Dental and Health Care Utilization among Florida Pediatric MediPass Beneficiaries

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The Florida MediPass Program

- Florida Medicaid’s Primary Care Case Management Program
  - Recipients must select a primary care provider (PCP) who will refer patients for necessary medical services
  - PCP’s receive a $3 monthly management fee for each patient
  - Dental services do not have to be approved by a PCP
  - 48 percent of all beneficiaries are in MediPass; 50 percent are in HMOs
  - Florida MediPass claims and utilization data are easily accessible
This project utilized Florida MediPass administrative claims data for years 2000-2003

• Included children who had a dental claim in 2000-2003 and were aged 0-6 years during each year
• Group 1: No record of general anesthesia (GA) for hospital-based dental procedure
• Group 2: Record of GA for a hospital-based dental procedure, based on:
  – ICD-9 codes: dental caries (521.0); dental periapical abscess without sinusitis (522.5); facial cellulitis (682.0) and periapical abscess with sinus (522.7)
  AND
  – Current Procedural Terminology (CPT) code 00170 ("anesthesia for intraoral procedures, including biopsy; not otherwise specified")
Distribution of Children, aged 0-6 years, enrolled in Florida Medicaid in years 2000-2003 with dental claims, with and without general anesthesia (GA)

<table>
<thead>
<tr>
<th>Year</th>
<th>All children</th>
<th>At least 1 dental claim</th>
<th>Without GA</th>
<th>With GA Children</th>
<th>With GA Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>75,537</td>
<td>74,495</td>
<td>1,042</td>
<td>1,317</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>82,328</td>
<td>81,007</td>
<td>1,321</td>
<td>1,665</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>92,313</td>
<td>91,044</td>
<td>1,269</td>
<td>1,667</td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>101,805</td>
<td>100,533</td>
<td>1,272</td>
<td>1,703</td>
<td></td>
</tr>
</tbody>
</table>
Unit of Analysis

• Member months
  – Allows for gaps in coverage and different lengths of spans in enrollment
  – Total number of days of enrollment/30 days
  – Rounded to the nearest month e.g. 30.2 rounded to 30
  – Results presented as per 1000 member months for ease of interpretation
### Selected demographics from children enrolled in Florida Medicaid program

<table>
<thead>
<tr>
<th>YEAR</th>
<th>Number</th>
<th>%White</th>
<th>%Black</th>
<th>%SSI</th>
<th>%Rural</th>
<th>%Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>74,495</td>
<td>29</td>
<td>37</td>
<td>7</td>
<td>23</td>
<td>77</td>
</tr>
<tr>
<td>2000GA</td>
<td>1,042</td>
<td>49</td>
<td>21</td>
<td>14</td>
<td>34</td>
<td>66</td>
</tr>
<tr>
<td>2001</td>
<td>81,007</td>
<td>31</td>
<td>32</td>
<td>6</td>
<td>23</td>
<td>76</td>
</tr>
<tr>
<td>2001GA</td>
<td>1,321</td>
<td>46</td>
<td>22</td>
<td>13</td>
<td>36</td>
<td>64</td>
</tr>
<tr>
<td>2002</td>
<td>91,044</td>
<td>30</td>
<td>30</td>
<td>5</td>
<td>22</td>
<td>77</td>
</tr>
<tr>
<td>2000GA</td>
<td>1,269</td>
<td>45</td>
<td>21</td>
<td>13</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>2003</td>
<td>100,533</td>
<td>28</td>
<td>31</td>
<td>4</td>
<td>21</td>
<td>78</td>
</tr>
<tr>
<td>2003GA</td>
<td>1,272</td>
<td>43</td>
<td>21</td>
<td>12</td>
<td>40</td>
<td>59</td>
</tr>
</tbody>
</table>
Selected demographic characteristics of children age 0-6 yrs enrolled in Florida Medicaid program, by General Anesthesia status
Average CDT Diagnostic, Preventive, Restorative and Other procedures per 1000 member months Florida Medicaid Recipients aged 0-6 years

<table>
<thead>
<tr>
<th>General Anesthesia (GA) status</th>
<th>Type of Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DIAGNOSTIC</td>
</tr>
<tr>
<td><strong>No GA</strong></td>
<td>268</td>
</tr>
<tr>
<td><strong>GA</strong></td>
<td>375</td>
</tr>
</tbody>
</table>
# Average Physician Visits, ER Visits, Hospital Admissions and Length of Stay per 1000 Member Months
## Florida Medicaid Recipients, 2000-2003

<table>
<thead>
<tr>
<th>General Anesthesia Status</th>
<th>Physician Visits</th>
<th>ER Visits</th>
<th>In-patient Admissions</th>
<th>Length of stay (days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Claims and No GA</td>
<td>206</td>
<td>32</td>
<td>2.5</td>
<td>11.4</td>
</tr>
<tr>
<td>Dental Claims and GA</td>
<td>382</td>
<td>66</td>
<td>6.6</td>
<td>28.4</td>
</tr>
</tbody>
</table>
Average Physician Visits, ER Visits, IP Admissions and Lengths of Stay/1000 Member Months
Florida Medicaid Recipients Age 0-6, 2000-2003
Average cost per 1000 member months ($1000) for Physician Visits, Inpatient Admissions, and Total Florida Medicaid Recipients Age 0-6, 2000-2003

- Cost for MD visits
  - No GA: 101.14
  - GA: 210.34

- IP Costs
  - No GA: 10.39
  - GA: 27.48

- Total Costs
  - No GA: 125.46
  - GA: 319.17
CONCLUSIONS

• DENTAL CARE - Beneficiaries with general anesthesia during a dental procedure received, on average:
  – 1.4 times as many diagnostic procedures
  – 5.9 as many restorative procedures
  – 5.5 as many other dental procedures
  – but only 0.9 as many preventive procedures as those who received dental care without general anesthesia.

• MEDICAL CARE - “General anesthesia group” had more medical contacts than those receiving dental care without general anesthesia, including:
  – 1.8 times as many physician visits
  – 2.1 as many emergency room visits
  – 2.6 times as many in-patient admissions
  – 2.5 times as long hospital stays
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REFERENCES


