Building a Midwife-Obstetrician Collaborative Program: Promise and Challenges

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MARIN’S JOURNEY:

• Turning challenge into opportunity

• Strategies and building blocks

• Potential for scalability?
**Marin General Hospital**

- Independent community hospital with ~1400 births per year
- Privately insured patients (~800 births/year): Private OBs
- Publicly insured patients (~600 births/year): County program

*Birth statistics from 2010*

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**Two Models**

<table>
<thead>
<tr>
<th>INSURANCE</th>
<th>HOSPITAL MODEL OF CARE</th>
<th>FINANCING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRIVATELY INSURED</strong></td>
<td>“Traditional” private practice model:</td>
<td>Group revenue</td>
</tr>
<tr>
<td></td>
<td>Mainly OBs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Solo or group practice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No in-house requirement</td>
<td></td>
</tr>
<tr>
<td><strong>PUBLICLY INSURED</strong></td>
<td><strong>CNM/OB hospitalist program:</strong></td>
<td>County:</td>
</tr>
<tr>
<td></td>
<td>CNMs primary provider</td>
<td>100% CNM shifts</td>
</tr>
<tr>
<td></td>
<td>OB involvement based on risk factors (~10% fully OB managed)</td>
<td>40% OB hospitalist shifts</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Hospital:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>60% OB hospitalist shifts</td>
</tr>
</tbody>
</table>
THREAT!

In 2010, County of Marin announced closure of County OB program:
* Local FQHC (Marin Community Clinics) could take over Prenatal care for Medicaid patients ....

*But County’s withdrawal had major implications for HOSPITAL CARE system:
  * Withdrew its funding 24-7 in-hospital CNM (100%)
  * Withdrew its funding for OB hospitalist program (40%)

What now?

* **Who** would care for publicly insured?
* **What system** of care would be put in place for underinsured?
  * still 24-7 in-house coverage?
  * still CNMs?
* **How would system be funded?**
Other Challenges…

* **Private Practice:**
  * Difficult to stay profitable due to decreasing reimbursements
  * Life-work balance:
    * Office responsibilities while taking call
    * Difficult call schedules for small groups
  * **High intervention rates** (Induction, CD, etc)
  * May not be adequately meeting the needs of women (“provider centered” rather than “patient centered”)

Opportunity for a new maternity program?

* Serve all patients
* Improve Care
* Solve challenges in both the private and public care systems
Solution?

Benefits for Private community

- **In-house “hospitalist” team would:**
  - Improve efficiency/productivity for inpatient care (one team to care for all in-house patients)
  - Avoid challenge of balancing L&D & outpatient responsibilities
  - Potentially decrease intervention while maintaining good outcomes (associated with midwifery care)
  - Improve “patient centeredness” by introducing providers with different focus, expertise and training.
Solution?

Benefits for Public community:

- **Partnership with Private community would provide needed resources** (funding/manpower) following County closure
- **Continue successful model of care** that had been in place for 20 years

Community Partnership!

- **Partnership between public and private clinicians**
  - 9 OBs had recently joined multi-specialty medical group
  - Group expanded to take on the “County” CNMs and OBs
  - This group provided 24-7 “CNM-OB hospitalist” service

- **Financial support from multiple stakeholders**
  - Private multi-specialty medical group
  - Hospital
  - Community clinic (FQHC)
  - County HHS
New CNM-OB Hospitalist program

Old system (Prior to 2011)

- $ OB global revenue (private group)
- $ OB global revenue (private group)
- $ Medicaid billings (FFS)
- $ Hospital stipend
- $ HHS/FQHC funding (short term)

IN HOSPITAL TEAM

- CNM Hospitalist
- OB Hospitalist
- L&D Nurse
- On-Call OB (back up)

REMOTE

- "UNASSIGNED" patients
- "County"/FQHC patients
- EMERGENCIES (All patients)
- Private group patients

New CNM-OB hospitalist program

- Managed > 80% of hospital’s OB patients (private group, publicly-insured & unassigned)
- All patients had access to midwifery care
- Managing clinicians in-hospital at all times

- Continuity of care between outpatient centers & hospital
  - CNM & OB Hospitalists also providing care in outpatient offices (private) and community clinic
Outcomes (first 2-3 years)

- **High Provider and L&D nurse satisfaction with new model**
  - Detailed questionnaires administered at 24 months post-implementation (22 providers, 24 RNs)

- **High Patient satisfaction under new model**
  - Detailed questionnaires administered at 18-24 months post-implementation (153 private, 150 public)
  - Included questions regarding *communication* between providers & RNs, if felt that “too many providers” were involved with care & impact of *meeting provider for first time* on L&D (rather than during prenatal care)

- Patient choice for CNM care on L+D increased from 16->60% from 2011->2014

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### Outcomes

**The Association of Expanded Access to a Collaborative Midwifery and Laborist Model With Cesarean Delivery Rates.**

Rosenstein, Melissa G. MD, MAS; Nijagol, Malini MD; Nakagawa, Sanae MS; Gregorich, Steven E. PhD; Kuppenmann, Miriam PhD, MPH

**Change of model associated with:**

- NTSV cesarean rates in private group decreased from 32.2% to 25.0% (aOR=0.61)
- Increased VBAC rates in private group (aOR 1.94)
- No increase in cesarean rates in publicly insured group
- No statistically significant increase in neonatal morbidity
Building a Midwife-OB collaborative program

- Turning challenge into opportunity
- Strategies and building blocks
- Ongoing challenges

Eight Steps To Successful Change
- John Kotter

1. Establish a sense of urgency
2. Develop a clear shared vision
3. Create a guiding coalition
4. Communicate the vision
5. Empower people to act on the vision
6. Create short term wins
7. Consolidate & build on the gains
8. Institutionalise the change
Establishing urgency for needed change:

Concerns of HOSPITAL

- Under EMTALA (Emergency Medical Treatment and Active Labor Act), hospital is responsible for providing L&D care to “unassigned” patients → How to provide?
- Gaining market share → What do patient’s want?
- How to maximize patient safety (& mitigate risk of litigation?)
- How to achieve optimal maternal and neonatal outcomes? (Perinatal measures now in Joint Commission Core Set)

Concerns of PRIVATE PROVIDERS:

- System of care for publicly insured → impact on them?
- Challenges with balancing office/L+D responsibilities, potential burnout from frequent call → any solution?
- Gaining market share → what do patient’s want?
- How to maximize patient safety?
- How to achieve optimal maternal & neonatal outcomes?
Establishing urgency for needed change:

Concerns of COMMUNITY CLINIC (& community at large):

- Needs of publicly insured patients → How to ensure culturally competent and patient centered care?
- How to ensure good communication between clinic & hospital during pregnancy and postpartum period?
- How to continue optimal maternal & neonatal outcomes?

Building a Midwife-OB collaborative program

Eight Steps To Successful Change
- John Kotter
  1. Establish a sense of urgency
  2. Develop a clear shared vision
  3. Create a guiding coalition
  4. Empower people to act on the vision
  5. Create short term wins
  6. Consolidate & build on the gains
  7. Institutionalise the change
Vision

CNM-OB hospitalist program will:

- **Continue successful model** of caring for publicly insured women
- **Maximize patient safety** by having 24-7 in-house care team
- **Improve “patient-centeredness”** by providing new option of midwifery care
- **Maintain outpatient-inpatient care continuity and communication** for vulnerable population
- Potentially **improve outcomes** and associated costs (lower intervention rate associated with CNM care)
- **Decrease provider redundancy** (thereby reduce costs) by having one care team for >80% of patients

Building a Midwife-OB collaborative program

Eight Steps To Successful Change - John Kotter

- Institutionalise the change
- Consolidate & build on the gains
- Create short term wins
- Empower people to act on the vision
- Communicate the vision
- Develop a clear shared vision
- Create a guiding coalition
- Establish a sense of urgency
Key pieces to achieving success

**Collaboration:**
- CNMs, OBs, RNs all involved with design, planning and implementation

**Leadership:**
- Transition/Operations committee of OB, CNM and RN Leaders working in the system

**Setting the stage for “team” culture:**
- What does CNM-OB-RN “collaboration” mean?
- What are roles and expertise of different providers?
- Midwives as collaborators, not physician extenders!

**Clear expectations:**
- Rules about patient management/assignment
- Expectations (documentation, communication, professionalism)
- Communication with patients about benefits of model and who is on care team

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**CNM Scope of Practice**

<table>
<thead>
<tr>
<th>CNM Management (Independent)</th>
<th>CNM Management with MD Consultation</th>
<th>CNM/MD Co-Management (MD note and/or exam required*)</th>
<th>MD Management (Referral/transfer to)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gestational Diabetes, diet controlled</td>
<td>AP testing with abnormal finding</td>
<td>New diagnosis of OR exacerbation of medical condition requiring change in medication*</td>
<td>Pyelonephritis</td>
</tr>
<tr>
<td>Internal and external fetal monitoring</td>
<td>Anemia x 30%, Hgb &lt; 9.5</td>
<td>IDDM</td>
<td>Severe Preeclampsia</td>
</tr>
<tr>
<td>Meconium with Category I electronic fetal heart rate pattern</td>
<td>Suspected fetal weight &gt;4500 grams</td>
<td>IUGR</td>
<td>Poorly controlled GDM</td>
</tr>
<tr>
<td>GBS prophylaxis according to protocols</td>
<td>Suspected IUGR</td>
<td>Unresolved electronic FHR pattern not responding to interventions</td>
<td>Multiple gestation</td>
</tr>
<tr>
<td>UTI, diagnosis and treatment</td>
<td>Pregnancy &gt;42 weeks</td>
<td>Preeclampsia with abnormal labs*</td>
<td>Breach</td>
</tr>
<tr>
<td>Initiation of anesthesia requests for NSYD</td>
<td>Pregnancy between 35 and &lt;36 weeks</td>
<td>Excessive bleeding in labor*</td>
<td>Failure to descend</td>
</tr>
<tr>
<td>ROM without labor for &lt;48 hours and no other risk factors</td>
<td>Labor Induction</td>
<td>Mal-presentation</td>
<td>Vacuum or forceps</td>
</tr>
<tr>
<td>Aminionfusion</td>
<td>Pitocin Augmentation</td>
<td>&gt;30 minute 3rd stage or Retained placenta*</td>
<td>Medical condition requiring MD care</td>
</tr>
<tr>
<td>IUPC</td>
<td>Temperature in labor &gt;100.5</td>
<td>Anticipated shoulder dystocia</td>
<td>Fetal distress requiring immediate operative delivery</td>
</tr>
<tr>
<td>&gt;36 weeks gestation</td>
<td>Mild preeclampsia of T30/90 with normal labs</td>
<td>34-35 week gestation delivery with Peds present</td>
<td>Seizure and sequelae</td>
</tr>
<tr>
<td>First surgical assist for C/S</td>
<td>Meconium stained fluid</td>
<td>Severely contracted pelvis*</td>
<td>Placenta accreta</td>
</tr>
<tr>
<td></td>
<td>Patient requiring Peds</td>
<td>VRAC*</td>
<td>HELLP syndrome</td>
</tr>
<tr>
<td></td>
<td>regional anesthesia</td>
<td>Excessive uterine tenderness or rigidity*</td>
<td>Cervical lacerations</td>
</tr>
<tr>
<td></td>
<td>MD evaluated stable, medical condition</td>
<td>Suppression of pre-term contractions</td>
<td>Prolapsed cord</td>
</tr>
<tr>
<td></td>
<td>Arrest of labor/prolonged 2nd stage ≥2 hours or ≥3 with epidural</td>
<td>Sickle cell anemia or disease</td>
<td>&lt;60 minutes 3rd stage</td>
</tr>
<tr>
<td></td>
<td>ROM &gt;48 hours without risk factors</td>
<td>Fetal death*</td>
<td>&lt;34 weeks gestation for delivery</td>
</tr>
<tr>
<td></td>
<td>Category II electronic fetal monitoring pattern</td>
<td>Active herpes genitalis (vaginal or vulvar)*</td>
<td>Active third trimester vaginal bleeding, not in labor</td>
</tr>
<tr>
<td></td>
<td>Active maternal substance use</td>
<td>Chorioamnionitis</td>
<td>Category III electronic fetal monitoring pattern</td>
</tr>
</tbody>
</table>
Realizing the full potential

- Increased efficiency & revenues by Obstetricians focusing on complex care while...

- Midwife focuses on routine & low risk (NOTE: billing rules vary by state)
  - First Assistant on C/S
  - Triage visits (including Biophysical Profiles)
  - Circumcisions (?)
  - Postpartum rounds and education

Building a Midwife-OB collaborative program

MARIN’S JOURNEY:

- Turning challenge into opportunity
- Strategies and building blocks
- Potential for scalability?
The Right Care at the Right time?

- Specific factors led to the extension of the CNM-OB collaborative model to Marin’s “private practice” community
- Marin’s success raises question about if this model could provide benefit in other communities as well.
- Is the CNM-OB collaborative model a way to achieve “The Right care at the Right Time”?

The Right Care at the Right time?

What are we trying to achieve with pregnancy care?

- “Patient Centered Care”: that respects individual needs and preferences
- “Right time”: Care that can respond to changes in the needs of a woman during her pregnancy & delivery course
- “Good outcomes”: usually think of as health of mother and baby, but also think about patient experience & presence or absence of unwanted intervention

Quality Care
The Right Care at the Right Time?

*Optimal care is effective care with the least potential harm*

- Most childbearing women are healthy and have no reason to expect complications from childbirth
- Optimal care should therefore:
  - Promote physiological process
  - Avoid intervention (potentially harmful) unless needed to achieve safe outcome

What are current barriers to providing optimal care?

- **“Patient Centered Care”**: Without providers of different backgrounds, philosophies & skills, it is difficult to meet individualized needs of patients
- **“Right time”**: Without collaborative practices, providers are experts in only low risk birth or complicated birth, not both
- **“Good outcomes”**: Obstetrical care has become increasingly interventional, causing potential harm with no proven benefit
The Right Care at the Right time

- Midwife-OB collaboration: Combining expertise to achieve a common goal for women
  - Midwives and obstetricians have different philosophies, training and expertise: working together allows team to meet patient’s individual needs
  - With varied expertise, team can more safely & efficiently take care of both low and high risk women together
  - True collaboration allows for focus on needs of patients (individual, medical) rather than needs of providers (not wanting to turn patients away even if not ideally suited)

Challenges

- Requires CHANGE in how midwives and MDs practice:
  - Creating a new “home” for both groups of providers
  - Establishing practice guidelines that all can agree to
  - Collaboration over hierarchy: vive la difference!
    - Communication and ongoing practice development are critical
    - Collaboration does not mean becoming the same
    - Collaboration means knowing when to turn the patient’s care over to another provider with a different skill set
Financial Barriers

- Can be difficult to “prove” that an OB hospitalist program is financially self-sustainable
- Compensation models for different providers (RVUs vs salaried)
- State legislation: in CA, CNMs require "supervision"
  - limits scheduling
  - limits reimbursement
  - maintains hierarchy

Multiple stakeholders:

- Different institutional cultures/philosophies/missions
- Different budgets/bottom lines
- Different EMRs!
  - multiple logins, passwords and user proficiencies
  - no cross communication between systems
It’s complicated to do the “Right Thing”

medical group (for profit):
private OB/GYNS
OB hospitalists

medical foundation
(nonprofit):
CNMS

hospital: only maternity ward in county

PSA for 24/7 OB hospitalists and CNMs
PSA for CNM services and supervising OB/GYNs

CNM dedication to underserved population

FQHC
hospital is obligated to provide maternity services

Thank you!

Clinicians & Administrators of Marin General Hospital, Prima Medical Group and Marin Community Clinics

Prima Medical Foundation

UCSF

OB/GYN Dept: Miriam Kupperman and Melissa Rosenstein

Dept. of Family and Community Medicine: Jennifer Reinks
Extra Slides

- Provider Satisfaction
- Nurse Satisfaction
- Patient Satisfaction

Provider perspective
(n=22; 24 months post implementation)

<table>
<thead>
<tr>
<th></th>
<th>Private OBs (7)</th>
<th>OB Hosp (7)</th>
<th>CNM (8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working with both publically and privately insured women as part of my job</td>
<td>1.6</td>
<td>1.0</td>
<td>1.1</td>
</tr>
<tr>
<td>The new model of staffing for inpatient care (CNM/MD hospitalist team in house, on-call/backup MD at home)</td>
<td>1.3</td>
<td>1.1</td>
<td>1.5</td>
</tr>
<tr>
<td>The quality of care my patients are receiving</td>
<td>1.4</td>
<td>1.2</td>
<td>1.6</td>
</tr>
<tr>
<td>The satisfaction/experience of my patients during their L&amp;D Care</td>
<td>1.7</td>
<td>1.2</td>
<td>1.6</td>
</tr>
</tbody>
</table>
### Provider perspective
(n=22; 24 months post implementation)

<table>
<thead>
<tr>
<th>1 = Positive</th>
<th>3 = Neutral</th>
<th>5 = Negative</th>
<th>Private OBs (7)</th>
<th>OB Hosp (7)</th>
<th>CNM (8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working within a larger system with more people sharing in the care of my patients</td>
<td>2.6</td>
<td>1.1</td>
<td>2.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All OBs in system being required to take hospitalist shifts</td>
<td>2.6</td>
<td>2.8</td>
<td>1.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Priv. OBs caring for publically insured patients while working as hospitalists</td>
<td>1.6</td>
<td>1.7</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OB Hospitalists caring for privately insured patients in hospital</td>
<td>2.3</td>
<td>1.7</td>
<td>1.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Nurses perspective
(n=24; 24 months post implementation)

<table>
<thead>
<tr>
<th>1 = Agree</th>
<th>2=Somewhat agree</th>
<th>3 = Neutral</th>
<th>4=Somewhat disagree</th>
<th>MEAN = &lt;2 (AGREE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New system of care for the private/public groups is safe</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>New system of care is safer for the private patients than the previous system where the managing clinician was not in hospital at all times.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>New system of care allows for more direct contact with clinicians than prior system</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publicly insured patients feel that they are getting well taken care of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private patients feel that they are getting well taken care of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Publicly insured patients are overall happy with their care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private patients are overall happy with their care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I prefer the new system to the old</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Nurses perspective
*(n=24; 24 months post implementation)*

<table>
<thead>
<tr>
<th>MEAN 2-3 (NEUTRAL-SOMEWHAT AGREE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public patients get assessed on L+D in a more timely fashion than previously</td>
</tr>
<tr>
<td>Private patients get assessed on L+D in a more timely fashion than previously</td>
</tr>
<tr>
<td>There are enough midwives or physicians available if the unit is very busy or there are emergency situations</td>
</tr>
</tbody>
</table>

### Patient Satisfaction

<table>
<thead>
<tr>
<th>SCALE (adjusted to 10 point scale) (HIGHER score is more positive rating)</th>
<th>PRIMA N=153</th>
<th>MCC N=150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall rating of experience</td>
<td>8.3</td>
<td>8.4</td>
</tr>
<tr>
<td>Composite Satisfaction L+D care</td>
<td>9.1</td>
<td>8.9</td>
</tr>
<tr>
<td>Composite Satisfaction “hospitalist system”</td>
<td>8.7</td>
<td>8.1</td>
</tr>
</tbody>
</table>

**My doctors, nurses, and midwives communicated well with each other.**

**My doctors and midwives were available when I needed them on L&D**

**There were too many doctors and midwives involved in my L&D**

**My doctor or midwife spent enough time with me during my L&D**
Patient Satisfaction: Based on when first met L+D provider

When did you first meet the person who primarily took care of you on labor and delivery?

<table>
<thead>
<tr>
<th>Event</th>
<th>Prima (N=14)</th>
<th>MCC (N=14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I met them when I came into the hospital to deliver</td>
<td>82 (56%)</td>
<td>80 (54%)</td>
</tr>
<tr>
<td>I met them once during a prenatal visit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I met them more than once during my prenatal visits</td>
<td>65 (44%)</td>
<td>67 (46%)</td>
</tr>
<tr>
<td>Was same person who saw me for my prenatal visits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not sure/don’t remember</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Patient Experience: Based on when first met L+D provider

(In-hospital vs >/=1 once during prenatal care)

<table>
<thead>
<tr>
<th>SCALE (low=negative, high = positive)</th>
<th>PRIMA</th>
<th>MCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>In hospital</td>
<td>9.0</td>
<td>8.9</td>
</tr>
<tr>
<td>During Prenatal care</td>
<td>9.1</td>
<td>8.8</td>
</tr>
<tr>
<td>Composite Satisfaction L+D care</td>
<td>9.0</td>
<td>8.9</td>
</tr>
<tr>
<td>Composite Satisfaction “hospitalist system”</td>
<td>8.8</td>
<td>8.1</td>
</tr>
</tbody>
</table>
**Patient Satisfaction:**

“I met them when I came into the hospital to deliver”

Do you think this changed your L&D experience?

<table>
<thead>
<tr>
<th></th>
<th>Prima (n=82)</th>
<th>MCC (n=80)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, it made it better</td>
<td>6 (7.3%)</td>
<td>35 (43.8%)</td>
</tr>
<tr>
<td>No, it didn’t make any difference</td>
<td>58 (70.7%)</td>
<td>33 (41.3%)</td>
</tr>
<tr>
<td>Yes, it made it worse</td>
<td>9 (11%)</td>
<td>1 (1.3%)</td>
</tr>
<tr>
<td>Not sure</td>
<td>9 (11%)</td>
<td>10 (12.5%)</td>
</tr>
</tbody>
</table>