Clinical Safety & Effectiveness
Cohort # 22
Improving Compliance with the Perinatal Palliative Care Standard
Team 3

UT Health San Antonio
Center for Patient Safety & Health Policy

University Health System

Educating for Quality Improvement & Patient Safety
The Team

- **Core Team**
  - Rachel Vandermeer, MD (Department of Pediatrics, UT Health SA)
  - Kristine Talamante, RN, BSN (Palliative Care Department, University Hospital)
  - Marcella Begola, RN, BSN, MS (Palliative Care Department, University Hospital)

- **Support Team**
  - Glen Medellin, MD (Department of Pediatrics, UT Health SA)
  - Tandy Mellard, MSN, RN, CPNP-PC/AC, CHPPN (Palliative Care Department, University Hospital)
  - Rebecca Charlton, MS CCLS (Palliative Care Department, University Hospital)
  - Julie Rowe, CPE (Chaplain, Center for Caring, University Hospital)
  - Julieanne Eddy, RN, MPH, CHPN (Director, Palliative Care Department, University Hospital)
  - Kayla Ireland, MD (Department of Maternal Fetal Medicine, UT Health SA)
  - Cynthia Ledesma, BSN, RN-C, MNN (Clinical Director of Obstetrics, University Hospital)
  - Rebecca Van Zandt, BSN, RN (High Risk Perinatal /Neonatal Nurse Coordinator, University Hospital)
  - Melanie Baker, RN (PCC, Interim Director of Labor and Delivery Department, University Hospital)
  - Sherry Martin (Health Care Quality Management Consultant)
Background

• Fall 2016- Dr. Bryan Alsip, CMO of University Hospital, requested we develop a perinatal palliative program.

• Currently, University Hospital is seeking two new CMS Designations related to maternal-fetal care:
Background

• Winter 2016-2017- Pedi Palliative Care (PPC) team researched standards and models for perinatal palliative programs.

• Spring 2017-1st Perinatal Palliative Task Force Meeting
  – PPC met with NICU, MFM and L&D representatives to formulate a process for perinatal referrals.

• October 2017-3rd Perinatal Palliative Task Force Meeting
  – Presented a Perinatal Palliative Standard of Care
Proposed Perinatal Palliative Workflow Algorithm

**High Risk Perinatal Trigger Diagnoses**
- T18
- T13
- Holoprosencephaly
- Anecephaly
- Hydranencephaly
- Bilateral Renal Agenesis
- Severe Diaphragmatic Hernia
- Lethal Skeletal Malformations
- Preivable ROM
- Severe Multiple Complex Congenital Anomalies
- Conjoined Twins

**Miscarriage (<15 weeks)**
- PPC Chaplain*
- Gather mom, dad and baby name, contact info
- Bereavement follow up (Center for Caring, PPC)

**IUFD OR Pre-viable (15-22⁶ weeks) Preterm Labor**
- Fetal Loss Checklist (L&D RN)
- PPC Chaplain and CCLS
- Completed checklist → Fetal Loss protocol book, Onbase (L&D RN)
- Bereavement follow up (Center for Caring, PPC)

**High Risk Perinatal Conditions**
- Outpatient → OB→OUTpt consult
- Admitted → OB→INpt consult
- PPC → Coordinates with OB/NICU
- PPC Outpt Consult (PPC MD, Perinatal Coordinator)
- PPC Inpt Consults (PPC MD, CCLS, Chaplain)
- Perinatal Guide & SDM Guide (PPC with Parents)
- PPC Sunrise Note (mom chart), Email
- NICU Orientation Meeting (OB, NICU, PPC)
- Guides left with family
- PPC documents FM/GOC in mom chart

**Pregnancy Related Maternal Health risk**
- Adult Palliative Consult

*on call chaplain if pedi not available
Proposed Perinatal Palliative Workflow Algorithm

High Risk Perinatal Trigger Diagnoses
- T18
- T13
- Holoprosencephaly
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- Miscarriage (<15 weeks)
- IUFD OR Pre-viable (15-22^6 weeks) Preterm Labor

- Pregnancy Related Maternal Conditions
- High Risk Perinatal Conditions

- Outpatient
- OB->OUTpt consult
- OB->INpt consult

- Admitted
- OB->INpt consult

- PPC Charnel Consult
- PPC Documents
- PPC Inpt Consults (PPC MD, CCLS, Chaplain)

- Bereavement follow up (Center for Caring, PPC)
  *on call chaplain if pedi not available

- Completed checklist → Fetal Loss protocol book, Onbase (L&D RN)

- NICU Orientation Meeting (OB, NICU, PPC)

- FM (OB, NICU, PPC)

- PPC documents FM/GOC in mom chart

- Pregnancy Related Maternal Conditions
- High Risk Perinatal Conditions

- Outpatient
- OB->OUTpt consult
- OB->INpt consult

- Admitted
- OB->INpt consult
Perinatal Palliative Care Standard

1. Perinatal consult for any baby where parents will need to make decisions about aggressive management versus comfort care.
   - Possible trigger diagnoses:
     - Trisomy 13
     - Trisomy 18
     - Holoprosencephaly
     - Anencephaly
     - Hydranencephaly
     - Complex cardiac lesions
     - Single ventricle (Agreed upon by Dr. Hussain)
     - Renal agenesis (bilateral)
     - Severe diaphragmatic hernia
     - Lethal skeletal malformations
     - Conjoined twins

2. Birth Plan elicited by PPC team (outpatient or inpatient)
   - Communicated to:
     - Consulting OB
     - Dr. Seidner with NICU
     - Chaplain Service
     - Child life, child life consult placed
     - Entire PPC team

3. PPC notified when mother in L&D
   - Email trigger (PPC has this established for PPC patients who are seen in UHS ER)
   - OB Charge nurse to call (NEED TO IDENTIFY PROCESS—should be able to look at orders for pediatric palliative care consult order)

4. Each mother with a PPC consult has an emotional/legacy building facilitator at bedside (before, during—if needed—and after deliver)
   - Facilitator discipline should depend on the case (MD/NP, Chaplain, Child life, RN)
   - A facilitator should be available 24/7
     - We likely do not have the staffing to meet these demands at the moment**

5. Legacy Building
   - Facilitated Memory Box
     - Items with instructions
       - This is NOT a fetal loss checklist; staff knows what needs to happen medically and the need for child life or chaplaincy. The goal of this box is to help staff ACTIVELY create memory making.
       - 2 blankets or Olivia Blanket
       - Book
       - Clothes—2 sets if able (something to go to morgue/funeral home, something for parent to keep)
       - Cardstock for hand/foot prints
       - Small stuffed animal or soft rattle
       - Other
     - Training for L&D nurses
       - Ideally, this box would be used by facilitator NOT nursing staff

6. Bereavement
   - 1 week call from PPC team member
   - 6 week card
   - Holiday card
   - 1 year call from PPC team member
   - Perinatal yearly memorial
Baseline Data

- Number of NICU Admissions for 2017: 810 infants
- Number of NICU Admissions in 2017 that expired: 37 infants
- Number of NICU Admissions in 2017 that meet Trigger Diagnosis (after 4/2017): 11
- Number of NICU Admissions in 2017 that meet Trigger Diagnosis (after 4/2017) with PPC consult: 9 (2 missed consults)
- Number of stillbirth/IUFD in 2017: 81
- Reviewed 28/81 charts: NO missed consults
Regroup

• We know we are getting the consult...but are we doing the consult well?

• Met with Dr. Kayla Ireland, Rebecca Van Zandt and Cynthia Ledesma
  – **What can we do better?**
  – You have set a high standard...
    • But does every mother receive the same care??

• Case review revealed **non-compliance** with our own standard of care.
AIM STATEMENT

We aim to increase our compliance with the Perinatal Palliative Standard of care from 60% to 85% by August 1, 2018
Perinatal Palliative Care Standard

1. Perinatal consult for any baby where parents will need to make decisions about aggressive management versus comfort care.
   - Possible trigger diagnoses:
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     - Trisomy 18
     - Holoprosencephaly
     - Anencephaly
     - Hydranencephaly
     - Complex cardiac lesions
     - Single ventricle
     - Renal agenesis (bilateral)
     - Severe diaphragmatic hernia
     - Lethal skeletal malformations
     - Conjoined Twins
     - OR antenatal or postnatal diagnosis of a condition which is not compatible with long term survival
     - OR antenatal or postnatal diagnosis of a condition which carries a high risk of significant morbidity or death
     - IUFD in 3rd trimester
     - Pre or perivable PPROM undergoing expectant management
     - Maternal Medical Comorbidity necessitating delivery in the pre or perivable period

2. Birth Plan elicited by PPC team (outpatient or inpatient)
   - Communicated to:
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       - Clothes-2 sets if able (something to go to morgue/funeral home, something for parent to keep)
       - Cardstock for hand/foot prints
       - Small stuffed animal or soft rattle
       - Other
     - Training for L&D nurses
       - Ideally, this box would be used by facilitator NOT nursing staff
       - Silver charm for mother and keychain for father (funding an issue)

6. Bereavement
   - 1 week call from PPC team member
   - 6 week card
   - Holiday card
   - 1 year call from PPC team member
   - Perinatal yearly memorial

*As of 2/2018, PPC team aims to have TWO PPC staff member facilitators available for the case to provide an interdisciplinary approach to care.
6 Metric Perinatal Palliative Care Standard

1. Perinatal consult for any baby where parents will need to make decisions about aggressive management versus comfort care.

2. Birth Plan elicited by PPC team (outpatient or inpatient)

3. PPC notified when mother in L&D

4. Each mother with a PPC consult has an emotional/legacy building facilitator at bedside (before, during-if needed- and after deliver)*

5. Legacy Building

6. Bereavement

*As of 2/2018, PPC team aims to have TWO PPC staff member facilitators available for the case to provide an interdisciplinary approach to care.
Process Map

Perinatal Palliative Care Consult
- Perinatal consult for any baby where parents need to make decisions about aggressive management vs. comfort care
- 12 possible trigger diagnoses will provide guidance for whether consult is appropriate

Birth Plan
- Patient/family will meet with Pediatric Palliative Care (PPC) team either outpatient or inpatient
- Pediatric Shared Decision Making Guide: Family, Birth Wishes, Important Memories

Communication of Birth Plan
- PPC Documentation available in Sunrise
- Consulting OB, NICU, Chaplain Service, Child Life Specialist, entire PPC team

Notification when Mother in Labor & Delivery
- Email trigger
- OB charge nurse will notify PPC team

Facilitator at Bedside
- Facilitator discipline dependent on case (MD/NP, Chaplain, Child Life, RN)
- Facilitator available 24/7*

Legacy Building
- Facilitated Memory Box
- Training for L&D Nurses

Bereavement Follow-up
- 1 week phone call
- 6 week card
- Holiday card
- 1 year phone call
- Perinatal Annual Memorial
High Risk Perinatal Trigger Diagnoses
- Trisomy 13
- Trisomy 18
- Holoprosencephaly
- Anencephaly
- Hydranencephaly
- Complex Cardiac Lesions – Single Ventricle
- Anhydraminos or Early Oligohydraminos – bilateral renal agenesis, infantile polycystic kidneys
- Severe congenital diaphragmatic hernia
- Lethal Skeletal malformations
- Conjoined twins
- Unexpected 3rd Trimester (IUFD)
- Periviable PPROM undergoing expectant management WITH prolonged hospitalization
- Antenatal or postnatal diagnosis or condition which is not compatible with long term survival or carries high risk of significant morbidity or death

Proposed Perinatal Palliative Workflow Algorithm

Miscarriage (<15 weeks)

PPC Consultation – Team Presence

High Risk Perinatal Conditions
- Outpatient
- Admitted

Perivable Pregnancy Related Maternal Health Risk
- Outpatient
- Admitted

OB → Perinatal Coordinator

OB → PPC INpt consult

Perinatal Coordinator → PPC, NICU, PCCU

PPC Inpt Consult (PPC MD, PPC Staff)

NICU Orientation

PCCU Orientation (Perinatal Coordinator, NICU, PCCU)

PPC Outpt Consult (PPC MD, PPC staff Perinatal Coordinator)

PPC communication → OB, NICU (Dr. Quinn)

PPC Sunrise Note

OB Notifies PPC

Emotional/Legacy facilitator bedside at birth

Legacy

Grief and Funeral Resources

Bereavement follow up
(Center for Caring, PPC)
FISHBONE

Environment
- OR is very busy and crowded
- OB/GYN triage vs L&D vs Antepartum
- Staff and family in room

Equipment
- Supplies for legacy
- Scrubs for OR

People
- Not enough staff

Policies/Protocols
- PPC standards not followed
- L&D doesn’t call

Communication
- Different team approaches
- Does staff know who to call and when to call PPC?

Training and education
- PPC needs to be there or sometimes it does not happen
- Do they know when to call?

Problem Statement
- Non-compliance with perinatal palliative standards
How Will We Know That a Change is an Improvement?

• We will track our percent total compliance with the perinatal palliative care standard
## Case Review

### Baseline Data

<table>
<thead>
<tr>
<th>Month/Week</th>
<th>Patient Name</th>
<th>Date of Delivery</th>
<th>Time of Delivery</th>
<th>Viable/ Non-viable</th>
<th>Birth Plan</th>
<th>PPC Notification</th>
<th>PPC Facilitator at Bedside*</th>
<th>Legacy</th>
<th>Total Compliance</th>
<th>PPC Compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-18</td>
<td></td>
<td>1/3/2018</td>
<td>14:36</td>
<td>non-viable</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>75%</td>
<td>66%</td>
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<tr>
<td>1/1/18 - 1/6/18</td>
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<td>2/3/2018</td>
<td>16:34</td>
<td>viable</td>
<td>Yes</td>
<td>No</td>
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<td>50%</td>
<td>100%</td>
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<tr>
<td>1/7/18 - 1/13/18</td>
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<td>2/3/2018</td>
<td>21:05</td>
<td>viable</td>
<td>Yes</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>1/14/18 - 1/20/18</td>
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<td>2/8/2018</td>
<td>8:20</td>
<td>non-viable</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>75%</td>
<td>100%</td>
</tr>
<tr>
<td>1/21/18 - 1/27/18</td>
<td></td>
<td>2/14/2018</td>
<td>8:10</td>
<td>non-viable</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Feb-18</td>
<td></td>
<td>2/23/2018</td>
<td>22:20</td>
<td>non-viable</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>25%</td>
<td>33%</td>
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<td>2/18/18 - 2/24/18</td>
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<tr>
<td>Goal</td>
<td>Primary Drivers</td>
<td>Interventions</td>
<td>Measure</td>
<td>Responsible</td>
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</tr>
<tr>
<td>We aim to increase our compliance with the perinatal palliative standard of care from 60% to 80%</td>
<td>Lack of knowledge of L&amp;D nurses on PPC contact information</td>
<td>Place contact info near computer stations in L&amp;D/OB triage (RS 3)</td>
<td>Track if L&amp;D notifies at time of admit</td>
<td>Kristine and Marcella March 9</td>
<td></td>
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<td></td>
<td></td>
<td>Email OB/L&amp;D Charge RNs and NICU RNS PPC contact info (RS 1)</td>
<td>Track if L&amp;D notifies at time of admit (RS 3)</td>
<td>Kristine and Marcella March 7</td>
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<tr>
<td></td>
<td>Ineffective staffing hours to include flex hours from</td>
<td>Develop and implement new day flex staffing to ensure 2 perinatal PC facilitators at bedside (RS 4)</td>
<td>NA</td>
<td>Kristine March 7</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Discuss new flex hours in team meeting</td>
<td>NA</td>
<td>Rachel March 9</td>
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<td></td>
<td></td>
<td>Perinatal PC attending/NP sends group text when consult received 6a-7p</td>
<td>Track whether text sent or not</td>
<td>Rachel, Glen, Tandy ongoing</td>
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<tr>
<td></td>
<td>Lack of a consistent Plan Of Care Documentation</td>
<td>Implement Dove Door Plan of Care: Discuss DOVE model with MFM, OB and L&amp;D (RS 1)</td>
<td>N/A</td>
<td>Rachel and Kristine March 23rd</td>
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<tr>
<td></td>
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<td>Create Signs (RS 3)</td>
<td>N/A</td>
<td>Rachel and Kristine March 23rd</td>
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<td></td>
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<td>Train OB/L&amp;D</td>
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<td></td>
<td>PPC completes and posts on door of PPC patients (RS 1)</td>
<td>Track whether sign posted</td>
<td>PPC Team Members</td>
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<tr>
<td></td>
<td>Insufficient Support Staff</td>
<td>Gather data on benefits of perinatal palliative care and areas of needed improvement</td>
<td>NA</td>
<td>Dr. Medellin, Dr. Vandermeer, Julieanne Eddy</td>
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</tr>
</tbody>
</table>
Provide L&D Nurses with PPC Contact Information

- Contact card placed at computer stations in L&D and OB triage
- Email OB/L&D triage nurses PPC contact information
- Email NICU charge nurses PPC contact information

Reorganize PPC team’s hours to include 6a-8p flex hours

- Discussed at PPC team meeting
- PPC MD/NP provider sends alert team text when new perinatal consult (between 6a-7p)

Introduce environmental reminder in patient’s room

- Discuss DOVE door sign with task force
- Create Signs
- Train bedside staff to provide bedside facilitation

Hire additional support staff

- Gather data on benefits of perinatal palliative care and areas of needed improvement
- Identify funding for additional staff
Results
Pareto Chart: Baseline Non-Compliance with Perinatal PC Standard

Pareto Chart: Intervention "Snapshot" Non-compliance with Perinatal PC Standard
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<td>Jan-18</td>
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<td>Feb-18</td>
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<td>1/28/18 - 2/3/18</td>
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<td>16:34</td>
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<td>No</td>
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<tr>
<td>2/4/18 - 2/10/18</td>
<td></td>
<td>2/3/2018</td>
<td>21:05</td>
<td>viable</td>
<td>Yes</td>
<td>No</td>
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<td>2/11/18 - 2/17/18</td>
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<td>Mar-18</td>
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<td>3/4/18 - 3/10/18</td>
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<td>9:51</td>
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<td>3/11/18 - 3/17/18</td>
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<td>3/13/2018</td>
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<td>viable</td>
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<td>No</td>
<td>N/A</td>
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<tr>
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<td>17:46</td>
<td>viable</td>
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<td>YES (nicu)</td>
<td>N/A</td>
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<td>Apr-18</td>
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<td>4/1/18 - 4/7/18</td>
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<td>4/2/2018</td>
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<td>viable</td>
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<td>4/8/18 - 4/14/18</td>
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<td>4/4/2018</td>
<td>8:48</td>
<td>non-viable</td>
<td>YES</td>
<td>No-had to ask for consi</td>
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<td>5/14/2018</td>
<td>20:31</td>
<td>non-viable</td>
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<td>Yes</td>
<td>offered, family declined</td>
<td>Yes</td>
<td>100%</td>
<td>100%</td>
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<td>5/20/18-5/26/18</td>
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<tr>
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SPC p-Chart: % Total Compliance with Standard of Perinatal Palliative Care

Note: Sigma was specified during launch.

SPC p-Chart: % Total Compliance with Standard of Perinatal Palliative Care

Phase Limits

<table>
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<th>Phase</th>
<th>LCL</th>
<th>Avg</th>
<th>UCL</th>
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<td>Baseline</td>
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<td>65.0%</td>
<td>100.0%</td>
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<tr>
<td>Intervention</td>
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<td>85.7%</td>
<td>100.0%</td>
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</table>
SPC p-Chart: % Compliance with PPC-Initiated Elements of Standard of Care

Note: Sigma was specified during launch.
Return on Investment

• University Hospital is seeking two new CMS Designations:
  – Level IV (Comprehensive) Maternal Designation
    • August 2018
    • Psychosocial support
  – Centers of Excellence for Fetal Diagnosis
    • Several years in future
    • Perinatal Palliative requirement

– Designations increase reimbursement for Medicaid deliveries
– (in future, could be penalized (lose reimbursement) without these designations)
Return on Investment
Recent Steps

• 4th Perinatal Palliative Task Force Meeting
  – Introduced DOVE Model Environmental Reminder
  – Reviewed Perinatal Palliative Care Standard
Next Steps

• Implement DOVE MODEL
  – OB/L&D unit leaders (June 2018)
• Meet with Perinatal Staff to discuss grief support for non-palliative cases (June 2018)
• Seek additional staff support (Summer 2018, Hire 2019)
Thank You!!