Mothers and Newborns affected by Opioids (MNO)- Neonatal Initiative

AIMs
By December 2019:
● Decrease pharmacologic treatment in opioid-exposed newborns (OENs)
● Increase optimized discharge plans in opioid-exposed newborns (OENs)
● Increase breastfeeding rates in eligible opioid-exposed newborns (OENs)

Goals
● Increase percent of OENs (>35 weeks) receiving a toxicology test (urine/cord/meconium)
● Increase percent of OENs (>35 weeks) requiring pharmacologic treatment for Neonatal Abstinence Syndrome (NAS)
● Reduce average days of pharmacologic treatment for OENs (>35 weeks) with NAS symptoms during infant hospitalization
● Increase percent of mothers with OUD/OENs (>35 weeks) who roomed together during infant hospitalization
● Increase percent of eligible OENs (>35 weeks) receiving maternal breast milk at infant discharge
● Increase percent of OENs (>35 weeks) discharged with a safe discharge plan made in partnership with the family, the hospital, and the community PCP
● Increase percent of OENs (>35 weeks) discharged to maternal custody
● Reduce average length of stay (LOS) for all OENs (>35 weeks) and OENs with NAS symptoms

PROBLEM
The use of opioids in pregnancy and related maternal morbidity has drastically increased in recent years. In Illinois, there was a 116% increase in maternal antenatal opioid use and a 53% increase in the Neonatal Abstinence Syndrome (NAS) rate between 2011 and 2015/2016. This statewide priority can be attributed as a result of clinician-approved over prescription of opioids, abuse of prescription opioids, and illicit use. In 2016, the NAS rate in Illinois was about 2.7 cases per 1,000 live births, affecting 391 infants born in Illinois that year.

EVIDENCE-BASED PRACTICES
The American Academy of Pediatrics and American Medical Association provide evidence pertaining to optimal diagnosis and treatment strategies for neonatal abstinence syndrome. Other State PQCIs (Ohio Perinatal Quality Collaborative, Northern New England Quality Improvement Network) found that by using their collaborative infrastructure to implement evidence-based tools and guidelines using quality improvement science tools they were able to achieve their initiative AIMs. Key opportunities of focus in 2018 to improve outcomes for OENs include standardizing identification and assessment of OENs, increase maternal participation in OENs newborn care, optimizing non-pharmacologic newborn care, standardizing pharmacologic treatment, and developing standardized safe discharge plans.

To learn more about the Illinois Perinatal Quality Collaborative, please visit us at www.ilpqc.org
MNO-Neo Initiative

MNO-NEONATAL OPPORTUNITIES FOR IMPROVEMENT

Teams reported baseline data (October - December 2017) identifying key opportunities for improving care of OENs:

- 35% of all OENs and 47% of OENs with NAS symptoms received pharmacologic therapy for NAS.
- The average length of pharmacologic treatment for OENs with NAS symptoms was 16.9 days.
- 65% of mothers with OUD roomed in with infant during infant hospitalization.
- 57% of OENs received maternal breastmilk at infant discharge.
- 34% of OENs were discharged with a safe discharge plan made in partnership with family, hospital, and community provider.
- 71% of OENs were discharged to maternal custody.
- The average length of stay for all OENs was 10.6 days and for OENs with symptoms for NAS was 14.9 days.

ILPQC and hospital teams will monitor this data monthly to facilitate improvement towards initiative goals.

SCOPE

Eighty-eight Illinois birthing hospitals are participating in the ILPQC Mothers and Newborns affected by Opioids (MNO) Neonatal Initiative. Currently 66 hospitals have submitted data during the initiative, including around 333 opioid-exposed newborns in participating Illinois hospitals. ILPQC engaged four times the number of participating Neonatal hospitals in this initiative including hospitals of all perinatal levels providing care to OENs.

APPROACH

The ILPQC Neonatal Advisory Workgroup and ILPQC NAS Workgroup began planning the Mothers and Newborns affected by Opioids (MNO) Initiative in January 2017. ILPQC worked with the Illinois Department of Public Health (IDPH), State Quality Council, IDPH Neonatal Advisory Committee, and Regionalized Perinatal Program, including perinatal network administrators to develop key driver diagrams, process, outcome, and structure measures, data forms, and collaborative learning implementation.

Thirty volunteer wave 1 teams started meeting in January 2018 to test and provide feedback on data collection strategies and quality improvement toolkit development. In May 2018, 58 additional Neonatal hospitals joined the initiative.

Since June 2018, teams have been attending monthly one-hour collaborative learning webinars; collecting, reporting, and monitoring data on all opioid-exposed newborns via the ILPQC web-based real-time data system. Teams are also beginning to use quality improvement strategies to test and implement standardized protocols for assessment and monitoring of OENs, optimized non-pharmacologic care, standardized pharmacologic treatment, and coordinated safe discharge plans. Baseline data included retrospective record review for October thru December 2017.

To date teams have participated in five one-hour collaborative learning webinars, averaging 150 participants per call. Topics thus far included prenatal consultation, neonatal toxicology testing, stigma and bias education, and assessment of OENs for symptoms of NAS.

MNO-NEONATAL IMPLEMENTATION PROCESS

Identification of OENs

Prenatal Consult

Assessment for NAS

Treatment of NAS Symptoms

Discharge of OEN

OEN identified via mothers who screened positive for OUD prenatally or at birth, and/or OEN identified at or after delivery (via IDPH NAS Decision Tree)

Document prenatal consult form in maternal medical chart

Complete prenatal consult

Obtain toxicology test

Perform assessment of OENs for NAS symptoms

Document non-pharmacologic care

Initiate non-pharmacologic treatment

If needed, initiate pharmacologic treatment

Create safe discharge plan

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November 2018