REPORT OF THE
JOINT COMMISSION ON HEALTH CARE

Update on the Virginia
Physician Workforce Shortage
(HJR 689, 2013)

TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA

HOUSE DOCUMENT NO. 2

COMMONWEALTH OF VIRGINIA
RICHMOND
2014
The Joint Commission on Health Care (the Commission) is established in the legislative branch of state government. The purpose of the Commission is to study, report and make recommendations on all areas of health care provision, regulation, insurance, liability, licensing, and delivery of services. In so doing, the Commission shall endeavor to ensure that the Commonwealth as provider, financier, and regulator adopts the most cost-effective and efficacious means of delivery of health care services so that the greatest number of Virginians receive quality health care. Further, the Commission shall encourage the development of uniform policies and services to ensure the availability of quality, affordable and accessible health services and provide a forum for continuing the review and study of programs and services.

The Commission may make recommendations and coordinate the proposals and recommendations of all commissions and agencies as to legislation affecting the provision and delivery of health care.

For the purposes of this chapter, "health care" shall include behavioral health care.

Joint Commission on Health Care Membership

Chair
The Honorable Linda T. Puller

Vice-Chair
The Honorable John M. O’Bannon, III

Senate of Virginia
The Honorable George L. Barker
The Honorable Harry B. Blevins
The Honorable Charles W. Carrico, Sr.
The Honorable L. Louise Lucas
The Honorable Stephen H. Martin
The Honorable Jeffrey L. McWaters
The Honorable Ralph S. Northam

Virginia House of Delegates
The Honorable Robert H. Brink
The Honorable David L. Bulova
The Honorable Benjamin L. Cline
The Honorable Rosalyn R. Dance
The Honorable T. Scott Garrett
The Honorable Algie T. Howell, Jr.
The Honorable Riley E. Ingram
The Honorable Christopher K. Peace
The Honorable Christopher P. Stolle
The Honorable William A. Hazel, Jr.
Secretary of Health and Human Resources

Commission Staff
Kim Snead
Executive Director

Stephen W. Bowman
Senior Staff Attorney/Methodologist
Michele L. Chesser, PhD
Senior Health Policy Analyst
Jaime H. Hoyle
Senior Staff Attorney/Health Policy Analyst
Sylvia A. Reid
Publication/Operations Manager
Preface

House Joint Resolution 689, introduced by Delegate Harry R. Purkey in 2013, directed the Joint Commission on Health Care (JCHC) to study whether a shortage of medical doctors in Virginia exists and if shortages exist provide avenues to alleviate the shortages.

Virginia currently has more than 16,000 practicing physicians; 40 percent of whom practice as family, internal medicine, or pediatric physicians. While the total number of physicians generally appears to be adequate, there is a maldistribution in which certain, primarily rural areas of the State have relatively few physicians. Future workforce shortages, particularly in primary care and surgery specialties, are expected and will need to be addressed also (Physician Forecasting in Virginia, 2008 – 2030; Virginia Department of Health Professions).

A number of avenues for addressing maldistribution and projected shortages of medical professionals were examined. Five policy options were approved by members of the Joint Commission:

State Funding

- A budget amendment for $400,000 GFs per year (with federal match funding) for the Virginia State Loan Repayment Program.

Requests of the Department of Health Professions

- A report to JCHC in 2014 regarding efforts to consider and accept applicable military training as evidence that the educational requirements for certification for certain health professions have been met.
- A request for convening a workgroup to consider and report back to JCHC in 2015 regarding the idea of establishing a mid-level provider license.

Request of the Virginia Health Workforce Development Authority

- A request for convening a workgroup to consider and report back to JCHC in 2015 regarding graduate medical education and new State-supported residencies.

Additional Review by JCHC

- A 2014 JCHC-study of the idea of allowing certain providers working within an approved facility to be exempt from Virginia’s scope of practice laws when established conditions have been met.

Joint Commission members and staff would like to thank the individuals who assisted in this study, including representatives from: Bipartisan Policy Center, Eastern Virginia Medical School, Medical Society of Virginia, University of Virginia, Virginia Commonwealth University, Virginia Department of Health, Virginia Department of Health Professions, Virginia Department of Planning and Budget, Virginia Geriatric Education Center, Virginia Hospital and Healthcare Association, and Virginia Workforce Health Development Authority.
Table of Contents

BACKGROUND.......................................................1

PHYSICIAN SUPPLY.............................................1

PHYSICIAN LICENSURE AND EDUCATION ......2

CURRENT PROVIDER SHORTAGES ...............4

PROJECTED PROVIDER SHORTAGES ..........6

AVENUES FOR ADDRESSING SHORTAGES ......7

POLICY OPTIONS AND PUBLIC COMMENT .....9

ATTACHMENTS:
SEPTEMBER 17, 2013 PRESENTATION TO THE JOINT COMMISSION ON HEALTH CARE

HOUSE JOINT RESOLUTION  689 (2013)
Update on the Virginia Physician Workforce Shortage

House Joint Resolution 689, introduced by Delegate Harry R. Purkey in 2013, directed the Joint Commission on Health Care (JCHC) to study and make recommendations regarding the current and projected shortage of medical doctors in Virginia.

This report addresses the issues raised in HJR 689 and provides an update of the physician-information presented to JCHC members in 2008 and 2009. The findings and recommendations of the earlier update are documented in two published reports: Interim Report: Analysis of Virginia’s Health Workforce Pipelines RD No. 118 (2009) and Final Report: Analysis of Virginia’s Health Workforce Pipelines RD No. 90 (2010).

Background

The statewide demand for health care services is projected to increase as the Commonwealth’s population and the over-65 population in particular increases. By 2030, 18 percent of the State’s population (1.8 million individuals) are expected to be over 65 years of age, an increase from 12 percent in 2000.1 This is an important change since older individuals in general require significantly more care from physicians. To meet this increased demand, an increased supply of health care practitioners will be needed.

Physicians provide essential health care services and specialize in the study, diagnosis, and treatment of disease or injury. In order to practice as a physician in the United States, one must graduate from a four-year medical school and complete a residency that provides training in a specialized medical field such as cardiology, pediatrics, family medicine, or psychiatry. Residency training typically lasts three to seven years.

Physician Supply

The American Association of Medical Colleges (AAMC) reported 2010 workforce figures including the figures shown in Figure 1. In general, Virginia’s physician-density ratios are comparable or higher than the median or average for all states; regarding active physicians who are international medical graduates, at 20.8 percent Virginia exceeded the median for all states (17.8 percent) but trailed the national figure of 24 percent.2

<table>
<thead>
<tr>
<th>Active Practicing Physicians per 100,000 People</th>
<th>Virginia</th>
<th>For All States: Median and Range</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>254.9</td>
<td>21st in U.S.</td>
<td>244.2</td>
<td>176.6 – 415.5</td>
</tr>
<tr>
<td>Active Practicing Primary Care Physicians per 100,000 People</td>
<td>91.2</td>
<td>25th in U.S.</td>
<td>91.0</td>
</tr>
<tr>
<td>Active Physicians who Are International Medical Graduates</td>
<td>20.8%</td>
<td>1st in U.S.</td>
<td>17.8%</td>
</tr>
</tbody>
</table>


2 The basis for the various physician estimates contained in the report may vary somewhat based on a number of factors including whether federal physicians, medical residents, and physicians that are licensed but not practicing are included or excluded, as well as other variables.
By surveying practitioners during the licensure process, the Department of Health Professions (DHP) through its Healthcare Workforce Data Center has significantly improved the reliability of workforce information gathered. *Virginia’s Physician Workforce: 2012*, reported that Virginia has more than 16,000 practicing physicians with the three most common specialties being in primary care (Figure 2). Furthermore, of Virginia’s practicing physicians: 20 percent attended an in-state medical school, 27 percent attended their first residency in Virginia, and an additional 23 percent attended their first residency in a bordering state or Washington, D.C.3

**Figure 2: Actively Practicing Virginia Physicians by Specialty**

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Medicine</td>
<td>2,782</td>
<td>17%</td>
</tr>
<tr>
<td>General Internal Medicine</td>
<td>2,008</td>
<td>12%</td>
</tr>
<tr>
<td>Pediatric</td>
<td>1,744</td>
<td>11%</td>
</tr>
<tr>
<td>Radiology</td>
<td>1,255</td>
<td>8%</td>
</tr>
<tr>
<td>Obstetrics and Gynecology</td>
<td>1,236</td>
<td>8%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>1,209</td>
<td>7%</td>
</tr>
<tr>
<td>Other*</td>
<td>6,151</td>
<td>38%</td>
</tr>
<tr>
<td><strong>Total Physicians</strong></td>
<td>16,385</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Physician Licensure and Education**

State law, rather than federal statute, determines the requirements for the practice of medicine. Two paths are available to become a licensed physician in Virginia; one for U.S. medical school graduates and one for international medical graduates as shown in Figure 3. All physician-licensees must (i) be of good moral character; (ii) complete medical studies approved by the Board of Medicine, and iii) have satisfactorily completed one-year of post-graduate training.5

**Figure 3: Virginia’s Physician Education Licensure Paths**

4 Virginia Health Chart Book at http://www.vahealthchartbook.org/ and email correspondence with staff at GeoHealth Innovations.  
5 VA. CODE ANN. § 54.1-2930.  
Medical Schools and Residencies in Virginia. Virginia currently has five medical schools: Eastern Virginia Medical School (EVMS), University of Virginia (UVA), Virginia Commonwealth University (VCU), the Edward Via Virginia College of Osteopathic Medicine and the Virginia Tech/Carilion School of Medicine. In 2014, the Liberty College of Osteopathic Medicine is expected to enroll its inaugural class.

In 2008, 2,512 students enrolled in Virginia medical schools and by 2012 that number had increased by 15 percent to 2,893 students. Virginia’s enrollment increase is similar to the national trend. After medical school, attending a residency program is the next stage of a physician’s education. Residency programs are sponsored by teaching hospitals, academic medical centers, health care systems, and other institutions. While medical school enrollment has increased, medical residency slots have not increased at the same rate. The issue of having an adequate supply is important because medical school graduates who are unable to complete a U.S. residency will be unable to practice medicine as a physician; this restriction also applies to physicians who actively practiced medicine in other countries prior to coming to the U.S.

Medicare, the largest funding source for medical residencies, has not increased the number of residencies it will fund since 1997. Additional sources of residency-funding include Medicaid, state governments, hospitals, and private insurers. The Commonwealth has provided State funding for family-medicine programs located within EVMS, UVA, and VCU since 1996. In 2013, the Resident Physician Shortage Act (Senate 577-2013) was introduced in Congress to provide funding for phasing in an additional 15,000 residency positions.

Physician Specialty Choice. A number of factors have been found to influence the decisions of medical students in choosing a specialty. A study, by the Robert Graham Center (which is a research-based division of the American Academy of Family Physicians), incorporated nearly 20 years of research in examining “multiple factors along the training path and how they relate to the end result, which is specialty of physician practice and where they practice.”

One very significant factor was found to be anticipated income. “The income gap between primary care and subspecialists has an impressively negative impact on choice of primary care specialties and of practicing in rural or underserved settings. At the high end of the range, radiologist and orthopedic surgeon incomes are nearly three times that of a primary care physician. Over a 35-40 year career, this payment disparity produces a $3.5 million gap in return on investment between primary care physicians and the midpoint of income for subspecialist physicians. There are measurable student characteristics, intentions, and training experiences that are significant predictors of the study outcomes. Rural birth, interest in serving underserved or minority populations, exposure to [public health grant-programs through] Title VII in medical school, and have rural or inner-city training experiences all significantly increased the likelihood of students choosing primary care, rural and underserved careers.”

---

7 Id.
11 Id.
Current Provider Shortages

Although physician density is comparatively high for Virginia as a state, there are physician shortages in some geographic areas and specialty fields. As shown in Figure 4, physician density varies considerably from 132 full-time physicians per resident in Southside to approximately 300 physicians per resident in Central and West Central Virginia.

**Figure 4: Physician Full-time Equivalents per 100,000 Residents**

![Figure 4: Physician Full-time Equivalents per 100,000 Residents](image)

The Health Resources Services Administration (HRSA) of the U. S. Department of Health and Human Services has formal guidelines for determining what constitutes a health professional shortage area (HPSA) for primary care, dental, and mental health practitioners. The HPSA guidelines differ for each of the three types of professionals.

**Primary Care Medical Professional Shortages.** Figure 5 shows the location of Virginia’s primary care medical HPSAs as designated by HRSA. The HPSA designations are based on three criteria:

1. The area must be rational for delivery of health services.
2. A specified population-to-provider ratio representing shortage must be exceeded within the area as evidenced by more than 3,500 persons per physician (or 3,000 persons per physician if the area has "high needs").
3. Health care resources in surrounding areas must be unavailable because of distance, overutilization or access barriers.13

The shortage areas shown in Figure 5 represent the need for 123 additional primary care medical physicians according to HRSA’s most recent calculation.14

---

13 Virginia Department of Health website at [http://www.vdh.state.va.us/healthpolicy/primarycare/shortagedesignations/index.htm](http://www.vdh.state.va.us/healthpolicy/primarycare/shortagedesignations/index.htm)
14 Health Resources Services Administration, *Find Shortage Areas: HPSA by State & County* – for Primary Medical Care in Virginia at [http://hpsafind.hrsa.gov/HPSASearch.aspx](http://hpsafind.hrsa.gov/HPSASearch.aspx)
Mental Health Professional Shortages. In 1990, Congress authorized replacing “psychiatric” with “mental health shortage areas.” “This legislative change authorized the utilization of clinical psychologists, clinical social workers, marriage and family therapists, and psychiatric nurse specialists to provide mental health services, in addition to” previously-recognized psychiatrists.\textsuperscript{15} Figure 6 shows the location of Virginia’s current mental health professional shortage areas.\textsuperscript{16}

Increasing Need for Geriatric Care. To meet the medical needs of the increasing number of individuals over 65 years of age, additional physicians who have expertise or training in age-related issues or geriatrics will be needed. Geriatrics involves “medical practice that addresses the complex needs of older patients and emphasizes maintaining functional independence even in the presence of chronic disease.”\textsuperscript{17} Examples of problems that are more common in older

\textsuperscript{14} Health Resources Services Administration, Guidelines for Mental Health HPSA Designation at http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/mentalhealthhpsaguidelines.html
\textsuperscript{15} Health Resources Services Administration, Find Shortage Areas: HPSA by State & County – for Mental Health in Virginia at http://hpsafind.hrsa.gov/HPSASearch.aspx
\textsuperscript{16} American Medical Student Association Geriatrics Committee at http://www.amsa.org/AMSA/Homepage/About/Committes/Geriatrics.aspx
adults include:

- confusion and dementia
- depression
- instability and falls
- incontinence
- chronic pain management
- sensory impairment
- the need for end-of-life care.

“Geriatric medicine is its own specialty. After an internal medicine or family practice residency, physicians can complete a one or two year fellowship to become certified in geriatrics.”

An American Geriatrics Society fact sheet, *Projected Future Need for Geriatricians*, reported that approximately “30,000 geriatricians will be needed by 2030 to care for about 21 million older Americans.” Considering there were only 7,500 certified geriatricians in the U.S. in 2012, it is generally accepted this goal for increasing the number of geriatricians will not be met. Consequently, a number of groups are suggesting training during medical school and through continuing education units on elder health and on functioning as an effective member of a team-based care provider.

**Projected Provider Shortages**

Workforce shortages can be measured, estimated, and forecasted using a variety of methodologies with different data and therefore come to different results. The Bipartisan Policy Center noted in *The Complexities of National Healthcare Workforce Planning* that “traditional supply-demand analyses for the health care industry workforce” are inadequate. Analyses have difficulty incorporating external factors that can impact workforce participation such as “access to professions, licensure requirements and skills portability, as well as structural workforce issues such as participation levels, workforce aging, lifestyle factors and gender.”

Assessing future demand for medical services is challenging because needs are affected by: “shifting utilization patterns of evolving consumer expectations of health care; demographic characteristics such as population aging, past activity or utilization trends in service delivery; policy changes that impact pricing and payment systems; and the uptake of insurance and evolving service delivery models.” These challenges can make it difficult to assess the health workforce’s adequacy in meeting the future demand for services.

In 2010, DHP’s Healthcare Workforce Data Center released *Physician Forecasting in Virginia 2008-2030* which made projections regarding general primary care, medical specialties, surgery, and other patient care physicians. Taking physician hours worked into consideration, the report noted current and future physician deficits and shortages would be most prevalent in primary care and surgery specialties (Figure 7).

---

18 Id.
20 Id.
22 Id.
23 Id.
Avenues for Addressing Shortages

Clearly an increased supply of health care practitioners will be needed to address the increased demand for health care services. Targeted government and private sector efforts will be crucial as the health care labor market does not ensure that practitioners will practice where they are needed or select the specialties that are needed. To address shortages and maldistribution, states will need to provide incentives for practicing within certain specialties and locating in underserved areas. Establishing effective incentives will be challenging as physicians are courted by medical practices, hospitals, and clinics located within and outside the state. That being said, the following sections review some current programs as well as additional opportunities that could be considered by the Commonwealth.

**J-1 Visa Waiver Program.** Under the J-1 Visa Waiver Program, the Immigration and Naturalization Service may allow an international medical graduate (IMG), who completes his/her medical training in the U.S., to stay and practice in the U.S. (Without the waiver, the foreign residency requirement requires IMGs to return home for at least two years before they can apply to reenter the U.S.) In exchange for waiving the foreign residency requirement, the IMG enters into an agreement with a government agency to practice in a HPSA or medically underserved area for at least three years. Virginia’s program, which typically has 30 slots available, has been successful in improving both the short-term and long-term supply of physicians in underserved areas; in 2012 and 2013 all available slots were filled.

**State Loan Repayment Program.** The federal State Loan Repayment Program (SLRP) provides cost-sharing grants to states and territories to support loan repayment programs for primary care providers working in health professional shortage areas. Currently 32 states are

---

24 J-1 Visa Waiver Program Overview at [http://www.vdh.state.va.us/healthpolicy/primarycare/incentives/j1visa/index.htm](http://www.vdh.state.va.us/healthpolicy/primarycare/incentives/j1visa/index.htm) and at [http://www.raconline.org/topics/j-1-visa-waiver](http://www.raconline.org/topics/j-1-visa-waiver)

25 Documents provided to JCHC staff by representatives of the Virginia Department of Health’s Office of Minority Health and Health Equity.
eligible to participate with HRSA matching, on a dollar for dollar basis, the funds provided by a state or community source. A maximum of $400,000 per year is available in federal funding for the Virginia SLRP. Educational loan repayments available for physicians, nurse practitioners, and physician assistants; the repayment amounts range from $50,000 to $120,000 over a four-year period for physicians. No State funding was provided for SLRP during the 2012-2014 biennium.

**State-Supported Family Practice Residency Programs.** Virginia has addressed primary care shortages by supporting family practice residency programs at EVMS, UVA and VCU. In 2013, these programs received more than $6.3 million in dedicated funding in the State budget. Sixty-one percent of the graduates from these three programs chose to practice in Virginia.

**Telemedicine.** Telemedicine allows a health care provider to communicate through an audio or video connection to another location in order to provide such services as patient diagnosis, consultation, or monitoring. While telemedicine can help to address local provider shortages and maldistribution, issues with provider reimbursement have limited its adoption across the State. Legislation enacted in 2010 (Senate Bill 675) requiring health insurers to cover health care services provided via telemedicine has helped to address some of the reimbursement issues.

**Geriatric Training and Education.** In 2010, the Virginia Geriatric Education Center (VGEC) was established through a collaboration between VCU, EVMS, and UVA. At that time, the Center received a $2.1 million grant over five years from HRSA to improve the training of health professionals in geriatrics. VGEC’s main objectives are to support faculty training and retraining to provide instruction in geriatrics; to develop curricula regarding the treatment of health problems of older adults; to support continuing education of health professionals who provide geriatric care; and to provide students with clinical training in geriatrics.

**Team-based Care and Legislative Changes.** As the practice of medicine is evolving, more attention is being given to team-based care in which a combination of two or more physicians, nurse-practitioners, physician assistants, pharmacists and other health care professionals coordinate their efforts across settings to provide care to the patient. As team-based care allows for more coordination, provider resources are more efficiently used which expands health care access. In addition, team-based care has become more accepted by consumers and identified as one avenue to address medical service shortages.

To allow for more team-based care, legislative changes were enacted in 2012 and 2013 that addressed the work of nurse practitioners and physician assistants.

- In 2012, HB 346 expanded the permitted duties of a nurse practitioner, when serving on a patient care team in collaboration and consultation with a physician on the team

---

26 Id.
27 JCHC staff correspondence with representative from Virginia Department of Planning and Budget.
28 JCHC staff correspondence with State-supported family practice residency programs.
29 Edward F. Ansello, Ph.D., *Filling the Gap*, Age in Action Vol. 25, Fall 2010, Virginia Center on Aging and Virginia Department for the Aging.
30 Virginia Geriatric Education Center website at [http://www.vgec.vcu.edu/index.html](http://www.vgec.vcu.edu/index.html)
HB 346 also allowed the team physician to collaborate with as many as six nurse practitioners (previously a physician could supervise as many as four nurse practitioners) and the requirement for the physician to be located onsite when a nurse practitioner provides care was eliminated.\(^{32}\)

- In 2012, SB 106 expanded the scope of practice for physician assistants under certain conditions to “use fluoroscopy for guidance of diagnostic and therapeutic procedures.”
  - SB 106 also increased the number of physician assistants that one physician is allowed to supervise from two to six.\(^{33}\)
- In 2013, HB 1501 allowed nurse practitioners, who work as patient care team-members, and physician assistants, who are supervised by a physician, to collaborate directly with pharmacists.\(^{34}\)

**Regulatory Flexibility for Certain Health Care Workers**

A task force, of the Virginia Hospital and Healthcare Association, recently considered Virginia’s future health care workforce challenges and concluded that “[i]ncremental change or maintaining the status quo will not provide a sufficient health professional workforce.”\(^{35}\) Task force recommendations included supporting “Troops to healthcare health system [as well as a] continued push on regulatory flexibility for qualified veterans” and for the health care workforce in general.\(^{36}\) One specific avenue for regulatory flexibility, which would allow certain health care providers to be exempt from scope of practice laws, is discussed in Option 6.

**Policy Options and Public Comment**

A number of avenues are available for addressing the increased demand for health care services and shortages and maldistribution of health care professionals, including:

- Funding additional primary care medical residency programs
- Providing match funding for the Virginia State Loan Repayment Program
- Establishing additional mid-level provider licenses
- Allowing certain hospitals to be exempt from some scope of practice laws for certain health care professionals.

Six policy options were presented for JCHC-member consideration and for public comment. Comments were submitted by:

- Dr. Russell C. Libby, President, **Medical Society of Virginia**
  - In support of Options 2 and 4; expressed concerns about Options 3, 5, and 6.
- Richard D. Shinn, Director of Government Affairs, **Virginia Community Healthcare Association**
  - In support of Options 2, 3, and 4; expressed concerns about Options 5 and 6
- Chris S. Bailey, Senior Vice President, **Virginia Hospital and Healthcare Association**

---

\(^{32}\) 2012 *Virginia Acts of Assembly*, Chapter 213 (HB 346 – O’Bannon)
\(^{34}\) 2013 *Virginia Acts of Assembly*, Chapter 192 (HB 1501 – O’Bannon)
\(^{36}\) *Id* (Slides 17 and 4).
• Welcomed the “opportunity to explore” Option 6.

Anton J. Kuzel, M.D., M.H.P.E., Chair of the VCU Department of Family Medicine and Population Health
• Did not address any of the recommendations but made a number of points that indicate the state of primary care may be in even worse condition than presented and to describe several promising residency initiatives in the Richmond area.

All of the submitted comments are included in their entirety in Appendix C.
Changes in the wording of the policy options, as approved during the November 2013 Decision Matrix meeting, are shown as italicized text.

**Option 1:** Take no action.

**Option 2:** Introduce a budget amendment of $400,000 GFs for the federal Virginia State Loan Repayment Program (SLRP).

The Virginia Community Healthcare Association indicated support for “increasing the recommendation to $500,000 with a minimum of 50% of the funds to be reserved for primary care providers that practice in Medically Underserved Areas (MUAs).”

**Option 3:** Request by letter of the JCHC Chair, that the Department of Health Professions present to JCHC in 2014 regarding efforts to accept applicable military training as and education toward credentialing and licensure requirements for certain selected professions regarding efforts by the Boards of Medicine and Nursing to consider and accept military training as evidence of satisfaction of the educational requirements for certification of certain health professions, as enacted in 2011 (HB 1535). The presentation should include an update on the work of the Joint Task Force on Veterans Employment Outreach and the DHP review of health-related professions that is underway.

The Medical Society of Virginia recommended revising this “option to focus on a review of efforts by the Boards of Medicine and Nursing to consider and accept military experience as evidence of satisfaction of the educational requirements for certification of certain health professions….”

**Option 4:** Request by letter of the JCHC Chair, that the Virginia Health Workforce Development Authority convene a workgroup to consider and report back to JCHC in 2015 regarding the advisability of, and if advisable, develop recommendations regarding:

• The need for a training program for graduate medical educators to teach residents requisite medical skills and ensure that medical residents in Virginia are adequately trained. If recommended, provide a training-program framework and funding requirements.
• A funding model for **new** State-supported family medicine residencies that could be used **if** the State increases appropriations for graduate medical education training. The model should include:
  o Consideration of: whether funding would be used exclusively for resident training, where residencies would be located, and what the community or medical facility match-rates would be, and what the impact would be of giving U.S. medical school graduates priority in filling State-supported residency programs.
Option 5: Request by letter of the JCHC Chair that the Department of Health Professions convene a workgroup to consider and report back to JCHC in 2015 regarding the advisability of, and if advisable, the additional education or training requirements and next steps to:

- Establish a mid-level provider license and thereby define the requirements for individuals, who are licensed to practice medicine in another country, to be licensed to practice under the supervision of a physician licensed in Virginia.
- Establish a mid-level provider license and thereby define the requirements to allow medical school graduates who have not completed a residency to be licensed to practice under the supervision of a physician licensed in Virginia.

The Medical Society of Virginia indicated desire to “withhold judgment on the option pending additional information on the potential impact of the effort.”

The Virginia Community Healthcare Association indicated VHCA encouraged more research and exploration before pursuing Option 5.

Option 6: Introduce legislation to amend Titles 32.1 (Health) and 54.1 (Professions and Occupations) of the Code of Virginia to allow certain providers working within an approved facility to be exempt from Virginia’s scope of practice laws when established conditions have been met. Include in the 2014 JCHC work plan a review of allowing certain providers working within an approved facility to be exempt from Virginia’s scope of practice laws when established conditions have been met. The providers, who would be eligible for scope of practice exemptions and therefore be allowed to perform activities that would otherwise require a license from the Boards of Medicine, Nursing, Pharmacy, or Physical Therapy (hereafter referred to as “permitted providers”) would include one or more of the following:

- Military-trained Personnel: Applies only to individuals performing activities substantially similar to health care training and experiences that they received in the military.
- Individuals Licensed in Other States: Applies only to individuals, licensed by a health professionals’ regulatory body in another state, who perform activities within their level of training but will not perform activities that exceed those approved for a similarly-trained professional licensed in Virginia.
- Non-specific Grouping: Applies only to individuals that have the requisite education or training to perform the designated activities. Practice activities may be limited by the hospital or hospital governing body for individuals practicing under this exemption within its facility. Furthermore, additional limitations may be set by the provider’s supervising physician through the practice agreement.

The Medical Society of Virginia indicated being very concerned with this policy option noting: “Given the strides made toward team-based care….we feel that this policy option actually represents a step backwards rather than a step forward by limiting nurse practitioner and physician assistant participation on the care team.”

The Virginia Community Healthcare Association indicated VHCA encouraged more research and exploration before pursuing Option 6.

The Virginia Hospital and Healthcare Association stated they have been exploring ways to address the physician shortage through its Healthcare Workforce Taskforce. VHHAs public
comment did not indicate support or opposition to JCHC policy options; however, it welcomed the “opportunity to explore” Option 6.

Subsequent Actions by the Joint Commission on Health Care. Based on the study findings and public comment, JCHC members approved Options 2 and 5 (as presented) and revised versions of Options 3, 4, and 6.

JCHC Staff for this Report
Stephen W. Bowman
Senior Staff Attorney/Methodologist
Attachments
UPDATE: VIRGINIA PHYSICIAN WORKFORCE SHORTAGE

Joint Commission on Health Care

September 17, 2013

Stephen W. Bowman
Senior Staff Attorney/Methodologist

Revised April 29, 2014

House Joint Resolution 689 (Del. Purkey)

1. Determine whether a shortage of medical doctors exists in the Commonwealth, by specialty and by geographical region
2. Project the future need for medical doctors in Virginia over the next 10 years by field of specialty
3. Identify and assess factors that contribute to the shortage of medical doctors
4. Identify the medical specialty fields primarily affected by the shortage of doctors
5. Recommend ways to alleviate shortages
Agenda

- Physician Supply, Shortages, and Maldistribution
- Medical School Graduates, Residencies, and Geriatric Training
- Recent Impacts and State Policies
- Policy Options

PHYSICIAN SUPPLY, SHORTAGES, AND MALDISTRIBUTION
Virginia Has Over 16,000 Practicing Physicians and 48% Are Primary Care Providers

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Medicine</td>
<td>2782</td>
<td>17%</td>
</tr>
<tr>
<td>General Internal Medicine</td>
<td>2008</td>
<td>12%</td>
</tr>
<tr>
<td>Pediatric</td>
<td>1744</td>
<td>11%</td>
</tr>
<tr>
<td>Radiology</td>
<td>1255</td>
<td>8%</td>
</tr>
<tr>
<td>Obstetrics and Gynecology</td>
<td>1236</td>
<td>8%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>1209</td>
<td>7%</td>
</tr>
<tr>
<td>Other*</td>
<td>6151</td>
<td>38%</td>
</tr>
<tr>
<td>Total Physicians</td>
<td>16,385</td>
<td>100%</td>
</tr>
</tbody>
</table>

*See Appendix for additional breakout of physician specialty counts


46% of Physicians that Manage Patient Load Primary Work Practices Are “Far from Full”

Primary Work Location
(n= 11,621)

- 46% Practice is far from full
- 49% Practice is almost full
- 5% Practice is full

Secondary Work Location
(n=2,602)

- 36% Practice is far from full
- 59% Practice is full

Note: Number and percentage are weighted estimates of physicians that manage patient load from Department of Health Professions Physician Survey

Multiple Factors Impact Specialty Choices

- Income gap between primary care physicians and specialists
  - "Physicians in the primary care specialties can expect to earn about $50,000 less per year than physicians in non-primary care specialties."
  - Virginia’s Physician Workforce: 2012

- Likelihood of students choosing primary care, rural and underserved careers significantly increased by:
  - Rural birth
  - Interest in serving underserved or minority populations
  - Exposure to Title VII in medical school
  - Rural or inner-city training experiences

- Primary care physicians have uncompensated care coordination duties and other administrative burdens that specialists do not have (e.g. in managed care gatekeeper function)

Primary Care Shortage Areas

126 Primary Care Physician FTEs are required to eliminate Virginia Health Professional Shortage Areas.

Virginia Primary Care Health Professional Shortage Areas (HPSA) *

Note: Health Resources & Services Adm. (HRSA) Primary Care Health Professional Shortage designation uses full-time equivalent primary care physician to population ratios.


Current and Future Geriatrician Shortages Mean Other Providers Will Fill the Gap

- Between 2005 and 2030, the number of adults aged 65 and older in the United States will almost double (37 million to 70 million).
- Older adults use a disproportionate amount of medical services. By population, individuals over 65 years of age make up only about 12% of the U.S. population, they account for:
  - 26% of all physician office visits,
  - 47% of all hospital outpatient visits with nurse practitioners,
  - 35% of all hospital stays,
  - 34% of all prescriptions,
  - 38% of all emergency medical service responses, and
  - 90% of all nursing-home use.
- 7,356 certified geriatricians were practicing in the U.S. in 2012 and 30,000 will be needed by 2030 (American Geriatrics Society).
- Fewer than 3 percent of students in medical schools choose to take geriatric electives.

Forecasts of Specialty Physician Shortage or Surplus Should Be Considered with Caution

- The health care workforce (entry, retention, exit and re-entry) can be subject to unpredictable and variable supply-side influences.
  - Labor market factors: licensure requirements and skills portability
  - Structural workforce issues: participation levels, workforce aging, lifestyle factors and gender.

- Demand-side variables can be unpredictable as well.
  - Shifting utilization patterns of reflecting changes in consumer expectations of health care
  - Policy changes that impact pricing and payment systems
  - Number of insured and evolving service delivery models.


2010 DHP Report: Projected Future Shortages Would Be Most Prevalent in Primary Care and Surgery Specialties

Team-Based Health Care Is More Accepted and Can Be Used to Address Shortages

Health Affairs

Survey Shows Consumers Open To A Greater Role For Physician Assistants And Nurse Practitioners

January 2013

Primary Care Physician Shortages Could Be Eliminated Through Use Of Teams, Nonphysicians, And Electronic Communication

June 2013

Note: Workforce-provider counts vary depending on source data and methodology. As a result, data trends are more informative than specific provider counts.
Path to Practice in the United States Is Challenging and Time-Consuming for Foreign Doctors

- To become a U.S. licensed physician an immigrant physician who has already practiced medicine in a foreign country must:
  - Pass prerequisite exams in order to apply for a residency
  - Be selected for a U.S. medical residency slot
  - Complete U.S. residency

New York Times Profile: Sajith Abeyawickrama

- At age 37 came to U.S. in 2010 to marry
- Anesthesiologist in home country, Sri Lanka.
- Instead of working as a doctor, he has held a series of jobs in the medical industry, including:
  - Entering patient data into a hospital’s electronic medical records system,
  - Teaching a test prep course for students trying to become licensed doctors themselves.

Medical School Enrollment in Virginia Has Increased 15% since 2008

<table>
<thead>
<tr>
<th>Year</th>
<th>VT-Carilion</th>
<th>VCOM</th>
<th>VCU</th>
<th>UVA</th>
<th>EVMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>2,512</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>2,570</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>2,663</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>2,803</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>2,893</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Liberty College of Osteopathic Medicine inaugural class is expected to begin fall 2014 and enroll 150 students each year.


Resident Position Increases Are Not Expected to Keep Pace with Medical School Graduates

<table>
<thead>
<tr>
<th>U.S. Medical School Enrollment (%) increase of 2002 enrollment</th>
<th>2002 Enrollment</th>
<th>2012 Enrollment</th>
<th>2017 Projected Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.D.</td>
<td>16,488</td>
<td>19,517 (18%)</td>
<td>21,434 (30%)</td>
</tr>
<tr>
<td>D.O.</td>
<td>2,968</td>
<td>5,804 (96%)</td>
<td>6,675 (125%)</td>
</tr>
<tr>
<td>Total</td>
<td>19,456</td>
<td>25,321 (30%)</td>
<td>28,109 (44%)</td>
</tr>
</tbody>
</table>

Medicare Residency Funding Remains at 1996 Levels

### Traditional Funding
1. **U.S. Federal government**
   - Largest supporter of graduate medical education
   - Program examples:
     - $9.5 billion in Medicare funds
     - Funding remains at 1996 levels
     - $2 billion in Medicaid funds
     - Department of Veterans Affairs
     - Department of Defense
2. **Individual States**
   - 40 states paid $3.8 billion through Medicaid programs in 2009
3. **Private insurers**
   - Insurer payments to teaching hospitals are typically higher than what they pay other hospitals

### Virginia Funding
- Medicaid provides funding to residencies
  - FY09 - $36 million in Direct and Indirect Medical Education funding to private hospitals
- Virginia provides general funds for family practice residencies and medical student programs
  - 2013 allotments:
    - EVMS $722,146
    - UVA $1,349,795
    - VCU $4,217,317

64% of physicians that completed VCU’s Family Practice Residency programs will practice in Virginia

---

**PPACA Residency Changes and Virginia Residency Enhancement**

**PPACA**
- Patient Protection and Affordable Care Act (PPACA) encourages the development or expansion of teaching health centers - community-based, ambulatory, patient care centers that operate a primary care residency program.
  - Examples: grants and provisions allowing providers to count teaching time toward their National Health Service Corps service requirement.

**New Activities**
- Medical colleges are working with hospitals to develop new residencies.
  - Examples include:
    - VCOM has collaborated with Lewis Gale Montgomery Regional Hospital (54 positions) and Danville Regional Health System (79 positions)
    - VCU and Patient First
      - Pilot to allow third-party payer reimbursement for 3rd year residents who work at Patient First sites, which may lead to hybrid private practice/residency program model.

Source: Congressional Research Service, Physician Supply and the Affordable Care Act, January 15, 2013 and email correspondence with representatives from Via College of Osteopathic Medicine and the Medical Society of Virginia.
Geriatric and Team-Based Training Has Improved in Virginia

**Virginia Geriatric Education Center**
- VCU, UVA, and EVMS Collaboration
- Established in 2010
- Funded by $2.1 million HRSA grant for 5 years

**Goals**
- Geriatric Faculty: Support training and retraining of faculty
- Students: Provide clinical training in geriatrics in diverse health care settings
- Active Practitioners: Support continuing education of health professionals who provide geriatric care
- Curricula: Develop, evaluate, and disseminate information relating to geriatric care

**VCU Medical School Training**
- New requirement: Unfolding geriatric case of “Mattie Johnson”, virtual patient
- 7-9 person teams composed of senior professional students in medicine, nursing, pharmacy, and social work
- 11 week training
- Training platform allows for virtual collaboration
- Case focuses on 26 core geriatric competencies
- Measures individual and group performance, as well as collaborative behaviors

---

**Sources:** Virginia Center on Aging, Director's Editorial, Filling the Gap, Edward F. Ansello, Ph.D, Fall 2010 at http://www.sahp.vcu.edu/vcoa/editorials/pdfs/fall10.pdf and JCHC staff email correspondence with Dr. Peter Boling, VCU Medical School professor.

---

**RECENT IMPACTS AND STATE POLICIES**
Health Care Workforce Regulation, Coordination, and Information Efforts

- Department of Health Professions
  - Workforce Data Center
    - Surveys of many DHP professions including physicians, nurse practitioners, physician assistants, and pharmacists.
  - HB 1535 (2011): Allow Boards of Medicine and Nursing to consider and accept relevant military training in lieu of education requirements
  - Military Credentials Review

- Virginia Health Workforce Development Authority
  - HB 1304 (2010): Facilitates “the development of a statewide health professions pipeline that identifies, educates, recruits, and retains a diverse, geographically distributed and culturally competent quality workforce.”
  - In 2010, received a federal Health Resources and Services Administration (HRSA) grant of $1.9 million

---

Telemedicine

- Telemedicine coverage is mandated for reimbursement in state-regulated private market
  - Senate Bill 675 (Wampler-2010): Requires insurers to reimburse for the cost of such health care services provided through telemedicine services.

- Virginia’s Medicaid program reimburses statewide for telemedicine services since 2003.

- Certified Telemedicine Technologist training is being developed at New College Institute
  - Program begins in early 2014
  - 250 initial enrollment (estimate)
  - Training geared toward medical professionals, including doctors, nurses, emergency medical technicians, and home health aides
  - Partially grant-funded by Virginia Workforce Health Development Authority.

**Federal-State Provider Placement Programs**

### Federal Virginia State Loan Repayment Program (SLRP)
- HRSA provides 1:1 match rate from state or community up to $400,000
- Repayment provided to certain health care practitioners to serve in HPSA
- No currently dedicated State General Funds

### Conrad 30 J-1 Waiver Program
- VDH can request a J-1 visa waiver for non-U.S. citizen IMG physicians who have completed their residency that agree to practice in an underserved area
  - Maximum of 30 per year
  - Note: VDH also participates in the Appalachian Regional Commission (ARC) J-1 Visa Waiver Program, which can request additional J-1 visas waivers in a health care professional shortage areas.

<table>
<thead>
<tr>
<th>Federal Fiscal Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan Repayment (SLRP)</td>
<td>16</td>
<td>7</td>
<td>0</td>
<td>6</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Conrad J-1 Waiver</td>
<td>21</td>
<td>13</td>
<td>20</td>
<td>24</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

*Source: Document provided to JCHC staff by representatives of the Virginia Department of Health’s Office of Minority Health and Health Equity.*

---

**Legislative Changes on Collaborative Practice Allow for More Team-Based Care**

<table>
<thead>
<tr>
<th>Nurse Practitioner</th>
<th>Physician Assistant</th>
<th>Pharmacist</th>
</tr>
</thead>
<tbody>
<tr>
<td># Practicing in Virginia</td>
<td>6,056</td>
<td>1,891</td>
</tr>
<tr>
<td>Legislative Impact*</td>
<td>Physician to NP ratio changed from 1:4 to 1:6</td>
<td>Physician to PA ratio changed from 1:2 to 1:6</td>
</tr>
</tbody>
</table>

*See appendix for additional elements of legislation*

Approved Physician-Related Options from the JCHC 2009 Workforce Pipelines Study

**Approved Policy Options for “When State revenue allows”**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restore funding for the Federal Virginia State Loan Repayment Program (SLRP) &amp; Virginia Loan Repayment Program (VLRP).</td>
<td>See Option 2</td>
<td></td>
</tr>
<tr>
<td>Increase funding for the UVA, VCU, and EVMS Family Practice Residency Programs.</td>
<td>See Option 4B</td>
<td></td>
</tr>
<tr>
<td>Increase Medicaid reimbursement rates to match the level of Medicare reimbursement rates for primary care physicians</td>
<td>PPACA increased rate in CY 2013 and CY 2014</td>
<td></td>
</tr>
<tr>
<td>Fund a Continuing Medical Education course focusing on medication issues of geriatric patients and targeted for primary care physicians to take at no cost to them.</td>
<td>Virginia Geriatric Education Center provides such training</td>
<td></td>
</tr>
</tbody>
</table>
Policy Options

Option 1: Take no action.

Option 2: Introduce a budget amendment of $400,000 GFs for the Federal Virginia State Loan Repayment Program (SLRP) in order to:
- Restore funding to the maximum amount that is eligible for the 1:1 federal match rate
- Note: The SLRP eligibility is limited to physicians, nurse practitioners, and physician assistants who are practicing/working in family medicine, internal medicine, geriatrics, pediatrics, obstetrics/gynecology, or general psychiatry.

Option 3: Request, by letter of the JCHC Chair, the Department of Health Professions present to JCHC in 2014 regarding efforts to accept applicable military training and education toward credentialing and licensure requirements for certain selected professions. The presentation should include an update on the work of the Joint Task Force on Veterans Employment Outreach and the DHP review of health-related professions that is underway.

Option 4: Request, by letter of the JCHC Chair, that the Virginia Health Workforce Development Authority convene a workgroup to consider and report back to JCHC in 2015 regarding the advisability of, and if advisable, develop recommendations regarding:

A. The need for a training program for graduate medical educators to teach residents requisite medical skills and ensure that medical residents in Virginia are adequately trained. If recommended, provide a training-program framework and funding requirements.

B. A funding model for new State-supported family medicine residencies that could be used if the State increases appropriations for graduate medical education training. The model should include:
- Consideration of whether funding would be used exclusively for resident training, where residencies would be located, and what the community or medical facility match-rates would be.

C. The workgroup should include, at a minimum, representatives of:
- Board of Medicine
- Medical schools located in Virginia
- Medical Society of Virginia
- Other relevant organizations
  - Virginia Association of Free and Charitable Clinics
  - Virginia Community Health Center Association
  - Virginia Department of Health
  - Virginia Hospital and Healthcare Association
  - Virginia Rural Health Association

Note: Options 4 A and 4 B maybe approved individually or in combination.
Option 5: Request, by letter of the JCHC Chair, that the Department of Health Professions convene a workgroup to consider and report back to JCHC in 2015 regarding the advisability of, and if advisable, the additional education or training requirements and next steps to:

A. Establish a mid-level provider license and thereby define the requirements for individuals, who are licensed to practice medicine in another country, to be licensed to practice under the supervision of a physician licensed in Virginia.

B. Establish a mid-level provider license and thereby define the requirements to allow medical school graduates who have not completed a residency to be licensed to practice under the supervision of a physician licensed in Virginia.

C. The workgroup should include, at a minimum, representatives of:

- Board of Medicine
- Medical schools located in Virginia
- Medical Society of Virginia
- Other relevant organizations
- Virginia Association of Free and Charitable Clinics
- Virginia Community Health Center Association
- Virginia Department of Health
- Virginia Hospital and Healthcare Association
- Virginia Rural Health Association

Note: Options 5A and 5B maybe approved individually or in combination.

Option 6: Introduce legislation to amend Titles 32.1 (Health) and 54.1 (Professions and Occupations) of the Code of Virginia to allow certain providers working within an approved facility to be exempt from Virginia’s scope of practice laws when established conditions have been met.

The providers, who would be eligible for scope of practice exemptions and therefore be allowed to perform activities that would otherwise require a license from the Boards of Medicine, Nursing, Pharmacy, or Physical Therapy (hereafter referred to as “permitted providers”) would include one or more of the following:

A. Military-trained Personnel: Applies only to individuals performing activities substantially similar to health care training and experiences that they received in the military.

B. Individuals Licensed in Other States: Applies only to individuals, licensed by a health professionals’ regulatory body in another state, who perform activities within their level of training but will not perform activities that exceed those approved for a similarly-trained professional licensed in Virginia.

C. Non-specific Grouping: Applies only to individuals that have the requisite education or training to perform the designated activities. Practice activities may be limited by the hospital or hospital governing body for individuals practicing under this exemption within its facility. Furthermore, additional limitations may be set by the provider’s supervising physician through the practice agreement.

See next 2 slides for additional requirements in order for supervising physicians, permitted providers, and hospitals to participate.
Option 6: Additional Requirements

Requirements of the supervising physician:

- To affirm that the permitted provider has the requisite education or training to perform the designated activities.
- To ensure that the permitted provider does not practice outside of the agreement limitations.
- To supervise no more than one permitted provider while supervising no more than two additional physician assistants or while participating in a collaborative practice agreement with no more than two nurse practitioners.
- To report to the State, any instance of a permitted provider performing an activity outside of the limitations allowed in the practice agreement.

Permitted providers are not allowed to:

- Possess or administer Schedules 1-5 controlled substances.
- Engage in activities they are not adequately trained to perform.
- Engage in activities that are not documented within a practice agreement maintained by the Department of Health Professions.

Permitted providers are required to meet continuing education requirements.

Option 6: Additional Requirements

Requirements of the hospital or hospital's governing body:

- Must receive a new type of State facility license that provides for scope of practice exemptions for that specific hospital or hospital's governing body.
- Must ensure a practice agreement is in place and is adhered to by any permitted provider who will be performing activities that would otherwise require a professional license to practice in Virginia.
- Must obtain a criminal background check for each permitted provider.
- Must provide the Department of Health Professions with the practice agreement for each permitted provider.
- Must report to the State all instances of a permitted provider performing an activity outside of the limitations allowed in the practice agreement.
- Must notify patients of all permitted providers who are providing medical care at the facility.
Public Comment

- Written public comments on the proposed options may be submitted to JCHC by close of business on October 8, 2013.
- Comments may be submitted via:
  - E-mail: sreid@jchc.virginia.gov
  - Fax: 804-786-5538
  - Mail: Joint Commission on Health Care
    P.O. Box 1322
    Richmond, Virginia 23218

- Comments will be summarized and presented during JCHC’s October 22nd meeting.

APPENDIX

- Training to Become a Physician
- Health Care Practitioner Supply
- PPACA Health Care Insured Increases
- Health Care Practitioner Shortages
- Collaborative Practice Legislation
- Health Care Workforce Resources
Appendix: Training to Become a Physician

Virginia’s Two Physician Pipelines

**Traditional Pipeline**

- Applicants (undergraduate degree)
- Med School (4 years) & Pass Medical Board Certification Test
- Residency/Internship (3-7 years)
- Licensed Physician

**International Medical Graduate Pipeline**

- Med School Outside of U.S. or Canada & Pass Medical Board Certification Tests
- U.S. Residency (U.S. Citizen)
- U.S. Residency w/VISA (Non-U.S. Citizen)
- VDH request J-1 Visa waiver for service in medically-underserved and health professional shortage area*

Sources:
- Annual report on the Primary Care Workforce and Health Access Initiatives – VDH (2006), Discussion with Virginia Board of Medicine representatives, The International Medical Graduate Pipeline: Recent Trends in Certification and Residency Training, John Boulet, Health Affairs Vol 25:2 p469.

Appendix: Training to Become a Physician

20% of Virginia’s Physicians Attended a Medical School In Virginia

<table>
<thead>
<tr>
<th>State</th>
<th>Weighted Estimate</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia</td>
<td>3,915</td>
<td>20%</td>
</tr>
<tr>
<td>Outside U.S./Canada</td>
<td>3,842</td>
<td>21%</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>1,839</td>
<td>7%</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>1,220</td>
<td>6%</td>
</tr>
<tr>
<td>New York</td>
<td>1,170</td>
<td>6%</td>
</tr>
<tr>
<td>Maryland</td>
<td>761</td>
<td>4%</td>
</tr>
<tr>
<td>North Carolina</td>
<td>655</td>
<td>3%</td>
</tr>
<tr>
<td>All Other Locations</td>
<td>6,369</td>
<td>33%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>19,260</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

35% of Virginia’s medical school graduates locate in Virginia

– American Association of Medical Colleges

50% of Virginia's Physicians First Residency Location Was in Virginia or a Bordering State

<table>
<thead>
<tr>
<th>State</th>
<th>Weighted Estimate</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia</td>
<td>5,057</td>
<td>27%</td>
</tr>
<tr>
<td>Washington, D.C.</td>
<td>1,817</td>
<td>10%</td>
</tr>
<tr>
<td>New York</td>
<td>1,790</td>
<td>10%</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>1,292</td>
<td>7%</td>
</tr>
<tr>
<td>Maryland</td>
<td>1,068</td>
<td>6%</td>
</tr>
<tr>
<td>North Carolina</td>
<td>795</td>
<td>4%</td>
</tr>
<tr>
<td>Ohio</td>
<td>653</td>
<td>4%</td>
</tr>
<tr>
<td>California</td>
<td>629</td>
<td>3%</td>
</tr>
<tr>
<td>All Other Locations</td>
<td>5,450</td>
<td>29%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18,552</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

39% of Virginia's residency graduates locate in Virginia


Appendix: Health Care Practitioner Supply

Virginia Physician Specialty Supply Map

### Virginia Physician Supply Counts By Specialty

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Physician Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Medicine</td>
<td>2782</td>
<td>17%</td>
</tr>
<tr>
<td>General Internal Medicine</td>
<td>2008</td>
<td>12%</td>
</tr>
<tr>
<td>Pediatric</td>
<td>1744</td>
<td>11%</td>
</tr>
<tr>
<td>Radiology</td>
<td>1255</td>
<td>8%</td>
</tr>
<tr>
<td>Obstetrics and Gynecology</td>
<td>1236</td>
<td>8%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>1209</td>
<td>7%</td>
</tr>
<tr>
<td>Cardiology</td>
<td>1011</td>
<td>6%</td>
</tr>
<tr>
<td>General Surgery</td>
<td>790</td>
<td>5%</td>
</tr>
<tr>
<td>Orthopedic</td>
<td>760</td>
<td>5%</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>707</td>
<td>4%</td>
</tr>
<tr>
<td>Neurology</td>
<td>630</td>
<td>4%</td>
</tr>
<tr>
<td>Gastroenterology</td>
<td>534</td>
<td>3%</td>
</tr>
<tr>
<td>Dermatology</td>
<td>374</td>
<td>2%</td>
</tr>
<tr>
<td>Pulmonology</td>
<td>335</td>
<td>2%</td>
</tr>
<tr>
<td>Urology</td>
<td>335</td>
<td>2%</td>
</tr>
<tr>
<td>Oncology</td>
<td>286</td>
<td>2%</td>
</tr>
<tr>
<td>Neonatal</td>
<td>140</td>
<td>1%</td>
</tr>
<tr>
<td>General Practitioner</td>
<td>135</td>
<td>1%</td>
</tr>
<tr>
<td>Geriatrics</td>
<td>99</td>
<td>1%</td>
</tr>
<tr>
<td>Oral Surgery</td>
<td>15</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>16385</td>
<td>100%</td>
</tr>
</tbody>
</table>


### Virginia Primary Care Physician Supply

**Family Medicine Physicians by Locality**

Appendix: Health Care Practitioner Supply

Virginia Nurse Practitioner (NP) and Physician Assistant (PA) by County Totals (2013)

Total Number of NP and PA within the County
- 1-9
- 10-25
- 26-75
- 76-150
- 151-250
- 251-500
- 501-1,000

Appendix: PPACA Health Care Insured Increases

PPACA Impacts Commercially Insured and Medicaid Providers

Newly Insured
- Private-market newly-insured through Health Benefits Exchange
  - Estimated 775,000 eligible
- Potential Medicaid expansion
  - Estimated 247,000 individuals if expansion occurs

Medicaid Providers
- 61% of Virginia physicians participate in the Medicaid program
- 53% of Virginia physicians are accepting new Medicaid payments
- Medicaid primary care providers will receive a rate increase to Medicare rate level for calendar years 2013 and 2014

Appendix: PPACA Health Care Insured Increases

Medicaid Expansion Population and “Woodwork” Effect

As a result of the ACA, Virginia estimates 74,996 currently eligible children will enroll in Medicaid (“woodwork”). If Virginia chooses to expand Medicaid, an estimated 7,500 additional currently eligible children would be expected to enroll in Medicaid and 247,923 newly-eligible individuals would be likely to take up Medicaid coverage.


Appendix: Health Care Practitioner Shortages

Virginia Mental Health Professional Shortage Areas (HPSA) *

Note: HPSA Mental Health Professional Shortage Area designation uses different provider to population ratios depending on whether a psychiatrist or core mental health professional (psychiatrist, clinical psychologist, clinical social worker, psychiatric nurse specialist, family and marriage therapist).

Note: HPSA’s Medically Underserved Area/Population designation uses four variables: 1) ratio of primary medical care physicians per 1,000 population, 2) infant mortality rate, 3) percent of the population with incomes below the poverty level, and 4) percent of population age 65 or over.


HB 346 (2012) Nurse Practitioner Collaborative Practice Legislation

- “Patient Care Team Physician” means a physician who is actively licensed to practice medicine in the Commonwealth, who regularly practices medicine in the Commonwealth, and who provides management and leadership in the care of patients as part of patient care team
- No requirement for MD to regularly practice at the same location
- Collaboration and consultation may be via telemedicine
- Ratios increased from 4:1 to 6:1
- Periodic review of patient records, no requirements for site visits
### Appendix: Collaborative Practice Legislation

**HB 1501 (2013) Pharmacist Collaborative Practice Legislation**

- Clarifies with whom pharmacist may enter into agreement (adds nurse practitioners, PAs, and physician’s office)
- Patient must notify prescriber to opt out
- Prescriber may elect for patient to not participate by contacting pharmacist or documenting on prescription
- Clarifies agreement may be in writing or electronic
- Authorizes pharmacist to implement drug therapy following diagnosis by prescriber

### Appendix: Health Care Workforce Resources

- Virginia Atlas  
- Virginia Chartbook  
- Department of Health Professions: Health Workforce Data Center  
- Virginia Rural Health Resource Center  
- National Center for the Analysis of Healthcare Data  
### Appendix: Health Care Workforce Resources

#### DHP Healthcare Workforce Data Center Current Surveys

- Assisted Living Facility Administrators
- Audiologists
- Certified Nurse Aides
- Clinical Psychologists
- Dental Hygienists
- Dentists
- Doctors of Osteopathy
- Licensed Clinical Social Workers
- Licensed Practical Nurses
- Licensed Professional Counselors
- Medical Doctors
- Nurse Practitioners
- Nursing Home Administrators
- Pharmacists
- Pharmacy Technicians
- Physical Therapists
- Physical Therapy Assistants
- Physician Assistants
- Registered Nurses
- Speech-Language Pathologists
WHEREAS, medical and health care experts have warned of a critical shortage of up to 200,000 medical doctors in the United States by 2020; and
WHEREAS, a medical doctor must complete nearly a decade of education and training, including four years of medical school and four to five years of residency training, in order to qualify for licensure; and
WHEREAS, while demand for medical care services has increased rapidly as a result of a growing population, the supply of doctors has remained limited; and
WHEREAS, health care manpower projections indicate that Virginia will experience a severe shortage of qualified health care providers on par with the worst national predictions; now, therefore, be it
RESOLVED by the House of Delegates, the Senate concurring, That the Joint Commission on Health Care be directed to study the current and impending severe shortage of medical doctors in Virginia. The Commission shall consider the impact of the current and projected shortage of medical doctors on the health care system in the Commonwealth and identify options to prepare for and remedy the shortage.
In conducting its study, the Commission shall (i) determine whether a shortage of medical doctors exists in the Commonwealth, by specialty and by geographical region; (ii) project the future need for medical doctors in Virginia over the next 10 years by field of specialty; (iii) identify and assess factors that contribute to the shortage of medical doctors, including factors related to medical school admissions, the costs of medical education, and the effect of excessive malpractice insurance premiums, malpractice laws and caps, the shortage of nurses, and ancillary regulations such as requirements related to Certificates of Public Need; and (iv) consider other related matters as the Commission may deem necessary. The Commission also shall identify the medical specialty fields primarily affected by the shortage of doctors and recommend ways to alleviate such shortages.
Technical assistance shall be provided to the Commission by the Department of Health Professions, Board of Medicine, State Council of Higher Education for Virginia, Virginia Commonwealth University School of Medicine, University of Virginia School of Medicine, Virginia Osteopathic Medical Association, and the Edward Via College of Osteopathic Medicine.
All agencies of the Commonwealth shall provide assistance to the Commission for this study, upon request.
The Joint Commission on Health Care shall complete its meetings by November 30, 2013, and the Chairman shall submit to the Division of Legislative Automated Systems an executive summary of its findings and recommendations no later than the first day of the 2014 Regular Session of the General Assembly. The executive summary shall state whether the Commission intends to submit to the General Assembly and the Governor a report of its findings and recommendations for publication as a House or Senate document. The executive summary and report shall be submitted as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents and reports and shall be posted on the General Assembly's website.