ORAL HEALTH, MEDICAID EXPANSION, AND PERSONAL RESPONSIBILITY

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BACKGROUND: IMPORTANCE OF ORAL HEALTH

• 91% US adults had tooth decay in 2011-12¹
• Tooth decay is the most common chronic childhood disease²
• Oral health is a risk factor for cardiovascular disease and diabetes³
• Oral diseases include: dental abscess/bacterial infections, oral cancers, fungal infections
• Poor oral health also affects quality of life (ex. eating and self-esteem)

BACKGROUND: ORAL HEALTH DISPARITIES

- Poor oral health disproportionately afflict low income populations ("silent epidemic")\(^4\)
- ACA’s 2014 Medicaid expansion (<138% FPL) aimed to reduce disparities by expanding adult dental benefits
  - 22 states expanded with dental benefits

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BACKGROUND: MEDICAID EXPANSION

- Dental usage uptake was mixed after Medicaid expansion
  - No immediate significant change\textsuperscript{5}
  - 3-6% increase after 2 years\textsuperscript{5}
  - Increased for childless adults but decreased for parents from 2010 to 2014\textsuperscript{7} (Singhal 2017)


RESEARCH QUESTIONS

1. To what extent is lack of dental usage due to personal responsibility and voluntary choice?

2. What is the role of incentives to improve oral health in Medicaid?
METHODS

• **Behavioral Risk Factor Surveillance System (BRFSS) 2015**
  - *WHO* (in overall Medicaid population) used services
  - State by state analysis of dental usage rates among Medicaid recipients

• **Medical Expenditure Panel Survey (MEPS) 2015**
  - *WHAT* dental services were used by low income populations

• **Literature search**
  - Structural and personal barriers to dental care usage
  - Previous Medicaid dental incentive programs
## SELECTED FINDINGS - BRFSS

<table>
<thead>
<tr>
<th>Dental Visit in last 12 months?</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expanded States</strong></td>
<td>Yes (1)</td>
<td>No (2)</td>
</tr>
<tr>
<td>51.05%</td>
<td>48.03%</td>
<td>0.93%</td>
</tr>
<tr>
<td><strong>Nationally</strong></td>
<td>65.10%</td>
<td>33.93%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>All adults &lt;138% FPL Based on family size</th>
<th>Had Dental Visit</th>
<th>No Dental Visit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>39%</td>
<td>45%</td>
</tr>
<tr>
<td>Female</td>
<td>61%</td>
<td>52%</td>
</tr>
<tr>
<td><strong>Education level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never attended</td>
<td>0.42%</td>
<td>1%</td>
</tr>
<tr>
<td>Elementary</td>
<td>11%</td>
<td>15%</td>
</tr>
<tr>
<td>Some HS</td>
<td>17%</td>
<td>21%</td>
</tr>
<tr>
<td>HS Grad</td>
<td>34%</td>
<td>32%</td>
</tr>
<tr>
<td>Some College</td>
<td>28%</td>
<td>24%</td>
</tr>
<tr>
<td>College Grad</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td><strong># permanent teeth were removed due to disease</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 5</td>
<td>49%</td>
<td>45%</td>
</tr>
<tr>
<td>6+ but not all</td>
<td>49%</td>
<td>53%</td>
</tr>
<tr>
<td>All</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>
SELECTED FINDINGS - BRFSS

- More people visit the physician than the dentists
- A majority of people have a personal doctor/health care provider

### Health Activation

<table>
<thead>
<tr>
<th>How long since your last routine medical checkup?</th>
<th>within past year</th>
<th>within past 2 years</th>
<th>within past 5 years</th>
<th>5 or more years ago</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>74.01%</td>
<td>12.77%</td>
<td>5.56%</td>
<td>5.17%</td>
</tr>
</tbody>
</table>

### Health Activation 2

<table>
<thead>
<tr>
<th>Personal doctor or health care provider?</th>
<th>One or more</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>76%</td>
<td>23.8%</td>
<td>0.34%</td>
</tr>
</tbody>
</table>
### SELECTED FINDINGS - BRFSS

<table>
<thead>
<tr>
<th>Potential for activation</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>difficulty walking or climbing stairs</td>
<td>18.85%</td>
<td>80.15%</td>
</tr>
<tr>
<td>difficulty dressing or bathing</td>
<td>6.81%</td>
<td>92%</td>
</tr>
<tr>
<td>difficulty doing errands alone such as visiting a doctor's office or shopping?</td>
<td>11.35%</td>
<td>87.26%</td>
</tr>
<tr>
<td>During the past month, other than your regular job, did you participate in any physical activities or exercises?</td>
<td>69.90%</td>
<td>29.99%</td>
</tr>
</tbody>
</table>
### SELECTED FINDINGS - BRFSS

#### Health Literacy

<table>
<thead>
<tr>
<th>Question</th>
<th>Very/somewhat EASY</th>
<th>Somewhat/very HARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>how difficult is it for you to get advice or info about health or other medical topics if you need it</td>
<td>79%</td>
<td>11%</td>
</tr>
<tr>
<td>how difficult is it for you to understand information that doctors, nurses, and other health professionals tell you?</td>
<td>87%</td>
<td>13%</td>
</tr>
</tbody>
</table>
SELECTED FINDINGS - MEPS

- Lower income tend to use:
  - LESS diagnostic & preventative care
  - MORE restorative care
SELECTED FINDINGS – STRUCTURAL BARRIERS

1) **Lack of providers** - distribution, quantity
   - Due to provider disincentives (reimbursement, administrative burden)
   - Missed appointments

2) **Lack of medical integration**
   - primary care physicians education

3) **Transportation costs/access**
SELECTED FINDINGS – PERSONAL BARRIERS

1) **Financial** - research suggest biggest barriers to care are financial, not supply related

2) Lack of **awareness** about benefits

3) Low oral health literacy
SELECTED FINDINGS – INCENTIVE PROGRAMS

Florida
- poor evaluation, and program kept changing
- Some evidence the financial motivation worked (millions of $ credits were claimed)

Iowa
- tiered approach to earn benefits
- Many people unaware of program & how to earn benefits
- Not a lot of people made it past tier 1

Kentucky
- TBD
CONCLUSIONS

• There may be a role for incentives
  • Some people with NO structural barriers still don’t all seek care → incentives can overcome personal barriers
  • Incentives may also be able to overcome some structural barriers (ex. transportation costs)
• Important to consider equity
• Need to rigorously evaluate incentive programs over time
LESSONS LEARNED

• Big disparities in oral health service utilization and outcomes based on income
• Lack of dental care usage is multifaceted and require a combination of solutions to overcome
• Need for more oral health services research
OTHER PROJECTS & CONTINUED WORK

• Evaluation of KY HEALTH - MyRewards program (dental component)
• Pediatric Dental Medicaid Usage and Incentives for Older Children
• The Role of Oral Health in Universal Health Coverage (UHC)