

Project Narrative

INTRODUCTION

The health care sector in Massachusetts is one of the most critical drivers of the economy. Health care leads the state as an employment base, a source of hiring, a driver of research and innovation, and projected job growth. In addition, this sector supports the overall health and well being of our residents. Several major national and state policy changes will drive the continued need to expand and prepare the health care workforce in our state. National and state health reform, the aging of the state's population, and the implementation of electronic medical records systems across all health care providers will dramatically impact hiring demands, skill/competency requirements and unmet health care needs across the state in ways not previously experienced.

As a state, the major health care stakeholders – government, industry, health care workers and non-profits – have agreed to participate in planning grant activities based on a stated need to build a unified, statewide workforce plan for the health care sector. Without this type of planning and coordination, the state will fail to attract and grow quality health care professionals at a pace consistent with the demand by the industry. And, without a well-educated and robust health care workforce, we risk more serious impacts on the health conditions of our most vulnerable populations.

NEEDS ASSESSMENT

The health care workforce is a critical component of the Massachusetts economy. Two major areas of need will drive the development of an implementation plan for the state. First, shifts and changes within the health care industry due to national and state health care reform will have a major impact on demand for health care professional ALs. The size of the sector and the regular vacancies that exist within the sector today demonstrate a need to increase the “supply” pipelines for critical shortage occupations. Second, the quality of care and the pockets of under-served populations present additional need for workforce strategies to shore up the health care workforce across the state.

The information in this section documents both (1) the significance of the health care sector in terms of size, occupations, and hiring demand and (2) the characteristics of unmet need and health disparities for the state.

Labor Force Needs

▪ Industry Base

The Massachusetts economy is dependent upon the health care sector as an employment base and growth sector. In May 2010 (CES-790 series), the Health Services and Education sector is reported as the largest employment sector in Massachusetts with over 660,000 people working in both sub-sectors. The sub-sector of Health Care and Social Assistance employs nearly 500,000 people of the 600,000.

Within the health care sector, certain occupations employ the greatest number of individuals and exhibit the most number of vacancies (next section). The following health care occupations employ the most people (across health care settings). The expansion of education and training pathways, licensing and certification in these occupations is a critical need for the state as we think about the expansion of health care services for the aging population and the retirement patterns within these fields.

Table 1: Top 20 Health Care Employment by Occupation

| Job Title | Employment Count |
|--|-------------------------|
| Registered Nurses | 83,060 |
| Nursing Aides, Orderlies, and Attendants | 42,630 |
| Home Health Aides | 17,570 |
| Licensed Practical and Licensed Vocational Nurses | 16,780 |
| Medical Assistants | 12,770 |
| Physicians and Surgeons, All Other | 8,950 |
| Medical and Clinical Laboratory Technicians | 7,480 |
| Pharmacy Technicians | 6,920 |
| Pharmacists | 6,560 |
| Medical and Clinical Laboratory Technologists | 6,540 |
| Dental Assistants | 6,450 |
| Physical Therapists | 6,320 |
| Emergency Medical Technicians and Paramedics | 6,310 |
| Radiologic Technologists and Technicians | 6,290 |
| Dental Hygienists | 5,890 |
| Medical Records and Health Information Technicians | 5,800 |
| Occupational Therapists | 3,870 |
| Healthcare Support Workers, All Other | 3,350 |
| Internists, General | 3,200 |
| Veterinary Technologists and Technicians | 3,140 |

Source: OES – May 2009

A key need for Massachusetts is the development of statewide data on the professionals currently licensed or certified within these occupations. The Massachusetts Department of Health, several Boards of Registration, and several other stakeholder groups have drafted uniform surveys to administer with health care professionals who renew their licenses on-line. *A key goal for the planning grant* will be to review existing efforts to collect data on the current workforce and support activities to achieve a statewide data collection process, using North Carolina's approach as a model.

▪ **Job Vacancies in Health Care**

Massachusetts developed a statewide Job Vacancy Survey beginning in 2002. Currently, we survey over 10,000 businesses in the state and ask them to record hiring demand by occupation. This tool will play a key role in the planning grant activities to further document hiring and expansion needs in the health care workforce. The Executive Office of Labor and Workforce Development, which publishes the survey, will work with the Department of Public Health and other key agencies that maintain data on the health care workforce to align the vacancy data with baseline data on the health care workforce to include in a dashboard tool for health care occupations (*prototype in Attachment 8 – discussed in more detail in next section*).

Since the beginning of the survey, RNs have topped the list of the most number of vacancies (2,769 in the 4th quarter of 2009) and have exhibited some of the highest vacancy rates compared to all other occupations (health or non-health). The table below shows the vacancy counts and vacancy rates for health care occupations recorded in the 4th quarter 2009 survey. In general, a significant number of health care positions have continued to post vacancies throughout the recessionary time frame, and more importantly have shown persistent job vacancies pre and post recession.

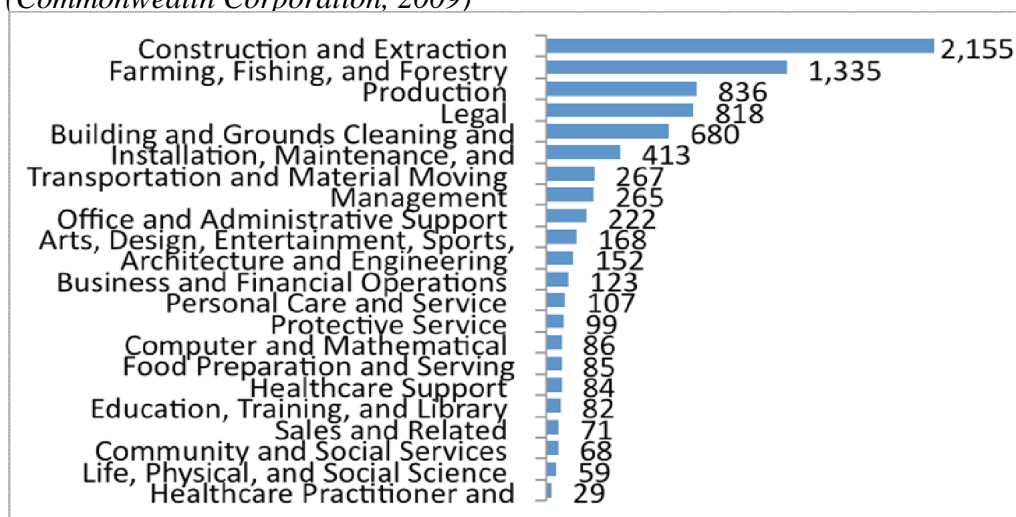
Table 2: Health Care Practitioner and Support Job Vacancies (JV) – 4th Quarter, 2009

| SOC Title | Vacancies | JV Rate 4Q09 |
|---|-----------|--------------|
| HEALTHCARE PRACTITIONER OCCUPATIONS | | |
| Registered Nurses | 2769 | 3.5% |
| Licensed Practical & Licensed Vocational Nurse | 422 | 2.5% |
| Physical Therapists | 366 | 5.8% |
| Medical and Clinical Lab Technologist | 177 | 2.3% |
| Occupational Therapists | 151 | 3.8% |
| Veterinary Technologists & Technicians | 139 | 5.8% |
| Radiologic Technologists & Technicians | 137 | 2.1% |
| AO Health Diagnosing & Treatment Practitioner | 135 | na |
| Speech-Language Pathologists | 130 | 4.6% |
| Emergency Medical Technician & Paramedic | 122 | 2.0% |
| Pharmacy Technicians | 98 | 1.5% |
| Medical & Clinical Lab Technicians | 95 | 1.4% |
| Medical Records & Health Information Technician | 95 | 1.7% |
| Diagnostic Medical Sonographers | 91 | 9.3% |
| Physician Assistants | 85 | 3.4% |
| Dietetic Technicians | 80 | 4.4% |
| Surgical Technologists | 70 | 3.2% |
| AO Physicians & Surgeons | 64 | na |
| Dentists, General | 63 | 2.8% |
| Respiratory Therapists | 60 | 2.6% |
| Pharmacists | 52 | 0.8% |
| AO Healthcare Practitioner & Technical Workers | 52 | n/a |
| Family and General Practitioners | 43 | 2.7% |

| SOC Title | Vacancies | JV Rate 4Q09 |
|---|-----------|--------------|
| Internists, General | 30 | 1.1% |
| Cardiovascular Technologists & Technicians | 30 | 2.5% |
| Dietitians and Nutritionists | 26 | 1.5% |
| Psychiatrists | 23 | 2.6% |
| Veterinarians | 22 | 1.7% |
| Occupation Health & Safety Specialist | 16 | 1.4% |
| Recreational Therapists | 16 | 1.6% |
| AO Health Technologist & Technician | 13 | n/a |
| Radiation Therapists | 13 | 3.6% |
| HEALTH CARE SUPPORT OCCUPATIONS | | |
| Nursing Aides, Orderlies, & Attendants | 1705 | 4.0% |
| Home Health Aides | 724 | 4.2% |
| Medical Assistants | 285 | 2.4% |
| AO Healthcare Support Workers | 208 | n/a |
| Dental Assistants | 203 | 2.9% |
| Psychiatric Aides | 81 | 1.1% |
| Medical Equipment Preparers | 73 | 6.6% |
| Physical Therapist Assistants | 51 | 2.2% |
| Veterinary Assistants & Lab Animal Caretakers | 45 | 3.0% |
| Massage Therapists | 41 | 4.1% |
| Occupational Therapist Assistants | 37 | 3.2% |
| Physical Therapist Aides | 18 | 2.1% |

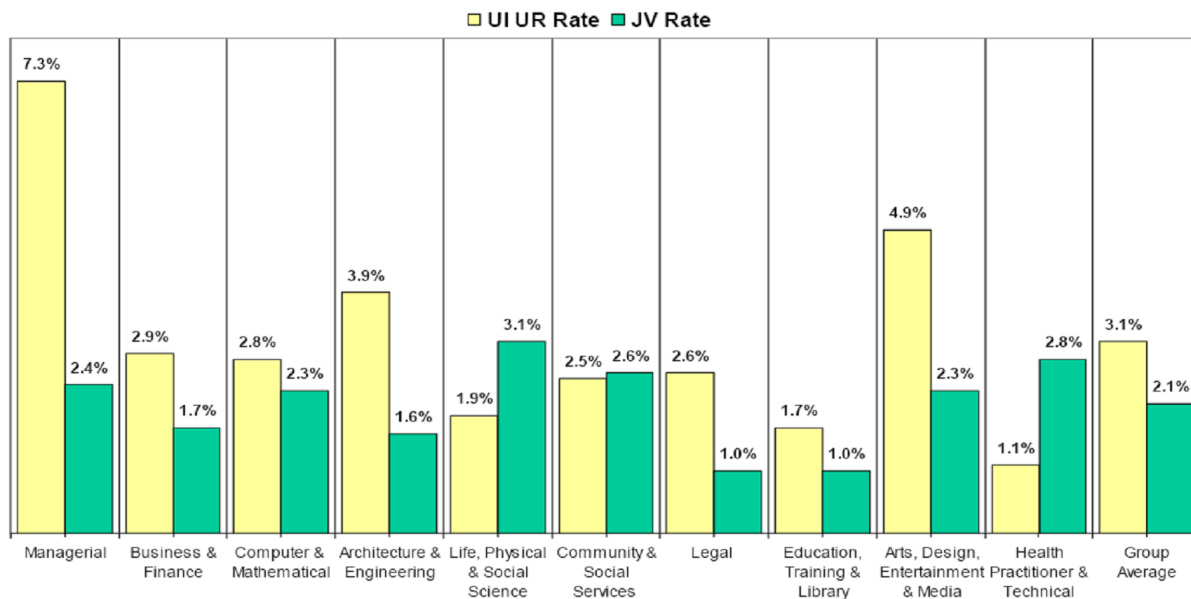
To get a better trend line on the types of occupations that face shortages of qualified professionals, Massachusetts compares job vacancies against the number of unemployment insurance claimants with work experience in the occupations (Table 3). The area with the greatest demand and least supply (at the bottom of the list) is healthcare practitioners with 69 unemployed claimants for every 100 job vacancies.

Table 3: Number of Unemployment Insurance Claimants for Every 100 Vacancies
(Commonwealth Corporation, 2009)



Looking across all industries, the health care sector consistently shows a constriction on the supply of qualified professionals compared to demand. During the 4th quarter of 2009, job vacancy rates exceeded unemployment rates in 3 of 10 professional and technical occupational groups: Life, Physical and Social Sciences; Community and Social Services and Health Practitioner and Technical (Table 4).

TABLE 4: COMPARISON OF JOB VACANCY RATES AND UI RATES:



Source: Massachusetts Department of Workforce Development

4th Quarter 2009 Job Vacancy Report A-19

■ Projections

The Massachusetts economy is expected to generate 216,650 new jobs between 2006 and 2016. An additional 768,330 job openings will result from the need to replace workers who retire, change industries or change occupations. In total nearly one million jobs will need to be filled by 2016. One of the fastest growing industry sectors in Massachusetts is Health and Educational services with Health Care accounting for 64,630 jobs during the 2006 -2016 cycle¹. Registered nurses (RNs) dominate all other occupations among healthcare professionals. There are 70,838 FTE RNs employed in Massachusetts with 52% employed in hospitals.² While the focus is often on new job growth, it is important to remember that most job openings will be the result of replacement demand and not growth. In fact, nearly 78% of the nearly one million projected net new job openings statewide will occur because of replacement associated with retirement, labor force withdrawal and occupational changes. For example, total projected new openings for

¹Massachusetts Executive Office of Labor and Workforce Development. (May 2009). LMI Profile: Annual Profile for Massachusetts

² HRSA Massachusetts Survey of RNs and BORN 2008 data : Craig Moore

registered nurses are expected to be 29,050 with 12,940 replacement jobs and 16,110 new jobs by 2010.³

As mentioned in the previous section, a key goal for the planning grant is to assist the Massachusetts Department of Public Health and its agencies to expand data collection on the existing workforce, including age demographics in order to predict retirement patterns.

Unmet Needs/Health Disparities

The Department of Public Health (DPH) monitors and analyzes the Commonwealth's unmet health needs and priority populations. **Attachment 7** contains an in-depth analysis of factors reviewed by the DPH. Based on this information, the Department outlined several characteristics unique to Massachusetts that impact quality of care and unmet health needs:

- The economic concerns that accompany living in a relatively affluent and densely populated state, particularly for those who are at or near the Federal Poverty Level
- A population that includes diverse racial, linguistic and cultural (REL) groups and the complexities of providing comprehensive primary care services for these groups
- Health disparities in urban and rural communities are particularly evident as a result of barriers to primary and preventive health care services, particularly Health Professional Shortage Areas (HPSA) with large REL populations. These HPSAs also include other groups with disparate health outcomes, including those who are Gay, Lesbian, Bi -sexual, Transgender (GLBT), those with disabilities, including mental/behavioral health care disabilities and who experience barriers to primary care services.
- Massachusetts target communities include HPSAs with large REL populations and rural HPSAs
- Issues of identifying primary care providers, and specifically those who will provide care in the targeted federally designated Health Professional Shortage Areas (HPSA) when statewide data describe a density of health care professionals and
- Access to a sufficient number of health care providers in the midst of ongoing comprehensive health care reform that is taking place in MA.

METHODOLOGY

The basic methodology for the planning grant in order to meet the expectations of the grant announcement is outlined below. We intend to form our statewide partnership by establishing a new committee of the Massachusetts Workforce Investment Board called the Healthcare Advisory Committee. This committee will contain the leadership of the required partners plus additional leaders from key health care industry groups and several major existing healthcare organizing efforts or collaborations in the state.

There are several existing collaborations that each include 10 – 20 stakeholders from government, private and non-profit sectors. The Directors or Chairs of the most significant collaborations are seated on the Committee and are described in more detail below (referenced in

³ Massachusetts Executive Office of Labor and Workforce Development. (May 2009). LMI Profile: Annual Profile for Massachusetts

the Project Organizational Chart - Attachment 6). Thus, this Committee will “link” all of the key stakeholder organizations in the state.

- **Primary Care Workforce:** Represented by the Department of Public Health’s Workforce Center (focused on physicians, nursing, dentistry, behavioral health specialists etc.) and eight Boards of Registration
- **Nursing and Allied Health Workforce:** Represented by the Department of Higher Education’s Nursing Pipeline Initiative and Boston Allied Health Initiative
- **Long-Term Care Workforce:** Represented by the Extended Career Ladder Initiative Advisory Board
- **Health Information Technology:** Represented by the Massachusetts Health Information Technology Council

The current membership list (based on submitted letters of commitment in Attachment 5) for the new Committee of the MWIB are included in the table below. The Advisory Committee will be led by the Executive Office of Labor and Workforce Development, Executive Office of Housing and Economic Development, and the Executive Office of Education/Department of Higher Education supported by staffing through the Commonwealth Corporation as grant administrator and one or more consultants.

| Organization | Healthcare Advisory Council Member (Required Members in Bold) |
|--|--|
| State’s Workforce Investment Board | Joseph Bevilacqua, Co Chair Governor, Co Chair |
| Health care employer | Joanne Pokaski, Beth Israel Deaconess Medical Center |
| Labor Organization | Harneen Chernow, Massachusetts Director 1199SEIU Training & Upgrading Fund |
| Public 2 year institution | David Hartleb, President Northern Essex Community College |
| Public 4 year institution | Thomas D. Manning, Deputy Chancellor, Commonwealth Medicine, UMass Medical School Patricia Meservey, President, Salem State College |
| State Federation of Labor | Robert Haynes, President MA AFL-CIO |
| State public secondary education agency | Commissioner Mitchell Chester Department of Elementary and Secondary Education |
| State P-20 Council | Secretary Paul Reville Executive Office of Education |
| Philanthropic Organization | Jill Lacey Griffen, Director of Programs Boston Foundation |
| Higher Education Nursing Initiative | Commissioner Richard Freeland Department of Higher Education |

| Organization | Healthcare Advisory Council Member (Required Members in Bold) |
|--|--|
| Employer Association | Lisa Gurgone, Executive Director MA Council for Home Care Aide Services |
| Employer Association | Carolyn Blanks, Executive Director Massachusetts Senior Care Foundation |
| State workforce agency | Secretary Joanne F. Goldstein Executive Office of Labor and Workforce Development |
| State Health and Human Service Agency | Jean McGuire, Assistant Secretary Executive Office of Health and Human Services |
| Commonwealth Corporation and Long-Term Care Advisory Group | Nancy Snyder, President Commonwealth Corporation |
| State public health agency (sent) and DPH Health Care Workforce Center | Julia Dyck, Director, Primary Care Office Department of Public Health |
| State Economic Development agency | Secretary Gregory Bialecki Executive Office of Housing and Economic Development |
| State organization on Health Information Technology | Glen Comiso MA Tech Collaborative/ E-Health Institute |
| Statewide health care industry organization (sent) | Linda Cragin, Director Mass AHEC <i>(included on letter from Umass Medical School)</i> |

The Committee will complete the following tasks.

- 1) **Analyze baseline and benchmark data** on the primary care workforce. Information on the existing health care workforce and projected hiring demand is currently available from multiple, disparate sources. The Advisory Committee will review available data and build out a statewide health care “dashboard” to build agreement on priority shortages and workforce solutions to identify in the implementation plan. The prototype of a dashboard tool in **Attachment 8** is an example of the type of tool we need to develop and use across all major stakeholder groups. We will develop baseline data and information in the following areas:
 - **Existing Workforce:** The Advisory Committee will work with Department of Public Health and its agencies to gather existing data sets on licensed professions and the current survey tools used to profile licensed health care professions. We will look at professions where we cannot currently profile the existing workforce and develop implementation steps to address these gaps.
 - **Hiring Demand:** The Advisory Committee will review the existing Massachusetts Job Vacancy Survey to identify ways to improve the tool and the ability to use existing data on detailed occupations and employers reporting from the survey to better understand statewide and regional hiring demand.

- **Supply:** Working with higher education partners, the Advisory Committee will develop a method to review existing data on graduates from public and private higher education institutions for high priority or shortage occupations. Currently, the Board of Nursing Registration, the Department of Higher Education and other agencies use the national data system called the Integrated Post-Secondary Education Data System (IPEDS) to review trends for nursing graduates. The Committee will develop data for additional occupations to populate the Dashboard Tool.

Using baseline data, the Advisory Committee will integrate data sets to build a model that can track and predict shortage occupations.

- 2) **Prioritize and agree on shortages in the primary care workforce** by occupation as the centerpiece of our statewide implementation plan.
- 3) **Review analyses from existing healthcare organizing efforts and key recommendations on solving workforce shortages.** Leadership from the organizing efforts below (at a minimum) will be included in the Advisory Committee:
 - i. **Primary Care Workforce:** Represented by the Department of Public Health's Workforce Center (focused on physicians, nursing, dentistry, behavioral health specialists etc.) and eight Boards of Registration
 - ii. **Nursing and Allied Health Workforce:** Represented by the Department of Higher Education's Nursing Pipeline Initiative and Boston Allied Health Initiative
 - iii. **Long-Term Care Workforce:** Represented by the Extended Career Ladder Initiative Advisory Board
 - iv. **Health Information Technology:** Represented by the Massachusetts Health Information Technology Council
- 4) **Integrate existing recommendations and draft new recommendations** as part of a unified statewide implementation plan to expand the primary care workforce by ten to twenty-five percent. The planning grant activities, if successful, will allow Massachusetts to apply for implementation funding at the end of the grant. The statewide implementation plan directly responds to a recent request from Governor Patrick to the Executive Offices of Education, Labor and Workforce Development, and Housing and Economic Development to create a statewide workforce plan for the healthcare pipeline through increased educational pipelines.
- 5) **The Healthcare Advisory Committee will draft a statewide implementation plan** that identifies solutions to major primary care workforce shortages prioritized by the Committee. The Committee will focus on the following strategic framework to develop solutions to workforce shortages. This framework will be modified based upon the discovery and discussion process through the Committee.
 - **Increase the pipeline of youth interested in health care careers:**
 - Articulate the higher education academic and health care industry skill standards for high school graduation, for entry into postsecondary education, and for various credentials and licensure. Provide information to network of Guidance Counselors across Massachusetts.

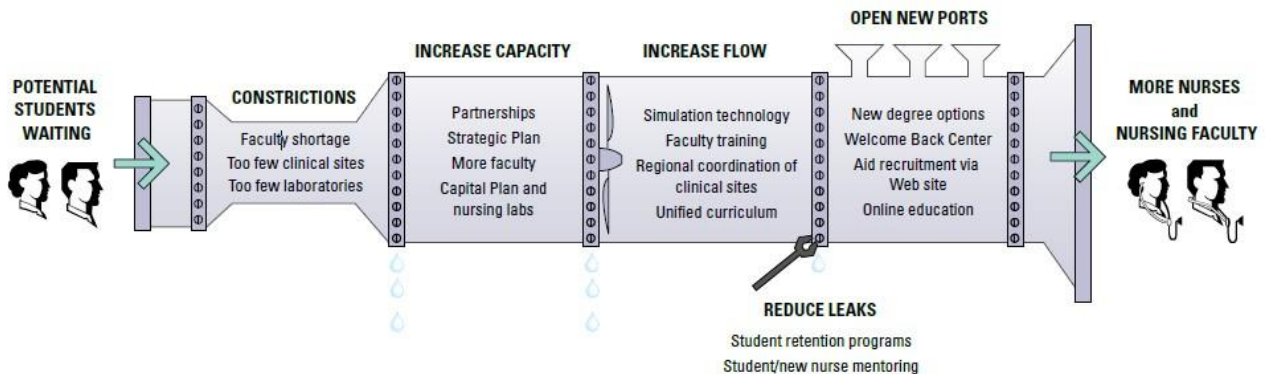
- **Increase current “graduation” capacity of higher education and training providers by increasing:**
 - Access to “health care” road maps for potential students to understand the higher education requirements for specific health care careers
 - Seat capacity in healthcare programs
 - Student retention/graduation rates in healthcare programs
 - The number of faculty in health care programs in higher education (e.g. nursing)
 - Transitions across higher education programming through a redesign of curricula (i.e. no repetition and dual enrollment processes) and a alignment of curricula with competency requirements of employers
 - Clinical placements/required on-the-job training
 - Strategic use of financial aid (loan forgiveness programs at Massachusetts Department of Public Health, the Massachusetts Education Rewards Grant program, Pell Grants, Individual Training Accounts through the Workforce Investment Act/TRADE/NEGs etc.)
- **Increase strategic use of financial assistance and grant resources:**
 - Identify ways to target education and training funding through Executive Office of Labor and Workforce Development to shortage areas as appropriate (Workforce Training Fund, state funded “sector” grants, Individual Training Accounts through the Workforce Investment Act/TRADE/NEGs etc.)
 - Work with Department of Public Health to ensure maximum use of existing loan forgiveness programs.
 - In addition, the statewide Implementation Plan will identify workforce strategies and initiatives in Massachusetts that are under resourced and need to be funded in order to expand the health care workforce. For example, the strategies articulated by the Nursing Initiative under the Department of Higher Education to increase nursing faculty, centralize clinical placements, and build out core competencies for curriculum are currently not funded at sufficient levels for maximum impact.
- **Assist dislocated workers to “remap” to health care sector:**
 - Recommend higher education curriculum that allows individuals with education and training in other sectors or fields to “remap” to healthcare shortage areas. Example: Information Technology to Health Information Technology.
 - The Advisory Committee will look at existing Department of Labor tools, such as the competency models (<http://www.careeronestop.org/CompetencyModel/learnCM.aspx>) and occupational “cross walk” tools through ONET to identify occupations that can map to health care occupations. Minnesota’s Job Skills Transfer Assessment Tool (JobStat) is a good tool that allows an individual to map their work history to other occupations. The tool evaluates the skill, knowledge and ability attributes of the person as described by their work experience, and returns a ranked list of alternative occupations that the individual may be qualified for.

<http://www.positivelyminnesota.com/apps/lmi/ota/OccupationSelectA.aspx?ES=Y&EST=portable+skills>

- **Identify Federal or State policy barriers** to developing a coherent and comprehensive health care workforce development strategy and a plan to resolve these barriers . The Advisory Committee will utilize the expertise of the members and the work completed by existing collaborations to identify and organize the federal and state policy barriers that have restricted the supply of health care professionals. For some of our largest shortages of health care professions in primary care, existing health care collaborations have identified the major barriers. In Certified Nursing Assistants/Long Term Care the wage rates set by state and federal policy affect the attractiveness of health care jobs in this industry. For the Nursing profession, the Nursing Initiative has identified federal and state requirements on teaching faculty certification, clinical placements and the lack of curriculum alignment as significant barriers to expansion. They have documented and created strategies to address these barriers.

MASSACHUSETTS HIGHER EDUCATION AND THE NURSING SHORTAGE

Expanding the Nursing Education Pipeline



WORK PLAN

| Activities | Timeline (Grant Start: Sept 2010) | Responsibility |
|---|---|--|
| Analyze baseline and benchmark data – completed “dashboard” framework | Complete Dashboard Framework: Dec 2010 | Completed Draft of tool. Advisory Committee, consultant to ensure on-time delivery of the framework |
| <i>Outline prototype for a statewide “dashboard”</i> | <i>Sept 2010 to Oct 2010</i> | <i>Advisory Committee, staffed by Executive Office of Labor and Workforce and the Commonwealth Corporation</i> |
| <i>Identify required data sources (available) and populate dashboard</i> | <i>Sept 2010 to Nov 2010</i> | <i>Same as above.</i> |
| <i>Identify required data sources (unavailable) and populate dashboard. Review DPH surveys of licensed professionals.</i> | <i>Sept 2010 to Sept 2011 (beyond)</i> | <i>Same as above. The following organizations will work with staff to develop unavailable data:</i> <ul style="list-style-type: none"> • <i>Dept of Public Health</i> • <i>Board of Registration in Dentistry</i> • <i>Board of Registration in Nursing</i> • <i>Board of Registration of Genetic Counselors</i> • <i>Board of Registration of Nursing Home Administrators</i> • <i>Board of Registration of Perfusionists</i> • <i>Board of Registration of Pharmacy</i> • <i>Board of Registration of Physician Assistants</i> • <i>Board of Respiratory Care</i> |
| <i>Integration of data sets to “predict” shortages.</i> | <i>Nov 2010 to Dec 2010</i> | <i>CommCorp, Consultant with input from Advisory Committee</i> |
| Prioritize and agree on shortages in the primary care workforce– discussion with the Committee | Jan 2011 | Advisory Committee, Commonwealth Corporation to design facilitated discussion |
| <i>Report out to MWIB on occupations prioritized as shortages</i> | <i>Q1CY11</i> | <i>MWIB Chairs, secure on agenda</i> |
| Review presentations from existing healthcare | Oct 2010 to Dec 2010 | Consultant will review existing collaborations and |

| Activities | Timeline (Grant Start: Sept 2010) | Responsibility |
|--|--|---|
| organizing efforts and key recommendations on solving workforce shortages. | | <i>design meeting agendas with reports from DPH Primary Care Office and Health Care Center, Nursing Initiative, ECCLI, HIT, etc.</i> |
| | | |
| Draft Statewide Plan (using strategic framework) | Completed draft by July 2011 | Commonwealth Corporation/Consultant with Secretariat support. |
| Strategy: Increase the pipeline of youth interested in health care careers: | | |
| <ul style="list-style-type: none"> • <i>Articulate the higher education academic and health care industry skill standards for high school graduation, for entry into postsecondary education, and for various credentials and licensure. Provide information to network of Guidance Counselors across Massachusetts.</i> • <i>Recommended steps to disseminate to students</i> <ul style="list-style-type: none"> • <i>No-cost, short-term (immediate action)</i> • <i>Identify resources required to implement</i> | <ul style="list-style-type: none"> • <i>Mapping of key licensing, certifications, entry-level college requirements drafted for each shortage area. (May 2011)</i> | <ul style="list-style-type: none"> • <i>Commonwealth Corporation and Consultant will drive activity with Advisory Committee members to map job entry requirements using existing DOL tools/resources and information for state agencies</i> • <i>Advisory Committee working with Department of Elementary and Secondary Education on dissemination to guidance counselors</i> |
| Strategy: Design implementation steps to increase current “graduation” capacity of higher education and training providers: | | |
| <i>Organize and integrate existing recommendations from statewide collaborations</i> | <ul style="list-style-type: none"> • <i>January 2010</i> | <i>Consultant (review existing reports and organize recommendations to expand graduation capacity for primary care and allied health occupations for review and adoption by Advisory Committee)</i> |
| <i>Identify additional implementation steps through Advisory Committee.</i> | <ul style="list-style-type: none"> • <i>Feb 2011 to Aug 2011</i> | <i>Consultant</i> |
| Strategy: Assist dislocated workers to “remap” to health care sector: | | |
| <i>Analysis of health care occupations that “cross walk” to non-health care occupations based on skill sets.</i> | <i>Oct 2010 to Feb 2011</i> | <i>Executive Office of Labor and Workforce Development and Department of Higher Education lead analysis (utilize existing tools from USDOL)</i> |
| <i>Recommend higher education curriculum that</i> | <i>March 2011</i> | <i>Department of Higher Education with support from</i> |

| Activities | Timeline (Grant Start: Sept 2010) | Responsibility |
|--|--|--|
| <i>allows individuals with education and training in other sectors or fields to “remap” to healthcare shortage areas. Example: Information Technology to Health Information Technology.</i> | | <i>consultant</i> |
| Strategy: Increase strategic use of financial assistance and grant resources: | | |
| <i>Identify ways to target education and training funding through Executive Office of Labor and Workforce Development to shortage areas, as appropriate</i> | <i>March 2011</i> | <i>Executive Office of Labor and Workforce Development to lead discussion with Advisory Committee</i> |
| <ul style="list-style-type: none"> <i>Work with Massachusetts Education Finance Agency to analyze existing financial aid sources and expenditure of aid by course of study.</i> <i>Department of Public Health to ensure maximum use of existing loan forgiveness programs. Review data on loan recipients by occupation, area etc against vacancies (RNs, etc).</i> | <i>March 2011</i> | <i>Department of Public Health to lead discussion with Advisory Committee</i> |
| <i>Identify workforce strategies that are under-resourced or unfunded and proven to increase the supply of workers for shortage areas.</i> | <i>June/July 2011</i> | <i>Consultant prepares information for review with full Advisory Committee</i> |
| Review and Presentation of Final Implementation Plan to Governor and MWIB | August/September Board Meeting | MWIB Chairs/ Consultant (preparation and scheduling) Presentation made by Advisory Committee members. |

RESOLUTION OF CHALLENGES

The most significant challenges anticipated in the planning grant include the following issues and potential solutions.

| Issue | Strategy |
|--|---|
| Many stakeholders, potential for too many agendas and desired outcomes. | <ul style="list-style-type: none"> • The statewide plan is required to focus on a clear goal of increasing the health care workforce by 10 to 25 percent will focus the Advisory Committee. • All working meetings and agendas will focus on data needs or strategies that create expansion in the workforce. |
| Pre-existing health care collaborations, turf issues. | <ul style="list-style-type: none"> • The Advisory Committee is set up to convene and integrate the recommendations of existing collaborations . See Project Organizational Chart. • It will not eliminate the work of existing collaborations but instead serve as a clearinghouse and elevate recommendations into one plan to be presented to the Governor and key leadership in the state. <i>(Several collaborations have produced good work, but it has not been heard by decision-makers.)</i> |
| <p>Tendency to form too many working groups.</p> <p>Loss of time in setting up meetings or starting from scratch by redefining the problem at each meeting</p> | <ul style="list-style-type: none"> • EOLWD, CommCorp and a consultant hired through the planning grant resources will use the basic “strategy framework” described in the methodology section to design agendas and prepare materials for decision points at Advisory Group Meetings (1 x month). • We will use sub-group meetings via phone conference or email (pulling experts on key subjects) for issues that cannot be resolved by the Advisory Committee. • The Advisory Committee will “kick back” issues to the expert collaborators as required for deeper analysis or vetting with additional stakeholders. |

EVALUATION AND TECHNICAL SUPPORT CAPACITY

Grant Outcomes

The Massachusetts Healthcare Advisory Group will work with HRSA to adopt appropriate performance benchmarks for the grant. Our key deliverables and performance indicators will include the following:

- Design and **Adoption of a Healthcare “Dashboard”** that includes key data elements on the existing workforce, hiring demand, and supply of new professionals. We intend to refine the prototype through the course of the planning activities. Many existing health care initiatives and collaborations have tried to develop a similar tool but do not “own” all of the data to build a supply-demand model.
- A **Statewide Implementation Plan** to address critical health care shortages that outlines agreed upon shortage areas and includes detailed strategies to expand the pipelines.
- Completion of all monitoring reports required by HRSA.

In addition, we will work with the Commonwealth Corporation’s Research and Evaluation Team to design a qualitative evaluation protocol for the 12-month planning grant based upon the input of the Advisory Committee and its definition of “success” for the planning grant. As described in the Evaluator Qualifications section below, this team has significant experience evaluating workforce initiatives.

Long Term Evaluation

Our intention is to utilize the “dashboard” tool (see Attachment 8 for draft dashboard) to evaluate and measure progress in addressing health care workforce over the long-term. This tool would track quantitative data to measure the supply and demand for health care professionals in shortage areas. Our goal is to incorporate the use of the tool within the standard operations of the members of the Advisory Committee and existing healthcare workforce initiatives. If the state were to receive an implementation grant following the successful completion of the planning grant we would incorporate this tool into the performance indicators for the grant.

Evaluator Qualifications

As described in the Organizational Information section below and in Attachments 3 and 4, the Commonwealth Corporation is a quasi-public agency that reports to the Executive Office of Labor and Workforce Development (EOLWD). It is charged by EOLWD with three main objectives:

- Develop and implement “sector” based workforce strategies
- Develop and implement youth pipeline strategies
- Develop and implement research and evaluation activities for the Massachusetts public workforce system

The Research and Evaluation team has done extensive work looking at both the effectiveness of workforce programs (employment and wage outcomes for the Workforce Investment Act,

Return on Investment studies etc.) and economic research for the public workforce system in Massachusetts.

The Research and Evaluation Team at Commonwealth Corporation worked with the EOLWD to develop an on-going “skill gap” analysis for the state. This utilizes data from the Job Vacancy Survey to identify occupations that show significant, persistent vacancies due to skill shortages (versus high turnover rates). The goal is to ensure that the Workforce Investment Boards in the state are building workforce strategies that related to the key skill shortages in their region. This work will inform the development of the health care dashboard for the Advisory Committee.

In addition, Commonwealth Corporation has done extensive evaluations of education and training grants made by the state to the health care sector. Commonwealth Corporation disseminates the results of their research by releasing information through Research and Evaluation Briefs and Workforce Investment Profiles (www.commcorp.org).

ORGANIZATIONAL INFORMATION

The Massachusetts Workforce Investment Board has designated Commonwealth Corporation to serve as project administrator for this initiative. Commonwealth Corporation (CommCorp) is a quasi-public agency within the Executive Office of Labor and Workforce Development. CommCorp’s Board of Directors is appointed by Governor Patrick and is chaired by Joanne Goldstein, the Commonwealth’s Secretary of Labor and Workforce Development. CommCorp currently provides staffing support to the Massachusetts’ Workforce Investment Board’s four standing committees (Links to Education and Sector Initiatives, Youth, ABE/ESOL, and Performance Accountability). CommCorp will also staff the Healthcare Advisory Committee, in collaboration with Tamika Correia, MWIB Executive Director and Jennifer James, Undersecretary for Workforce Development.

CommCorp’s mission is to build upward mobility pathways for Massachusetts youth and adults to prepare for high demand careers, in concert with state and regional partners. CommCorp focuses on three of the Commonwealth’s workforce development system priorities: (1) Addressing the Commonwealth’s Skills Gap, (2) Enhancing the Youth Pipeline, and (3) Building the Capacity of the Workforce Development System. CommCorp accomplishes its objectives by building strong partnerships with regional and local stakeholders, including businesses, organized labor, workforce investment boards, career centers, CBOs, and community colleges. CommCorp also works in close collaboration with state agencies whose missions are complementary.

CommCorp currently has 42 staff and an annual budget of \$36 million. These funds come from federal, state and foundation grants which are re-granted to organizations across the state. As a result of the organization’s work in administering public funds, they have strong fiscal, data management and reporting capabilities. CommCorp is audited annually by an independent firm that also conducts an A-133 audit and bi-annually by the Commonwealth’s Auditor.

CommCorp has three divisions – Sector and Regional Strategies, Youth Pathways, and Applied Research and Evaluation. This project will be managed within CommCorp’s Sector and

Regional Strategies (SRS) division, which is responsible for building career pathways and workforce training for priority sectors. The staff of the Sector and Regional Strategies Division and the Applied Research and Evaluation Division have extensive experience in developing and evaluating health care workforce development strategies in partnership with state and regional stakeholders. The following are some examples of CommCorp's work in the health care sector.

CommCorp designed and administered Massachusetts' Nurse Career Ladder Initiative (NUCLI) - a \$2.9 million USDOL H-1B grant to respond to the critical nursing shortage and nursing faculty shortage. CommCorp raised an additional \$2.9M from partners in match for the USDOL funds and with the resulting \$5.8M, brought together representatives of the healthcare industry, higher education, workforce development, and organized labor to work toward shared goals.

The results were:

| Activity | Enrollments | Graduates | Licensed |
|---------------------------------------|--------------------|------------------------------------|------------------------------------|
| BSN Degree | 510 | 261 | 170 |
| ADN Degree | 951 | 438 | 400 |
| LPN Certificate | 63 | 63 | 54 |
| Specialty Nursing Certificate for RNs | 56 | 55 | 55 certificates |
| MSN | 25 | | |
| Career Coaching | 343 | | |
| Refresher Course | 7 | 6 | 6 certificates |
| Total Actual | 1,955 | 699 (<i>ADN or above</i>) | 570 (<i>ADN or above</i>) |
| Total Plan | 1,000 | 150 | 250 |

Since 2000, CommCorp has managed the Commonwealth's Extended Care Career Ladder Initiative. The Extended Care Career Ladder Initiative (ECCLI) provides grants and technical assistance to long term care facilities and home care agencies to develop career advancement programs to support recruitment, retention and advancement of direct care workers. ECCLI grants have helped more than 172 nursing homes and home health agencies train over 9,000 individuals. CommCorp's Applied Research and Evaluation Team have conducted extensive qualitative and quantitative evaluations of ECCLI programs and outcomes. ECCLI sites report improved worker retention rates and reductions in the cost of doing business, while improving the quality of patient care.

For the past three years, through grant making and research, CommCorp has been supporting the development of regional capacity to understand the composition of the health care workforce and build programs that meet regional workforce demand. In 2007 CommCorp produced the Health Care Chartbook. The Chartbook provides a snapshot of the Health Care industry, including employment, occupational distribution, salary, regional and other data for use by workforce development professionals and career counselors. Between 2008 and 2009, through the Workforce Competitive Trust Fund, CommCorp funded 18 health care sector partnerships. This year, CommCorp began supporting the development of strategic plans for demand health care occupations by each of the Commonwealth's 16 workforce investment boards. The 16 Health Care

Skills Gap grants and CommCorp's technical assistance resources are supporting the development of regional partnerships between health care employers, community colleges, workforce investment boards, career centers and community-based organizations. In addition, CommCorp is working with two community colleges to develop articulated pathways and programming for working adults who are preparing for health care careers but do not have sufficient literacy and numeracy skills to be accepted immediately into Associate's Degree programs in key health care fields. Finally, this year CommCorp established and is convening a Health Care Workforce Development Professionals Network. The Network is comprised of individuals who work for health care organizations and have responsibility for workforce planning. CommCorp provides a platform for members to share effective health care workforce development strategies practices.

In addition to CommCorp's expertise in health care workforce development strategic planning, the organization has extensive capacity to support regional and state stakeholders in understanding and making practical use of labor market information.

- In 2008, in collaboration with Northeastern University's Center for Labor Market Research CommCorp provided detailed labor market demand and supply trend data from 2000 -2007/8 for the sixteen workforce areas of the state. Data included industry demand trends, vacancy data, population and labor force trends, and numbers of graduates by field of study from higher education institutions and vocational technical schools .
- In 2008 CommCorp supported regional sessions to convene workforce, education, business, community and government leaders in fourteen of sixteen regions to identify critical trends, persistent challenges and to begin to discuss strategies for addressing persistent challenges. Nearly 2,000 regional leaders participated in nine regional summits.
- In 2009 CommCorp supported sessions for five regions, in partnership with the Executive Office of Health and Human Services and the Department of Elementary and Secondary Education, to convene leaders from youth -serving, education and workforce organizations to identify critical trends, persistent challenges and to begin to discuss strategies for addressing persistent challenges. CommCorp also released youth indicator trend data for 16 regions.

Finally, Commonwealth Corporation serves on or provides staffing support to many of the Commonwealth's existing health care workforce development planning initiatives, including the Extended Care Career Ladder Advisory Board, the Department of Higher Education's Nursing and Boston Allied Health Initiatives , and the Department of Public Health's Primary Care Workforce Center.

In summary, CommCorp has substantial experience and expertise in health care workforce development, has working relationships with health care providers and with the state and regional agencies and taskforces that are currently engaged in health care workforce strategic planning, has a long history of partnership building and convening, and is a practiced grant administrator and project manager.

The project organizational chart (Attachment 6) displays the Massachusetts Workforce Investment Board's newly established Health Care Advisory Committee. The organizational

chart and page 8 of the narrative show the relationship between existing health care workforce development planning initiatives and the planned activities of the Committee. CommCorp will convene the Advisory Committee and will be responsible for working closely with Advisory Committee members and consultants to ensure that all activities proposed in the project workplan (see pages 12-14) are completed.