Assessing Health and Health Care in
Prince George’s County

Findings and Potential Next Steps

February 2009
Prince George’s County Is Formulating Strategies for Restructuring Health Care

The County’s Goals:

- Improve access for the indigent and uninsured
- Improved financial performance
RAND Was Asked to Conduct An Assessment of Health Needs and Treatment Capacity for Prince George’s County

The RAND Report’s Three Goals:

- Describe current health care needs and capacity based within the County on available data

- Identify access issues unique to the County and to sub-populations

- Compare health needs and capacity in the County to surrounding jurisdictions
RAND Compared Prince George's County to Surrounding Jurisdictions
Organization of Findings

- Notable Socio-demographic Features
- Health Status
- Health Care Access and Utilization
- Hospital Inpatient and ED Use Patterns
- Health System Capacity
- Conclusions and Potential Next Steps
Socio-Demographics Vary Widely Across PUMAs

PUMA 1
- Lower income
- Losing Population
- Growing Hispanic

PUMA 2
- Higher income
- Gaining Population
- Majority Black

PUMA 3
- Lower income
- Stable Population
- Growing Hispanic

PUMA 4
- Lower income
- Losing population
- Majority Black

PUMA 5
- Higher income
- Gaining Population
- Majority Black

PUMA 6
- Higher income
- Gaining Population
- Majority Black

RAND

01/06/2009
Compared to Other Suburban Jurisdictions, More Prince George’s Residents Work Outside the County and Have Relatively Long Commutes

Source: 2006 American Communities Survey
Organization of Findings

- Notable Socio-demographic Features
  - Health Status
  - Health Care Access and Utilization
  - Hospital Inpatient and ED Use Patterns
  - Health System Capacity
  - Conclusions and Potential Next Steps
### Prince George's Residents Are Less Healthy Than Residents of Montgomery and Howard Counties

<table>
<thead>
<tr>
<th>Health Status</th>
<th>Prince George's</th>
<th>Montgomery</th>
<th>Anne Arundel</th>
<th>Baltimore County</th>
<th>Howard</th>
<th>DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair or poor health</td>
<td>13.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic condition</td>
<td>34.8%</td>
<td>29.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart disease</td>
<td>6.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypertension</td>
<td>24.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cerebrovascular disease</td>
<td>2.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>10.5%</td>
<td>4.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asthma</td>
<td>9.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overweight or obese</td>
<td>68.3%</td>
<td>49.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability</td>
<td>17.2%</td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

### Mortality

<table>
<thead>
<tr>
<th>All-cause Mortality (in 100,000s)</th>
<th>Prince George's</th>
<th>Montgomery</th>
<th>Anne Arundel</th>
<th>Baltimore County</th>
<th>Howard</th>
<th>DC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>822.4</td>
<td>566.8</td>
<td>805.7</td>
<td>793.3</td>
<td>662.3</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors' Analysis of 2005-6 BRFSS, MDHH Vital Statistics Administration 2006

RAND

Healthier than PG at p<0.05

Less Healthy than PG at p<0.05
Among County Residents, Having a Chronic Condition Varied Most by Education

<table>
<thead>
<tr>
<th>Race</th>
<th>Education</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>White</td>
<td>Above High School</td>
</tr>
<tr>
<td>36%</td>
<td>34%</td>
<td>32%</td>
</tr>
</tbody>
</table>

Source: Authors' analysis of data from the 2005 and 2006 Behavioral Risk Factor Surveillance Surveys.
Access to Care Was Comparable Across the Region, But Prince George's Residents Were Less Likely to Be Insured or Use Dental Care

<table>
<thead>
<tr>
<th>Access Measure</th>
<th>Prince George's</th>
<th>Montgomery</th>
<th>Anne Arundel</th>
<th>Baltimore County</th>
<th>Howard</th>
<th>DC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Uninsured Adults</strong></td>
<td>13.8%</td>
<td>8.3%</td>
<td></td>
<td></td>
<td>5.2%</td>
<td></td>
</tr>
<tr>
<td>Missed needed care because of cost</td>
<td>9.9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No regular source of care</td>
<td>15.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last routine checkup 2+ years ago</td>
<td>11.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Last dental exam 5+ years ago</strong></td>
<td>11.4%</td>
<td>4.2%</td>
<td>6.9%</td>
<td></td>
<td>4.3%</td>
<td></td>
</tr>
<tr>
<td>Needed, didn't receive treatment for alcohol</td>
<td>6.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Needed, didn't receive treatment for illicit drugs</td>
<td>2.4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors' Analysis of 2005 6 BRFSS

RAND

More access than PG at p<0.05

Less access than PG at p<0.05

13 01/06/2009
Health Care Access For Prince George’s Residents Varied Most by Income and Health Insurance Status

<table>
<thead>
<tr>
<th>Access Measure</th>
<th>Race Black vs. White</th>
<th>Education More vs. Less</th>
<th>Household Income Higher vs. Lower</th>
<th>Health Insurance Yes vs. No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uninsured Adults</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No regular source of care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missed needed care within last year because of cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last routine checkup 2+ years ago</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Last dental exam 5+ years ago</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors' Analysis of 2005-6 BRFSS
## Immunization and Mammography Rates for Prince George’s Residents Lagged Behind Others

<table>
<thead>
<tr>
<th>Preventive Care Measure</th>
<th>Prince George’s</th>
<th>Montgomery</th>
<th>Anne Arundel</th>
<th>Baltimore County</th>
<th>Howard</th>
<th>DC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholesterol test &lt; 5 yrs ago</td>
<td>80.2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flu shot this year (age &gt;50)</td>
<td>42.9%</td>
<td>56.6%</td>
<td>54.2%</td>
<td>60.0%</td>
<td>48.8%</td>
<td></td>
</tr>
<tr>
<td>Pneumovax (age &gt;65)</td>
<td>53.5%</td>
<td>68.1%</td>
<td>69.7%</td>
<td>64.9%</td>
<td>81.8%</td>
<td></td>
</tr>
<tr>
<td>HIV test (age &lt;65)</td>
<td>56.1%</td>
<td>40.6%</td>
<td>42.5%</td>
<td>44.8%</td>
<td>33.8%</td>
<td>63.7%</td>
</tr>
<tr>
<td>Mammogram within 2 years among women 50+</td>
<td>81.3%</td>
<td></td>
<td></td>
<td>87.4%</td>
<td>89.1%</td>
<td></td>
</tr>
<tr>
<td>Pap smear within 3 yrs (women 18 vs. 64, no hysterectomy)</td>
<td>90.7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any history of PSA among men 50+</td>
<td>80.8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colonoscopy/sigmoid. in last 10 yrs (age 50+)</td>
<td>63.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ Analysis of 2005-6 BRFSS

RAND More preventive care than PG at p<0.05  Less preventive care than PG at p<0.05
Use of Preventive Care Among County Residents Varied Most by Health Insurance Status

Source: Authors' analysis of data from the 2005 and 2006 Behavioral Risk Factor Surveillance Surveys.
Organization of Findings

- Notable Socio-demographic Features
- Health Status
- Health Care Access and Utilization
  - Hospital Inpatient and ED Use Patterns
- Health System Capacity
- Conclusions and Next Steps
Hospital Use Patterns Provide a Window Into Primary Care Access

- Ambulatory care sensitive inpatient admissions
  - Likely to be preventable with timely access to high quality primary care
  - For conditions such as asthma or heart failure
- Ambulatory care sensitive ED visits
  - Visits for conditions that are non-emergent; emergent, but primary care treatable; or emergent, but preventable or avoidable
- Rates are commonly used markers for the availability and effectiveness of primary care
ACS Inpatient Discharge Rates for Children Age 0-17 Are Beginning to Increase
There Are More ACS Inpatient Discharges for Children Ages 0-17 Inside the Beltway
ACS Inpatient Rates for Prince George’s Residents Age 18-39 Have Increased Modestly Since 2000
There Are More ACS Inpatient Discharges for Adults Age 18-39 Inside the Beltway
ACS ED Rates in Prince George’s and the Region Remain Mostly Stable

Age 0-17

Age 18-39

Age 40-64

Age 65+

Prince George’s  District of Columbia  Montgomery
There Are More ACS ED Discharges In the Eastern Regions of the County

Age 0-17
Age 18-39
Age 40-64
Age 65+
Prince George’s Residents Are More Likely to Use Hospitals Outside the County, Regardless Payer Source
Similarly, Prince George’s Residents Were More Likely to Use EDs Outside The County

Prince George’s County Residents

Montgomery County Residents

District of Columbia Residents
Organization of Findings

- Notable Socio-demographic Features
- Health Status
- Health Care Access and Utilization
- Hospital Inpatient and ED Use Patterns
- Health System Capacity

Conclusions and Potential Next Steps
Per Capita Acute Hospital Bed Capacity in The County Remains Stable

The County Has A Relatively High Per Capita Number of "Excess" Acute Beds

Source: a Author's calculation based on data from the 2000 US Census and 2006 American Communities Survey.
   b Maryland Health Care Commission, 2007
Per Capita ED Capacity in The County Remains Relatively Stable

Source: aAuthor's calculation based on data from the 2006 American Communities Survey.
Emergency Department Capacity in the County Is Used Relatively Intensively

Emergency Departments in The County Receive an Average Number of Visits

b Author's caution based on data from the 2000 U.S. Census and 2006 American Communities Survey.
Supply of Primary Care Physicians in The County Remains Relatively Low

Supply of Pediatricians is Concentrated in Wealthy Fast Growing Regions …

MDs per Capita

ACS Inpatient Use

ACS ED Use

… While Supply is Lower in Areas With More ACS Admissions
Adult Primary Care Physicians Are Concentrated Around Hospitals Rather Than Sick People

MDs per Capita

ACS Inpatient Use

ACS ED Use
Safety Net Clinics Operate In Areas Where Need Is Greatest
However, Capacity of Safety Net Clinics Is Very Small Compared to Number of Uninsured

- ~80,000 Uninsured Adult Residents in Prince George’s County
- Greater Baden FQHC served ~5,000 Prince George’s Residents
- Unity FQHC in DC served ~2,000 Prince George’s Residents
- Other clinics in Montgomery County and DC also serve Prince George’s Residents
Organization of Findings

- Notable Socio-demographic Features
- Health Status
- Health Care Access and Utilization
- Hospital Inpatient and ED Use Patterns
- Health System Capacity

- Conclusions and Potential Next Steps
Main Findings

- The overall health status of County residents is similar to residents of other jurisdictions
  - Yet, there are large SES-based disparities within the County

- Physician supply appears lower than in other jurisdictions and use of care outside the County appears substantial
  - Commuting patterns may be a driving factor

- The County appears to lack a robust safety net
Findings Have Implications in Three Key Areas

1. Health disparities combined with low primary care capacity makes the establishment of a primary care safety net an urgent concern.

2. High rates of out-of-County care—both compensated and uncompensated—may have political and economic consequences:
   - Lost revenue to the County
   - Strains resources of neighboring jurisdictions
   - Hinders economic development

3. Improving the overall health of County residents will require both strengthening the public health system and attention to social determinants of health.
Potential Next Steps

- Characterize and expand the safety net available to uninsured residents and those enrolled in Medicaid

- Examine the primary care system, in both privately insured, uninsured, and Medicaid populations

- Answer key question facing the County: *Strengthen health care infrastructure within the County or rely on regional capacity?*
  - Obtain community input on residents’ experiences and satisfaction with the County’s healthcare delivery system
  - Understand whether perceived quality of healthcare in the County is a factor in commercial development and residential location decisions
Extra Data Slides
### Mortality Is Higher in the Southern Regions of the County For Residents Age 18-44

<table>
<thead>
<tr>
<th>Region</th>
<th>North</th>
<th>North Central</th>
<th>South Central</th>
<th>South</th>
<th>North</th>
<th>Central</th>
<th>South</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIUMA</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>All Causes</td>
<td>102.4</td>
<td>187.6</td>
<td>344.2</td>
<td>263.1</td>
<td>130.3</td>
<td>136.0</td>
<td>286.8</td>
</tr>
<tr>
<td>Homicide</td>
<td>16.4</td>
<td>35.3</td>
<td>96.4</td>
<td>90.5</td>
<td>44.9</td>
<td>22.9</td>
<td>39.4</td>
</tr>
<tr>
<td>Cancer</td>
<td>8.2</td>
<td>19.0</td>
<td>34.4</td>
<td>31.1</td>
<td>18.0</td>
<td>28.5</td>
<td>30.9</td>
</tr>
<tr>
<td>Accidents</td>
<td>26.6</td>
<td>43.5</td>
<td>34.4</td>
<td>31.1</td>
<td>44.9</td>
<td>17.5</td>
<td>70.3</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>8.2</td>
<td>16.3</td>
<td>24.1</td>
<td>17.0</td>
<td>2.3</td>
<td>11.0</td>
<td>30.9</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>2.1</td>
<td>13.6</td>
<td>17.0</td>
<td>2.3</td>
<td>11.0</td>
<td>30.9</td>
<td>30.9</td>
</tr>
</tbody>
</table>

Source: Maryland Vital Statistics Administration

Below 50% County rate

25% vs. 50% County rate

Within ±1 vs. County rate

25% vs. County rate

Above 50% County rate
## Mortality Is Higher Inside the Beltway For Residents Age 45-64

<table>
<thead>
<tr>
<th>Region</th>
<th>PUMA</th>
<th>All Causes</th>
<th>Cancer</th>
<th>Heart Disease</th>
<th>Diabetes</th>
<th>Cerebrovascular Disease</th>
<th>Accidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Inside Beltway</td>
<td>1</td>
<td>332</td>
<td>113.4</td>
<td>76.9</td>
<td>16.2</td>
<td>28.3</td>
<td>8.1</td>
</tr>
<tr>
<td>North Central</td>
<td>3</td>
<td>538.1</td>
<td>169.4</td>
<td>109.6</td>
<td>26.6</td>
<td>6.6</td>
<td>33.2</td>
</tr>
<tr>
<td>South Central</td>
<td>4</td>
<td>805.5</td>
<td>232.7</td>
<td>225.6</td>
<td>39.4</td>
<td>35.8</td>
<td>10.7</td>
</tr>
<tr>
<td>South Outside Beltway</td>
<td>7</td>
<td>678.2</td>
<td>217</td>
<td>183.9</td>
<td>30.1</td>
<td>30.1</td>
<td>15.1</td>
</tr>
<tr>
<td>North Outside Beltway</td>
<td>2</td>
<td>320.3</td>
<td>100.1</td>
<td>64.5</td>
<td>13.3</td>
<td>17.8</td>
<td>15.6</td>
</tr>
<tr>
<td>Central</td>
<td>5</td>
<td>350.7</td>
<td>132.2</td>
<td>76.7</td>
<td>16.3</td>
<td>8.2</td>
<td>8.2</td>
</tr>
<tr>
<td>South Outside Beltway</td>
<td>6</td>
<td>474.5</td>
<td>165.5</td>
<td>136.1</td>
<td>11</td>
<td>14.7</td>
<td>18.4</td>
</tr>
</tbody>
</table>

Source: Maryland Vital Statistics Administration
# Regional Differences in Mortality Are Less Pronounced for Residents Age 65+

<table>
<thead>
<tr>
<th>Region</th>
<th>PUMA</th>
<th>All Causes</th>
<th>Heart Disease</th>
<th>Cancer</th>
<th>Cerebro vs. vascular Disease</th>
<th>Diabetes</th>
<th>Chronic Respiratory Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>1</td>
<td>4361.2</td>
<td>1453.7</td>
<td>985.3</td>
<td>129.2</td>
<td>242.3</td>
<td>145.4</td>
</tr>
<tr>
<td>North Central</td>
<td>3</td>
<td>4154.8</td>
<td>1446</td>
<td>916.5</td>
<td>173.1</td>
<td>152.8</td>
<td>142.6</td>
</tr>
<tr>
<td>South Central</td>
<td>4</td>
<td>4743.6</td>
<td>1570.5</td>
<td>1121.8</td>
<td>170.9</td>
<td>267.1</td>
<td>160.3</td>
</tr>
<tr>
<td>South</td>
<td>7</td>
<td>4429.4</td>
<td>1503.7</td>
<td>1119</td>
<td>221.5</td>
<td>244.8</td>
<td>128.2</td>
</tr>
<tr>
<td>Outside Beltway</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North</td>
<td>2</td>
<td>3854.1</td>
<td>1023.7</td>
<td>808.7</td>
<td>301.1</td>
<td>103.2</td>
<td>189.3</td>
</tr>
<tr>
<td>Central</td>
<td>5</td>
<td>4160.4</td>
<td>1215.2</td>
<td>1072.3</td>
<td>214.5</td>
<td>150.1</td>
<td>135.8</td>
</tr>
<tr>
<td>South</td>
<td>6</td>
<td>4948.8</td>
<td>1759.2</td>
<td>1024.9</td>
<td>229.5</td>
<td>137.7</td>
<td>175.9</td>
</tr>
</tbody>
</table>

Source: Maryland Vital Statistics Administration
Rates of Low Birth Weight Babies Are Higher for Blacks But Trending Up Recently for Whites

Source: Governor's Office for Children and DC Department of Health
Infant Mortality Is Higher For Blacks And Declining More Rapidly

Source: Governor's Office for Children and DC Department of Health
Prince George's Emergency Departments Are Comparably Overcrowded

![Bar chart showing the percent of operating hours in different jurisdictions.](chart)

Source: Maryland Health Care Commission, 2007, Use of Maryland Hospital Emergency Departments: An Update and Recommended Strategies to Address Over Crowding.