Joint Legislative Program Evaluation Oversight Committee

Mothers, Babies and Medicaid

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Fiscal Research Division

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This will primarily be a data presentation

**DISCUSSION GUIDE**

- Comparative Trends in Births
- Trends in C-Section Rates
- Trends in Infant Birth Weights
- Trends in Spending
- Observations and Next Step

There will be more questions raised than answered
Percentage of births covered by Medicaid increased from about 50% in 2004 to about 57% in 2010, and continues at 57% of total births through 2013.

The growth in the Medicaid percentage of total births is function Medicaid births growing at a rate faster than non-Medicaid births through 2010, then declining at a slower rate through 2013.

Source: DHHS Data Warehouses and NC Birth Certificate Data
Medicaid % of NC Births

Overall State % in 2013 - 57% of Total Births

Highest quartile 78.5% to 100% of births
Third quartile 68.3% to 77.5% of births
Second quartile 58.2% to 67.4% of births
Lowest quartile 23% to 57.7% of births

Source: DHHS Data Warehouses and NC Birth Certificate Data
**Trends in Medicaid C-Section Rate**

- Medicaid C-Section rates in NC lower than the rates for the general population
- Medicaid C-Section rates primary driver of State rates because the majority of births paid for by Medicaid

**One Unanswered Question:**

Data shows a positive trend in recent year’s C-section rates...data not available to demonstrate absolutely what among programs implemented within and external to Medicaid has impacted this rate?

Source: DHHS Data Warehouses and NC Birth Certificate Data
Locations of Higher Levels of Care for Newborns

Source: DHHS Division of Health Services Regulation
Level III and IV are the highest level of hospital care offered to newborns in NC.

Days consistently reported by hospitals began to increase in 2012 for all babies.

One Unanswered Question:
With improvement in birth weights, what is causing increase in Level III and IV days, how much is longer lengths of stay versus increased admissions — why?
Medicaid Low Birth Weights/1,000 Births

5.7 to 7.1
7.2 to 8.7
8.8 to 10.6
10.7 to 14.2

Location of Level III and IV Nurseries

Source: DHHS Division of Health Services Regulation and UNC School of Public Health Presentations at HHS Appropriations
• Birth weights one indicator of infant health

• Should be a key determinate in Medicaid spending for children

<table>
<thead>
<tr>
<th>Birth Weight Category</th>
<th>FY 2013-14</th>
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</thead>
<tbody>
<tr>
<td>Less Than 500 Grams</td>
<td>$39,723</td>
</tr>
<tr>
<td>500 to 749 Grams</td>
<td>$129,632</td>
</tr>
<tr>
<td>750 to 999 Grams</td>
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<tr>
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Comparison of Birth Weight Distribution

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<tr>
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</thead>
<tbody>
<tr>
<td>Very Low Birth Weight &lt;1500 grams</td>
<td>1.6%</td>
<td>1.7%</td>
<td>1.4%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Low Birth Weight &lt; 2500 grams</td>
<td>9.6%</td>
<td>9.0%</td>
<td>8.1%</td>
<td>7.0%</td>
</tr>
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</table>

Source: DHHS Data Warehouses and NC Birth Certificate Data
Trends in Medicaid Spending on Births

Absolute costs include the actual payment for the mother’s prenatal, delivery payments to CCNC for the Pregnancy Medical Home and the child for the year of life.

Cost in 2013 includes one case with hospital payments of $2.5 M, but this would only account for an overall increase in the average cost of only $20. The increase in 2013 is primarily a function of payments to hospitals and physicians which increased the average cost by $2,270.

One Unanswered Question: What is driving change in 2013 hospital and physician spending?

Source: DHHS Data Warehouses and NC Birth Certificate Data
Trends in Medicaid Spending on Births

- Prior to 2013, C-section rates appear to be positively impacting absolute Medicaid spending for mothers.
- Absolute spending for infants trending upward after 2006 for Medicaid spending in nearly every year.

One Unanswered Question:

How much is utilization, rates, consumption, mix or location of providers contributing to trends in Medicaid spending for mothers and babies?

Source: DHHS Data Warehouses and NC Birth Certificate Data
Location & Mix Create Variations in Medicaid Spending

One Unanswered Question: How has % of deliveries changed for each of these facilities?

Source: Division of Medical Assistance

The difference in the hospital rates reflect the graduate medical education addition to base rates for teaching hospitals.
Trends in Medicaid Spending on Births

- Rate reductions during the period impacted spending trends
- Price adjusted cost normalizes spending for rate reductions implemented

\[ \text{FY 2013-14} \]

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Source: DHHS Data Warehouses and NC Birth Certificate Data

\[ \text{Lowest birth weight babies cost as much on average as 20 times more than a baby born at 2,500 grams or higher} \]
Initiatives for Improving Outcomes

- Durham Connects – in-home post delivery nurse visits for births in Durham County
- PQCNC – focused on a variety of initiatives, education and programs, such as eliminating elective 39 week gestation periods
- Pregnancy Home – initiative through CCNC to lower c-section rate and improve birth weights:
  - $50 incentive to complete standardized risk screening
  - $150 incentive for performing post partum office visit
  - Exemption from PA’s for OB ultrasounds
  - Enhanced rate for normal deliveries
  - Care management, care manager and access to process and outcomes data

Actual data is not available to determine the exact factors leading to these changes, there are numerous other actions taken by other Divisions and Agencies/Organizations outside DHHS

One Unanswered Question: If infant birth weights are increasing, c-section rates are declining – why are average costs per delivery increasing?

Source: DHHS Data Warehouses and NC Birth Certificate Data
Summary

• The data shows:
  1) Birth weights have improved and reported hospital days for neonates has increased,
  2) C-section rates have started declining, and
  3) Absolute Medicaid spending for prenatal, deliveries, CCNC and the 1st year of an infant’s life are mostly flat in total prior to 2013; however, General Assembly actions to lower rates and change policy appear to be the primary factor driving Medicaid spending.

• The data doesn’t answer a lot of questions, but rather raises questions about
  a) What is/should the relationship between birth weights & c-section rates and costs & Level III and IV days?
  b) Who is/should be looking at health outcomes for mothers & babies and costs from a system perspective?
  c) What should NC be investing in to improve outcomes and lower costs?
  c) Next steps?
QUESTIONS

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