



# *Targeting High-Risk Pregnant Members to Reduce NICU Admissions*

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## **Monroe Plan for Medical Care**

- **Delivery System for Excellus BlueCross BlueShield**
- **96,000+ Members in Medicaid Managed Care (Blue Choice Option), Child Health Plus, and Family Health Plus**
- **Service Area: 13 Counties in Upstate New York Including Cities of Rochester and Binghamton**
- **4,100 + Providers on Panel**



## **Monroe Plan for Medical Care**

- **Prenatal/Perinatal Services Highest Medical Expense Diagnostic Group**
- **Nearly 2,200 Births 2006**
- **NICU Admissions Major Driver of Costs**
- **108 NICU Admits/1,000 Births in 1998 (Upstate New York Medicaid Rate About 110/1,000)**
- **Implemented Healthy Beginnings Prenatal Care Program in Late 1997**

# Challenges for Effective Prenatal Care

(Best Clinical and Administrative Practices/BCAP Typology)\*

- **Identification: Know Who is Pregnant Soon Enough to Intervene for High-Risk**
- **Stratification: Allocate Resources and Interventions Cost-Effectively**
- **Outreach: Overcome Patient Challenges for Contact and Engagement in Care**
- **Intervention: Assist Patients to Make Changes to Positively Affect Pregnancy Outcomes**

## **Identification: Adapted Health Risk Assessment**

- **Instituted Mandatory Prenatal Registration Form Submission (Health Risk Assessment) in Late 1997.**
- **Pay Providers for Submission/Potential Denial of Reimbursement for Prenatal Care if not Submitted**
- **Submission Rates Improved to > 90%**

## **Identification: Use of Prenatal Registration Form**

- **Challenge: Improve Timing of Submission of PRF**
- **Aim: Improve the Rate of Submission of PRF During 1<sup>st</sup> Trimester**
- **Change:**
  - **Face to Face Meetings with Providers/Staff**
  - **Enhancement of Prenatal Registration Form**
  - **Tiered Payment for Submission of Form (Instituted 4/1/01)**
- **Results:**
  - **1<sup>st</sup> Trimester Submission Rates > 60%**

## **Stratification: Mental and Behavioral Health Needs**

- **Challenge: Lack of Coordination between Perinatal and Behavioral Health Staffs in Addressing MH/CD Issues Identified in PRFs**
- **Aim: All MH/CD Issues Reviewed and Followed-Up by Behavioral Health**

## **Stratification: Mental and Behavioral Health Needs**

- **Change (Initiated 11/01/00):**
  - **Formalized Staff Process of Review of PRFs**
  - **Relevant Prenatal Registration Forms are Reviewed by Medical and Mental Health Staff**
- **Results:**
  - **BH Staff Reviews 100% of Women Identified with BH Issue on PRF and Contacts All**

## **Outreach/Intervention: Psychosocial Outreach**

**Challenge: Social Isolation, Unstable Home Environment, and Spousal Abuse Correlate Significantly with Poor Birth Outcomes (MP Birth Outcome Database)**

**Aim: Address Needs of Women Identified and Stratified as Having High-Risk Psychosocial Issues**

## **Intervention: Psychosocial Intervention**

### **Change:**

- **Engagement of BabyLove Program in 2002**
- **Addition of Social Worker to MP Staff (2<sup>nd</sup> Quarter 2003)**

### **Results:**

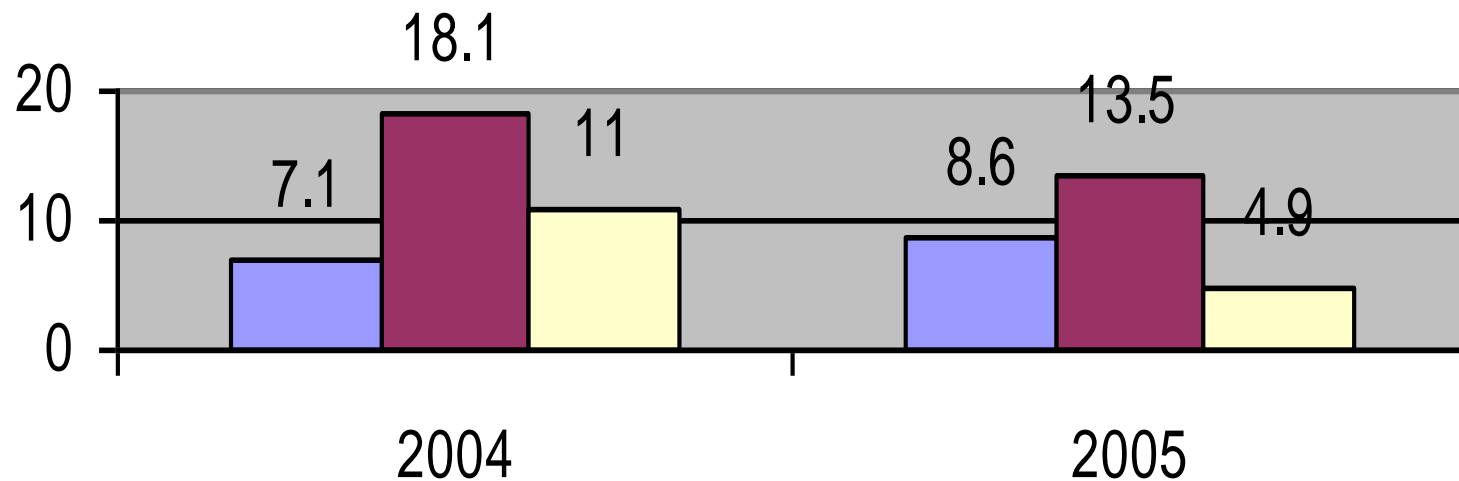
- **Effective Program in Place to Address Needs of Women with Greatest Social Risks**

## **Intervention: Targeted Psychosocial Intervention for African American Teens**

- **African-American Teens Had NICU Admit Rates  
150% Greater Than Caucasian Teens**
- **MP Instituted Intensive BabyLove Program Targeting  
Pregnant African-American Teens in 2005**
- **30+ Participants in Program During 2005**

## Intervention: Targeted Psychosocial Intervention for African American Teens

### NICU Admission Rates for Teens



White African-American Difference



## **Intervention: Enhancing Care Management Capabilities**

**Challenge: Assuring Coordination of Care Management Activities Across MP Staff and BabyLove**

**Aim: Implement Care Management Software System to Support Activities**

## **Intervention: Enhancing Care Management Capabilities**

### **Change:**

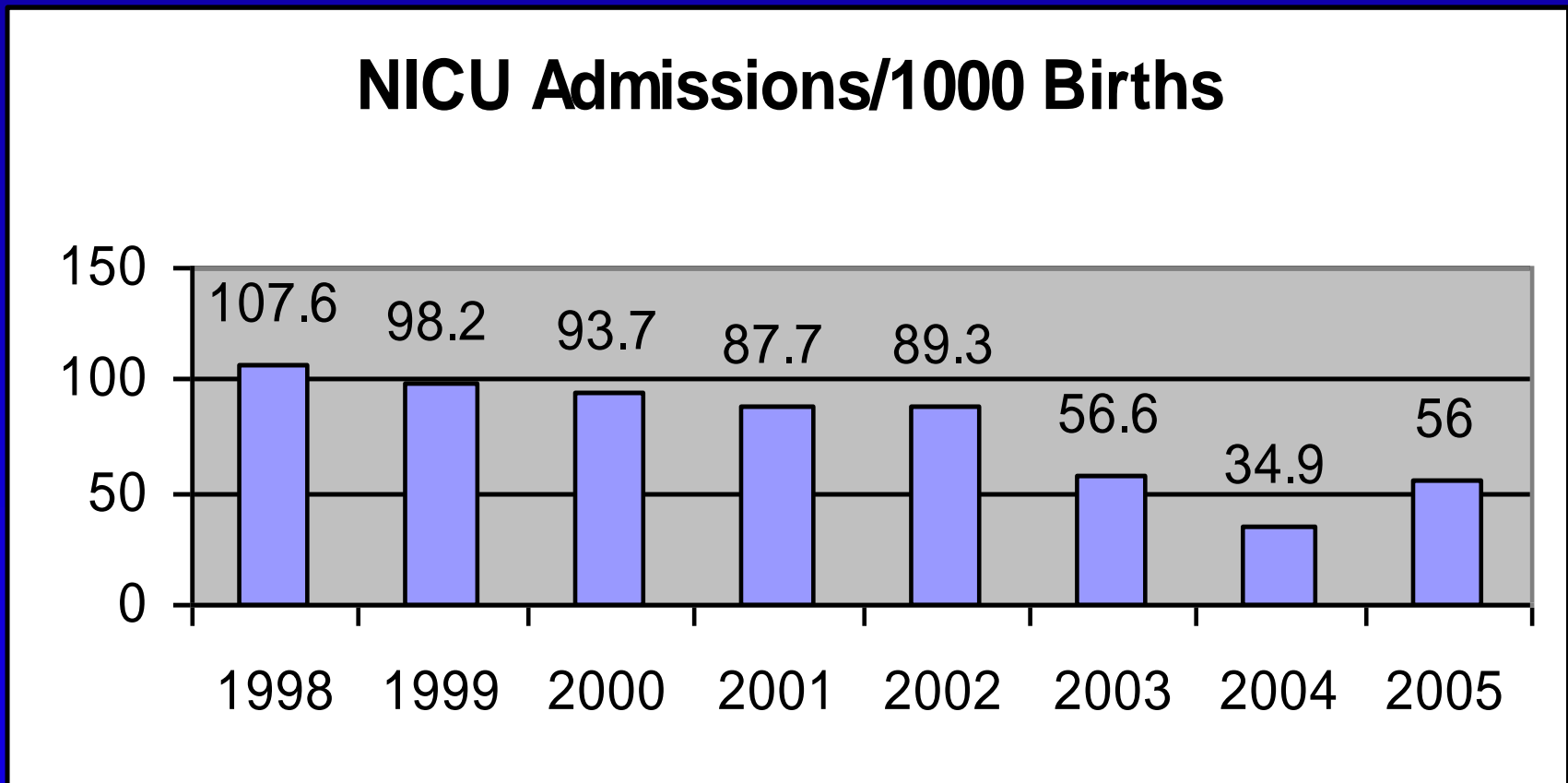
#### **Installation of Care Management Software:**

- **Identifies Risk Factors and Scores PRF**
- **Provides Member Demographics**
- **Identifies Related Providers**
- **Provides for Progress Notes**
- **Fields for Entry of Birth Outcomes**
- **Creates Reports**
- **Interface for Co-Morbidity Issues**

## **Lessons Learned:**

- **Quality Improvement is an Ongoing Process**
- **Plan-Do-Study-Act (PDSA)**
- **Must Identify Who is Pregnant and Risk Factors**
- **Care Must be Individualized**
- **Need to “Connect” Culturally**
- **Work with Community-Based Organizations/Services**
- **Don’t Duplicate Existing Services**
- **Borrow Liberally and Steal Shamelessly (BCAP)**

## Monroe Plan NICU Admits/ 1,000



**Analysis of NY State SPARCS Data Demonstrated No Concurrent Changes in NICU Admission Rates in Upstate New York for Medicaid During These Years**

# Does Any of This Make a Difference?

**Return on Investment (ROI) Methodology:**

**Ratio:**

$$\frac{\text{(Pre-Program Medical Costs)} - \text{(Post-Program Medical Costs)}}{\text{Program Costs}}$$

**From: American Healthways/Johns Hopkins Standard Evaluation Methodology in  
*Calculating Return on Investment***

## Medical Costs (NICU)

<u>Year</u>	<u>NICU Admits</u>	<u>Live Births</u>	<u>Projected NICU Costs (1998 Base)</u>	<u>Actual NICU Costs</u>	<u>NICU Cost Savings</u>	<u>Aggregate NICU Savings</u>
1998	65	604	\$ 610,700	\$ 610,700	-0-	-0-
1999	77	775	\$ 779,552	\$ 675,499	\$ 104,053	\$ 104,053
2000	93	993	\$ 998,958	\$ 729,340	\$ 269,618	\$ 373,671
2001	100	1140	\$ 1,148,600	\$ 698,432	\$ 450,168	\$ 823,839
2002	106	1172	\$ 1,175,900	\$1,062,250	\$ 113,650	\$ 937,489
2003	75	1401	\$ 1,406,430	\$ 355,322	\$ 1,051,108	\$ 1,988,597
2004	62	1778	\$ 1,791,655	\$ 214,564	\$ 1,577,091	\$ 3,565,688
2005	106	1894	\$ 1,908,941	\$ 1,253,755	\$ 655,186	\$ 4,220,874



## Incremental Enhanced Prenatal Program Costs

<b>Year</b>	<b>Admin. Costs (\$)</b>	<b>No. Live Births</b>	<b>Admin. Costs/ Birth (\$)</b>	<b>Incremental Program Costs/ Birth (\$)</b>	<b>Total New Program Costs (\$)</b>	<b>Aggregate New Program Costs (\$)</b>
<b>1997</b>	<b>\$ 41,300</b>	<b>600</b>	<b>\$ 68.83</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>1998</b>	<b>\$ 69,043</b>	<b>604</b>	<b>\$ 114.31</b>	<b>\$45.48</b>	<b>\$ 27,470</b>	<b>\$27, 470</b>
<b>1999</b>	<b>\$ 106,947</b>	<b>775</b>	<b>\$ 138.00</b>	<b>\$ 69.17</b>	<b>\$ 53,607</b>	<b>\$ 81,077</b>
<b>2000</b>	<b>\$ 160,053</b>	<b>993</b>	<b>\$ 161.18</b>	<b>\$ 92.35</b>	<b>\$ 91,704</b>	<b>\$ 172,781</b>
<b>2001</b>	<b>\$ 304,002</b>	<b>1140</b>	<b>\$ 266.67</b>	<b>\$ 197.84</b>	<b>\$ 225,538</b>	<b>\$ 398,319</b>
<b>2002</b>	<b>\$ 300,857</b>	<b>1172</b>	<b>\$ 256.70</b>	<b>\$ 187.87</b>	<b>\$ 220,184</b>	<b>\$ 618,503</b>
<b>2003</b>	<b>\$ 397,284</b>	<b>1401</b>	<b>\$ 282.57</b>	<b>\$ 213.74</b>	<b>\$ 299,450</b>	<b>\$ 917,953</b>
<b>2004</b>	<b>\$ 450,640</b>	<b>1778</b>	<b>\$ 253.45</b>	<b>\$ 184.62</b>	<b>\$ 328,254</b>	<b>\$ 1,246,207</b>
<b>2005</b>	<b>\$ 558,075</b>	<b>1894</b>	<b>\$ 294.65</b>	<b>\$ 225.82</b>	<b>\$ 427,703</b>	<b>\$ 1,673,910<sub>19</sub></b>

# Return on Investment

**Ratio:**

**(Pre-Program Medical Costs) – (Post-Program Medical Costs)**  
**Program Costs**

$$\frac{\$4,220,874}{\$1,673,910} = 2.52$$

# What is New York State Doing?

## Medicaid Managed Care Prenatal Care Work Group:

- Explore Statewide Risk Assessment Form
- Develop Process to Provide Services to Address Identified Risks
- Encourage Antenatal Use of Progesterone
- Provision of Dental Care During Pregnancy

# What is New York State Doing?

## Medicaid Managed Care Quality Incentive Program:

- Provides Financial Rewards to Improve Quality Care
- Plans May Earn Up to 3% Additional Premium Revenue Based on Performance
- Performance Based on Quality of Care Measures, CAHPS Measures, and Compliance Measures
- Significant Amount of Additional Funds at Stake for Medicaid Managed Care Plans

# Questions?