The Impact of Premature Birth on Health Care Costs and The Healthy Babies Healthy Business Program

Presentation to Ohio Collaborative to Prevent Infant Mortality Health Care Coordination Subcommittee
By Lisa Amlung Holloway
March of Dimes Ohio Chapter State Director of Program Services
What We are All About

Mission:
- To improve the health of babies by preventing birth defects, premature birth and infant mortality
- 4 Strategies to Reach our Mission
  • 1: Research
  • 2: Advocacy
  • 3: Community Services
  • 4: Education
March of Dimes
Prematurity Campaign

A multiyear, multimillion-dollar campaign to address awareness, education and research to help families have healthier babies
Why Premature Birth?

It’s a common, serious, costly medical burden.

Prematurity had risen by nearly 30% during the twenty years preceding the campaign.

It’s the #1 killer of newborns.

The leading cause of death in first month of life
A leading cause of death in the first year of life
Premature infants are more than 15 times as likely as other infants to die in the first year of life.

It’s a major risk factor for child illness and disability.

The March of Dimes is well suited to tackle the challenge.
A Quick Look at Ohio

150,879 babies are born

19,842 babies are born preterm (13.2%)

13,188 babies are born low birthweight (8.8%)

1,168 babies die before reaching their first birthday (7.8)
Causes of infant mortality: U.S. and Ohio, 2006

Rate per 100,000 live births

- Birth Defects: US 137.2, Ohio 153.8
- Premature/LBW: US 113.5, Ohio 142.0
- SIDS: US 54.6, Ohio 65.5
- RDS: US 19.4, Ohio 21.2
- Maternal Preg. Comp.: US 39.3, Ohio 47.1

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Preterm birth
Ohio and US, 1997-2007

Preterm is less than 37 completed weeks gestation.
Medicaid coverage of births
Ohio, 2001-2006

Percent of all births

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>30.4</td>
</tr>
<tr>
<td>2002</td>
<td>30.1</td>
</tr>
<tr>
<td>2003</td>
<td>36.6</td>
</tr>
<tr>
<td>2004</td>
<td>38.1</td>
</tr>
<tr>
<td>2005</td>
<td>39.7</td>
</tr>
<tr>
<td>2006</td>
<td>40.7</td>
</tr>
</tbody>
</table>

Footnotes available in notes section.
The IOM estimates the societal economic cost of prematurity to be $26 billion annually.

Direct health care costs to employers for premature babies during the first year of life average $46,004, compared to $3,859 for babies born healthy and full term.

On average, premature babies covered by employer plans spend 14.2 days in the hospital during the 12 months following birth, compared to 2.3 days for full-term babies.
Average Payment by Health Plan for Newborn Care

Source: Thomson Healthcare  Babies were chosen from MarketScan Commercial Claims and Encounter database for 2005 and were only included if they had at least twelve months of continuous enrollment after birth.
Average Inpatient Hospital Stays for Newborn Care

Source: Thomson Healthcare  Babies were chosen from MarketScan Commercial Claims and Encounter database for 2005 and were only included if they had at least twelve months of continuous enrollment after birth.
Average Payment by Health Plan for Maternal Care

Dollars

<table>
<thead>
<tr>
<th>Uncomplicated Deliveries</th>
<th>Vaginal</th>
<th>C-Section</th>
<th>Complicated Deliveries</th>
<th>All Live Births</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$8,106</td>
<td>$11,657</td>
<td>$12,870</td>
<td>$9,781</td>
</tr>
</tbody>
</table>

Source: Thomson Healthcare  Mothers were chosen from the MarketScan Commercial Claims and Encounter data base for 2005 and were only included if they had at least nine months of continuous enrollment before birth and three months after birth.
Average Inpatient Hospital Stay for Maternal Care

<table>
<thead>
<tr>
<th>Uncomplicated Deliveries</th>
<th>Vaginal</th>
<th>C-Section</th>
<th>Complicated Deliveries</th>
<th>All Live Births</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days</td>
<td>2.3</td>
<td>3.6</td>
<td>4.1</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Source: Thomson Healthcare. Mothers were chosen from the MarketScan Commercial Claims and Encounter data base for 2005 and were only included if they had at least nine months of continuous enrollment before birth and three months after birth.
## Total Direct Costs by Maternal-Newborn Complication Status

<table>
<thead>
<tr>
<th>Maternal / Newborn Combination</th>
<th>Provider Charges</th>
<th>Total Payments</th>
<th>Net Payments</th>
<th>% Payments by Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncomplicated Delivery + Uncomplicated Newborn</td>
<td>$27,949</td>
<td>$15,506</td>
<td>$13,886</td>
<td>89.5%</td>
</tr>
<tr>
<td>Complicated Delivery + Complicated Newborn</td>
<td>$77,805</td>
<td>$46,009</td>
<td>$44,367</td>
<td>96.4%</td>
</tr>
</tbody>
</table>

Source: Thomson Healthcare
Total Direct Costs + Wage and Productivity Costs

<table>
<thead>
<tr>
<th></th>
<th>Maternal/Newborn Pair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maternal =&gt;</td>
<td>Uncomplicated</td>
</tr>
<tr>
<td></td>
<td>Complicated</td>
</tr>
<tr>
<td>Newborn =&gt;</td>
<td>Uncomplicated</td>
</tr>
<tr>
<td></td>
<td>Complicated</td>
</tr>
<tr>
<td>Direct Costs</td>
<td></td>
</tr>
<tr>
<td>Health Plan Payments</td>
<td>$13,886</td>
</tr>
<tr>
<td></td>
<td>$44,367</td>
</tr>
<tr>
<td>Indirect Costs</td>
<td></td>
</tr>
<tr>
<td>Short Term Disability Days</td>
<td>55.8</td>
</tr>
<tr>
<td></td>
<td>60.0</td>
</tr>
<tr>
<td>Wages</td>
<td>$8,464</td>
</tr>
<tr>
<td></td>
<td>$9,103</td>
</tr>
<tr>
<td>Productivity</td>
<td>$15,477</td>
</tr>
<tr>
<td></td>
<td>$16,646</td>
</tr>
<tr>
<td>Total Costs</td>
<td>$29,363</td>
</tr>
<tr>
<td></td>
<td>$61,013</td>
</tr>
</tbody>
</table>
Risk Factors for Premature Birth

Current multifetal pregnancy
History of preterm birth
Some uterine and/or cervical abnormalities

Chronic health problems (high blood pressure, diabetes, obesity)
Medical risks in current pregnancy
Behavioral and environmental risks (smoking, drinking alcohol, using drugs)
Demographic risks (African-American, over 35)
Other risks - stress, abuse, etc.
Obesity among women of childbearing age

Ohio and US, 1999-2009

Footnotes available in notes section.
Smoking among women of childbearing age  Ohio and US, 1999-2009

Footnotes available in notes section.
Late preterm births
Ohio and US, 1996-2006

Late preterm is between 34 and 36 weeks gestation.
March of Dimes 2010 Premature Birth Report Card

The March of Dimes graded states by comparing each state’s rate of premature birth to the nation’s 2010 objective of 7.6 percent. Premature birth is the leading cause of newborn death in the United States. We don’t yet understand all the factors that contribute to premature birth. The nation must continue to make progress on research to identify causes and prevention strategies, and on interventions and quality improvement initiatives to improve outcomes.

Grade for Ohio: Preterm Birth Rate: 12.6%

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2008</th>
<th>%Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate</td>
<td>13.3</td>
<td>12.6</td>
<td>-5.3</td>
</tr>
</tbody>
</table>

Status of Selected Contributing Factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>Previous Rate</th>
<th>Latest Rate</th>
<th>Status</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uninsured Women</td>
<td>14.8%</td>
<td>15.9%</td>
<td>X</td>
<td>Health care before and during pregnancy can help identify and manage conditions that contribute to premature birth. We urge federal and state policy makers to accelerate implementation of health reform by expanding coverage for women of childbearing age, and we urge employers to create workplaces that support maternal and infant health.</td>
</tr>
<tr>
<td>Woman Smoking</td>
<td>53.4%</td>
<td>54.0%</td>
<td>X</td>
<td>Smoking cessation programs can reduce the risk of premature birth. We urge federal and state policy makers to immediately implement comprehensive Medicaid coverage of smoking cessation coverage of provisions of health reform.</td>
</tr>
<tr>
<td>Late Preterm Birth</td>
<td>9.2%</td>
<td>8.7%</td>
<td>✓</td>
<td>The rise in late preterm births (34-36 weeks) has been linked to rising rates of early induction of labor and c-sections. We call on hospitals and health care professionals to establish quality improvement programs that ensure consistency with professional guidelines regarding c-sections and inductions prior to 39 weeks gestation.</td>
</tr>
</tbody>
</table>

State Actions:
For information on how we are working to reduce premature birth, contact the March of Dimes Ohio Chapter at (513) 769-3588.
About 8,256 babies born in Ohio between September 2008 and March 2010, who probably would have been delivered at 36 to 38 weeks in the absence of the initiative, instead were delivered after 38 weeks (at term) according to an internal data analysis by the collaborative.

In that same 19-month period, an estimated 250 neonatal intensive care unit admissions were avoided, a cost savings of an estimated $10 million to $12 million a year.

Dr. Edward Donovan
Professor of clinical pediatrics in the Child Policy Research Center at Cincinnati Children's Hospital Medical Center and a co-founder of OPQC
The Cleveland Plain Dealer, July 2010
Solutions are within our grasp

A family-friendly workplace is beneficial to employees and employers. These standards were prepared by the March of Dimes to promote the well-being of your employees before, during, and after their pregnancy. Helping your families have healthy babies makes good business sense.

Fourteen Standards for Workplaces that Support Maternal & Infant Health

1. Provide information to employees on preconception, prenatal, postnatal and infant care through classes, brochures, a library, e-mail or (a) directed Web site(s)
2. Provide a positive working environment that is smoke-, drug- and toxin-free for all employees, including those who are pregnant
3. Encourage healthy activities, such as walking and healthy food choices; include offer of discounts to gyms and fitness resources for all employees
4. Provide information about healthy pregnancy and childbirth, encouraging early and continuing prenatal care and information about preterm birth prevention
5. Provide flexibility in scheduling to allow time off for regular prenatal appointments when possible
6. Provide reasonable physical accommodation for pregnant employees, such as a place where they can rest with their feet up, if needed
7. Provide flexibility in scheduling to allow time off for pediatric appointments during baby’s first year when possible
8. Provide a private area where lactating women can pump and store breastmilk
9. Provide health insurance coverage that includes comprehensive preconception, prenatal, childbirth and postnatal care, including immunizations and maternal depression screening, or facilitate through a liaison the application for insurance through state or private agencies
10. Offer an employee assistance program
11. Provide access to flextime when possible
12. Provide access to work from home/telecommuting when possible
13. Provide access to job sharing when possible
14. Provide job protection beyond the federal Family and Medical Leave Act (FMLA) provisions for the birth and care of an employee’s child, or for the adoption or foster care placement of a child

One way to adopt the first standard is to register to use our Healthy Babies Healthy Business® worksite wellness education package — it's complimentary from the March of Dimes (marchofdimes.com/hbhb)

Approved by the National Business Group on Health
Employer Programs that Address Risk Factors

- Smoking cessation programs
- Employee assistance programs (EAPs) that address substance abuse, depression, etc.
- Health risk assessments
- Fitness club discounts
- Childbirth education classes
- Flexible spending accounts
- Pregnancy and newborn benefits
Background

Labor Force (Women 16-44) - 41.7 million
  - Women (16-44) as % of Labor Force - 46%
U.S. Births - 4.1 million
Birth Rate (per 1000) among women 16-44 in labor force - 48
Births among women 16-44 in labor force - 2.0 million
What is HBHB?

A FREE multi-dimensional workplace education program with six resources to help companies improve employee health and the health of their bottom line:

1. My 9 months—high-quality health and wellness information for the company Intranet
2. March of Dimes Web sites in English and Spanish
3. E-mail access to March of Dimes health information specialists
4. Print materials on pregnancy and newborn health in English and Spanish
5. Shareyourstory.org—Online community for families of premature babies
6. Bereavement materials for employees who have lost a baby or child
Who is Using HBHB?

253 organizations using HBHB (Sept. 2010)
  WalMart    Nebraska Dept. of Health
  Sprint     Farmer’s Insurance
  Cigna      Cornell University
  Hallmark   CVS/Caremark

18 organizations in Ohio (current)
  GE Aviation  Dayton Chamber of Commerce
  Duke Energy  Fayette Co. Memorial Hospital
  Sherwin Williams
  Midmark
HEALTHY BABIES, HEALTHY BUSINESS*
Reduce Your Healthcare Costs While You Help Save Babies

IT BEGINS WITH AN EDUCATED EMPLOYEE

Premature birth is a serious, common and costly problem. Since 1981, the rate of premature birth has increased approximately 30%, accounting for over 500,000 babies a year. It’s the leading cause of newborn death and may result in lifelong disabilities. Nearly 50% of the total charges for infant hospital stays in 2002 were for babies who were born too soon or too small.

March of Dimes has created a free tool to help employees make better health care decisions. **Healthy Babies, Healthy Business** is a multi-dimensional health education program for the workplace. It offers six resources to help companies improve employee health and the health of the company's bottom line.

The 6 Components of the Healthy Babies, Healthy Business Program

1. **“My 9 Months”**
   High quality health and wellness information for the company web site or Intranet.
   View the online demo.

2. **March of Dimes Web sites**
   In English and Spanish:
   - www.marchofdimes.com
   - www.nacersano.org

3. **E-mail access**
   to March of Dimes Health information specialists.

4. **Printed health education materials ...**
   on childbearing topics in English and Spanish.
   View the online catalog.

5. **An online community ...**
   for NICU families. Participate in online discussions, start a blog, make friends.
   [www.shareyourstory.org](http://www.marchofdimes.com)

6. **Guidance, comfort & information ...**
   for employees who have lost a baby or child.
   Order bereavement materials.
There's a lot you can do both before and during pregnancy to help you have a healthy baby. Developed by March of Dimes experts, this website gives you the information you need — when you need it.
My 9 Months

Features

High-quality content provided directly by the March of Dimes
Content is centrally managed by the March of Dimes
Marketing kit and implementation guide for benefits administrators
Seamless integration into your corporate Intranet

Benefits

Preconception and prenatal educational messages delivered to employees whenever and however they need information
Healthier employees and babies
Reduced health care costs
Improved employee productivity and morale
Fast, easy implementation
E-mail access to March of Dimes health information specialists

askus@marchofdimes.com
preguntas@nacersano.org
March of Dimes Print Materials

1. Becoming a Dad
2. Eating Healthy
3. Newborn Care
Online Community for Families of Premature Babies

Share your Story.

An online community for NICU families. Participate in online discussions, start a blog, or just make friends.

Three years ago when I first logged on, I never imagined I would find such a comforting, welcoming community. But Share Your Story has been my shoulder to cry on, my friend to lean on and the biggest group of cheerleaders a mom could ask for. Share Your Story has been such a blessing in my life.

— Carissa (Braden’s Mommy), IA

What’s Hot on Share:

Want to see the mission in action? Come meet our Shining Star!

Nueva página! Lo invitamos a que se una a esta comunidad y comparta sus experiencias y sabiduría con otros padres y familias en español.
Bereavement Materials

- From Hurt to Healing
  Dealing with the Death of Your Baby

- What Can You Do?
  Helping Loved Ones Deal with the Death of Their Baby

- When You Want to Try Again
  Thinking About Pregnancy

march of dimes
GET STARTED NOW!

Thank you for your interest in our Healthy Babies, Healthy Business™ program. Please fill out the registration form below to get started.

**TIP:** To create a more seamless integration with your intranet, upload your organization's logo, it will be included in the layout of the website.

* Required Fields

**Your Information:**

- * Your First Name: [Input]
- * Your Last Name: [Input]
- * Your E-mail: [Input]
- * Your Password: [Input]
- * Verify Your Password: [Input]

ℹ️ We respect your desire for privacy and will not share your e-mail address with third parties.

**Your Company's Information:**

- * Name of Company Headquarters: [Input]
- Division: [Input]
- * Number of Employees: [Input]
There's a lot you can do both before and during pregnancy to help you have a healthy baby. Developed by March of Dimes experts, this website gives you the information you need — when you need it.
Contact

Steve Abelman, Director, Worksite Wellness Programs
- 914-997-4226
- sabelman@marchofdimes.com