Department of Health and Mental Hygiene

MARYLAND STATEWIDE COMMISSION ON THE SHORTAGE IN THE HEALTH CARE WORKFORCE

Annual Report 2007

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Governor

Anthony G. Brown
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Maryland Statewide Commission on the Shortage in the Health Care Workforce

Executive Summary

Chapter 379 of the Acts of 2006 House Bill 1127 called for the creation of the 21 member Statewide Commission on the Shortage in the Health Care Workforce. The Commission's charge is to determine the extent of the current and future health care workforce shortages in the state, and to provide recommendations to enhance the education, recruitment, and retention of health care workers in Maryland with noted attention to minority and rural issues.

By reviewing graduation data provided by the Higher Education Commission and comparing it to occupational projections from the Department of Labor, Licensing and Regulation, the Commission was able to determine a "top 20" list of occupations most likely to experience the greatest current and projected shortages. It was agreed by the Commissioners that recommendations would be grouped by the three functional areas in the Commission's charge; education, recruitment and retention.

The Commission explored programs used by other states and organizations to address workforce shortages, and the recommendations of the National Health Workforce Center and the Association of Academic Health Centers, which address specifically Maryland and its health workforce issues. In brief, the Commission has determined that the following measures should be considered:

- Creation of a centralized state health care workforce resource and information webpage. Accessibility of information is a strong recruiting tool with a low fiscal burden. Licensure information, location of translator services, live contacts for frequently asked questions, currently available tuition reimbursement/loan forgiveness programs, and other public and private resources can be linked giving applicants a "one stop" information source, and could alleviate knowledge barriers.
- Creation of an ongoing commission or task force to coordinate and monitor ongoing statewide health care workforce issues as they emerge and become more defined. The environment and shortage areas continue to change and new issues present that should be addressed. There are several groups addressing these issues from different perspectives, and there should be a centralized group to consider public and private health workforce issues on a statewide basis.
- Development of a statewide initiative to develop faculty for <u>all</u> health care workforce areas of study and exploration of the feasibility of health career faculty scholarships to increase the supply of health care professionals.
- Consider the health regulatory boards adopting reciprocity or acceptable national standards regarding licensing criteria. This would promote portability of credentialing and licensure `with less administrative and fiscal barriers (similar to current Nursing "multi-state" agreement).
- Promote diversity within health careers through educational institutions and support centers for K-12 students, minorities, rural populations, and underserved areas.

Collaboration between existing workforce focused groups is needed. The collaboration must include local jurisdictions, state and federal entities, health occupation groups, professional organizations, academic institutions, advocacy groups, business and economic entities, and all interested in the issue.

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Ronald M. Hearn, Executive Director
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Governor's Workforce Investment Board
Maryland Department of Labor, Licensing and Regulation

Committees

The Maryland Statewide Commission on the Shortage in the Health Care Workforce (MSCSHW) identified three focus areas to reverse the shortage in Maryland's health care workforce. These areas include the education of qualified applicants, recruitment of these individuals to careers in health care, and retention of trained personnel. Committees were created to determine the MSCSHW's recommendations of innovative and effective strategies to improve each focus area. Committees were open for participation from interested stakeholders with the approval of the designated chairperson. Members of each committee area are listed below.

EDUCATION COMMITTEE MEMBERS

Dr. Catherine Crowley
Mr. R. Terence Farrell
Dr. Barbara Heller
The Honorable Paula Hollinger
Mr. Dean Kendall
Ms. Gewreka L. Nobles
Dr. Malinda Orlin
Ms. Christine P. Walti
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Dr. Robert Young

RECRUITMENT COMMITTEE MEMBERS

Ms. Suzanne Gilbert
Dr. Carlessia Hussein
Mr. Robert Jepson
Dr. Ilana Mittman
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Mr. Mark Townend

RETENTION COMMITTEE MEMBERS

Mr. William Miles Cole
Mr. Miguel McInnis
The Honorable Karen Montgomery
Ms. Colleen Parrott
Ms. Anne E. Walker
Ms. Rhonda Wallace

Commission Findings in General

The Commission is in agreement that available information suggests the shortage of health care professionals is not unique to Maryland, but is rather a national crisis. The scarcity results from "more positions continually being created globally than there are qualified professionals." The research of the Commission does not suggest that there is a disproportionate problem with health professionals leaving Maryland for more favorable destinations.

Additionally, professional health care opportunities regionally are on the rise at a pace greater than neighboring states. Competition for a steadily increasing flow of professionals among the many academic, for profit, and not for profit health care organizations has become fierce as the rapid growth in demand has outpaced the slower increase in supply.

Health care workers provide services in thousands of sites statewide, and represent several hundred occupations. Many positions require taking specific educational programs as prerequisites for licensure or certification. These licensed healthcare occupations are regulated by the occupations boards within the Department of Health and Mental Hygiene. Non-licensed occupations may have multiple paths to qualify workers to provide services, and only some are regulated.

In May, 2007 *Maryland's Top 25 Demand Health Care Occupations: Projected Demand and Reported Supply Provided by Maryland Higher Education Institutes* was compiled by the Maryland Higher Education Commission (MHEC) in collaboration with the Maryland Statewide Commission on the Shortage in the Health Care Workforce, and the Department of Labor, Licensing and Regulation.

The Commission used the MHEC report as a basis for the review of the "gap" between projected annual openings and projected number of graduates in June 2006 (see Appendix B: Rank By Demand "Occupational Titles", p. 39). The report revealed that 18 health care occupations have a gap between projected demand and supply (See Chart below).

Occupation	Gap in Numbers
Health Specialties Teachers & Nursing Instructors*	201
Licensed Practical Nurses	198
Registered Nurses	157
Physicians and Surgeons	125
Rehabilitation Counselors	125
Medical & Clinical Laboratory Technologists	119
Mental Health Counselors & Substance Abuse & Behavioral Disorder Counselors	72
Dental Assistants*	63
Medical & Clinical Laboratory Technicians*	62
Physical Therapists Aides*	61
Emergency Medical Technicians/Paramedics*	60
Physical Therapists	56
Pharmacy Technicians*	45
Physician Assistants	32
Occupational Therapists	31
Pharmacists	26
Surgical Technologists*	25
Dental Hygienists	13

The asterisk, inserted by MHEC, on the occupations Health Specialties Teachers & Nursing Instructors, Dental Assistants, Medical & Clinical Laboratory Technicians, Physical Therapist Aides, Emergency Medical Technicians/Paramedics, Pharmacy Technicians, and Surgical Technologists, means that the data on these occupations are not complete. Graduates of short-term training and teacher preparation programs are not included in the projection of number of graduates for these occupations.

There is a need to focus statewide efforts on better development of the "pipeline" which provides health professionals to our state's health care markets (which will be addressed in part as an "education" and a recruitment recommendation).

For the purpose of our Commission's charge the education and retention portions of this report addresses the intermediate and long-term solutions, while recruitment addresses the immediate need.

Education Committee

Health Care Professions Workforce Review

Many groups have been concentrating on the shortages of nursing and allied health workers. Some of the more prominent efforts are noted below:

The Education Committee of the Nursing Workforce Commission is addressing several key elements including student retention, financial aid, faculty diversity, alternative faculty staffing strategies such as joint appointments, shared faculty, and use of simulation, and distance learning.

The Health Initiatives Steering Committee of the Governor's Workforce Investment Board (GWIB) is replicating the nursing business case model for several other health occupations on the MHEC gap list (respiratory therapist, radiographer, etc.).

The Maryland State Medical Society (MedChi), in collaboration with the Maryland Hospital Association (MHA), is studying the physician workforce in Maryland, including supply and demand, use of physician extenders such as PAs and Nurse Practitioners (NPs), and in and out of state migration.

The Maryland Hospital Association with Nurse educators and hospital representatives has developed what they believe to be a cost benefit analysis for filling the gap in nursing as outlined in *Who Will Care: The Case for Doubling the Number of RNs Educated in Maryland*. In this report they address the gap between supply and demand for nurses over the next 10 years.

New educational programs are helping to address the need for Pharmacists. The College of Notre Dame will enroll its first class of 40 students in Fall 2008 into its newly-created Doctor of Pharmacy (PharmD) degree program. The University of Maryland has expanded enrollment in its PharmD program by 40 students per year from 2007-2010 at the USM Regional Center at Shady Grove. Therefore, the education committee considers the "gap" in pharmacy between the number of projected openings and the number of graduates will be substantially addressed within the next few years due to expansion of existing and new programs.

In Maryland, LPN education occurs almost exclusively in programs at community colleges. All, with the exception of Dundalk Community College, are integrated into the RN education program. First year nursing school students have the option to graduate at the end of 12 months (and are eligible to take the

LPN licensure exam), or may continue in RN course work. Because many students elect to take the LPN exam AND continue for the RN, the number of licensed LPNs in Maryland is relatively static. LPNs go on to complete RN education and licensure exams and do not renew the LPN license. This "Career Ladder" articulation program has been in place for more than 10 years. Students licensed as LPNs are able to work as nurses and earn a good salary while they are in school. For this reason, it is recommended that analysis of the gap for RN and LPN positions be combined.

Due to limited resources and in order not to duplicate the efforts of other state-level groups addressing the projected physician and nurse shortages, the Education Committee elected not to address Physicians & Surgeons, Physician Assistants (PA), Registered Nurses (RN) and Licensed Practical Nurses (LPN), and Dental Assistants. This left six health occupations with gaps between projected demand and projected supply to be addressed.

Occupation	*Gap in Numbers*
Rehabilitation Counselors	125 (more demanded than graduates)
Medical & Clinical Laboratory Technicians	119
Mental Health Counselors & Substance Abuse & Behavioral Disorder Counselors	72
Physical Therapists	56
Occupational Therapists	31
Dental Hygienists	13

Reasons for the Gaps

Gaps may be the result of many factors, including but not limited to:

- Availability of educational programs – number, size, location and schedule of offerings
- Availability of faculty, classrooms, clinical sites
- Visibility of educational programs
- Interest and knowledge about the career
- Cost of education/scholarship availability
- Academic preparation of applicants
- Licensure and certificate requirements
- Dwindling number of practitioners due to "boomer" retirements and conversely increased demand due to aging of Marylanders who will use more health care services

An example of "availability of educational programs" would be programs preparing Rehabilitation Counselors. Coppin State University and the University of Maryland Eastern Shore (UMES) have the only two masters programs in the state, and they produce fewer than 25 graduates per year. It should be noted that individuals may be able to qualify for licensure based on knowledge and experience without "graduating from an accredited school," but this isn't a number of existing persons necessary to bridge the gap.

The workforce in the mental health field is comprised of three groups: High school, Bachelor's level and Master's level educated employees. Many of the residential programs hire high school graduates for their entry level direct care positions. These are largely unskilled individuals who work shifts in varying residences. There have been efforts to require higher education standards; however providers have resisted this due to an inability to meet higher level salaries that would be demanded from degreed individuals. The Bachelor level staff in direct services represents the base of community services.

Psychiatric Day Rehabilitation Programs, Case Management and Mobile Treatment teams are all staffed by bachelor level individuals. The final level of staffing is the master's level educated staff that provides most of the true clinical services.

Medical & Clinical Laboratory Technicians can come from non-degree programs that provide training for entry level laboratory personnel, or Workforce Investment Act (WIA) and community colleges programs. In addition, there are five college-based lab education programs documented by MHEC and a new masters program at University of Maryland, College Park.

In Dental Hygiene, the University of Maryland, Baltimore Dental School has expanded its relationships with community colleges beyond already established collaborations with Wor-Wic and Chesapeake Colleges. The program is presently in discussions with representatives from Cecil College. It is possible that activities underway will result in increased supply to more closely meet the demand.

Based on the number of potential causes there is not a one-size-fits-all solution. However, across the majority of health occupations, certain reasons for shortages appear frequently. The Education Committee concluded that every career seems to have common problems: more programs are needed, more educational capacity and/or more students in the pipeline.

Many programs are turning qualified students away due to inadequate classroom space, clinical placement sites, and the shortage of faculty. The shortage of faculty is a result of lack of qualified/prepared individuals to serve as faculty or clinical instructors, lower salaries, and inadequate funding. Inadequate classroom space and clinical placement sites need to be reviewed and addressed by educational facilities.

The primary established state mechanism to recommend the allocation of resources for education is the Maryland Higher Education Commission. MHEC approves plans for higher education, new programs, and the cancellation of existing programs. They also have the necessary authority to monitor and evaluate academic programs.

Currently there are several state educational funding programs which focus on fields with health care workforce shortages. The Health Services Cost Review Commission's (HSCRC) Nurse Support Program II provides funding for education of nurses at all levels. It has been very effective to date. Grants already approved by the program will result in the graduation of over 600 new masters and doctoral prepared nurses; this will support education of many additional undergraduate nurses.

The Health Personnel Shortage Incentive Grant Program (HPSIG) increases the number of graduates eligible for licensure, certification, or registration in designated health shortage occupations. Eligible educational programs receive up to $1,500 for each student who graduates. Funds are used to enhance or expand the educational programs leading to licensure or certification in the health occupations that the Department of Health and Mental Hygiene determines to be in short supply. This program has been chronically under funded.

- Recommendations

It is recommended that MHEC provide the detailed analysis necessary to understand the gaps in these six health occupations. The recent *Nursing Education Capacity Study* conducted by MHEC could serve as a model for this work

It is further recommended that MHEC:

- Develop a definitive description of capacity for health education programs;
- Create a mechanism to shift student interest as workforce demands evolve;
- Develop, gather and report on standardized measures of student retention and graduation rates. Based on comparison of enrollments to graduations, some programs appear to have very high attrition rates. This may not actually be the case, however, as MHEC statistics are based on declared major, not on students actually registered for classes;
- Determine the extent of *faculty shortages for the health professions*. It is our understanding that this is a new health occupations category and needs development and refinement. In particular, further information is needed on what is included in the category and what qualifications are required. Faculty availability is a crucial element in all health care occupations;
- Identify academic programs that can provide education for future faculty and promote availability of programs; and
- Assess the extent and capability of short-term training and other non-degree programs to meet the supply of Dental Assistants, Medical & Clinical Laboratory Technicians, Physical Therapist Aides, Emergency Medical Technicians/Paramedics, Pharmacy Technicians, and Surgical Technologists. Evaluate the nursing career ladder education model for application to advancement in these fields.

The Education Committee notes that while educational institutions are working toward a solution, the health care workforce shortage remains critical, with no end in site. It is based on these assumptions that the Committee recommends educational institutions should:

- Continue to expand new ways of learning for the health and allied professions, including use of simulation, alternative sites and times for learning, and different instructional models that engage the service organizations as partners to prepare the necessary future workforce;
- In collaboration with employers and regulatory agencies, examine policy, regulations, and accreditation requirements and eliminate any unnecessary barriers to clinical education;
- Research ways to share resources, such as distance learning capabilities and online curricula.
- Consolidate and standardize data gathering methodology and reporting, i.e., qualified applicants rejected due to capacity; graduates; etc.;
- Evaluate the development of a regional simulation center that could be accessed by all health and allied health professional students in a specified geographic area. This could lead to sharing of resources/expertise across disciplines. For example, a medical technician faculty could teach all disciplines to start IVs;
- Optimize use of existing clinical facilities. For example increase evening and weekend utilization. The Maryland Hospital Association online registration for clinical placements in Clinical Assignment for Healthcare Students(CAHS) for nurses is a good start, but should increase and expand to other health care professions; and
- The Health Services Cost Review Commission (HSCRC) should consider targeted use of future Nurse Support Program II money to get at the root of the problem, specifically, to improve clinical instruction capability.

State-level Policy

- Additional curriculum development at the two and four-year college levels to prepare students for careers in mental health with career track development (AA to BA); and
- Expansion of state educational funding programs to focus on health workforce shortage fields.

Recruitment Committee

Having established "scarcity" of human capital and increase in market demand as guidance for recommendations, the Recruitment Committee focused on strategies to increase Maryland's competitive stance against other states. Maryland can better facilitate incoming health professionals administratively, and explore the more efficient use of minority human resources already existing in Maryland. Recruitment recommendations will center on making better use of unrealized assets and competing for currently scarce resources.

Use of the Web in Coordination and Accessibility of resources:

The area of greatest potential to facilitate and "grow" health care workers is the internet. With a minimal fiscal outlay the State can create a web site to serve as an electronic "Ombudsman" for professionals, and paraprofessionals interested in employment in the state. While several Maryland based health career sites exist, they are geared toward certain professions such as nursing, or are administered by organizations with specific interests.

The Maryland Hospital Association's "Maryland Health Careers.org" website is a good example, and provides a good model for what needs to be done by the state, but still lack information on many of the "gap" professions previously identified. Existing sites do not have the latitude to cover the spectrum of information all health professionals need.

- Recommendation

A state "Health Professionals Career Website" internet source could be administered by the Department of Business and Economic Development with input from the Department of Health and Mental Hygiene, and linked to existing resources such as contact information for licensure and certification with the regulatory Boards, tuition reimbursement programs, grants, position descriptions, credentialing agencies, support services (bilingual translators) and any other area of interest to incoming professionals.

Many available resources and funds are already in existence and not being utilized to their full capacity due to lack of exposure or public knowledge. Recent studies have shown that grants and funds are available and are not being requested from state and federal organizations charged with assisting in health career recruitment and education. While certain programs are known to specific segments with interests, many go unknown to individuals who could use these resources.

The State could be a first point of contact for professionals who rely primarily on the internet as their source of information by linking the "Health Professionals" page to state agencies pages, high school & college pages, and general information and recruiting pages.

Foreign Health Professional Assistance

There are unlicensed/certified health professionals currently living in Maryland. Some are foreign born or trained doctors, nurses and other health care workers. Some are military having completed their obligation. Still others are here studying under an educational Visa. They may or may not qualify for a direct equivalency licensure and certification. Even if they are not capable of lateral licensure equivalent, they may be qualified for other health careers. Many may be close to meeting requirements

but lack the fiscal resources or communication ability to determine what they need to become licensed and or certified.

In 2005, 15 percent of all US health care workers were foreign born. There is no data as to how many naturalized Americans were trained as health care workers but because of artificial barriers to achieving licensure and certification in the US are not currently working in the health field.

Graduates in the US can gain three year H-1B visas for a pre-arranged job, usually renewable for one three year period. An exchange visitor visa (J-1) is commonly used for graduates of overseas medical schools to gain access to medical education, usually residency programs, with a requirement that they return to the home country for two years. The only exception to the two-year home residency rule is when a waiver visa is received (J-1 waiver program), which requires sponsorship by a government agency. In return for a service commitment in a rural area, permanent residency may be gained.

- Recommendation:

A "nominee" program would involve having an Ombudsman stationed with the Maryland Health Occupations' Boards to serve as a contact person, provide resources and act as liaison between Foreign Trained Health Providers and the Boards, and to assist eligible foreign physicians and health care professionals with visa concerns in obtaining permanent resident status in an expedited manner. This person could provide timely feedback to applicants regarding the hiring process, and once they have applied, their status. These foreign born/trained individuals present as an untapped resource with respect to bi-lingual, bi-cultural health workers who are already legal US residents. In addition, these individuals may have a better mastery of English, and be more familiar with the cultural and language needs of individuals living in American communities than nurses and health care providers "recruited" from foreign countries.

The program would also assist ex-Military health care career professionals in getting necessary licensure and educational/credential resources to continue working in-state (Military Deployment Center (Fleet and Family Support Centers). In the State of Maryland, there are military deployment centers that offer assistance for personnel and their families preparing for separation from active duty. Transition services include in depth career counseling, self help computer resources, job fairs and Professional career workshops. The program should include ongoing contact with these programs as a means to keep these resources from leaving the state after military service.

Pro Bono/Volunteer Program

In order to retain licensure most health care professionals must obtain Continuing Education Credits (CEU's) as a requirement of license renewal. Each Health Occupation Board determines how many and what type of programs will be considered for CEUs. Often health care professionals pay to participate in programs that will be accepted for CEUs.

- Recommendation

In the past, Pro Bono or Volunteer hours have not been accepted for CEU by most Health Occupation Boards. However, as the need grows for health care professionals to work in underserved areas and to serve as mentors awarding CEUs, such a volunteer service makes sense.

By serving as mentors to students, whether in high school, undergraduate or graduate programs, health

care professionals can provide valuable insight to help students succeed in their field.

By volunteering in various locations (clinics, schools, nursing homes, homeless shelters, etc.) health care professionals will be enabling citizens in underserved areas to receive greater access to health care.

Recruiting Minority Health Professionals:

Maryland stands as the fifth most diverse state in the nation with combined minority designations exceeding 40 percent of the population, and in some jurisdictions having a majority status. Based on US population numbers, minorities are underrepresented in the nation's health workforce. While African Americans, Native Americans and Hispanics (native Spanish Speaking) represent almost 33 percent of all Americans, they comprise less than 9 percent of nurses, 6 percent of physicians and 5 percent of dentists (Sullivan, 2004).

Population trends suggest that goals to increase the number of health care providers in the system can be facilitated by schools recruiting more qualified applicants from minority groups. Minority recruitment into health careers will not only help us close the gaps in available health care workers in the state and the nation, but data show that ethnic and racial minorities are more likely to work in medically underserved areas.

There are known challenges to minority recruitment. Entering and graduating from a health professional school happens at the "downstream" end of an educational pipeline that starts with an individual's earliest school experience. For minorities, this pipeline is "leaky" at various points. Research studying academic achievement in children in federally funded programs in low income, low performing students found that achievement gaps between white students, native Spanish speaking students, and African American students remain relatively constant across the six elementary grades (DHMH, Office of Health Disparities, 2006). The problem of educational disparities is very pronounced in high school graduation where statistics show that 76 percent of African American males in Baltimore City drop out of high school. Some of the barriers to minority recruitment include the following:

1. Lack of awareness of minority middle and high school students on the various health careers;
2. Under-representation of inner-city students in math and sciences;
3. Increased high school and college dropout rates;
4. Financial barriers; and
5. Lack of diverse role models and mentors.

- Recommendations:

1. Evaluate the efficacy and cost-effectiveness of existing state programs that provide funding to increase health professional workforce, and modify to ensure balanced outcomes. Provide minority tuition assistance, scholarships, loan forgiveness and other resources and support.

2. Establish a linked data base of demographics of health professionals in the state such as ethnicity and race from the regulatory boards, health professional schools, employers, and others. Improve the climate of health professional schools by making diverse mentors available.

3. Foster a supportive environment in the schools by establishing a comprehensive system that includes: diverse mentors, student preceptors, and self help groups.

4. Increase awareness of advisors, guidance counselors, parents, teachers and students to the scope of health careers opportunities.

5. Foster collaborations between health professional schools to increase preparedness for application and matriculation into health careers by offering post-baccalaureate programs, summer programs, “adopt-a-school” programs, mentorship, admission test preparation, application assistance and other interventions.

6. Require institutions requesting state funds for initiatives pertaining to health workforce shortage to demonstrate appropriate outreach recruiting from communities that are under-represented in health careers.

Retention Committee

Most health care professions are having difficulty retaining qualified workers. The severity of this issue differs depending upon profession, work setting, and whether the job is in the public, private, non-profit, or the for-profit sector. The causes of retention problems across the varying professions are remarkably similar and can be divided into three basic areas: retention by individual employers; retention within a job category (even while employees move from one employer to another); and retention within the health care field, overall.

The reasons for this increased mobility include the current Maryland unemployment rate of 3.8% (http://www.dllr.state.md.us/lmi/laus/maryland2007.htm) which creates opportunities for workers to transition if not satisfied; increased geographic mobility; accelerated knowledge changes and requirements within each profession; increasing opportunities within health care overall; and widespread dissatisfaction with some aspects of health care employment. Add to these factors a new generation of employees who, some have argued, have qualitatively different expectations and requirements of employment. Increased career mobility in health care may be positive or negative, but it tends to be more often positive for the employee and negative for the employer in that it is generally costly in terms of recruitment, training and workplace moral.

A review of state and national studies of retention in the health care workforce reveal common causes, which are grouped here under four main headings: the increasing toxicity of the health care workplace; a lack of parity or perceived parity in pay, benefits, and needed "perks"; and inadequate career and personal / professional development opportunities; outside cultural and political forces. Data collected from interviews by Commission members serving on the Workforce Retention Committee and from the literature cited above reveal the following problems.

1) The Increasing Toxicity of the Health Care Workplace
   a. Pace & stress: The increasing workplace demands of health care have led to:
      - Excessive caseloads, leading to unacceptably low quality of care
      - An inability to tend to personal health needs on the job (e.g. nurses report increased urinary tract infections due to inadequate bathroom breaks; and poor workplace ergonomics)
      - Lack of work / life balance; and
      - Required overtime (upon threat of losing employment or specific benefits)

   b. Poor work process design
      - Hyper-specialization of job functions the "it's not my job" syndrome
      - Inadequate clerical support
      - Sacrifice of worker safety for efficiency and cost-reduction (e.g. inadequate equipment and training for handling obese patients; cutting corners on prevention measures
      - Emphasis on the "science" of medicine to the exclusion of the "art" of healing (e.g. electronic medical records can pose an additional patient/provider barrier)

   c. Negative workplace culture and climate
      - Lack of empowerment to make decisions affecting one's working conditions (e.g. noise level work and break schedules, etc.)
      - Workplace hierarchy; specific professions seen as "lower" on the professional totem pole
      - Lack of effective mental health support for workers who witness human suffering daily

- Low morale permeating the workplace; lack of esprit de corps

2) A lack of parity or perceived parity in pay, benefits, and needed "perks"
   - Public versus private salary scales
   - Lack of systematic, foreseeable cost-of-living salary increases
   - Work without pay (forced to work overtime without OT pay or comp time)
   - Mandatory overtime
   - Workload – excessive and ever-increasing
   - Lack of human resources support; need for help interpreting arcane, complex, ever-changing personnel policies and benefits
   - Lack of child care facilities linked to agencies
   - Lack of tuition reimbursement for public sector employees
   - Lack of longevity leave or longevity bonuses for public sector employees
   - Inequity between different retirement systems for public sector employees

3) Inadequate career and professional development opportunities
   - Lack of opportunity for advancement, within the organization and/or within the profession; poor or no career ladders or lattices for some professions
   - Lack of mentoring and employer investment in employee development
   - Lack of training stipends, tuition assistance, and loan forgiveness
   - Lack of adequate training in system and organization-specific procedures; expecting employees to learn by trial and error on the job
   - Lack of career ladders and opportunities; and
   - Lack of sufficient work/life support (stipends, scholarships, internships) during the training phase of most health care professions. It is uniquely stressful to be a student.

4) Outside cultural and political forces
   - Racism and classism in the workplace, affecting employees and clients
   - Increasing diversity of patients/clients posing challenges to a culturally competent, collaborative model of care
   - Under-representation of specific ethnic and linguistic groups in health professions (25 percent of the U.S. population is composed of underrepresented groups, yet they represent only 10 percent of the health professions and are growing very modestly; Hispanics account for 12 percent of the U.S. population, but only two percent of nurses and 3.5 percent of physicians; less than one in 20 African-Americans are doctors or dentists, even though one in eight persons in the United States are African-American; Ref. # 5)
   - Decreasing financial and public support for basic public health infrastructure in favor of disaster readiness, pandemic preparation, bioterrorism, security measures
   - Erosion of coverage through loss of employer-provided health benefits and threats to public health programs, such as the Children's Health Insurance Program
   - Litigious climate that increases medical malpractice claims and expenses; and
   - Rural workforce issues; transportation problems and lack of incentives to locate in underserved rural areas.

The nursing profession has been studied extensively to ascertain the impact of high turnover on the workplace and on patient care. Similar impacts are experienced throughout the health sector. Negative impacts include:

- The expense of hiring and training new personnel (replacement costs);
- The stress experienced and time required to integrate new staff into a health care team; and
- Negative patient outcomes.

The rule of thumb reported in the literature for replacement costs for nurses is an outlay equal to a nurse's annual salary, but some studies have found the cost to be equal to or greater than twice a nurse's annual salary (Moskowitz 2007). Loss of knowledge and team cohesiveness is more difficult to quantify, but the morale of remaining team members suffers as workload increases. Patient outcomes suffer when staff turnover temporarily increases the patient-to-nurse ratio (Needleman 2002). New staff must learn new policies and on-the-job procedures and therefore are unable to function at peak capacity.

Retention of a skilled health care workforce will require a concerted effort to improve the culture of the health care workplace. Organizations and health care providers must conduct a thorough self-examination to determine exactly what the retention issues are, and the changes to implement. Specific diagnostic questions for the problems cited above are listed here.

To diagnose and cure a toxic or ineffective/inefficient workplace, health care organizations must ask themselves:

- Does the organization promote and practice respectful, collegial communication and behavior?
- Is there a team orientation?
- Is there a sense of trust among coworkers and between workers and managers?
- Is diversity respected?
- Is communication between employees clear and respectful, open and trusting?
- Are role expectations clearly defined?
- Is everyone held equally accountable for the work they do within the sphere they can influence?
- Is the organization staffed adequately to be able to provide quality care and meet client/patient needs?
- Is the organization staffed adequately staffed to promote work and home life balance for employees?
- Does the leadership of the organization serve as an advocate for effective practices? Do they allocate the resources necessary to promote effective practice?
- Do they support shared decision-making?
- Do employees participate in system, organizational, and process decisions?
- Does a formal structure exist to support shared decision-making?
- Do health professionals have reasonable control over their practice?
- Are effective workplace climate surveys conducted regularly and are the results used?
- Are effective exit interviews conducted and are the results used?

To diagnose and cure a lack of parity or perceived parity in pay, benefits, and needed "perks", health care organizations must ask themselves:

- Are salaries comparable with others in the marketplace for the same job qualifications, or if not, do other benefits render them comparable?
- Does the organization promote job-sharing and flexible work schedules?
- Does the employer support employees' use of accrued compensatory and leave time without penalty?
- Are alternative roles developed and promoted for older workers, such as through special projects or redesigned jobs or work schedules?

- Are health benefits made available for active part-time employees?
- Does the organization provide on-site fitness facilities or access to wellness and prevention programs (health screenings, immunizations, etc.)? Alternatively, is information about prevention and wellness education and information promoted, even if these are not a fitness facility?
- Does the organization have a total rewards plan or strategy — either formal or informal?
- Are injury prevention programs in place which provide for appropriate job changes or environmental modifications, along with conditioning of workers to reduce worker injury?
- Are appropriate, tailored rehabilitation programs in place to support position requirements and return-to-work criteria?
- Has the organization considered paid additional time off for the purpose of care giving beyond what is legally required by the Family Medical Leave Act? Does the organization offer unpaid leave for care giving?
- Does the organization offer personalized retirement preparation programs?
- Does the organization offer service awards that include something of monetary value? Alternatively, does the employer offer service awards with no significant monetary value?
- Does the employer support employees doing self-selected volunteer service in the community?
- Is education offered about rehabilitation programs for disabled employees?
- Does the employer sponsor retiree clubs, newsletters, and periodic social events?
- Does the organization have an active, user-friendly Employee Assistance Program?
- Has the organization considered implementing elder-care options with company financial support, in lieu of other benefits? Alternatively, does the employer offer elder-care referrals or other options without financial support?
- Do retirees retain health benefits?
- Are special programs in place for "semi-volunteers," who may be compensated with meals or educational opportunities but who are not paid employees?
- Does the organization offer long-term care insurance with an employer subsidy or a group purchase option? Alternatively, is long-term care insurance available for voluntary purchase without group discount or employer subsidy?

To diagnose and cure inadequate career and professional development opportunities, health care organizations must ask themselves:

- Is continuing education and certification supported/encouraged?
- Does the organization provide training that leads to other career options?
- Does the organization provide counseling and support for career advancement?
- Does the employer foster career pathways, job ladders or lattices?
- Does the employer foster continued learning?
- Does the employer provide the latitude to support an employee's "pet project" so their contribution may be personally meaningful?
- Is participation in professional associations encouraged, including time granted to attend professional development activities?
- Does the workplace promote bringing experienced and newer employees together so that knowledge is preserved and taught?
- Is a program of phased retirement in place so more experienced employees are not lost suddenly and completely?

The following recommendations are made to facilitate retention and career advancement of health care

workers.

- Recommendation

1. State-level Policy
   - State Boards for the health professions should develop and implement an effective reciprocity process for health professionals licensed in other states who move to Maryland;
   - Conduct compensation parity studies between the public and private sectors for health workforce shortage professions specified in this report; revise public sector compensation accordingly;
   - Mandated policy on salary incentives for health career faculty with requiring cost-of-living adjustments and salary increments for public sector health care employees; and
   - Recommend legislation requiring that public sector health care employees be offered health care benefits proportional to hours worked.

2. Organization-level Policy
   - Form a task force to conduct a rigorous self-assessment of retention issues within the organization, based upon quantitative and qualitative data; include at least 1/3 members of the non-managerial workforce on this task force
   - Set a goal for improved retention in specific job categories; monitor and publicize progress or setbacks
   - Offer the opportunity, where feasible, to implement "telecommuting" or alternate work schedules during the work week to improve the morale and productivity of the health care professional, while decreasing commuters on the roadways
   - Offer a choice between a lunch break or several equivalent break/rest periods during the day
   - Compensate professionals with compensatory time or over-time pay in exchange for over-time or a longer than regularly scheduled work week
   - Encourage continued education by implementing an automatic salary increment for health care workers who pass a certification or licensure exam, or attain an advanced degree in their profession
   - Offer a fair and proportional subsidy to health care professionals at all levels for trainings/education hours towards the maintenance of licensure and certification
   - Implement career ladders and lattices within the organization; train and promote internal job candidates as a matter of organizational philosophy and policy
   - Adopt family-friendly policies and a balanced work/life philosophy which supports employees' ability to address family and health issues without penalty; offer workplace seminars on topics of interest to parents and grandparents
   - Train all supervisors in constructive and supportive employee development
   - Involve health care workers in determination of the organization's mission, vision and other agency needs
   - Offer cross cultural diversity training for all levels of health care professionals

Rural and Underserved Areas

Rural and underserved areas are difficult to reach and have unique issues. This report includes additional details in the education, recruitment, and retention sections that are critical to the geographic descriptions and health status issues in Maryland.

Providing access to quality health care to residents of Maryland's rural and underserved communities is the economically prudent thing to do. A lack of health care practitioners in a community makes it very difficult to lead to community self-sufficiency. It continues to increase dependence on Medicaid and other tax funded programs that put a band-aid on the need, but do not change the underlying issues of poverty and lack of access to care.

A major challenge is to maintain health professionals in rural and underserved areas that can be the catalyst for quality health care. Rural and underserved communities require access to prevention services and timely health care. This often reduces the need for expensive, catastrophic care for conditions that could have been prevented or managed at reduced cost. Attracting quality health professionals to serve in communities that face socioeconomic challenges or are geographically isolated with low population density is an essential component of providing access to care and supporting economic development.

Rural Maryland represents nearly 30 percent of Maryland's population. According to the federal Office of Rural Health Policy, jurisdictions are rural if at least two-thirds of the census tracts are classified as rural. The federal office classified the following Maryland jurisdictions as rural:

Allegany County
Caroline County
Dorchester County
Garrett County
Kent County
Somerset County
Saint Mary's County
Talbot County
Worcester County

The June 2007 Maryland Rural Health Plan identifies "access to primary care and specialty care and pharmacy services" as the most important rural health priority. The National Health Care Disparities Report (2004) identified two major barriers to access to health care for rural populations: access to health insurance and the longer travel distance rural residents face to reach health care delivery sites. The Maryland and national rural priority areas speak to the need to recruit and retain a quality health care workforce in shortage areas.

Over fifteen percent of Maryland's rural population is aged 65 and over. This is 38 percent higher than the state average. By 2030, the rural elderly population is projected to grow to 25.4 percent. Rural residents aged 25 and older, are less likely to have attained a bachelor's degree than the state as a whole. The Maryland Department of Human Resources (2004) data shows that Medicaid enrollment is 27 percent higher in federally-designated rural jurisdictions than in the state overall. The Maryland Physician Licensure File (2004) shows there are 34 percent fewer primary care providers per 100,000 population in state designated rural jurisdictions than the state overall. It has been shown that health

professions students from rural areas are more likely to return to rural areas to practice after graduation (Hughes, et. al. 2005).

An effective initiative that is underway in West Virginia (WV) could be replicated in rural and underserved areas in Maryland to help with health care workforce shortages. This WV initiative is a "Grow Your Own" model of an educational pipeline that is successfully identifying, educating, and retaining its own populace as health professionals and reducing health workforce shortages in the state which ranks last in educational attainment in the nation.

How do they accomplish this? West Virginia's "Grow Your Own" initiative invests heavily in its own human resources, their children/students. They have created an interdisciplinary training collaboration between the West Virginia Rural Health Education Partnership (RHEP) and the West Virginia Area Health Education Center programs (AHEC). The RHEP/AHEC partnership is a blend of strategies where training and financial incentives are linked with community recruitment and retention. The program encourages, identifies, and educationally supports students from an early age to become health professionals. The RHEP/AHEC partnership includes collaborations with the elementary, middle and high schools; higher education; and the legislature which leads to successful recruitment and retention of quality health care professionals in rural and underserved communities. This is a highly developed program that incorporates numerous elements, but some of those include a degree-required rural rotation for all state supported health science students and collaboration with the health sciences schools, private schools and local community colleges. Recruitment of health professionals contributes to economic development through the creation of jobs.

"Grow Your Own" works according to a 2005 Survey of Rural Providers who Completed Rural Rotations in WV: 40 percent of all respondents are in practice where they completed high school; 63 percent of all respondents said that familiarity with their chosen rural community was a major influence in their decision to practice there; and 65 percent said that they wanted to practice close to their family

Other evidence of success includes these outcomes of the 15-year program: in the past nine years retention in primary care has increase by 74 percent; the state has eliminated eight Health Professional Shortage Areas (HPSA) counties in 10 years; 820 RHEP/AHEC graduates are confirmed to be practicing in rural areas of the state (2006); and 79% of primary care residents who complete a WV residency stay in the state. In rural West Virginia one doctor equals 4.3 jobs for the community. The program contributes to a stable economy for attracting and sustaining other industries and business. West Virginia's program provides state funding of $2.5 million per year to communities and $4.5 million to schools for rural health training programming.

Replicating this type of program will meet the health care workforce shortages as well as build community and individual capacity by investing in the people who live in the shortage areas. The existing Area Health Education Centers, Workforce Investment Boards, Maryland State Department of Education, higher and other educational institutions, and business entities must effectively take on this role. The Maryland AHEC Program is currently engaged in "Grow Your Own" initiatives that would be strengthened through increased partnerships and collaboration between the above stakeholders. With a number of the essential components in place, the completion of this cost-effective health professions education pipeline is attainable.

- Programs that provide financial incentive for health professional school graduates to practice in rural/underserved areas have limited effectiveness because after a period of service, the practitioners often leave the community.

- The WV program has demonstrated that "Grow your Own" program completers remain in rural/underserved practices.

Effective strategies must address the community's ability to recruit and retain health care providers in a manner that invests in its own future, the children/students. Given that the Maryland AHEC program already provides a statewide infrastructure and long-term experience in pipeline programs. Therefore there are four recommendations specific to rural/underserved areas.

- Recommendation

Through sustainable funding commitments, address all aspects of the health professions education pipeline from K-12 to health professions education through continuing education for the practitioner.

Education and Training in Rural and Underserved Areas

Educational programming to enhance K-12 students' awareness of health careers, recruitment of cohorts to tackle the appropriate coursework necessary to meet higher education standards for entrance into health professions curricula, and the rendering of educational assistance throughout the middle and high school years must be available for rural/underserved communities. Strategically operating "Grow Your Own" pipeline activities throughout the state will balance the urban, suburban, and rural geographic areas.

Pipeline training programs that recruit trainees from rural/underserved areas and have rural/underserved specific content make a substantial difference in attracting students. The Sullivan Commission reported that health care providers that understood and shared the culture and values of rural/underserved communities were much more effective in providing culturally appropriate health care and addressing community health disparities.

The Maryland AHEC program provides an infrastructure for clinical rotations in rural/underserved areas as well as the continuing education needs of health practitioners. But this pipeline is not complete and sustainable like the WV model.

Financial incentives for students

Students from rural/underserved areas often do not envision themselves as financially able to complete health professions education programs. A sustainable program of scholarships and stipends must be provided to rural/underserved students who pursue a career in one of the health care shortage occupations. This is financially feasible because rural underserved students' family income already places them in the need range for financial assistance. However, these students and their families need the assurance that if they successfully complete pipeline programs, the funding to complete their education and training will be there. After graduating, these students would return to their respective communities or to other underserved communities to practice, thus helping alleviate shortages.

Support for Community-Based Recruitment and Retention

Rural/underserved communities need to determine how to most appropriately meet their critical health workforce needs through recruitment and retention efforts. The health professions students that we are training need substantial clinical experience in a community in order to become a culturally competent practitioner. A community's ability to recruit and retain a qualified, culturally competent health

workforce is a critical component of long-term economic development. (Concepts on economic development need to be expanded)

Policy and Advocacy is needed to implement the workforce needs in underserved areas. The policy and advocacy has been initiated on a community level. Community health workforce needs should drive the decision making-process using these items:

- Sustainable funding/partnerships for K-12 pipeline programs in rural/underserved communities to maximize “Grow Your Own” efforts
- Sustainable funding for scholarships and stipends for successful pipeline program completers
- Sustainable funding/partnerships to ensure substantial community-based clinical experience in rural/underserved areas for all health professions students
- Sustainable funding/partnerships to support the professional development and education needs of rural/underserved practitioners
- Establishment of policy changes to reverse the low Medicaid reimbursement rates could increase the numbers of providers serving Medicaid patients. Reimbursement must be made for all rural providers to eliminate disparities.

- Recommendation

To enable Maryland to move forward with the "grow your own" model of recruitment and retention in rural and underserved areas, the Maryland legislature should instate workers compensation for students engaged in unpaid job shadowing or internship experiences. Student workers compensation will encourage local employers to bring students into their businesses for career development. This legislation can impact career development in any field. With student workers compensation coverage, the education system, health care sector, and workforce needs will be positively affected. West Virginia does provide this coverage.

Appendices

Appendix A: Legislation

UNOFFICIAL COPY OF HOUSE BILL 1127

J2 (6lr1042)

ENROLLED BILL

-- Health and Government Operations/Education, Health, and Environmental Affairs --

Introduced by **Delegates Mandel, Bronrott, Frush, Goldwater, Gutierrez, Hammen, Howard, Jameson, Kaiser, Lawton, Lee, Madaleno, McDonough, Morhaim, Parker, and Sophocleus**

Read and Examined by Proofreaders:

_____
Proofreader.

_____
Proofreader.

Sealed with the Great Seal and presented to the Governor, for his approval this _____ day of _____ at _____ o'clock, _____M.

_____
Speaker.

CHAPTER_____

AN ACT concerning

Statewide Commission on the Shortage in the Health Care Workforce

FOR the purpose of establishing the Statewide Commission on the Shortage in the Health Care Workforce; providing for the membership of the Commission; authorizing the Commission to consult with certain individuals and entities in performing the duties of the Commission; requiring the Secretary of Health and Mental Hygiene to chair the Commission, make certain appointments to the Commission, and establish certain subcommittees; providing for the duties of the Commission; requiring the Commission to make certain recommendations; requiring the Department of Health and Mental Hygiene to provide staff support to the Commission; requiring the Commission to make a certain annual report to the Governor and General Assembly on a certain date; providing that members of the Commission are entitled to a certain reimbursement; providing for the termination of this Act; and generally relating to the Statewide Commission on the Shortage in the Health Care Workforce.

BY adding to
Article - Health Occupations
Section 1-601 to be under the new subtitle "Subtitle 6. Statewide Commission on the Shortage in the Health Care Workforce"
Annotated Code of Maryland
(2005 Replacement Volume)

Preamble

WHEREAS, The health care industry is one of the top economic engines of the State; and

WHEREAS, There is a nationally identified shortage of workers in many health care fields; and

~~WHEREAS, A recent study by the Center for Health Workforce Development~~
WHEREAS, Recent studies have identified critical shortages in Maryland of health care professionals and workers, including laboratory technicians ~~and mental health specialists~~, radiologic technicians, respiratory therapists, and physical therapists, in many important health care fields including nursing and pharmacy; and
WHEREAS, Individuals in rural and underserved areas of Maryland are at risk due to a shortage in Maryland of physicians, nurses, and other health care professionals and workers; and

WHEREAS, Access to care, the delivery of quality care, and patient safety are dependent on the availability of an adequate supply of well-educated and trained health care professionals and workers, the backbone of the health care delivery system; now, therefore

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That the Laws of Maryland read as follows:

Article - Health Occupations

SUBTITLE 6. STATEWIDE COMMISSION ON THE SHORTAGE IN THE HEALTH CARE WORKFORCE.

1-601.

(A) THERE IS A STATEWIDE COMMISSION ON THE SHORTAGE IN THE HEALTH CARE WORKFORCE.

(B) THE COMMISSION CONSISTS OF THE FOLLOWING MEMBERS:

(1) ONE MEMBER OF THE HOUSE OF DELEGATES, APPOINTED BY THE SPEAKER OF THE HOUSE;

(2) ONE MEMBER OF THE SENATE OF MARYLAND, APPOINTED BY THE PRESIDENT OF THE SENATE;

(3) THE SECRETARY OF HEALTH AND MENTAL HYGIENE;

(4) THE SECRETARY OF BUSINESS AND ECONOMIC DEVELOPMENT;

(5) THE STATE SUPERINTENDENT OF SCHOOLS, OR THE STATE SUPERINTENDENT'S DESIGNEE;

(6) THE SECRETARY OF HIGHER EDUCATION, OR THE SECRETARY'S DESIGNEE;

(7) A REPRESENTATIVE FROM THE UNIVERSITY SYSTEM OF MARYLAND WITH KNOWLEDGE OF HEALTH CARE WORKFORCE ISSUES, APPOINTED BY THE CHANCELLOR OF THE UNIVERSITY SYSTEM OF MARYLAND;

(8) A REPRESENTATIVE FROM A COMMUNITY COLLEGE THAT OFFERS DEGREES TO HEALTH CARE WORKERS, APPOINTED BY THE MARYLAND ASSOCIATION OF COMMUNITY COLLEGES;

(9) A REPRESENTATIVE FROM AN INDEPENDENT COLLEGE THAT OFFERS DEGREES TO HEALTH CARE WORKERS, APPOINTED BY THE MARYLAND INDEPENDENT COLLEGE AND UNIVERSITY ASSOCIATION;

(10) THE EXECUTIVE DIRECTOR OF THE OFFICE OF MINORITY HEALTH AND HEALTH DISPARITIES OR THE EXECUTIVE DIRECTOR'S DESIGNEE;

(11) ~~THE EXECUTIVE DIRECTOR OF THE CENTER FOR HEALTH WORKFORCE DEVELOPMENT~~ THE ~~PRESIDENT~~ *EXECUTIVE DIRECTOR* OF THE RURAL MARYLAND COUNCIL OR THE ~~PRESIDENT'S~~ *EXECUTIVE DIRECTOR'S* DESIGNEE;

(12) A REPRESENTATIVE FROM THE GREATER BALTIMORE REGIONAL BUSINESS COMMUNITY WITH KNOWLEDGE OF HEALTH CARE WORKFORCE ISSUES, APPOINTED BY THE GREATER BALTIMORE COMMITTEE;

(13) A REPRESENTATIVE FROM THE GREATER WASHINGTON REGIONAL BUSINESS COMMUNITY WITH KNOWLEDGE OF HEALTH CARE WORKFORCE ISSUES, APPOINTED BY THE COMMITTEE FOR MONTGOMERY;

(14) A UNION REPRESENTATIVE WHO IS A HEALTH CARE WORKER, CHOSEN FROM A LIST SUBMITTED BY UNIONS THAT REPRESENT HEALTH CARE WORKERS;

(15) A STUDENT HEALTH CARE WORKER REPRESENTATIVE, CHOSEN FROM A LIST SUBMITTED BY INSTITUTIONS OF HIGHER EDUCATION THAT EDUCATE HEALTH CARE WORKERS;

(16) THE ~~EXECUTIVE DIRECTOR~~ PRESIDENT OF THE MARYLAND HOSPITAL ASSOCIATION OR THE PRESIDENT'S DESIGNEE;

(17) A REPRESENTATIVE FROM THE LONG-TERM CARE INDUSTRY;

(18) A REPRESENTATIVE FROM THE COMMUNITY-BASED HEALTH CARE INDUSTRY; ~~AND~~

(19) A REPRESENTATIVE FROM A COMMUNITY MENTAL HEALTH PROGRAM OPERATING IN THE PUBLIC MENTAL HEALTH SYSTEM;

(20) A REPRESENTATIVE FROM A MEDICAL LABORATORY; AND

~~(19)~~ ~~*(20)*~~ *(21)* A CONSUMER OF HEALTH CARE SERVICES.

(C) IN PERFORMING ITS DUTIES, THE COMMISSION MAY CONSULT WITH INDIVIDUALS AND ENTITIES THAT THE SECRETARY DEEMS APPROPRIATE.

(D) (1) THE SECRETARY OF HEALTH AND MENTAL HYGIENE SHALL:

(I) CHAIR THE COMMISSION;

(II) APPOINT THE NONDESIGNATED MEMBERSHIP OF THE COMMISSION; AND

(III) ESTABLISH SUBCOMMITTEES AND APPOINT SUBCOMMITTEE CHAIRS AS NECESSARY TO FACILITATE THE WORK OF THE COMMISSION.

(2) TO THE EXTENT PRACTICABLE, THE MEMBERS APPOINTED TO THE COMMISSION SHALL REASONABLY REFLECT THE GEOGRAPHIC, RACIAL, ETHNIC, CULTURAL, AND GENDER DIVERSITY OF THIS STATE.

(E) THE COMMISSION SHALL:

(1) DETERMINE THE CURRENT EXTENT OF THE HEALTH CARE WORKFORCE SHORTAGE IN THE STATE INCLUDING AN EVALUATION OF MECHANISMS CURRENTLY AVAILABLE IN THE STATE AND ELSEWHERE INTENDED TO ENHANCE EDUCATION, RECRUITMENT, AND RETENTION OF HEALTH CARE WORKERS;

(2) EXAMINE WHAT CHANGES ARE NEEDED:

(I) TO ENHANCE INSTITUTIONAL CAPACITY TO INCREASE STUDENT ENROLLMENT AND GRADUATION RATES; AND

(II) TO ENHANCE EXISTING EDUCATIONAL PROGRAMS, SCHOLARSHIP PROGRAMS, AND FUNDING MECHANISMS TO PROVIDE INCENTIVES TO INDIVIDUALS TO ENTER THE HEALTH CARE WORKFORCE;

(3) EXAMINE WHAT CHANGES ARE NEEDED WITHIN THE HEALTH CARE ENVIRONMENT TO RETAIN HEALTH CARE WORKERS;

(4) IDENTIFY METHODS TO:

(I) RECRUIT MINORITIES INTO THE HEALTH CARE WORKFORCE;

(II) RECRUIT HIGH SCHOOL STUDENTS INTO THE HEALTH CARE WORKFORCE; ~~AND~~

(III) *RECRUIT AND FACILITATE THE LONG-TERM RETENTION OF HEALTH CARE WORKERS IN RURAL AND UNDERSERVED AREAS IN THE STATE; AND*

~~(III)~~ *(IV)* FACILITATE CAREER ADVANCEMENT AND RETENTION OF HEALTH CARE WORKERS; AND

(5) DEVELOP RECOMMENDATIONS ON, AND FACILITATE IMPLEMENTATION OF, STRATEGIES TO REVERSE THE GROWING SHORTAGE OF HEALTH CARE WORKERS IN THE STATE.

(F) THE DEPARTMENT SHALL PROVIDE STAFF SUPPORT TO THE COMMISSION.

(G) THE COMMISSION SHALL REPORT ITS FINDINGS AND RECOMMENDATIONS TO THE GOVERNOR AND, SUBJECT TO § 2-1246 OF THE STATE GOVERNMENT ARTICLE, TO THE GENERAL ASSEMBLY ON OR BEFORE JANUARY 1 OF EACH YEAR.

(H) A MEMBER OF THE COMMISSION MAY NOT RECEIVE COMPENSATION BUT IS ENTITLED TO REIMBURSEMENT FOR EXPENSES UNDER THE STANDARD STATE TRAVEL REGULATIONS, AS PROVIDED IN THE STATE BUDGET.

SECTION 2. AND BE IT FURTHER ENACTED, That this Act shall take effect July 1, 2006. It shall remain effective for a period of 2 years and, at the end of June 30, 2008, with no further action required by the General Assembly, this Act shall be abrogated and of no further force and effect.

Appendix B: Rank By Demand (Occupational Titles)

Ranked by Demand	Occupational Title	Estimated Employment 2004	Estimated Employment 2014	Ranked by 2014 Employment	Growth Openings	Ranked by Growth Openings	Total Openings	Ranked by Total Openings	Composite Score
1	Registered Nurses	48,595	62,510	1	13,915	1	24,080	1	3
2	Nursing Aides & Home Health Aides	36,870	49,465	2	12,600	2	17,430	2	6
3	Medical Assistants	7,510	10,635	5	3,125	3	4,510	3	11
4	Physician and Surgeons, ALL	9,615	14,470	3	2,070	4	3,730	5	12
5	Licensed Practical and Licensed Vocational Nurses	8,930	10,905	4	1,975	5	3,920	4	13
6	Dental Assistants	4,345	6,025	6	1,685	6	2,895	6	18
7	Health Specialties Teachers, Postsecondary & Nursing Instructors	4,885	5,970	7	1,085	8	2,185	7	22
8	Pharmacy Technicians	4,515	5,765	8	1,245	7	1,835	9	24
9	Pharmacists	4,440	5,420	9	980	11	1,840	8	28
10	Emergency Medical Technicians and Paramedics	4,340	5,390	10	1,050	10	1,545	12	32
11	Medical and Clinical Laboratory Technicians	3,595	4,325	11	730	17	1,700	10	38
12	Physical Therapists	3,130	4,205	13	1,075	9	1,385	16	38
13	Radiologic Technologists and Techs.	3,445	4,260	12	815	14	1,460	15	41
14	Mental Health Counselors & Substance Abuse and Behavior Disorder Counselors	3,195	3,965	15	780	16	1,505	13	44
15	Medical and Clinical Laboratory Technologists	3,580	4,180	14	600	20	1,565	11	45
16	Rehabilitation Counselors	2,970	3,770	16	800	15	1,480	14	45
17	Dental Hygienists	2,310	3,205	18	900	12	1,095	18	48
18	Physician Assistants	2,155	3,005	20	855	13	1,185	17	50
19	Medical Records and Health Information Technicians	2,440	3,070	19	630	18	975	20	57
20	Occupational Therapists	2,005	2,630	22	625	19	895	21	62
21	Speech-Language Pathologists & Audiologists	2,465	2,870	21	405	23	1,015	19	63
22	Dentists, General	3,235	3,545	17	310	25	855	23	65
23	Respiratory Therapists & Techs	1,875	2,235	23	355	24	885	22	69
24	Surgical Technologists	1,710	2,155	24	445	21	670	24	69

Maryland 2004-2014 Occupational Projections for All Health Care Occupations

Ranked by Demand	Occupational Title	Estimated Employment 2004	Estimated Employment 2014	Ranked by 2014 Employment	Growth Openings	Ranked by Growth Openings	Total Openings	Ranked by Total Openings	Composite Score
25	Physical Therapist Aides	1,150	1,565	28	420	22	610	26	76
26	Massage Therapists	1,750	2,025	25	275	28	615	25	78
27	Medical Transcriptionists	1,380	1,670	26	290	27	545	28	81
28	Marriage and Family Therapists	1,365	1,625	27	255	29	570	27	83
29	Physical Therapist Assistants	680	995	34	310	26	425	29	89
30	Diagnostic Medical Sonographers	885	1,140	31	255	30	420	30	91
31	Dietetic Technicians	1,285	1,480	29	200	31	365	32	92
32	Dietitians and Nutritionists	930	1,075	32	145	35	385	31	98
33	Occupational Health and Safety Specialists	855	1,010	33	155	33	340	33	99
34	Cardiovascular Technologists and Technicians	775	950	35	175	32	320	34	104
35	Opticians, Dispensing	1,145	1,245	30	100	37	300	36	106
36	Chiropractors	785	940	36	155	34	305	35	108
37	Pharmacy Aides	680	790	38	130	36	235	38	112
38	Optometrists	590	685	39	95	38	260	37	114
39	Nuclear Medicine Technologists	425	500	41	75	39	155	40	123
40	Recreational Therapists	520	590	40	70	42	195	39	121
41	Radiation Therapists	280	355	44	75	40	135	41	125
42	Psychiatric Aides	805	830	37	25	46	130	42	125
43	Occupational Therapist Assistants	245	320	46	75	41	105	44	131
44	Athletic Trainers	245	300	47	60	43	110	43	133
45	Podiatrists	300	335	45	35	45	105	45	135
46	Psychiatric Technicians	365	375	42	15	47	60	47	136
47	Occupational Therapist Aides	120	170	48	45	44	60	46	138
48	Orthodontists	135	145	49	10	48	35	48	145
49	Occupational Health and Safety Technicians	290	375	43	0	51	0	51	145
50	Oral and Maxillofacial Surgeons	85	95	50	10	49	25	49	148
51	Orthotists and Prosthetists	30	35	51	5	50	25	50	151

The reader is cautioned in interpreting this comparative data to consider the notes provided on pages 1-2 of this report.
Source: (1) Maryland Higher Education Commission – Degree Information System, Private Career School Annual Reports, WIA Data Collections,
(2) Department of Labor, Licensing, and Regulation.

Appendix C: Top 25 Demand Health Care Occupations

	Top Health Care Occupations	Projected Total Openings from 2004 – 2014	Graduates in FY 2006	Difference Between Projected Total Annual Openings & Graduates in 2006 (Gap)	
				#	%
1	Health Specialties Teachers & Nursing Instructors *	219	18	92%	201
2	Licensed Practical Nurses	392	194	51%	198
3	Registered Nurses	2,408	2,251	7%	157
4	Physicians & Surgeons	373	248	34%	125
5	Rehabilitation Counselors	148	23	84%	125
6	Medical & Clinical Laboratory Technologists	157	38	76%	119
7	Mental Health Counselors & Substance Abuse & Behavioral Disorder Counselors	151	79	48%	72
8	Dental Assistants *	289	226	22%	63
9	Medical & Clinical Laboratory Technicians *	170	108	36%	62
10	Physical Therapist Aides *	61	0	100%	61
11	Emergency Medical Technicians/Paramedics *	154	94	39%	60
12	Physical Therapists	138	82	41%	56
13	Pharmacy Technicians *	183	138	25%	45
14	Physician Assistants	119	87	27%	32
15	Occupational Therapists	90	59	34%	31
16	Pharmacists	184	158	14%	26
17	Surgical Technologists *	67	42	37%	25
18	Dental Hygienists	110	97	12%	13
19	Nursing Aides & Home Health Aides *	1,742	1,749	-.4%	-7
20	Respiratory Therapists & Technicians	89	97	-9%	-8
21	Speech-Language Pathologists & Audiologists	100	113	-13%	-13
22	Dentists, General	86	106	-23%	-20
23	Medical Records & Health Information Technicians *	98	147	-50%	-49
24	Radiologic Technologists & Technicians	146	213	-46%	-67
25	Medical Assistants *	451	1,481	-228%	-1,030

*Under-reported are graduates of short-term training and teacher preparation programs.
The reader is cautioned in interpreting this comparative data to consider the notes provided on pages 1-2 of this report.
Source: Maryland Higher Education Commission – (1) Degree Information System, Private Career School Annual Reports.
WIA Data Collections and (2) Department of Labor, Licensing and Regulation.

Continuation of 26 to 51 Demand Health Care Occupations

	Top Health Care Occupations	Projected Total Openings from 2004 – 2014	Graduates in FY 2006	Difference Between Projected Total Annual Openings & Graduates in 2006 (Gap)	
				#	%
26	Dietetic Technicians	365	19	18	49%
27	Medical Transcriptionists	545	50	5	9%
28	Occupational Therapist Assistants[1]	105	13	-2	-18%
29	(Occupational Therapist Aides)	60	13	-7	-56%
30	Occupational Health and Safety Specialists[2]	340	44	-10	-29%
31	Dietitians and Nutritionists	385	50	-11	-28%
32	Nuclear Medicine Technologists	155	27	-11	-69%
33	Diagnostic Medical Sonographers	420	62	-20	-48%
34	Athletic Trainers	110	35	-24	-69%
35	Cardiovascular Technologists and Technicians	320	57	-25	-78%
36	Physical Therapist Assistants	425	75	-33	-79%
37	(Occupational Health and Safety Technicians)	85	44	-35	-80%
38	Psychiatric Aides[3]	130	81	-68	-523%
39	(Psychiatric Technicians)	60	81	-75	-93%
40	Pharmacy Aides	235	133	-109	-454%
41	Radiation Therapists	135	212	-198	-1414%
42	Massage Therapists & Practitioners	614	496	-435	-713%
43	Marriage and Family Therapists	570	*No Matching Programs	Unknown	
44	Chiropractors	305	No Matching Programs	Unknown	
45	Opticians, Dispensing	300	No Matching Programs	Unknown	
46	Optometrists	260	No Matching Programs	Unknown	
47	Recreational Therapists	195	No Matching Programs	Unknown	
48	Podiatrists	105	No Matching Programs	Unknown	
49	Orthodontists	35	No Matching Programs	Unknown	
50	Oral and Maxillofacial Surgeons	25	No Matching Programs	Unknown	
51	Orthotists and Prosthetists	25	No Matching Programs	Unknown	

[1] For data collection purposes, no separation is made between the instructional categories for Occupational Therapist *Assistants* and Occupational Therapist *Aides*. The graduate data is duplicated for these two occupations.

[2] For data collection purposes, no separation is made between the instructional categories for Occupational Health and Safety *Specialists* and Occupational Health and Safety *Technicians*. The graduate data is duplicated for these two occupations.

[3] For data collection purposes, no separation is made between the instructional categories for Psychiatric *Aides* and Psychiatric *Technicians*. The graduate data is duplicated for these two occupations.

Continuation of 26 to 51 Demand Health Care Occupations

*No Matching Program: No programs in the MHEC inventory match these occupation titles sufficiently to be included in the data
The reader is cautioned in interpreting this comparative data: (1) identified occupations may contain or not take into account crossover instructional programs; (2) these are graduate statistics, not licensing statistics (e.g., 496 Massage Therapist & Practitioners graduated in 2006; however all may not have received licensure to work in MD)

Source: Maryland Higher Education Commission – (1) Degree Information System, Private Career School Annual Reports, Workforce Investment Act (WIA) Data Collections and (2) Department of Labor, Licensing and Regulation.

October 4, 2007

Appendix D: Occupations By Career Pathway and Health Fields

Top 25 Demand Health Care Occupations Grouped by Career Pathways and Health Fields

A. Therapeutic Services – Health Career Pathway

Health Fields		Occupations		Health Fields		Occupations
1.	Medicine	(1)Physicians & Surgeons. (2) Physician Assistants. (3) Surgical Technologist.		2.	Nursing	(4) Registered Nurses. (5) Licensed Practical Nurses. (6) Nurse Assistants & Home (7) Health Aides.
3.	Dentistry	(8) Dentists. (9) Dental Hygienists. (10)Dental Assistants.		4.	Pharmacy	(11) Pharmacists. (12) Pharmacy Technicians.
5.	Therapy	(13)Occupational Therapists. (14)Physical Therapists & Physical Therapist Aides. (15) Speech-Language Therapists & Audiologists.		6.	Health Counseling	(16) Rehabilitation Counselors. (17) Mental Health Counselors, Substance Abuse & Behavioral Disorder Counselors.
7.	Emergency Medical Technology/Paramedics	(18) Emergency Medical Technicians/ Paramedics.		8.	Teaching	(19) Health Specialties Teachers & Nursing Instructors.

B. Diagnostic Services – Health Career Pathway

Health Fields		Occupations		Health Fields		Occupations
9.	Health Technology	(20)Radiologic Technologists/Technicians. (21) Respiratory Therapists/Technicians.		10.	Medical Lab Technology	(22) Medical Laboratory Technologists. (23) Medical Laboratory Technicians.

C. Infomatics – Health Career Pathway

Health Fields		Occupations		Health Fields		Occupations
11.	Medical Assisting	(24) Medical Assistants.		12.	Medical Records	(25) Medical Records & Health Information Technicians.

Appendix E: Maryland Reported Postsecondary Health Care Programs By Educational Level

Health Care Programs	Credit or Non-Credit Courses	PCS Certificate	College Certificate	Associate Degree	Bachelor's Degree	Master's Degree	Doctoral Degree	1st Professional Degree
1st Professional Degree								
Dental (Dentists)								X
Medicine (Physicians/Surgeons)								X
Pharmacy (Pharmacists)								X
Physical Therapy					~~X~~	~~X~~		X
Graduate Degree								
Speech Pathology & Audiology						X	X	
Mental Health & Substance Abuse Counseling						X		
Occupational Therapy						X		
Rehabilitation Counseling						X		
Health & Nursing Education						X	X	X
Bachelor's Degree								
Medical Laboratory Technology					X	X	X	
Physician Assistants			X **	~~X~~	X	X		

~~X~~ Strike-outs indicate levels of education that were discontinued during the period of FY 1997 – FY 2006.

** Admissions prerequisites of a bachelor's degree for physician assistant certificate programs. Source: MHEC 2007.

Continuation of Appendix E: Maryland Reported Postsecondary Health Care Programs By Educational Level

Health Care Programs	Credit or Non-Credit Courses	PCS Certificate	College Certificate	Associate Degree	Bachelor's Degree	Master's Degree	Doctoral Degree	1st Professional Degree
Associate Degree								
Registered Nurse				X	X	X	X	
Dental Hygiene				X	X	X		
Respiratory Therapy			~~X~~	X	X			
Certificate								
Radiologic Technology		X		X	X			
Licensed Practical Nursing		~~X~~	X					
Surgical Technology			X	X				
Credit or Non-Credit Courses								
EMT/Paramedic	*	~~X~~	X	X	X	X		
Medical Assistant	*	X	X	X				
Medical Records Technology	X	X	X	X				
Medical Lab Technician	X	X	X	X				
Dental Assistant	X	X	~~X~~	~~X~~				
Nursing Assistant/Home Health Aide	X	X	X					
Pharmacy Technician	X	X	X					
Physical Therapist Aides	X							

~~X~~ Strike-outs indicate levels of education that were discontinued during the period of FY 1997 – FY 2006.
** Admissions prerequisites of a bachelor's degree for physician assistant certificate programs. Source: MHEC 2007.

Appendix F: Average Faculty Salaries

Average Faculty Salaries in Maryland by Rank in 2005
All Faculties, All Disciplines

	Professor	*Assistant Professor*	*Assistant Professor*	*Instructor*	*Lecturer*	*Average*
Community Colleges	$73,249	$58,044	$50,044	$42,814	$26,470	$60,047
4 year Colleges	$110,428	$77,799	$64,319	$54,979	$45,185	$79,026

MHEC Data Book 2005; Full Time Faculty Salaries

Appendix G: Priority List Covered by MHEC Program

Health Occupations	Annual Openings	2006 Graduates	Difference Between Projected Total Annual Openings & Graduates in 2006		MHEC Priority Area
			#	%	
Health Specialties Teachers, Postsecondary & Nursing Instructors and Teachers (Nurse Faculty currently eligible)	219	18	201	92%	Workforce
Registered Nurses	2,408	2,251	157	7%	Workforce
Physician and Surgeons, ALL	373	248	125	34%	LARP
Rehabilitation Counselors	148	23	125	84%	Workforce
Mental Health Counselors, Substance Abuse and Behavior Disorder Counselors	151	79	72	48%	Workforce
Physical Therapists	138	82	56	41%	Workforce/LARP
Physician Assistants	119	87	32	27%	LARP
Occupational Therapists	90	59	31	34%	Workforce/LARP
Audiologist Speech-Language Pathologists & Audiologists	100	113	-13	-13%	Workforce/LARP
Dentists, General	86	106	-20	-23%	LARP
Social Workers	307	411	-104	-34%	Workforce/LARP
Clinical, Counseling, and Social Psychologists	139	411	-272	-196%	Workforce

Workforce: Included in the current Workforce Shortage Student Assistance Grant Program
LARP: Loan Assistance Repayment Program

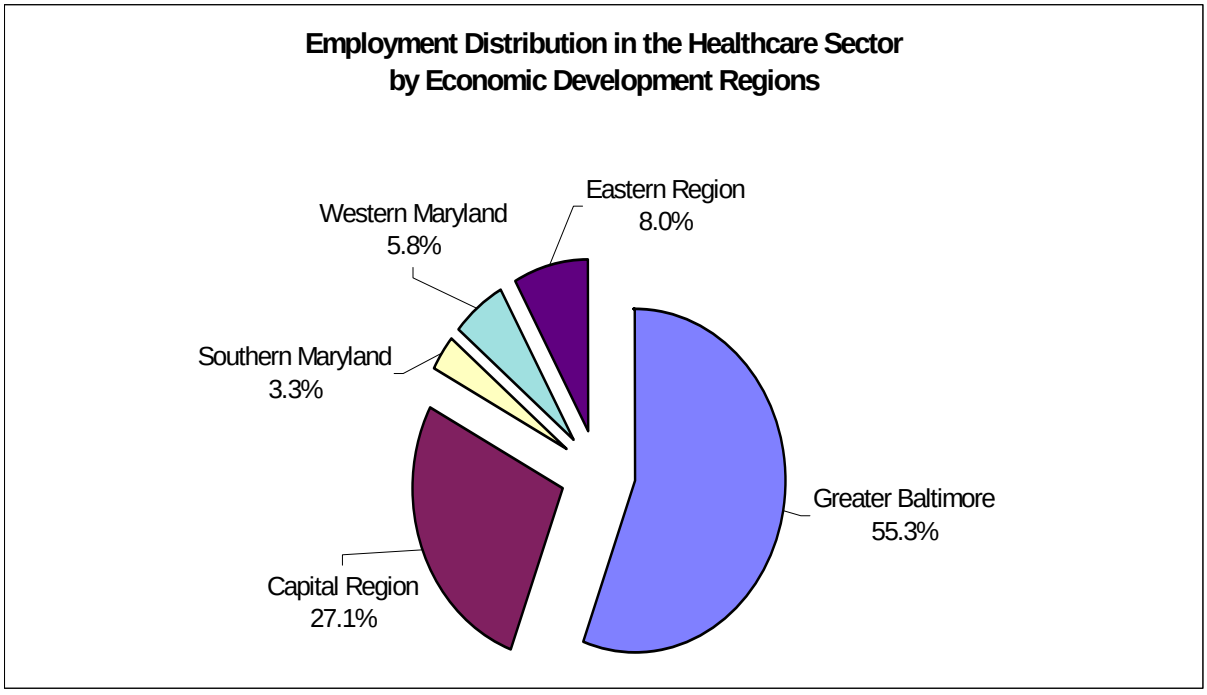
Appendix H: Employment and Wages in the Health Care Sector By Economic Development Regions

Employment and Wages in the Healthcare Sector
By Economic Development Regions

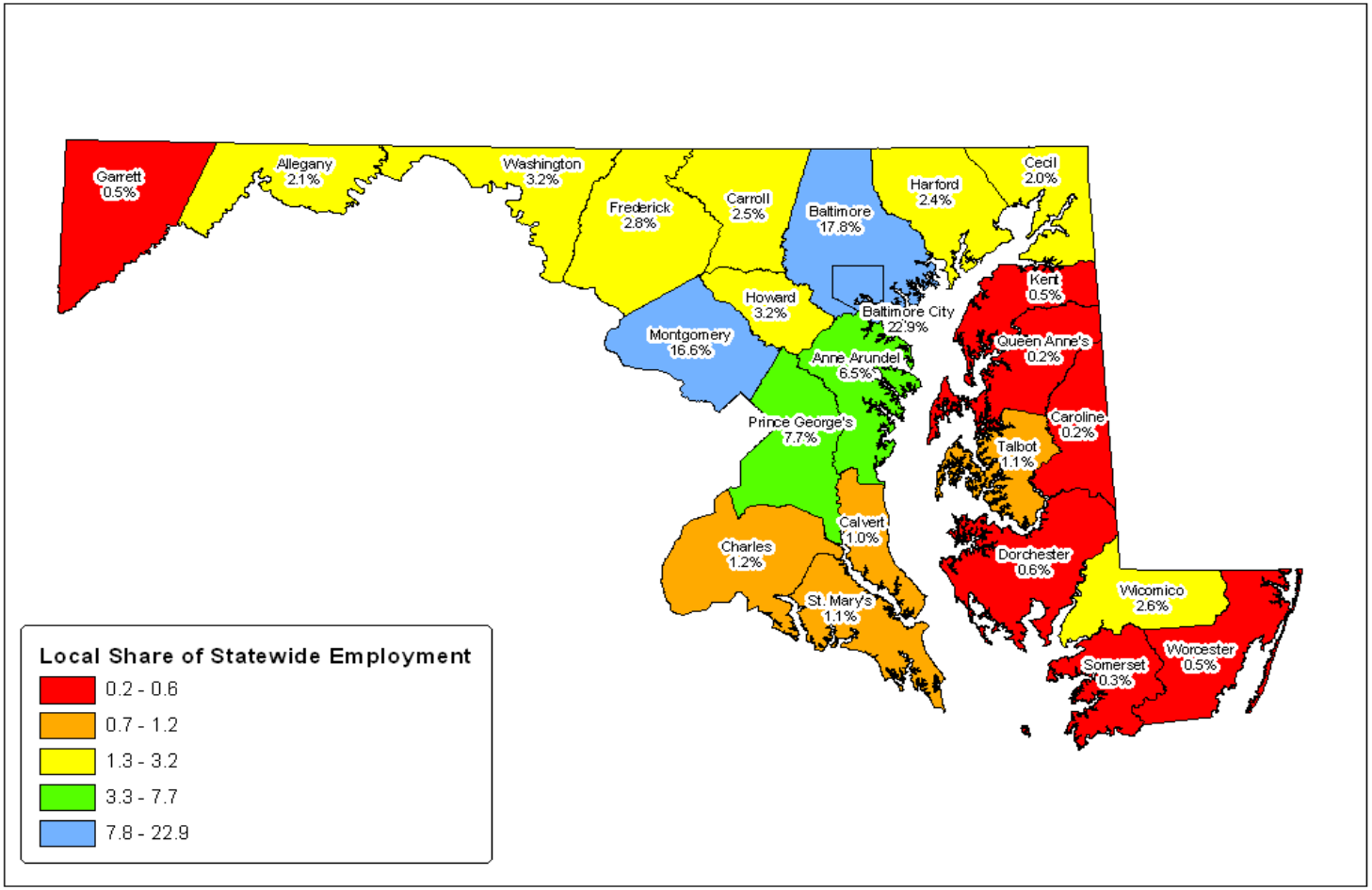
Region	Employment 2001	Employment 2005	Employment Change 2001 - 2005	Number of Reporting Units* 2005	Total Wages 2005	Average Weekly Wage 2005
Maryland	**233,838**	**257,750**	**23,912**	**11,550**	**$11,232,295,480**	**$838**
Greater Baltimore	128,368	142,587	14,219	5,208	6,217,882,215	839
Capital Region	63,928	69,968	6,040	4,395	3,182,727,632	875
Southern Maryland	7,636	8,471	835	464	323,858,037	735
Western Maryland	14,074	14,902	828	491	536,159,031	692
Eastern Region	18,906	20,519	1,613	799	890,305,918	834
Nondistributable**	926	1,303	377	193	81,362,647	1,201

* Refers to a single physical business location

** Data in all Healthcare Sector industries that cannot be assigned to a specific geographic location



Local Share of Statewide Employment in the Healthcare Sector
2005



Prepared by the MD DLLR - Office of Workforce Information & Performance

According to the Maryland Department of Labor, Licensing and Regulation Division of Workforce Development, the Health Care Sector consists of businesses that provide a variety of health care services to individuals, which may include screening, diagnosis, treatment, rehabilitation, and short or long-term inpatient, home, or residential care. Some establishments also provide social or personal assistance to their clients. Health care is a "knowledge-based" sector; its component industries share the common process of service delivery by trained professionals with the requisite expertise.

Appendix I: Existing Programs in Maryland for Pipeline Preparation into Health Careers

The Meyerhoff Scholarship Program

The program was founded in 1988 at the University of Maryland in Baltimore County (UMBC) by a grant from the Robert and Jane Meyerhoff Foundation. The program operates under the guidance of Freeman A. Hrabowski III and has the ultimate goal of increasing the number of under represented minorities who achieve high degrees in math, science and engineering. The program which started out accepting only minority students is now open to all students. Today UMBC has more black biochemistry graduates than any other undergraduate institution in the nation. By now the program has more than 500 graduates per year with 86 percent entering SEM (Science, Engineering and Math) degrees.

The Ingenuity Project

The project has the mission of preparing highly motivated and capable Baltimore students to achieve a nationally competitive level of math and sciences. It began as a middle school program in 1994. A high school component was added in 1997 and an elementary one in 2001. It is operated by a non-profit organization and founded by the Abell Foundation and the Baltimore City Public School system.

The Baltimore Talent Development High School

With only 39 percent high school graduates in nearly four years, Baltimore City has its work cut out for it. Situated in one of the poorest neighborhoods in Baltimore City, the school is committed to being a model program to preventing the high drop out rates of minority students. The vast majority of students are low income and all are black. Currently in the school which opened its doors only four years ago, attendance rates are at over 90 percent. Tough love, a variety of enrichment programs in arts and sciences, low teacher-student ratio, and high autonomy levels of seniors, prove successful. In 2004, the drop out rate in the school was only 3.6 percent. It is estimated that 60 percent of students in the junior class will attend a four year college and another 30 percent a two year college.

Dunbar Health Professions Mentoring Program

The school which is in close proximity to Johns Hopkins Medical Institutions seeks to inform and encourage high school students who are interested in health careers. Each Dunbar student is paired with a Johns Hopkins or University of Maryland student who serves as a mentor. The students go through eight monthly two-hour mentoring sessions. Students also take field trips to the two "adopting" hospitals to visit the various clinical sites and watch health workers at work.

Morgan State University Health Careers Opportunity Program (HCOP)

The project sought to develop a more competitive applicant pool by partnering with Baltimore City Public Schools to identify and enroll 30 high school students or economically disadvantaged minority students for a 36-week academic year tutoring. The program was funded under the Centers of Excellence programs (Title VII) and was defunct in 2006 when the federal government stopping the funding.

Baltimore Alliance for Careers in Health Care

The alliance seeks to address unemployment and underemployment as well as shortage in health providers by identifying health career pathways and training city residents on the job to enter various health careers.

PROMISE – Maryland Alliance for Graduate Education and the Professoriate (AGEP)

The National Science Foundation's Alliance is intended to significantly increase the number of domestic students receiving doctoral degrees in the science, technology, engineering and math (STEM). Maryland's AGEOP is an alliance of the three public research universities in Maryland led by UMBC. The Maryland AGEP was awarded in 2002, and the provost of the program is Dr. Arthur T. Johnson.

- Propose interviews with college campus media outlets (radio, TV, newspaper, and magazines).
- Write an article for the school newspaper to describe a health care organization and positions within that organization.
- How the organization provides health care to those in need and how the student could assist in those efforts.

National Health Services Corps

The National Health Service Corps (NHSC) is an administration within the United States Department of Health and Human Services committed to improving the health of the Nation's underserved. NHSC operates in Maryland to help underserved communities recruit and retain dedicated clinicians to meet their residents' health care needs. Some of these clinicians are obligated to serve in community-based systems of care in return for scholarship or loan repayment support already established. Many NHSC clinicians remain in underserved communities after fulfilling their NHSC service commitments. This program helps to soften the fiscal impact the State should explore use of Federal program money available to recruit rural and underserved populations.

Appendix J: Maryland Health Workforce Related Organizations and Programs

Maryland Statewide Commission on the Shortage in the Health Care Workforce (MSCSHW)

MARYLAND HEALTH WORKFORCE RELATED ORGANIZATIONS & PROGRAMS

1. Baltimore Alliance for Careers in Health care
   - Career Coaching and Mapping
   - Pre-allied Health Bridge Program
   - Jobs to Careers

   http://www.baltimorealliance.org

2. Community Foundation of the Eastern Shore
   - Partners in Nursing -- a regional mentoring program specifically to address three issues: Retention of new nurses; Creation of a nursing leadership network; and Development of a career path to increase the number of nurse faculty.
   - Partners in Nursing Steering Committee

   www.cfes.org

3. Maryland Addiction Directors' Council
   - Workforce Development Committee

   http://www.mdaddictiondirectors.com

4. Maryland Area Health Education Center
   - Baltimore Area Health Education Center
   - Eastern Shore Area Health Education Center
   - Western Maryland Area Health Education Center

   -- Youth Health Service Corps: health professions recruitment program that trains and places high school students as volunteers in health care agencies.

   -- Exploring Careers in Health Occupations -- a summer pipeline program.

   http://health.allconet.org/
   http://ahec.umaryland.edu/overview.asp

5. Maryland Association for Community Services (MACS) for Persons with Developmental Disabilities, Inc.

   http://wwwmacsonline.org

6. Maryland Association of Deans and Directors of Nursing Programs
   - Nurse Faculty Recruitment Fair

   http://www.marylandhealthcareers.org

7. Maryland Department of Health and Mental Hygiene
   - Maryland Statewide Commission on the Shortage in the Health Care Workforce

   http://www.dhmh.maryland.gov/mscshw/

Source: MSCSHW, 11-8-2007
http://www.dhmh.maryland.gov/mscshw/

Maryland Statewide Commission on the Shortage in the Health Care Workforce (MSCSHW)

MARYLAND HEALTH WORKFORCE RELATED ORGANIZATIONS & PROGRAMS

8. Maryland Department of Health and Mental Hygiene: Family Health Administration
   - Maryland Primary Care Organization (PCO) – designations for Health Professional Shortage Areas and Medically Underserved Areas
   - Maryland Loan Assistance Repayment Program (LARP) Physicians only
   - Maryland Conrad 30 (J-1 Visa waiver) Program
   - National Health Services Corps (coordination with the federal government)
     http://www.fha.state.md.us/ohpp
   - State Office of Rural Health: 3R Net
     http://www.3rnet.org/
   - Maryland Dent-Care Loan Assistance Repayment Program
     http://www.fha.state.md.us/oralhealth/

9. Maryland Department of Health and Mental Hygiene (DHMH): Mental Hygiene Administration
   - DHMH Mental Hygiene Administration Subcommittee on Children's Mental Health Workforce Development.
   - Maryland Mental Health Transformation Grant: subcommittee - Mental Health Workforce
   - Workgroup on Cultural Competency and Workforce Development for the Mental Health Professionals -- administered by DHMH Office of Minority Health and Health Disparities
     http://www.dhmh.state.md.us/mha/

10. Maryland Department of Health and Mental Hygiene: Maryland Health Professional Boards and Commissions
    http://www.dhmh.state.md.us/html/org-board&comm.htm

11. Maryland Department of Health and Mental Hygiene: Office of Minority Health and Health Disparities
    - Workforce Diversity Initiative funded by the United States Health and Human Services, Office of Minority Health
      http://www.dhmh.state.md.us/hd/websites.htm

12. Maryland Department of Labor, Licensing & Regulation, Governor's Workforce Investment Board
    - Center for Health Industry
    - Health Care Steering Committee
      http://www.mdworkforce.com/

Source: MSCSHW, 11-8-2007
http://www.dhmh.maryland.gov/mscshw/

Maryland Statewide Commission on the Shortage in the Health Care Workforce (MSCSHW)

MARYLAND HEALTH WORKFORCE RELATED ORGANIZATIONS & PROGRAMS

13. Maryland Health Services and Cost Review Commission (HSCRC)
    - Nurse Support Program I – supports staff development and education for health careers, as well as retention programs.
    - Nurse Support Program II - sponsored by Health Services and Cost Review Commission (HSCRC) and administered by Maryland Higher Education Commission (MHEC) -- supports nursing education and faculty development

      http://www.hscrc.state.md.us/

14. Maryland Higher Education Commission
    - Janet Hoffman Programs
    - Maryland Scholarships and Loan Repayment Programs

      http://www.mhec.state.md.us/

15. Maryland Hospital Association
    - Health Care Faculty Shortage Work Group
    - Business Case Work Group

      http://www.mdhospitals.org

16. Maryland Nursing Workforce Commission, Maryland Board of Nursing (MBON)
    - Maryland Commission on the Nursing Workforce (MBON) – subcommittees include recruitment, retention, nursing education, technology applications

      http://www.mbon.org/main.php

17. Maryland State Department of Education
    - Academy of Health Professions
    - Project Lead the Way Biomedical Sciences

      http://www.msde.md.gov/msde/

18. National Organization of State Offices of Rural Health
    - Workforce Committee

      http://www.nrharural.org/

19. The Annapolis Coalition on the Behavior Health Workforce
    - Children's Workforce Issues
    - Innovation in Workforce Education
    - Cultural Competency and Disparities in Access to Quality Services
    - Rural Workforce Issues

      http://www.annapoliscoalition.org/

Source: MSCSHW, 11-8-2007
http://www.dhmh.maryland.gov/mscshw/

MARYLAND HEALTH WORKFORCE RELATED ORGANIZATIONS & PROGRAMS

20. Towson University School of Nursing
    - Nightingale Scholars Program -- a "grow your own" program for faculty development EMT to RN transition program developed by Community College of Baltimore County.
      http://www.towson.edu/

21. University of Maryland Baltimore
    - Center for Health Workforce Development
      http://www.umaryland.edu/healthworkforce/

22. University System of Maryland Office of the Chief Operating Officer/Vice Chancellor for Administration and Finance (COO/VCAF)
    - Workforce Development: University System of Maryland Studies
      http://www.usmd.edu/

Source: MSCSHW, 11-8-2007
http://www.dhmh.maryland.gov/mscshw/

Appendix K: Commission Workplan and Timeline

Maryland Statewide Commission on the Shortage in the Health Care Workforce (MSCSHW)

Work Plan and Timeline

January 18, 2007 First Commission Meeting

Discuss House Bill 1127 (2006) legislation, Statewide Commission on the Shortage in the Health Care Workforce (MSCSHW) charge, and operational timelines.

1) Review charge, timelines, and commission representatives.
2) Identified groups and agencies that work on health care workforce issues in Maryland not listed in the legislation.
3) Identify baseline data and studies on health care workforce for education, recruitment and retention in Maryland.
4) Discussions committee development.

March 2007 Postponed Commission Meeting

Review data and existing health care workforce resources.

- Determine baseline data for the charge.

April 19, 2007 Second Commission Meeting

Review and assessing data on Maryland health care workforce shortages to be used as MSCSHW baseline.

1) Provide data presentations.
2) Provide model workforce program presentations.
3) Discuss website development.
4) Decisions on usage of health care workforce data and information.

A**pril 25, 2007 Special Committee Meeting**

Conduct a working meeting of commissioners only to outline the 2007 Mid-year Report to the Governor and General Assembly.

1) Outline the content information for the 2007 Mid-year Report.
2) Discuss recommendations from several entities on health care workforce.
3) Discuss health professional occupations to be included in the MSCSHW report.
4) Solicit volunteers for committees to address the issues on education, recruitment and retention.
5) Reviewed website content.

May 17, 2007 Third Commission Meeting

Complete review of health care workforce programmatic gaps and review of the draft 2007 Mid-year Report.

1) Presentations on the Governor's Workforce Investment Board.
2) Ensure collaboration of all existing workforce groups.
3) Review draft report and made revisions as agreed upon.
4) Conclusion on health occupation numbers.
5) Review Mid-year Report for comments.
6) Submit the final report to DHMH Office of Governmental Affairs and Public Relations.

June 21, 2007 Fourth Commission Meeting

Conclude data on the extent of the health care workforce shortage and conduct committee work on education, recruitment, and retention.

1) Start data compilations, analysis, and recommendations for the Annual Report.
2) Committees develop recommendations and facilitate strategies on health care workforce shortages.
3) Gather workforce programmatic information.
4) Arrange for conference calls for Committees.

July 19, 2007 Fifth Commission Meeting

Develop Annual Report Content

- Conduct committee breakout sessions on education, recruitment, and retention.

August 16, 2007 Sixth Commission Meeting

Develop Annual Report Content

- Conduct committee breakout sessions on education, recruitment, and retention.

September 20, 2007 Seventh Commission Meeting

Develop Annual Report Content

1) Continue committee breakout sessions on education, recruitment, and retention.
2) Discuss finalizing recommendations from the Education, Recruitment, and Retention Committees.
3) Submit details on committee work.
4) Discuss language for the development of new health care workforce policies.

October 18, 2007 Eight Commission Meeting

Review and edit draft 2007 Annual Report.

1) Ensure that all vital components are adequately covered in the report.
2) Conduct Committee breakout sessions as necessary.
3) Review edits and revisions by October 31, 2007.
4) Submit the final report to DHMH Office of Governmental Affairs and Public Relations.

November 15, 2007 Ninth Commission Meeting

Discuss implementation action plan

December 20, 2007 Tenth Commission Meeting

Discuss implementation action plan

Appendix L: Commission Activities and Timeline

Maryland Statewide Commission on the Shortage in the Health Care Workforce (MSCSHW)

Commission Activities and Timeline

January 18, 2007 **First Commission Meeting**

Discuss House Bill 1127 (2006) legislation, Statewide Commission on the Shortage in the Health Care Workforce (MSCSHW) charge, and operational timelines.

1) Review Commission representatives. Identified groups and agencies that work on health care workforce issues in Maryland not listed in the legislation. The Commission plans to invite these groups to participate in the work with the Commission and to be available for consultation as necessary.
2) The consensus was that the legislation was not intended to institute another study.
3) Baseline data and studies on health care workforce for education, recruitment and retention in Maryland should be obtained as a starting point.

March 2007 **Postponed Commission Meeting**

The March meeting was not held due to the continuation of gathering health care workforce data and information resources.

April 19, 2007 **Second Commission Meeting**

Review and assessing data on Maryland health care workforce shortages to be used as MSCSHW baseline.

1) Judy Hendrickson, director of Academic Affairs for the Maryland Higher Education Commission (MHEC), presented data regarding "Maryland's Top 25 Demand Health Care Occupations"
2) Ronald M. Hearn, executive director of the Baltimore Alliance for Careers in Healthcare (BACH) presented their model of building workers' knowledge and skills; and enhancing organizational and workforce system capacities. BACH uses educational requirements for entry level and technician jobs with coaching through career paths.
3) Discuss the need for minority population data for various health careers.
4) Initiate the development of a Website to promote awareness, post baseline information, internet links, and workforce resources.
5) Draft a letter for the Secretary of Health's signature that will solicit health workforce data and information from Maryland entities.

April 25, 2007 Special Committee Meeting

Conduct a working meeting of commissioners only to outline the 2007 Mid-year Report to the Governor and General Assembly.

1) Review the tracking outline and develop a matrix to incorporate content information for the 2007 Mid-year Report.
2) Discuss recommendations from several entities on health care workforce to enhance the early presentation for the health shortage occupations in Maryland.
3) Discuss health care workforce shortage data to create a self-selection of the number of health professional occupations to be included in the MSCSHW report.
4) Solicit volunteers for committees to address the issues on education, recruitment and retention.
5) Approve the website for public view.

May 17, 2007 Third Commission Meeting

Complete review of health care workforce programmatic gaps and review of the draft 2007 Mid-year Report.

1) Art Taguding, director of the Center for Industry Initiatives, Governor's Workforce Investment Board (GWIB), Maryland Department of Labor, Licensing and Regulation. Mr. Taguding presented on GWIB's history with a Health Summit on workforce and other efforts to address health care workforce shortages.
2) Ensure collaboration of all workforce groups to strength Maryland's workforce development system.
3) Review draft report and made revisions as agreed upon.
4) Conclusion on health occupation number: Total Top 53 Health Occupations in Maryland, as defined by DLLR. With the combination of two categories, MSCSHW will use top 51 health occupations.
5) Incorporate edits, comments, and ideas into the report and forward to Commissioners for approval. Next, the report is to be submitted to the DHMH Office of Governmental Affairs for approval and then to be released as the final report.

June 21, 2007 Fourth Commission Meeting

Conclude data on the extent of the health care workforce shortage and conduct committee work on education, recruitment, and retention.

1) Start drafting data compilations, analysis, and recommendations.
2) Committees work on recommendations and facilitating strategies on health care workforce shortages.
3) Gather workforce programmatic information from the Maryland State Department of Education, Maryland Area Health Education Centers, and community colleges, etc.
4) Arrange for conference calls for Committees.

July 19, 2007 Fifth Commission Meeting

Conduct Committee breakout sessions. Each Committee reports to the full Commission progress on their topic area.

August 16, 2007 Sixth Commission Meeting

Conduct Committee breakout sessions. Each Committee reports to the full Commission progress on their topic area.

September 20, 2007 Seventh Commission Meeting

Continue with Committee updates and address the Maryland health care workforce data compiled in the 2007 Mid-year Report.

1) Discuss finalizing recommendations from the Education, Recruitment, and Retention Committees.
2) Plan for Committee breakout sessions. Committee Chairpersons submit details of committee work.
3) Discuss language for the development of new health care workforce policies.
4) Review accumulated information to define issues and approaches on health care workforce shortage recommendations.

October 18, 2007 Eight Commission Meeting

Review and edit draft 2007 Annual Report.

1) Ensure that all vital components are adequately covered in the report.
2) Conduct Committee breakout sessions as necessary.
3) Review edits and revisions by October 31, 2007.

November 15, 2007 Ninth Commission Meeting

Discuss implementation action plan

December 20, 2007 Tenth Commission Meeting

Discuss implementation action plan

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