Effectiveness of Workforce Programs in Improving Healthcare Access in Maryland

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PHASE Symposium
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Outline

• Project Introduction/Overview
  • HPSA designation
  • Workforce Programs
• Methods/Approach
• Findings
• Limitations and Challenges
• Conclusions/Policy and Practice Implications
HPSA Designations

**Primary Care (PC) HPSA**
- Provider: population ratio $\geq 1:3500$
- Percent of population with income less than poverty level
- Travel distance/time to nearest source of accessible care outside the HPSA
- Infant health index
  - Infant mortality rate
  - Low-birth weight

**Mental Health (MH) HPSA**
- Psychiatrist: population ratio $>1:30,000$
- Percent of population with incomes less than poverty level
- Travel distance/time to nearest source of accessible care outside the HPSA
- Additional factors
  - Youth Ratio
  - Elderly Ratio
  - Substance abuse prevalence
  - Alcohol abuse prevalence
Workforce Programs

• National Health Service Corp (NHSC)
• J1 Visa Waiver
• State Loan Assistance Repayment Program (SLRP)
National Health Service Corp

• NHSC Scholarship
  • Enrolled or accepted students committed to primary care
  • 2-4 yr. full-time service requirement at HPSA designated sites

• NHSC Loan Repayment
  • Receive educational loan repayment up to $50,000
  • 2 yr. full-time service at a HPSA designated site

J-1 Visa Waiver Program

• Granted for the physician's agreement to work in an underserved area for 3 years

• Annual state eligibility: 30 J-1 Visa waivers
Maryland State Loan Repayment Program (SLRP)

• Primary Care Physicians ONLY
• 2-4 yr. full-time service commitment
• Loan repayment assistance $25,000/yr
• Maximum assistance $100,000

Maryland Department of Health and Mental Hygiene: State Loan Repayment Program (SLRP) in Maryland.
http://hsia.dhmh.maryland.gov/opca/SitePages/pco-larp.aspx
Objectives

1. To determine the effectiveness of federal workforce programs in improving primary care and mental health access in Maryland from 2003-2012

2. To determine trends in primary care and mental health HPSA designations and workforce providers from 2003-2012.
Outcome Measures

1. Healthcare access (primary care and mental health)
   1) Provider: population ratios
   2) Respondent answer to Maryland BRFSS Healthcare Access question
      a) Was there a time in the past 12 months when you needed to see a doctor but could not because of the cost?

2. Number of primary care and mental health HPSA designations (2003-2012)

3. Number of primary care and mental health workforce providers per county (2003-2012)
Study Design/ Methodology

• Four Data Sources
  • HRSA Data Warehouse
  • J-1 Visa Waiver Program, NHSC and SLRP workforce provider placements
  • HRSA Area Resource file
  • Maryland BRFSS

• Statistical Analysis
  • T-test
  • Descriptive analysis
Maryland
Maryland HPSA Designations (2003-2012)

Primary Care HPSA
• Total Number
  • 297
• Average
  • 29.7 HPSAs/year

Mental Health HPSA
• Total Number
  • 139
• Average
  • 13.9 HPSAs/year
Maryland Primary Care Providers by Workforce Program

No. Primary Care Providers

Year


J1 Visa Waiver, NHSC, SLRP

Primary Care Providers by Workforce Program
Maryland Primary Care Provider: Population Ratio (per 100,000 residents)

Year


WF, -WF, WF, -WF, WF, -WF, WF, -WF, WF, -WF, WF, -WF, WF, -WF

Population Ratio (per 100,000 residents)
Maryland Psychiatrist: Population Ratio (per 100,000 residents)

<table>
<thead>
<tr>
<th>Year</th>
<th>PP Ratio (per 100,000 residents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>WF</td>
</tr>
<tr>
<td>2004</td>
<td>-WF</td>
</tr>
<tr>
<td>2005</td>
<td>WF</td>
</tr>
<tr>
<td>2006</td>
<td>-WF</td>
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<tr>
<td>2007</td>
<td>WF</td>
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<td>2008</td>
<td>-WF</td>
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<td>2009</td>
<td>WF</td>
</tr>
<tr>
<td>2010</td>
<td>-WF</td>
</tr>
<tr>
<td>2011</td>
<td>WF</td>
</tr>
</tbody>
</table>
# Maryland BRFSS Survey:
## Healthcare Access by County

**Question #3:** Was there a time in the past 12 months when you needed to see a doctor but could not because of the cost?

<table>
<thead>
<tr>
<th>County</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queen Anne's County</td>
<td>7.18%</td>
</tr>
<tr>
<td>Calvert County</td>
<td>7.68%</td>
</tr>
<tr>
<td>Howard Co.</td>
<td>8.3%</td>
</tr>
<tr>
<td>Hartford County</td>
<td>9.14%</td>
</tr>
<tr>
<td>Charles County</td>
<td>9.2%</td>
</tr>
<tr>
<td>Fredrick County</td>
<td>9.36%</td>
</tr>
<tr>
<td>Carroll County</td>
<td>9.38%</td>
</tr>
<tr>
<td>Anne Arundel County</td>
<td>9.56%</td>
</tr>
<tr>
<td>Worcester County</td>
<td>9.56%</td>
</tr>
<tr>
<td>St. Mary's County</td>
<td>9.75%</td>
</tr>
<tr>
<td>Montgomery County</td>
<td>10.14%</td>
</tr>
<tr>
<td>Talbot County</td>
<td>10.17%</td>
</tr>
<tr>
<td>Washington County</td>
<td>10.24%</td>
</tr>
<tr>
<td>Dorchester County</td>
<td>10.92%</td>
</tr>
<tr>
<td>Kent County</td>
<td>11.07%</td>
</tr>
<tr>
<td>Mean Maryland</td>
<td>11.46% +/- 1.15</td>
</tr>
<tr>
<td>Allegany County</td>
<td>12.33%</td>
</tr>
<tr>
<td>Garret County</td>
<td>14.12%</td>
</tr>
<tr>
<td>Prince Georges County</td>
<td>14.13%</td>
</tr>
<tr>
<td>Caroline County</td>
<td>15.71%</td>
</tr>
<tr>
<td>Baltimore City</td>
<td>15.97%</td>
</tr>
<tr>
<td>Somerset County</td>
<td>16.93%</td>
</tr>
</tbody>
</table>
Limitations and Challenges

• Having complete data available to answer the proposed question
• Generalizability of findings
  • Provider: population ratios
    • Cannot infer adequacy of provider resources and improved healthcare access for the population
    • No consideration of services provided by non-physician providers
• Maryland BRFSS Healthcare Access Question
Conclusion

• Little to no impact of workforce programs on improving primary care and mental health access in Maryland

• More work needs to be done to include non-physician primary care and mental health providers in workforce programs to improve healthcare access
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References


Questions??