and Training Program(HEET )</b>	<a href="http://pages.uoregon.edu/lerc/pdfs/heetwhitepaper.pdf">http://pages.uoregon.edu/lerc/pdfs/heetwhitepaper.pdf</a>	A prior a grant that address the skill shortages in healthcare through the Development of Incumbent Employees in WA.
<b>Healthcare Career Advancement Program (HCAP)</b>	<a href="http://www.h-cap.org">http://www.h-cap.org</a>	The Healthcare Career Advancement Program (H-CAP) is a national partnership of the Service Employees International Union (SEIU) locals and healthcare employers.
<b>Health Workforce Information Center</b>	<a href="http://www.hwic.org/experts/browse/xd172">http://www.hwic.org/experts/browse/xd172</a>	List of Healthcare Organizations
<b>Health Workforce Information Center</b>	<a href="http://www.hwic.org">http://www.hwic.org</a>	Updated health workforce news, etc!
<b>Doc Working: job postings for Physicians in the United States</b>	<a href="http://www.docworking.com">http://www.docworking.com</a>	DocWorking.com is a job board designed exclusively for physicians. Because employers can post jobs free of charge through 2011, you will find the most rapidly growing list of physician jobs on the web!
<b>The Future of Nursing</b>	<a href="http://www.futureofnursing-nys.org">http://www.futureofnursing-nys.org</a>	Nursing site with recommendations
<b>Federal Healthcare Reform in NYS</b>	<a href="http://www.healthcarereform.ny.gov/questions_answers">http://www.healthcarereform.ny.gov/questions_answers</a>	Questions and Answers regarding the Affordable Care Act , The NY Healthcare Exchange, Coverage, Effects on Seniors, COBRA
<b>Bureau of Emergency Medical Services</b>	<a href="http://www.health.state.ny.us/nysdoh/ems/about.htm">http://www.health.state.ny.us/nysdoh/ems/about.htm</a>	Information from DOH about the State EMS system.
<b>National Conference of State Legislators</b>	<a href="http://www.ncsl.org/default.aspx?TabId=22376">http://www.ncsl.org/default.aspx?TabId=22376</a>	Scope of Practice Legislative database: Choose state, topic, year, and bill number to research which scope of practice issues are in process, are pending or have had a decision.

## Appendix 3 - Asset Mapping Workgroup Report

### Asset Mapping Workgroup

#### A. Key Issues, Highlights and Methodology

With the assistance of six workgroup members, eleven Department of Health (DOH) and four additional non-DOH subject matter experts (SMEs) (Appendix 9), the Asset Mapping Workgroup inventoried about 50 incentive and resource programs and collaborated to identify gaps and develop recommendations for implementation.

#### Description of Workgroup Tasks

Workgroup members were assigned the task of mapping federal, state and private resources that could be used to recruit, educate, train and retain individuals in high demand occupations for a skilled healthcare workforce and strengthen partnerships. Specific tasks included:

1. Identify resources and compile a table/catalog of pertinent information (*SEE TABLE OF RESOURCES BELOW*);
  - a) Identify whether the resource is:
    1. Federal
    2. State
    3. Private
    4. Other
  - b) Identify contact information;
    1. Website
    2. Email address
    3. Physical address
    4. Phone number
    5. Contact person's name, title, and contact information
  - c) Available funding;
    1. Amount of funding
    2. Basic qualifying criteria
    3. Time frame
    4. Region (if designated)

- d) Identify purpose of funding: recruitment strategies, education, training, retention and/or a combination.
2. Examine and discuss how these identified resources can be directed to support;
    - a) Recruitment, education, training and retention
    - b) High demand primary care occupations
    - c) Areas of New York State where primary care services are limited; and
  3. Summarize highlights, unanticipated results, challenges and recommendations for solutions, strategies and next step. (Appendix 5)

## **B. Challenges, Barriers and Gaps**

1. Difficulty in inventorying resources as there is no “one-stop shop” for programs. The work group had to access various diverse sources; online, and from SMEs to collect and organize the information. It was not clear, in many cases, under whose auspices many private opportunities were available; also, if an opportunity, especially a private-sector opportunity, were not currently available, i.e., the application period was temporarily closed, it was difficult to get information about the opportunity.
2. There is minimal coordination between federal, state and private stakeholders. The workgroup could not, in some cases, get the full story from one agency or another about an opportunity, co-sponsored by multiple agencies, or confirm whether a particular opportunity was defunct. In some cases, there were defunct NYS Department of Health (DOH) programs from the 1990s that still lived on in some school websites.

## **C. Recommendations (SEE RECOMMENDATIONS CHART BELOW)**

1. Explore a “one-stop shop”, healthcare incentives and opportunities clearinghouse for primary care workforce resources. There should be a “center” for available workforce resources and opportunities, at least for primary care resources, with a staff person deployed to update and assure the currency of the opportunities.
2. Identify appropriate partnerships; expand partnerships between State, local and not-for-profit agencies. This “center” could periodically reach out to other agencies and set up linkages for the flow of information on resources as they become available, and alerts when new opportunities arise. It could also convene private foundations, community-based organizations as well as others to explore the creation and funding of new opportunities as the need arises.
3. Incorporate the above recommendations, at the State level, as a function of DOH’s Office for the Development of Patient-Centered Primary Care Initiatives, created as part of the State’s Medicaid Redesign Team recommendations. This Office has the broader goal of expanding access to primary care services statewide.

**ASSET MAPPING RESOURCES CHART:** The below table provides a catalog of resources as specified in A-1 above.

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/Purpose
Federal	<p><b>HRSA Faculty Loan Repayment Program (FLRP)</b>                      No NYS contact.  <a href="http://www.hrsa.gov/loanscholarships/repayment/faculty/">http://www.hrsa.gov/loanscholarships/repayment/faculty/</a></p>	<p>Provides loan repayment for individuals from disadvantaged backgrounds who serve as faculty at eligible health professions schools for a minimum of two years. Geographic Coverage: Nationwide. Application Deadline: Varies. Sponsors: Health Resources and Services Administration, HRSA Bureau of Clinician Recruitment and Service, HRSA Bureau of Health Professions.</p>	<p>Recruitment and retention</p>
Federal	<p><b>Income-based loan repayment</b>                      No NYS contact  <a href="http://studentaid.ed.gov/PORTALSWebApp/students/english/BRPlan.jsp">http://studentaid.ed.gov/PORTALSWebApp/students/english/BRPlan.jsp</a></p>	<p>Income-Based Repayment (IBR) is a repayment plan for the major types of federal student loans that caps your required monthly payment at an amount intended to be affordable based on your income and family size. All Stafford, PLUS and Consolidation Loans made under either the Direct Loan or FFEL Program are eligible for repayment under IBR, EXCEPT loans that are currently in default, parent PLUS Loans (PLUS Loans that were made to parent borrowers), or Consolidation Loans that repaid parent PLUS Loans. The loans can be new or old, and for any type of education (undergraduate, graduate, professional, job training).</p>	<p>Training and Education</p>
Federal	<p><b>Indian Health Service Loan Repayment Program</b>                      No NYS contact.  <a href="http://www.physicians.ihs.gov/index.cfm?module=benefits">http://www.physicians.ihs.gov/index.cfm?module=benefits</a>  <a href="http://www.loanrepayment.ihs.gov/">http://www.loanrepayment.ihs.gov/</a></p>	<p>In FY 2011, approximately \$42 million nationwide (no NYS amount available) to award up to \$20,000 per year in exchange for a minimum two-year service obligation, plus 20 percent of federal income tax on the award, to serve in federally-recognized tribal areas (In NYS, only Akwesasne, Irving and Salamanca reservations are eligible). A variety of health professions are eligible for loan repayment, as specified on <a href="http://www.loanrepayment.ihs.gov/priority_list.cfm">http://www.loanrepayment.ihs.gov/priority_list.cfm</a></p>	<p>Recruitment and retention</p>
Federal	<p><b>National Health Service Corps</b>                      Caleb Wistar (NYS Liaison)                      York State Department of Health                      Tower Building Room 1084 ESP                      Albany NY 12237                      (518) 473-7019 (Voice)                      (518) 474-0572 (fax)  <a href="mailto:Ccw01@health.state.ny.us">Ccw01@health.state.ny.us</a>;  <a href="http://nhsc.hrsa.gov/loanrepayment/index.htm">http://nhsc.hrsa.gov/loanrepayment/index.htm</a></p>	<p>In FY 2011, approximately \$9 million in loan repayment for primary care, dental and mental health clinicians in NYS (\$123 million nationwide). Provides loan repayment, either part time or fulltime, to clinicians who serve in federally-designated underserved areas (HPSAs) in return for up to \$60,000 for the first 2 years of obligated service.</p>	<p>Recruitment and retention</p>

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
Federal	<b>Nursing Education Loan Repayment Program</b> Caleb Wistar <a href="http://www.hrsa.gov/loanscholarships/repayment/nursing/">http://www.hrsa.gov/loanscholarships/repayment/nursing/</a>	In FY 2011, approximately \$94 million nationwide (no NYS amount available; includes scholarship program funding). In exchange for the initial two years service commitment, RNs and Nurse faculty members receive 60 percent of their total qualifying education loan balance. For an optional third year of service, participants receive 25 percent of their original total qualifying nursing education loan balance. Participants work at either one of 15 types of “Critical Shortage Facility” or an eligible school of nursing.	Recruitment and retention
Federal	<b>Nursing Scholarship Program</b> Caleb Wistar <a href="http://www.hrsa.gov/loanscholarships/scholarships/Nursing/">http://www.hrsa.gov/loanscholarships/scholarships/Nursing/</a>	In FY 2011, approximately \$94 million nationwide (no NYS amount available; includes scholarship program funding). In exchange for the scholarship, which pays tuition and about \$2,000 for other reasonable costs and a \$1,326 monthly stipend, upon graduation, the nurses work at the same types of facilities (as in the Nursing Education Loan Repayment Program) for at least 2 years.	Recruitment and retention
Federal	<b>Public Service Loan Forgiveness Program</b> No NYS contact <a href="http://studentaid.ed.gov/students/attachments/siteresources/LoanForgivenessv4.pdf">http://studentaid.ed.gov/students/attachments/siteresources/LoanForgivenessv4.pdf</a>	Designed to encourage individuals to enter and continue to work full-time in public service jobs, including public health clinicians. Under this program, borrowers may qualify for forgiveness of the remaining balance due on their eligible federal student loans after they have made 120 payments under certain repayment plans while employed full time by certain public service employers. Borrowers must make 120 monthly payments on their eligible federal student loans beginning after October 1, 2007 before they qualify for the loan forgiveness. The first cancellations of loan balances will not be granted until October 2017.	Recruitment and Retention

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
Federal	<b>Scholarships for Disadvantaged Students</b> <a href="http://www.hrsa.gov/loanscholarships/scholarships/disadvantaged.html">http://www.hrsa.gov/loanscholarships/scholarships/disadvantaged.html</a>	Provides funds to schools for scholarships for full-time, financially needy students with disadvantaged backgrounds, and who are enrolled in health professions and nursing programs. Participating schools are responsible for selecting scholarship recipients, making reasonable determinations of need, and providing scholarships that do not exceed the cost of attendance (tuition, reasonable educational expenses and reasonable living expenses). Applicants must be at a school that participates in the Scholarships for Disadvantaged Students program and from a disadvantaged background as defined by the U.S. Department of Health and Human Services; and a citizen, national, or a lawful permanent resident of the United States.	Training and education
Federal/ State	<b>Workforce Investment Act</b> NYS Department Of Labor Division of Employment & Workforce Solutions Bldg 12, W. Averell Harriman State Campus, Room 450 Albany, NY 12240 Karen Coleman, Deputy Commissioner of Workforce Development <a href="http://www.labor.ny.gov/home">http://www.labor.ny.gov/home</a>	State Level PY 2010 WIA funds were \$41,683,686, plus \$126,983,700 in PY 2010 WIA funds distributed to local areas. Formula grants to states for training and education services for adults, dislocated workers & youth via local One Stop Career Centers HR 1 zeroes out all new funding	Training and education
Municipal	<b>Orleans County Medical Scholarship</b> <a href="http://www.medina-ny.com/OCMSB/">http://www.medina-ny.com/OCMSB/</a>	Provides up to \$36,000 in loans over six years of training. Students either guarantee to practice for one year giving a \$3,000 (amended Feb. 2011 to \$6,000) reduction in their obligation or repay the 'loan' with interest. Funding was not to exceed 1/6 of the Total Grant per year of Training (i.e. \$1,500 per semester). Less could be requested at the choice of the student. Moneys advanced could be forgiven in full if the Doctor practiced full time in Orleans County, NY for six years, 1/6 Outstanding Amount Forgiven for each year. Recipients choosing not to return have all made arrangements with the County Treasurer and County Attorney to repay the dollars advanced	Recruitment and Retention

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
Private	<b>Minority Nurse Faculty Scholars Program</b> American Association of Colleges of Nursing Attention: Amy Jacks One DuPont Circle, NW, Suite 530 Washington, DC 20036-1120 <a href="http://www.aacn.nche.edu/students/scholarships/minority">http://www.aacn.nche.edu/students/scholarships/minority</a>	The American Association of Colleges of Nursing (AACN), with support from the Johnson & Johnson Campaign for Nursing's Future, provides scholarship funding to underrepresented minority (URM) nursing students who plan to work as nursing faculty after graduation. Applicants must be enrolled full-time in a doctoral nursing program (PhD, DNP) or a clinically-focused master's degree program. Applicants must commit to becoming full-time faculty in an accredited registered nursing program after graduation. Mentorship and leadership development are important features of this program. This scholarship program is designed to address the growing shortage of nurse educators while diversifying the nurse faculty population in the United States. In addition to seeking out individuals committed to careers in nursing education, this program also will expand the number of culturally-competent nurse educators available to teach an increasingly diverse student body.	Training and Education
Private	<b>AfterCollege/AACN Scholarship</b> <a href="http://www.aftercollege.com/content/article/aftercollege_aacn_scholarship/76107013/">http://www.aftercollege.com/content/article/aftercollege_aacn_scholarship/76107013/</a>	AfterCollege and the American Association of Colleges of Nursing (AACN) have partnered to offer a \$2,500 scholarship program for students pursuing professional nursing education programs.	Training and Education
Private	<b>Albany Medical College</b> <a href="http://www.amc.edu/Academic/Undergraduate/documents/MCCollege_Catalog.pdf">http://www.amc.edu/Academic/Undergraduate/documents/MCCollege_Catalog.pdf</a>	Combined degree programs with RPI, Union and Siena – Physician-Scientist; Leadership in Medicine Program; Humanities and Medicine Program; Early Assurance Program with Albany College of Pharmacy, Amherst College, Bowdoin College, College of the Holy Cross, Hamilton College, Haverford College, Middlebury College, SUNY Albany, Swarthmore College, Williams College	Recruitment

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
Private	<b>AMA Physicians of Tomorrow Scholarships</b> <a href="http://www.ama-assn.org/ama/pub/about-ama/ama-foundation/our-programs/medical-education/physicians-tomorrow-scholarships.shtml">http://www.ama-assn.org/ama/pub/about-ama/ama-foundation/our-programs/medical-education/physicians-tomorrow-scholarships.shtml</a>	To date, over \$700,000 was granted to exceptional medical students across the nation. \$10,000 scholarships reward current third-year medical students/individuals who are approaching their final year of medical school. The number of recipients is determined after all applications have been received. Typically, 8-12 recipients in total are selected. Each medical school can nominate one person for each of the different scholarship opportunities (2 nominees in total). Each scholarship category takes into consideration academic excellence and financial need. In New York, the selection is based on academic excellence and financial need.	Training and Education
Private	<b>American Medical Women's Association (AMWA)</b> <a href="mailto:awards@amwa-student.org">awards@amwa-student.org</a>	Provides two \$1,000 scholarships to women currently enrolled in medical school. Awardees are chosen based on need as well as embodiment of the goals of the AMWA.	Training and Education
Private	<b>Blackwell Scholarship Program-Special Admissions Program</b> <a href="http://www.hws.edu/admissions/blackwell_scholars.aspx">http://www.hws.edu/admissions/blackwell_scholars.aspx</a>	Provides \$ to assure four, tuition-free years of college education at Hobart and William Smith Colleges, opportunities to work with physicians at Finger Lakes Health, a guaranteed seat in medical school at SUNY Upstate Medical University following graduation from Hobart and William Smith, and a waiver of the requirement to take the Medical College Admission Test (MCAT). Funded and administered by Hobart and William Smith Colleges.	Training and education
Private	<b>Certified Background/AACN</b> <a href="http://www.certifiedbackground.com/solutions/scholarships.php">http://www.certifiedbackground.com/solutions/scholarships.php</a>	Provides scholarships for nursing students in baccalaureate, master's, and doctoral programs. CertifiedBackground.com commits \$200,000 over five years to this new program that will distribute eight scholarships in the amount of \$5,000 each year from 2011 through 2015.	Training and education

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/Purpose
Private	<p><b>Doctors Back to School</b>  <a href="http://www.mssny.org/mssnyip.cfm?c=t&amp;nm=Practice_Resources">http://www.mssny.org/mssnyip.cfm?c=t&amp;nm=Practice_Resources</a>            Barb Ellman            Assistant Director, Government Affairs            Medicaid Society of the State of New York  <a href="mailto:bellman@mssny.org">bellman@mssny.org</a>            1 Commerce Plaza            99 Washington Avenue, Ste 408            Albany, NY 12210            (518) 465-8085</p>	<p>\$10,000 grant from Pfizer to reimburse the physicians for travel expenses. Doctors go to middle and high schools areas with high minority populations, to talk to the students about choosing medicine as a career. The Medical Society of the State of NY (MSSNY) is expanding this program by partnering with AHEC summer internship programs and one-on-one mentoring. Funding is being sought through the NYS Health Foundation</p> <p>Other programming that would be retention activities include:            1. "Culture Block: How Culture, Ethnic, and Religious Beliefs and Traditions Affect a Patient's Medical Care and Compliance". It is a CME program for physicians and other healthcare providers and is either a dinner seminar or grand rounds format. MSSNY did approximately 20 programs around New York State and have three more to complete. The first module of the program is on the MSSNY CME website and the second module, which consists of case studies, will be put on the website. (Funded through a grant from Pfizer.)</p> <p>2. Health Literacy: "How to Effectively Communicate to a Diverse Patient Population." MSSNY presented approximately 25 programs around New York State under a grant from Pfizer as well. A CD was produced which was mailed out to approximately 10,000 physicians around the state.</p>	Recruitment and Retention
Private	<p><b>Dr. Martin R. Liebowitz Scholarship for Primary Care and Internal Medicine</b></p>	<p>Provides dollars to fourth year medical students pursuing careers in Primary Care/Internal Medicine at SUNY Stony Brook Medical. The award based on merit and financial need. Preference is given to economically disadvantaged students.</p>	Training and education

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
Private	<p><b>Educational Programs for Nursing</b>            1199/SEIU Training and Employment Fund  <a href="http://1199seiubenefits.org/funds-and-services/training-and-employment/college-programs/educational-programs-for-nursing/">http://1199seiubenefits.org/funds-and-services/training-and-employment/college-programs/educational-programs-for-nursing/</a>            For further information contact an Educational Counselor at (212) 284-9200</p>	<p>The Fund provides tuition sponsorship, counseling, tutoring and other academic supportive services to eligible 1199SEIU members who want to become RNs and LPNs.  <b>RN</b> - Those accepted to or are currently in the clinical phase of an accredited nursing program with a GPA of at least 2.5 may be eligible to receive tuition sponsorship. Those already enrolled in an RN program with a GPA of at least 2.5 may be eligible for the Accelerated Degree Program, which covers up to 9 credits per semester rather than the standard six.  <b>LPN</b> – Those currently attending or have recently been accepted to an LPN program must contact an Admissions Counselor to determine eligibility to receive tuition sponsorship.</p>	Training and education
Private	<p><b>Health Careers Core Curriculum</b>            1199/SEIU Training and Employment Fund  <a href="http://1199seiubenefits.org/funds-and-services/training-and-employment/college-programs/health-careers-core-curriculum/">http://1199seiubenefits.org/funds-and-services/training-and-employment/college-programs/health-careers-core-curriculum/</a></p>	<p>Provides assistance for 34 credits of basic required college courses through the City University of New York (CUNY) and some State University of New York (SUNY) campuses, and apply those credits to healthcare-related associate or bachelor’s degree programs.            Morning and evening classes are held at the Training and Employment Funds’ Manhattan site and on campuses throughout the city. To participate, you must attend the Training and Employment Funds’ College Bound workshop, pass the Reading and Writing portions of the CUNY-ACT skills assessment, and attend a program orientation. For the fall semester apply between May 1 and July 28; for the spring semester apply between September 1 and December 1.</p>	Training and education
Private	<p><b>Forgivable Loan Program</b>  <a href="http://1199seiubenefits.org/funds-and-services/training-and-employment/college-programs/forgivable-loan-program/">http://1199seiubenefits.org/funds-and-services/training-and-employment/college-programs/forgivable-loan-program/</a>            For information, please contact an Educational Counselor at (212) 284-9200.</p>	<p>Forgivable loans are available for fulltime 1199SEIU students enrolled in accredited degree, certificate or diploma programs that are considered health industry shortage area professions. Participating members work loans off after graduation at a contributing institution.</p>	Training and Education

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
Private	<b>Herbert W. Nickens Medical Student Scholarship (AAMC)</b> Juan Amador, AAMC Diversity Policy and Programs, <a href="mailto:NickensAwards@aamc.org">NickensAwards@aamc.org</a> or <a href="https://www.aamc.org/initiatives/awards/101280/nickens_scholarship_overview.htm">https://www.aamc.org/initiatives/awards/101280/nickens_scholarship_overview.htm</a>	Five \$5,000 scholarships will be awarded to students entering their third year of medical school who have shown leadership in efforts to eliminate inequities in medical education and healthcare and demonstrated leadership efforts in addressing educational, societal, and healthcare needs of minorities in the United States. Student must be a U.S. citizen or permanent resident and nominated by the medical school. Applications are due May 2.	Training and Education
Private	<b>Hispanic Dental Association Foundation</b> <a href="http://www.hdassoc.org/site/epage/8351_351.htm">http://www.hdassoc.org/site/epage/8351_351.htm</a>	Supports 2 separate scholarships that can be accessed by NYS dental students: 1. Colgate-Palmolive Company, the Founding Supporter of the Hispanic Dental Association, offers up to \$10,000 will be awarded to support students who seek to advance their scientific and applied clinical knowledge in the area of dentistry to further their commitment to aiding and supporting the Hispanic community. 2. Procter & Gamble Professional Oral Health has joined with the Hispanic Dental Association Foundation to present a scholarship program to students in dentistry of up to \$1,000 to support meritorious work by students who seek to advance their scientific and applied clinical knowledge as they enter into the oral health profession.	Training and Education

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
Private	<p><b>Jonas Nurse Leaders Scholar Program</b>  <a href="http://www.jonascenter.org/program-areas/scholars">http://www.jonascenter.org/program-areas/scholars</a></p> <p>Phone: 212.609.1584  Email: regine.dunn@jonascenter.org</p>	<p>About \$2.5 million per year to support educational development of new doctoral-level faculty and stimulate models for joint faculty appointments between schools of nursing and clinical affiliates. Jonas Nursing Scholars each receive four years of funding for tuition and a living stipend up to \$70,000 per year through a forgivable loan. Jonas Nursing Scholars agree to complete a doctoral degree in four years; limit salaried employment during the course of study; begin teaching nursing full-time in the New York City metropolitan area within four months of degree completion; and remain teaching in the area for a minimum of four years. Grantee institutions identify Jonas Scholars from competitive pools of qualified applicants, while considering the applicants' interest in areas in high demand for nurse educators, including oncology, geriatrics, mental health, public health and integrative and holistic care.</p>	Training and education
Private	<p><b>Jonas Nursing Scholars Program</b>  <a href="http://www.jonascenter.org/grants">http://www.jonascenter.org/grants</a></p>	<p>\$2.5 million and addresses the nation's accelerating shortage of nursing faculty. The Scholars Program supports educational development of new nursing faculty and stimulates models for joint faculty appointments between schools of nursing and clinical affiliates.</p> <p>The Jonas Scholars grants include six leading academic institutions with graduate nursing programs; three are located in the New York metropolitan area. There are three outside the region but are partnering with New York institutions. These grants, made through institutional awards, will fund six doctoral students above the number that schools had planned to admit.</p>	Faculty development
Private	<p><b>Joseph Collins Foundation</b>  Attn: Augusta L. Packer, Secretary/Treasurer,  153 East 53<sup>rd</sup> Street,  New York, New York 10022.  Application deadline: March 1</p>	<p>The application filed by the medical school, with a letter from the dean affirming the student's eligibility on the basis of qualifications, merit, and need. The letter must also indicate that the applicant has a desire to specialize in neurology, psychiatry, or to practice general medicine. Applicants must have academic standing in the upper half of the class and a demonstrated interest in the arts or other cultural pursuits. Award amount is \$5,000 and may be renewable.</p>	Training and Education

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
Private	<b>McCaughan Heritage Scholarship</b> <a href="http://www.aof-foundation.org/index.cfm?fa=grants_detail&amp;gid=521">http://www.aof-foundation.org/index.cfm?fa=grants_detail&amp;gid=521</a>	Provides up to \$5,000 to an osteopathic medical student in their last-year of studies (OMS IV) during the fall of 2011, in good academic standing at an AOA accredited college of osteopathic medicine, and committed to the science, art and philosophy of osteopathic medicine early in their career, emphasizing the integration of osteopathic principles, practice, and treatment in patient care.	Training and education
Private	<b>The National Association of Hispanic Nurses (NAHN) 2011 Scholarship and Awards</b> <a href="http://www.thehispanicnurses.org/scholarship/">http://www.thehispanicnurses.org/scholarship/</a> Miriam 'Mimi' Gonzalez, BS, RN Chair, Awards/Scholarship Committee National Association Of Hispanic Nurses 1455 Pennsylvania Ave., N.W., Suite 400, Washington, D.C. 20004	The scholarship awards are presented to NAHN members who are enrolled in practical/vocational, associate, diploma, baccalaureate, or graduate accredited nursing programs. Selection of recipients is based on current academic standing and other designated criteria. Scholarship award recipients are a select group of Hispanic students who demonstrate promise of future professional contributions to the nursing profession and who have the potential to act as role models for other aspiring nursing students. To qualify for the scholarship award, the applicant must be currently enrolled in an accredited school of nursing and be a United States citizen or legal resident of the United States.	Training and education
Private	<b>New Careers in Nursing Scholarship</b> <a href="http://www.son.jhmi.edu/apply/finaid/aid/grants.aspx">http://www.son.jhmi.edu/apply/finaid/aid/grants.aspx</a>	The Robert Wood Johnson Foundation in association with the American Association of Colleges of Nursing (AACN) provides students of John Hopkins University with various scholarship opportunities. Recipients must be from disadvantaged backgrounds or underrepresented groups in nursing and demonstrate significant financial need.	Training and education
Private	<b>Nurses Educational Fund Scholarship</b> Scholarship Coordinator Nurses Educational Funds, Inc. Barbara Butler 555 West 57th Street Suite 1327 NY, NY 10019 Phone: 212 399-1428 Fax: 212 581-2368 bbnef@aol.com	Provides \$10,000 annually in scholarships to registered nurses or members of a professional nursing association, enrolled full-time in a master's or doctoral program accredited by National League for Nursing, and be a U.S. citizen or declare official intention of becoming one. Selection is based upon academic excellence; evidence of current and future service to the nursing profession is also important. Applicant must submit GRE or MAT scores.	Training and education

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
Private	<b>Pisacano Scholars Leadership Program</b> Jane Ireland at jireland@fpleaders.org, (888) 995-5700 ex: 1249. Or: Pisacano Leadership Foundation, 2228 Young Drive, Lexington, KY 40505-4294. <a href="http://www.fpleaders.org">http://www.fpleaders.org</a> . Application deadline: March 1	Provides educational services, leadership training, and funding to reimburse a portion of medical school related debt. Scholarships awarded to outstanding medical students for a four-year period. Students who have made a commitment to the field of family medicine and who will enter their fourth year of medical school in the fall may apply. The PLF will award scholarships with a maximum value of \$28,000 each.	Training and Education
Private	<b>Scholarship of Excellence Award</b> <a href="http://www.asahp.org/excellence_award.htm">http://www.asahp.org/excellence_award.htm</a>	Provides \$1,000 scholarships for allied health students enrolled in its member schools to recognize outstanding students in the allied health professions who achieve excellence in their academic programs and have significant potential to assume future leadership roles in the allied health professions.	Training and education
Private	<b>The Dressler Scholarship</b> United Jewish Appeal <a href="http://www.ujafedny.org/about-the-scholarships/">http://www.ujafedny.org/about-the-scholarships/</a>	The Dressler Scholarship provides financial assistance for M.S.W. and clinical psychology students interested in clinical work within a Jewish nonprofit organization. This is a partial scholarship ranging from \$2,000 to \$4,000 per year for a maximum of two years.	Training and education
Private	<b>The Edna A. Lauterbach Scholarship Fund</b> <a href="http://www.ednascholarship.org">www.ednascholarship.org</a>	Funding not disclosed. Provides scholarship toward nursing (RN or LPN) expenses including tuition, specialty training, books and other related expenses. Scholarships are available for those who: 1. A registered Nurse or a Licensed Practical Nurse who are developing a home or community-based care business. 2. Reside in New York State. 3. Plan for or engaged in an entrepreneurial venture utilizing nursing or related home and community-based services. 4. Show that proposed class/training will improve candidate's ability to manage their organization or venture; and 5. Demonstrate financial need.	Training and education
Private	<b>TYLENOL® Scholarship Program</b> <a href="http://www.tylenol.com/page.jhtml;jsessionid=MGDF5SCRI0ANSCQPCCFSUYKYB2IIQNSC?id=tylenol/news/subptyschol.i nc&amp;_requestid=1423863">http://www.tylenol.com/page.jhtml;jsessionid=MGDF5SCRI0ANSCQPCCFSUYKYB2IIQNSC?id=tylenol/news/subptyschol.i nc&amp;_requestid=1423863</a>	The TYLENOL® Scholarship program helps students getting a healthcare-related education manage the rising costs of education. Amount Awarding \$250,000 in scholarships. Eligible to receive up to \$10,000 in scholarship money.	Training and education

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
Private	<p><b>Voucher/Reimbursement Program</b>            1199/SEIU Training and Upgrading Fund  <a href="http://1199seiubenefits.org/funds-and-services/training-and-employment/college-programs/payment-information/vouchers/">http://1199seiubenefits.org/funds-and-services/training-and-employment/college-programs/payment-information/vouchers/</a>            Email: <a href="mailto:training@1199funds.org">training@1199funds.org</a> or call (646) 473-9200 or (212) 284-9200 and ask to speak to an Educational Counselor.</p>	<p>The voucher option allows 1199SEIU members to take up to 6 credits each semester (a maximum of 24 credits per year) with no out-of-pocket costs. The Training and Upgrading Fund pays the college directly.</p> <p><u>Colleges Accepting Tuition Vouchers</u>            ■City University of New York (CUNY) — All colleges            ■State University of New York (SUNY) — All 4-year colleges and the following 2-year colleges:            Westchester County Community College            Rockland County Community College            Dutchess County Community College            Nassau County Community College            Suffolk County Community College            Private School Touro College — All locations            Those attending a college that does not honor a Tuition Voucher can be reimbursed for fees and 6 credits per semester up to a maximum of 24 credits per year.</p>	Training and Education
Regional	<p><b>HealthMatch</b>            Catskill Hudson AHEC  <a href="http://health-match.org">http://health-match.org</a>            Kathryn R. Reed, MHA, CMPE            Executive Director            Catskill Hudson AHEC            598 Route 299            Highland, New York 12518            (845) 883-7260</p>	<p><b>Funded by HEAL 9 in 2010; HealthMatch</b> is a health professional recruitment service designed specifically for small and rural communities in New York State. <b>HealthMatch</b> provides the expertise and real-world experience to effectively match the right primary care providers with communities in need. <b>HealthMatch</b> is a collaborative effort that brings the commitment of healthcare, business, and civic leaders together in order to provide increased local access to quality healthcare throughout New York State.</p>	Recruitment
Regional	<p><b>HealthTrek Hudson Mohawk AHEC</b>  <a href="http://www.gohealthcareer.org">www.gohealthcareer.org</a></p>	<p>Provides “pipeline” programs targeted to four high schools in underserved areas; programs range from classroom presentations to scholarships and paid internships.</p>	Recruitment
Regional	<p><b>MyHealthCareer</b>            Northern AHEC  <a href="http://www.myhealthcareer.org">www.myhealthcareer.org</a></p>	<p>A web based career exploration tool to be used individually or in a classroom setting; six of nine AHEC centers in NYS currently use this product, which is licensed annually.</p>	Recruitment

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
State	<b>Doctors Across New York Program</b> Caleb Wistar (Loan Repayment); Helen Crane (Practice Support New York State Department of Health Corning Tower, Room 1190 Albany NY 12237-0722 gme@health.state.ny.us (518) 486-7854 (FAX)	The SFY 11-12 NYS Budget proposes \$1.7 million annually for loan repayment and \$4.3 million annually for practice support. Provides loan repayment or other financial incentives to allopathic and osteopathic physicians of all specialties to work in underserved areas of NYS for 5 years (and up to \$150,000 per physician in loan repayment) or 2 years (and up to \$100,000 in cash incentives in practice support).	Recruitment and retention
State	<b>Emerging &amp; Transitional Worker Training</b> Blas Ortiz New York State Department of Labor State Office Campus, BLD#12, RM 450 Albany, NY 12240 (518) 457-2213 (voice) <a href="mailto:Blas.Ortiz@labor.ny.gov">Blas.Ortiz@labor.ny.gov</a>	\$10 million has been made available to the State under the American Recovery and Reinvestment Act of 2009 and federal Workforce Investment Act funds to provide emerging and transitional workers with the necessary skills and competencies to successfully obtain employment and advance their careers. This funding is available to providers in the healthcare industry. The maximum award is \$500,000. This funding can be used to assist individuals interested in careers in healthcare. Funds set to expire in 2011 unless the federal government provides an extension.	Education
State	<b>Health Workforce Retraining Initiative</b> Barry Gray, Director Bureau of HEAL, Workforce Development and Capital Investment Department of Health Corning Tower 1084 ESP Albany New York 12237-0053 (518) 473-4700	Provides \$28.4 million in SFY 11-12 to train healthcare workers in shortage occupations. Eligible institutions include hospitals, nursing homes, home care agencies, unions and educational institutions. The New York State Department Of Labor provides contractor assistance program reviews.	Retention
State	<b>Healthcare Recruitment and Retention Program</b> John Gahan, Director Bureau of Primary & Acute Care Reimbursement Office of Health Insurance Programs Department of Health Corning Tower 1043 ESP Albany New York 12237 (518) 474-3267	(Approximately \$492 million annually; scheduled to be eliminated in SFY 12-13 budget years). Provides rate enhancements for hospitals, CHCs, nursing homes and home care service agencies to recruit and retain healthcare workers.	Recruitment and Retention

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
State	<b>Licensed Social Worker Loan Forgiveness Program</b> Michael Reynolds (518) 473-3871 <a href="http://www.hesc.com/content.nsf/SFC/4/NYS_Licensed_Social_Worker_Loan_Forgiveness_Program">http://www.hesc.com/content.nsf/SFC/4/NYS_Licensed_Social_Worker_Loan_Forgiveness_Program</a>	Anticipated funding is \$978,000 to "... increase the number of licensed social workers working in ... health, mental health, substance abuse, geriatrics/aging, HIV/AIDS and child welfare or communities with multilingual needs. Up to \$26,000, or up to \$6,500 annually over four years in return for work in critical human service areas for a minimum of 35 hours per week during the calendar year preceding their application or payment.	Recruitment and retention
State	<b>Nursing Home Nurse Aide Certification Program</b> Melanie Welch Bureau of Workforce Resources Office of Long Term Care New York State Department of Health 161 Delaware Ave. Delmar, NY 12054 (518) 402-1881	Provided by nursing homes, community based organizations, BOCES, proprietary schools, community colleges and nursing schools. The nursing home nurse aide testing and certification program, and the Nurse Aide Registry, continues to be funded for SFY 11-12 at \$4,079,000. There are currently 96,095 active nursing home nurse aides in the Nurse Aide Registry. About 1,100 new nurse aides are added to the Registry per month (about 13,200 per year). However, this increase is offset by the number of aides whose certification expires each month and who are then deleted from the Registry.	Training and education
State	<b>Nursing Home Nurse Aide Training Reimbursement Program</b> Bureau of Accounts Management New York State Department of Health Tower building Room 1315 ESP Albany, NY 12237 (518) 474-1208	Funding for 11-12 is \$ The NYS Department of Health (DOH) reimburses, through Medicaid, nursing homes for a portion of their mandated nurse aide training costs or if the nurse aide personally pays, through a request for reimbursement to DOH on behalf of the nurse aide.	Training and Education
State	<b>NY "State 30" and related J-1 waiver programs</b> Steve Swanson York State Department of Health Tower Building Room 1084 ESP Albany NY 12237 (518) 473-7019 (Voice) (518) 474-0572 (fax) <a href="mailto:sas03@health.state.ny.us">sas03@health.state.ny.us</a>	\$0 funding. Federal law provides certain entities (in New York State, the New York State DOH, the Appalachian Regional Commission, the Department of Health and Human Services, and the federal Veterans Administration) permission to recommend a waiver of the J-1 visa home residency requirement for foreign medical graduates who agree to serve in, or serve populations in federally-designated Health Professional Shortage Areas (HPSAs) for three years in return for the waiver. Under the New York "State 30" program, the Department of Health issues 30 such waivers annually. Typically, about half are primary care practitioners.	Recruitment and retention

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
State	<b>NYS AHEC as NHSC Ambassadors</b> <a href="http://nhsc.hrsa.gov/ambassadors/">http://nhsc.hrsa.gov/ambassadors/</a>	All nine AHEC centers have at least one person who serves as an Ambassador for the National Health Service Corp.	Recruitment
State	<b>NYS Limited License Program</b> Steve Swanson York State Department of Health Tower Building Room 1084 ESP Albany NY 12237 (518) 473-7019 (Voice) (518) 474-0572 (fax) <a href="mailto:sas03@health.state.ny.us">sas03@health.state.ny.us</a>	\$0 funding. NYS Law requires that foreign medical graduates serve in an underserved area as a condition of granting a medical license. Currently, about 800 clinicians are serving in underserved areas of NYS; of whom about 440 are primary care physicians and psychiatrists.	Recruitment and retention
State	<b>OPH-NY Learns Public Health</b> Nancy Blake, Thomas Reizes Office of Public Health Practice New York State Department of Health Corning Tower 821 ESP Albany, New York 12237 (518) 473-4223 <a href="https://www.NYLearnsPH.com">https://www.NYLearnsPH.com</a>	Provides funding (expected to continue in SFY 11-12) to provide a learning management system (LMS), a web-based tool designed to facilitate the tracking of learners, courses, and competencies for state, local and allied public health and health agencies throughout New York. The LMS has proven to be an effective and easy-to-use tool for promoting courses, registering learners and monitoring and tracking course completion. Currently the system hosts over 600 public health related courses, and tracks completion of Emergency Preparedness Training requirements as well as continuing education required of local public health professionals per the State Sanitary Code. The LMS currently has almost 8,000 users.	Training and education
State	Oral Health Workforce project NYS AHEC System Statewide office – University at Buffalo  <a href="http://www.ahec.buffalo.edu/">http://www.ahec.buffalo.edu/</a>	The NYS AHEC system is a subcontractor to the NYS DOH Bureau of Dental Health (Dr Kumar, Director) to provide job fairs to dental students and residents; dental position openings via MyHealthCareer and recruitment services through HealthMatch. The project funding period is 9/1/10 – 8/31/13.	Recruitment

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
State	<b>Personal Care Training Program (PCATP)</b> Colleen Dwyer Bureau of Workforce Resources Office of Long Term Care New York State Department of Health 161 Delaware Ave. Delmar, NY 12054 (518) 402-1987	No funding provided. State law requires persons performing personal care services to complete 40-hour training programs approved by the State. All training programs must use the Home Care Curriculum, developed by the NYS Department of Health (DOH). Employers must use the Home Care Evaluations to ascertain whether students have mastered the required knowledge and skills. The number of home care agencies with PCATPs is 309. These 309 agencies offer PCATPs at 359 different sites throughout the State. Of the 225,000 active home health and personal care aides listed in the Home Care Registry, about 97,000 are personal care aides.	Training and education
State	<b>Public Health Management Leaders of Tomorrow</b> Sylvia Pirani, Director Nancy Blake Office of Public Health Practice New York State Department of Health Corning Tower 821 ESP Albany, New York 12237 (518) 473-4223	Provided \$552,720 in SFY 08-09 (Executive budget eliminates funding in 11-12) to provide State and local health department staff with tuition reimbursement for public health courses at the University at Albany School of Public Health (SPH) and to help SPH students to complete internships at the NYS DOH or local public health agencies. Funds are to cover tuition for the Northeast Public Health Leadership Institute.	Training and education
State	<b>Regents Physician Loan Forgiveness Award Program</b> Lewis J. Hall, Supervisor Pre-Collegiate Preparation Programs Unit and Scholarships and Grants Administration Unit Office of Higher Education New York State Department of Education (518) 486-1319 <a href="mailto:lhall@mail.nysed.edu">lhall@mail.nysed.edu</a> <a href="http://www.highered.nysed.gov/kiap/scholarships/rplfap.htm">http://www.highered.nysed.gov/kiap/scholarships/rplfap.htm</a>	Anticipated funding in 11-12 budgets is \$800,000. Provides up to \$10,000 annually, based on a clinician's qualifying educational debt in return for up to 4 years' full-time service in an underserved area, as defined by the New York State Regents. See <a href="http://www.highered.nysed.gov/kiap/scholarships/rplfap.htm">http://www.highered.nysed.gov/kiap/scholarships/rplfap.htm</a>	Recruitment and retention
State	<b>Rural Recruitment and Retention Network (3RNet)</b> Caleb Wistar (for NYS) <a href="mailto:Ccw01@health.state.ny.us">Ccw01@health.state.ny.us</a> ; <a href="http://www.3Rnet.org">http://www.3Rnet.org</a>	\$3,000 annually paid by the NYS Primary Care Office to maintain a website for clinicians and facilities to connect job opportunities.	Recruitment and retention

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
State	<p><b>SEARCH</b> Student/Resident Experiences And Rotations in Community Health Program <b>NYS AHEC System</b> Statewide office – University at Buffalo <a href="http://www.ahec.buffalo.edu/">http://www.ahec.buffalo.edu/</a></p>	<p>A three year HRSA NIH funded project; The program is coordinated by nine New York State Area Health Education Centers (AHEC) in conjunction with the Community Health Care Association of New York State (CHCANYS). This project allows students and residents, interested in working with underserved populations, an opportunity to serve on multidisciplinary healthcare teams in hospitals, community health centers, offices and clinics in underserved communities. SEARCH students and residents will have hands on experience in communities that need health professionals the most. The program can also involve working with local health departments on the completion of a Community Experience Project that helps students and residents enhance their community involvement skills while gaining valuable clinical training. Travel stipends are provided to the student/resident and preceptor stipends are provided to the healthcare facility.</p>	Recruitment
State	<p><b>The HIV Clinical Education Initiative (CEI)</b> Lyn Stevens AIDS Institute New York State Department of Health Corning Tower Room 259 ESP Albany NY 12237 (518) 473-8815 <a href="mailto:lcs02@health.state.ny.us">lcs02@health.state.ny.us</a></p>	<p>Provides \$1.4 million (with continued funding expected in 11-12) to increase access to quality HIV care in NYS by providing progressive HIV education to clinicians and supporting the networks of care for patients with HIV.</p>	Training and education
State/ Private	<p><b>Oral Center of Health Dental Preceptorships in New York and New Jersey</b> Lyn Stevens AIDS Institute New York State Department of Health Corning Tower Room 259 ESP Albany NY 12237 (518) 473-8815 <a href="mailto:lcs02@health.state.ny.us">lcs02@health.state.ny.us</a></p>	<p>Provides \$179,500 to train dentists to learn the early signs and symptoms of HIV disease and to manage all aspects of a patient's oral health needs. Funding of this program is provided by a grant from The NY/NJ AIDS Education and Training Center at Columbia University. Continued funding expected in SFY 11-12.</p>	Training and education

Type	Program Name/NYS Contact/Websites	Funding Amount/Program Specifics	Funding/ Purpose
State / Private / Federal	<b>New York New Jersey Public Health Training Center</b> Nancy Blake Office of Public Health Practice New York State Department of Health Corning Tower 821 ESP Albany, New York 12237 (518) 473-4223 njb05@health.state.ny.us	(Will have continued funding expected for 2011-2012) One of many Public Health Training Centers across the nation, funded by HRSA. Collaboration of Columbia University and University at Albany Schools of Public Health, the University of Medicine and Dentistry of New Jersey School of Public Health, and partnering State, city, county, and local health departments in NY and NJ.	Training and education
State/ Private/ Federal	<b>Empire State Public Health Training Center</b> Nancy Blake Office of Public Health Practice New York State Department of Health Corning Tower 821 ESP Albany, New York 12237 (518) 473-4223 njb05@health.state.ny.us	The new Empire State Public Health Training Center, based out of the University at Albany, was recently created with links to the University at Buffalo School of Public Health. It will focus on rural areas and funded by HSRA. It will have continued funding for 2011-2012.	Training and Education
State/ Private	<b>Rural Medical Scholarship and Grant</b> <a href="http://www.upstate.edu/medalumni/student_services/scholarships_and_awards.php#commence">http://www.upstate.edu/medalumni/student_services/scholarships_and_awards.php#commence</a>	Scholarship provides \$5,000 per year for four years of study awarded to a SUNY Upstate Medical student from a rural area and intends to return to practice primary care medicine in their community. The scholarship is new in 2010-11.  Rural Medicine Grant provides \$10,000 to third and fourth year students actively involved in the Rural Medicine Clerkship through the Family Medicine Program at SUNY Upstate Medical University. Funding is awarded in the student's fourth year. The selection is the Rural Medicine Program and the funding is from several area hospitals.	Training and education

**Asset Mapping Recommendations and Next Steps:** The below table provides a catalog of resources as specified in Section C above.

	<b>DISCUSSION ITEM</b>	<b>UNANTICIPATED RESULTS</b>	<b>CHALLENGES, BARRIERS AND GAPS</b>	<b>RECOMMENDATIONS FOR SOLUTIONS</b>	<b>STRATEGIES &amp; NEXT STEPS FOR IMPLEMENTATION</b>
<b>1.</b>	Identify Resources and Compile a Table/Catalog of Pertinent Information.	Difficulty in inventorying resources – no “one-stop shop” for incentives.	No clearinghouse for NYS information “Moving target” for cataloguing resources?	Create NYS Clearinghouse; update entries at least every 2 years.	Explore “one-stop shop” or clearinghouse for primary care resources.
<b>2.</b>	How can identified resources be directed to support Recruitment, Education, Training, and Retention?	Minimal coordination between federal, state and private stakeholders.	Need better communication and information sharing between federal, state and private stakeholders.	Identify stakeholders interested in resource mapping;  Create mechanism to update and share information;	Identify appropriate partnerships; expand partnerships between State, local and not-for-profit agencies.  Collaboration through grants/closer ties between academic, community, and healthcare providers.
<b>3.</b>	How can identified resources be directed to support <b>High Demand Primary Care Occupations?</b>	See #2 above.	See #2 above.	See #2 above. Link #1 above to high-demand occupations; Build on efforts to further focus on tracking of students into high-demand practice; Create or redesign primary care office in New York State DOH as a single point of contact for issues related to expansion of primary care workforce shortages.	Incorporate the above recommendations into the function of the new DOH Office for the Development of Patient-Centered Primary Care Initiatives, which is being created within the Department of Health as part of the State’s Medicaid Redesign Team recommendations.

	<b>DISCUSSION ITEM</b>	<b>UNANTICIPATED RESULTS</b>	<b>CHALLENGES, BARRIERS AND GAPS</b>	<b>RECOMMENDATIONS FOR SOLUTIONS</b>	<b>STRATEGIES &amp; NEXT STEPS FOR IMPLEMENTATION</b>
4.	How can identified resources be directed to support <i>Areas of NYS where Primary Care Services are Limited?</i>			<p>See #1-3 above. Work with AHECs, the NYS Office of Rural Health, the NYS Council on Graduate Medical Education and others to develop issues, gaps priorities and strategies.</p> <p>Continue and Increase PC Rotations/Training in underserved areas (rural and urban)</p> <p>Consider exploring rural and urban opportunities to increase primary care rotations/training and telemedicine in underserved areas.</p>	See #3 above. PCO Office can take lead in implementing these solutions.
5.	Other Workgroup Findings (if any).		Funding stream issues?		

## Appendix 4 - Data Collection Workgroup Report

### Data Collection Workgroup

#### Highlights and Methodology

The group held a series of four teleconference phone calls to discuss the workforce data issues facing New York State. The group agreed that it would be extremely valuable to catalogue all current health workforce data collection underway in the state. Members of the group contributed to this effort by identifying the organizations engaged in health workforce data collection and describing their outputs. An assessment of the strengths and weaknesses of the individual data sources was also completed. The summary of findings follows the narrative and is identified as *Data Collection: Sources of Data on Demand for New York's Health Workers*.

#### Barriers and Gaps

While current data collection efforts produce excellent information, it simply does not go far enough. Group members, after reviewing the data table, agreed that there were substantial data gaps related to workforce supply, production and demand.

#### Challenges

The most substantial challenge to addressing the workforce data needs of the state are the resources needed to sustain more comprehensive data collection and analyses.

#### Recommendations: Long Term and Short Term

The recommendations of the workgroup reflect a clear understanding of collaborations necessary to remove barriers, address challenges and create a more systematic approach to collecting, analyzing and disseminating data for use in regional health workforce planning.

Convene a task force charged with the development of an implementation plan for the three following recommendations:

- Identify a central organization, such as the Center for Health Workforce Studies, to serve as a repository for all state, health workforce data that is collected to ensure uniformity and consistency in all data and to support systematic dissemination of data needed for planning purposes.
- Increase the availability of SUNY and CUNY educational pipeline data to be used by regional groups for health workforce planning.
- Develop more efficient and cost-effective ways to collect health workforce data that builds collaborations across agencies, reduces redundancies and creates a more streamlined approach to data collection.

Task force membership should include representatives from DOH, DOL, SED, SUNY, CUNY, and the Center for Health Workforce Studies. Additionally, other key stakeholders that will help shape the development of the implementation plan include provider associations (e.g., HANYS, HCA, NYSHFA), professional associations (e.g., MSSNY, NYSNA) and other relevant groups including 1199, AHEC and the Institute for Nursing, New York State Nursing Workforce Center.

## Data Collection: Sources of Data on Demand for New York's Health Workers

Data Source	Description	Advantages	Limitations (access, funding)	Recent Reports
<b>State Data - Hospitals</b>				
<i><b>Nursing &amp; Allied Health Workforce Advocacy Survey</b></i>				
HANYS, GNYHA, all other allied regional hospital associations and CHWS	Collects data needed to calculate vacancy and turnover rates for multiple health professionals utilizing budgeted, staffed and separation data provided by the facility. Enables HANYS to produce longitudinal data. Also assesses recruitment and retention difficulty for all professionals and reasons. Collects data on educational level of nurses working in hospitals across the state as well as barriers to and facilitators of further education	Supports monitoring of trends in hospital vacancy and turnover rates.	Insufficient regional response rates limit ability to assess regional trends.	2011 pending spring publication
Survey population= all licensed hospitals in NY				
Relevant sample size=105				
Response rate=58%(180 total)				

Data Source	Description	Advantages	Limitations (access, funding)	Recent Reports
<b><i>Annual Physician Recruitment &amp; Retention Survey</i></b>				
HANYS, GNYHA, all other allied regional hospital associations	Collects data on physician employment, vacancies and retirements over time in NY hospitals. Collects data needed to calculate recruitment and retention rates for primary care physicians and specialists. Assesses utilization of mid level practitioners and use of telemedicine	Provides data on physician specialties that are most difficult to recruit and why. Informs HANYS advocacy agenda, e.g., to lobby for more funding for the Doctors Across New York Program	NYC hospitals do not participate , so data are limited to hospitals outside of NYC	2010 report on line
Survey population= all licensed hospitals in NY				
Relevant sample size=111				
Response rate=76% excl NYC				

Data Source	Description	Advantages	Limitations (access, funding)	Recent Reports
<b>State Data - Nursing Homes</b>				
<b><i>Annual Nursing Home Recruitment and Retention Survey</i></b>				
The Center for Health Workforce Studies	Collects data on current recruitment and retention issues for workers in nursing homes. Short one-page survey asks about perceived recruitment and retention difficulties.	Similar survey has been conducted in the past, allowing for longitudinal analysis as needed. 'Fax back' return allows for quick turnaround. Usually response rate is sufficient to report findings by DOL region.	Insufficient resources to conduct follow-up on non-respondents.	2010 report on line. 2011 pending spring publication
Survey population= all licensed nursing homes in NY				
Relevant sample size=676				
Response rate=17%				

Data Source	Description	Advantages	Limitations (access, funding)	Recent Reports
<b>State Data - Home Care Agencies</b>				
<i>Annual Home Care Recruitment and Retention Survey</i>				
The Center for Health Workforce Studies	Collects data on current recruitment and retention issues for workers in home care agencies. Short one-page survey asks about perceived recruitment and retention difficulties.	Similar survey has been conducted in the past, allowing for longitudinal analysis as needed. 'Fax back' return allows for quick turnaround. Usually response rate is sufficient to report findings by DOL region.	Insufficient resources to conduct follow-up on non-respondents.	2010 report on line.  2011 spring publication
Survey population= all licensed nursing homes in NY				
Relevant sample size=253				
Response rate = 19%				

Data Source	Description	Advantages	Limitations (access, funding)	Recent Reports
<b>State Data - Federally Qualified Health Centers (FQHCs)</b>				
<b><i>Recruitment and Retention Survey for FQHCs and Look-alikes</i></b>				
CHCANYS in collaboration with the Center for Health Workforce Studies	Collects data needed to calculate vacancy and turnover rates for multiple health professionals utilizing budgeted, staffed and separation data provided by the health center. Collects data on perceived recruitment and retention issues for health center workers. Additional information collected on perceived supports needed around recruitment and retention activities.	Working in collaboration with CHCANYS to field the survey and follow up with non-respondents.	Given small number of health centers in the state, regional analyses are not possible in some DOL regions.	2010 report on line. 2011 pending spring publication
Survey population= all federally qualified health centers and FQHC look-alikes				
Relevant sample size=60				
Response rate=N/A -				

## Appendix 5 - Career Pathways Workgroup Report

### Career Pathways Workgroup

#### **Preface:**

The Career Pathways workgroup examined volumes of information relating to career pathways for selected primary care occupations. The scope of work for this workgroup was to:

- Identify the existing career pathways for primary healthcare occupations and address existing opportunities, career pathway models, parallel education and on the job training tracks, gaps in career ladders and barriers to existing pathways.
- Inventory existing training and education programs for the primary care occupations and discuss capacity issues, faculty issues, distance learning, projected needs, gaps, shortages and best practices.

We acknowledge that the scope of this work is limited. At the conclusion of this document, we have attempted to identify additional areas and topics worthy of further examination and discussion.

#### **Report Format:**

Drawing on the resources of individual workgroup members, including a “mini-survey” of Regional Adult Education Network (RAEN) Center directors, the following is a list of topics examined:

- A review of existing career ladders and parallel lattices for occupations identified above
- Gaps, including those in training and education
- Challenges
- Existing educational programs in New York State
- Regional needs and training availability
- General shortage information
- Related needs
- Suggestions and alternatives

The report is by occupation, with each section addressing relevant topics shown above. There is a section on promising practices provided at the end.

Appendices include:

- An inventory of existing primary care occupations chart detailing education and licensure requirements
- A nursing career pathway diagram, used with permission (Kimberly Harper, Executive Director, nursing 2000inc.org)
- Inventory of Primary Care Training and Education programs (with the exception of Certified Nursing Assistants)

- Department of Education Survey
- Physician Medical Programs
- Primary Care Occupational Requirements

A “promising practices” survey was conducted among New York State BOCES programs. The results of this survey relate most specifically to Certified Nursing Aide and Licensed Practical Nursing programs, but do include other programs.

## **Physicians:**

### **1. Existing Career Pathway:**

Parallel pathways for physicians do not exist. It is possible to move from one professional occupation (i.e. pharmacist, nurse practitioner, physician assistant) to physician, but this requires additional coursework, clinical and residency work over and above what has been completed and some schools do not accept transfer students. Hence, this is an even longer pathway toward an M.D. degree.

*The following is from the American Medical Association Website:*

The education of physicians in the United States is lengthy and involves undergraduate education, medical school and graduate medical education. (The term "graduate medical education" [GME] includes residency and fellowship training; the American Medical Association does not use the term "postgraduate education.")

- **Undergraduate education:** Four years at a college or university to earn a BS or BA degree, with a strong emphasis on basic sciences, such as biology, chemistry, and physics. Some students may enter medical school with other areas of emphasis.
- **Medical school:** Four years of education at a U.S. medical school accredited by the Liaison Committee on Medical Education (LCME). Four years at one of the LCME-accredited U.S. medical schools, consisting of preclinical and clinical parts. After completing medical school, students earn their doctor of medicine degrees (MDs), although they must complete additional training before practicing on their own as a physician. (Note: Some physicians receive a doctor of osteopathic medicine [DO] degree from a college of osteopathic medicine.)
- **Residency program** (graduate medical education): Through a national matching program, newly graduated MDs enter into a residency program that is three to seven years or more of professional training under the supervision of senior physician educators. The length of residency training varies depending on the medical specialty chosen: family practice, internal medicine, and pediatrics, for example, require 3 years of training; general surgery requires 5 years. (Some refer to the first year of residency as an "internship"; the AMA no longer uses this term.)
- **Fellowship:** One to three years of additional training in a subspecialty is an option for some doctors who want to become highly specialized in a particular field, such as gastroenterology, a subspecialty of internal medicine and of pediatrics, or child and adolescent psychiatry, a subspecialty of psychiatry.

After completing undergraduate, medical school and graduate medical education (GME), a physician still must obtain a license to practice medicine from a state or jurisdiction of the United States in which they are planning to practice. They apply for the permanent license after completing a series of exams and completing a minimum number of years of graduate medical education.

The majority of physicians also choose to become board certified, which is an optional, voluntary process. Certification ensures that the doctor has been tested to assess his or her knowledge, skills, and experience in a specialty and is deemed qualified to provide quality patient care in that specialty. There are two levels of certification through 24 specialty medical boards: doctors can be certified in 36 general medical specialties and in an addition, 88 subspecialty fields. Most certifications must be renewed after six to ten years, depending on the specialty.

Learning does not end when physicians complete their residency or fellowship training. Doctors continue to receive credits for continuing medical education (CME) and some states require a certain number of CME credits per year to ensure the doctor's knowledge and skills remain current. Continuing medical education requirements vary by state, by professional organizations, and by hospital medical staff organizations.

*Some of the above information was adapted from "Your Doctor's Education" in JAMA, Sept. 6, 2000.*

## **2. Gap in career ladders:**

As stated above (1) there is no defined pathway, per se, from a lower level or parallel occupational step to M.D. However, it might be possible to create articulation agreements which allow advanced practice professionals to "fill in the gaps" in their education on a customized basis, should they wish to become an M.D. after becoming, for example, a physician assistant.

## **3. Challenges:**

1. Tuition and student debt: Public medical school tuition is approximately \$24K per year; private medical schools are double. The average 2010 medical school graduate had \$154,000 in debt; some have double that amount.
2. Capacity: 15 medical schools exist in NYS. While the number of applications is rising, the average rate of matriculation among New York's Medical Colleges is merely 2.75%.
3. Primary care salaries are approximately half of those of a cardiologist's (\$190,000 vs. \$400,000), and much less than most other specialty areas.
4. Primary care residencies go unfilled. American medical students are choosing higher paying specialties, in part because of their high debt burden. The Wall Street Journal reported (April 12, 2010) that 13% of primary care residency slots were filled by International Medical Graduates (IMGs). IMGs are routinely recruited to fill these slots, especially those from Caribbean schools. New York is currently opposing this practice, as it maintains that IMGs are not as academically prepared as U.S. trained doctors.

## **4. Existing medical schools in New York State:**

Distance learning is not a current component of medical school. However, it may facilitate completion of undergraduate work.

Note: More than 75% of community based primary care physicians who work in HPSAs completed their medical training in New York. This supports the “grow your own” theory of training a primary care physician in-state. – *Center for Health Workforce Studies*.

**5. Regional needs and existing or non-existing training availability.** See attached inventory of Primary Care Training and Education Programs.

**6. Projected physician shortage:** According to the HANYS 2010 Physician Advocacy survey, New York’s physician shortage continues to worsen and 1000 new physicians are needed. September 30, 2010, AAMC reported a need for more than 63,000 physicians nationwide by 2015. HANYS’ member hospitals report a dramatic increase in the number of departing physicians and difficulty in recruiting replacements in 2009.

**7. Related Needs:**

- Primary care shortage: 94 primary care physicians per 100,000 population in New York, but 7 regions (48 counties) have fewer. - *CHWS 2010 Annual NY Physician Workforce Profile*
- Rural area primary care shortage: NYS HPSAs: A HPSA is a geographic area, population group or facility determined by the U.S. Department of Health and Human Services Division of Shortage Designation to have a shortage of primary care physicians. Of the 84,000 physicians licensed to practice medicine in NYS, over 18,000 provide community based primary care services to New York residents. Of these, only one in four (approx 4500 physicians) provide services in New York State HPSAs. - *Center for Health Workforce Studies*
- Advocacy for expansion of National Health Services corps – providing physicians to rural areas. - *Center for American Progress*
- Residency funding: In 2010 HRSA released a \$168,000,000 grant to increase residency slots in rural areas (2010 SGA).
- HANYS is advocating for more Medicare funded residency slots for NYS, an idea which is also supported by President Obama.

**8. Training and education gaps:**

- Most medical colleges are in downstate New York (Long Island/New York City/Westchester). Due to the cost of living in these areas, (salaries, transportation, utilities, etc) the cost of a medical education is higher than it might be in other areas of the state. Only four medical schools exist in the upstate and mid to western regions of New York State.

- Need to encourage more training in outpatient, rural and community sites. Allow federal dollars to fund training of physicians in alternative sites, not just hospitals. (Center for American Progress)
- Studies show that newly graduated physicians choose to work within 50 miles of their home or from where they graduated. Need for creative incentives (i.e. loan forgiveness, guaranteed salaries, etc) to attract physicians to more rural areas.
- Newly graduating physicians wish to work 40 hours per week or less. Retiring primary physicians reportedly have worked a 60 hour week for years. Thus, it takes 1.2 new physicians to replace one who is retiring.

## 9. Solutions and alternatives to existing models:

- Telemedicine: Per HANYS report, “Telemedicine allows one physician to serve multiple communities. Patients, at a “spoke” hospital, can consult with physicians at a “hub” hospital. A community hospital may link with a center of excellence that can be virtually anywhere. Patients in residential settings may see physicians without having to go to the hospital. Patients at home can be monitored by their primary care provider to enable better management of chronic illnesses.”
- Alternative provision of care: Increasing the use of mid-level practitioners, such as NPs, P.A.s, RNs to provide primary medical care may alleviate some of the existing shortage. However, as noted elsewhere in this report, these practitioners are subject to the same disincentives to practice primary care as physicians, namely higher salaries in specialty fields.
- Loan forgiveness: it may be possible to say that loan forgiveness may be more than offset by the significant savings in the diagnosis and treatment of illness because of early or preventive care provided by a primary care physician.

### Midwives:

Midwives offer care for pregnant women birthing at home, birth centers or in hospitals. For midwives who have out-of-hospital practices, there are hospital and doctor back-up arrangements in case a woman develops a complication. If there were complications, it would be necessary for a consultation with, transfer of care, or transport to a physician. In the hospital setting, where most Certified Nurse Midwives usually practice, they work under the supervision of obstetricians. Midwives also offer contraception, gynecological services and menopausal care to women.

#### 1. Existing Career Pathway:

In the United States today, there are two midwifery credentials: Certified Nurse Midwife (CNM) and Certified Midwife (CM).

- **Certified Nurse Midwife (CNM)** candidates must earn a Bachelor of Science in Nursing (BSN) and then pass the board of nursing examinations to become a Registered Nurse (RN). One to two years of experience working in obstetrical nursing, women's gynecological care or labor and delivery in a hospital or clinic is usually required for

candidates looking for a nurse- midwifery program, which takes about a year to complete and results in a Master's degree (MS).

After completing the Nurse-Midwifery program, the candidate must pass the American College of Nurse Midwifery (ACNM) board examination to obtain certification. Most Certified Nurse Midwives work in hospital or clinical settings, some establish birth centers or home birth services. All work in consultation with obstetrician-gynecologists.

- **Certified Midwives (CM):** The American College of Nurse-Midwives (ACNM) Certified Midwives (CM) have or receive a background in a health related field other than nursing and graduate from a midwifery education program accredited by the ACNM department of accreditation. Graduates of an ACNM accredited midwifery education program take the same national certification examination as CNMs but receive the professional designation of Certified Midwife. CMs must attend a university-based program to become educated in the same core competencies for basic practice as CNMs, and practice in accord with the same standards for practice, philosophy, and code of ethics as nurse-midwives. Certified Midwives are relatively new professionals to the healthcare field but their education closely mirrors the education for Certified Nurse-Midwives. The mechanisms to educate and credential CMs were approved in 1994. CMs are not registered nurses (RNs), but may hold other professional designations as healthcare providers such as a Physician Assistant (PA) or Physical Therapist. (PT) New York is one of a few states that recognize the Certified Midwife credential.

### **General Requirements:**

- Completion of a New York State licensure qualifying program in midwifery; or
- graduation from a midwifery education program after December 1995\* accredited by the American College of Nurse Midwives Division of Accreditation; or
- Completion of a degree or diploma program in registered professional nursing or the equivalent as outlined in the Regulations of the Commissioner of Education.
- Completion of a program in midwifery registered by the New York State Education Department or determined by this Department to be equivalent. This leads to a baccalaureate degree or higher academic credential and includes educational preparation for the practice of midwifery and additional courses in related basic and clinical sciences.

*Note:* If you graduated from a program accredited by the American College of Nurse Midwives Division of Accreditation prior to 1996, you may be required to take additional courses, such as pharmacology, to meet the education requirement for licensure.

Programs must be equivalent in scope, content, and level of study to a registered program and must include the following professional studies:

Educational preparation for the practice of nursing means completing courses and supervised clinical experiences that include, but are not limited to, the following:

1. technical healthcare skills;
2. maternity, pediatric, medical, surgical, psychiatric, and mental healthcare;

3. nutrition;
4. pharmacology;
5. ethics; and
6. biological, physical, and social sciences supportive to healthcare.

Educational preparation, for the practice of midwifery, includes completing courses and supervised clinical experiences that include, but are not limited to, the following:

1. preconception, ante partum, intrapartum, and postpartum care;
2. physical assessment, diagnosis, and treatment of actual or potential health problems of women;
3. well-woman care;
4. neonatal care;
5. family planning and gynecological care;
6. professional, legal, and ethical aspects of midwifery practice;
7. areas of nutrition related to the practice of midwifery; and
8. a pharmacology component that includes instruction in drug management of midwifery clients.

### **Prescriptive Privilege**

An applicant who satisfies all requirements for licensure as a midwife is authorized to prescribe and administer drugs, immunizing agents, diagnostic tests and devices, and to order laboratory tests, limited to the practice of midwifery and subject to limitations of the practice agreement, after providing evidence as follows:

- completion of a three-credit course in pharmacology that includes instruction in drug management of midwifery clients, and
- completion of instruction in New York State and Federal laws and regulations relating to prescriptions and record keeping, or
- the satisfactory completion of equivalent course work as determined by the Department.

- *New York State Education Law, Section 6951(2)*

### **2. Gap in Career Ladders:**

Midwifery allows for entry into the profession from a non-nursing background, but does require at least the equivalent of a baccalaureate degree for entry.

### **3. Existing midwifery programs:**

New York State has four Midwife programs

**Columbia University** (New York, NY)  
School of Nursing  
CUMSPH/ICAP  
722 W. 168<sup>th</sup> St. 7<sup>th</sup> fl  
New York, NY 10032-3703

212-305-5236

Program directed by Laura Zeidenstein CNM MSN

Master's Completion Option

Post Graduate Certificate Option

Program Types: Direct Entry MSN, Masters in Nursing

Matching Program Tracks: Nurse Midwifery, Women's Health with Adult Primary Care

Oncology or Nurse Midwifery

Accreditation: ACNM accredited

**New York University**

College of Nursing at the College of Dentistry

Midwifery Program

246 Greene St

New York, NY 10003-6677

212-998-5895

Program Directed by: Julia Lange Kessler CM MS RN IBCLC

Master's Completion Option

Post Graduate Certificate Option

Accreditation: ACNM accredited

**State University of New York Downstate Medical Center**

College of Health Related Professions

Midwifery Education Program

450 Clarkson Ave. # 1227

Brooklyn, NY 11203-2013

718-270-7742

Program directed by: Ronnie Lichtman CNM PhD FACNM

Certified Midwife (CM) option

ADRN to CNM Option

Partially Distance

Master's Completion Option

Post Graduate Certificate Option

Accreditation: ACNM accredited

**Stony Brook University** (Stony Brook, NY)

Pathways to Midwifery

Health Sciences Center

Stony Book, NY 11794-0001

631-444-2867

Program directed by: Nicole Rouhana, CNM MS FNP-BC

Fully Distance

Master's Completion Option

Post Graduate Certificate Option

***ONLINE CNM PROGRAMS OFFERED***

Program Types: Masters in Nursing

Matching Program Tracks: Nurse Midwifery

Accreditation: ACNM accredited

#### 4. Regional needs and existing or non-existing training availability:

There are no midwifery programs outside of the metro New York, Long Island area; however, Stony Brook offers one on-line program

#### 5. Other projections: (National projections per O\*net)

Projected job openings (2008 – 2018) 32,000

Projected growth (2008-2018) faster than average 14% - 19%

NYS occupational projections include midwives within the Health Technologists category (29-2099) which shows a favorable growth rate of 5.1 for the state (2008-2018). However, Midwifery is not a separate occupational title within this data set.

### Dental Programs:

#### 1. Existing Career Pathway:

##### A. Dentists:

Step 1: Earn a Bachelor's Degree in the Sciences

Step 2: Complete a Doctor of Dental Surgery Program

Step 3: Take the National Board Dental Examination

Step 4: Get Licensed by a State Board

To meet the education requirements for licensure, candidates must present evidence of completion:

1. Not less than 60 semester hours of *pre-professional education*, including courses in general chemistry, organic chemistry, biology or zoology, and physics; and
2. A program of professional education consisting of either:
  - o At least four academic years, or the equivalent thereof, in a program registered by the New York State Education Department (SED), licensure qualifying or accredited by an accrediting organization acceptable to SED (see below for information about accredited dental programs); **or**
  - o At least four academic years of dental education satisfactory to the SED. The four years of education culminating of a degree, diploma or certificate in dentistry recognized by the appropriate civil authorities of the country in which the school is located (see below).

##### B. Dental Hygienists:

To meet the education requirements for licensure, you must have:

- Earned a high school diploma, or the equivalent, and
- Completed a New York State qualifying registered licensure, or American Dental Association accredited dental hygiene program.

In addition to the professional education requirement, every applicant for licensure as a dental hygienist or a limited permit must complete coursework or training in the

identification and reporting of child abuse in accordance with Section 6507(3) (a) of the Education Law.

Every dental hygienist must also complete approved coursework or training appropriate to the professional's practice in infection control and barrier precautions, including engineering and work practice controls, to prevent the transmission of the human immunodeficiency virus (HIV) and the hepatitis b virus (HBV) in the course of professional practice.

**C. Certified Dental Assistant:**

To meet the education requirements for licensure as a certified dental assistant you must have:

- Earned a high school diploma or G.E.D.
- Completed a licensure-qualifying program in dental assisting or an equivalent program as determined by the State Education Department. A list of New York State registered, licensure-qualifying dental assisting programs is available through the Education Department's Inventory of Registered Programs.

Equivalent means the educational program must culminate in a degree or credential from an institution acceptable to the State Education Department. It must include courses as specified below.

**You must complete *either* A or B below:**

**A. A one-year program consisting of 24 semester hours or the equivalent including:**

1. The biomedical sciences content area:
  - body structure and function,
  - basic concepts of microbiology pertaining to infection control,
  - basic nutrition; and
2. The professional dental assisting content area:
  - dental materials and instruments,
  - dental radiography techniques and safety,
  - basic dental and oral anatomy,
  - introductory content in oral histology, embryology, pathology, and therapeutics,
  - legal and ethical aspects (dental record keeping, terminology, charting, and patient confidentiality); and
3. The clinical content area:
  - chair side dental assisting and appropriate laboratory procedures,
    - placing and removing temporary restorations;
    - placing, condensing, and carving amalgam restorations; and
    - placing, condensing and finishing non-metallic restorations.
  - patient education and preventive dentistry,
  - dental radiographic procedures,
  - infection control,
  - assisting in management of dental and medical emergencies; and

4. Course work in oral and written communications and basic behavioral concepts; and
5. At least 200 hours of clinical experience.

**B. An alternate course of study in dental assisting acceptable to the New York State Education Department including:**

1. The biomedical sciences content area, the professional dental assisting content area, and the clinical content area; and
2. At least 1,000 hours of relevant work experience under a licensed dentist's direct personal supervision.

NOTE: In addition to meeting these education requirements, you must satisfy the examination requirements outlined in the next section.

### **Examination Requirements**

Passing scores on appropriate examinations administered by the Dental Assisting National Board (DANB), Inc. are required for licensure in New York. There are two pathways to qualify to take the required DANB examinations. See below to determine which examination section(s) you must complete.

#### **Pathway I: Applicants eligible for DANB**

If you meet DANB's eligibility requirements, you must take and pass the current DANB CDA examination consisting of the following three components: Radiation Health and Safety (RHS), Infection Control (ICE), and General Chair side (GC).

- If you have passed all three components of DANB's CDA examination after June 1, 1993, you have met New York State's examination requirement.
- If you have passed DANB's CDA examination between June 1, 1985 and June 1, 1993, you must take and pass the Infection Control (ICE) component of the current DANB examination.
- If you have passed DANB's CDA, examination prior to June 1, 1985, you must take and pass the Radiation Health and Safety (RHS) and Infection Control (ICE) components of the current DANB examination.

#### **Pathway II: Applicants not eligible for DANB**

If you graduated from a New York State registered licensure qualifying dental assisting program, or the equivalent, but do not meet DANB's eligibility requirements, you must take and pass New York's three-part certified dental assisting examination (administered by DANB). The exams consist of DANB's Radiation Health and Safety (RHS) and Infection Control (ICE) components and the New York Professional Dental Assisting component.

NOTE: If an individual fulfills the examination requirement, they will not be licensed until SED approves the education as both the education and examination requirements must be met.

## **Gaps in Career Ladders:**

While progressing from dental assistant to dental hygienist is a logical assumption and a clear pathway for the hygienist profession, it does not follow that hygienists will then become dentists. Additionally, hygienists do not need to first become dental assistants; they can follow a course of study directly out of post secondary education.

The career path to becoming a dentist is separate and distinct, requiring four years of baccalaureate education, followed by four years of approved dental education. As with physicians, there is no lateral pathway from alternative healthcare occupations or from related occupations within the dental field.

In 2005, the Oral Health Plan for New York State made the following recommendation: “to examine and make recommendations on strengthening the dental health workforce including integrating dental hygiene education and training programs into undergraduate and graduate programs to advance the careers of dental hygienists.”

**4. Existing NYS Programs:** see attached Inventory of Primary Care Training and Education Programs

## **5. Regional needs and projected shortages in the dental field:**

According to the 2011, CHWS report, *A Profile of Active Dentists in New York*, “there is wide regional variation in the distribution of dentists in New York. While the ratio of active dentists per capital is well above the national ration, access to oral health services in the state is problematic in certain regions and for certain unrepresented groups. There are currently six federally designated geographic Dental Health Professional Shortage Areas (DHPSAs) in the state and 41 federally designated special population DHPSAs for either Medicaid eligible or low income residents.

## **Nursing: (Licensed Practical Nurse and Registered Nurse)**

There are three distinct *licenses* within the nursing profession in New York State: Registered Professional Nurse (RN), Licensed Practical Nurse (LPN) and Nurse Practitioner (NP).

### **Registered Professional Nurse (RN) allowable duties:**

- Diagnose and treat a patient’s unique responses to diagnosed health problems;
- Perform health assessments to identify new symptoms of possibly undiagnosed conditions or complications
- Teach and counsel patients about maintenance of health and prevention of illness or complications;
- Execute medical regimens as prescribed by licensed physicians, dentists, nurse practitioners, physician assistants, podiatrists and;
- Contribute as members of an interdisciplinary healthcare team and as consultants on health related committees to plan and implement the healthcare needs of consumers.

**Licensed Practical Nurse (LPN):** provides skilled nursing care tasks and procedures under the direction of an RN, physician, or other authorized healthcare provider.

**Nurse Practitioner (NP):** an RN who has earned a separate license as an NP through additional education and experience in a distinct specialty area of practice. This occupation is reviewed in another section of this report.

## 1. Existing Career Pathway

In nursing there are existing pathways to assist paramedics, military corpsmen and licensed practical nurses (LPNs) to transition to pre-licensure registered nurse (RN) programs. Excelsior College is a good example of this as well as community college nursing programs that place LPNs into second semester courses. There is growing interest from LPN programs to aid the transition of their graduates into generic BSN programs, for example Orange County Community College.

There are numerous programs within New York State (NYS) and outside of NYS that offer RN-BS, RN-MS and MS in nursing degree programs. These programs provide career pathways for licensed RNs who desire a change or advancement within the profession. Masters prepared nurses can specialize in roles such as educators, administrators, midwives, nurse practitioners and advanced practice nurses.

The movement along the pathway requires formal academic preparation and credentialing. Life experience can be a source of learning which can be validated to award academic credit in programs like Excelsior College's competency based program. Students earn credit by completing examinations, both those that test theoretical nursing knowledge and a comprehensive clinical examination that validates clinical competency of the beginning RN.

The education, training and industry skill standards required for each primary care occupation in nursing (credentials and licensing) may commence with a typical pathway as follows:

Certified Medical Assistant (CMA) -- Individuals interested in becoming certified medical assistants (CMA) need to be high school graduates or have completed a GED. To earn the CMA credential the student must enroll in a medical assisting program accredited either by the Commission on Accreditation of Allied Health Education Program (CAAHEP) or by the Accrediting Bureau of Health Education Schools (ABHES). There are a number of medical assisting programs in New York State. Once the program of study is completed, the student must successfully complete the CMA Certification Examination. Recertification is required every 5 years.

Medical assistants are prepared to work in ambulatory settings such as physicians' offices, clinics and group practices. They can perform both administrative and clinical procedures such as recording keeping and accounting/billing, coding and insurance processing, laboratory testing and drawing blood, first aid, health histories and other duties under the supervision of the physician.

Medical assisting is a rapidly growing allied health career and assistants who are certified can advance to office manager or some other administrative support position. They earn competitive wages.

There is no direct clear pathway from CMA to RN, however some CMAs have completed LPN programs and then engage in studies leading to RN licensure.

### **Some career figures for medical assisting graduates in New York:**

Average annual salary:	\$31,640
Currently employed:	19,710
Employment outlook:	34% growth
Most popular degrees:	Associate's, Certificate

LPNs – completion of an approved LPN program which makes the individual eligible to seek licensure as a LPN; licensed after successful completion of the NCLEX-PN and approval of licensing board

RNs – completion of an approved RN program (diploma, associate or bachelors degree) which makes the individual eligible to seek licensure as a RN; licensed after successful completion of NCLEX-RN and approval of licensing board

To fill roles of nurse educator, nurse administrator and nurse midwife, individuals are required to complete additional academic preparation, usually a graduate degree in nursing. Also in NYS, nurse practitioners receive a certificate from the NYS Education Department as long as the individual holds a valid RN license and meets additional education requirements (graduate degree and a specified number of clinical practice hours).

### **Additional Credentials:**

**Certified Asthma Educator:** This category of preparation is open to health and medical professionals who qualify to take the national certification examination to become a certified Asthma Educator. The Certified Asthma Educator (AE-C) teaches and counsels clients (and their families) with asthma, with the goal of improving the quality of the client's life and the quality of care provided to clients and families.

Professionals who are eligible to take the certification examination include physicians, PAs, NPs, RNs, LPNs, Respiratory Therapists, Pulmonary Function Technologists, Pharmacists, Social Workers, Health Educators, Occupational Therapists (OT), and Physical Therapists (PT).

The National Asthma Educator Certification Board (NAECB) provides the certification examination. There is additional information about this certification at <http://www.naecb.org>. The certification provides existing healthcare professionals with opportunity for addition compensation and employment opportunities with select employers.

**Certified Diabetes Educators:** This certification prepares healthcare professionals to be able to provide diabetes self-management education for clients and families. These health professionals must have appropriate credentials, experience and practice in a manner consistent with their scope of practice.

Professionals who are eligible to seek certification include clinical psychologists, physicians (MD or DO) or podiatrist, RNs, OTs, PTs, and optometrists holding a current, active, unrestricted license from the United States or its territories or registered dietitians, or healthcare professional with a minimum of a master's degree in social work.

There is also a professional practice experience requirement of a minimum of 2 years of practice. The National Certification Board provides the certification examination for Diabetes Educators (NCBDE). Additional information about this certification may be viewed at <http://www.ncbde.org>. The certification provides existing healthcare professionals an opportunity for additional compensation and employment opportunities with select employers.

## **2. Gaps in Career Ladders:**

For individuals who are healthcare workers at the beginning levels such as certified nursing assistants (CNAs) or home health aides (HHAs) there is no way to make the transition to either the LPN or RN level without attendance at a campus based nursing program. Often the prospective nursing student must add his/her name to a waiting list for these programs. While waiting to begin a program of study, these students may face completion of remedial work as well as the general education portion of the program. This results in a delay as well as the completion of credits that are not essential to meeting degree requirements. It is likely that a 60 credit associate's degree in nursing, which should take two years of full-time study, can take up to 4 years to complete due to the program's lack of qualified faculty and/or lack of clinical placements.

In addition to the roadblocks to existing pathways noted above, regulatory agencies such as state boards of nursing can create barriers to educating and licensing of healthcare workers. The ability to regulate the profession is at the state level despite LPNs and RNs taking a national licensing examination to demonstrate beginning competency. The amount of variation across states regarding educational requirements (including clinical hour requirements) is noteworthy. Data is not available to support the traditional apprenticeship model that continues to be the standard in nursing education. Many states require clinical rotations in medical-surgical nursing, obstetrics, pediatrics, psych-mental health and gerontology. With the scarcity of clinical placements, meeting these requirements has become a significant issue.

## **3. Challenges:**

Numerous reports and white papers have been prepared on the challenges, barriers and gaps involved in the national nursing shortage. The Center for Health Workforce Studies has produced a variety of documents, which address many of these issues in detail. Below are issues, which are representative of challenges affecting New York's nursing workforce:

**Diversity:** The nurses are not representative of the diverse population of this state and there is wide regional variation on the highest education achieved (50% in NYC report a BSN while less than 20% report it in the North Country).

**Faculty salaries:** *from the AACN website:* "Higher compensation in clinical and private-sector settings is luring current and potential nurse educators away from teaching. According to the American Academy of Nurse Practitioners, the average salary of a nurse

practitioner, across settings and specialties, is \$81,060. By contrast, the AACN reported in March 2009 that master's prepared faculty earned an annual average salary of \$69,489.”

#### 4. Regional needs and existing or non-existing training availability:

There are currently 88 LPN programs fairly well distributed statewide. There are 65 associate degree programs which are all pre-licensure programs preparing individuals to become eligible to seek RN licensure. These are also fairly well distributed with the exception of the North Country region where there are no programs listed (per Office of the Professions website). There are 57 bachelors' degree programs, which represent a combination of generic pre-licensure programs, and RN-BS completion programs. There are 38 graduate degree programs and only 10 doctoral nursing programs with none of these programs in the North Country region and the others scattered across the state

#### 5. Projected shortages in the nursing field:

While the number of nursing graduates has steadily increased since 2002, a long term nursing workforce shortage is still projected. As noted in the report from the Center entitled “Trends in New York Registered Nurse Graduations 1996-2010” it is projected that the number of graduates from associate and bachelors degree in nursing programs will continue to increase across all regions of NYS. However, qualified applicants are denied admission to these programs since they have instituted caps on new enrollments due to lack of classroom space and lack of funding to pay faculty (Center for Health Workforce Studies).

- **Licensed Practical Nurses:** *The following is from the CHWS website:* The Center recently completed a research study on supply and demand gaps for licensed practical nurses (LPNs) in the state's nursing homes. There is concern about serious shortages of LPNs in long term care, but not much is known about contributing factors. The study found that New York has fewer LPNs per capita than the national average and that the supply of LPNs is not well distributed across the state. Shortages of LPNs persist in New York, and are more pronounced in certain regions and for certain types of employers. While LPN graduations are projected to increase, the increase will not apply equally to all areas of the state.
- **Nurse Faculty:** *The following information is from the American Association of Critical-Care Nurses (AACN) website: Scope of the Nursing Faculty Shortage.* According to AACN's 2009-2010 report, *Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing*, U.S. nursing schools turned away 54,991 qualified applicants from baccalaureate and graduate nursing programs in 2009 due to an insufficient number of faculty, clinical sites, classroom space, clinical preceptors, and budget constraints. Almost two-thirds of the nursing schools responding to the survey pointed to faculty shortages as a reason for not accepting all qualified applicants into entry-level baccalaureate programs.

According to a *Special Survey on Vacant Faculty Positions* released by AACN in September 2010, 880 faculty vacancies were identified in a survey of 556 nursing schools with baccalaureate and/or graduate programs across the country (70.3% response rate). Besides the vacancies, schools cited the need to create an additional 257 faculty positions to accommodate student demand. The data show a national nurse faculty vacancy rate of 6.9%.

Most of the vacancies (90.6%) were faculty positions requiring or preferring a doctoral degree. The top reasons cited by schools having difficulty finding faculty were noncompetitive salaries compared to positions in the practice arena (30.2%) and a limited pool of doctorate-prepared faculty (30.4%).

Program capacity: Low faculty salaries are only part of the equation. Inadequate availability of clinical sites is another. Last, but foremost is the formula by which community college programs are funded. Specifically, it costs approximately \$20,000 per year x two years to educate a nurse, but the revenues generated by that enrollment only add to about \$10,000 per year. Other college programs must subsidize nursing. Therefore, the high cost is a disincentive to increasing nursing capacity. The New York State FTE state aid rate is 2260 (down from 2675) and this rate is the same for all programs, regardless of cost or need. The funding formula needs to be revised to create an added differential for high cost, high demand programs and colleges, which attempt to expand capacity.

Worsening faculty shortages in academic health centers are threatening the nation's health professions educational infrastructure, according to a report by the Association of Academic Health Centers released in July 2007. Survey data show that 94% of academic health centers CEOs believe that faculty shortages are a problem in at least one health professions school, and 69% think that these shortages are a problem for the entire institution. The majority of CEOs identified the shortage of nurse faculty as the most severe followed by allied health, pharmacy and medicine.

According to a study released by the Southern Regional Education Board (SREB) in February 2002, a serious shortage of nurse faculty was documented in all 16 SREB states and the District of Columbia. Survey findings show that the combination of faculty vacancies (432) and newly budgeted positions (350) points to a 12% shortfall in the number of nurse educators needed. Unfilled faculty positions, resignations, projected retirements, and the shortage of students being prepared for the faculty role pose a threat to the nursing workforce over the next five years."

## 6. Other projections:

The reader is directed to the 2010 report: *Trends in New York Registered Nursing Graduations, 1996 -2010*, issued by The Center for Health Workforce Studies, School of Public Health, University at Albany, 1 University Place, Suite 220, Rensselaer, NY 12144-3456 Phone: (518) 402-0250 Fax: (518) 402-0252 <http://chws.albany.edu>

## 7. Solutions and alternatives:

As with challenges, mentioned above, this topic has been widely covered by nursing advocates and organizations nationwide. Below, we have included several topics of interest, which may provide effective relief from some of the acknowledged shortages and barriers within the nursing profession.

**Distance education:** Expanded distance education delivery models using blended models of credit by examination, online courses and competency testing may be a solution. However, delivery of the curriculum using these strategies can be expensive unless delivered on a large

scale. A partnership between colleges and healthcare organizations, including the use of dual appointments for employees to the medical center and the college, has shown promise.

**Centralized application service for nursing education:** - *taken from the AACN website:*  
“In September 2010, AACN announced the expansion of NursingCAS, the nation’s centralized application service for RN programs, to include graduate nursing programs. One of the primary reasons for launching NursingCAS was to ensure that all vacant seats in schools of nursing are filled to better meet the need for RNs, APRNs, and nurse faculty. In 2009, more than 10,000 vacant seats were identified in masters and doctoral nursing programs alone. NursingCAS provides a mechanism to fill these seats and maximize the educational capacity of schools of nursing. See [www.aacn.nche.edu/Media/NewsReleases/2010/ExpanNursingcas.html](http://www.aacn.nche.edu/Media/NewsReleases/2010/ExpanNursingcas.html) .

**Robert Wood Johnson Foundation brief:** In July 2010, the Robert Wood Johnson Foundation (RWJF) released its Charting Nursing’s Future newsletter focused on “Expanding America’s Capacity to Educate Nurses: Diverse, State-Level Partnerships Are Creating Promising Models and Results.” This policy brief describes partnerships that are effectively addressing the nursing and nurse faculty shortages. Among the policy recommendations advanced in this brief is the requirement that all new nurses complete a BSN program within 10 years of licensure, which would enhance the pipeline into baccalaureate and graduate nursing programs. See: [www.rwjf.org/files/research/20100608cnf.pdf](http://www.rwjf.org/files/research/20100608cnf.pdf)

**Simulation labs:** Simulation labs allow students to acquire the full range of skills needed for nursing, ranging from drawing blood and hanging an IV bag to delivering babies and preparing toddlers for surgery. Mannequins, enabled by software innovations and composed of new high-performance materials, now have state-of-the-art features not found in earlier generations of patient simulations. Computer-based scenarios enable students to deal with a broad range of traumas and injuries from stab wounds in the chest to pneumonia with septic shock. These simulation labs are ideal for visual learners, but are prohibitively expensive, in many cases.

**Mobile labs:** Mobile labs would be an additional option to addressing the shortage of basic practice clinical sites. This investment would be a one-time purchase and set-up of the mobile units, staffed by nursing professionals and could provide outreach services to community residents.

## **Physician Assistant (PA):**

### **1. Career Pathway**

To become a licensed, registered physician assistant in New York State, you must have completed high school or its equivalent and you must present satisfactory evidence of completion of a program for the training of physician assistants. The training program is approved by the New York State Education Department as licensure-qualifying or accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) or a program determined by the Department to be the equivalent of a licensure qualifying or accredited program.

For a program for the training of physician assistants to be determined substantially equivalent to a licensure qualifying or accredited program, it must include:

- 32 semester hours of classroom work; and
- 40 weeks /1,600 clock hours of supervised clinical training.

*Please note:* Graduates of medical programs cannot be licensed as registered physician assistants based solely on medical education. All applicants for registered physician assistant licensure must fulfill the educational requirements outlined above.

### **Infection Control and Barrier Precautions:**

Every practicing physician assistant must complete approved coursework or training appropriate to the professional's practice in infection control and barrier precautions, including engineering and work practice controls, to prevent the transmission of the human immunodeficiency virus (HIV) and the hepatitis B virus (HBV) in the course of professional practice.

### **Examination Requirements**

PA candidates must pass the Physician Assistant National Certifying Examination (PANCE) that is administered by the National Commission on Certification of Physician Assistants (NCCPA). PANCE is a computer examination administered four times a year.

### **Nurse Practitioner (NP):**

#### **1. Career Pathway**

To receive a certificate to practice as a nurse practitioner in New York State you must:

- have a currently registered New York State license as a Registered Professional Nurse (RN); and
- meet education requirements

A list of New York State Nurse Practitioner programs is in appendix 10.

A nurse practitioner is certified to practice in a specific specialty area. An NP may be authorized in more than one specialty. Specialty areas are Acute Care, Adult Health, College Health, Community Health, Family Health, Gerontology, Holistic Care, Neonatology, Obstetrics/Gynecology, Oncology, Pediatrics, Palliative Care, Perinatology, Psychiatry, School Health, and Women's Health.

Once authorized, the NP must maintain the registration of his/her RN license and NP certificate in order to practice as a nurse practitioner. To satisfy the education requirements for certification as a nurse practitioner, the individual must present evidence of satisfying the requirements. Because Nurse Practitioners may dispense prescriptions, an NP candidate must meet the pharmacotherapeutic requirements below.

Required:

1. Completion of a nurse practitioner educational program registered by the New York State Education Department as qualifying for certification, or a program determined by the Department to be equivalent to a registered program, which is designed and conducted to prepare graduates to practice as nurse practitioners.
2. Certification as a nurse practitioner by one of the following national certifying organizations:

American Academy of Nurse Practitioners  
P.O. Box 12846  
Austin, TX 78711  
Phone 512-442-4262  
Web [www.aanp.org](http://www.aanp.org)

American Nurses Credentialing Center  
Attn: Verification Specialist  
P.O. Box 791321  
Baltimore, MD 21279-1321  
Web <http://nursingworld.org/ancc/>

National Board for Certification of Hospice and Palliative Nurses  
One Penn Center West  
Pittsburgh, Pa 15276-0100  
Phone 412-787-1057  
E-mail [nbchpn@hpna.org](mailto:nbchpn@hpna.org)

National Certification Corporation  
(Formerly NAACOG)  
P.O. Box 11082  
Chicago, IL 60611-0082  
Phone 312-951-0207  
Web [www.nccnet.org](http://www.nccnet.org)

(Certification for women's health, neonatal and gynecologic/reproductive nurse practitioners.)

Oncology Nursing Certification Corporation  
125 Enterprise Drive  
Pittsburgh, PA 15275  
Phone 877-769-6622  
Web [www.oncc.org](http://www.oncc.org)

Pediatric Nursing Certification Board  
800 South Frederick Avenue, Suite 204  
Gaithersburg, MD 20877-4152  
Phone 301-330-2921 or 888-641-2767  
Web [www.pncb.org](http://www.pncb.org)

Alternative certification requirements for graduates of nurse practitioner programs prior to April 1, 1989, as follows:

- completion of at least a four-week long (full-time) nurse practitioner program prior to April 1, 1989; *and either*
- two years of experience prior to April 1, 1989, of which one year must be after April 1, 1986, in the provision of primary healthcare services in a healthcare facility licensed pursuant to Article 28 of the Public Health Law or in a school health demonstration project; **or**
- completion of a supplemental educational program culminating in the successful completion of a comprehensive examination or clinical evaluation. Registered nurses should contact registered nurse practitioner programs for information about admission to their programs with advanced placement.

**-AND-**

- Satisfaction of the pharmaco-therapeutic requirement for ALL applicants You must document completion of not less than three semester hours, or the equivalent, in pharmaco-therapeutics to include instruction in drug management of clients in the nurse practitioner specialty area and instruction in New York State and Federal laws and regulations relating to prescriptions and record keeping; **or** completion of an educational program or a combination of courses which is the substantial equivalent in content and scope to the pharmaco-therapeutics course listed above; **or** satisfactory completion of an examination in pharmaco-therapeutics acceptable to the Department; **or** satisfactory completion of a nationally recognized examination acceptable for licensure in New York State as a physician assistant or for certification as a nurse midwife.

**NOTE:** If the student has completed a program other than a New York State licensure-qualifying program and/or the pharmacotherapeutics course did not include instruction in New York State and Federal laws and regulations related to prescriptions and record keeping, the student may contact the following professional association's for required instruction:

The Nurse Practitioner Association of New York State  
 12 Corporate Drive  
 Clifton Park, NY 12065  
 Phone 518-348-0719  
 Web [www.thenpa.org](http://www.thenpa.org) 

The New York State Nurses Association  
 11 Cornell Road  
 Latham, NY, 12210-1499  
 Phone 518-782-9400 ext. 288  
 Web [www.nysna.org](http://www.nysna.org)   
 Online course [New York Prescribing Information for Nurse Practitioners](#) 

Prescription Forms: If you satisfy all requirements for a certificate as a nurse practitioner, you will be authorized to issue prescriptions pursuant to Section 6902 (3) (b) of the NYS Education Law.

## **2. Challenges:**

It has been proposed that practitioners, such as NPs and P.A.s may help alleviate the growing physician shortage. This may be true for specialty areas. However, in the primary care arena,

the same problems exist with mid-level practitioners, as for physicians. Physician Assistants and Nurse Practitioners are incentivized with higher bonuses and salaries for entering specialty areas. Hence, many strategies proposed to solve the primary care physician shortage will also draw mid-level practitioners into primary care.

**3. Other observations:** It should be noted that Colorado did a study in 2008 on Scope of Practice as it relates to Physician Assistants. Colorado found evidence to show that physician assistants (PAs) provide a level of care comparable to physicians with no difference in patient satisfaction, and PAs are more likely to live in a rural and health professional shortage area. With regard to advanced practice nurses, the committee found that nurse practitioners (NPs) provide a "comparable level of care" to that of physicians..." ("Collaborative Scopes of Care"; www.coloradotrust.org)

### **Certified Nursing Assistant (C.N.A.):**

#### **1. Existing career pathway:**

The State Education Department website:

<http://www.p12.nysed.gov/cte/health/nurseassisting.html> outlines the Nursing Assistant curriculum. Core Curriculum includes: Overview of the Human Body, Emergency Care, Maintaining and Promoting a Safe Environment, Infection Control, Personal Care, Nutrition and diet therapy, Elimination Procedures, Lifting, Moving and Transporting, Assisting with Admissions, Transfers, Discharges and Physical Exams, Pre-and Post Operative Care, Circulatory and Respiratory Care, Life Changes and Adaptations and Communication and the Client.

New York State's minimum pre-employment Training Requirements include 100 hours, comprised of at least 70 hours of actual classroom and lab training, plus 30 hours of supervised clinical training with residents in a nursing home.

The New York State Department of Health (NYSDOH) administers the New York State (NYS) Nursing Home Nurse Aide Competency Examination and manages the NYS Nursing Home Nurse Aide Registry (NAR).

The majority of nursing aides on the registry become certified by successfully completing a NYS approved, nursing home, nurse aide training program and passing the Competency Examination. The exam consists of two parts: a clinical skills exam/ practical portion and a written/ oral exam.

All individuals performing nurse aide duties in a nursing home on a full-time, part-time or contractual basis must meet minimum training and competency requirements in accordance with State and federal regulations. They must also be in good standing on the NAR.

An individual is not required to hold a high school diploma, nor a GED to become a C.N.A. From that position, however, an individual can aspire to become a Licensed Practical nurse and from there, a Registered Nurse. Becoming a C.N.A. is not required, prior to obtaining a Licensed Practical Nurse certification, although it may be necessary to complete post secondary education in order to be accepted into a R.N. baccalaureate program.

## 2. Gaps and challenge (as identified by the NYS Health Facilities Association)

- No Universal care worker: Currently the path to become a home health aide or certified nurse aide is completely separate. There are a couple of pilots in New York State, for example, Unity Health System, where they are cross educating staff to be HHA or CNA and can be interchanged within a system. However, there has been concern by personal care organizations that with such career ladders no one will want the personal care jobs, but we have tended to think of this as a career lattice (vs. ladder) so that individuals have more opportunities across settings and providers have more opportunity with workers.
- Training sites for HHA and CNAs vary across the state. Providers report a lack of sites, especially in rural areas.
- Career ladders within jobs: i.e., Advanced CNA position that could also perform simple dressings, apply medicated creams, etc. One barrier to C.N.A. advancement is the CNA training regulations. They are very difficult to expand or deviate from without years of discussion. Veteran's Administration model has these career paths for this level of staff.
- Class size and flexibility of class schedule can also be a roadblock to working individuals trying to move up the career ladder and into a C.N.A. entry level career.

## 3. Existing programs:

### Central Region

Facility	Address	Contact	Initial Approval	Approval Period
Broome Community College	P.O. Box 1017 Binghamton, NY 13902 (607) 778-5060	Judith Samsel, R.N. Chairperson	March 1, 1998	March 1, 2011 - February 28, 2013
Mohawk Valley Community College	1101 Sherman Drive Utica, NY 13501 (315) 792-5375	Nancy Caputo, R.N. Health Services Dept. Head	April 1, 1999	May 1, 2010 - April 30, 2012
SUNY Syracuse EOC	100 New Street Syracuse, NY 13202 (315) 472-0130	Karen Krassenbaum, R.N. Coordinator	October 1, 1999	July 1, 2010 - June 30, 2012

### Genesee Valley Region

Facility	Address	Contact	Initial Approval	Approval Period
Corning Community College	1 Academic Drive Corning, NY 14830-3297 (607) 962-9241	Rachel Hofstetter, R.N. Program Administrator	February 18, 1997	July 1, 2009 - June 30, 2012
Corning Community College Business Development Center	24 Denison Parkway West Corning, NY 14830 (607) 962-9241	Rachel Hofstetter, R.N. Program Administrator	August 18, 2008	August 18, 2008 - August 17, 2009
Finger Lakes Community College	4355 Lakeshore Drive Canandaigua, NY	Marcia Lynch Continuing	March 1, 2006	December 6, 2010 - December 5, 2012

Facility	Address	Contact	Initial Approval	Approval Period
	14424 (585) 394-3500 x7664	Education Specialist		
Finger Lakes Community College Geneva Extension Center	63 Pulteney Street Geneva, NY 14456 (585) 394-3500 x7664	Marcia Lynch Continuing Education Specialist	September 6, 2005	December 6, 2010 - December 5, 2012
Finger Lakes Community College at the Livingston County Center for Nursing and Rehabilitation	11 Murray Hill Drive Mount Morris, NY 14510 (585) 394-3500 x7664	Marcia Lynch Continuing Education Specialist	January 8, 2007	February 1, 2011 - January 31, 2013
Finger Lakes Community College at the Hill Haven Assisted Living, Nursing and Rehabilitation Center	1550 Empire Blvd. Webster, NY 14580 (585) 394-3500 x7664	Marcia Lynch Continuing Education Specialist	August 1, 2008	August 1, 2008 - July 31, 2009
Finger Lakes Community College Victor Campus Center	200 Victor Heights Parkway Victor, NY 14564	Marcia Lynch Continuing Education Specialist	January 3, 2011	January 3, 2011 - January 2, 2012
Finger Lakes Community College Wayne County Nursing Home and Rehabilitation Center	1529 Nye Road Lyons NY 14489 (585) 394-3500 x7664	Marcia Lynch Continuing Education Specialist	October 7, 2009	October 7, 2009 - October 6, 2010
Finger Lakes Community College The Shore Winds	425 Beach Avenue Rochester, NY 14612 (585) 394-3500 x7664	Marcia Lynch Continuing Education Specialist	August 23, 2010	August 22, 2010
Marion S. Whelan School of Practical Nursing	196 North Street Geneva, NY 14456 (315) 787-4003	Victoria Record, M.S., R.N. Program Administrator	October 9, 2008	October 9, 2009 - October 8, 2011
Rochester Educational Opportunity Center	305 Andrews Street Rochester, NY 14604 (585) 546-8660 x223	Amy Hudzinski, R.N. Chair, Health Care Programs	June 30, 1989	July 1, 2010 - June 30, 2012

Long Island Region

Facility	Address	Contact	Initial Approval	Approval Period
Long Island EOC Farmingdale State College Brentwood Campus	1090A Suffolk Avenue Brentwood, NY 11717 (631) 434-3740 (631) 434-6894	RoseMary Gonzalez, R.N.	January 1, 1993	March 1, 2010 - February 29, 2012

Facility	Address	Contact	Initial Approval	Approval Period
Long Island EOC Farmingdale State College Hempstead Campus	269 Fulton Avenue Hempstead, NY 11550 (516) 489-8705 (516) 481-4938	RoseMary Gonzalez, R.N.	February 1, 1993	March 1, 2010 - February 29, 2012
Long Island EOC Farmingdale State College Hooper Hall	2350 Broadhollow Road Farmingdale, NY 11731 (631) 420-2275 (631) 420-2608	RoseMary Gonzalez, R.N.	January 20, 2010	January 20, 2011 - January 19, 2013
Long Island EOC Farmingdale State College NACEC	1 Commerce Boulevard North Amityville, NY 11701 (631) 842-5376	RoseMary Gonzalez, R.N.	January 25, 2010	February 1, 2011 - January 31, 2013
University Hospital at SUNY Stony Brook Department of Clinical Education	14 Technology Drive, Suite 1 East Setauket, NY 11733 (631) 444-4319	Christine Dougherty, M.S., R.N. Coordinator	July 1, 2001	July 1, 2010 - June 30, 2012

Metropolitan Region

Facility	Address	Contact	Initial Approval	Approval Period
ASA Institute of Business and Computer Technology	81 Willoughby Street Brooklyn, NY 11201 (718) 534-0810	Khagi Agaev, R.N. Coordinator	February 1, 2005	February 1, 2010 - January 31, 2012
Bronx Community College	University Avenue & W. 181st Street Bronx, NY 10453 (718) 289-5420	Ellen Hoist, R.N. Coordinator	March 30, 1992	September 1, 2009 - August 31, 2011
Fiorello H. LaGuardia Community College	31-10 Thomson Avenue Long Island City, NY 11101 (718) 482-5351	Dianna Moll, M.P.H., R.N. Coordinator	April 3, 2000	April 3, 2009 - April 2, 2011
Hostos Community College Department of Continuing Education	500 Grand Concourse, Room 208B Bronx, NY 10451 (914) 793-5882	Alder Davis, R.N. Program Coordinator	September 1, 2000	November 19, 2009 - November 18, 2011
Hostos Community College/ Lehman College Continuing Education	2501 Grand Concourse Bronx, NY 10468 (914) 793-5882	Alder Davis, R.N. Program Coordinator	September 1, 2000	February 28, 2011 - February 27, 2011

Facility	Address	Contact	Initial Approval	Approval Period
Kingsborough Community College	2001 Oriental Boulevard Brooklyn, NY 11235 (718) 368-5052	Deborah Anglin-Diallo, R.N. Coordinator	July 1, 2007	January 1, 2011 - December 31, 2012
Mandl School the College of Allied Health	254 West 54th Street New York, NY 10019 (212) 247-3434	Elliot R. Pruzan	May 1, 2008	May 1, 2009 - April 30, 2011
Manhattan EOC	163 West 125th Street New York, NY 10027 (212) 961-4320	Grace Y. Ingleton, R.N. Program Coordinator	January 4, 2007	January 4, 2010 - January 3, 2012
Queensborough Community College	222-05 56th Avenue Bayside, NY 11364 (718) 631-6343	Gladys Maingrette, M.S.A., R.N.	January 3, 2011	January 3, 2011 - January 2, 2012
The College of Staten Island	2800 Victory Boulevard, Bldg. A, Rm. 203 Staten Island, NY 10314 (718) 982-2182	Donna Arena, R.N. Coordinator	September 1, 1998	September 1, 2007 - August 31, 2009
York College	94-20 Guy R. Brewer Boulevard Jamaica NY 11451 (718) 262-2790	Paula Rose Administrator	March 1, 2009	December 1, 2009 - November 30, 2011

Mid-Hudson Region

Facility	Address	Contact	Initial Approval	Approval Period
Cochran School of Nursing Andrus Pavillon St. John's Riverside Hospital	967 North Broadway Yonkers, NY 10701 (914) 964-4283	Dr. Kathleen Dirschel Program Administrator	July 1, 1996	July 1, 2010 - June 30, 2012
Westchester Community College Ossining Extension Site	22 Rockledge Avenue Ossining, NY 10562 (914) 606-7400	Josephine Borreggine, R.N. Program Coordinator	March 15, 2002	November 1, 2010 - October 31, 2012
Westchester EOC	26 South Broadway, 8th Floor Yonkers, NY 10701 (914) 606-7646	Cynthia Nwizu, Interim Assistant Dean of Academic Affairs	September 1, 1989	July 1, 2010 - June 30, 2012
Westchester EOC	16 East Church Street Spring Valley, NY 10977 (845) 425-4623	Cynthia Nwizu, Interim Assistant Dean of Academic Affairs	June 5, 2006	July 3, 2009 - July 2, 2011

Northeastern Region

Facility	Address	Contact	Initial Approval	Approval Period
Capital District EOC	145 Congress Street Troy, NY 12180 (518) 273-1900	Diane Arrington-Stokem, R.N. Coordinator	August 21, 1989	September 1, 2010 - August 31, 2012
Columbia-Greene Community College	4400 Route 23 Hudson, NY 12534	Robert Bodratti	July 20, 2009	July 20, 2009 - July 19, 2010
Fulton-Montgomery Community College	Route 67 Johnstown, NY 12095 (518) 762-4651 x306	Mary Lou Roux, R.N. Coordinator	August 4, 1989	July 1, 2010 - June 30, 2012
Jamestown Community College	525 Falconer Street Jamestown, NY 14701 (716) 665-5220 x294	Yvonne Carlson, R.N. Coordinator	November 1, 1995	May 1, 2009 - April 30, 2011
Schenectady County Community College	78 Washington Avenue Schenectady, NY 12305 (518) 381-1314	Matthew Grattan, Executive Director of Workforce Development	May 3, 2010	May 3, 2010 - May 2, 2011
Schenectady County Community College	NYS Department of Labor-One Stop 175 Central Ave, 3rd Flr Albany, NY (518) 381-1314	Matthew Grattan, Executive Director of Workforce Development	March 1, 2011	March 1, 2011- February 29, 2012

Western Region

Facility	Address	Contact	Initial Approval	Approval Period
Buffalo EOC	465 Washington Street Buffalo, NY 14203 (716) 849-6737	Rose Williams, R.N. Coordinator	August 1, 1989	June 22, 2009 - June 21, 2011
Niagara County Community College	3111 Saunders Settlement Road Sanborn NY 14132 (716) 731-3271	Cherie A. Mavissakalian Chairperson, Nursing Education	June 1, 1996	February 23, 2009 - February 22, 2011
SUNY College of Technology at Alfred	10 Upper College Drive Alfred, NY 14802 (607) 587-3672	Muriel S. Brown, R.N. Coordinator, Nursing	March 1, 2003	November 19, 2009 - November 18, 2011

*\* The Programs listed above are only those registered by the New York State Education Department, Office of Professions. Additional listings can be found with New York State Education Department's Bureau of Proprietary School Supervision and Office of Workforce Preparation, and the New York State Department of Health. Numerous other programs exist, funded through BOCES, grants and private employers on a localized basis. Student in these programs, however, must still complete training, examination and registry requirements as noted above.*

#### 4. Additional needs:

**Retention:** C.N.A. retention is a long standing problem in the provision of quality care in long term care settings. Students often do not recognize the full implications of their personal care responsibilities until they have experienced some of the manifestations of dementia, aging and other diseases.

#### 5. Solutions and alternatives:

**Mentoring:** Some New York City healthcare employers have found that C.N.A.s lack foundational skills such as professionalism, critical thinking and teamwork. The Foundation for Long Term Care (FLTC) has developed a peer mentoring program to enhance retention rates for Certified Nursing Assistants and improve critical skills and behaviors. "Growing Strong Roots" is intended to re-focus the orientation processes to concentrate on demonstrating exemplary care giving in actual practice, as well as meeting the needs of new CNAs so that they are motivated to remain with the facility. This program also teaches a culture of caring, supports new staff as they transition to becoming part of the facility team and provides recognition and a career ladder for experienced nurse aides. The program may be considered a promising practice and is available for a fee from the FLTC, Latham, NY.

**Advancement:** CUNY/Hostos Community College is training C.N.A.'s to become Patient Care Technicians, (PCT) providing additional competencies, such as phlebotomy, electrocardiography and cardio pulmonary respiration (CPR) which entitle them to higher salaries. The PCT is widely used in the New York City, at hospitals such as Bronx Lebanon and Mt. Sinai, although it remains to be seen whether this will be a recognized credential in other parts of New York State.

Since 2008, the Foundation for Quality Care, Inc in partnership with Life Works Learning, has developed and implemented the Geriatric Nursing Assistant Career Development Program (GNACD) for CNAs in Skilled Nursing Facilities across NYS. Goals of this program include:

- Improve recruitment of CNAs into long term care settings;
- Improve CNA retention through career ladder education, training, and rewards;
- Enhance CNA skills and competencies critical to long term care (e.g., dementia and rehabilitative care);
- Develop an advanced credential for CNAs that is generally recognized by long term care employers;
- Assist long term care employers in establishing pathways for CNA career advancement.

This 27 hour educational series builds upon the CNAs' basic 100 hour course with topics including Aging and Illness, Spirituality and Dying, Nutrition, Dementia, Communication, Team Building, Quality of Life and Importance of Family. By successfully completing this course, participants qualify for an Advanced CNA title and are utilized in a variety of ways in their new position.

**Access to training:** Continue to implement incentives to expand C.N.A training sites across the state, including on-site employer programs

**Retention:** Work with industry leaders to address the real and perceived barriers to entry into and retention in the C.N.A. and H.H.A. occupations. Recommendations include flexible schedules, child care options, access to public transportation, elimination of mandatory overtime, etc.

## **6. Shortages:**

The New York State Department of Labor reports that long term employment prospects for C.N.As are “very favorable”. Anticipated annual new job openings are approximately 840 through 2016. Turnover greatly increases this number.

### **Promising Practices:**

#### **Career Information & Guidance Programs**

*The New York City Welcome Back Center at LaGuardia Community College* helps internationally trained healthcare professionals get into a healthcare profession in New York State. The demand for healthcare professionals who are culturally and linguistically diverse and competent is high. Working in conjunction with the College’s Workforce1 Healthcare Career Center, the New York City Welcome Back Center guides individuals through the licensing process in their specialty or another healthcare area.

#### **Innovative Teaching & Training Models**

The *Career Pathways How-To Guide* published by the Workforce Strategy Center (2006) describes a number of characteristics of successful career pathways programs, including clear linkages between remedial, academic and occupational programs within educational institutions; easy articulation of credits across institutions; "wrap-around" supportive services; and "Bridge" programs.<sup>xx</sup>

In recent years a number of NY’s educational organizations have piloted both contextualized bridge courses that use sector-focused content to develop students’ basic skills in preparation for entrance to advanced healthcare training programs or integrate basic education and occupational healthcare training simultaneously (often referred to as I-BEST instruction). The following are brief descriptions of successful contextualized healthcare Bridge and integrated training models:

##### *Health Care Career Bridge Programs: Contextualizing Preparatory Instruction:*

LaGuardia Community College offers two tracks of Bridge to Healthcare Careers programming aimed at assisting low-skilled adults prepare for higher level healthcare training. **The GED Bridge to Health Care Careers Program** serves adult students with career aspirations in healthcare who need still to earn their GED. Designed as a springboard to either college or vocational training, Bridge classes provide health career-focused academic preparation that develops students’ reading, writing and math skills in preparation for the GED and post-secondary education simultaneously. Since program inception in 2007, 70% of eligible students have earned their GED and 65% of GED earners have transitioned into college or occupational certification programs.

The second *ESOL Bridge to Health Care Careers* track offers a contextualized English language course designed to upgrade the English communicative skills of immigrant healthcare professionals. This course provides students with a pathway for entering healthcare training in the future, helping healthcare professionals develop their reading, writing, computer and oral communication skills in the context of healthcare. Entry into training programs is competitive and students are evaluated in the Bridge class to be considered for subsequent higher-level trainings.

### ***Integrated Basic Education and Skills Training (I-BEST)***

Washington State's successful and well-researched I-BEST model, which combines adult basic skills education with professional skill training, is designed especially for non-traditional, adult students from diverse educational backgrounds who face economic and educational disadvantages that often impede a rigorous professional course of professional study. A 2009 CCRC study compared the educational outcomes over a two-year tracking period of I-BEST students with those of other basic skills students. The study found that students participating in I-BEST achieved better educational outcomes than did other basic skills students, including those who enrolled in at least one non-I-BEST workforce course. I-BEST students were more likely than others to continue into credit-bearing coursework; earn credits that count toward a college credential; earn occupational certificates; and make point gains on basic skills tests. On all the outcomes examined, I-BEST students did moderately or substantially better than non-I-BEST basic skills students in general.<sup>xxi</sup>

A number of I-BEST healthcare career pilot programs have been implemented in NY and early evidence demonstrates the effectiveness of the integrated, comprehensive training model.

LaGuardia Community College has implemented the following four I-BEST healthcare training programs since 2009. All provide a unique, resource rich instructional environment that requires occupational instructors to co-teach with basic skills instructors trained in contextualized literacy. Career readiness and counseling services are also provided during and after the programs to help students persist in their career goals and address personal challenges that may impede their academic success.

### ***Supporting Adults through Vocational Emergency Medical Technician Training (The S. A. V. E Program)***

During this 16-week program, students study 24 hours a week to become certified emergency medical technicians and to work in the field where they will provide basic emergency care to victims of traumatic and/or medical emergencies and transport them to the appropriate medical facility. This intensive EMT course includes lectures, labs, and two basic life support clinical rotations on a 911 ambulance in New York City as well as academic enhancement coursework focusing on critical thinking and reading skills. Occupational EMT faculty provides instruction together with a basic skills instructor. So far, the program has 90% program completion rate and 95% passing rate on NY State practical exam.

### ***Integrated Medical Office Clinical Technician (I-MOCT) Program***

Track One: MOCT for Adult Learners

During this 28-week program, students attend classes twelve hours per week to prepare for work in healthcare settings where they will perform multiple patient care practices including drawing blood, administering electrocardiograms (EKG), and measuring glucose levels. Students complete courses in Medical Terminology, EKG and Phlebotomy, which are co-taught by a technical instructor from the Pre-Hospital Care Programs and a basic skills instructor from the Pre-College Academic Programming department. Coursework is complemented by an internship in the field. 96% of students completed training. From the first cohort, 96% of students completed the training, 100% of graduates passed the EKG and Phlebotomy national certification exams and 40% of graduates have obtained jobs in the field to date.

#### Track Two: MOCT –ELL

The Medical Office Clinical Technician (MOCT) Training for English Language Learners is designed to train immigrant students to develop their communicative skills while preparing for national certification exams in order to qualify for work in medical offices and clinics drawing blood, taking vital signs and administering electrocardiograms. The MOCT- ELL focuses on having students develop their academic reading skills in English, preparing for content courses (medical terminology, EKG and phlebotomy) and improving their knowledge of English and communication skills for the healthcare workplace context, in addition to providing the vocational training. In addition to classroom theory, students complete a 250 hour internship in a clinical setting. 9 months, 12-16 hours per week, including a “vestibule” pre-training session, concurrent ESOL and technical training, certification exams in EKG and phlebotomy and workplace internships.

#### ***The Integrated Central Service Technician (I-CST) Program***

The Integrated Central Service Technician Program is designed as a response to new certification requirements for the incumbent central service technician workforce. During this 12-week program, students work 10 hours per week to prepare for work as a technician in the central service department of a hospital where equipment is sterilized and prepared for use. Vocational instruction begins with foundational content in microbiology, anatomy and physiology before career-specific content is introduced. Students sit for the International Association of Healthcare Central Service Material Management certification exam after successfully developing academic and technical competencies. Program instruction is provided collaboratively by both a technical instructor and a basic skills instructor.

#### ***The Integrated Bridge to Licensed Practical Nursing (I-LPN) Program***

During this intensive, 8-week academic program, students prepare for entry and success in LaGuardia Community College’s credit-bearing Licensed Practical Nursing Program. The coursework requires students to attend class for 17 hours per week and successfully complete the rigorous curriculum, assignments, and activities of the licensed practical nursing pre-clinical science and math courses in a supportive environment. Students complete math, anatomy, and physiology coursework in the contextualized pre-training before enrolling in credit-bearing gateway courses that determine their eligibility for entrance into nursing programs. Instruction is provided collaboratively by the Health Sciences department faculty and a basic skills educator. 95% retention in the clinical portion of the LPN program to date.

Lutheran Family Health Centers' Bridge to Health Careers in Brooklyn, NY is an education and training program that prepares 40 immigrant workers each year for career-track entry-level healthcare positions such as Certified **Nursing Assistant, Pharmacy Technician, Medical Office Associate and EKG Technician**. Participants are supported throughout the training and placement process by a host of wraparound supports to facilitate the transition into the world of work. Once they have secured employment, participants receive retention support to ensure job stability and promote advancement. Outcomes for Bridge participants have shown that the model is successful in supporting students in persisting and completing the program as well as in job placement. The Bridge program has an eight-part model: intake, goal-setting, ESOL/job readiness, professional skill training, internship, job search, job placement, retention support. Each step of the program is supported by vocational counselors and Family Support case managers.

### **Healthcare Career Pipeline Programs**

**HHC New York State LPN to RN Transition Course and Articulation Model**, (2006-2008) a statewide educational articulation model, developed to increase the supply of registered nurses by implementing practices that allow nursing education programs to avoid unnecessary gaps or duplication of prior learning and thereby increase the educational mobility for LPNs in the workforce. The NYC Health and Hospitals Corporation sponsored 20 of their incumbent LPNs to participate in this LaGuardia Community College training to become registered nurses through an agreement with their participating employees to continue employment with their hospital in their new titles for two years after earning the new title. This program contained two "Bridge" courses. One Bridge course was "The College Bridge to Allied Health Careers" which focused on the strengthening the reading, writing, and critical thinking skills of participants who had no prior or recent college education. The second Bridge course was the LPN to RN Transition Course which prepares LPNs to make the role transition from LPN to that of RN student. This program produced 18 Registered Nurses.

**Wyckoff/1199 (2007 – 2009) and Metropolitan Jewish Health System's C.N.A to LPN (2008 – 2010) Programs** were designed for eligible incumbent Nurse Technicians and C.N.A.s to enter and successfully complete LaGuardia's Practical Nursing certificate program and advance into the LPN ranks in their respective hospitals. Sponsored by their hospitals and/or union, the participants of these programs were promoted to the high-wage title of LPNs within their sponsoring hospital, or found employment with other hospitals. These workers did not participate in a "Bridge" course; however, they were the first group to receive extensive academic support in the way of tutoring and recitations throughout the pre-clinical and clinical phases of the Practical Nursing program.

### **NCLEX-Practical Nurse Preparation for Foreign Trained Nurses**

Using an integrated "I-Best" model, this course assists nurses who are already credentialed from abroad to obtain New York State credentials by developing the both the English language and technical skills and knowledge they will need in order to pass the NCLEX -PN examination and become employed as Licensed Practical Nurses in New York City. This course includes NCLEX-PN test preparation, computer skills training, resume and interview preparation, along with contextualized English for nurses, such as nursing roles in US Healthcare; geriatric care, care of

patients with Alzheimer's/ dementia and Adult and Child CPR. Participants will complete a clinical component in a long term care facility.

### **Summary:**

The healthcare sector is composed of hundreds of occupations. It is complex and widely diverse. Accordingly, entry points to healthcare careers take many forms and career pathways, ladders and lattices are equally complex.

Most healthcare careers (but not all) require completion of secondary education. All require some additional training beyond high school. This paper has concentrated on the primary care occupations, of Certified Nursing Assistant, Licensed Practical Nurse, Registered Nurse, Dental Assistant, Dental Hygienist, Nurse Practitioner, Midwife, Physician Assistant, Dentist and Physician. These occupations fall naturally into three categories: entry level, mid level and advanced/professional level occupations as follows:

Entry level:            Certified Nursing Assistant  
                              Dental Assistant  
                              Licensed Practical Nurse

Mid-Level:             Registered Nurse  
                              Dental Hygienist

Professional:         Nurse Practitioner  
                              Midwife  
                              Physician Assistant  
                              Dentist  
                              Physician

This grouping does not imply, however, that one category is a precursor or pre-requisite for the next.

Multiple entry and access points exist for most entry and mid-level titles. Advancement to the professional level is often accomplished via a defined path from high school to post secondary education and then further by completing a program of additional specialized education.

New York State's healthcare programs are concentrated in the New York City and Long Island Regions. Indeed only four of 15 medical schools and one of four dentistry programs are outside of these areas. No midwifery programs exist outside of that metropolitan area (except for one distance learning program). No Dental Hygienist programs exist in the Mohawk Valley or Central regions; the Southern and North Country regions lack Dental Assisting programs and no Nurse Practitioner programs exist in the North Country.

On the contrary, L.P.N., C.N.A. and Registered Nursing programs are well distributed throughout the state and are frequently available to both high school students and adult learners.

Multiple barriers exist to advancement into professional levels of healthcare and especially primary care. New York State is experiencing capacity issues for many of their healthcare programs including Registered Nurse, Physician and Dental Hygienist. Medical programs accept about 3% of their applicants. Tuition costs are prohibitive and limited grants and scholarships exist, especially for healthcare practitioners who are part time students. Primary care salaries do not rival those of specialty areas and lack of diversity, in dentistry, nursing, medicine and other occupations, is a pervasive concern.

### **Additional Considerations:**

**Pipeline:** Work is needed to develop a pipeline of future primary care practitioners, starting at the secondary school level. Interest in mathematics and science needs to be stimulated to achieve higher levels of competency prior to entry into baccalaureate programs. Healthcare career interests need to be better defined; community service and leadership activities should be part of a secondary education curriculum. It should be noted that the AHEC's (Area Health Education Centers) have active pipeline programs that target high school and college students for internship/mentoring/job shadowing programs. These programs have included over 2,500 students from July 1, 2008 through December 31, 2010.

**AHEC** also has a SEARCH (Student/Resident Experiences and rotations in Community Health) program, which provides a rural (or underserved area) practice experience for health professions students. This practice builds on the concept that New York should "grow its own" healthcare practitioners, since it has been shown that practitioners in rural areas are more often those who have achieved their education in-state. Colorado and Virginia also subscribe to this model.

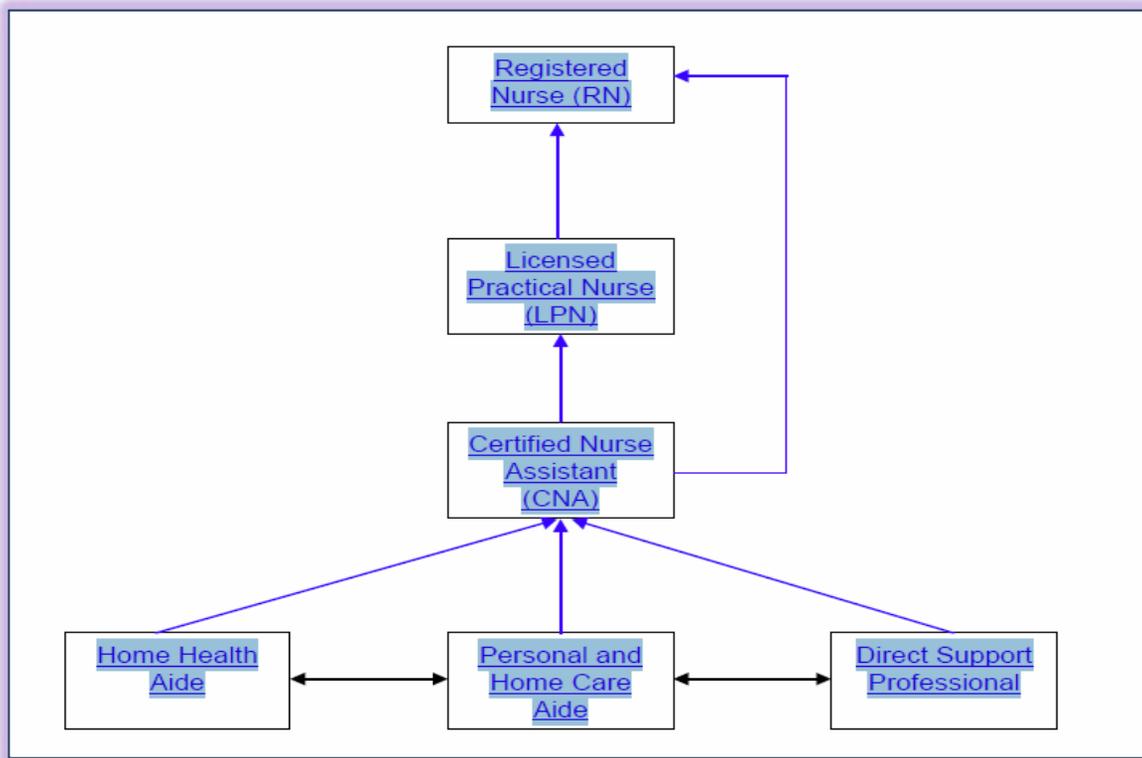
**Lattices:** Additional lattices need development to facilitate advancement between occupations. This will enable a C.N.A. to become a medical assistant or a dental assistant to become an L.P.N. By basing advancement on accomplishment of competencies or skills, which can be documented, it would be possible to advance into other occupations without necessarily repeating education and coursework previously completed.

It is also becoming more and more necessary to build additional advancement into existing occupational ladders. For example, a physical therapy assistant (high school plus AAS degree) must now attain at least a master's degree to become a Registered Physical Therapist. There is no interim step at the baccalaureate level.

**Educational Cooperation:** Articulation agreements and distance learning must become more widespread. Curriculum sharing for consistency in learning should be encouraged.

We must intensify our focus on primary care careers, examine creative methods of credentialing which will be recognized statewide, and hence be "portable". New collaborations between educators, policymakers and other stakeholders must take place and existing partnerships must be re-examined in order to recruit, train and retain a diverse primary care cohort in New York State.

## Sample Career Ladder/Lattice for Long Term Healthcare



### Health Career Pathway Survey

The New York State Education Department (SED), as a member of the NYS Workforce Investment Board, conducted a survey of SED funded adult education programs to identify health career pathways for the Subcommittee.

Survey results begin on page 109.

### SURVEY:

The survey questions were designed to elicit information about career pathway issues as they relate to primary care occupations. When developing the answers, participants were asked to consider only issues that pertain to the following occupations: physicians, Registered Nurses,

L.P.N.s, home health aides/C.N.A.s, dentists, physician assistants, nurse practitioners, dental hygienists, dental assistant, and midwifery.

1. Name one or two healthcare career pathway promising practices in your region.
2. List any pipeline programs in your region.
3. Briefly summarize any programs or practices currently in effect in your region which attempt to interest high school students (and/or disconnected youth) in primary care careers.
4. Address the potential for expanding (or starting) distance learning programs in your region. What are some of the challenges, solutions, strategies that arise?
5. Identify any primary care education gaps or particular needs within your region.
6. Are you aware of any alternative teaching models or practices, perhaps from other states, which have potential for the primary care sector in your region?

**Career Pathways Workgroup – Inventory of Primary Care Training and Education Programs**

<b>Program Name</b>	<b>City</b>	<b>Region</b>	<b>Dental Assisting</b>	<b>Dentist</b>	<b>Dental Hygienist</b>	<b>L.P.N</b>	<b>Midwife</b>	<b>Reg. Nurse (RN)</b>	<b>Physician</b>	<b>Nurse Practitioner</b>	<b>Physician Assistant</b>
Adirondack Comm College	Queensbury	CR						AAS			
Albany Med College	Albany	CR							MD	MS	MS
Alb-Sch-Sch-Sar BOCES	Albany	CR				Cert.					
Columbia-Greene CC	Hudson	CR						AAS			
Educational Opp Ctr	Troy	CR				Cert.					
Ellis Hospital	Schenectady	CR						AAS			
Excelsior College	Albany	CR						AAS/BSN			
Hudson Valley CC	Troy	CR	Cert.		AAS			AAS			
Maria College	Albany	CR				Cert.		AAS/BSN			
Memorial Hosp School of Nursing	Albany	CR						AAS			
Mildred Elley School	Albany	CR				Cert.					
Rensselaer Columbia Greene BOCES	Castleton	CR				Cert.					
Sage Colleges	Troy	CR						BSN		MS	
Samaritan Hospital	Troy	CR				Cert.		AAS			
SUNY Empire State College	Saratoga Springs	CR						BSN			
Wash-Sar-Waren-Ham-Ess BOCES	Hudson Falls	CR				Cert.					

Program Name	City	Region	Dental Assisting	Dentist	Dental Hygienist	L.P.N	Midwife	Reg. Nurse (RN)	Physician	Nurse Practitioner	Physician Assistant
Crouse Hosp. School of Nursing	Syracuse	C						AAS			
LeMoyne College	Syracuse	C						BSN			MS
Onondaga Comm College	Syracuse	C						AAS			
Onondaga-Cort-Madis BOCES	Syracuse	C	Cert.			Cert.					
Oswego County BOCES	Mexico	C	Cert.			Cert.					
St. Joseph's College of Nursing	Syracuse	C						AAS			
SUNY College of Tech @ Morrisville	Morrisville	C						AAS/BSN			
SUNY Hlt Science Ctr	Syracuse	C						BSN		MS	
SUNY Upstate Medical College	Syracuse	C							MD	MS/DNP	MS
Syracuse Central Tech HS	Syracuse	C				Cert.					
Syracuse University	Syracuse	C						BSN			
Cayuga County Community College	Auburn	FL						AAS			
Cayuga Onondaga BOCES	Auburn	FL				Cert.					

Program Name	City	Region	Dental Assisting	Dentist	Dental Hygienist	L.P.N	Midwife	Reg. Nurse (RN)	Physician	Nurse Practitioner	Physician Assistant
Corning Comm College	Batavia	FL						AAS			
Educational Opp Ctr	Rochester	FL				Cert.					
Finger Lakes Comm College	Canandaigua	FL						AAS			
Finger Lakes Comm College	Geneva	FL						AAS			
Genesee Comm College	Batavia	FL						AAS			
Geneva Liv-Steu-Wyom BOCES	Mt. Morris	FL									
Isabella G. Hart School Nursg	Rochester	FL				Cert.					
Keuka College	Penn Yan	FL						BSN			
Marion S Whelan Sch Nrsng	Geneva	FL				Cert.					
Monroe Comm College	Rochester	FL	Cert.		AAS			AAS			
Monroe-Orleans BOCES	Spencerport	FL	Cert.								
Nazareth College	Rochester	FL						BSN			
Orleans Niagara BOCES	Medina	FL				Cert.					

Program Name	City	Region	Dental Assisting	Dentist	Dental Hygienist	L.P.N	Midwife	Reg. Nurse (RN)	Physician	Nurse Practitioner	Physician Assistant
Roberts Wesleyan College	Rochester	FL						BSN			
Rochester Institute of Tech	Rochester	FL									BS
SUNY Brockport	Brockport	FL						BSN			
St. John Fisher	Rochester	FL						BSN		MS/DNP	
University of Rochester	Rochester	FL						BSN	MD	MS/DNP	
Wayne-Finger Lakes BOCES	Newark	FL	Cert.			Cert.					
Clinton Community College	Plattsburgh	NC						AAS			
Clinton-Essex-War-Wash BOCES	Plattsburgh	NC				Cert.					
Jefferson CC	Watertown	NC						AAS			
Jeff-Lewis-Ham-Her-Onei BOCES	Watertown	NC				Cert.					
North Country CC	Ticonderoga	NC				Cert.		AAS			
North Country Comm College	Malone	NC				Cert.					
North Country Comm College	Saranac Lake	NC				Cert.		AAS			
St. Lawrence-Lewis BOCES	Ogdensburg	NC				Cert.					
SUNY Coll of Tech	Canton	NC			AAS	Cert.		AAS/BSN			
SUNY College at Plattsburgh	Plattsburgh	NC						BSN			

Program Name	City	Region	Dental Assisting	Dentist	Dental Hygienist	L.P.N	Midwife	Reg. Nurse (RN)	Physician	Nurse Practitioner	Physician Assistant
Adelphi University	Garden City	LI						BSN		MS	
CUNY-Laguardia Comm College	Long Island City	LI				Cert.		AAS			
CUNY-Queensborough CC	Bayside	LI						AAS			

Eastern Suffolk BOCES	Patchogue	LI				Cert.					
Hofstra	Hempstead	LI							MD		MS
Long Island University	Brookville	LI						BSN		MS	
Nassau Community College	Garden City	LI						AAS			
Nassau County BOCES	Westbury	LI	Cert.								
St. Joseph's College of Nursing	Patchogue	LI						BSN			
Suffolk Cty Comm College	Brentwood	LI						AAS			
Suffolk Cty Comm College	Selden	LI						AAS			
SUNY Farmingdale	Farmingdale	LI			AAS	Cert.		AAS/BSN			
SUNY Stony Brook	Stony Brook	LI	Cert.	DDS			CNM	BSN	MD		MS
Voc Ed Nassau County Nursing	Uniondale	LI				Cert.					
Western Suffolk BOCES	Northport	LI				Cert.					
<b>Program Name</b>	<b>City</b>	<b>Region</b>	<b>Dental Assisting</b>	<b>Dentist</b>	<b>Dental Hygienist</b>	<b>L.P.N</b>	<b>Midwife</b>	<b>Reg. Nurse (RN)</b>	<b>Physician</b>	<b>Nurse Practitioner</b>	<b>Physician Assistant</b>
College of New Rochelle	New Rochelle	MH						BSN			
Concordia College	Bronxville	MH						BSN			
CUNY-The City College	New Rochelle	MH								MS	
Dominican College of Nursing	Orangeburg	MH						BSN		MS	
Dorothea Hopfer School of Nursing	Mt. Vernon	MH						AAS			
Dutchess Community College	Poughkeepsie	MH	Cert.					AAS			
Dutchess County BOCES	Poughkeepsie	MH				Cert.					
Mercy College	Dobbs Ferry	MH						BSN		MS	MS
Mount St. Mary College	Newburgh	MH						BSN		MS	

Mount Vernon Hospital	Mt. Vernon	MH						AAS			
New York Medical College	Valhalla	MH							MD		
Nyack College	Nyack	MH						BSN			
Orange Cty Comm College	Middletown	MH				AAS		AAS			
Orange Ulster Cty BOCES	Goshen	MH					Cert.				
Pace University	Pleasantville	MH						BSN		MS/DNP	
Putnam Westchester BOCES	Yorktown Hgts	MH					Cert.				
Rockland Comm College	Suffern	MH						AAS			
Rockland County BOCES	W. Nyack	MH					Cert.				
Southern Westchester BOCES	Rye Brooke	MH					Cert.				
St. John's Riverside Hospital	Yonkers	MH						AAS			
Sullivan Cty BOCES	Liberty	MH					Cert.				
Sullivan Cty Comm College	Loch Sheldrake	MH						AAS			
SUNY College at New Paltz	New Paltz	MH						BSN			
Ulster County CC	Stone Ridge	MH						AAS			
Ulster Cty BOCES	Pt. Ewen	MH	Cert.				Cert.				
Westchester Comm College	Valhalla	MH						AAS			

Program Name	City	Region	Dental Assisting	Dentist	Dental Hygienist	L.P.N	Midwife	Reg. Nurse (RN)	Physician	Nurse Practitioner	Physician Assistant
Schu-Steu-Che-Tio-All-BOCES	Painted Post	MV	Cert.			Cert.					
St. Elizabeth College of Nursing	Utica	MV						AAS			
SUNY Insti of Tech @ Utica	Utica	MV						BSN		MS	
Utica College	Utica	MV						BSN			

Ful-Mont Cty Comm College	Johnstown	MV						AAS			
Hamilton Fulton-Mont BOCES	Johnstown	MV				Cert.					
Hartwick College	Oneonta	MV						BSN			
Herkimer Cty BOCES	E. Herkimer	MV				Cert.					
Madison-Oneida BOCES	Verona	MV				Cert.					
Mohawk Valley CC	Utica	MV						AAS			
Mohawk Valley Comm.College	Utica	MV						AAS			

Program Name	City	Region	Dental Assisting	Dentist	Dental Hygienist	L.P.N	Midwife	Reg. Nurse (RN)	Physician	Nurse Practitioner	Physician Assistant
Beth Israel	New York City	NYC						AAS			
Clara Barton HS/Hlt Prof	Brooklyn	NYC				Cert.					
College of Mt. Saint Vincent	Riverdale	NYC						BSN		MS	
Columbia University	New York	NYC	Cert.	DDS			CNM	BSN	MD	MS/DNP	
CUNY Borough of Manhattan CC	New York	NYC						AAS			
CUNY-Bronx Comm College	Bronx	NYC				Cert.		AAS			
CUNY-College of Staten Island	Staten Island	NYC						AAS/BSN		MS	
CUNY-Hostos Comm College	Bronx	NYC			AAS	Cert.		AAS			
CUNY-Hunter College	New York	NYC						BSN		MS	
CUNY-Kingsborough Comm College	Brooklyn	NYC									
CUNY-Lehman College	Bronx	NYC								MS	
CUNY-Medgar Evers college	Brooklyn	NYC				Cert.		AAS/BSN			
CUNY-New York City Tech College	Brooklyn	NYC			AAS			AAS			
CUNY-New York Institute of Tech	Old Westbury	NYC						BSN	DO		MS
CUNY-The City College	Staten Island	NYC								MS	

Program Name	City	Region	Dental Assisting	Dentist	Dental Hygienist	L.P.N	Midwife	Reg. Nurse (RN)	Physician	Nurse Practitioner	Physician Assistant
CUNY-The City College	New York City	NYC									BS
CUNY-York College	Jamaica	NYC						BSN			BS
Curtis High School	Staten Island	NYC				Cert.					
Helene Fuld Coll of Nursing	New York	NYC						AAS			
Herbert H. Lehman College	Bronx	NYC						BSN			
Long Island Coll Hos School of Nursing	Brooklyn	NYC						AAS			
Long Island University	Brooklyn	NYC						BSN		MS	BS
Mandl School of Allied Health	New York City	NYC	Cert.								
Molloy College	Rockville Centre	NYC						BSN		MS	
Monroe College	Bronx	NYC				Cert.		AAS			
Mount Sinai School of Medicine	New York City	NYC							MD		
New York City Dept of Ed	Brooklyn	NYC				Cert.					
New York School for Med/Dent Asst	Long Island City	NYC	Cert.								
New York University	New York	NYC		DDS	AAS		CNM	BSN	MD	MS	
Pace University	New York	NYC						BSN		MS/DNP	MS
St. Francis College	Brooklyn	NYC						BSN			
St. Vincent's Catholic Medical Ctr	Fresh Meadow	NYC						AAS			BS
St. Joseph's College of Nursing	Brooklyn	NYC						BSN			
St. Paul's School of Nursing	Flushing	NYC						AAS			
St. Paul's School of Nursing	Staten Island	NYC	Cert.					AAS			

SUNY Downstate College of Medicine	Brooklyn	NYC					CM/CN M		MD		BS
SUNY Hlt Science Ctr	Brooklyn	NYC						BSN			
Touro College	Brooklyn	NYC						AAS	DO		MS
Wagner College	Staten Island	NYC						BSN		MS	MS
Weill Cornell Medical College	New York City	NYC							MD		MS
Yeshiva University (Albert Einstein College of Medicine)	Bronx	NYC							MD		
<b>Program Name</b>	<b>City</b>	<b>Region</b>	<b>Dental Assisting</b>	<b>Dentist</b>	<b>Dental Hygienist</b>	<b>L.P.N</b>	<b>Midwife</b>	<b>Reg. Nurse (RN)</b>	<b>Physician</b>	<b>Nurse Practitioner</b>	<b>Physician Assistant</b>
Otse-Dela-Scho-Gre BOCES	Stamford	ST				Cert.					
Broome Community College	Binghamton	ST			AAS			AAS			
Broome-Dela-Tioga BOCES	Binghamton	ST				Cert.					
Cornell University	Ithaca	ST									MS
Del-Chen-Mad-Otsego BOCES	Norwich	ST				Cert.					
Elmira College	Elmira	ST						BSN			
SUNY Binghamton	Binghamton	ST						BSN		MS/DNP	
SUNY College of Tech @ Delhi	Delhi	ST				Cert.		AAS/BS N			
Tompkins Cortland C C	Dryden	ST						AAS			

Program Name	City	Region	Dental Assisting	Dentist	Dental Hygienist	L.P.N	Midwife	Reg. Nurse (RN)	Physician	Nurse Practitioner	Physician Assistant
Catt-Alle-Erie-Wyom BOCES	Olean	W	Cert.			Cert.					
Catt-Alle-Erie-Wyom BOCES	Ellicottville	W				Cert.					
Daemen College	Amherst	W						BSN		MS/DNP	MS
D'Youville College	Buffalo	W						BSN		MS	MS
Erie Chaut-Catta BOCES	Angola	W				Cert.					
Erie Comm College	Buffalo	W						AAS			
Erie Community College	Williamsville	W	Cert.		AAS			AAS			
Erie County BOCES	W. Seneca	W				Cert.					
Jamestown Comm College	Jamestown	W						AAS			
Niagara County CC	Sanborn	W	Cert.			Cert.		AAS			
Niagara University	Niagara University	W						BSN			
SUNY Buffalo	Buffalo	W		DDS				BSN	MD	MS/DNP	
SUNY College of Tech	Alfred	W						AAS			
SUNY Educ. Opportunity Ctr	Buffalo	W	Cert.			Cert.					
Trocaire College	Buffalo	W				Cert.		AAS			

**KEY: Training and Education Charts**

<b>Regions</b>	
C	Central
CR	Capital Region
FL	Finger Lakes
LI	Long Island
MH	Mid Hudson
MV	Mohawk Valley
NC	North Country
NYS	New York City
S	Southern Tier
W	Western

<b>Training and Education</b>	
AAS	Associate Degree
BS	Bachelor of Science
BSN	Bachelor of Science/ Nursing
Cert.	Certificate
CM	Certified Midwife
CNM	Certified Nurse Midwife
DDS	Doctor of Dental Surgery
DNP	Doctorate of Nursing Practice
DO	Doctor of Osteopathic Medicine
MD	Medical Doctorate
MS	Masters Degree

**NYS BoCES/Adult Education results**

1. Promising Practices	2. Pipeline Programs	3. High School Students	4. Distance Learning	5. Gaps & Needs	6. Alternative Teaching Models
<b>Literacy Volunteers of Cattaraugus County, Inc. 716.372.8627 <a href="mailto:olean1@aol.com">olean1@aol.com</a></b>					
Tuition reimbursement from local hospital for students who successfully complete community college nursing program.	Local community college nursing program and local hospital collaborations.	Local schools promote career awareness with specialized curriculum for all students but not aware of specifics for health care field.	Challenges -- availability and cost of providing/utilizing Internet service for residents of rural area. Solutions -- provide more public access or low-cost private hardware and service reception. Strategies -- involve local governments, CBO's, schools and public in addressing the issues.	Not sure if the local population has the desire or demographics to participate more in this field as trained healthcare providers. Non-locals tend to leave after a short time resulting in a constant need for new healthcare providers and a break in continuum of care for patients.	No
<b>Buffalo City Schools 716.887.3912 x 201 <a href="mailto:larnold@buffaloschools.org">larnold@buffaloschools.org</a></b>					
<a href="http://www.mynextmove.org">http://www.mynextmove.org</a>	CNA Adult Ed program - ECC Pathways - LPN nursing program - RN local colleges	Gear Up for out of school youth and adults, Career Collegiate Institute - out of school youth program helps students find and follow appropriate career paths	Challenge - many urban underemployed do not have internet access at home. Solution - DL hybrid programs which use other media - TV, books, videos in combination with tutoring sessions.	Challenges - Health Navigation, preventative care, environmental factors in health, health literacy for ELLs	We partner in a health navigation program at the Response To Love Center on the East Side. One of the greatest challenges for our urban adults understands preventative care and the role the environment plays in health.

1. Promising Practices	2. Pipeline Programs	3. High School Students	4. Distance Learning	5. Gaps & Needs	6. Alternative Teaching Models
<b>Cayuga-Onondaga BOCES 315.253.0361 <a href="mailto:abishop@caybores">abishop@caybores</a></b>					
Auburn Memorial Hospitalist program has freed up primary care physicians to provide primary care to clinics for the uninsured/ Medicaid provided need services to communities.	Students that participate in Health Occupations programs are given opportunities to talk to schools offering higher education programs. LPN program graduates are given advanced standings in local community college RN program.	New Visions - Medical Professions Program Health Occupations Program students complete career exploration Annual Health Occupation Career Fair	Lack of qualified instructors and lack of clinical facilities	Lack of funding for Adult Students	No

1. Promising Practices	2. Pipeline Programs	3. High School Students	4. Distance Learning	5. Gaps & Needs	6. Alternative Teaching Models
<b>Cheektowaga Maryvale Union Free School District 716. 635.4669 <a href="mailto:vecchiarella@maryvale.wnyric.org">vecchiarella@maryvale.wnyric.org</a></b>					
L.P.N.s Home health aides/C.N.A.s Dental Assistant	High School Students GED Students  Out of School Youths Healthcare Students	Maryvale's Medical Coding/Secretary is offered and sometimes these students get interested in furthering their education to nursing.	Maryvale offers distance learning and would like to expand to open it up for more students but the age 21 years and older hurts the younger students who are proficient on the computers and would rather be enrolled in distance learning. The solution would be to allow 18 years and older to enroll in distance learning with a probationary period of 90 days. Maryvale offers Ed2go for students that have computers but some of those challenges are they cannot afford computers so the solution is to offer a grant that the student can use the computer until the course is completed and the incentive would be they could keep it to further their education and careers.	The students that are out of school youth and do not belong to the Maryvale District find that their Home School District is not as accommodating to provide the education they ask for or want. There is not any funding to enroll these students in Medical Coding or GED Programs that only have EPE funding for 21 years and above.	Not from other states.

1. Promising Practices	2. Pipeline Programs	3. High School Students	4. Distance Learning	5. Gaps & Needs	6. Alternative Teaching Models
<b>Erie County B.O.C.E.S Literacy Program 716.821.7384 <a href="mailto:cmchale@e1b.org">cmchale@e1b.org</a></b>					
Long-Term Care Dialysis	LPN to RN Transition Programs	Intro to Nursing / Health Careers	None currently in existence. Online theory portions seem to make sense, but not the practical components - of course.	Unknown	No
<b>Finger Lakes Community College 585.785.1206 <a href="mailto:vankeuka@flcc.edu">vankeuka@flcc.edu</a></b>					
We combined our non-credit C N A and HHA training program at the request of local employers.	Wayne-Finger Lakes BOCES has a New Visions Medical Careers Program. Students will work in a hospital setting alongside physicians, physician assistants and other healthcare professionals. High school credits are earned in English 12, Government/Economic s, and Health Science. Opportunity to earn college credit is available.	Wayne-Finger Lakes BOCES offers Health Dimension -The first year of this program provides the basic knowledge and competencies considered common to careers in the health field. Students will explore many areas of employment through discussion, field trips and hands-on experiences before choosing a specialized course of study. The second year provides the training and education requirements needed to sit for the NYS Nurse Assistants Exam and may include exploration of, and exposure to additional health related careers.	FLCC is currently offers RN courses on-line in addition to allied health non-credit training such as Medical Biller and Coder.	More funding for tuition from workforce.	No

1. Promising Practices	2. Pipeline Programs	3. High School Students	4. Distance Learning	5. Gaps & Needs	6. Alternative Teaching Models
<b>Freeport Adult Continuing/Community Education 516.864.8314 <a href="mailto:eweiss@freeportschools.org">eweiss@freeportschools.org</a></b>					
	GED students and ESOL students in adult education classes			Finding programs for students to attend in Home Health Aid	
<b>Genesee Valley BOCES 585.344.7735 <a href="mailto:phazzan@gvboces.org">phazzan@gvboces.org</a></b>					
LPN and CNA	High School Students and Adult students	Our LPN and CNA programs	We have the capability to make this a DL program.	High School drop outs	no
<b>Greece Central School District 585. 966.2721 <a href="mailto:Nicole.Viggiano@greece.k12.ny.us">Nicole.Viggiano@greece.k12.ny.us</a></b>					
BOCES has LPN and CNA programs	I believe BOCES have pipeline programs as well	BOCES for high school students. None that I am aware of for out of school youth.	The challenges include screening students for appropriateness, conveying program requirements (i.e. TABE testing)	I am not aware.	Not that I am aware of.

**Herkimer BOCES 315.867.2079 [mkline@herkimer-boces.org](mailto:mkline@herkimer-boces.org)**

More local urgent care, Our Part time evening LPN program	CTC Health Occupations then to CNA then to LPN. Many nursing homes do CNA and a good number eventually enroll in LPN program.	The CTC Health Occupations programs, MASH camp in the summer	We would love to do this but our equipment needs to be upgraded.	The related health fields such as RPT and X-ray Tech. Long waiting lists at RN programs.	We would like to do more w/ patient simulators and the online medical record. Both require equipment that we don't have and can't afford.
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**Herkimer BOCES Adult LPN Nursing Coordinator 315.895.2210 ext 4 [snicolette@herkimer-boces.org](mailto:snicolette@herkimer-boces.org)**

Our area has developed extensive primary care clinical that all employ LPN's, the nursing home and adult care opportunities have not changed. There is an added emphasis in home care as higher level custodial patients are cared for in the home primarily by LPN's with RN case managers.	We have a new articulation agreement with HCCC to allow evening LPN students to simultaneously take RN prerequisites. We are also actively engaged in developing a solid track to allow RN students who are unsuccessful in their 3rd and 4th semester to transfer into our program and complete as an LPN. The intent is that these students will gain confidence and clinical skills to enable them to go back and complete their RN; It further establishes a positive working environment between our program and the colleges to facilitate our student pursuing their RN later.	The high schools offer CNA through BOCES. We work with GED to assist students interested in nursing to apply to our program after they have completed their GED.	I would like to explore distance learning using a real time setup such as Skype. Because our program uniquely deal with not just scholastic but the psychosocial needs of our students. Straight online classes do not seem possible.	The main issues with our students are psycho social. They lack support systems to care for their children while they are in school or studying. Many also lack study skills. We try to compensate by teaching study skills and discussing child care options up front. Because I believe in good attendance and education, I have spent more than one afternoon with a baby in my office while the mother attended class.	No
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1. Promising Practices	2. Pipeline Programs	3. High School Students	4. Distance Learning	5. Gaps & Needs	6. Alternative Teaching Models
<b>Kenmore- Tonawanda Union Free School District    716.874.8411    <a href="mailto:mszczepanik@kenton.k12.ny.us">mszczepanik@kenton.k12.ny.us</a></b>					
<p>1) Erie BOCES 1 offers a 1 year program to honors-level high school seniors called Connections: Health Related Careers. This 4 credit program provides students with an opportunity to observe careers in many allied health areas. Students spend about 4 hours each day are a designated hospital site</p> <p>2) Erie BOCES 1 also offers a 2 year vocational program for juniors and seniors called Health Careers/Intro to Nursing. This course helps students explore and gain knowledge regarding the various health careers.</p>	<p>WIA adult and dislocated worker funds have been used for this purpose. As far as a pipeline to more highly skilled jobs, there have been many individuals trained over the years who came in as HHA's, CNA's, etc and were then trained through WIA to become LPN's, RN's etc. Also, WIA youth funding has been used over the years to provide training and/or work experience in some of the primary care areas to those ages 14 to 21</p>	<p>1) WIA Youth Services, including year-round programs and summer youth employment, tries to match youth based on their interests to work experience sites in both the public and private sectors (for in and out of school youth). ITA funds can be used to train youth ages 18-21 for careers in primary care areas</p> <p>2) A new charter school that recently opened in the area: Health Sciences Charter School opened in Sept. 2010 in Tonawanda, New York. This school prepares high schools for careers science and medicine .</p>	<p>The potential not only exists but also is constantly being evaluated and pursued on all levels including high school, post secondary and adult literacy.</p>	<p>The region at one time appeared to be saturated with certified nursing assistant programs. It would now appear that a need for such programs currently exists; however, available funding and qualified instructors do not.</p>	<p>N/A</p>

1. Promising Practices	2. Pipeline Programs	3. High School Students	4. Distance Learning	5. Gaps & Needs	6. Alternative Teaching Models
<b>La Fuerza Unida      516.759.0788 ext. 25      <a href="mailto:amunera@lfuinc.org">amunera@lfuinc.org</a></b>					
I am not aware of any but the recent introduction of midwifery has brought good results in our area.	Home health aides, Physician and Dental assistants.	Medical billing	Need for bi-lingual distance learning. Campaign to promote distance learning.	Except for family practice in hospitals, immigrants do not have a clue as to the health system (past and future).	The Chilean health model provides good ideas that could be implemented in this country.
<b>Western New York Regional Information Center      716.646.9415      <a href="mailto:lbaranowski@frontier.wnyric.org">lbaranowski@frontier.wnyric.org</a></b>					
LPN's & Home Health aides/CNA's	GED students currently working as Home Health Aides.	Several nursing homes in this area offer tuition assistance while working in their facility.	Some of the challenges in distance learning are how to incorporate the hands-on components of nursing students. They could complete their basic studies on line or at home, but would need clinical training as well.	There are actually numerous training programs held in this region.	Nothing that we are aware of.
<b>LVA Dutchess County      845.452.8670      <a href="mailto:MarianLVA@yahoo.com">MarianLVA@yahoo.com</a></b>					
(no answer)	Some of our ABE students express interest in becoming CNA's. We test them and help them to attain high enough levels in reading and math to be eligible for the CNA training given by BOCES. I have also had an adult student interested in becoming an LPN after having been license as a CNA.	(no answer)	(no answer)	Distance Learning has been an essential component of some GED programs for rural area students living in remote areas. (GRASP) Retention of students is the biggest challenge to distance learning. More frequent contact with students to help and encourage learning can help retain students whose interest is flagging.	(no answer)

1. Promising Practices	2. Pipeline Programs	3. High School Students	4. Distance Learning	5. Gaps & Needs	6. Alternative Teaching Models
<b>Madison Oneida BOCES    315. 361.5805    <a href="mailto:krinaldo@bcce.moric.org">krinaldo@bcce.moric.org</a></b>					
Oneida Healthcare/ Extended Care Facility Masonic Care Community	The local WIB operates a Career Pathways grant that includes a healthcare pathway beginning with CNA and leading to Registered Nurse Programs	Madison-Oneida BOCES Secondary CTE to Adult and Continuing Ed Training programs. T.R. Proctor High School’s “College and Career Readiness Program,” in which healthcare occupations are presented to high school seniors. Local BOCES Open House events where high school students and parents explore CTE, career and college options.	Potential for starting a hybrid model exists here. A challenge of distance learning in our region lies in the fact that many of our adult student population needs direct instructor support and oversight. However a hybrid model where distance learning, combined with on-site, instructor-led classes would be possible. We would also want to insure that student work is authentic, which could be verified by on-site demonstration of knowledge. In Primary care programs a large part of learning comes from hands-on learning and demonstration of “clinical” skills that would be a challenge in a purely distance learning model. Another challenge is in financing development of an on-line or distance learning program/platform. A strategy or solution to meet that challenge is to look for existing programs and learn from other best-practices in this arena.	Many adults must work while attending school. As a result, CNA’s often begin traveling a pathway to higher levels of employment in the field but are stymied by the mounting costs associated with advanced levels of education. We also find that one or both of the following factors challenge adult students entering our programs: 1. weak academic skills and poor study skills and 2. inability to manage or “juggle” demands of rigorous curriculum with family/job responsibilities. Although a “pre-nursing” program is available to those interested in entering the primary care education setting and who need to strengthen their academic and study skills, few if any have the disposable income necessary to pay for this introductory education. Since traditional funding streams or financial aid funds cannot be applied to this level of education many people are “shut out” of the opportunity to participate and be successful in more advanced levels. The ability to offer students sufficient support (i.e. case management or counseling) so they could navigate and manage “life” while attending to their studies is impossible without pricing our educational programs so high that they would not be accessible to the population in our region.	NA



1. Promising Practices	2. Pipeline Programs	3. High School Students	4. Distance Learning	5. Gaps & Needs	6. Alternative Teaching Models
<b>Niagara Falls Community Education Center    716. 286.0771    <a href="mailto:atouma@nfschools.net">atouma@nfschools.net</a></b>					
Certified Nursing Assistant	Certified Nursing Assistant	BOCES Health Program	Reading and comprehension skills	Reading skills and following directions	No
<b>OCM BOCES    315.453.4424    <a href="mailto:mukleya@ocmboces.org">mukleya@ocmboces.org</a></b>					
CNA, Dental Hygienists	BOCES CTE to LPN to RN@ OCC Health Care Pathways through CNY WORKS to SEIU	OCM BOCES has CTE healthcare programs, as does their adult education department. Currently in our adult programs, we are offering- LPN, CNA, Central Service Tech, Medical Assistant, and Dental Assistant training.	Distance Learning programs are challenging for many of our students. They do not have access to computers except in public venues due to financial situations. In addition, many students have lower skill levels.	Dental Hygienists, X-Ray technician, Sono- tech, and OR tech	(no answer)
<b>Olean City School District    Adult Ed Coordinator    716.375.8033    <a href="mailto:ledstrom@olean.wnyric.org">ledstrom@olean.wnyric.org</a></b>					
CNA certification dental hygienists	Guidance, Adult Ed classes, former Bridge Program	(no answer)	(no answer)	(no answer)	(no answer)

1. Promising Practices	2. Pipeline Programs	3. High School Students	4. Distance Learning	5. Gaps & Needs	6. Alternative Teaching Models
<b>Tompkins Learning Partners Inc    607.277.6442    <a href="mailto:Literacy@TLPartners.org">Literacy@TLPartners.org</a></b>					
<p>The BOCES in Cortland, NY has an LPN program. Tompkins Cortland Community College has RN and LPN programs. Some of the local nursing homes will train CNAs in-house.</p>	<p>I am not aware of any pipeline programs.</p>	<p>I only work with adult students out of high school, so I couldn't comment on that.</p>	<p>One challenge is computer literacy and access to high speed internet. Most importantly, low literacy students are unable to participate in many of these programs. More focus is needed in basic literacy programs first, so that there will be a population which reads well enough to feed into these training programs.</p>	<p>I'm not quite sure that I understand the question, but if you are referring to students who go to emergency rooms rather than primary care physicians, then I can address that. Low literacy and low "health" literacy, lack of knowledge of the U.S. healthcare system, and poor employment prospects all contribute to this problem.</p>	<p>We are not aware of any.</p>
<b>Utica City Schools    315.738.1083 ext 144    <a href="mailto:mismith@uticaschools.org">mismith@uticaschools.org</a></b>					
<p>Our program is strictly ESL. Currently there is no ESL specific transition/training program for health fields. I have had conversations with our local community college and several healthcare providers, and we have a program to propose if additional funding becomes available</p>	<p>We have both older teens and adults who would be interested in healthcare fields. Realistically, they would enter through a CNA (or similar) program and work their way through the system as their English, job and cultural skills progress.</p>	<p>no answer</p>	<p>There is great potential for distance learning among underemployed immigrants and refugees in the Utica area. Challenges include time for the student to participate, quality learning through a distance learning program and hands on, clinical work. Perhaps a hybrid distance and classroom might also be effective.</p>	<p>There is a need for a focused ESL program, combining language, culture, job skills, and intensive case management.</p>	<p>I-Best models are successful.</p>

## Career Pathways Workgroup: Physician Medical Program Information

Accredited Physician Programs in NYS	City	Region	Faculty Level	Applicants (2010)	Matriculates (2010)	%
SUNY Downstate College of Medicine	Brooklyn	NYC		5351	183	3.4
Albany Medical College	Albany	Capital Region	250 FT	7965	137	1.72
Touro College of Osteopathic Medicine	Harlem	NYC		N/A	135	N/A
Columbia University - NYC	NYC	NYC		7070	166	2.34
Weill Cornell Medical College - NYC	NYC	NYC		5565	101	1.81
Mt. Sinai School of Medicine - NYC	NYC	NYC		6306	141	2.23
New York University - NYC	NYC	NYC		7241	162	2.23
University of Rochester - Rochester	Rochester	Finger Lakes		4909	104	2.11
New York Medical College – Valhalla	Valhalla	Mid Hudson		11344	194	1.71
Albert Einstein College of Medicine – Yeshiva University	Bronx	NYC		7337	183	2.49
SUNY Buffalo – School of Medicine	Buffalo	Western		4329	144	3.32
New York Institute of Technology	Old Westbury, NYC	LI, NYC		N/A	313	N/A
New York College of Osteopathic Medicine	Old Westbury	LI		N/A	N/A	N/A
Stony Brook University (School of Medicine)	Stony Brook	LI		4226	124	2.93
SUNY Upstate Medical College	Syracuse	Central		4903	161	3.28
Hofstra	Hempstead	LI		Accredited	Jun-10	
Sackler School of Medicine ( American Program)	Tel Aviv, Israel	N/A				
<b>Average acceptance rate:</b>						<b>2.18</b>

N/A- Not Available

## Career Pathways Workgroup: New York State BOCES Healthcare Programs

1. Promising Practices	2. Pipeline Programs	3. High School Students	4. Distance Learning	5. Gaps	6. Alternative Teaching Models
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**Central Valley Educational Service** 518.561.0100 x 246 [sbaker@dcmo.boces.com](mailto:sbaker@dcmo.boces.com)

1. HHA, CNA, PCA, Pharmacy Tech
2. PN, RN CNA, PN-RN PCA, HHA or CAN
3. CNA – Allied Health I – junior level – certified end of junior year.  
CNA/HHA – also offered evenings
4. Health programs are technical and “hands on” which make it difficult to do distant learning.  
Current challenges – Space  
Most of our local population wants hands on vs. distant learning.  
YouTube.com has very good sites for skills demonstrations which may be helpful for a distant learning environment as a future opportunity.
5. See #1
6. Simulation lab hours better utilize as clinical time when clinical facilities are not available.  
Distant learning and YouTube are other examples of alternative teaching.

**DCMO BOCES** [paulsend@dcmo.boces.com](mailto:paulsend@dcmo.boces.com)

1. LPN, CAN, FNP
2. Articulation from CNA to LPN programs (BOCES). LPN graduates are channeled to the CN program offered by SUNY Morrisville
3. Certified nurse’s program, LRN certified coding specialist, medical office assistant
4. LPN on-line theory with clinical settings lack of math background, prerequisite medical terminology would be nice
5. Mathematics, division, fractions, algebra, metric conversions
6. None

**Dutchess County BOCES** 845.486.8001 x 326 [susan.moraca@dcbooces.org](mailto:susan.moraca@dcbooces.org)

1. Nursing Assistant (NA) and Licensed Practical Nursing (LPN)
2. Dutchess BOCES has a program titled Introduction to Health Occupations. This is a one-year program for high school students (typically taken during their junior year) that introduce the students to a wide variety of career opportunities in the healthcare arena. The curriculum includes the foundation necessary for high school students to succeed in our senior level programs.
3. Dutchess BOCES has a program that affords qualified high school seniors the opportunity to train as Certified Nursing Assistants. Upon successful completion of this program, students are eligible for the NYS Nurse Aide certification exam. This is an entry-level

position in the healthcare arena.

Another option for qualified high school seniors is Practical Nursing I. PNI is the first half of the post-secondary practical nursing program. Upon successful completion of the entire post-secondary program, graduates are eligible to take the NYS Practical Nursing licensing examination.

4. We have used distance learning to some degree within our curriculum. One example of this occurred within our Health Occupation Cluster when the students were virtual participants to an autopsy. The students were able to speak to the physician and ask questions. Opportunities like this give us the opportunity to expose a large number of students to areas where field trips are not available or affordable.
5. I think we need a much stronger connection to our component high schools. We can do a much better job of identifying appropriate students for the Health Occupations. It is important for us to dispel the misnomer that just because the student wants to “help people” does not necessarily mean they are the best candidate for healthcare careers.
6. I am not aware of any other teaching modes or practices that are currently in use; however, I would be receptive to any suggestions and available to review any models that are in use.

**Eastern Suffolk BOCES    Phone (631) 289-2200    [gbixhorn@esboces.org](mailto:gbixhorn@esboces.org)**

1. Practical Nursing & Certified Nurse Assisting
2. Nurse Assisting to Practical Nursing to Registered Nursing, Clinical Medical Assisting to Practical Nursing to Registered Nursing, Pharmacy Technician to Pharmacist, Dental Assisting to Dental Hygienist
3. Practical Nursing Level I for high school seniors is 450 hours of course work. Completion allows for entry into Level II of nursing. Courses listed below have imbedded regents’ credits that allow for course completion and satisfaction for high school graduation requirements: Practical Nursing, Clinical Medical Assisting, Nurse Assisting and Pharmacy Technician.
4. Distance learning does have its advantages as to ease of access and availability, however, there is a cost factor involved along with the challenge of hiring qualified teachers. Economic constraints of some students preclude them access to home computers.
5. In all health programs, the need for internships is a crucial part of each program. Even though the need for healthcare is growing, the lack of clinical space for practice has decreased. Hospitals and healthcare facilities need to allow for healthcare education and not discourage internships because they do not “employ” the type of student in a certain internship. Example: Many hospitals are seeking “Magnet” status and have moved to employing only a registered nursing staff. These hospitals no longer wish to participate in the educational internships of the Practical Nursing students because they do not employ them.
6. Not aware of any at this time.

**Genesee Valley BOCES    585-344-7751    [bshelby@gvboces.org](mailto:bshelby@gvboces.org)**

1. GVEP trains LPN’s and CNA’s. Both secondary and post secondary training at GVEP involves CNA’s. Secondary education students in the Health Dimensions program are job ready for many entry level healthcare positions (transport aide, unit aide, dietary aide, activities aide, therapy aide, personal care aide)
2. A healthcare pipeline includes anyone who expresses an interest in a healthcare career, such as high school students, up through any healthcare students or practitioners who may have an interest in pursuing a higher level (such as RN to NP) in the field. High school students attend our programs from surrounding counties, (Genesee, Livingston, Wyoming, and Monroe) Interest is evident with junior high school level students. Students have to wait until 11th grade to enter our secondary education programs.
3. I. HEALTH ACADEMY- College Tech Prep Health Careers Academy is a course of study designed to provide qualified students with a broad knowledge of the healthcare industry (earn up to 15 college credits). Students explore multidisciplinary healthcare

professions and current biotechnology through on-site observations at local hospitals and other healthcare facilities. Students applying to the academy should have plans to attend college or technical school in a healthcare field, be enrolled or have successfully completed chemistry, and possess at least a B average at their home school. This program offers Genesee Community College credit, and serves as a foundation for pursuing careers as an audiologist, biomedical engineer, dentist, dietician, hematologist, lab pathologist, massage therapist, nuclear imaging technician, nurse, optometrist, physical or occupational therapist, physician, pharmacist, radiologist and more.

II. HEALTH DIMENSIONS- All Health Dimensions students spend time in local facilities working collaboratively with local clients. Students participate in acute care at local hospitals, long term care in geriatrics at local nursing homes, end of life care at a hospice center, and receive pediatric experience by visiting daycare centers and grade schools to present "Stuffed Buddy Day". (Preschool, kindergarten, first and 2nd graders bring their stuffed buddy for a checkup. We x-ray, bandage, listen to their heart beats and blood pressure, measure and weigh them. This is a program to encourage little ones to look at a health career and to become comfortable with care from medical practitioners.)

Students may observe in the Emergency room, operating room, Intensive care, acute care and medical surgical units, x-ray, cardiac rehabilitation, amputee center and dental offices. Students also explore other aspects of health careers.

Health Dimensions Students may receive certification in First Aid, Adult CPR, Child and Infant CPR, AED, and Child Abuse Reporting. Health Dimensions students will engage in a challenging hands-on approach in the health field. Participants will experience and provide the human side of client care. Students may choose to take the New York State Nurse Assisting certification exam after completing the course. Health Dimensions students will explore the following: Anatomy & Physiology, Gerontology, Phlebotomy and Electrocardiogram Technology. Responding to Emergencies is a first aid response course available to Health Dimensions students. (college credits available; third-year science credit available).

III. HUMAN SERVICES- This program prepares students for a wide range of career opportunities in the diverse field of human services. Through practical work experiences, students develop high-level skills needed to interact with people of all ages in a variety of environments such as classrooms, childcare centers and human service agencies. Students study human development, birth to adulthood, over the course of two years. Students have the opportunity to become certified in First Aid and Community CPR (earn up to six college credits).

IV. Health Occupations Students of America (HOSA) A national student Leadership program that engages students in health career activities and leadership programs. Students participate at the local level, state level, and national level in leadership and skilled competitive events. This program gives students a sense of self worth and values. The HOSA program encourages continuing education to achieve the dream of becoming a medical professional.

4. Distance learning programs could be initiated for health careers exploration. The course could explore many aspects of healthcare. A hands-on approach is not necessary for this, although it would make the program more enjoyable. Distance learning for the present Health Dimensions program would not work. This program requires clinical laboratory and clinical site experience where students are required to complete patient care tasks. NY State Dept of Education and NY State Department of Health Education require hands on hours. A hand on experience is necessary for students to acquire proficiency in the required patient care skills for taking vital signs and assisting clients. The Health Careers Academy program may work with distance learning, as there are no required hands on hours required by the NY State Dept of Education or the NY State Department of Health.
5. There is a need for medical technicians, entry level employment in the health field (medical assisting, transport aides, unit aides, recreation aides, occupational therapy aides, home health aides, personal care assistants, file clerks and other entry level positions.

6. Distance learning is being used in many of the RN and LPN programs presently. I have had many post secondary students come to me to say they have not been pleased with this method. They have advised me they do not acquire the same knowledge, as there is little to no interaction with colleagues and teachers. It is also my understanding that there are lower success rates with this type of education. Last spring I attended a meeting at the local college with many nursing educators. One of the nursing directors advised me that it takes an average of 7 years for an adult to complete the associate degree RN program. Perhaps, this is a reflection of the new distance learning being utilized (?)

**Genesee Valley BOCES**      **585-658-7912**      [jdonlon@gvboces.org](mailto:jdonlon@gvboces.org)

1. Genesee Community College (GCC) trains RN's. Genesee Valley Educational Partnership (GVEP) trains LPN's and CNA's. Both secondary and post secondary training at GVEP involves CNA's. Secondary education students in the Health Dimensions program are job ready for many entry level healthcare positions (transport aide, unit aide, dietary aide, activities aide, therapy aide, personal care aide) There are multiple healthcare facilities in the immediate region: two hospitals (Dansville and Warsaw), five long term care facilities (Livingston and Wyoming counties), three home health agencies (Livingston and Wyoming counties) and numerous medical practices. All of these require the services of qualified primary care providers.
2. High school students attend our programs from surrounding counties, (Genesee, Livingston, Wyoming, and Monroe) Interest is evident with junior high school level students. Students have to wait until 11th grade to enter our secondary education programs. High school students who don't know what path they want to follow and/or do not have the funding to attend college, and adult learners who are or become the sole source of income for their family often use a "stepping stone" approach to obtaining a career in healthcare (CNA to LPN to RN to advanced practice, etc.) My students, high school and adult learners in CNA and LPN programs, regularly express interest in starting their path to a health care career with the goal of continuing their education as possible. Programs designed to "step" would be beneficial for these individuals.

**Batavia**

- 1- HEALTH ACADEMY- College Tech Prep Health Careers Academy is a course of study designed to provide qualified students with a broad knowledge of the health care industry (earn up to 15 college credits). Students explore multidisciplinary health care professions and current biotechnology through on-site observations at local hospitals and other health care facilities. Students applying to the academy should have plans to attend college or technical school in a health care field, be enrolled or have successfully completed chemistry, and possess at least a B average at their home school. This program offers Genesee Community College credit, and serves as a foundation for pursuing careers as an audiologist, biomedical engineer, dentist, dietician, hematologist, lab pathologist, massage therapist, nuclear imaging technician, nurse, optometrist, physical or occupational therapist, physician, pharmacist, radiologist and more.
- 2- HEALTH DIMENSIONS- All Health Dimensions students spend time in local facilities working collaboratively with local clients. Students participate in acute care at local hospitals, long term care in geriatrics at local nursing homes, end of life care at a hospice center, and receive pediatric experience by visiting day care centers and grade schools to present "Stuffed Buddy Day". (Preschool, kindergarten, 1st and 2nd graders bring their stuffed buddy for a checkup. We x-ray, bandage, listen to their heart beats and blood pressure, measure and weigh them. This is a program to encourage little ones to look at a health career and to become comfortable with care from medical practitioners.) Students may observe in the Emergency room, operating room, Intensive care, acute care and medical surgical units, x-ray,

cardiac rehabilitation, amputee center and dental offices. Students also explore other aspects of health careers. Health Dimensions Students may receive certification in First Aid, Adult CPR, Child and Infant CPR, AED, and Child Abuse Reporting. Health Dimensions students will engage in a challenging hands-on approach in the health field. Participants will experience and provide the human side of client care. Students may choose to take the New York State Nurse Assisting certification exam after completing the course. Health Dimensions students will explore the following: Anatomy & Physiology, Gerontology, Phlebotomy and Electrocardiogram Technology. Responding to Emergencies is a first aid response course available to Health Dimensions students. (college credits available; third-year science credit available).

- 3- HUMAN SERVICES- This program prepares students for a wide range of career opportunities in the diverse field of human services. Through practical work experiences, students develop high-level skills needed to interact with people of all ages in a variety of environments such as classrooms, childcare centers and human service agencies. Students study human development, birth to adulthood, over the course of two years. Students have the opportunity to become certified in First Aid and Community CPR (earn up to six college credits).
4. Health Occupations Students of America (HOSA) A national student Leadership program that engages students in health career activities and leadership programs. Students participate at the local level, state level, and national level in leadership and skilled competitive events. This program gives students a sense of self worth and values. The HOSA program encourages continuing education to achieve the dream of becoming a medical professional.

### **Mt. Morris**

- 1- HEALTH ACADEMY- College Tech Prep Health Careers Academy is a course of study designed to provide qualified students with a broad knowledge of the healthcare industry (earn up to 15 college credits). Students explore multidisciplinary healthcare professions and current biotechnology through on-site observations at local hospitals and other healthcare facilities. Students applying to the academy should have plans to attend college or technical school in a healthcare field, be enrolled or have successfully completed chemistry, and possess at least a B average at their home school. This program offers Genesee Community College credit, and serves as a foundation for pursuing careers as an audiologist, biomedical engineer, dentist, dietician, hematologist, lab pathologist, massage therapist, nuclear imaging technician, nurse, optometrist, physical or occupational therapist, physician, pharmacist, radiologist and more.
- 2- HEALTH DIMENSIONS- All Health Dimensions students spend time in local facilities working collaboratively with actual clients. Students may also receive certification in First Aid, Adult CPR, Child and Infant CPR, AED, and Child Abuse Reporting. Health Dimensions students will engage in a challenging hands-on approach in the health field. Participants will experience and provide the human side of client care. Students may choose to take the New York State Nurse Assisting certification exam after completing the course (college credits available; third-year science credit available).  
Health Dimensions II- Students will explore the following: Anatomy & Physiology, Gerontology, Phlebotomy and Electrocardiogram Technology. Responding to Emergencies is a first aid response course available to Health Dimensions II students.
- 3- HUMAN SERVICES- This program prepares students for a wide range of career opportunities in the diverse field of human services. Through practical work experiences, students develop high-level skills needed to interact with people of all ages in a variety of environments such as classrooms, childcare centers and human service agencies. Students study human development, birth to adulthood, over the course of two years. Students have the opportunity to become certified in First Aid and Community CPR (earn up to six college credits).

7. Distance learning programs could be initiated for health careers exploration. The course could explore many aspects of healthcare. A hands-on approach is not necessary for this, although it would make the program more enjoyable. Distance learning for the present Health Dimensions program would not work. This program requires clinical laboratory and clinical site experience where students are required to complete patient care tasks. NY State Dept of Education and NY State Department of Health Education require hands on hours. A hand on experience is necessary for students to acquire proficiency in the required patient care skills for taking vital signs and assisting clients. The Health Careers Academy program may work with distance learning as there are no required hands on hours required by the NY State Dept of Education or the NY State Department of Health. There is a need for medical technicians, entry level employment in the health field (medical assisting, transport aides, unit aides, recreation aides, occupational therapy aides, home health aides, personal care assistants, file clerks and other entry level positions. Better planning so that it isn't "either/or". Home school may offer chemistry during the time students can attend a program like Health Dimensions. Students may need specific preparation to be eligible for healthcare programs and have been delayed or prohibited from entering due to lack of necessary math and science credits. Distance learning is used in many of the RN and LPN programs presently. I have had many post secondary students come to me to say they have not been pleased with this method. They have advised me they do not acquire the same knowledge, as there is little to no interaction with colleagues and teachers. It is also my understanding that there are lower success rates with this type of education. Many programs in place encourage healthcare personnel to pursue a higher level. Many facilities instituted tuition assistance and scholarship programs to recruit and retain staff. Some employers provide flexible scheduling to accommodate classes and use of agency computers for educational purposes, including distance learning. Some employers offer a stipend for students that work for them while completing their health care training. It is very competitive in terms of enticing the right candidates to apply and then keeping them in the workplace once their training is completed.

**Greater Southern Tier BOCES (607) 730-7905 or 1-877-Adult-Ed [tdriscoll@gstboces.org](mailto:tdriscoll@gstboces.org)**

1. GST BOCES has created a Certified Dental Assisting Modular Program (CDAMP), which is an on-line NYS Certification Program for working Dental Assistants. This is a very affordable on-line program designed for the individual to complete at their own pace, on their own time. This would be a next step in the career ladder for students who have graduated from the high school Dental Assisting program. We also have a unique Student Certified Nurse Aide Employment Program that has been very successful. College freshmen and sophomores are sponsored for this class by area Skilled Nursing Facilities and upon successful completion of the class, and NYS certification exam, they work during the summer months and any subsequent long holiday breaks. The students get tuition, books and test fees at no cost to them. They are paid during the training session and have a guaranteed summer job. The facilities get much needed coverage for staff taking summer vacations and it has proven to cut down on overtime expenses for the participating facilities. We have an articulation agreement with Corning Community College allowing successful LPN completers to receive credit for Nursing 1 as they pursue their RN degree. CCC comes to speak with the class during our Career Day in May each year, as does Arnot-Ogden School of Nursing and Elmira College. Students are given information on their respective RN programs. Our financial aid counselor contacts the Career and Technical Education students who are in Certified Nurse Aid classes to provide them with information on our Practical Nursing Program.
2. We work in conjunction with our Central New York Area Health Education Center (CNYAHEC), the Chemung Valley Rural Health Network and WorkForce NY in the promotion of health careers to high school students and funding to qualified applicants in our

rural areas and promote our career pathways; PCA-HHA-CNA-LPN. We also reach out to the WIA Youth counselors to promote health careers to the area out-of-school-youth.

3. We participate in many healthcare career days in area high schools and hosted Working Worlds 2010, which offered our districts' HS teachers and guidance counselors a tour of our training facilities, including our health career classrooms and nursing labs. All high school guidance counselors and Career and Technical Education teachers of Health Occupations are contacted and offered the opportunity to have BOCES adult education counselors come speak to any of their high school classes regarding health careers.

Our BOCES' campuses run New Visions health career programs for those students who express an interest in health occupations and qualify academically.

4. As a start, we've had an initial meeting with CNYAHEC and hope to work in collaborate to videotape CNA and LPN lessons that could be shared between classes or healthcare facilities such as in-service training or common classroom training topics. These lessons/in-services would be available via Sharepoint at SUNY Buffalo at no cost to facilities or training programs. We have discussed distance learning for our theory classes in LPN. We are not sure that this population of students is appropriate for this type of independent learning. We have not pursued this seriously enough to discuss strategies or solutions at this point. However, it would reduce seat time and some commute time.
5. We have a need for additional qualified instructors for our PCA, Home Health Aide, CNA and LPN programs! We also need more clinical sites for our Home Health Aide programs. It is my opinion that the non-college bound student does not receive the same attention that college-bound students enjoy. Guidance counselors and high-school instructors seem to cater to the latter group. I believe that there should be much more "career awareness" about health career steps provided to the non-college bound. How does one survive without a college education and what steps should be taken to ensure a successful career path are questions that should be addressed more fully and consistently with those students who do not academically qualify for programs such as New Visions in healthcare. In the future, there will be an even greater shortage of qualified individuals to fill these "middle skills" jobs.
6. I am not aware of any.

**Herkimer BOCES 315-867-2041 [jpicolla@Herkimer-boces.org](mailto:jpicolla@Herkimer-boces.org)**

1. Establish additional local access healthcare centers(Urgent Care)
2. BOCES High School CNS, BOCES Adult LPN, nursing homes offer C.N.A. training, and support BOCES LPN enrollment.
3. BOCES demonstrations and recruitment at local schools and community events  
LPN recruits at 32 sites
4. Great potential to start Distance Learning in our region. Biggest challenge is teleconference equipment. Hands -on practicum
5. RN training becomes more selective with enrollments, creating long waiting lists. Related health fields (x-ray and respiratory therapy) very limited access: often 10 or 15 per year.
6. Virtual training to allow additional training without leaving employment.

**Monroe 2 BOCES (585) 352-2470 or (585) 349-9102 [jsalemi@monroe2boces.org](mailto:jsalemi@monroe2boces.org) or [mwagner@monroe2boces.org](mailto:mwagner@monroe2boces.org)**

1. Partnerships with supporting agencies are at the foundation of successful programs.  
The Monroe 2-Orleans BOCES Center for Workforce Development (CWD) Adult Learning Programs partner with these local healthcare providers: Unity Health System, Rochester General Hospital, Lakeside Nursing Home, Eastman Dental Center / Strong

Hospital Systems for clinical experiences and internships. Students complete their clinical hours on-site at these local healthcare institutions.

2. Healthcare of Rochester (HCR): provides Home Health Aid Training to successful completers of the adult BOCES 2 CWD Certified Nursing Assistant program.
3. Internship, externship or shadowing components of all adult career education programs are completed at local doctors', dentists', or other medical related professionals' offices. The adult education staff and the adult student have created these partnerships.
4. Medical Career Pathway program allows the student to explore the area of study within the medical field. All students participate in core curriculum, but then must select "electives" of study. Students must choose one (1) elective for successful completion of the career education program, but can choose more if they wish. In the career pathway program, some students have selected up to four (4) electives.

**The Monroe 2-Orleans BOCES Career and Technical Center (WEMOCO)** for secondary students, partner with these local healthcare providers:

Unity Health System, Lakeside Hospital, Beikirch Nursing Facility, Eastman Dental Center, Monroe Community Hospital, Mary Cariola Children's Center, and the University of Rochester Medical Center for clinical experiences and internships. Students complete their clinical hours on-site at these local healthcare institutions.

1. Internship and shadowing components of the secondary Career and Technical Education programs are completed at local healthcare facilities, doctors', dentists' or other medical related professionals' offices. These partnerships have been created by the instructional staff, in conjunction with the School to Work Office.  
The students experience the promising practices of the Rochester region through the research done related to chronic illnesses at the University of Rochester Medical Center and the Eastman Dental School's Dental Clinic for the underprivileged.
2. The BOCES 2 CWD provides career exploration in the adult literacy programs. This is achieved through computer usage, guest speakers, observation of the Medical Career Education programs offered at BOCES 2 CWD and the BOCES 2 CWD Admissions Advisors availability to meet with the literacy student to discuss career options.  
Additionally, BOCES 2 CWD literacy students may participate in the Community Continuing Education evening career programs for a minimal tuition. This allows the literacy student to "assess" if medical careers are the pathways they wish to gain employment.
3. WEMOCO's Certified Nurse Assistant, Dental Assisting, and New Visions Health Professions programs are seen as a pipeline to post-secondary programs as related to RN, LPN, and Dental Hygienist, Pre-Med and Pre-Dental majors.  
WEMOCO also offers a Career Exploration Internship Program (CEIP), which allows students to experience a healthcare career of interest to them. This program can pipeline into the Certified Nurse Assistant, Dental Assisting, and/or New Visions programs.
4. The regional adult programs provide career education to individuals 18 years of age and older. These young adults have access to any of the career orientations provided at BOCES 2 CWD. At WEMOCO, the students have the opportunity to participate in the New Visions Health Professions, Certified Nurse Assistant, and Dental Assisting programs; as well as the CEIP program. The Greater Rochester Area also offers a high school student program for students who have an interest in healthcare careers such as Explorer's Programs and Volunteer Fire and Ambulance Corps.
5. Distance learning is always an option when referring to the "academics" of a program. However, a critical component of the adult career education programs is the hands-on training. Students are assessed by the "performance of the skill". The successful completion of these core competencies is essential prior to the adult student performing the skills on a patient. This assessment

process is lengthy since each student must perform the skill and the evaluator must focus on the ability of the student to perform the skill. Distance Learning opportunities at the secondary level are difficult options due to the critical component of clinical experiences in the Certified Nurse Assistant program, as well as the Dental Assisting program. Necessary course credit for high school graduation also must be taken into consideration when looking into distance learning options.

6. In this region, there seems to be a greater need for Medical Research Technicians as well as for all aspects of the nursing field. Post-secondary education opportunities in the majors of Nursing and Dental Hygiene are very limited in the area, as are the number of Nurse Educators.
7. We have a number of alternative models and practices, which have been developed locally, and at the state level regarding healthcare programs. The New York State Department of Health determines New York State Curriculum at the Secondary, Post Secondary, and Continuing Education levels. Out of state practices do not correlate with New York State licensure requirements.

### **Orange Ulster BOCES**

1. Medical Assistant  
Phlebotomy
2. Graduating High School transiting to post-secondary programs that offer certificates, State licensing or national certifying exams.
3. Youth enrolled in our NYDOL grant funded Second chances program and our incarcerated youth programs are made aware of our adult education career path programs. We provide brochures, flyers and staff at venues that serve youth in Orange County. We work with the CTECH portion of BOCES to keep them informed of transition to certificate programs for those graduating students for whom it would be a continuation of their vo-tech experience or who are looking for an alternative to a college experience at this juncture in their lives.
4. This is a potential we are interested in a beginning research on. We do offer some on-line programs, but we are currently researching ones that are attached to national certifications. Challenges are the proper technology and providing authentic hands-on portions of curriculum, as well as clinical experiences where applicable.
5. Surgical Technician  
Central Supply Technician  
Patient Care Technician
6. No

### **St. Lawrence-Lewis BOCES**

1. Promising practice: there are no promising practices in our region. There are only hospital based services for medical and nursing care for the most part. A hopeful move for the future is the newly developing practice of accepting hopeful candidates into several region universities with guarantees for slots in SUNY upstate medical school. There are not many/any private practices to employ midlevel or allied health workers. There are many dental practices. Some private specialty practices. Urology. Medical Oncology. For the most part the practices are hospital based/owned and not really focused on outpatient primary care. This is a problem for the region. In this rural area many private practices have been bought by the local hospitals, much of the primary care services are provided by hospital owned clinics staffed by nurse practitioners and physicians assistants that are overseen by a physician. These clinics have added revenue to the hospitals that have been faced with loss of Medicare and especially Medicaid revenue. With a quick review of the StLL Provider Report, local area hospitals are now running 40 percent of the practices in St. Lawrence County. These arrangements are encouraged by New York State as they bring in significant revenue to the state via the NYS Pooling Surcharges and Assessments. Surcharges and Assessments are collected by the NYS Pooling Department on ALL inpatient,

outpatient services provided by the hospitals, including hospital owned clinics. If this practice, which would appear to be a conflict of interest, since the Primary Care Provider is also an employee of the hospital, is the look of the future, then it would stand to reason that the services provided by the hospital owned practices should be the focus of BOCES, in terms of providing programs geared towards the changes and challenges in the medical industry.

2. As mentioned in #1, I have heard that any student except to SUNY Potsdam or St. Lawrence or Clarkson's premed program who maintains a certain GPA is guaranteed a slot at SUNY Upstate Medical University. A little know secret is that the NY Institute of Technology College of Osteopathic Medicine on Long Island has as its charter that it will populate rural NY with physicians. Any rural candidate is given special attention and there are quite a few Northern NY students from there i.e. an anesthesiology resident from Lafargeville, an orthopedic surgery resident from Hevelton (whose parents were both teachers). There is a general surgery resident from Gouverneur at SUNY Upstate. We have grown these physicians and with a facility friendly system and not a physician friendly system it will be difficult to get them back. I know an Alex Bay BOCES LPN student who proceeded to get an AAS and RN at JCC, then a BSN from Plattsburg, NP from SUNY Upstate and then attended a foreign medical school to return to a Family Practice Residency in Tennessee. I believe she is now at Ft. Drum. The New Visions program at SMC in Watertown is placing student who are interested in health careers with various professionals for shadowing to help them formalize their goals. SMC is starting a new nursing assistant program at the Keep Home. The loss of the BOCES LPN program in St. Lawrence Co. is a tremendous loss. Not sure why this happened?? Politics of nursing?? A significant deterrent to progress from RN to NP is for some the way our region uses NP and PA's as substitutes for physicians instead of physician extenders that they were meant to be. Problems with the system in part stem from attracting wannabe's instead of good solid practitioners who are interested in working within their practice guidelines under supervision.  
Partnership for Potsdam Central School and Clarkson  
Partnership for Gouverneur Central School and Canton  
NAHEC  
BOCES OCC. ED  
Shadowing programs: Canton Potsdam Hospital, Claxton-Hepburn Hospital, Massena Memorial Hospital, Clifton-Fine Hospital and E.J. Noble Hospital
3. New nursing assistant program at SMC would be expected to start. There are not a lot of young people interested in healthcare as it is a system in crisis. I have met with several young people interested in primary care careers. Many will not return here due to poor income potential. Nursing assistant and LPN programs through BOCES is a huge asset to the healthcare system. The Patient Protection and Affordable Care Act provide a new national, voluntary, consumer funded program called Community Living Assistance Services and Supports (Class) Program. These communities will replace nursing homes that have not been able to financially support themselves and have been a draw on hospital revenues. To properly staff these communities one would expect the need for Physicians, Nurse Practitioners, Registered Nurses, Physical and Speech Therapist, Nursing Assistants, Home Health Aides, Clerical Staff etc. All programs offered at local universities.
4. Another challenge is the need for hands on learning in healthcare, not only for teaching but also for assessing character and suitability for assuming these sorts of responsibilities. Teachers need to be comfortable with the technology and they need to be able to know and assess their student. Much of the "work" of learning can be streamlined using computer modules as well as live distance classes. This is a very poor region. The price of gas to get to a local learning center is even at times an obstacle. BOCES would be an excellent pipeline to provide the distance learning services. For example, one technical center could provide the class room setting programs and through distance learning, provide that same program to other districts via BOCES on line services. Coordination of the services within the geographic region is very important in terms of the cost savings to the local districts and the

effectiveness of the programs. Linkages to Universities within this region and surrounding regions are important in order to provide the medical programs to address the primary care workforce expansion needed to meet the industry needs of 2014.

5. I don't believe that we have a primary care education gap. I think we have a "brain drain". I can't help but compare rural NYS to rural Maine where I lived and worked for over 15 years. The most dramatic difference is that each little town has its own physician. They don't all have their own hospital but they all have physicians. Physicians for the most part can handle roles that other members of the healthcare team often perform. If you lack a nurse, the physician can still give an injection. Unfortunately, we are building a system here in NYS where we have warehoused people and have many allied health workers caring for them but nobody out in the communities trying to diagnose and treat preventable disease or intervene early. We have the classic disease system. We have "hospitals" that function without physicians. How exactly does a hospital function without physicians? It churns, bills, and doesn't accomplish much healthcare product with a huge healthcare bill. I was astonished at the difference when I moved to Maine. I thought I was moving to the boondocks. They were so much more advanced in their system of healthcare that it was shocking to me. The other alternative teaching/practice models with which I have had experience is the European system where young people start very early in selecting healthcare careers. They do not avoid sciences in their younger years but are required to actually get work experience in healthcare and caring for patients along with learning of science. We teach to create scientist. They create scientists but teach to create clinicians for patient care as opposed to for example pharmaceutical research and development. When we train physicians, it is as if we expect them all to be the surgeon general or medical director of Pfizer rather than be working with patients. I believe there is a problem with revenues to properly market the current programs offered through BOCES. I also believe there is reluctance on the part of some districts to properly educate the students and parents with regards to the educational opportunities offered through BOCES. I also believe that vocational education should start at the middle school level, with an emphasis on academics towards a career path beginning during this time. By the time a student reaches high school AP courses along with hands on experience through shadowing with local providers, should be implemented. For those providers interested in the pipeline program, college funding for future professional employees would include an agreement to provide a certain amount of years of service to the employer. I believe BOCES has the resources to work collaboratively with the universities in this area or to link with other universities, along with the local medical community to prepare students, future employees or business owners, for the challenges facing the medical profession. Please see attachments with regards to pipeline or collaboration between BOCES, local universities, employers, districts and students.
6. The other alternative teaching/practice models with which I have had experience is the European system where young people start very early in selecting healthcare careers. They don't avoid sciences in their younger years but are required to actually get work experience in healthcare and caring for patients along with learning of science. We teach to create scientist. They create scientists but teach to create clinicians for patient care as opposed to for example pharmaceutical research and development. When we train physicians, it is as if we expect them all to be the surgeon general or medical director of Pfizer rather than be working with patients. I know the push is to get physicians away from patients but any system that does this is doomed to failure. We will all suffer, unless it is recognized that physicians are very important to the provision of healthcare and they cannot be replaced by midlevel's that lack the depth of knowledge and understanding needed. Many mid-levels do not even recognize the weaknesses in their education. Without physician leadership, any primary care model will fail.

**Sullivan County BOCES    845-295-4172    [dtheysohn@scboces.org](mailto:dtheysohn@scboces.org)**

LPN Education:

- Sullivan BOCES offers both a Full time (10 month) and Part time secondary extended program (18 month). Adults are eligible for both programs and high school seniors meeting admission criteria are eligible to enroll in the Part time program. This is a benefit

to the high school senior as they can complete the first year while still in high school and the home school tuition pays for the first year.

- Part time students completing the first year of the LPN program are eligible to sit for the NYS Certified Nurse Aide certification exam.
- In addition, many of our graduates are encouraged to continue in nursing education and they participate in the NYS LPN to RN articulation agreement in which students receiving their LPN license and successful completion of the transition course (meeting college admission criteria/pre requisite courses) are able to enter the second year of a 2 year RN AAS program. Many of our graduates continue in the SCCC (Sullivan County Community College) nursing program, which participates in this articulation.

#### Nurse Aide Education:

- Sullivan BOCES offers a CNA program through the secondary CTE Health Occupations program- senior year program. Upon successful completion, students are eligible to sit for the NYS State Certified Nurse Aide certification exam.
- Sullivan BOCES adult education offers the CNA program continually throughout the year. Classes are held on the main campus for utilization of the health occupations lab and other resources. Students are encouraged to continue their education and many continue into the LPN program.
- CTE --Diversified Health Occupations program career ladder: This is a CTE secondary program, providing students an opportunity to pursue health careers and/or certified nurse assistant training. The program acquaints high school students with a variety of health occupations including geriatrics, emergency services, home healthcare, physical therapy, occupational therapy, pharmacy tech, central supply, veterinary services, dental assisting, radiology, and acute care experiences. The first year all students enroll in the Introduction to Health Occupations course and then choose a career path to pursue in Year Two (Nurse Assisting/Allied Health; LPN or New Vision).

Year One: Introduction to Health Occupations – is an exploratory course that prepares the student with the basic theory and skills to continue in their second year courses. All students interested in Health Occupations enroll in this course their junior year and they explore the different occupations/careers in healthcare (Therapeutic; Diagnostic; Informational; Environmental services) through theory and clinical experiences. Upon completion of this course, students are better able to make a decision as to which career track to pursue in their second year.

Year Two: Students can pursue Nurse Assisting; Allied Health Careers, LPN or New Vision Health, Nurse Assisting- students receive training to obtain NYS Nurse Aide Certification, Allied Health Careers-advanced health career exploration; development of basic entry level skills in additional health occupations. Human services: habilitation/ rehabilitation; Phlebotomy, EKG, Medical Assisting, Home Health Aide, Veterinary assisting, Dental assisting, pharmacy technology. Specific skills and functions of allied health careers.

New Vision Health- One year program that is an academically rigorous program for high achieving college bound seniors interested in the healthcare field. Interdisciplinary immersion program in which students explore health career opportunities within a variety of healthcare facilities in competency based internships. Students can receive up to 12 college credits in the program.

- LPN- Part time program (as described above) Post-secondary CTE offerings:
- LPN program-Full time adult; Part-time: adult and secondary extended

College articulations-all the health programs have established college articulations

- Students pursue career tracks in nursing, medicine, medical assistant, physical and occupational therapy at two and four year colleges.

- Currently participate in the NYS LPN to RN articulation agreement with participating 2 year RN schools.
- Currently involved in pursuing an LPN to BSN articulation with Perkins II consortium.
- The Introduction to Health Occupations program is designed to provide the students with an overview of the various career choices in healthcare. This enables students with the ability to make good choices for continuing in health career education or employment. Students participate in many activities which promote interest in the healthcare field: trip to NYC BODIES exhibit; college visits to health related programs (Orange County Community College- nursing, physical therapy, occupational therapy); visit to Helen Hayes Rehabilitation center; career exploration presentation at Catskill Regional Medical Center or Crystal Run Healthcare in which a panel of healthcare practitioners explain their occupations/ education/job opportunities in addition to a tour of the healthcare facility. Sullivan BOCES CTE has held a “Health Expo” in which approximately 20 healthcare professionals made presentations to students interested in the health field (9-12 grade students). Career exploration event was conducted by CRMC in which 7th-10th graders from the county were selected to attend a tour and presentation by healthcare professionals in the local hospital (CRMC). This event was very exciting for the students and encouraged them to enroll into the Health Occupations courses at CTE. Tours are provided to all 10th grade students in the county to expose them to the health occupations programs and they have an opportunity to observe the students working in the lab as well as observe the simulation manikins. Students are also encouraged to visit the programs in the clinical setting to gain additional knowledge of the program and opportunities in the healthcare field. Opportunities for current students to visit local community colleges or universities (New Vision Health) are made available to help students make choices about health programs and careers. Visits have been made to Syracuse University and Sullivan County Community College. LPN students participate in numerous community and component school districts health fairs, in which they promote the health occupations programs and the various careers in healthcare. LPN Information sessions and New Vision Information Night events are held for prospective students interested in the LPN and New Vision Health programs. At this time the potential students are introduced to the program (theory, clinical, lab experiences); current students and graduates; parents of students/graduates, healthcare professionals in addition to staff discuss program and clinical internship experiences.
- Our Health Occupations programs have participated in the Saint Louis University (AIMS) cadaver demonstration and this year students will also have an opportunity to participate in the Forensic Autopsy videoconference. These distance learning experiences were made possible through Perkins II grant funding. Our teachers, that are adjunct faculty from the local community college and Syracuse University, teach several college courses in the New Vision Health program. Initiatives are being taken to developing opportunities for more students throughout the county to enroll in these New Vision Health college courses through distance learning. We have the resources available on site to offer distance learning courses and this may be a cost effective solution to other schools currently offering similar courses.
- The primary education gap that consistently presents itself in the various health occupations programs in Sullivan County is the difficulty students have in performing basic mathematical calculations. This is evident on the LPN entrance testing, TABE test scores of the secondary students and the increasing need for graduates to enroll in post-secondary remedial math courses at the local community colleges. Remediation efforts have been implemented in this area but math ability continues to be a challenge for students. Transportation is a definite need and an issue many students face in the post-secondary programs. Sullivan County is a very rural area with limited public transportation services, which limits the ability of individuals to participate in many of the health related programs. Financial aid is available for the adult LPN program but many students need to work, many are single parents, and there are limited child care and support services available. These are the major challenges adult students face in both the LPN and CNA programs.
- Use of simulation manikins in the lab setting are being utilized (limited number of clinical hours approved) in some areas in place of actual clinical experiences, due to the limited clinical sites and increasing number of nursing students competing for those sites.

We have been fortunate at Sullivan County CTE to be able to utilize clinical sites at alternate times so that our nursing students are provided the optimal clinical learning experiences. The LPN students are scheduled for 12 hour shifts and/or evening shifts in addition to the traditional day shift so that they are provided adequate clinical experiences. This practice has been very successful this year and will be continued in the future. The practical nursing programs and AAS RN programs in New York State are continuing to collaborate to improve the NYS LPN to RN Articulation agreements in nursing education that promotes a seamless transition for advancement in the nursing career track. Articulation models from other states. (South Carolina, New Jersey, and Connecticut) continue to be considered as advancement is made in this area. Efforts are being made in the Mid-Hudson region to develop articulation agreements between LPN to BSN nursing programs.

**Wayne Finger Lakes BOCES=WFL 315 332 7317**      [jboronkay@wflboces.org](mailto:jboronkay@wflboces.org)

1. Our BOCES trains about 150 LPN's each year. We have had CNA start and stop based on area needs. The blend of day and evening programs appears adequate. One of the reasons I can't expand easily is there is a lack of RN's with the geriatric experience to teach CNA.
2. Regional BOCES serving high school juniors and seniors, BOCES adult LPN classes. In the Finger Lakes region, we have a health careers Regional Skills Alliance.
3. Students from Wayne-Finger Lakes BOCES alternative high school placements may take a CTE course at no cost to the sending districts. Health dimensions are available as a CTE offering. Our New Vision medical professions classes are always at maximum enrollment.
4. That has promise in a region like ours. I would be interested in any form or type of pilot. Ontario County is developing a free wireless zone for its residents.
5. Community College in our catchment offers RN and C.N.A., W-FL offers practical nursing and C.N.A. to secondary students and occasionally adults. The local long term care facilities often train their C.N.A.'s on the job. I don't see any gaps.
6. N/A

**Western Suffolk BOCES**      **631.261.3600**      [kbaker@wsboces.org](mailto:kbaker@wsboces.org)

1. The move toward achieving Magnet Status for Long Island hospitals requires that registered nurses with four-year degrees occupy all nursing positions. While this has eliminated opportunities for LPNs in hospital settings, it has opened opportunities in long term health related facilities such as nursing homes and rehabilitation centers. This not only represents an opportunity for graduates of LPN programs, it also provides an answer to the severe economic, political and social pressure currently being felt by the long term health care field that is expected to continue well into the future – it is less expensive for these facilities to use LPNs than RNs. Another common practice in the Long Island region that has an impact on Western Suffolk BOCES is the use of internships in the field of Medical Assisting. Students going through the BOCES program are placed in physicians' offices for an internship that frequently turns into a job following completion of the program. Again, economics is the driving factor as medical assistants can do the routine functions much less expensively than RNs. This internship function is also seen in our Sonography and Surgical Technology programs. We have an agreement with many hospitals in the NYC-Long Island region for clinical placement of our students, which frequently leads to employment upon successful completion of the program.
2. Scholarships are in place at Western Suffolk BOCES for secondary students who would like to be trained in our LPN program. We also offer scholarship incentives to graduating LPN students who would like to receive further training in our other health career programs such as Surgical Technology, Sonogram, etc. Qualifying students are also eligible for advanced standing in these programs for having completed prerequisite courses such as Anatomy & Physiology, etc. Many of the students placed for clinical internships are

hired at the practices and hospitals where they complete their internships. We also have articulation agreements with post-secondary institutions where our students, having met admission criteria, are admitted to programs to further their education in the healthcare field. For example, LPN graduates are given credit toward their RN degree by colleges and universities with which we have articulation agreements.

3. In addition to the articulation agreements, secondary school health field students are encouraged to pursue the health professions. This is done through several means, one of which is our Guidance Advisory Council, which meets every month at our health professions campus. Secondary school guidance counselors in our catchment area are invited to participate in these meetings where current events in the healthcare field are discussed along with economic, political and social trends. To help collect this data, Western Suffolk BOCES conducts a bi-annual Focus Group which brings together senior representatives from, among other fields, healthcare. It is this group that confirmed and elaborated upon the movement by hospitals to four-year RNs. In a related effort, our own guidance counselors go out into the field on a regular basis to meet with secondary school counselors and to make presentations to student bodies at our catchment schools to help those interested in the healthcare profession. Western Suffolk BOCES recently joined Facebook and is expanding its efforts to utilize other social media to a finger on the pulse of the rapidly changing methods of mass communication among our youth.
4. Western Suffolk BOCES offers over 50 on-line courses in the healthcare and related fields. We also offer preparation courses for those wishing to apply for the LPN, Sonography and Surgical Technology programs. In addition to our GED preparation programs, we offer several college preparation courses as well as part of our on-line offerings. One of the challenges in on-line learning is to increase the number of self-paced tutorial courses we offer. Instructor-led courses are much more expensive and limit the number of on-line courses that we can make available. We have created a “blackboard” website for communication with and between faculty and students and the nursing faculty has used Skype for lectures under exceptional circumstances. This served us very well during the several snow emergencies we experienced in the northeast this past winter when campuses had to be closed.
5. Because of the expansion of competitive healthcare programs in local colleges and universities, Western Suffolk BOCES finds itself struggling to secure clinical placements in hospital settings for its students. To compensate, we have become creative in finding new clinical sites such as the Suffolk County Jail, various pediatricians’ offices and wound care facilities. With the aging of the Baby Boomer generation, the coming inclusion of millions of previously uninsured citizens under the ACA and the subsequent explosive growth of the healthcare field, there will be a steadily increasing need for training and clinical placement of healthcare students.
6. Driven by the reduction in clinical placement sites, schools are increasingly using simulation labs with programmable mannequins. These interactive mannequins can be programmed to respond to treatments, conditions, medications and procedures. While this manifestation of technology is helpful in compensating for the reduced availability of actual patients and may in fact be a wave of the future, the use of human actors to replace the actual patient is a new paradigm that is becoming commonplace.

## Appendix 6 - Healthcare Credentials Workgroup Report

### Preface

The Healthcare Credentials Workgroup, led by Deborah King, Executive Director of 1199 SEIU Training and Employment Funds, was comprised of nine subject matter experts in the healthcare workforce field.

The nine members of the workgroup were:

Claudia Alexander, Executive Secretary for Physical Therapy, Podiatry, Ophthalmic Dispensing and Coordinator of the Professional Assistance Program  
New York State Education Department

Dolores Cottrell-Carson, Executive Secretary for Dentistry, Dental Hygiene, Dental Assisting and Optometry  
New York State Education Department

Rebecca Hall, Assistant Director  
1199 SEIU Training and Employment Funds

Christine Hall-Finney, Director  
Division of Provider Relations and Utilization Management  
New York State Department of Health

Christine Johnston, Director  
New York State Association of Healthcare Providers

Linnea LoPresti, Assistant Provost  
State University of New York

Walter Markowitz, Director of Strategic Planning & Program Development  
North Shore Long Island Health Systems

Sergio Matos, Executive Director  
Community Health Worker Network of NYC

Shayne Spaulding, Director of Workforce Development  
Academic Affairs/Adult and Continuing Education  
City University of New York

The workgroup convened on four separate occasions, via conference call, between February 2011, and April 2011. Several members assumed responsibility for independent research on certain topics and subsequently informed the group of their findings.

In addition, a panel of healthcare experts including Elizabeth Swain, Executive Director of the Community Health Care Association of New York State (CHCANYS), convened to discuss healthcare workforce issues with the Healthcare Credentials Workgroup and other sub-groups of the Healthcare Workforce Development Subcommittee.

The workgroup's charge was to come up with a proposal focusing on work which needs to be done to address key credential issues in order to advance healthcare reform in New York State.

In addition to the areas of focus of the proposal, future work will need to address healthcare in rural and other areas where there is a shortage of primary care physicians and dentists. For example, other states have allowed for the creation of a new dental position to perform work currently done by dentists. The workgroup did not have the time and resources to explore these issues.

Notwithstanding the limitations noted above, the workgroup has been able to make some recommendations to inform the steps that need to be taken to advance healthcare reform in New York State.

## Introduction

### Workgroup Charge

The Healthcare Credentials Workgroup had a three-fold charge:

1. To describe the academic and healthcare industry skill standards for high school graduates, for entry into postsecondary education and for various credentials and licensing;
2. To undertake an inventory of the credentials and the licensing requirements needed for selected primary care occupations: and,
3. To describe the competencies and identify promising practices.

Some of the key questions the group grappled with in seeking to fulfill this charge have included:

- What type of workforce will be needed to provide healthcare in a changing environment?
- What are the growth jobs and what are the skills/competencies/credentials needed to fulfill these roles?
- Are there new jobs that need to be created?
- What type of training is needed as a minimal requirement to sit for a credentialing/certification exam, a high school diploma, a two year degree, a BA, or higher?
- Should the scope of practice of certain jobs or the ability to operate independently be changed in order to meet needs?

### Key Findings

**The most significant findings by the group have included:**

1. The emergence of several occupations (such as: community health workers (CHWs), health coach/chronic disease coach, medical assistants, patient navigators, and various HIT related occupations) which are expected to play a key role in the changing healthcare environment i.e., the increasing shift from hospital-centered care to community/home-centered care. CHWs in particular bring an added dimension to the evolving community/home-centered care model because many of these incumbents can identify better with patients in poor communities based on a common cultural background and common language. The proliferation of medical assistants bring into play a resource that needs to be better defined and harnessed within the growing importance of the team approach in providing healthcare.
2. The need to develop standardized role definitions and industry recognized credentials and standards for these occupations. For example, training for medical assistant is based on employer specific needs and not by industry-wide accepted standards; proprietary schools are the major provider of training for this occupation; and, training can run anywhere between four to six weeks and up to nine (9) months or longer. There are at least three roles/functions for medical assistants: some function solely in a clinical capacity, others are limited to an administrative capacity, while others may engage in a little of both roles. As a result, there are no consistent standards in training. Candidates

completing medical assistant training receive no industry-recognized credential that can serve as a stepping stone or stackable credential<sup>10</sup> to advance along a career pathway in the nursing field. Based on these findings a case can be made that standardization for medical assistant training may be required—not only to help advance candidates through a career pathway in the healthcare system—but, more importantly, to ensure quality care for patients.

3. State agencies (the State Education Department and the New York State Department of Health) are charged with the responsibility of overseeing and regulating licensed healthcare professions and nonprofessionals (there are currently 48 such professions identified on the books) in the State. Many of the emerging occupations need clear definitions, functions and roles to determine:
  - Whether or not there is a need for State regulations to govern these occupations;
  - What level of formal education would be required;
  - What types of credentials, if any, would be required ;
  - What would define the occupation’s scope of practice, if applicable; and,
  - If the roles/functions for these occupations are infringing on an existing statutorily defined licensed profession’s scope of practice.
4. There is a need to ensure existing statutory limitations on scope of practice for licensed professions is not breached, as efforts are undertaken to expand functions and responsibilities of currently licensed professions, such as RNs and LPNs; or, as consideration is given to expanding roles and responsibilities for currently non-licensed professionals, e.g. medical assistants.
5. If credentialing standards are adopted for the emerging occupations, the need to determine which State agency or agencies—if applicable—would have enforcement responsibility: to manage conduct and discipline, to maintain standards and guard against abuses.
6. The workgroups need to better understand the Legislature’s primary role in defining scope of practice for licensed professions; and, what is the underlying process (from exploring and recommending to implementation and enforcement) for effecting any changes to existing scope of practice parameters or adoption of new ones for the licensed professions.

## Key Recommendations

If Health Resources and Services Administration (HRSA) implementation grant funds are available, recommendations include:

1. Conduct a research study that would identify and describe the job duties and education currently required for new and emerging jobs because of healthcare reform/primary care

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<sup>10</sup> A credential is considered stackable when it is part of a sequence of credentials that can be accumulated over time to build up an individual’s qualifications and help them to move along a career pathway or up a career ladder to different and potentially higher-paying jobs. US Department of Labor, Employment and Training Administration, Training and Employment Guidance Letter No. 15-10, Increasing Credential, Degree, and Certificate Attainment by Participants of the Public Workforce System, <http://wdr.doleta.gov/directives/attach/TEGL15-10.pdf> (December 15, 2010).

service growth. These jobs include CHW, medical assistant, patient navigator, health coach/chronic disease coach and various HIT related occupations. It is anticipated that more than one job is actually encompassed in most of these titles.

2. Convene and staff a committee of healthcare industry representatives from various regions of the state to review the findings with an attempt to get a consensus on what standardized job titles and what industry recognized credentials could be developed for each position.
3. Convene and staff a joint committee of industry/union reps and educators to begin to develop education/training programs, certificates, curriculum, etc. for such new jobs. Where possible the education/training should be part of an articulated career/education pathway. Diversity and affordability should be taken into consideration in the development of a career ladder.
4. Convene and staff a committee to study workforce needs in rural areas or other areas with a low percentage of primary care physicians, dentists and other primary care providers in order to make recommendations about:
  - a. Whether new job classifications should be created to address the healthcare needs of those residents; and/or,
  - b. Whether scope of practice of existing classifications should be expanded. Include representatives of physicians, physician assistants, nurse practitioners, dentists, etc. in this initiative. Also, research how other states are addressing primary care delivery in underserved areas.
5. Include representatives of DOH and SED on the above initiatives where appropriate. In some cases, there may be a recommendation that a State exam/certification/license should be required.
6. Have subject matter experts come before the workgroup to inform its members on the legislative process for recommending changes to the scope of practice for any given profession, including enforcement provisions. This will help lay the groundwork and provide the proper framework within which the workgroup's members can explore and formulate proposed changes for deliberation by the Healthcare Workforce Development Subcommittee and appropriate action.

The above implementation plan would greatly assist New York State in developing the credentials necessary to insure a qualified workforce to deliver care under healthcare reform.

## General Findings

The workgroup has found, as the result of developing an “***Inventory of Existing Required Credentials and Licensing to Work in a Primary Healthcare Occupation in New York State***” (see appendix to this workgroup report), that the parameters governing these professions are well established and, under the statutory control of the State Legislature, which is solely responsible for defining the scope of practice for all licensed professions in New York State. Regulatory/enforcement, control and oversight of these professions is vested in either jointly or separately in the State Education Department or the New York State Department of Health.

However, where concern surfaced was in the identification of a series of emerging professions, expected to play a key role in the changing environment of healthcare that, in some cases, lack clearly defined roles and functions; and, in other instances may infringe upon the scope of practice of currently licensed professions. The list of these occupations include CHWs, health

coaches, health educators, home health aides, medical assistants, and patient navigators to name a few.

“There is no common definition of patient navigators and the profile of a patient navigator varies widely by program. Many use trained CHWs who may be full-time employees or volunteers. CHWs have close ties to the local community and serve as important links between underserved communities and the healthcare system. They also possess the linguistic and cultural skills needed to connect with patients from underserved communities. CHWs are also known as community health advisors, lay health advocates and “promotores de salud” [essentially ‘*health promoters*’ in Spanish—Healthcare Credentials Workgroup comment].” Healthcare navigators include trained social workers, nurses and nurse practitioners as well as trained lay persons/volunteers. Some navigation programs also use a team based approach that combines CHWs with one or more professionals with experience in healthcare or social work. While there is no set education required for a patient navigator to be successful, a successful navigator should be:

- Compassionate, sensitive, culturally attuned to the people and community being served and able to communicate effectively.
- Knowledgeable about the environment and healthcare system.
- Connected with critical decision makers inside the system, especially financial decision makers.”<sup>11</sup>

In NYS the effort to develop credentials for CHWs has been the focus of a two-year study at Bronx Lebanon Hospital, which is intended not only to test the effectiveness of these workers within a team setting—but in establishing standards and parameters for a portable credential. A report on the outcome of this study was expected to be available in June 2011. The report may very well speak to how effective CHWs can be in improving the epidemiological profile of poor communities that, historically, have placed a low premium on healthcare—as evidenced by predominant reliance on episodic care as opposed to preventative healthcare practices, broken follow-up appointments, and, inconsistent compliance with or understanding of medical direction. CHWs, by virtue of common cultural background or the ability to communicate effectively in a patient’s primary language, are able to overcome these barriers; and, prove a valuable resource and cost-saving contributor to the primary healthcare system. For this reason, it is especially important that programs designed to train CHWs guard against any artificial barriers that would limit the diverse nature of this training pool.

The workgroup has also learned that the City University of New York (CUNY) is looking to develop CHW certificates where students will be able to take bundled credit courses that articulate to degree programs. CUNY administrators organized a conference to look at national CHW training models, held in June 2011.

In sharp contrast, there is no effort currently underway to standardize training across the state for medical assistants. Training tends to be employer specific for this occupation (each hospital’s clinical setting/practices may be different); and, individuals undergoing medical

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<sup>11</sup> Institute for Alternative Futures, “The DRA (Accelerating Disparity Reducing Advances ) Project,” available at: [http://www.altfutures.com/draproject/pdfs/Report\\_07\\_02\\_Patient\\_Navigator\\_Program\\_Overview.pdf](http://www.altfutures.com/draproject/pdfs/Report_07_02_Patient_Navigator_Program_Overview.pdf), pg. 3

assistant training do not “graduate” with a portable credential. Compounding this occupation’s issues is that length of training can run the gambit from four to six weeks in some areas to nine (9) months in others. An additional concern is that some of these incumbents engage in clinical activities that infringe on the role normally reserved to nursing. This raises a legal liability issue as well as what standards are being applied by training providers/employers to ensure quality of care is not compromised.

In discussing what training standard or credential requirements should be adopted for medical assistants there was a recognition that some incumbents act in a clerical capacity while others exercise clinical related duties. The workgroup concluded that the State Education Department would need a clear definition of the role and function medical assistants would be expected to play in the healthcare system to more adequately determine whether or not such a role required regulatory control; or, what and if credentialing standards would suffice to ensure uniformity in training.

Such is not the case in occupations related to maintenance of Electronic Health Records (EHR), a key building block for the new healthcare delivery system. Although the workgroup found that some incumbents receive some form of training before coming on the job, others receive on-the-job training after being hired. The fact is that there are various formal training options available to individuals interested in pursuing a career in this field. For example:

- CUNY, through its New Community College initiative, offers an AAS Degree to prepare students for work as Registered Health Information Technicians (RHITs).
- CUNY also recently approved an online bachelor's degree program in Health Information Technician (HIT) through the School of Professional Studies.
- A similar offering is available through the Borough of Manhattan Community College.
- Hofstra University offers a broad range of credentialed training in Healthcare Information Technology from a certificate program (which requires candidates to complete only four required course offerings and one out of four elective course offerings to earn a certificate) up to an undergraduate four year degree and a Masters Degree in Information Technology (B.B.A/M.B.A.)
- In Upstate New York, Hudson Valley Community College offers a Health Information Management and Technology (HIM) A.A.S. program designed for students to gain the skills necessary to become an administrative medical office professional in either a private practice or healthcare facility. The HIM program is modeled after the American Health Information Management Association (AHIMA) Registered Health Information Technician (RHIT) curriculum and HIM program graduates are prepared and eligible to take the AHIMA Certified Coding Specialists (CCS) examination. Program graduates are also prepared to take the Internet and Core Computing (IC3) exam. It must be noted that the program goes far beyond computer skills and knowledge of office software, as course content focuses on ethics, security and the necessary soft and collaboration skills needed in the technical health field. The program concludes with an industry internship.
- In Western New York, Erie Community College offers an Associate’s Degree in Health Information Technology;
- Alfred State College offers an online associate of applied science in Health Information Technology/Medical Records;

- The Rochester Institute of Technology offers a graduate degree program in Healthcare Information Technology; and,
- In the Southern Tier, Broome Community College offers an Associate’s Degree as well in Health Information Technology.

One of the issues raised by members of the workgroup was the need to reign in the cost of training for healthcare occupations. The workgroup discussed the possibility of having training providers (both public [CUNY and the State University of New York (SUNY)] and private) consider sharing their curriculums, as a possible cost saving measure. However, it was determined that proprietary issues would very likely impede such an effort.

In exploring strategies to increase primary care capacity, the group considered efforts to ensure licensed professionals were operating to the full extent of their scope of practice, and cross training. However, cross training was particularly difficult because it immediately raised the concern of infringing on the scope of practice of other licensed professionals. Although other states, such as Colorado and California have addressed this issue by granting temporary waivers to certain professions—to assume roles outside a practitioner’s normal purview—it is unclear how the healthcare licensed community in New York State would respond in the face of such proposals. Indeed, the workgroup determined there are many occupations (phlebotomists, EKG and surgical tech for example) that may be infringing on the scope of practice for nurses.

If any serious consideration is given in seeking to expand the scope of practice for any licensed profession, or emerging healthcare occupation, there will be a need to consult with the State’s healthcare licensed community—including the State Legislature, and State agencies charged with regulating and overseeing all licensed healthcare professions in the State.

# **Appendix to Healthcare Credentials Workgroup Report: Inventory of Existing Required Credentials and Licensing**

## **Focus Group of Primary Care Occupations**

### **Physician – MD, OD**

#### **Summary of Occupation**

A physician is a licensed healthcare professional who diagnoses, treats, operates, or prescribes for any human disease, pain, injury, deformity, or physical condition.

A New York licensed physician has completed a program of medical education and received the doctor of medicine (M.D.), doctor of osteopathy (D.O.), or equivalent degree. While New York State requires a minimum of two years of postsecondary education prior to medical school, most applicants admitted to medical school have a minimum of a bachelor's degree. Medical programs include studies in basic and medical sciences.

New York licensed physicians have also completed a minimum of one year of postgraduate training in an approved residency program; graduates of unaccredited/unregistered medical schools must complete three years of residency training and pass a proficiency exam. In addition, licensed physicians pass a State-approved licensing examination.

To be licensed as a physician in New York State the candidate must be:

- be of good moral character
- be at least 21 years of age
- meet education, examination and experience requirements
- be a United States citizen or an alien lawfully admitted for permanent residence in the United States (Permanent Resident Card/INS I-551 Status/"Green Card")

#### **Governing Statute:**

Title 8, Article 131, Section 6524 of New York's Education Law and Part 60 of the Commissioner's Regulations. Also, under specified limitations defined in Section 6526 of New York State Education Law, individuals may be exempt from licensure.

§6524. Requirements for a professional license:

To qualify for a license as a physician, an applicant shall fulfill the following requirements:

1. Application: file an application with the department;
2. Education: have received an education, including a degree of doctor of medicine, "M.D.", or doctor of osteopathy, "D.O.", or equivalent degree in accordance with the commissioner's regulations;
3. Experience: have experience satisfactory to the board and in accordance with the commissioner's regulations;

4. Examination: pass an examination satisfactory to the board and in accordance with the commissioner's regulations;
5. Age: be at least twenty-one years of age; however, the commissioner may waive the age requirement for applicants who have attained the age of eighteen and will be in a residency program until the age of twenty-one;
6. Citizenship or immigration status: be a United States citizen or an alien lawfully admitted for permanent residence in the United States; provided, however that the board of regents may grant a three year waiver for an alien physician to practice in an area which has been designated by the department as medically underserved, except that the board of regents may grant an additional extension not to exceed six years to an alien physician to enable him or her to secure citizenship or permanent resident status, provided such status is being actively pursued; and provided further that the board of regents may grant an additional three year waiver, and at its expiration, an extension for a period not to exceed six additional years, for the holder of an H-1b visa, an O-1 visa, or an equivalent or successor visa thereto;
7. Character: be of good moral character as determined by the department; and
8. Fees: pay a fee of two hundred sixty dollars to the department for admission to a department conducted examination and for an initial license, a fee of one hundred seventy-five dollars for each reexamination, a fee of one hundred thirty-five dollars for an initial license for persons not requiring admission to a department conducted examination, a fee of five hundred seventy dollars for any biennial registration period commencing August first, nineteen hundred ninety-six and thereafter. The comptroller is hereby authorized and directed to deposit the fee for each biennial registration period into the special revenue funds-other entitled "professional medical conduct account" for the purpose of offsetting any expenditures made pursuant to section two hundred thirty of the public health law in relation to the operation of the office of professional medical conduct within the department of health. The amount of the funds expended as a result of such increase shall not be greater than such fees collected over the registration period.
9. For every license or registration issued after the effective date of this subdivision, an additional fee of thirty dollars shall be paid and deposited in the special revenue fund entitled "the professional medical conduct account" for the purpose of offsetting any expenditures made pursuant to subdivision fifteen of section two hundred thirty of the public health law. The amount of such funds expended for such purpose shall not be greater than such additional fees collected over the licensure period or for the duration of such program if less than the licensure period.
10. A physician shall not be required to pay any fee under this section if he or she certifies to the department that for the period of registration or licensure, he or she shall only practice medicine without compensation or the expectation or promise of compensation. The following shall not be considered compensation for the purposes of this subdivision: (a) nominal payment solely to enable the physician to be considered an employee of a healthcare provider, or (b) providing liability coverage to the physician relating to the services provided.
11. No physician may be re-registered unless he or she, as part of the re-registration application, includes an attestation made under penalty of perjury, in a form prescribed by the commissioner, that he or she has, within the six months prior to submission of the re-registration application, updated his or her physician profile in accordance with subdivision four of section twenty-nine hundred ninety-five-a of the public health law.

**Note:** Part 60 of the Commissioner's regulations describes additional requirements governing physician licensing e.g., required experience, licensing examinations, license by endorsement, limited permits, etc.

## **Physician Assistant**

### **Summary of Occupation**

A physician assistant ("PA") is a licensed healthcare professional who provides medical care under the supervision of a physician. PAs provide a wide range of care within the area of practice of the supervising physician.

Licensed New York physician assistants have graduated from a two-to-four year State-approved PA program; these programs often require two years of college-level course work prior to admission, although some programs allow entry directly from high school. In addition, PAs have passed a comprehensive licensing examination.

To be licensed as a registered physician assistant in New York State you must:

- be of good moral character;
- be at least 21 years of age;
- meet education requirements; and
- meet examination requirements.

### **Governing Statute**

Title 8, Article 131-B, Section 6541 of New York's Education Law and Part 60 of the Commissioner's Regulations.

#### §6541. Registration Requirements to Practice as a PA in NYS

1. To qualify for registration as a physician assistant or specialist assistant, each person shall pay a fee of one hundred fifteen dollars to the department for admission to a department conducted examination, a fee of forty-five dollars for each reexamination and a fee of seventy dollars for persons not requiring admission to a department conducted examination and shall also submit satisfactory evidence, verified by oath or affirmation, that he or she:
  - a. at the time of application is at least twenty-one years of age;
  - b. is of good moral character;
  - c. has successfully completed a four-year course of study in a secondary school approved by the board of regents or has passed an equivalency test;
  - d. has satisfactorily completed an approved program for the training of physician assistants or specialist assistants. The approved program for the training of physician assistants shall include not less than forty weeks of supervised clinical training and thirty-two credit hours of classroom work. The commissioner is empowered to determine whether an applicant possesses equivalent education and training, such as experience as a nurse or military corpsman, which may be accepted in lieu of all or part of an approved program; and

- e. in the case of an applicant for registration as a physician assistant, has obtained a passing score on an examination acceptable to the department.
2. The department shall furnish to each person applying for registration hereunder an application form calling for such information as the department deems necessary and shall issue to each applicant who satisfies the requirements of subdivision one of this section a certificate of registration as a physician assistant or specialist assistant in a particular medical specialty for the period expiring December thirty-first of the first odd-numbered year terminating subsequent to such registration.
3. Every registrant shall apply to the department for a certificate of registration. The department shall mail to every registered physician assistant and specialist assistant an application form for registration, addressed to the registrant's post office address on file with the department. Upon receipt of such application properly executed, together with evidence of satisfactory completion of such continuing education requirements as may be established by the commissioner of health pursuant to section thirty-seven hundred one of the public health law, the department shall issue a certificate of registration. Registration periods shall be triennial and the registration fee shall be forty-five dollars.

## **Nurse Practitioner – NP**

### **Summary of Occupation**

A Nurse Practitioner (NP) is an RN who has earned a separate license as an NP through additional education and experience in a distinct specialty area of practice. Nurse practitioners may diagnose, treat, and prescribe for a patient's condition that falls within their specialty area of practice. This is done in collaboration with a licensed physician qualified in the specialty involved and in accordance with an approved written practice agreement and protocols. Nurse Practitioners are autonomous and do not practice under the supervision of the collaborating physician. (Nurse practitioner specialty areas: Acute Care; Adult Health; College Health; Community Health; Family Health; Gerontology; Holistic Nursing; Neonatology; Obstetrics and Gynecology; Oncology; Palliative Care; Pediatrics; Perinatology; Psychiatry; School Health; Women's Health.)

To receive a certificate to practice as a nurse practitioner in New York State you must:

- have a currently registered New York State license as a Registered Professional Nurse (RN);
- and meet education requirements

Once authorized, individuals must maintain the registration of their RN license and their NP certificate in order to practice as a nurse practitioner.

### **Governing Statute:**

Title 8, Article 139, Section 6910 of New York's Education Law and Part 64 of the Commissioner's Regulations.

§6910. Certificates for nurse practitioner practice.

1. For issuance of a certificate to practice as a nurse practitioner under subdivision three of section six thousand nine hundred two of this article, the applicant shall fulfill the following requirements:
  - a. Application: file an application with the department;
  - b. License: be licensed as a registered professional nurse in the State;
  - c. Education:
    - i. have satisfactorily completed educational preparation for provision of these services in a program registered by the department or in a program determined by the department to be the equivalent; or
    - ii. submit evidence of current certification by a national certifying body, recognized by the department; or
    - iii. meet such alternative criteria as established by the commissioner's regulations;
  - d. Fees: pay a fee to the department of fifty dollars for each initial certificate authorizing nurse practitioner practice in a specialty area and a triennial registration fee of thirty dollars. Registration under this section shall be coterminous with the nurse practitioner's registration as a professional nurse.
2. Only a person certified under this section shall use the title "nurse practitioner".
3. The provisions of this section shall not apply to any act or practice authorized by any other law, rule, regulation or certification.
4. The provisions of this section shall not apply to any activity authorized, pursuant to statute, rule or regulation, to be performed by a registered professional nurse in a hospital as defined in article twenty-eight of the public health law.
5. The commissioner is authorized to promulgate regulations to implement the provisions of this section.

## **Certified Nurse Midwife - CNM**

### **Summary of Occupation**

A New York State licensed midwife is a healthcare provider who may care for the health needs of pre-adolescent, adolescent, and adult women throughout their life span. Licensed midwives provide primary well woman healthcare including gynecologic care, and care during pregnancy and childbirth, as well as care of the newborn following birth.

In New York State, the Board of Regents and the State Education Department (SED) oversee the licensure and practice of midwifery and 47 other licensed health, business and design professions.

Any use of the title "Midwife" within New York State requires licensure.

To be licensed as a midwife in New York State a candidate must:

- be of good moral character;
- be at least 21 years of age;
- meet education and examination requirements; and
- be a United States citizen or an alien lawfully admitted for permanent residence in the United States (UCSIS I-551 Status/"Green Card").

## **Governing Statute:**

Title 8, Article 140, section 6955 of New York's Education Law and Subpart 79-5 of the Commissioner's Regulations.

§6955 Requirements for a professional license.

To qualify for a license as a midwife, an applicant shall fulfill the following requirements:

1. Application: file an application with the department.
2. Education: satisfactorily;
  - a. complete educational preparation (degree or diploma granting) for the practice of nursing, followed by or concurrently with educational preparation for the practice of midwifery in accordance with the commissioner's regulations, or
  - b. submit evidence of license or certification, the educational preparation for which is determined by the department to be equivalent to the foregoing, from any state or country, satisfactory to the department and in accordance with the commissioner's regulations, or
  - c. complete a program determined by the department to be equivalent to the foregoing and in accordance with the commissioner's regulations.
3. Examination: pass an examination satisfactory to the department and in accordance with the commissioner's regulations.
4. Age: be at least twenty-one years of age.
5. Character: be of good moral character as determined by the department.
6. Citizenship or immigration status: be a United States citizen or an alien lawfully admitted for permanent residence in the United States.
7. Pay a fee of one hundred ninety dollars to the department for admission to a department conducted examination for an initial license. A fee of one hundred dollars for each re-examination, a fee of one hundred fifteen dollars for an initial license for persons not requiring admission to a department conducted examination, a fee of one hundred eighty dollars for each triennial registration period and a fee of seventy dollars for a limited permit.

## **Registered Nurse - RN**

### **Summary of Occupation**

A registered professional nurse (RN) is a licensed health professional who has an independent, a dependent and a collaborative role in the care of individuals of all ages, as well as families, groups and communities. Such care may be provided to sick or well persons. The registered nurse uses the art of caring and the science of healthcare to focus on quality of life. The registered nurse accomplishes this through nursing diagnosis and treatment of a patient's, family's or community's responses to health problems that include but are not limited to issues involving the medical diagnosis and treatment of disease and illness.

Registered nurses are not authorized to prescribe medications of any kind or to provide a medical diagnoses or medical plan of care.

To be licensed as a registered professional nurse in New York State you must:

- be of good moral character;
- be at least eighteen years of age;
- meet education requirements;
- complete coursework or training in the identification and reporting of child abuse offered by a New York State approved provider; and, meet examination requirements.

### **Governing Statute:**

Title 8, Article 139, Sections 6905 and 6906 of New York State Education Law and Part 64 of the Regulations of the Commissioner of Education.

§6905. Requirements for a license as a registered professional nurse.

To qualify for a license as a registered professional nurse, an applicant shall fulfill the following requirements:

1. Application: file an application with the department;
2. Education: have received an education, and a diploma or degree in professional nursing, in accordance with the commissioner's regulations;
3. Experience: meet no requirement as to experience;
4. Examination: pass an examination satisfactory to the board and in accordance with the commissioner's regulations;
5. Age: be at least eighteen years of age;
6. Citizenship: meet no requirement as to United States citizenship;
7. Character: be of good moral character as determined by the department; and
8. Fees: pay a fee of one hundred fifteen dollars to the department for admission to a department conducted examination and for an initial license, a fee of forty-five dollars for each reexamination, a fee of seventy dollars for an initial license for persons not requiring admission to a department conducted examination, and a fee of fifty dollars for each triennial registration period.

### **Licensed Practical Nurse - LPN**

#### **Summary of Occupation**

A Licensed Practical Nurse (LPN) is a licensed healthcare provider who provides nursing care under the direction of an RN, physician, or other authorized healthcare provider. There is no independent component to the LPN role. An LPN has graduated from high school and completed an approved practical nursing program of at least nine months (or two semesters).

Licensed Practical nurses are not authorized to administer such services as bolus IV medication, initiation of non-patient specific orders, insertion of naso-gastric tubes or triaging of patients.

To be licensed as a licensed practical nurse in New York State you must:

- be of good moral character;

- be at least seventeen years of age;
- be a high school graduate or the equivalent;
- meet education requirements; and
- meet examination requirements.

### **Governing Statute:**

Title 8, Article 139, Sections 6905 and 6906 of New York State Education Law and Part 64 of the Regulations of the Commissioner of Education.

§6906. Requirements for a license as a licensed practical nurse.

To qualify for a license as a licensed practical nurse, an applicant shall fulfill these requirements:

1. Application: file an application with the department;
2. Education: have received an education including completion of high school or its equivalent, and have completed a program in practical nursing, in accordance with the commissioner's regulations, or completion of equivalent study satisfactory to the department in a program conducted by the armed forces of the United States or in an approved program in professional nursing;
3. Experience: meet no requirement as to experience;
4. Examination: pass an examination satisfactory to the board and in accordance with the commissioner's regulations, provided, however, that the educational requirements set forth in subdivision two of this section are met prior to admission for the licensing examination;
5. Age: be at least seventeen years of age;
6. Citizenship: meet no requirements as to United States citizenship;
7. Character: be of good moral character as determined by the department; and
8. Fees: pay a fee of one hundred fifteen dollars to the department for admission to a department conducted examination and for an initial license, a fee of forty-five dollars for each reexamination, a fee of seventy dollars for an initial license for persons not requiring admission to a department conducted examination, and a fee of fifty dollars for each triennial registration period.

## **Healthcare Career Pathway Occupations**

### **Certified Nursing Assistant - CNA**

#### **Summary of Occupation**

A Certified Nursing Assistant, also called a CNA, works under the supervision of a Registered Nurse, LPN, Physician Assistant, Nurse Practitioner, Medical Doctor, Resident, or other supervisory staff as designated by the healthcare facility, or supervisor. A CNA assists patients with daily living tasks and works closely with patients. A CNA is responsible for basic care services such as bed making, grooming and vital signs. A CNA may also assist doctors and nurses with medical procedures.

#### **New York CNA Certification Requirements**

CNA certificate requirements in New York State, candidates must:

- complete required course work and/ or training program;
- pass the Certified Nursing Assistant Exam<sup>1</sup>;
- submit fingerprint cards;
- certificates and will not be issued without the results of a State and federal background check coming back in good standing

<sup>1</sup> The certifying exam is administered by Prometric. Prometric is an independent testing organization authorized by the New York State Department of Health to administer the CNA exam. The exam is given in two parts. The first part is a multiple-choice exam. The second part is a practical exam, where candidates will have to show the evaluator their knowledge of skills learned.

As prescribed by federal law, the typical New York CNA certificate program:

- lasts approximately 8 to 13 weeks to gain 75 accredited hours of CNA course work; and,
- 100 hours of clinical rotation.
- Individual schools often have special requirements to begin training.
- After passing the Certified Nurse Assistant exam, certificate holders must be placed on the New York Nurse Aide Registry.

### **Required Hours for New York State CNA Certification**

In New York State, candidates are required to complete a minimum of 75 hours of CNA course work and 100 hours of clinical rotation before taking the State CNA certification exam. The nurse aide classes typically last 2-6 months. Individual schools often have special requirements to begin the training program.

### **New York CNA Certification Prerequisites**

- a current background check,
- two fingerprint cards,
- Photo ID, two photos (passport size),
- a negative TB test within the past 6 months and proof of immunizations will be required.
- a high school diploma or GED.

### **Focus group of Primary Care Occupations**

1. Physician
2. Physician Assistant
3. Nurse Practitioner
4. Certified Nurse Midwife
5. Registered Nurse
6. Licensed Practical Nurse

### **Additional Career Pathway Occupations:**

1. Home Health Aide

2. Personal Care Aide
3. Home Attendant (NYC)
4. Direct Support Professional - DSP
5. Dental Hygienist

### **Medical Records Support: Electronic Health Records (EHR)**

1. Accredited Record Technician
2. Medical Records Technician/Health Information Technician/Registered Health Information Technician
3. Health Information Manager

### **Other Key Occupations in the Healthcare Delivery System**

The following list of occupations, although not included in the original Planning Grant application submitted by New York State to HRSA, have been identified by the workgroup as occupations that will play a key role in the implementation of healthcare reform in New York State. It is the workgroup's position that each of these occupations needs to be factored into any discussions/efforts that may move the State healthcare delivery system towards a team centered approach.

1. Medical Assistants
2. Certified Diabetes Educators
3. Certified Asthma Educators
4. Social Workers
5. Nutritionists
6. Patient Navigator
7. Community Health Educators
8. Dentists
9. Dental Assistants
10. Pharmacists
11. Pharmacy Technicians
12. Physical Therapist
13. Occupational Therapist
14. Medical records personnel, particularly as it relates to electronic medical records and possible retraining
15. Radiological Technicians (diagnostic)
16. Phlebotomists

## Appendix 7 – Rules and Regulations Workgroup Report

### Key Issues

The Rules and Regulations Workgroup's primary focus was to identify Federal or State policies, rules and regulations that exist and any barriers of such which may inhibit the development of a coherent and comprehensive healthcare workforce. The charge was to make recommendations to address the challenges identified.

### A Qualified and Available Workforce

The Patient Care and Affordability Act will create new demands for primary care throughout New York State as millions are added to the number of people covered by health insurance. The Act also requires a greater emphasis on disease prevention and chronic disease management. These new realities create a demand for a larger pool of paraprofessionals and professionals to deliver primary care, as well as innovations in the way in which that care is delivered. New York will need increasing numbers of healthcare paraprofessionals and professionals in order to expand access to primary care. Local, State and federal regulations and policies can often have the unintended consequence of inhibiting the expansion of primary care delivery.

### Methodology

*Subject Matter Experts (SMEs):* The workgroup utilized *subject matter experts* in relevant occupational fields with expertise in the healthcare industry to work together in identifying rules and/or regulation issues which inhibit the expansion of the primary care workforce and to subsequently recommend potential changes.

*Conference Calls:* The workgroup communicated via conference call and email throughout the duration of the planning period. At times, they would reach out to external contacts to verify and confirm information.

### The Main Objectives

- Canvass subcommittee and workgroup members to identify any other rules, regulations and policies related to the Healthcare Workforce which prohibits future development.
- What area does the rule or regulation affect: training, education, recruitment, retention, region, certifications, licensing, specific occupation, or other.
- Identify if it is a State or federal item.
- Discuss the intent of the rule, regulation or policy and the constraints imposed. How does it inhibit the development of the primary care workforce?
- Discuss if the scope is too broad or too narrow
- Identify the severity of safety concerns, if any exist

- Research any prior attempts for regulatory relief and results/reasons for outcome
- Think out-of-the-box and write down ideas for changes and resolutions.
- Discuss the process required to change item and the proper procedure to implement a change (waiver, legislative proposal, etc.).
- Summary of highlights, challenges, recommendations for solutions, strategies and next steps, including pursuing statutory and/or regulatory relief as necessary.

## **Inventories**

Workgroup members, subject matter experts and outside contacts compiled a list of rules and regulations, which they felt inhibited training and education in the healthcare sector.

## **Challenges and Recommendations**

### **Scope of Practice**

The expansion of primary care can be impeded when healthcare personnel are unable to practice to the full extent of their credential or at the highest level of their education and training.

**Challenge # 1** - Physician Assistants are underutilized for primary care due to the fact that their charts must be co-signed by physicians.

**Challenge # 2** - Many advanced practice registered nurses, including nurse practitioners and midwives, who could provide primary care but are currently unable to do so because they are required to have a physician collaboration agreement. In many underserved areas of the state, these agreements are difficult to obtain because of the shortage of primary care doctors.

Recommendation: Convene a task force of experts to explore ways in which new regulations or rules could enable people in direct patient care fields to practice to the full extent of their education and competency. The group should consider what changes are possible while maintaining quality of care.

The task force can include qualified practitioners in the primary care fields, including advanced practice registered nurses, physician assistants, doctors, and representatives from community healthcare centers, rural healthcare facilities, the Medicaid Redesign Team and others who have experience in the expansion of work under new models of care delivery.

The requirement for a collaborative agreement was recently removed from the nurse midwife scope of practice; there should be consideration to remove or modify it for nurse practitioners.

### **Training and Education Barriers**

Some regulations are intended to ensure that healthcare personnel have the appropriate level of training needed to provide high quality care and ensure their own safety and the safety of patients. However, there are some regulations that have the unintended consequence of making it more difficult to obtain the training required to enter the field.

**Challenge # 3** - Home health aide training programs allow only 60 days from the day an individual enters the program to complete the 75 hours of training required to become a certified home health aide. This State requirement works against individuals and programs in upstate as trainees often attempt to work full-time while being trained as a home health aide.

Recommendation: Explore expanding the time limit for completion beyond 60 days, not to exceed 120 days.

**Challenge # 4** - Advanced Practice Registered Nurses (APRNs): Physician Assistants are dependent practitioners who must work under the supervision of a physician, but are allowed more clinical duties than APRNs, including Nurse Practitioners, who are independent practitioners and who currently work under a collaborative practice agreement with a physician.

Recommendation: Seek provider neutral language in statutes and regulations to allow advanced practice registered nurses to practice within their full scope and competency levels. Convene a task force to look at barriers to APRNs receiving hospital privileges and direct reimbursement for services provided to their patients.

## **Reimbursement Rules that Promote Primary Care**

Before we can isolate the challenges surrounding Primary Care reimbursement, we need to try to explain as briefly as possible, the types of reimbursement.

- Fee-for-Service is the traditional system of payment to providers in which providers are paid their costs along with a profit margin for rendering services. Under this system, a fee is charged for each service provided on a retrospective basis. This means that after the services are rendered the fee is determined as compared to a prospective, fixed rate basis commonly used by HMO's.
- Discounted Fee-For-Service is a variation of the traditional system of payment to providers in which providers agree in advance, to what they will charge for the provision of their services prior to the services being rendered. There are different methods in presenting this discount to the provider's usual and customary fee. For example, a specified discount to customary fee for services, or a bulk rate such as a package rate (services bundling), or a diagnosis related group rate based on a certain dollar amount per service or item.

Hospital's per diem payment method is an example of a prospective discounted fee-for-service where there is some transfer of utilization management responsibilities to the healthcare provider. A hospital per diem payment amount is the same regardless of the number, scope or intensity of services provided. It is a flat fee per day for services rendered.

- Capitation is a fixed dollar amount payment to providers based on a per member per month calculation. It is paid in advance for services being rendered by the provider. The capitated amount is payment for the designated services whether such services are rendered or not. This payment is the same regardless of the amount of services rendered

by the group. This method of payment puts the provider at-risk. The risk is that the provider is responsible for providing services even if the capitated amount does not cover the cost of those services. The provider must understand how much the services cost and the profit margin in relation to the capitated rate, and the estimated utilization of medical services by the patient pool provided by the HMO.

The traditional fee-for-service payment method paid providers when they provided service. In contrast, managed care pays them whether or not they see patients, though they have to see the patients when they are sick. Under managed care, physicians have more of an incentive to keep their patients well, placing a new ethical burden on physicians.

To improve quality and reduce healthcare costs various payers, such as government and private sector plans, are increasingly using incentive programs connecting payment to performance against nationally accepted and health plan standards. In addition, with consumer directed health plans, consumers use of performance indicators is predicted to increase, as consumers are encouraged through financial incentives and education to use data to select physicians and hospitals. Many believe electronic health records are essential to better clinical integration and pay for performance.

**Challenge # 5** - A fee for service reimbursement structure does not appropriately compensate primary care models that emphasize disease prevention and management, including expanded use of medical assistants and community health workers.

Recommendation A: The state should continue to monitor funding opportunities for pilot programs designed to evolve care models. New York is already making great strides in exploring alternative financing options, including the recommendations in the Medicaid Redesign Team (MRT), which will move more than 1 million customers to coordinated care models. Similarly, the MRT recommended moving all Medicaid customers to coordinated care models by 2013. Workgroup participants suggested that the state take credit for this existing work and to continue to expand on it.

Recommendation B: Many insurance companies and third party payers do not directly reimburse advanced practice registered nurses for the services provided as Centers for Medicare and Medicaid Services (CMS) does. The state should require that all third party payers provide direct reimbursement for all covered services that are provided by a qualified practitioner and not limit reimbursement to physicians only.

## Telemedicine

Telemedicine allows one physician to serve multiple communities. As an example, patients at a “spoke” hospital can consult with physicians at a “hub” hospital and/or a community hospital may link with a center of excellence that can be virtually anywhere. Furthermore, to manage chronic illnesses, patients in residential settings may see physicians without having to go to a hospital and they can be monitored at home by their primary care provider.

**Challenge # 6** - Telemedicine and reimbursement for medical services is insufficient, there are regulatory barriers and the financial resources are lacking.

**Recommendation:** Increase reimbursement to cover the cost of services; expand approved settings to include home care, outpatient clinics, and long term care facilities; and mandate that third-party payers reimburse for these services.

Eliminate onerous regulations, including duplicative credentialing requirements that create impediments to the process, State licensure requirements, malpractice coverage, and duplicative privileging processes.

## Physicians

Access to care in communities across NYS is threatened by growing physician shortages. Physician shortages are related to a high number of aging and retiring physicians, an aging patient population requiring more chronic care, and greater patient access to and demand for healthcare (a result of the ACA). All of these factors contribute to a greater demand on existing practices and hospitals. Overall, healthcare reform will not succeed without increasing the number of physicians practicing in NY, specifically in our underserved areas. Widely acknowledged by all, healthcare services in NYS face a critical shortage as we work to resolve staffing challenges. This is especially the case in rural areas.

### Summary of the Doctors Across New York Program

The Doctors Across New York (DANY) program is a State-funded initiative enacted in 2008 to help train and place physicians in a variety of settings and specialties to care for New York's diverse population. The Physician Practice Support (PPS) program under the DANY initiative provides up to \$100,000 (maximum of \$50,000 per year) in funding over a two-year period to applicants who can identify a licensed physician who has completed training and who will commit to a two-year service obligation in an underserved region within New York State. Combined with other reimbursement reform efforts, the DANY initiative has begun to address areas of the state that currently lack diverse and adequate physician services.

In 2009, 70 awards totaling \$5.4 million were filled under the Physician Practice Support Program. The 2011-12 State Executive Budget provides an additional \$4.3 million to support these awards and a second cohort of awards with a total available funding for awards for \$7.2 million over a two-year contract period.

The program has three means by which to apply for funding:

1. Practice Support to Establish or Join Practices – Individual physician applicants are eligible to apply for funds to support the costs of establishing or joining practices in underserved communities;
2. Qualified Educational Loan Repayment – Individual physician applicants are eligible to apply for funds to be used for repaying qualified educational loans as per the definition in section II that follows; and/or
3. Practice Support to Recruit New Physicians - General hospitals and other qualified healthcare providers are eligible to apply for funds to help recruit new physicians to provide services in underserved communities. Funds may be used for sign-on bonuses, income guarantees or other financial incentives or compensation *provided directly to the physician*, including for repaying qualified educational loans.

Eligibility criteria:

- You must have a connection to New York State, meaning that you either went to high school, college, medical school or completed your residency program here.
- You must have completed your residency program within the last five years.
- You cannot have received any other loan repayment funding from other sources(i.e. National Health Service Corps)

**Challenge # 6** - Rural areas of New York face some of the most difficult challenges. The average age of active physicians in rural areas is 53, with 15% over the age of 60 and only 3% under the age of 35. Recruitment is more difficult in rural areas of NYS than in other regions. The geographic location, shortage of interested candidates, and a lack of opportunities for spouses/significant others all play a role.

Recommendation: To release less rigorous requirements for the Doctors Across New York (DANY) program and to allow for additional qualified applicants in rural and underserved areas.

### **Dentists and Dental Hygienists**

The shortage of dentists is leading to poor oral health outcomes in many underserved areas. Oral healthcare is critical to both preventive care and diagnostic medicine. There is a pending public health bill (S 5210-2011) to expand the Doctors Across New York (DANY) program (see previous section) to include dentists, who would commit to practice in an underserved region.

**Challenge # 7** - Dental hygienists and assistants are unable to practice without the supervision of a dentist, which is a barrier to the expansion of basic oral healthcare.

Recommendation: Explore additional occupational titles, currently used in other states, who could practice independently and/or allow existing New York paraprofessionals, within the oral health field, to practice more independently.

### **Nursing**

**Challenge # 8** - Nurse Quality Protection Act: The lack of regulations under the Nurse Quality Protection Act is impeding transparency and improvements in quality nursing practices, as well as confusion among providers.

Recommendation: Regulations should be promulgated that mirror the National Database of Nursing Quality Indicators (NDNQI) and allow hospitals already participating in this national quality initiative to transfer their data without duplicate effort. Such regulations would also provide a mechanism for providers who cannot afford to participate in the national effort to participate at the state level more cost effectively.

**Challenge # 9** - The average age of a School of Nursing faculty is 56 years old. Currently, the pipeline needs to be filled with nurses who are educated and trained to educate future nurses.

**Recommendation:** New York State should be a leader in following the suggestions of the IOM's *Future of Nursing* report and develop rules and regulations to increase the number of baccalaureate and doctoral prepared nurses by 2020. Barriers preventing nurses and advanced practice nurses from working to the full extent of their scope of practice should be removed. NY should also support, through regulation, the notion of nurse residency programs for all pre-licensure and advanced practice degree programs or when a nurse transitions into a new clinical practice area.

### **Advanced Practice Registered Nurses including Nurse Practitioners**

**Challenge # 9** - For many terminally ill individuals, a standard part of their care includes the ability to elect Do Not Resuscitate orders (DNRs). Advanced Practice Registered Nurses are an important component of the workforce for primary care expansion, but may not write DNRs. This State regulation may impede nurse practitioners from serving as primary care givers for the terminally ill or others.

**Recommendation:** Review the standards and consider eliminating this regulation.

**Recommendation:** Loan repayment and practice support programs and other incentives to help recruit mid-level practitioners, such as nurse practitioners and physician assistants, to work in under-served areas of the state.

### **Direct Care Workers, Home Health Aides**

Direct care workers in the healthcare system are not allowed to administer medications, although direct care workers working with the developmentally disabled are allowed to administer, as are consumer-directed personal assistants in the Medicaid Consumer Directed Personal-Assistance Program.

**Challenge # 10** - The Direct Care workers in the State's ARC homes do dispense medications as stated above but they must become "med certified" before doing so. The staff RN handles the certification in-house. She must observe so many medication "pours" before the worker receives their certification. Most of the time, this translates into a small increase in hourly wage.

**Recommendation:** There is controversy on this subject. Some medical groups do not support a change in this regulation others are requesting the possibility of exploring models in other states, which have a medication aide occupational title accompanied by training, evaluation and specific oversight requirements.

**Challenge # 11** - Home health aide training programs are finding an insufficient number of sites in which to complete the Supervised Practical Training (SPT) component of the home health aide training. Federal regulations do not allow the use of a skilled nursing home. Currently, an adult day health center is the usual site

**Recommendation:** The state could identify additional specific sites and reimburse them for use. Alternatively, for those areas with shortages of home health aides, a nursing visit could

be reimbursed to enable a client's home to be used for the SPT (a patient's home can be used but a nurse needs to accompany the aide and the nursing visit is not reimbursed).

**Challenge # 12** - Registered Nurses must demonstrate they have worked in the field of home care for a year to teach home healthcare aides, limiting the availability of instructors, many of whom practice in other settings.

Recommendation: There needs to be additional research regarding the teaching requirements. We may need to consider alternative work experience or additional courses to obtain a credential for RNs to teach home healthcare aides in order to expand the pool of instructors.

**Challenge # 13** - Numerous home care programs have identified the need for additional training in the diseases and conditions of the clientele served. Many have reported additional training in falls prevention, Alzheimer's and dementias, end-of-life/hospice/palliative care, and chronic diseases (e.g., cardiac, rehab, pulmonary, etc.). However, at least 8 hours of the annual 16 hours of in-service are given to "mandated" training (e.g., HIPAA, HIV confidentiality, infection control), which leaves insufficient time for the necessary training to serve the population that now uses home care.

Recommendation: The State mandates certain components of this requirement. It has been suggested if it is changed, there may be a need to increase in-service requirements.

### **Other Healthcare Rules and Regulations**

**Challenge # 14** - When hiring professional staff, the process of credentialing for the institution is lengthy, regardless of whether the new employee is licensed and/or experienced. The delay prevents primary care professionals from entering the field.

Recommendation: The Department of Health is working on this challenge. In addition, the inclusion of the credentialing of advanced practice registered nurses should be considered for any recommendations in this area.

**Challenge # 15** - Certificate of need is a lengthy process and often delays the opening of institutions that provide primary care in underserved areas.

Recommendation: New York State is currently examining this process.

**Challenge # 16** - DOH proposed regulations require that all healthcare personnel receive influenza vaccination, however, the regulations do not have exceptions for people with food allergies, including egg allergies. The influenza vaccination is not recommended for people with egg allergies and consequently, many primary care personnel with such allergies are unable to practice.

Recommendation: Reasonable health exceptions to the influenza vaccination requirement could increase the number of healthcare professionals delivering primary care.

**Challenge # 17** - The Joint Commission and the Department of Health, despite the fact that there is significant duplication of the information collected, review healthcare facilities separately. The dual review system takes primary care staff away from patient care – reducing the hours available for primary care provision.

Recommendation: There has been progress on this item: there is now a reciprocity agreement. If the Joint Commission has accredited the facility, the Department of Health will now accept the accreditation.

## Appendix 8 - February 2011: Healthcare Panel Discussion

On February 28, 2011, the HWDS Vice-Chair, Deborah King, arranged a Healthcare Panel Discussion in New York City with health professionals to discuss various questions developed by HWDS members prior to the event.

Panelists were representatives from the following organizations:

Primary Care Development Corporation, Community Health Network of New York City, MONTEFIORE Medical Center CMO, Unite Here Health Center, NYC, The Center for Health Workforce Studies, Community Health Care Association, New York State Department of Health, New York State Department of Labor, and 1199 Service Employees International Union Training and Employment Funds and Training and Upgrading Fund.

### Highlights of the Discussion

There is a need to increase healthcare support staff in order to support primary care providers in “team” healthcare delivery models. Who (job titles) will be on the team and who can do what job duties considering Scope of Practice policies?

Healthcare training and education needs to include team based care, behavioral, and motivational segments in the curriculum. Currently, there is very little training to teach medical personnel on how to work together.

Expanding education and training capacity is a difficult proposition when considering that tuition does not cover the full cost of providing a medical education.

There are occupations, including, but not limited to, medical assistant and certified diabetes educator, which need further investigation. The first step is to define the job duties and subsequently to design acceptable and possibly standardized training curriculum. There needs to be portable and stackable credentials to offer the healthcare worker an incentive to obtain the training and education required for one occupation, but also to allow them to move laterally and to advance to the next level position.

There is a need to create an infrastructure for regional workforce planning and to create a robust talent pipeline.

## Appendix 9- Healthcare Workforce Development Subcommittee Partners

<i>Deborah King</i>	<i>Executive Director, 1199 SEIU, Training and Employment Funds Vice - Chair HWDS</i>
<i>Walter Markowitz</i>	<i>Director, Strategic Planning &amp; Program Development, North Shore Long Island Jewish Health Systems</i>
<i>Denise Brucker</i>	<i>Director of Continuing Education, Adirondack Community College</i>
<i>Denise Bukovan</i>	<i>Office of the Chancellor's Deputy for the Education Pipeline System Administration, State University of New York</i>
<i>Jean Moore</i>	<i>Director, Center for Health Workforce Studies, State University of New York, Albany, School of Public Work</i>
<i>Ed Murphy</i>	<i>Executive Director, The Workforce Development Institute, New York State AFL – CIO</i>
<i>James Knickman</i>	<i>President, Chief Executive Officer, New York State Health Foundation</i>
<i>Robert Purga</i>	<i>Supervisor, Adult Education and Workforce Development, New York State Education Department</i>
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## Appendix 10 - References

- i. [http://www.statsamerica.org/innovation/guide/practitioners\\_guide.pdf](http://www.statsamerica.org/innovation/guide/practitioners_guide.pdf)
- ii. The Healthcare Workforce in New York, 2009 Trends in the Supply and Demand for Health Workers, Released in June 2011, by the Center for Health Workforce Studies, School of Public Health, State University of New York, Albany.
- iii. Health Insurance Coverage in New York, 2008 Published, June 21, 2010. Author/Editor: Allison Cook, Emily Lawton and Danielle Holahan, Current Population Survey.
- iv. *Help Wanted: New York's Physician Shortage Continues to Worsen*, Healthcare Association of New York State's 2010 Physicians Advocacy Survey.
- v. *The Future of Nursing: Leading Change*, Advancing Health Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing at the Institute of Medicine; Institute of Medicine, October 5, 2010
- vi. Sia C, Tonniges TF, Osterhus E, Taba S (May 2004). "[History of the medical home concept](#)". *Pediatrics* **113** (5 Suppl): 1473–8. doi:10.1542/peds.113.5.S1.1473 (inactive 2010-06-24). PMID [15121914](#).
- vii. Martin JC, Avant RF, Bowman MA, et al. (2004). "The Future of Family Medicine: a collaborative project of the family medicine community". *Annals of Family Medicine* **2** Suppl 1: S3–32. doi:10.1370/afm.130. PMC [1466763](#). PMID [15080220](#).
- viii. Arnst C (2009-06-25). "[The family doctor: a remedy for health-care costs?](#)". *BusinessWeek*. [http://www.businessweek.com/magazine/content/09\\_27/b4138034173005.htm](http://www.businessweek.com/magazine/content/09_27/b4138034173005.htm). Retrieved 2009-07-11.
- ix. Backer LA (2009). "[Building the case for the patient-centered medical home](#)". *Family Practice Management* **16** (1): 14–8. PMID [19186734](#).
- x. "[Medical Home Accreditation](#)". Accreditation Association for Ambulatory Health Care. <http://www.aaahc.org/eweb/dynamicpage.aspx?webcode=mha>. Retrieved March 30, 2010.
- xi. National Committee for Quality Assurance. "[Physician Practice Connections–Patient-Centered Medical Home \(PPC-PCMH\)](#)". <http://www.ncqa.org/tabid/631/Default.aspx>. Retrieved July 14 2009.
- xii. "[Obama responds to American Academy of Family Physicians](#)". BarackObama.com. 2008-07-15. <http://my.barackobama.com/page/community/post/sultanr/gGxkpl>. Retrieved July 11, 2009.
- xiii. Fisher ES (September 2008). "Building a medical neighborhood for the medical home". *The New England Journal of Medicine* **359** (12): 1202–5.
- xiv. Ginsburg PB, Maxfield M, O'Malley AS, Peikes D, Pham HH (2008 Dec). "[Making medical homes work: moving from concept to practice](#)". *Policy Perspective* (Washington, DC: Center for Studying Health System Change).
- XV. National Partnership for Women & Families (2009-03-30). "[Unprecedented consumer principles can guide development of 'medical home' model of care](#)". Press release. [http://www.nationalpartnership.org/site/PageServer?pagename=newsroom\\_pr\\_PressRelease\\_090330](http://www.nationalpartnership.org/site/PageServer?pagename=newsroom_pr_PressRelease_090330). Retrieved 2009-07-10. "[Principles for patient- and family-centered care. The medical home from the consumer perspective](#)". 2009-03-30 [http://www.nationalpartnership.org/site/DocServer/Advocate\\_Toolkit-Consumer\\_Principles\\_3-30-09.pdf?docID=4821](http://www.nationalpartnership.org/site/DocServer/Advocate_Toolkit-Consumer_Principles_3-30-09.pdf?docID=4821). Retrieved 2009-07-10.
- xvi. Nutting PA, Miller WL, Crabtree BF, Jaen CR, Stewart EE, Stange KC (2009). "Initial lessons from the first national demonstration project on practice transformation to a patient-centered medical home". *Annals of Family Medicine* **7** (3): 254–60. doi:10.1370/afm.1002. PMC [2682981](#). PMID [19433844](#). Porter S (2009-05-13). "[TransforMED evaluators detail initial lessons from demo project. Massive practice change harder than expected](#)". *AAFP News Now*. <http://www.aafp.org/online/en/home/publications/news/news-now/practice-management/20090513t-med-eval.html>. Retrieved 2009-07-13.
- xvii. Rittenhouse DR, Shortell SM (May 2009). "The patient-centered medical home: will it stand the test of health reform?". *J Am Med Assoc* **301** (19): 2038–40. doi:10.1001/jama.2009.691. PMID [19454643](#).
- xviii. Bates D, Bitton A (April 2010). "The future of health information technology in the patient-centered medical home". *Health Affairs*.  
NCQA PCMH 2011 Standards> url =  
<http://www.familycarenetwork.com/files/NCQA%20PCMH%202011%20Standards.pdf>

- 
- <sup>i</sup> [http://www.statsamerica.org/innovation/guide/practitioners\\_guide.pdf](http://www.statsamerica.org/innovation/guide/practitioners_guide.pdf)
- <sup>ii</sup> The Healthcare Workforce in New York, 2009 Trends in the Supply and Demand for Health Workers, Released in June 2011, by the Center for Health Workforce Studies, School of Public Health, State University of New York, Albany.
- <sup>iii</sup> Health Insurance Coverage in New York, 2008 Published, June 21, 2010. Author/Editor: Allison Cook, Emily Lawton and Danielle Holahan, Current Population Survey.
- <sup>iv</sup> *Help Wanted: New York's Physician Shortage Continues to Worsen*, Healthcare Association of New York State's 2010 Physicians Advocacy Survey.
- <sup>v</sup> *The Future of Nursing: Leading Change*, Advancing Health Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing at the Institute of Medicine; Institute of Medicine, October 5, 2010
- <sup>vi</sup> Sia C, Tonniges TF, Osterhus E, Taba S (May 2004). "History of the medical home concept". *Pediatrics* **113** (5 Suppl): 1473–8. doi:10.1542/peds.113.5.S1.1473 (inactive 2010-06-24). PMID [15121914](#).
- <sup>vii</sup> Martin JC, Avant RF, Bowman MA, et al. (2004). "The Future of Family Medicine: a collaborative project of the family medicine community". *Annals of Family Medicine* **2 Suppl 1**: S3–32. doi:10.1370/afm.130. PMC [1466763](#). PMID [15080220](#).
- <sup>viii</sup> Arnst C (2009-06-25). "The family doctor: a remedy for health-care costs?". *BusinessWeek*. [http://www.businessweek.com/magazine/content/09\\_27/b4138034173005.htm](http://www.businessweek.com/magazine/content/09_27/b4138034173005.htm). Retrieved 2009-07-11.
- <sup>ix</sup> Backer LA (2009). "Building the case for the patient-centered medical home". *Family Practice Management* **16** (1): 14–8. PMID [19186734](#).
- <sup>x</sup> "Medical Home Accreditation". Accreditation Association for Ambulatory Health Care. <http://www.aaahc.org/eweb/dynamicpage.aspx?webcode=mha>. Retrieved March 30, 2010.
- <sup>xi</sup> National Committee for Quality Assurance. "Physician Practice Connections–Patient-Centered Medical Home (PPC-PCMH)". <http://www.ncqa.org/tabid/631/Default.aspx>. Retrieved July 14 2009.
- <sup>xii</sup> "Obama responds to American Academy of Family Physicians.". BarackObama.com. 2008-07-15. <http://my.barackobama.com/page/community/post/sultanr/gGxkpL>. Retrieved July 11, 2009.
- <sup>xiii</sup> Fisher ES (September 2008). "Building a medical neighborhood for the medical home". *The New England Journal of Medicine* **359** (12): 1202–5.
- <sup>xiv</sup> Ginsburg PB, Maxfield M, O'Malley AS, Peikes D, Pham HH (2008 Dec). "Making medical homes work: moving from concept to practice". *Policy Perspective* (Washington, DC: Center for Studying Health System Change).
- <sup>xv</sup> National Partnership for Women & Families (2009-03-30). "Unprecedented consumer principles can guide development of 'medical home' model of care". Press release. [http://www.nationalpartnership.org/site/PageServer?pagename=newsroom\\_pr\\_PressRelease\\_090330](http://www.nationalpartnership.org/site/PageServer?pagename=newsroom_pr_PressRelease_090330). Retrieved 2009-07-10. "Principles for patient- and family-centered care. The medical home from the consumer perspective". 2009-03-30 [http://www.nationalpartnership.org/site/DocServer/Advocate\\_Toolkit-Consumer\\_Principles\\_3-30-09.pdf?docID=4821](http://www.nationalpartnership.org/site/DocServer/Advocate_Toolkit-Consumer_Principles_3-30-09.pdf?docID=4821). Retrieved 2009-07-10.
- <sup>xvi</sup> Nutting PA, Miller WL, Crabtree BF, Jaen CR, Stewart EE, Stange KC (2009). "Initial lessons from the first national demonstration project on practice transformation to a patient-centered medical home". *Annals of Family Medicine* **7** (3): 254–60. doi:10.1370/afm.1002. PMC [2682981](#). PMID [19433844](#). Porter S (2009-05-13). "TransforMED evaluators detail initial lessons from demo project. Massive practice change harder than expected.". *AAFP News Now*. <http://www.aafp.org/online/en/home/publications/news/news-now/practice-management/20090513t-med-eval.html>. Retrieved 2009-07-13.
- <sup>xvii</sup> Rittenhouse DR, Shortell SM (May 2009). "The patient-centered medical home: will it stand the test of health reform?". *J Am Med Assoc* **301** (19): 2038–40. doi:10.1001/jama.2009.691. PMID [19454643](#).
- <sup>xviii</sup> Bates D, Bitton A (April 2010). "The future of health information technology in the patient-centered medical home". *Health Affairs*.
- <sup>xix</sup> NCQA PCMH 2011 Standards <http://www.familycarenetwork.com/files/NCQA%20PCMH%202011%20Standards.pdf>