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Early identification of opioid exposed newborns (OEN), use of Eat Sleep Console (ESC) tool, keeping mom & baby together along with non-pharmacological interventions as a first line of treatment resulted in decreased need for pharmacological treatment, decreased length of stay (LOS) and improved outcomes.

BACKGROUND

Problem

Prenatal exposure to opioids may lead to Neonatal Abstinence Syndrome (NAS). From 1999-2014 the occurrence of opioid use disorder (OUD) in pregnant women increased 77%. OUD increases risk for NAS¹. From 2009-2017, the rate of NAS increased 60% in the US and 52% in Illinois.²

Historically, OENs were admitted to the NICU. Issues:

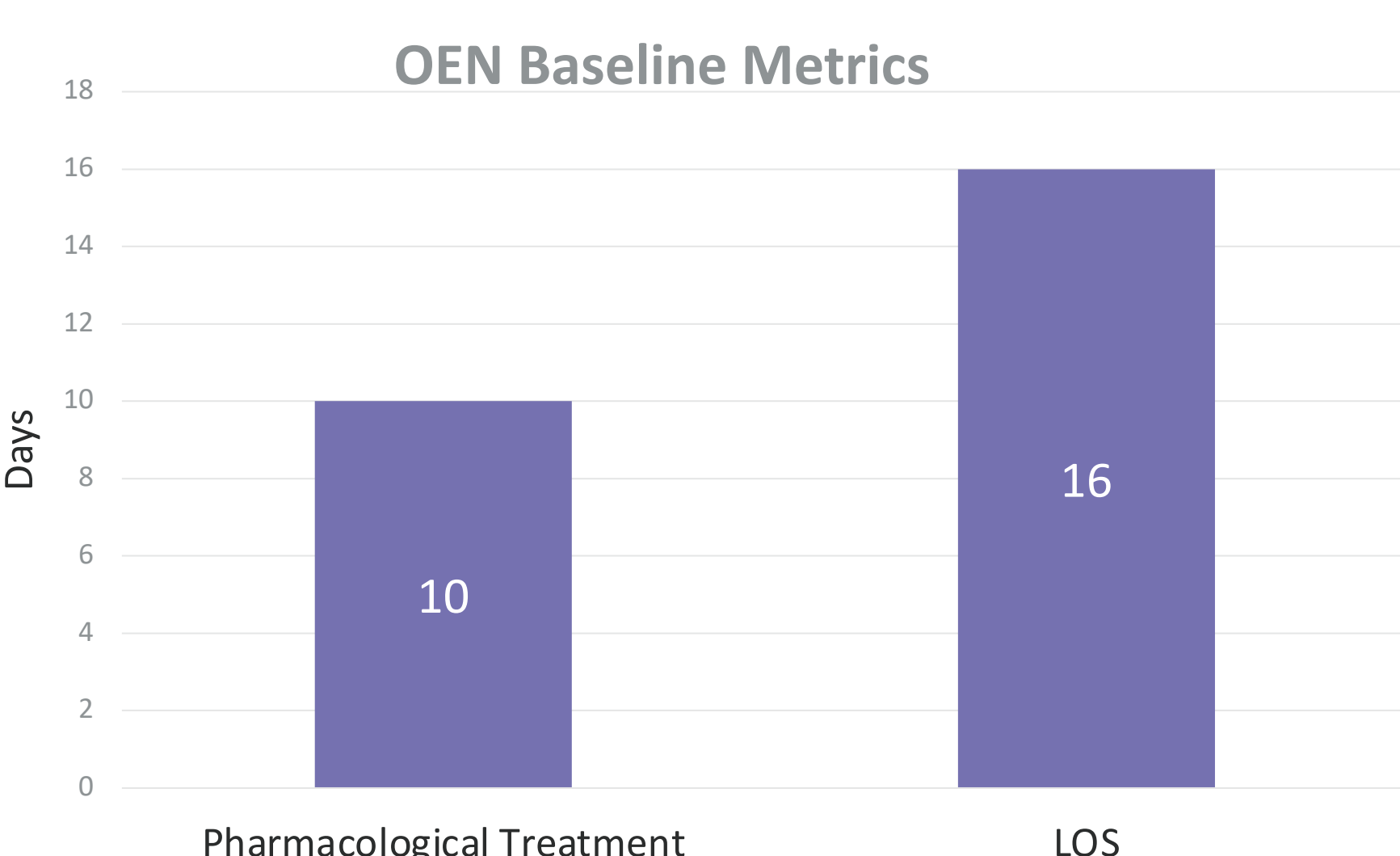
- NICU is an overstimulating environment
- Infant-mother separation
- Often required pharmacological treatment

Purpose

- Develop protocols and care guidelines
- Change culture/reduce stigma & bias
- Improve outcomes for OENs
- Minimize mother-infant separation
- Utilize non-pharmacological interventions

Objectives

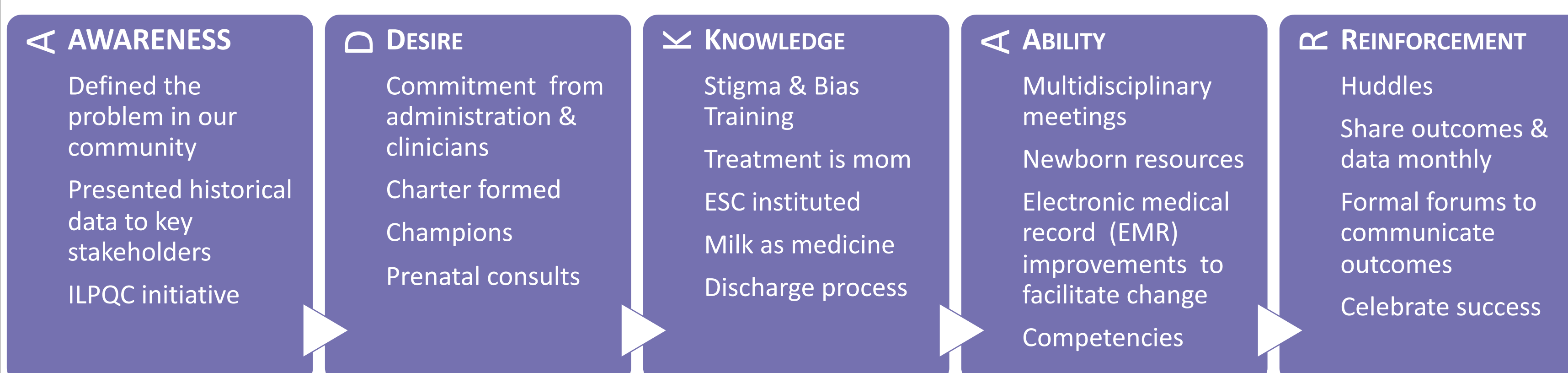
- Decrease OENs receiving pharmacologic treatment to below 20%
- Increase eligible OENs receiving maternal breastmilk to above 70%
- Increase OENs discharged with a safe coordinated discharge to above 95%³



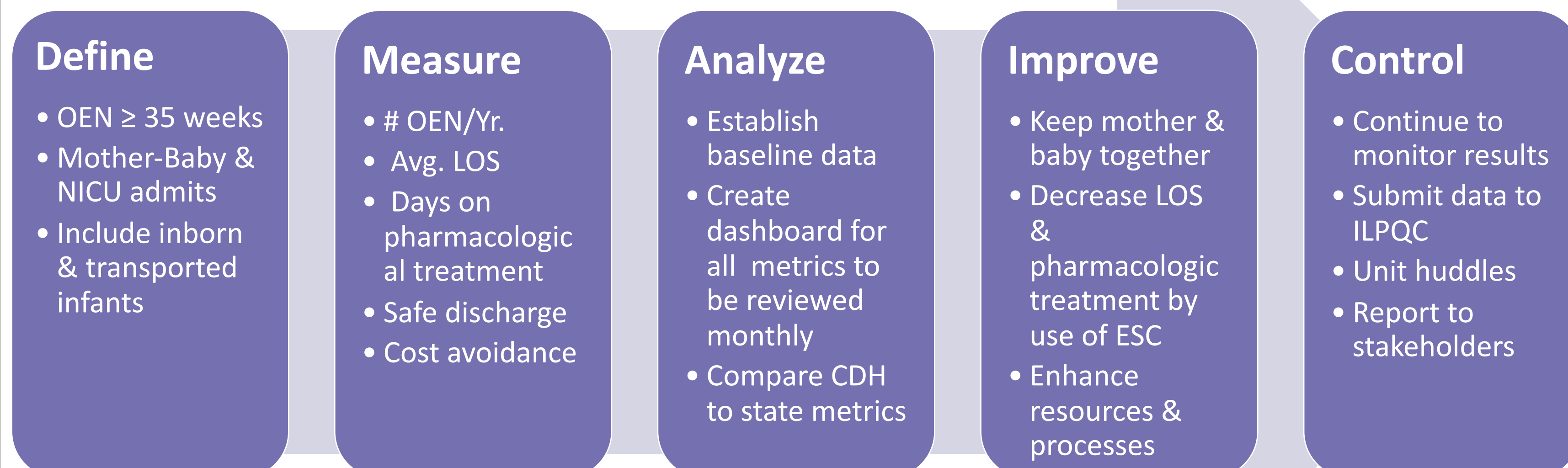
* Safe discharge not measured during baseline.

METHODS

Change Model



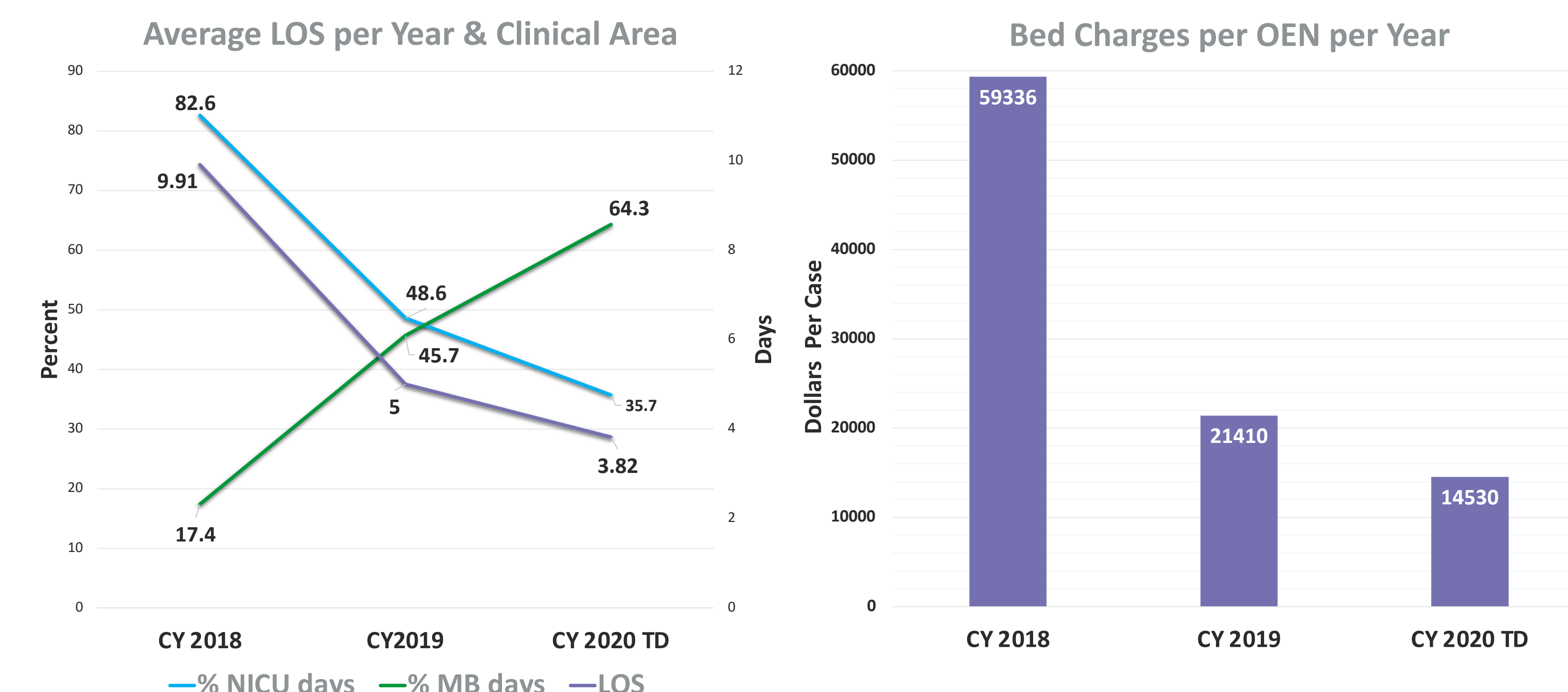
Improvement Process



System changes to support initiative

Partner with OB colleagues on project	Form a system-wide multidisciplinary MNO committee	Implement a validated tool for identification of mothers with OUD	Involve informatics to incorporate changes to EMR to support project initiatives and improved processes
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RESULTS



	Baseline	FY 2020
% OEN receiving breastmilk	40%	90%
% OEN with safe discharge	42%	90%

Control Plan

- Team to meet quarterly, review all cases
- Continue to monitor data
- Share results/outcomes
- Continue huddles & ESC for all OENs
- Continue improvement process



CONCLUSIONS

Participation in the initiative was successful as demonstrated by our outcomes. Orchestration of a committed multidisciplinary team and collaboration with hospitals in our own system helped to accomplish these achievements. Keeping mothers and babies together during hospitalization, initiating education prenatally and implementing non-pharmacological interventions as a first line of treatment led to improved outcomes, safe care and empowered mothers to be the primary caregivers of their infants. Overall, these improvements promote a safe discharge and set the dyad up for success beyond the hospital stay. A secondary gain is healthcare savings by decreasing LOS and NICU utilization.

REFERENCE

- (1) U.S. Department of Health & Human Services. (n.d.) Surveillance network: Maternal, infant and child health outcomes following treatment of opioid use disorder in pregnancy. Retrieved from [https://aspe.hhs.gov/surveillance-network-maternal-infant-and-child-health-outcomes-following-treatment-opioid-use-disorder-oud-during-pregnancy#:~:text=From%201999%2D2014%2C%20the%20prevalence,neonatal%20abstinence%20syndrome%20\(NAS\).TBD](https://aspe.hhs.gov/surveillance-network-maternal-infant-and-child-health-outcomes-following-treatment-opioid-use-disorder-oud-during-pregnancy#:~:text=From%201999%2D2014%2C%20the%20prevalence,neonatal%20abstinence%20syndrome%20(NAS).TBD)
- (2) Agency for Healthcare Research and Quality (n.d.) HCUP Fast Stats: Opioids & neonatal abstinence syndrome. Retrieved 10/14/20 <https://www.hcup-us.ahrq.gov/faststats/NAServlet?radio2=on&location1=IL&characteristic1=01C11&location2=US&characteristic2=01C11&expansionInfoState=hide&dataTablesState=hide&definitionsState=hide&exportState=hide>
- (3) Illinois Perinatal Quality Collaborative (n.d.) MNO- neonatal: Objectives. Retrieved from <https://ilpqc.org/mothers-and-newborns-affected-by-opioids-neonatal-initiative>