VIRGINIA’S PHYSICIAN WORKFORCE AND RELATED POLICIES

State Health Commissioner’s Advisory Council on Health Disparity & Health Equity

April 8, 2014

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Joint Commission on Health Care
Agenda

- Physician Supply, Shortages, and Maldistribution
- Medical School Graduates, Residencies, and Geriatric Training
- Recent Impacts and State Policies
- JCHC Approved Policy Options
PHYSICIAN SUPPLY, SHORTAGES, AND MALDISTRIBUTION
### The Physician Workforce At a Glance

<table>
<thead>
<tr>
<th>The Workforce</th>
<th>Background</th>
<th>Income by Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensees: 39,197</td>
<td>HS Degree in VA: 20%</td>
<td>Primary Care: $150k-$175k</td>
</tr>
<tr>
<td>Virginia’s Workforce: 19,697</td>
<td>Med School in VA: 20%</td>
<td>Non-Pri Care: $200k-$225k</td>
</tr>
<tr>
<td>Full-Time Equiv. Units: 19,654</td>
<td>Residency in VA: 27%</td>
<td>Highest: Anesthesiology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Survey Response Rate</th>
<th>Specialty/Role</th>
<th>Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Licensees: 69%</td>
<td>Primary Care: 42%</td>
<td>Practice is Full: 3%</td>
</tr>
<tr>
<td>Renewing Practitioners: 76%</td>
<td>Board Certified: 67%</td>
<td>Medicaid Participant: 61%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Finances</th>
<th>Typical Time Spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Female: 35%</td>
<td>Median Income: $175k-$200k</td>
<td>Patient Care: 90-99%</td>
</tr>
<tr>
<td>Diversity Index: 49%</td>
<td>Health Benefits: 55%</td>
<td>Administration: 1-9%</td>
</tr>
<tr>
<td>Median Age: 51</td>
<td>Under 40 w/ Ed debt: 68%</td>
<td>% Primarily Pat. Care: 86%</td>
</tr>
</tbody>
</table>

Source: Va. Healthcare Workforce Data Center

This slide is taken from the presentation Dr. Dianne Reynolds-Cane, Director of the Virginia Department of Health Professions, gave to the Joint Commission on Health Care September 17, 2013.
Racial and Ethnic Diversity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Virginia Population</th>
<th>All Physicians</th>
<th>Physicians Under 40</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>Weighted Estimate</td>
<td>%</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>64%</td>
<td>12,253</td>
<td>69%</td>
</tr>
<tr>
<td>Black, non-Hispanic</td>
<td>19%</td>
<td>1,377</td>
<td>8%</td>
</tr>
<tr>
<td>Hispanic of any race</td>
<td>8%</td>
<td>597</td>
<td>3%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>6%</td>
<td>2,948</td>
<td>17%</td>
</tr>
<tr>
<td>American Indian or Alaskan Native</td>
<td>0%</td>
<td>17</td>
<td>0%</td>
</tr>
<tr>
<td>Other Race</td>
<td></td>
<td>417</td>
<td>2%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>2%</td>
<td>204</td>
<td>1%</td>
</tr>
</tbody>
</table>

This slide is taken from the presentation Dr. Dianne Reynolds-Cane, Director of the Virginia Department of Health Professions, gave to the Joint Commission on Health Care September 17, 2013.
Gender and FTEs

This slide is taken from the presentation Dr. Dianne Reynolds-Cane, Director of the Virginia Department of Health Professions, gave to the Joint Commission on Health Care September 17, 2013.
Age and Retirement

Median Age is 51. Nearly 20% of physicians expect to retire within the next 5 years.

This slide is taken from the presentation Dr. Dianne Reynolds-Cane, Director of the Virginia Department of Health Professions, gave to the Joint Commission on Health Care September 17, 2013.
Virginia Has Over 16,000 Practicing Physicians and 40% 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><strong>Total Physicians</strong></td>
<td><strong>16,385</strong></td>
<td><strong>100%</strong></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)

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

**Secondary Work Location**  
(n=2,602)

- Practice is far from full: 36%
- Practice is almost full: 59%
- Practice is full: 5%

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

2013 JLARC Study: Impact of Medicaid Payment Policies on Access to Health Care Services for Virginians

JLARC’s report on the Impact of Medicaid Payment Policies on Access to Health Care Services for Virginians includes:

- Statewide and regional provider availability
- Measures of provider availability other than participation rates
- Examine availability for a broad array of providers beyond just physicians, such as dentists, mental health practitioners, etc.

Estimate of the Medicaid Participating Providers: Source Billed Claims

<table>
<thead>
<tr>
<th>FY12</th>
<th>Medicaid Participation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Care</td>
<td>75%</td>
</tr>
<tr>
<td>Specialists</td>
<td>47%</td>
</tr>
<tr>
<td>All Physicians</td>
<td>62%</td>
</tr>
</tbody>
</table>

Notes: Medicaid Participating means 10 or more patients in the fiscal year. Specialist counts exclude anesthesiologists and radiologists. All physicians count from DHP annual survey of Virginia Physicians.

Source: JCHC staff email correspondence with JLARC staff, October 23rd 2013.
# Access to Care Was Examined Using Four Measures

## Provider availability*

<table>
<thead>
<tr>
<th>Provider participation rate</th>
<th>Percentage of all Virginia providers who treated Medicaid enrollees</th>
</tr>
</thead>
<tbody>
<tr>
<td># providers / 1,000 enrollees</td>
<td># of Medicaid providers available for every 1,000 Medicaid enrollees</td>
</tr>
</tbody>
</table>

## Use of services

<table>
<thead>
<tr>
<th>% of enrollees receiving care</th>
<th>% of enrollees that received service at least once during the year</th>
</tr>
</thead>
<tbody>
<tr>
<td># visits / 1,000 enrollees</td>
<td># of visits for every 1,000 Medicaid enrollees</td>
</tr>
</tbody>
</table>

*For physicians, measures of provider availability include only those that served 10 or more enrollees.

**JLARC Impact of Medicaid Payment Policies Study**

Southside Virginia has a high proportion of uninsured adults and a low number of physician FTEs per resident.

This slide is taken from the presentation Dr. Dianne Reynolds-Cane, Director of the Virginia Department of Health Professions, gave to the Joint Commission on Health Care September 17, 2013.
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) *

- Geographic Primary Care HPSA
- Population Primary Care HPSA

* Up-to-date designation data may be obtained from HRSA Shortage Designation Branch: http://datawarehouse.hrsa.gov/datadownload.aspx.

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

Mental Health Professional Shortage Areas

Virginia Mental Health Professional Shortage Areas (HPSA) *

* Up-to-date designation data may be obtained from HRSA Shortage Designation Branch: http://datawarehouse.hrsa.gov/datadownload.aspx.

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).

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**

**WORKFORCE**

By Michael J. Dill, Stacie Pankow, Clese Erikson, and Scott Shipman

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

**CARE TRANSFORMATION**

By Linda V. Green, Sergei Savin, and Yina Lu

**Primary Care Physician Shortages Could Be Eliminated Through Use Of Teams, Nonphysicians, And Electronic Communication**
Mid-Level Healthcare Practitioners

**Physician Assistants**
- 1,891 in Workforce
- 1,775 FTEs
- Median Age: 37

**Nurse Practitioners**
- 6,056 in Workforce
- 6,435 FTEs
- Half became NPs after Y2000

This slide is taken from the presentation Dr. Dianne Reynolds-Cane, Director of the Virginia Department of Health Professions, gave to the Joint Commission on Health Care September 17, 2013.
Note: Workforce-provider counts vary depending on source data and methodology. As a result, data trends are more informative than specific provider counts.
This slide is taken from the presentation Dr. Dianne Reynolds-Cane, Director of the Virginia Department of Health Professions, gave to the Joint Commission on Health Care September 17, 2013.
MEDICAL SCHOOL GRADUATES,
RESIDENCIES, ANDGeriatric Training
Medical School Enrollment in Virginia Has Increased 15% since 2008

2008: 2,512
2009: 2,570
2010: 2,663
2011: 2,803
2012: 2,893

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

Sources:
- Liberty Journal, New dean lays groundwork for Liberty’s medical school at http://www.liberty.edu/libertyjournal/?PID=24995&MID=56751
Resident Position Increases Are Not Expected to Keep Pace with Medical School Graduates

<table>
<thead>
<tr>
<th>U.S. Medical School 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

Sources: Health Affairs Policy Brief, Graduate Medical Education, August 16, 2012; Virginia Acts of Assembly Chapter 806, 2013 Session; Department of Medical Assistance Services report to JCHC, Enhancing Direct Medical Education and Indirect Medical Education Payments, August 30, 2011; and correspondence with representative from Virginia Department of Planning and Budget as well as Dr. Anton Kuzel, VCU Department of Family Medicine.
## 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 $5.1 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
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.
Military Credentialing and Licensing

- House Bill 1535 (2011)
- Physicians and other officer-level professions can be licensed through endorsement from other states.
- Enlisted-level occupations require extensive, professional-level cross-walking and gap analyses in comparison with civilian health professional licensure.
- In response to Delegate Stolle’s request and upon request to participate in the DoD multi-agency Task force on Military Credentialing, the Department of Health Professions has been contributing to this analysis since March 2012.

This slide is taken from the presentation Dr. Dianne Reynolds-Cane, Director of the Virginia Department of Health Professions, gave to the Joint Commission on Health Care September 17, 2013.
### Legislative Changes on Collaborative Practice Allow for More Team-Based Care

<table>
<thead>
<tr>
<th>Legislation</th>
<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>
<td>5,554</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>
<td>Pharmacist may collaborate with NP or PA</td>
</tr>
</tbody>
</table>

* See appendix for additional elements of legislation

Take Home

Demographics

• Slightly more than half of physicians under age 40 are women
• Women physicians practice by approximately 11.5% fewer hours than their male peers
• Asian physicians comprise the largest ethnic minority at 17%
• Nearly 20% of physicians expect to retire in the next 5 years

Education and Training

• Retention of medical school grads and residents is essentially unchanged from 2010
• About half of Virginia’s physicians are educated and trained in bordering or nearby states
Take Home

**Workforce Mal-distribution**

- The physician to population ratio is especially low in Southside and Southwest Virginia and in some urban areas.
- Legislation such as HB346 and HB1501 enable efficiencies through patient care teams, collaborative care, and healthcare related IT to ease the burden of care carried by too few physicians.
2013 JCHC Approved Policy Option to Improve Population Health Measurement

By letter of the JCHC Chair, request that the Virginia Department of Health (VDH) and Virginia Center for Health Innovation collaboratively:

- Identify statewide core regional population health measurements, including options for their collection and dissemination;
- Consider leveraging existing efforts such as the Virginia Atlas of Community Health and the Community Health Needs Assessments (as mandated for not-for-profit hospitals) and consult (at a minimum) with representatives of:
  - Council on Virginia’s Future
  - Department of Medical Assistance Services
  - Medical Society of Virginia
  - Virginia Association of Free and Charitable Clinics
  - Virginia Chamber of Commerce
  - Virginia Community Healthcare Association
  - Virginia Hospital & Healthcare Association
  - Virginia Rural Health Association
- Report to JCHC by October 2015 regarding conclusions and recommendations to improve measurement and tracking of population health in Virginia.