Minnesota Birth Center and the BirthBundle®

Dr. Steve Calvin, Founder and Medical Director
2010
A Maternal-Fetal Medicine Specialist with 30+ years of experience envisions better maternity and newborn care for low-risk mothers

2012
Opens midwife-led birth center in Minneapolis, MN

2015
Based on demand, opens 2nd birth center in St. Paul, MN

Present
Designed the BirthBundle®, a maternity and newborn care product that provides coordinated care with better clinical outcomes for a single price.
Clinical Landscape

- In 2011 ACOG did a workforce study and found that the demand for women’s health care is growing, projecting an OB shortage. Increased CNM involvement was recommended.

- 4 million births per year in the US

- 2639 hospitals provide maternity care in the US

- 1 in 74 mothers gives birth outside a hospital. This varies by demographic and region and is growing (CDC).

- 1/10 births are currently attended by a midwife (mostly certified nurse midwives – CNMs)
Clinical Landscape

- OBs: 33,000 practice in the US – a shortage is projected
- Laborists: OB MDs specializing in hospital birth care
- Midwives: 11,000 in the US – ~6,000 active in birth care
- Nurses: RNs play a major role in hospital OB care
- Doulas: Provide continuous non-medical support to mothers before, during and after birth
Maternity and Newborn billing is very confusing

Current billing/coding structure is misleading. The “global” only covers professional fees, 20-23% of total paid claims for the maternity episode

<table>
<thead>
<tr>
<th>% of Total Costs</th>
<th>Vag</th>
<th>C/S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility</td>
<td>54%</td>
<td>60%</td>
</tr>
<tr>
<td>Professional</td>
<td>23%</td>
<td>20%</td>
</tr>
<tr>
<td>Prof Anesth.</td>
<td>8%</td>
<td>7%</td>
</tr>
<tr>
<td>Radiology</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Lab</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Pharm.</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>

* Data based on Truven Study
At the time of birth, there are two patients and at least four bills including professional and facility for the mother and the newborn and sometimes anesthesia, radiology, etc.

Fee-for-service may incent more interventions that increase cost without improving outcomes.

Maternity care is a care episode where the consumer wants to shop but lack of price and quality information is a challenge.
Minnesota Birth Center Model of Care

- At the Minnesota Birth Center, pregnancy and childbirth are treated as a normal physiologic process.
- Certified Nurse-Midwives provide mothers with compassionate, evidence-based care to achieve a satisfying childbirth experience.
- An integrated medical safety-net is in place for healthy mothers that experience complications during pregnancy and birth.
Location is Key

The Mother Baby Center at Abbott Northwestern...
Birth Suite

- Comfortable, home-like environment
- Medical supplies are out of sight
- Tub available for labor and birth
- Nitrous oxide available for pain management
Why Maternity Care?

- **Transparent Costs:** Maternity care is unnecessarily expensive with very little cost transparency.

- **Improved Outcomes:** The CDC reported a 32.7% C/S rate in 2013 in the US, double the WHO recommendation.

- **Time limited and defined:** The bundle includes pre-natal, intra-partum and post-partum care. From 270 days prior and up to 56 days after the delivery.

- **Price Sensitive:** Many mothers choose to “shop” maternity care, creating the potential for competition in the market.

- **Unmet Need:** Births in birth centers are much lower cost, safe for most patients, and preferred by many mothers but hardly being done at all.

http://www.cdc.gov/nchs/fastats/delivery.htm
Maternity Care & Payment Model: Redesigned

HIGHER QUALITY CARE FOR A LOWER, MORE PREDICTABLE COST

- **Minnesota Birth Center**: To demonstrate that an independent-integrated midwife-led birth center can provide low-risk mothers with excellent primary maternity care that is safe, satisfying and lower in cost.

- **BirthBundle®**: To show that a comprehensive bundle of maternity and newborn care can be provided for a single price using the foundation of midwife-led primary maternity care teams in independent-integrated birth centers.
Birth Centers are Growing

- American Association of Birth Center (AABC) and Commission for the Accreditation of Birth Centers (CABC) are the relevant national organizations.

- Nearly 300 centers are CABC accredited (only 170 in 2004)

- Analogous to development of ambulatory surgery centers

- High demand for birth centers in national maternal surveys

- Significant regulatory barriers remain despite support for birth centers from ACOG and SMFM
The BirthBundle® is designed to be truly “global”, including 50+ procedure codes.

To provide each mother in the BirthBundle® the safest care, there are two routes for payment and delivery: birth center & hospital.

This care and payment model demonstrate savings through better clinical outcomes at a lower price.
Barriers

- Poor understanding of midwives, out-of-hospital facilities and their philosophy of maternity care
- Low/unsustainable reimbursement by payers and lack of understanding of the value of adding to networks
- Hospital’s fear of competition and continued lack of cost transparency
- Responding to the charge of “cherry-picking” low-risk moms
### Traditional Hospital Costs

#### Hospital Costs for 100 Births

<table>
<thead>
<tr>
<th>Hospital Delivery</th>
<th>Price</th>
<th>Deliveries</th>
<th>Payer Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaginal Delivery</td>
<td>$18,329</td>
<td>70</td>
<td>$1,283,030</td>
</tr>
<tr>
<td>Cesarean Delivery</td>
<td>$27,866</td>
<td>30</td>
<td>$835,980</td>
</tr>
<tr>
<td><strong>Estimated Total</strong></td>
<td></td>
<td>100</td>
<td><strong>$2,119,010</strong></td>
</tr>
</tbody>
</table>

- C/S rate is 30%, MN Hospital Association
- Price is claims paid data Truven Study 2010
## BirthBundle® Cost

### BirthBundle Cost for 100 Births

<table>
<thead>
<tr>
<th>BirthBundle™</th>
<th>Price</th>
<th>Deliveries</th>
<th>Payer Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth Center Delivery</td>
<td>$12,500</td>
<td>75</td>
<td>$937,500</td>
</tr>
<tr>
<td>Hospital Delivery</td>
<td>$9,000</td>
<td>25</td>
<td>$225,000</td>
</tr>
<tr>
<td><strong>BirthBundle™ TOTAL</strong></td>
<td>100</td>
<td></td>
<td><strong>$1,162,500</strong></td>
</tr>
</tbody>
</table>

### Estimated costs outside BB for hospital births

- **$371,455**

### Total

- **$1,533,955**

- $371K represents hospital costs not included in BB: facility & NB care
- 9% C/S rate, 91% Vaginal Delivery
BirthBundle® Vs. Traditional Hospital

<table>
<thead>
<tr>
<th>Savings on 100 Births</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>100 Traditional Hospital Deliveries</td>
<td>$ 2,119,010</td>
</tr>
<tr>
<td>100 BirthBundle Deliveries</td>
<td>$ 1,533,945</td>
</tr>
<tr>
<td>Savings Using BirthBundle®</td>
<td>$ 585,065</td>
</tr>
</tbody>
</table>

• Patients that go through BirthBundle® offer 28% savings over FFS payment model
### Statistics
May 2012-December 2015

<table>
<thead>
<tr>
<th>Delivery Location</th>
<th>Quantity</th>
<th>% to Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>MN Birth Center</td>
<td>487</td>
<td>68%</td>
</tr>
<tr>
<td>Hospital</td>
<td>225</td>
<td>32%</td>
</tr>
<tr>
<td>Total</td>
<td>712</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Delivery Type</th>
<th>Quantity</th>
<th>% to Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaginal</td>
<td>646</td>
<td>91%</td>
</tr>
<tr>
<td>Natural</td>
<td>613</td>
<td>86%</td>
</tr>
<tr>
<td>Assisted</td>
<td>33</td>
<td>5%</td>
</tr>
<tr>
<td>Cesarean Section</td>
<td>66</td>
<td>9%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>712</td>
<td>100%</td>
</tr>
</tbody>
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Unique Bundling Challenges For Public Programs Vs. Commercial Insurance

- Public programs cover pregnancy care for nearly half of all mothers nationally.
- Most are on Medicaid so these mothers have no financial incentive to choose different care options.
- They desire and deserve options.
- Commercial insurance pays nearly double the amount that public programs pay for care.
- High deductible policies are an expensive hurdle for many mothers.
- Insurers and employers must be creative in plan design.
Resources

- Minnesota Birth Center: theminnesotabirthcenter.com
- AABC: birthcenters.org
- Blog: pregnant-pauses.org
- Dr. Calvin’s Email: Steve@theminnesotabirthcenter.com