

Neonatal Abstinence Syndrome

Standardization and Family Centered Care

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Disclosure statement

I have no conflicts of interest to declare

I would like to acknowledge the Vermont Oxford Network (VON) and iNICQ webinar series for ongoing training, education and support in our endeavor to improve care for families and babies with neonatal abstinence syndrome (NAS)

St Vincent Healthcare NICU

- 22 bed, level 3B NICU
 - 200 admits/year
 - 20% are transports from surrounding area
- Regional hospital serving Billings, Eastern Montana, Northern Wyoming, and Western North Dakota
- -Crow
 - Northern Cheyenne
 - Sioux, Gros Ventre
 - Assiniboine
 - Northern Arapahoe, Shoshone

The problem of NAS

- Prior to 2013, NAS was identified, diagnosed, and treated without best practice guidelines or high quality staff education
 - Infants received variable care, leading to prolonged length of stay and variable support for the families
 - Families were not involved in the care process and felt frustration with care of their babies and education
 - Staff felt ill-equipped to care for these patients and experienced high stress levels caring for these infants
- Increasing use of narcotics in pregnancy is a nationwide epidemic
- Improving recognition that a standardized approach to NAS diagnosis and care will improve care for these families and reduce length of stay

Standardizing the care of NAS

- January 2013 - a multidisciplinary team was assembled and felt standardization of pharmacologic treatment, use of breast milk, family centered care, and NAS scoring would decrease LOS and improve quality of care
- We joined VON NAS iNICQ series and identified gaps in practice
- We spent the year developing standardized guidelines based on key drivers

Key Drivers Diagram

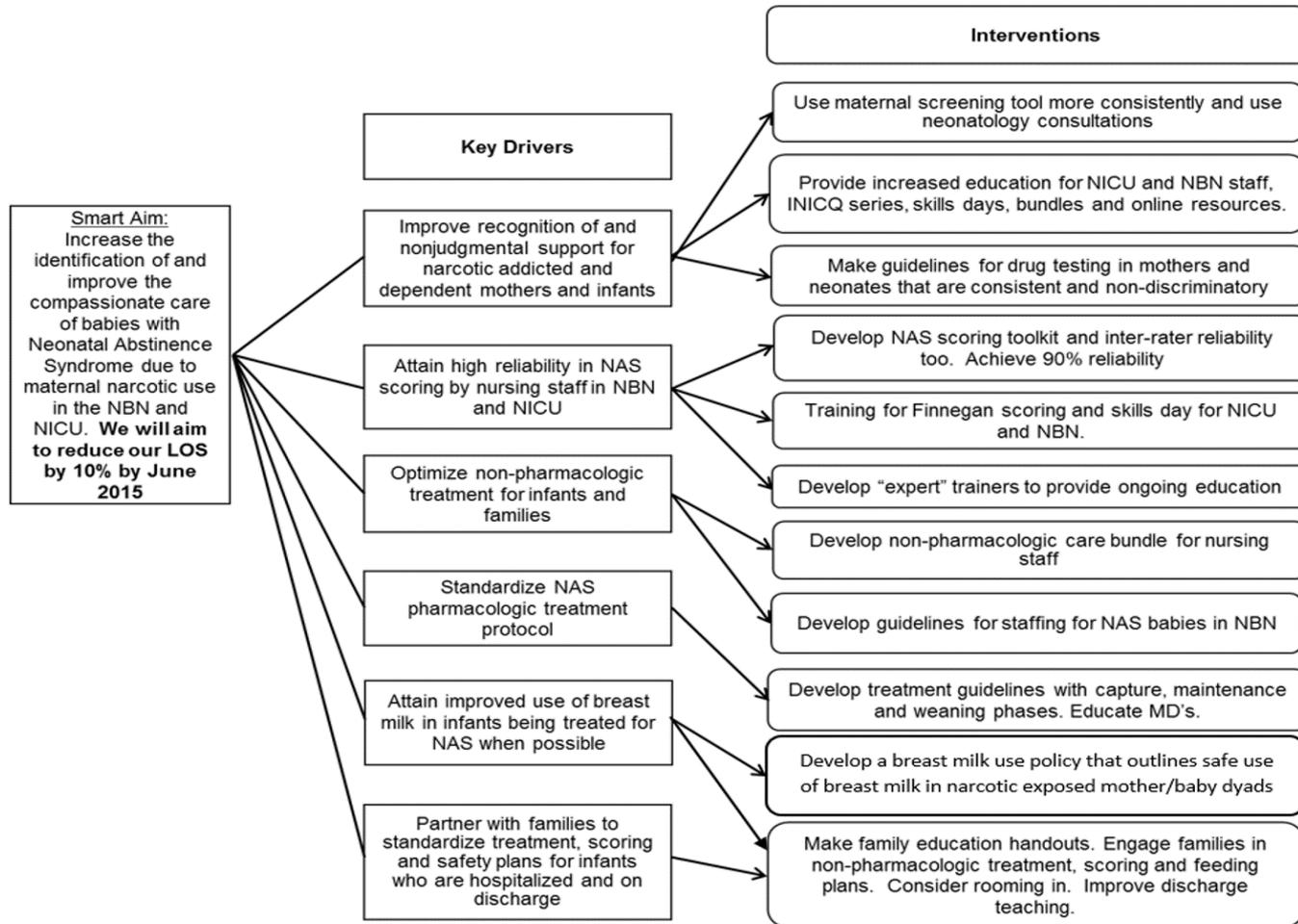


Figure 1: NAS QI Initiative Driver Diagram with key drivers and interventions all aimed a decreasing LOS and improving the compassionate care of babies with NAS at St. Vincent Healthcare.

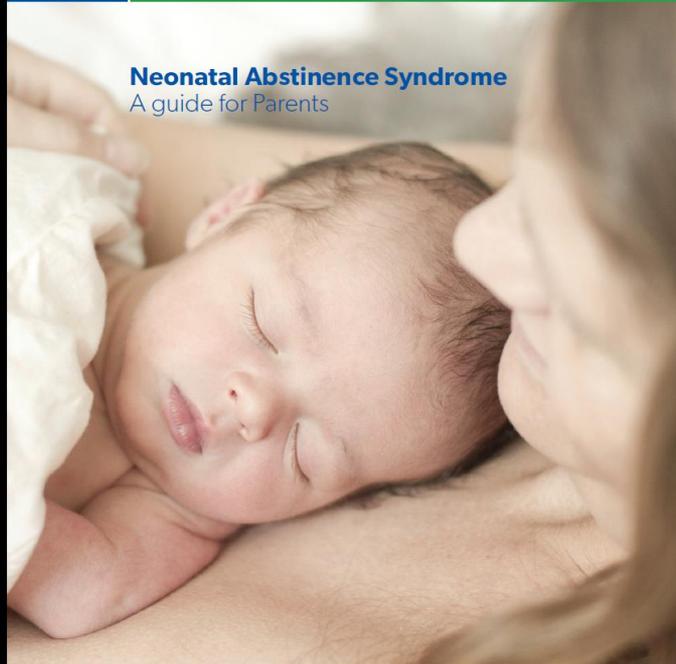
Standardizing the care of NAS

- 2014 - small incremental changes in practice and measured improvement (PDSA cycles)
 - March 2014, we implemented our standardized best practice guidelines for pharmacologic treatment, breast milk use, and maternal and neonatal drug screening
 - June 2014, we introduced education on Finnegan scoring and testing for inter-rater reliability, to improve nursing care and confidence and to standardize our scoring
 - Sept 2014, we started prenatal consults and improving identification of families with narcotic use prior to delivery. We aimed to improve involvement of families in care and education of families
 - June 2015, we registered 102 SVH staff for the VON NAS Universal training to further work on standardization of care and treating mother-infant dyad in a caring compassionate way

Parent Education and Involvement

- Parent handbook - information regarding withdrawal and what families might expect during their hospitalization
- The education include signs/symptoms a baby might show to help parents learn what look for as withdrawal symptoms and specific techniques that may help with these symptoms.
- Encourages parents to be actively involved in the scoring and non-pharmacologic treatment of their infant
- A great resource for both prenatal consults and education of families when babies are born

Parent Education



Neonatal Abstinence Syndrome
A guide for Parents



Family involvement

<i>Specific ways to calm a baby struggling with NAS</i>			
BEHAVIOR	CALMING SUGGESTIONS	BEHAVIOR	CALMING SUGGESTIONS
Breathing troubles	<p>Avoid overdressing or wrapping baby too tightly</p> <p>Always make sure your baby sleeps on his/her back</p> <p>Call your baby's doctor if your baby is having trouble breathing</p>	Excessive or high pitched crying <i>(crying that lasts a long time or is louder than normal)</i>	<p>Hold your baby close to your body, skin-to-skin or swaddled in a blanket</p> <p>Decrease loud noises, bright lights, and any excessive handling</p> <p>Rock or sway your baby while humming or singing</p>
Sneezing/stuffy nose	<p>Keep baby's nose and mouth clean with a soft washcloth</p>	Fever	<p>Do not over dress or over bundle your baby</p> <p>Report a temperature greater than 100.4 to your baby's doctor</p>
Spitting up	<p>Burp your baby each time he or she stops sucking during bottle feeding</p> <p>Hold your baby upright for a period of time after feeding</p> <p>Keep bedding and clothes free of spit up</p>	Hyperactivity <i>(inability to sleep or be calm)</i>	<p>Use a soft thin blanket to snugly wrap your baby</p> <p>Swaddle and carry your baby, talk/sing softly and gently sway</p> <p>Offer a pacifier</p>
Shaky/jittery	<p>Keep baby swaddled in a light blanket and avoid over stimulation between cares.</p>	Excessive sucking	<p>Feed your baby when he/she is showing signs of hunger</p> <p>Offer a pacifier or finger if your baby wants to suck but isn't hungry</p>
Sleeplessness <i>(problems falling asleep or staying asleep)</i>	<p>Avoid loud noises, bright lights, patting, or touching your baby too much</p> <p>Limit visitors so your baby doesn't get handled too much</p>	Difficult or poor feeding	<p>Feed your baby when he/she is showing signs of hunger</p> <p>Feed in a calm quiet area</p> <p>Allow your baby to rest as much as possible between feedings</p>

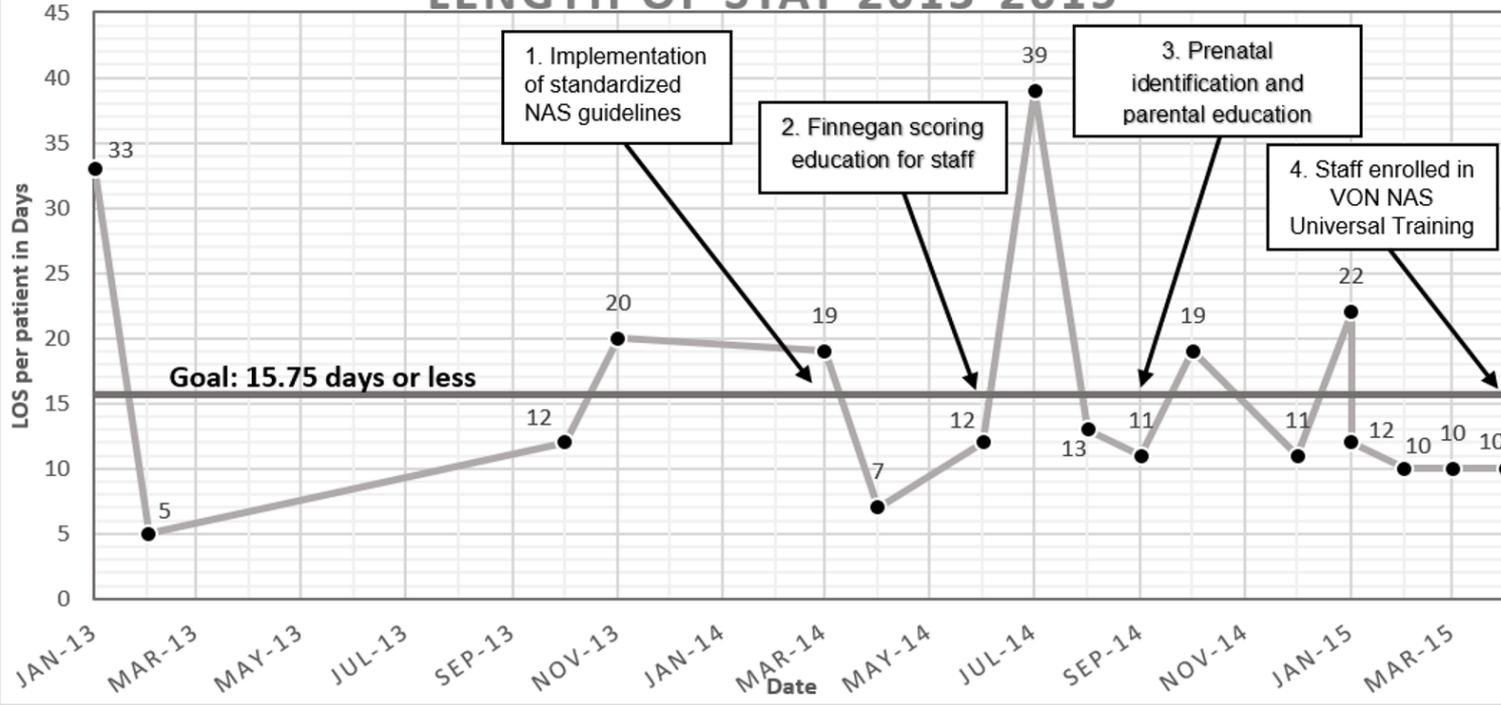
Barriers to treating babies with NAS

- Personal bias/judgement
- No standardized guideline for breast milk use in infants whose mothers use narcotics
- No standardized approach to infant care and initiating or weaning medication
- Lack of parental involvement in scoring and care
- Lack of nursing education to identify and non-pharmacologically treat infants
- Lack of prenatal identification, education and consults
- Ignoring the mother-baby dyad

Effect of Change of Practice

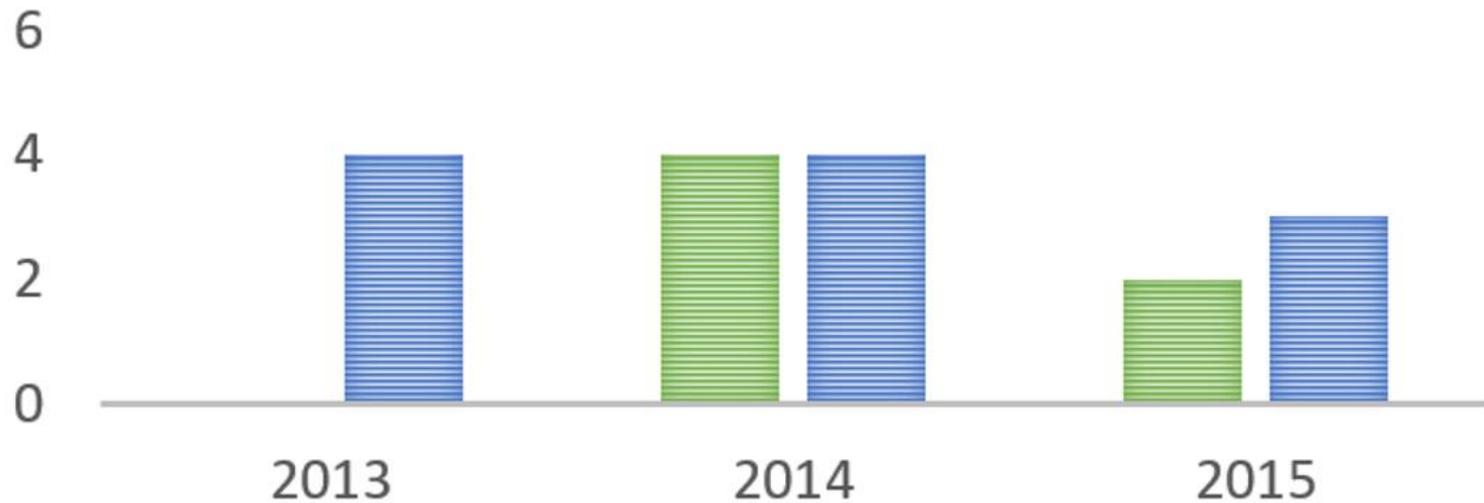
- In 2013, LOS was 17.5 days. It decreased to 14.2 days in the first six months of 2015.
- From Jan 2012 to Dec 2012 0% of our infants with NAS were fed breast milk and in 2014 50% of our babies received breast milk.
- The 2014 Finnegan Scoring Training achieved a 93% inter-rater reliability among nurses.
- In June 2015 our survey showed 87.7% of our nurses survey felt they are more prepared to provide family centered care since the education began.

LENGTH OF STAY 2013-2015



USE OF MATERNAL BREAST MILK IN INFANTS WITH NAS

■ Received MBM ■ Received Formula



Outreach

- Prenatal Consults
- Staff Education
- Parent Education books are available for prenatal providers and methadone/subutex clinic in Billings, Montana
 - Available for widespread use

What we have learned

- Standardization reduces LOS and improves family care
- Prenatal identification and education is key
- Treating the mother-infant dyad improves long term outcomes
- Families need to be a part of caring for the infant as the treatment team

The Future

- Partner with more obstetric providers and Methadone/Subutex clinics to help educate and identify early mothers with drug use
- Provide timely prenatal consults and educate with parent handbook. It provides great deal of knowledge to a family and includes them in the care of the infant.
- Partner with outlying hospitals to improve identification and treatment of infants with NAS and to standardize care.
- Questions?