PCM#5: IMPROVING EXCLUSIVE BREASTFEEDING RATES ACROSS A HOSPITAL SYSTEM

Allina Health Mother Baby Clinical Service Line

Katie Foag, MPH
Jesse Hennum, MD
Kris Scott, RNC, BSN, IBCLC
Objectives

• Review the background of the Allina Exclusive Breastfeeding Project

• Understand challenges of enacting culture change in multiple hospitals across the region

• Learn advantages and resources of a healthcare system for tracking and analysis

• Understand unique challenges of improving breastfeeding across multiple different demographic and cultural environments
“Macro” approach: Health system vs. hospital

- 68,000 infants born in MN in 2010
- 14,000*/yr in Allina hospitals ~18% (*River Falls, WI)
- In 2014: 6.9 % of births in US occur in Baby Friendly facilities
- Healthy People 2020 goal is 8.1%
- 99.9% of US hospitals will be baby friendly by 2479
It all began...

- Allina Advanced Training Program  Spring 2012
  - Based on the Intermountain Model
  - Meant to support the Triple Aim

**Aim- To Increase Rate of Exclusive Breastfeeding in Healthy Newborns While Hospitalized**

- Team of MD, Allina RN and Children’s RN
- Supported by Performance Improvement and Data Analysis Teams
- Utilized the typical Quality Improvement Model
- Conclusion: education the best intervention
Pilot project: Two hospitals

• Interventions:
  – Patient education handouts
  – Nursing education – online learning management system
  – Enhanced EMR data about breastfeeding – reasons why formula given

• Achieved goal to increase by relative 10%
Project Spread Across System

- Expanded pilot interventions system wide
  - Mandatory nursing education to all Allina OB Units
  - Patient Educational handouts to all clinics and OB Units
  - Monthly outcomes report to hospital leadership

- Obtained more information
  - Site visit presentations to providers at all 10 sites
  - Collected feedback
  - Analyzed data, identified themes
From the analysis

• Recent creation of toolkit for each site
  – Individualized for each hospital
  – 3 suggested interventions for each hospital to use
  – Assigned sites to create 30-60-90 day action plan

• Common theme- cultural and language barriers
  – Partnered with ECHO Minnesota to create videos in multiple languages
Allina’s Exclusive Breastfeeding Rates

Exclusive Breastfeeding Rate, Allina Overall

- 2012-03: 43%
- 2012-04: 41%
- 2012-05: 47%
- 2012-06: 46%
- 2012-07: 48%
- 2012-08: 49%
- 2012-09: 48%
- 2012-10: 46%
- 2012-11: 45%
- 2012-12: 45%
- 2013-01: 47%
- 2013-02: 50%
- 2013-03: 50%
- 2013-04: 54%
- 2013-05: 57%
- 2013-06: 52%
- 2013-07: 53%
- 2013-08: 53%
- 2013-09: 54%
- 2013-10: 53%
- 2013-11: 53%
- 2013-12: 53%
- 2014-01: 54%
- 2014-02: 56%
- 2014-03: 57%
- 2014-04: 57%
- 2014-05: 57%
- 2014-06: 59%
- 2014-07: 54%
Advantages of a Health System
Allina’s Exclusive Breastfeeding Rates

Exclusive Breastfeeding Rate, Allina Overall

* Lines represent statistical process control limits (D.J. Wheeler)
Technical advantages

- Single team: 10 hospitals
- Barriers to success often very similar between sites
- Collective financial resources makes funding for larger projects possible
- Electronic Medical Record
- System wide policies and procedures
- Data analysis
- Patient educational materials: Handouts, website, mobile app
Data Driven Approach

All sites’ patient data into EMR

Data Warehouse containing patient data from:
- EMR
- Registries
- Lab
- Etc

Clinical Outcomes

Clinicians

Analytics

Quality Improvement

System Office
- Data Architects
- Data Analysts
- Report Writers

wiseGEEK
# Scheduled and On-Demand Reports

<table>
<thead>
<tr>
<th>Newborn Discharge Location</th>
<th>Newborn Count</th>
<th>Exclusive Breastfeeding</th>
<th>Intent to Breastfeed at Admission</th>
<th>Intent to Breastfeed and Exclusive Breastfeeding</th>
<th>Breastfeeding First Feeding</th>
<th>Breastfeeding Last Feeding</th>
<th>Skin to Skin First Hour</th>
<th>Breastfeeding First Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANW</td>
<td>375</td>
<td>59.5% (223)</td>
<td>84.0% (315)</td>
<td>67.3% (212/315)</td>
<td>87.2% (327)</td>
<td>70.7% (265)</td>
<td>81.3% (305)</td>
<td>72.8% (273)</td>
</tr>
<tr>
<td>BUF</td>
<td>64</td>
<td>73.4% (47)</td>
<td>84.4% (54)</td>
<td>81.5% (44/54)</td>
<td>90.6% (58)</td>
<td>81.3% (52)</td>
<td>87.5% (56)</td>
<td>79.7% (51)</td>
</tr>
<tr>
<td>CMC</td>
<td>27</td>
<td>74.1% (20)</td>
<td>81.5% (22)</td>
<td>86.4% (19/22)</td>
<td>88.9% (24)</td>
<td>70.4% (19)</td>
<td>92.6% (25)</td>
<td>77.8% (21)</td>
</tr>
<tr>
<td>MCY</td>
<td>164</td>
<td>37.2% (61)</td>
<td>59.1% (97)</td>
<td>53.6% (52/97)</td>
<td>75.6% (124)</td>
<td>54.9% (90)</td>
<td>79.9% (131)</td>
<td>62.2% (102)</td>
</tr>
<tr>
<td>NUM</td>
<td>25</td>
<td>48.0% (12)</td>
<td>56.0% (14)</td>
<td>78.6% (11/14)</td>
<td>64.0% (16)</td>
<td>56.0% (14)</td>
<td>88.0% (22)</td>
<td>48.0% (12)</td>
</tr>
<tr>
<td>OWA</td>
<td>48</td>
<td>47.9% (23)</td>
<td>72.9% (35)</td>
<td>62.9% (22/35)</td>
<td>68.8% (33)</td>
<td>60.4% (29)</td>
<td>70.8% (34)</td>
<td>58.3% (28)</td>
</tr>
<tr>
<td>RTH</td>
<td>16</td>
<td>61.3% (13)</td>
<td>87.5% (14)</td>
<td>92.9% (13/14)</td>
<td>87.5% (14)</td>
<td>87.5% (14)</td>
<td>100.0% (16)</td>
<td>100.0% (16)</td>
</tr>
<tr>
<td>STF</td>
<td>94</td>
<td>70.2% (66)</td>
<td>83.0% (78)</td>
<td>82.1% (64/78)</td>
<td>89.4% (84)</td>
<td>73.4% (69)</td>
<td>88.3% (83)</td>
<td>74.5% (70)</td>
</tr>
<tr>
<td>UTD</td>
<td>211</td>
<td>42.2% (89)</td>
<td>60.2% (127)</td>
<td>58.3% (74/127)</td>
<td>81.0% (171)</td>
<td>51.6% (130)</td>
<td>88.2% (186)</td>
<td>73.9% (156)</td>
</tr>
<tr>
<td>UTY</td>
<td>85</td>
<td>54.1% (46)</td>
<td>76.5% (65)</td>
<td>64.6% (42/65)</td>
<td>83.5% (71)</td>
<td>62.4% (53)</td>
<td>91.8% (78)</td>
<td>70.6% (68)</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>1,109</td>
<td>54.1% (900)</td>
<td>74.0% (821)</td>
<td>67.4% (553/821)</td>
<td>83.1% (922)</td>
<td>66.3% (735)</td>
<td>84.4% (936)</td>
<td>71.1% (789)</td>
</tr>
</tbody>
</table>
Allina Health Pregnancy homepage
http://www.allinahealth.org/pregnancy

Beginnings: Pregnancy, Birth & Beyond

Allina Health dedicates Beginnings: Pregnancy, Birth & Beyond to the families who honor us by sharing their beginnings. We look forward to supporting and helping you through your pregnancy, the birth of your child and parenthood.

Now available as a mobile app
Beginnings: Pregnancy, Birth & Beyond is also available as a mobile app for the Apple iPad®, iPhone®, and iPod touch®; the Android smartphone and tablets; and the Kindle Fire. The free app includes the same content as the book, along with the ability to:

- follow baby’s kicks and movements
- time and track contractions and
- after baby is born, track feedings and diaper changes

Get the Beginnings: Pregnancy, Birth & Beyond app:

Special topics
Breastfeeding quiz
 Gestational diabetes
 Over-the-counter medicines safe to use during pregnancy
 Postpartum depression: Rachel’s story

Pregnancy tips
Eating fish during pregnancy
While fish typically is a healthy food, many types contain mercury, which can harm a developing fetus. There are some recommended precautions expectant moms can take.
More pregnancy tips...

Worksheets

- Baby’s activity record (fetal movement count) worksheet
- Birth plan worksheet
- Chart your baby’s breastfeeding and diapers
- Chart your baby’s formula feedings and diapers
- Choosing child care worksheet
- Choosing your baby’s health care provider
- Determining your health insurance coverage

Allina Health services
- Pregnancy care
- Classes and support groups
- Home Health - Mother & Newborn
- Resources for pregnancy, labor, birth and parenting
Mobile App (Free on the App Store!)

Newborn Feed...
- How to get off to a good start
- Breastfeeding
- Breastfeeding basics
- Breastfeeding positions
- How to tell if your baby is getting...
- Common issues
- Expressing and storing breast milk
- Special circumstances
- Breastfeeding in public
- Weaning
- Formula feeding

Breastfeeding ...

Recline hold

- Lie on your back, supported by pillows.
- Position your baby so she is tummy-to-tummy on your stomach. Her head should be between your breasts. Gently guide her to your breast while supporting her bottom with your hand.
ADAPTIVE/CULTURAL ADVANTAGES
Adaptive/Cultural advantages

- Competition!

Exclusive Breastfeeding Rate, 2013 by Hospital
Adaptive/Cultural advantages

- Learn from others’ success
- Being an outsider is often an advantage
- The selling point of high level data analysis
CHALLENGES
Technical challenges

- 10 hospitals separated by up to 137 miles
- Small team!
- Barriers to success often vastly different
- Multiple provider systems or leadership structures
- Communication
- Limitations of data
Adaptive/Cultural challenges

- One size fits all approach – hospital cultures are very different
- Representing the “corporate HQ”
- Cannot reach most stakeholders
- Finding champions at each site
Conclusions

• Think big!
• Learn from the high performers
• Meeting in person is complex to arrange, but may pay off
• This is not a foley catheter project
• Repeated exposure leads to continued inspiration
• Need the consistent support of system leadership as well as hospital leadership

Questions?

Katherine.Foag@allina.com
Jesse.Hennum@allina.com
Kris.Scott@allina.com