

Minnesota Birth Center and the BirthBundle®

Dr. Steve Calvin, Founder and Medical Director



Background

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

Payment Landscape

- 💧 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

% of Total Costs		
Charge Type	Vag	C/S
Facility	54%	60%
Professional	23%	20%
Prof Anesth.	8%	7%
Radiology	7%	7%
Lab	4%	3%
Pharm.	4%	3%

* Data based on Truven Study

Payment Landscape

- ◆ 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.

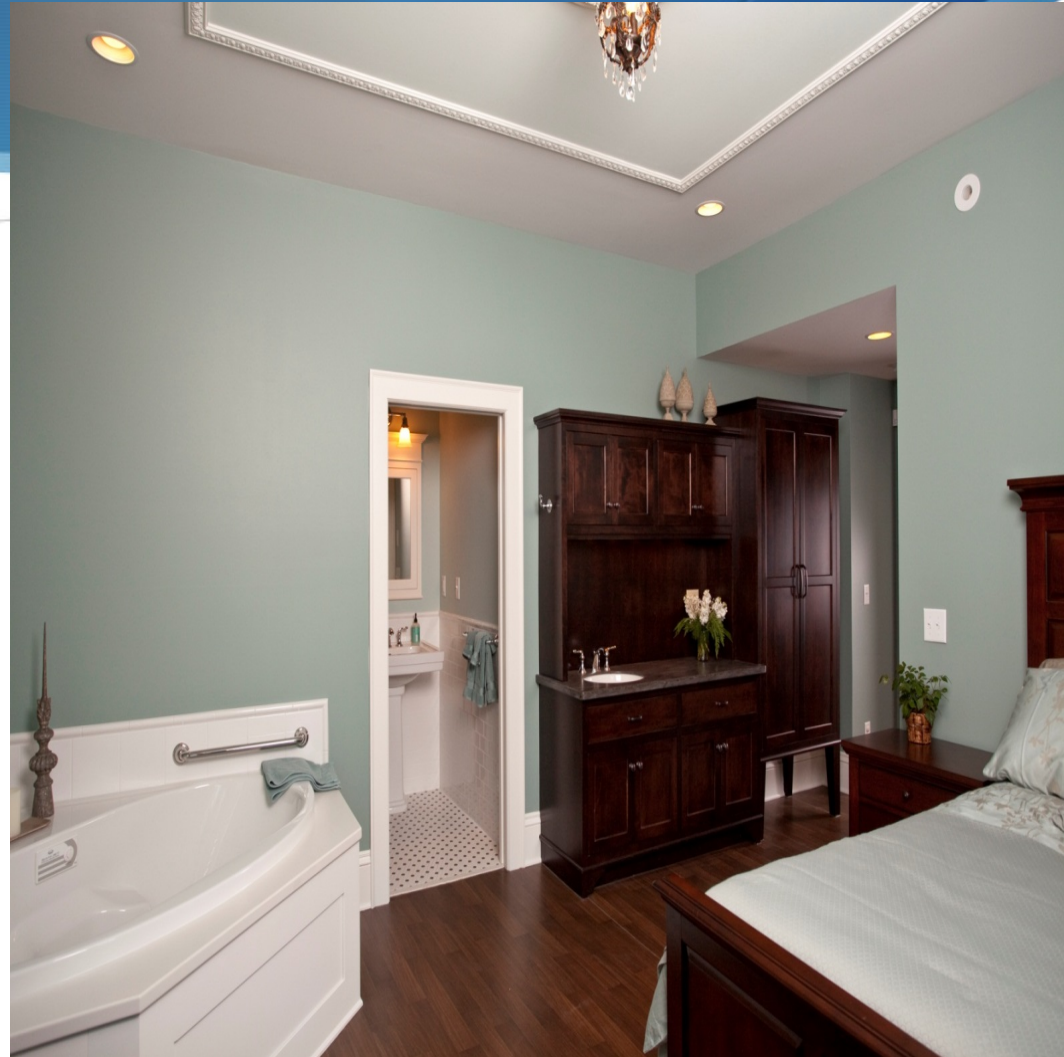
Location is Key



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.

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

BirthBundle® Design

- ◆ 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			
Hospital Delivery	Price	Deliveries	Payer Expense
Vaginal Delivery	\$18,329	70	\$1,283,030
Cesarean Delivery	\$27,866	30	\$835,980
Estimated Total		100	\$2,119,010

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

BirthBundle® Cost

BirthBundle Cost for 100 Births			
BirthBundle™	Price	Deliveries	Payer Expense
Birth Center Delivery	\$12,500	75	\$937,500
Hospital Delivery	\$9,000	25	\$225,000
BirthBundle™ TOTAL		100	\$1,162,500

Estimated costs outside BB for hospital births	\$371,455
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Total	\$1,533,955
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- \$371K represents hospital costs not included in BB: facility & NB care
- 9% C/S rate, 91% Vaginal Delivery

BirthBundle® Vs. Traditional Hospital

Savings on 100 Births	
100 Traditional Hospital Deliveries	\$ 2,119,010
100 BirthBundle Deliveries	\$ 1,533,945
Savings Using BirthBundle®	\$ 585,065

- Patients that go through BirthBundle® offer 28% savings over FFS payment model

Statistics

May 2012-December 2015

Delivery Location	Quantity	% to Total
MN Birth Center	487	68%
Hospital	225	32%
Total	712	100%

Delivery Type	Quantity	% to Total
Vaginal	646	91%
Natural	613	86%
Assisted	33	5%
Cesarean Section	66	9%
TOTAL	712	100%

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

Case Study #1: Uncomplicated Birth Center Birth

- ◆ A 35 year old second time mother chooses the BirthBundle® (BB) with care at the Minnesota Birth Center
- ◆ She begins care at 12 weeks and declines prenatal genetic screening except for a level II ultrasound exam at 20 weeks and a 36 week scan for concern about fetal growth, each scan was normal and both are included in the BB.
- ◆ She has a normal spontaneous birth of an 8 lb girl at the birth center at 40 weeks and goes home 5 hours later. A 24 hour RN visit and a 6 week post partum visit are provided.

Case Study #2: Birth Center Labor, Hospital Birth

- ◆ A 29 year old first time mother chooses BB care at the birth center.
- ◆ She has a normal prenatal course with an early dating ultrasound and a complete 20 week scan (included in the BB).
- ◆ At 39 weeks she goes into labor and near the end of a long labor she has significant pain (despite N2O use) that requires transfer to the hospital for and epidural block.
- ◆ The anesthetic gives her relief and she has a midwife attended vaginal birth in the hospital. She goes home in 24 hours and has a 24 hour and 6 week post partum visit.

Case Study #3: Birth Center Prenatal Care, Induction, Cesarean Delivery

- ◆ A 24 year old first time mother chooses BB care.
- ◆ She has normal prenatal visits and an early and a 20 weeks ultrasound exam.
- ◆ She has an episode of preterm contractions at 35 weeks that is evaluated at the birth center.
- ◆ At 40 weeks she has rupture of membranes without labor for 36 hours.
- ◆ She is admitted to the hospital for induction of labor under midwife care.
- ◆ After a prolonged labor with no progress toward delivery she is delivered by cesarean section by a collaborating MD. She has post partum visits.

QUESTIONS



Resources

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