



North Carolina
State Health Plan
FOR TEACHERS AND STATE EMPLOYEES



Stork Rewards Year One Outcomes

May 24, 2013

Board of Trustee's Meeting

Why are we doing this?

Pre-term Birth Statistics

In the United States:

- Immense need exists to produce better health outcomes in the treatment of pregnant women and their unborn children with prenatal and antenatal care
- In 2012, the number of babies born too soon exceeded 517K with 11.7% of births preterm
- Preterm birth is the No. 1 obstetrical complication and leading cause of neonatal* death
- Received a grade of “C” from the March of Dimes for the 2012 Premature Birth Report Card
- Annual economic cost associated with preterm births is >\$26B or \$51,600 per infant born preterm
- 25-40% of total health plan expenses are maternity related driven by preterm births and NICU days



In North Carolina:

- In 1988, NC had the highest infant mortality rate in the nation
- In 2011, NC's infant mortality rate was 2nd lowest in the state's history; 7.2 babies died /1,000 live births
- In 2012, 12.6% of births were preterm; higher than national statistic
- Received a grade of “C” from the March of Dimes for 2012 Premature Birth Report Card
- In an average week in NC, 299 babies are born preterm

In State Health Plan:

- From October 2011 through September 2012, there were 229 unique preterm newborns
- Preterm and low birth weight newborns' cost to the Plan was: **\$65,520** from Oct. 2009-Sept. 2010 and **\$61,373** from Oct. 2010- Sept. 2011

Source: March of Dimes and Infant Mortality Reduction Coalition – Forsyth County <http://www.marchofdimes.com/peristats/pdf/lib/998/NC.pdf>
<http://www.helpourbabies.org/causes.aspx>

* Affecting the newborn during the first month after birth

Stork Rewards

Objectives & Strategy

- **Objectives**

- Help the pregnant member achieve a healthy full-term delivery through education, behavior change, improved coordination and communication regarding adherence to her physician's prenatal care plan
- Engage members to reduce adverse events
- Improve outcomes (antenatal complications, preterm and low birth weight rates)
- Reduce costs

- **Strategy**

- Introduce incentives to improve engagement and encourage 1st trimester engagement
- Present program through multiple communication channels to subscribers and covered spouses of child bearing age



Executive Summary

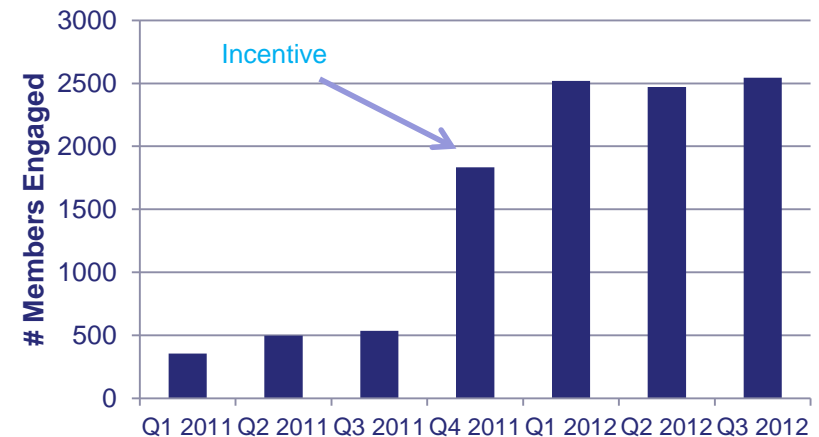
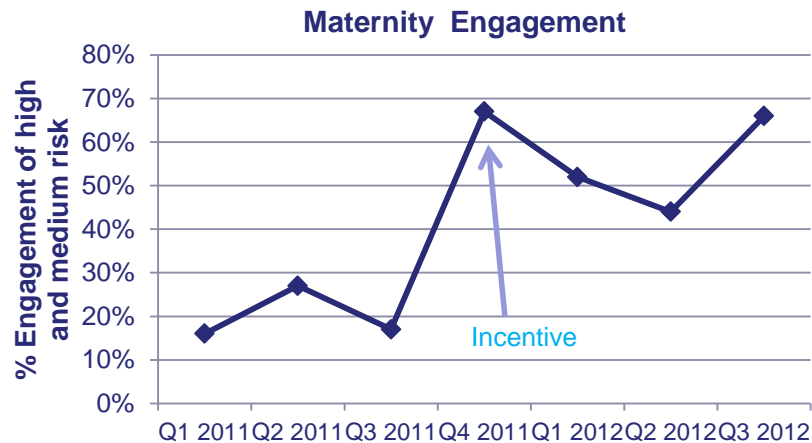
Outcome	Baseline	PY1	Comment
Eligible Deliveries	6,374	6,200	Declined 2.7%
Admits for Antenatal Complications (per 100 deliveries)	3.95	3.73	p = 0.26**
LBW/preterm births (per 100 deliveries)	8.10	8.69	p = 0.13**
NICU Admissions (per 100 deliveries)	7.49	8.02	P = 0.15**

**Major outcomes not statistically significant

Engagement

Did the incentive improve engagement?

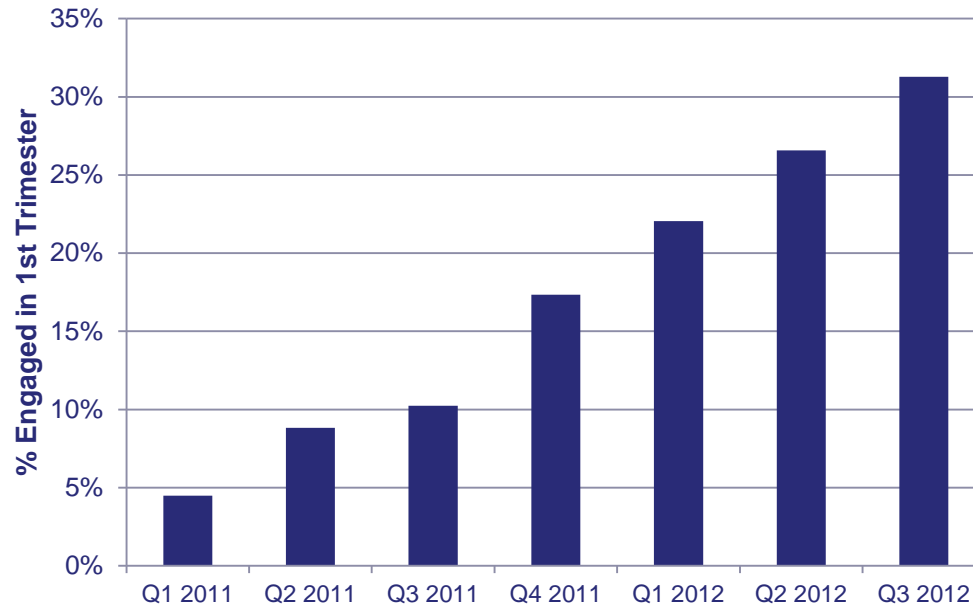
- Engagement of medium and high risk pregnant women increased from an average of 20% pre-incentive to 57% post-incentive
- Average # of members engaged per quarter increased 400% after incentive



Engagement

Are we engaging pregnant women early enough?

- % of pregnant women engaged in first trimester is steadily increasing; currently only represents 31% of engaged members
- Pregnant women ideally should be engaged during first trimester so there is sufficient time to impact antenatal complications and birth outcomes



Findings and Recommendations

- Findings

- Member engagement increased to 96% with Stork Rewards program
- Analysis did not show a statistically significant difference between baseline period and PY1 with respect to hospitalizations for antenatal complications, LBW and preterm rates and NICU utilization
- Cost of incentive to the Plan was \$353,874 for 1st year of program
- **Many women enrolled in Stork Rewards in PY1 have not yet delivered; therefore more time is needed to fully assess program impact**

- Recommendations by ActiveHealth

- Continue Stork Rewards incentive program through 2014
- Place greater communication emphasis on first trimester enrollment

