

# **Joint Legislative Program Evaluation Oversight Committee**

## **Mothers, Babies and Medicaid**

**Steve Owen,  
Fiscal Research Division**

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**FISCAL RESEARCH DIVISION**  
A Staff Agency of the North Carolina General Assembly

# *Trends and Analysis of Mothers and Babies*

*This will primarily be a data presentation*

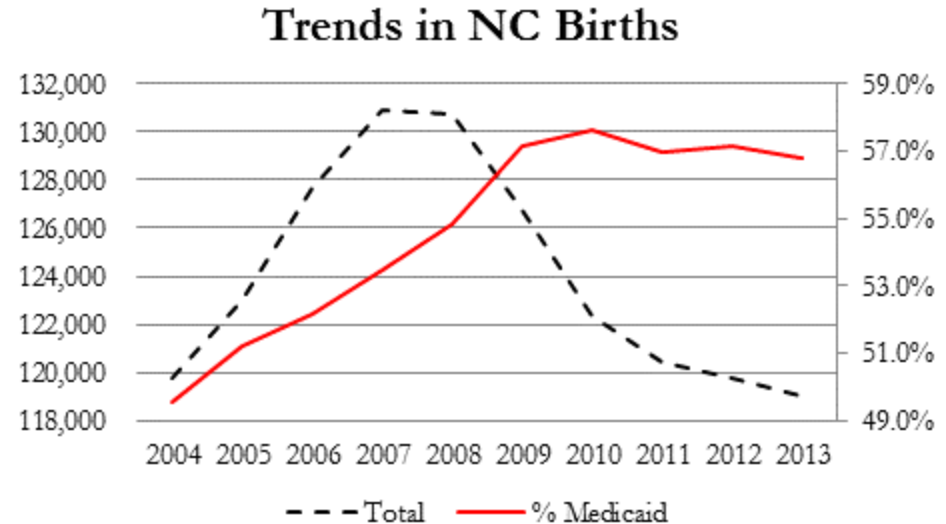
## **DISCUSSION GUIDE**

- 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*

# *Trends in NC Births*

- 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

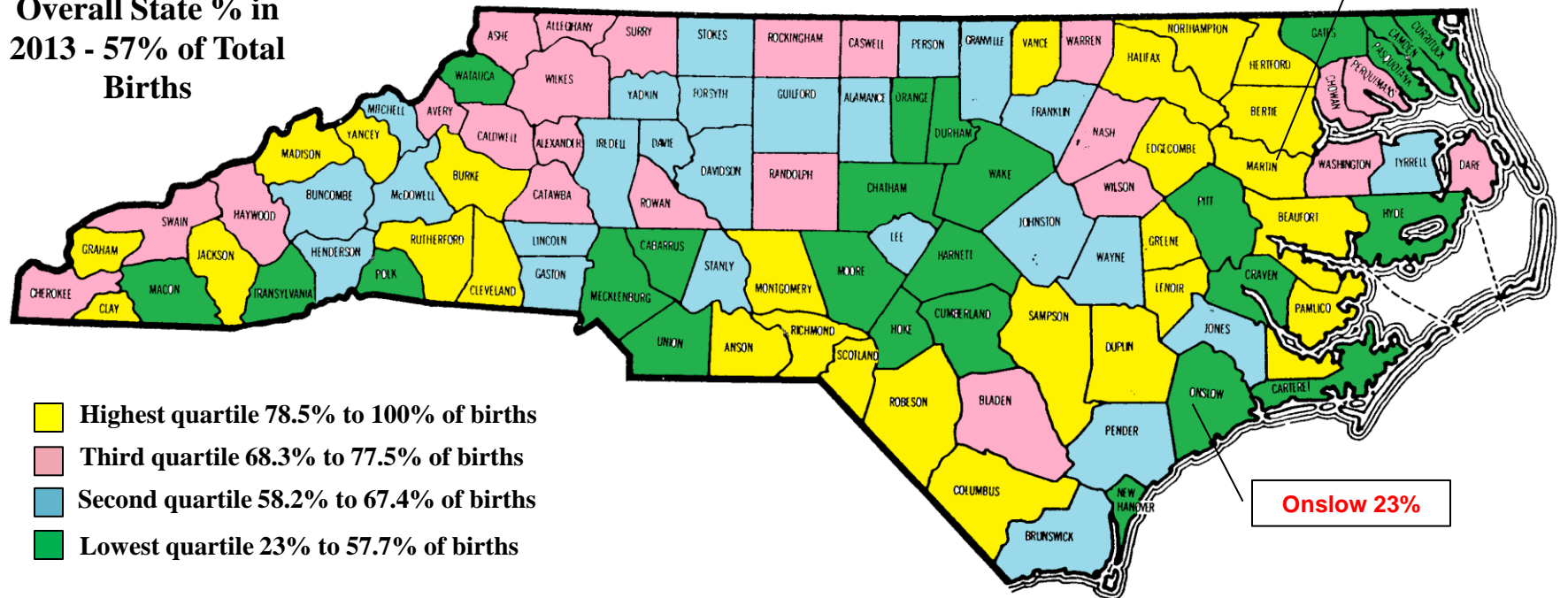


- The growth in the Medicaid percentage of total births is function Medicaid births growing at a rate faster than non-Medicaid births through 2010, then declining at a slower rate through 2013

Source: DHHS Data Warehouses and NC Birth Certificate Data

# Medicaid % of NC Births

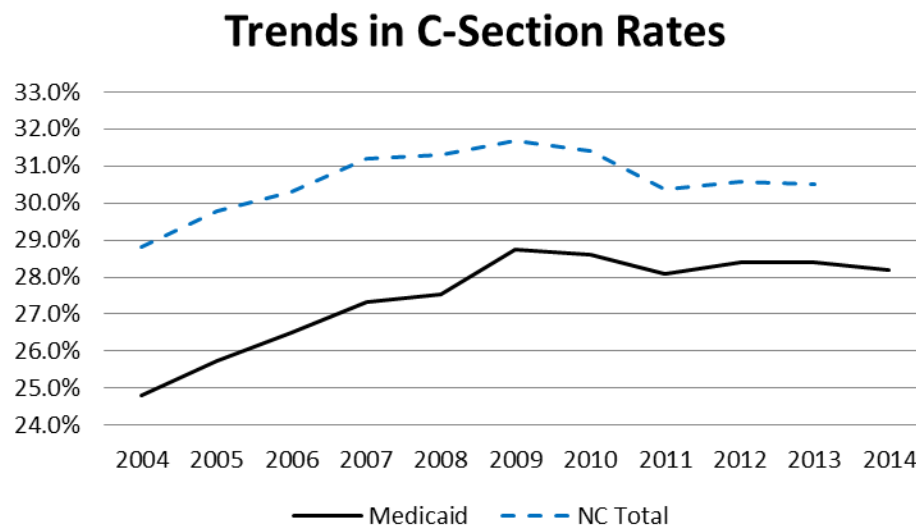
**Overall State % in  
2013 - 57% of Total  
Births**



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

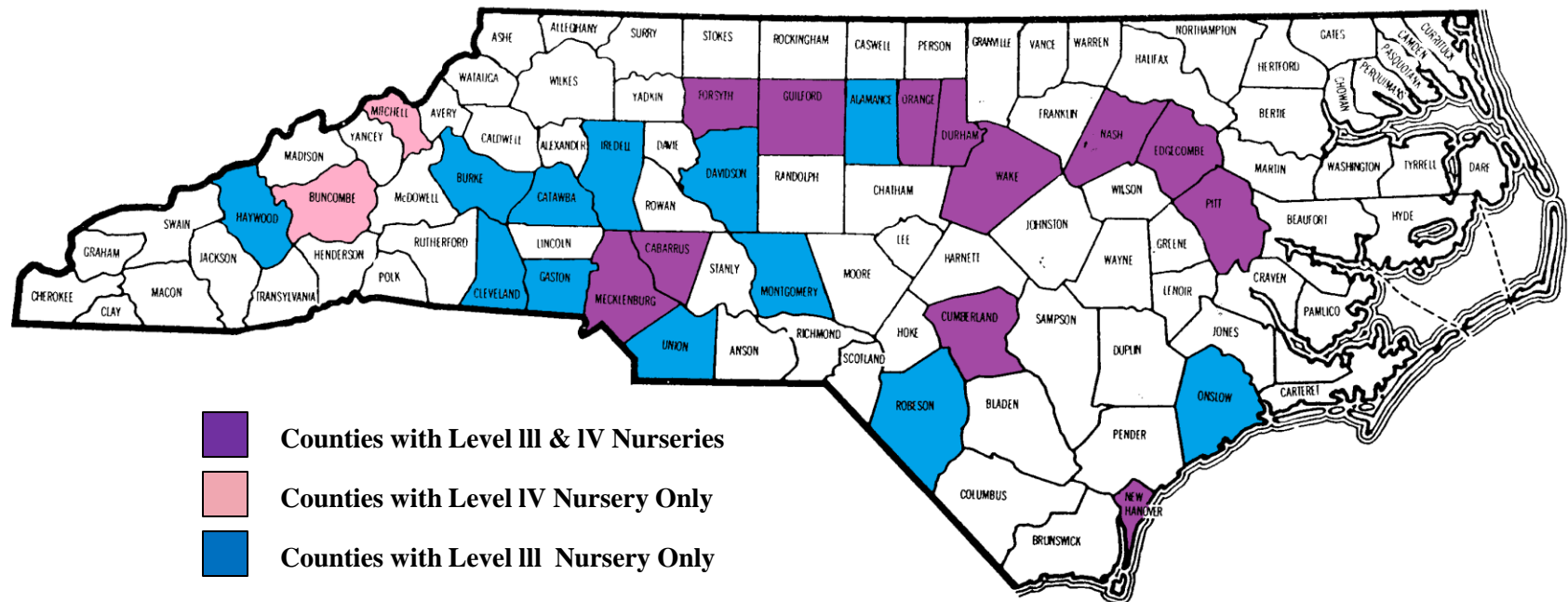


## *One Unanswered Question:*

*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

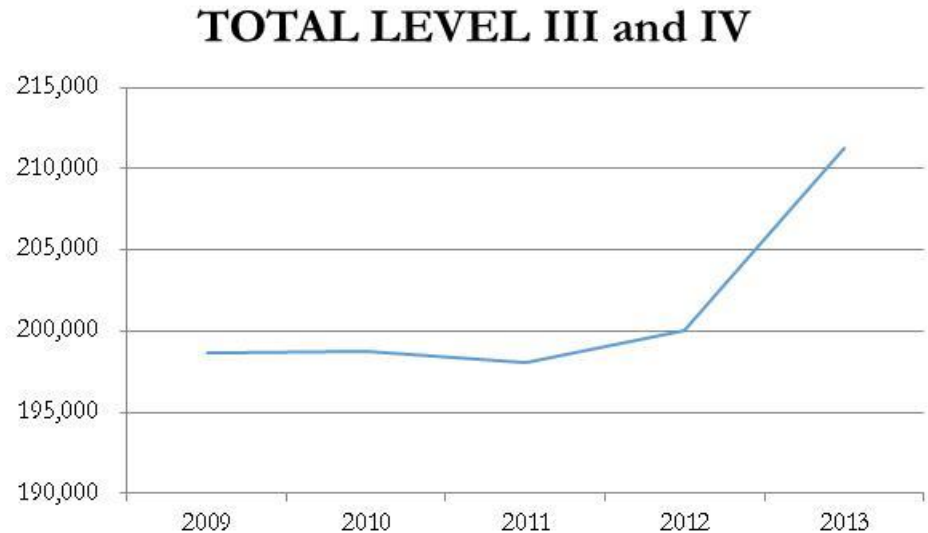
# *Locations of Higher Levels of Care for Newborns*



Source: DHHS Division of Health Services Regulation

## *Trends in Days Reported for Higher Levels of Care for Newborns*

- 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

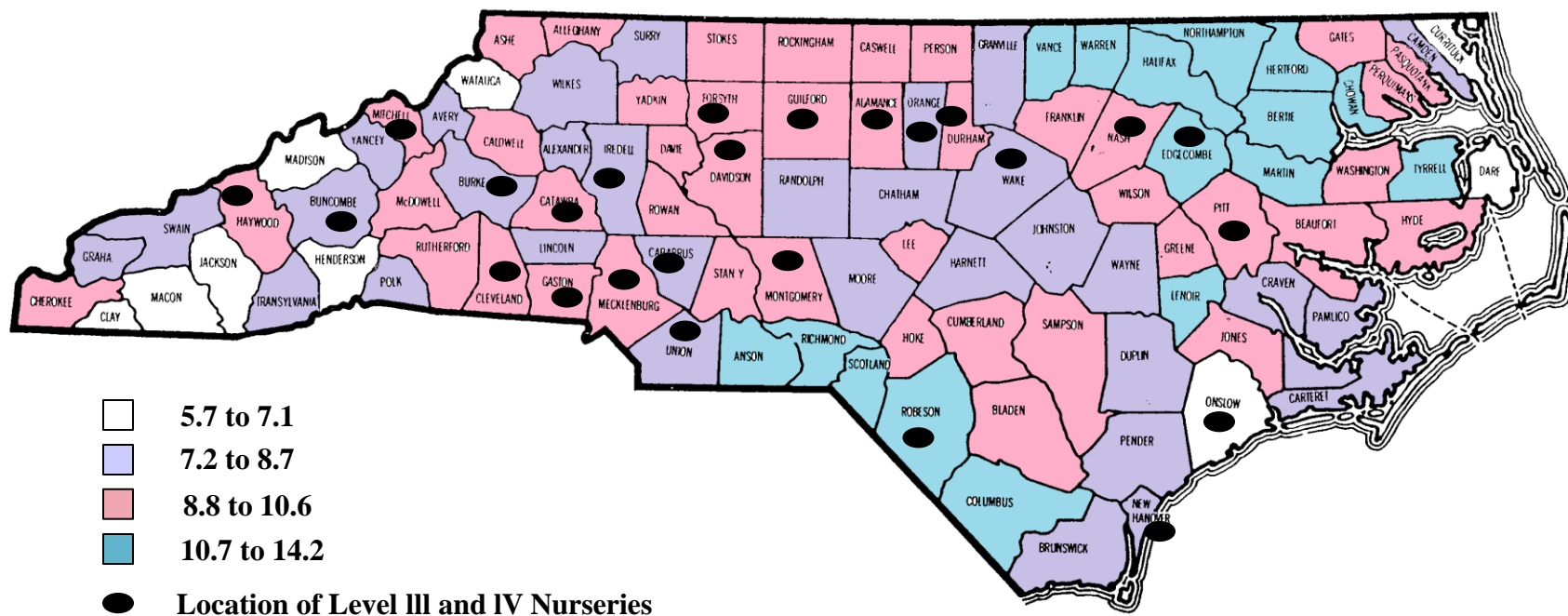


### *One Unanswered Question:*

*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?*

Source: DHHS Health Services Regulation

# *Medicaid Low Birth Weights/ 1,000 Births*



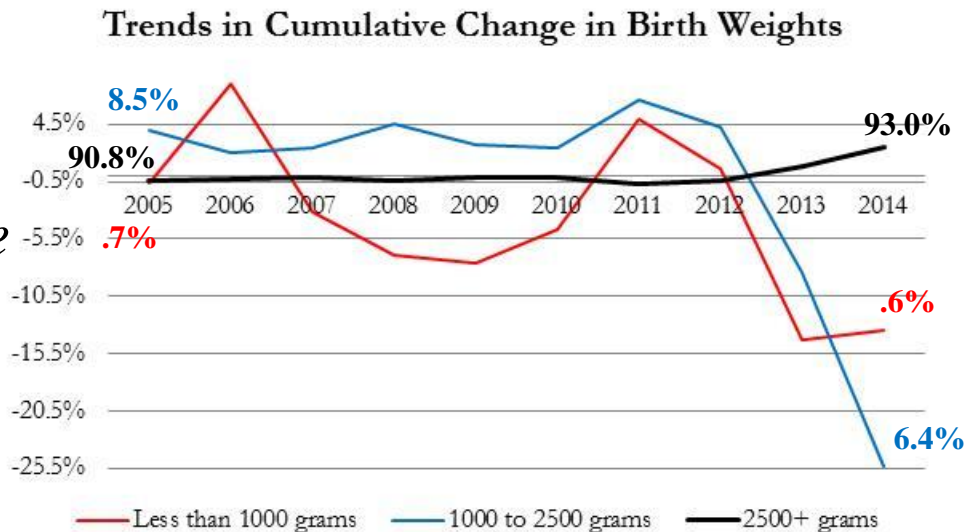
Source: DHHS Division of Health Services Regulation and UNC School of Public Health  
Presentations at HHS Appropriations



# Trends in Medicaid Infant Birth Weights

- *Birth weights one indicator of infant health*
- *Should be a key determinate in Medicaid spending for children*

	<i>FY 2013-14</i>
Less Than 500 Grams	\$ 39,723
500 to 749 Grams	\$ 129,632
750 to 999 Grams	\$ 123,156
1000 to 1499 Grams	\$ 72,550
1500 to 2499 Grams	\$ 19,575
2500+ Grams	\$ 5,550



## Comparison of Birth Weight Distribution

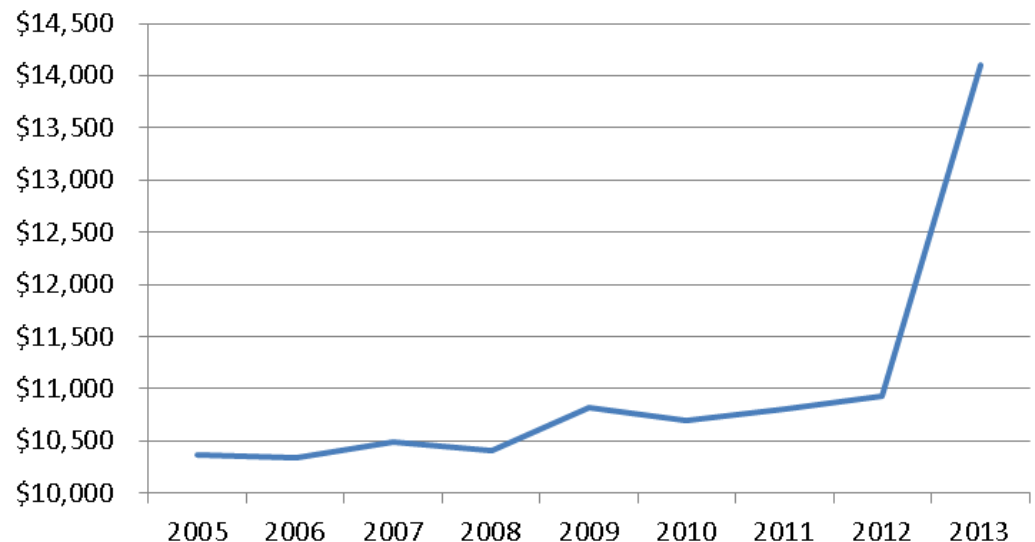
	2012			2014
	Medicaid	NC	US	Medicaid
Very Low Birth Weight <1500 grams	1.6%	1.7%	1.4%	1.2%
Low Birth Weight < 2500 grams	9.6%	9.0%	8.1%	7.0%

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

Medicaid Total Cost per Delivery and First Year of Life



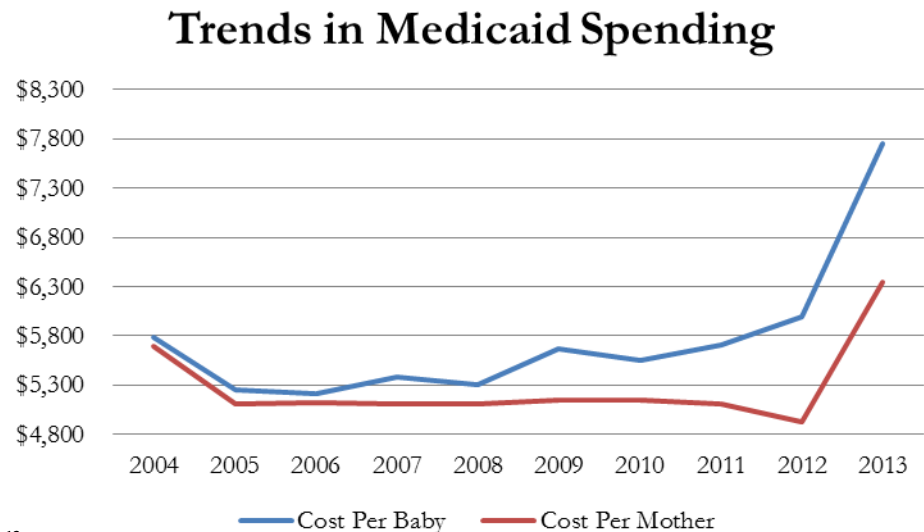
*Cost in 2013 includes one case with hospital payments of \$2.5 M, but this would only account for an overall increase in the average cost of only \$20. The increase in 2013 is primarily a function of payments to hospitals and physicians which increased the average cost by \$2,270*

*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

		<i>Full Term</i>				
	<i>Base Rate</i>	<i>Normal Delivery</i>	<i>C-Section w/Comp</i>	<i>Normal Newborn</i>	<i>Neonate w/Comp</i>	<i>Premature w/Comp</i>
★ University of North Carolina Hospital	\$ 4,531.66	\$ 3,116	\$ 5,554	\$ 914	\$ 7,319	\$ 18,805
★ Vidant Medicaid Center	\$ 3,741.75	\$ 2,573	\$ 4,586	\$ 755	\$ 6,043	\$ 15,527
★ North Carolina Baptist Hospital	\$ 3,741.68	\$ 2,573	\$ 4,586	\$ 755	\$ 6,043	\$ 15,526
★ Duke University Hospital	\$ 3,709.22	\$ 2,550	\$ 4,546	\$ 748	\$ 5,991	\$ 15,392
Carolinas Medical Center	\$ 3,103.68	\$ 2,134	\$ 3,804	\$ 626	\$ 5,013	\$ 12,879
Durham Regional Hospital	\$ 2,875.69	\$ 1,977	\$ 3,524	\$ 580	\$ 4,645	\$ 11,933
New Hanover Regional Medical Center	\$ 2,850.27	\$ 1,960	\$ 3,493	\$ 575	\$ 4,603	\$ 11,827
WakeMed Raleigh Campus	\$ 2,848.92	\$ 1,959	\$ 3,492	\$ 575	\$ 4,601	\$ 11,822
Mission Hospital	\$ 2,811.06	\$ 1,933	\$ 3,445	\$ 567	\$ 4,540	\$ 11,665
Moses H. Cone Memorial Hospital	\$ 2,803.21	\$ 1,927	\$ 3,436	\$ 565	\$ 4,527	\$ 11,632
Carolinas Medical Center - Northeast	\$ 2,796.99	\$ 1,923	\$ 3,428	\$ 564	\$ 4,517	\$ 11,606
Cape Fear Valley Medical Center	\$ 2,763.73	\$ 1,900	\$ 3,387	\$ 557	\$ 4,464	\$ 11,468
Union Regional Medical Center	\$ 2,756.16	\$ 1,895	\$ 3,378	\$ 556	\$ 4,451	\$ 11,437
Mercy Hospitals	\$ 2,747.50	\$ 1,889	\$ 3,367	\$ 554	\$ 4,437	\$ 11,401
Forsyth Memorial Hospital	\$ 2,746.69	\$ 1,889	\$ 3,366	\$ 554	\$ 4,436	\$ 11,398
ALL OTHER	\$ 2,704.50	\$ 1,860	\$ 3,315	\$ 545	\$ 4,368	\$ 11,223

Other Teaching Hospitals

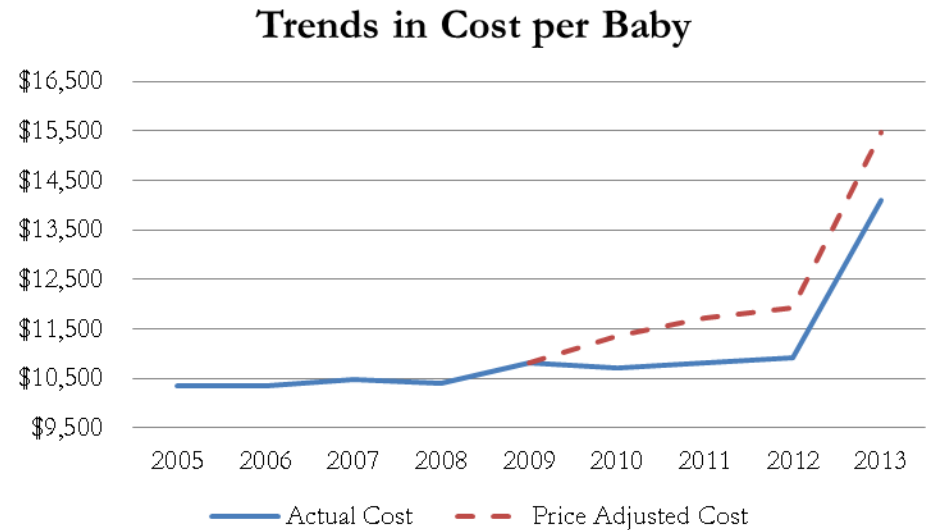
*One Unanswered Question: How has % of deliveries changed for each of these facilities?*

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



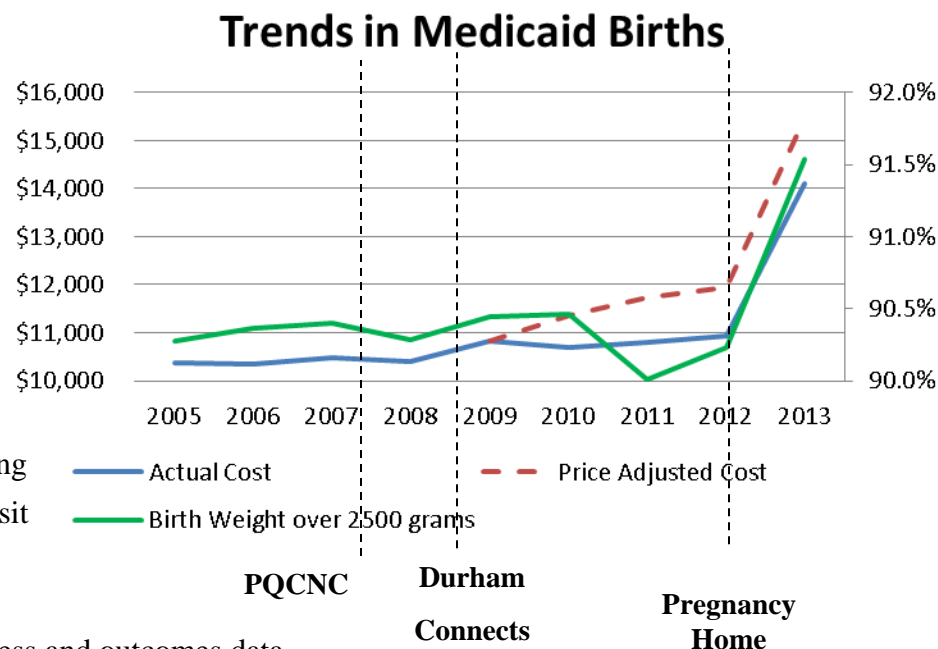
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***Lowest birth weight babies cost as much on average as 20 times more than a baby born at 2,500 grams or higher***

Source: DHHS Data Warehouses and NC Birth Certificate Data

# 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

**Steve Owen – [steve.owen@ncleg.net](mailto:steve.owen@ncleg.net)  
919-733-4910**

