Interprofessional Education: A Powerful Tool for Improving Delivery Room Care and Competency
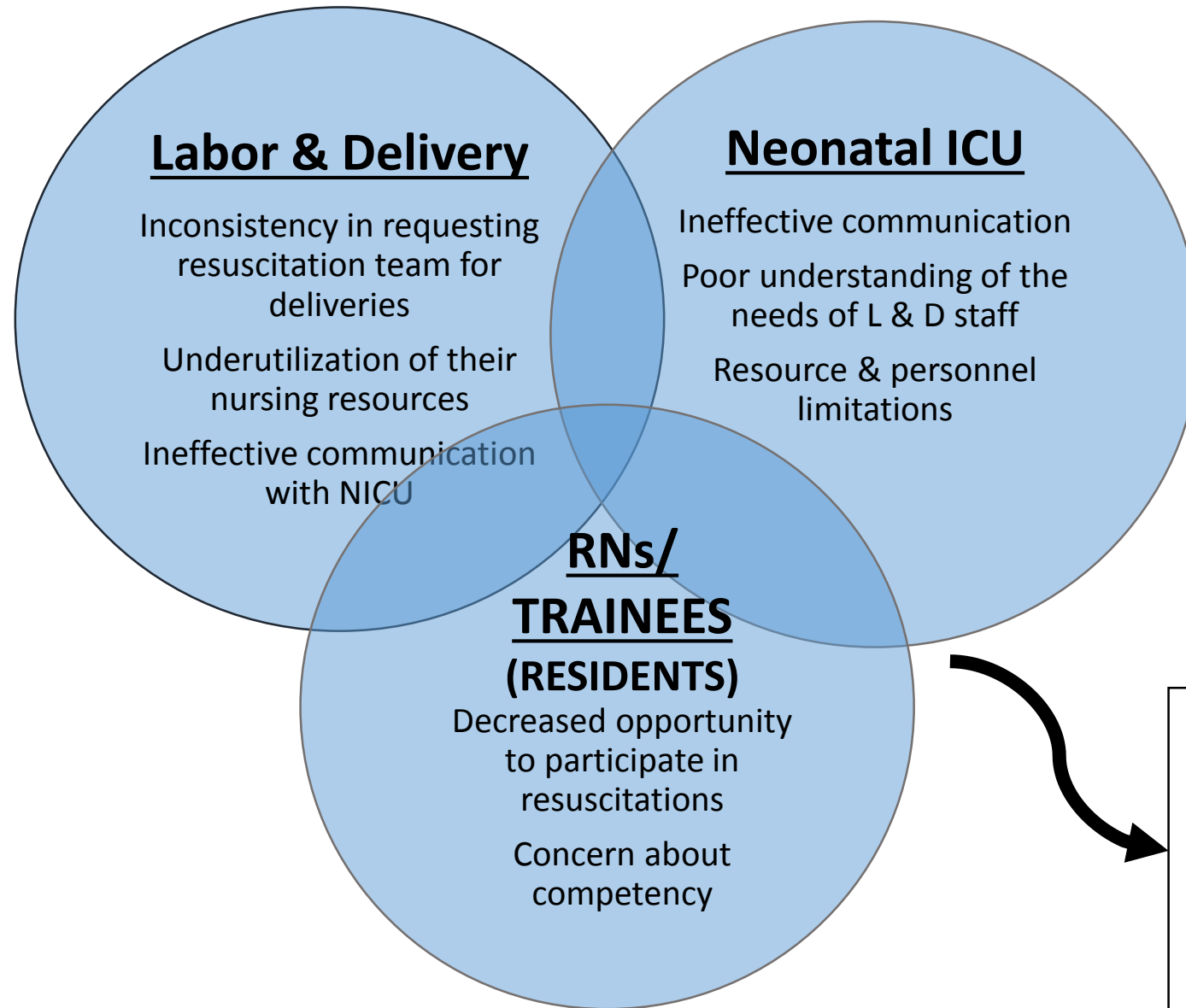
Kate Gitzinger MS, RN, CPNP

ECU BRODY SCHOOL OF MEDICINE

VIDANT HEALTH

COLLABORATIVE TEAM MEMBERS

➢Dr. Sri Ravisankar, MD, Medical Director

➢Tara Stroud, MSN, NNP, Administrator

➢Angela Still, MSN, RN, Administrator

➢Carolyn Alphin, MSN, RN, Education Specialist

➢Jessica Jefferson, MSN, RN Education Specialist

BACKGROUND PROBLEM

Labor & Delivery

Inconsistency in requesting resuscitation team for deliveries

Underutilization of their nursing resources

Ineffective communication with NICU

Neonatal ICU

Ineffective communication

Poor understanding of the needs of L & D staff

Resource & personnel limitations

RNs/ TRAINEES (RESIDENTS)

Decreased opportunity to participate in resuscitations

Concern about competency

- A system wide frustration amongst staff in different units (L & D versus NICU versus 1 west)
- Decreased standard of care
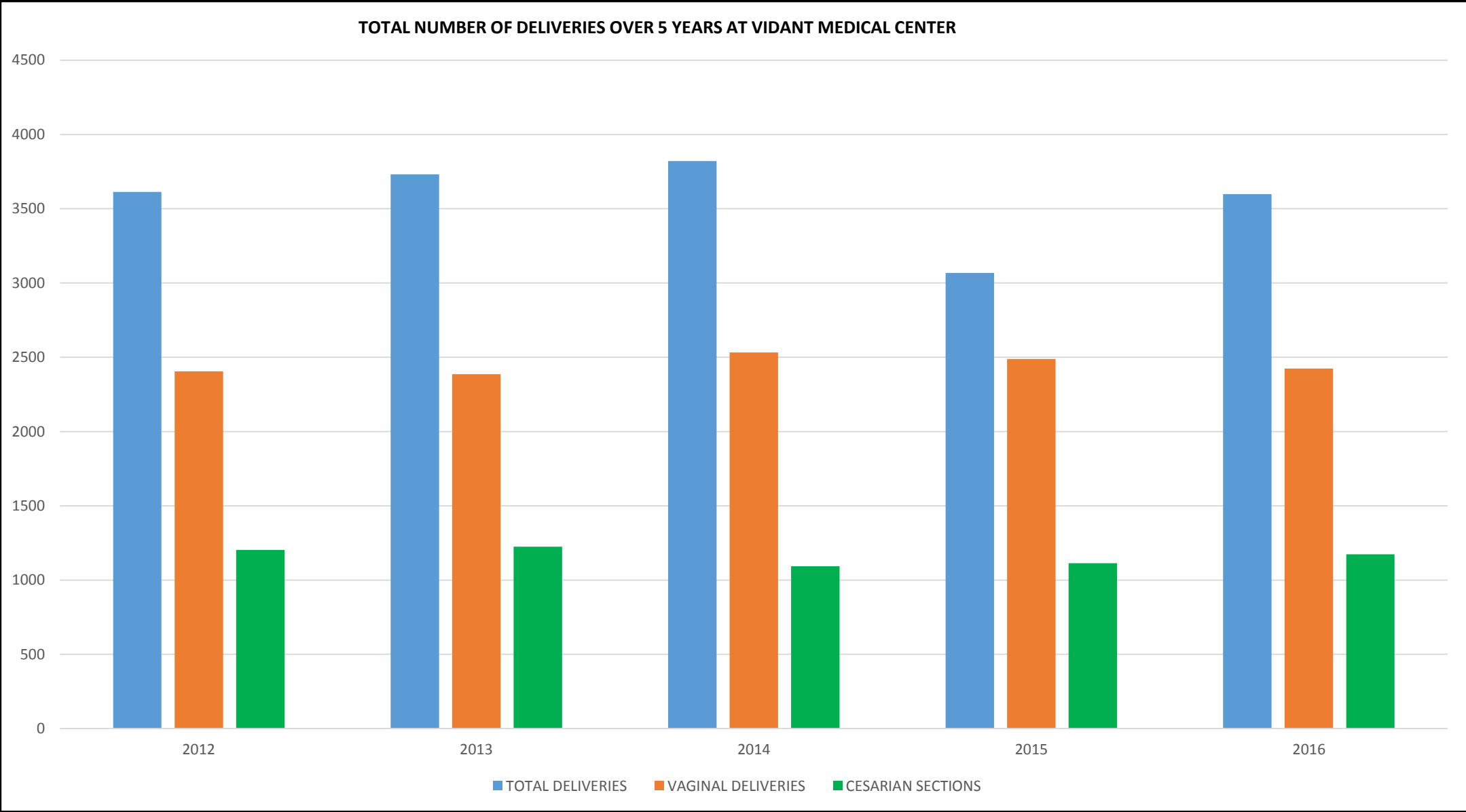- Poor public relations amongst staff thereby impacting residents and learners

AIM STATEMENT

1. To have a Low Risk Delivery Team at all scheduled cesarean section deliveries who can provide intervention if necessary to decrease Neonatal Intensive Care Unit transitions and admissions

2. Provide family centered care by keeping the mother/baby couplet intact and decreasing separation

3. Increase nurse and resident physician competency and confidence in Neonatal Resuscitation Program skills by actively participating in low risk deliveries and enhance interprofessional work
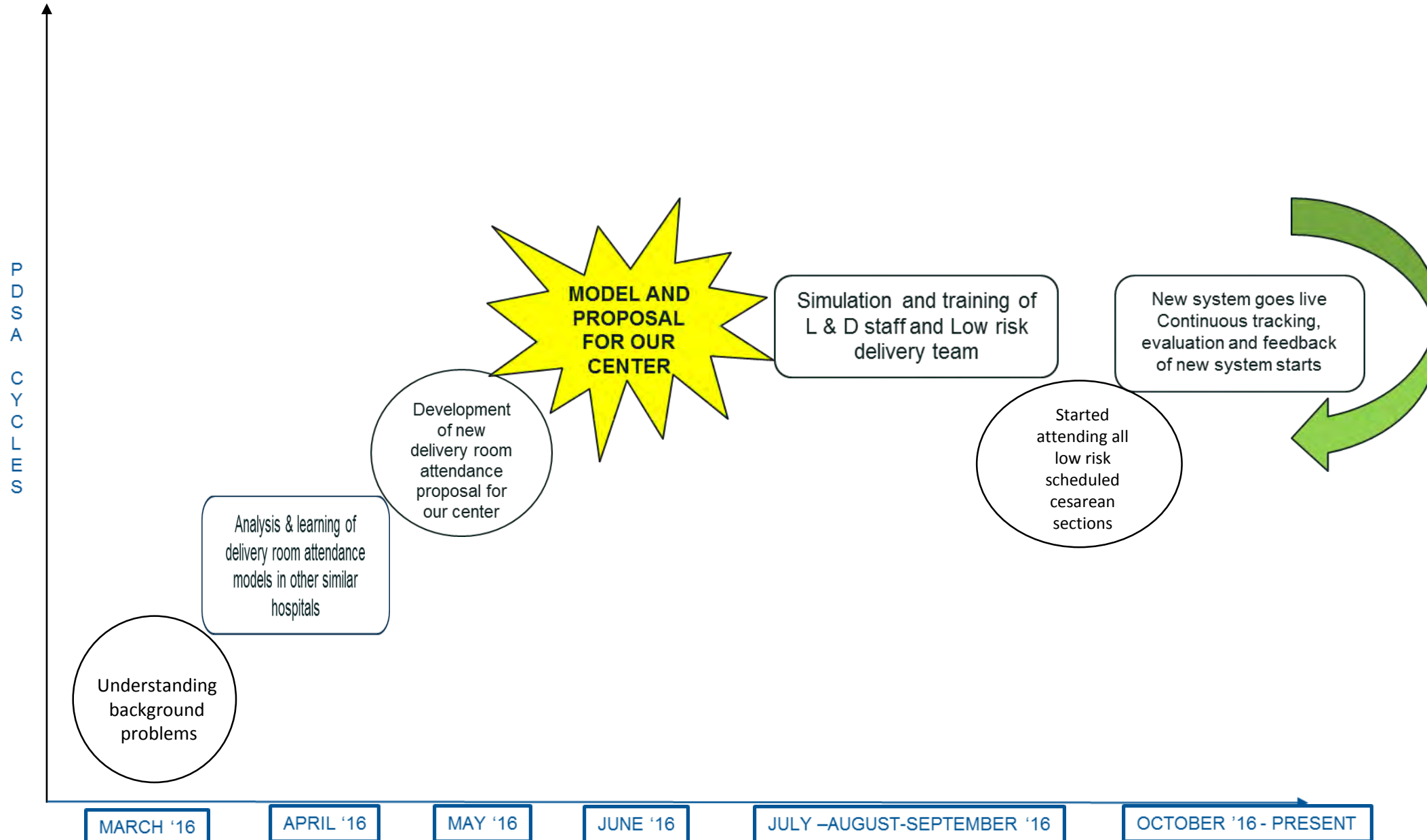
MEASURING CHANGE FOR IMPROVEMENT

➢ Decrease in number of babies requiring transition time in NICU or NICU admission

➢ Increased confidence and NRP skills of residents and nurses

➢ Any baby requiring intervention = decreased workload on NICU and increased experience/skills for residents and nurses

➢ Any baby requiring intervention that was kept with his/her mother = increased family centered care

➢ Survey nursing staff to assess new system

BASELINE DATA

TOTAL NUMBER OF DELIVERIES OVER 5 YEARS AT VIDANT MEDICAL CENTER

Legend: TOTAL DELIVERIES, VAGINAL DELIVERIES, CESARIAN SECTIONS

INDIVIDUAL CYCLES OF CHANGE - A TIMELINE

P D S A   C Y C L E S

MODEL AND PROPOSAL FOR OUR CENTER

Simulation and training of L & D staff and Low risk delivery team

New system goes live Continuous tracking, evaluation and feedback of new system starts

Development of new delivery room attendance proposal for our center

Started attending all low risk scheduled cesarean sections

Analysis & learning of delivery room attendance models in other similar hospitals

Understanding background problems

MARCH '16 | APRIL '16 | MAY '16 | JUNE '16 | JULY –AUGUST-SEPTEMBER '16 | OCTOBER '16 - PRESENT

Key Drivers to Achieve Our Aim

Aim

Primary Drivers

Secondary Drivers

Improve consistency of delivery attendance attendance

Decrease mother baby separation, cost savings by decreasing admissions to neonatal ICU

Improve skill and competency of trainees and RN's

2 Team delivery attendance strategy

Stratifying deliveries into low & high risk

Interprofessional education between units

Increased trainee participation under supervision

Low risk team comprising a skilled supervisor, L & D RN's and trainee

High risk team with advanced skilled resuscitator, trainee, respiratory therapist and neonatal nurse

Standardized algorithm outlying criteria for low versus high risk deliveries

- Use of high fidelity neonatal simulators
- Competency based check off list
- Repeated simulation training over a 3 month time frame
- Combined interdisciplinary team training and simulation

- More opportunity to lead the resuscitation
- Familiarity of equipment
- Structured supervision
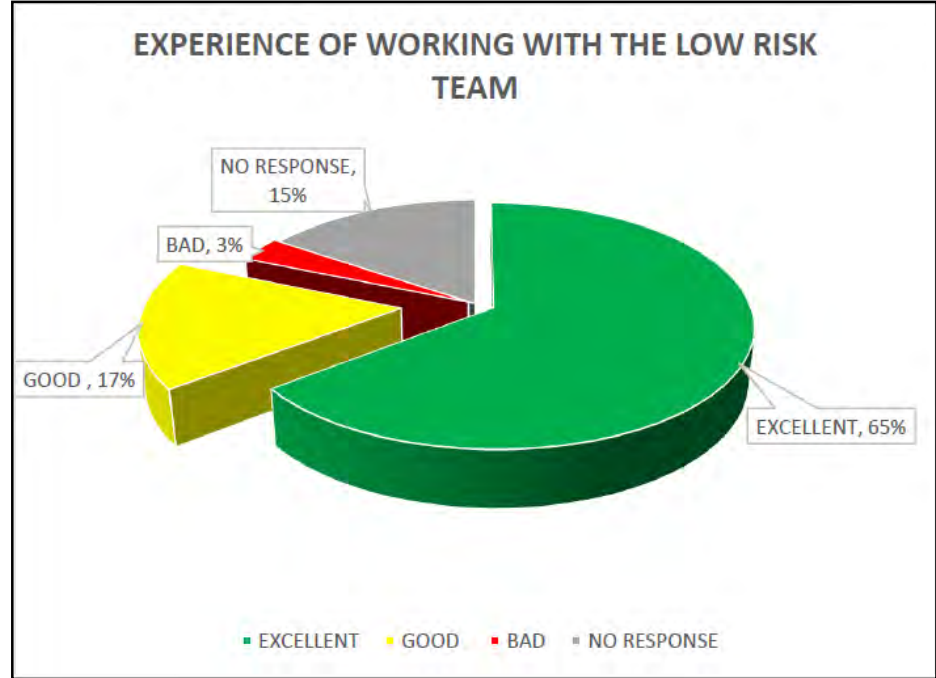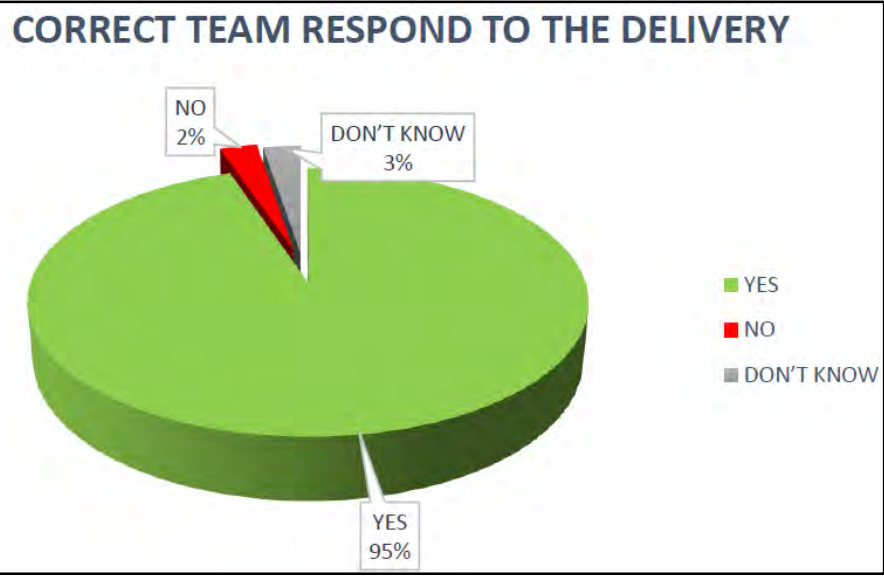- Attendance of deliveries in 2 different clinical rotations

DATA COLLECTION & RESULTS

➢Tracking of all pages requesting a low or high risk delivery team

➢Feedback forms for L&D staff and resident physicians

➢Competency-based check off sheet for residents

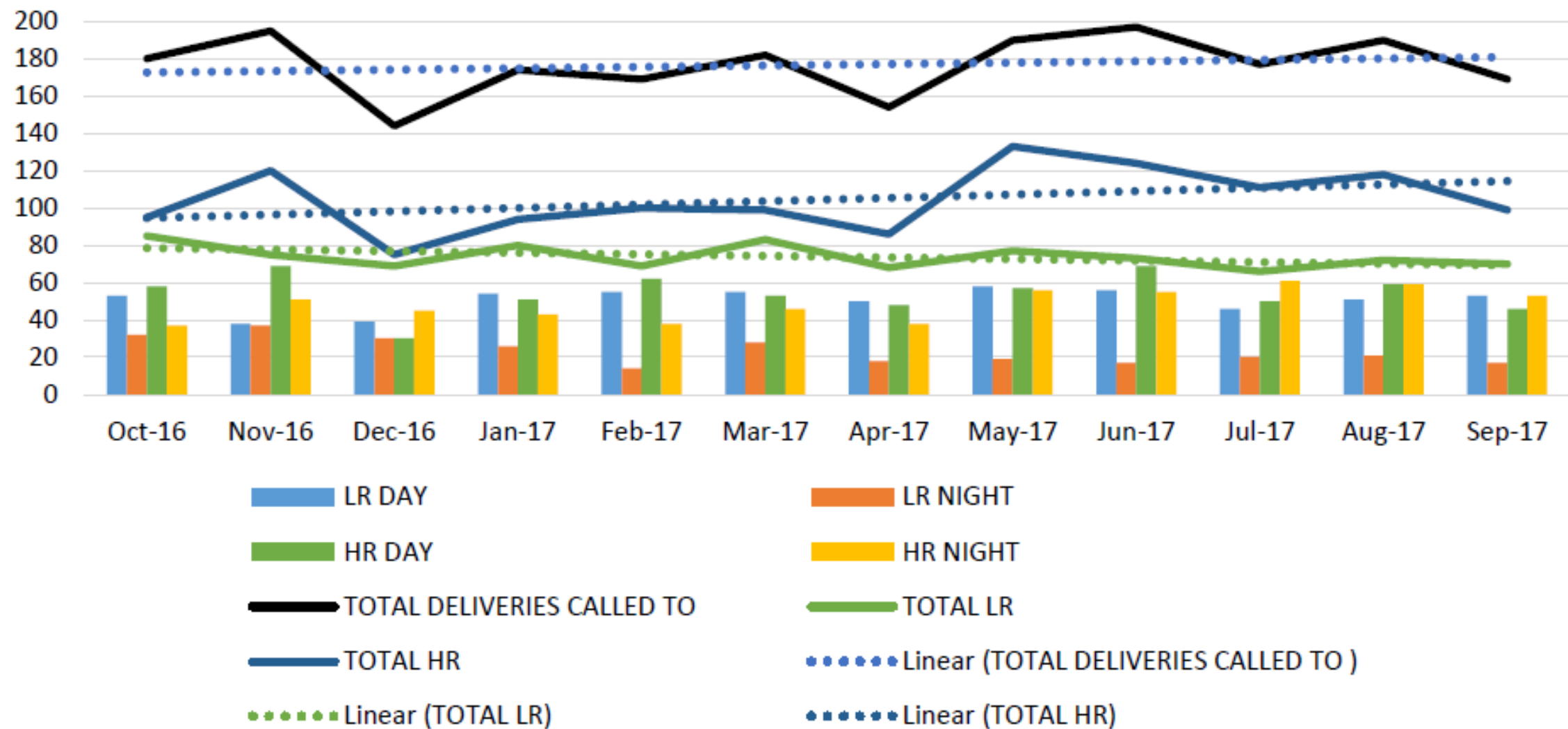➢Tracking of NICU admissions from deliveries attended by Low Risk Delivery Team

Balancing measure:

➢Ensure competency of the Low Risk Team by monitoring number of times additional help of the full high risk team was requested

➢Ensure the traditional learning goals of the newborn rotation are not impacted for residents

OUTCOMES: FEEDBACK ABOUT THE DR SYSTEM FROM L & D

CORRECT TEAM RESPOND TO THE DELIVERY

- YES
- NO
- DON'T KNOW

NO 2%
DON'T KNOW 3%
YES 95%

EXPERIENCE OF WORKING WITH THE LOW RISK TEAM

NO RESPONSE, 15%
BAD, 3%
GOOD, 17%
EXCELLENT, 65%

- EXCELLENT
- GOOD
- BAD
- NO RESPONSE

ANY PROBLEMS WORKING WITH THE LOW RISK TEAM

NO RESPONE, 8%
YES, 3%
NO, 89%

- YES
- NO
- NO RESPONE
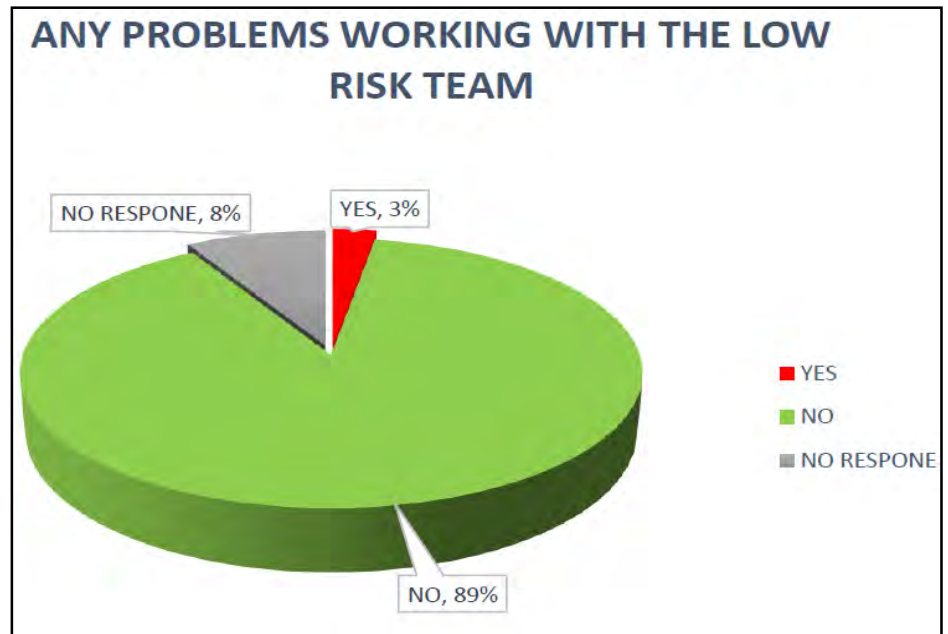
LOW & HIGH RISK DELIVERIES CALLED TO AND TOTAL DELIVERIES PER MONTH

Legend:
- LR DAY
- LR NIGHT
- HR DAY
- HR NIGHT
- TOTAL DELIVERIES CALLED TO
- TOTAL LR
- TOTAL HR
- Linear (TOTAL DELIVERIES CALLED TO)
- Linear (TOTAL LR)
- Linear (TOTAL HR)

NUMBER OF ELECTIVE C-SECTIONS PER MONTH AND NUMBER OF BABIES THAT WERE PREVENTED FROM BEING ADMITTED TO THE NICU DUE TO LOW RISK TEAM INTERVENTIONS IN THE DELIVERY ROOM
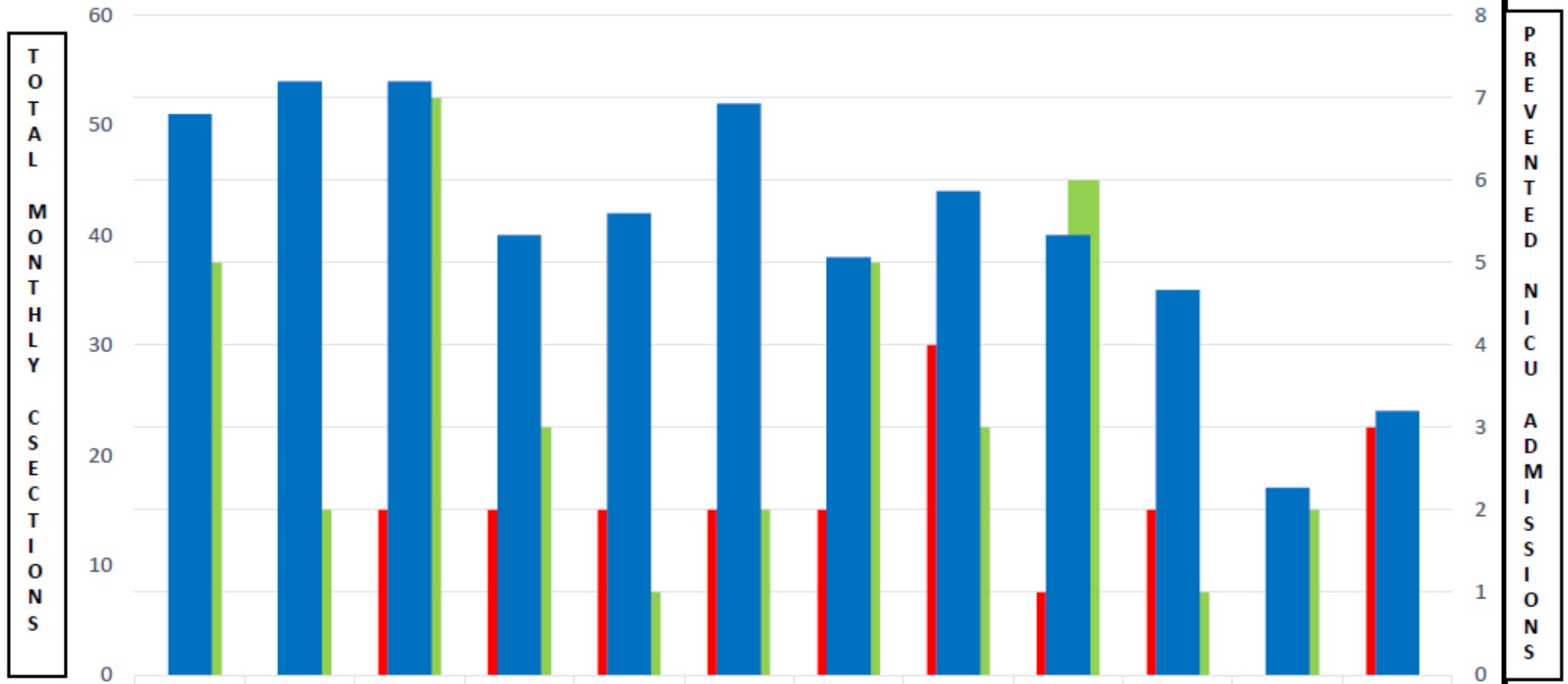
	OCT '16	NOV '16	DEC '16	JAN '17	FEB '17	MAR '17	APR'17	MAY '17	JUNE '17	JULY '17	AUG '17	SEPT '17
■ WENT TO NICU	0	0	2	2	2	2	2	4	1	2	0	3
■ STAYED BECAUSE OF INTERVENTIONS	5	2	7	3	1	2	5	3	6	1	2	0
■ ELECTIVE C-SECTIONS	51	54	54	40	42	52	38	44	40	35	17	24

■ WENT TO NICU   ■ STAYED BECAUSE OF INTERVENTIONS   ■ ELECTIVE C-SECTIONS

DECREASE IN NUMBER OF NICU TRANSITIONS DUE TO INTERVENTIONS BY SKILLED LOW RISK TEAM
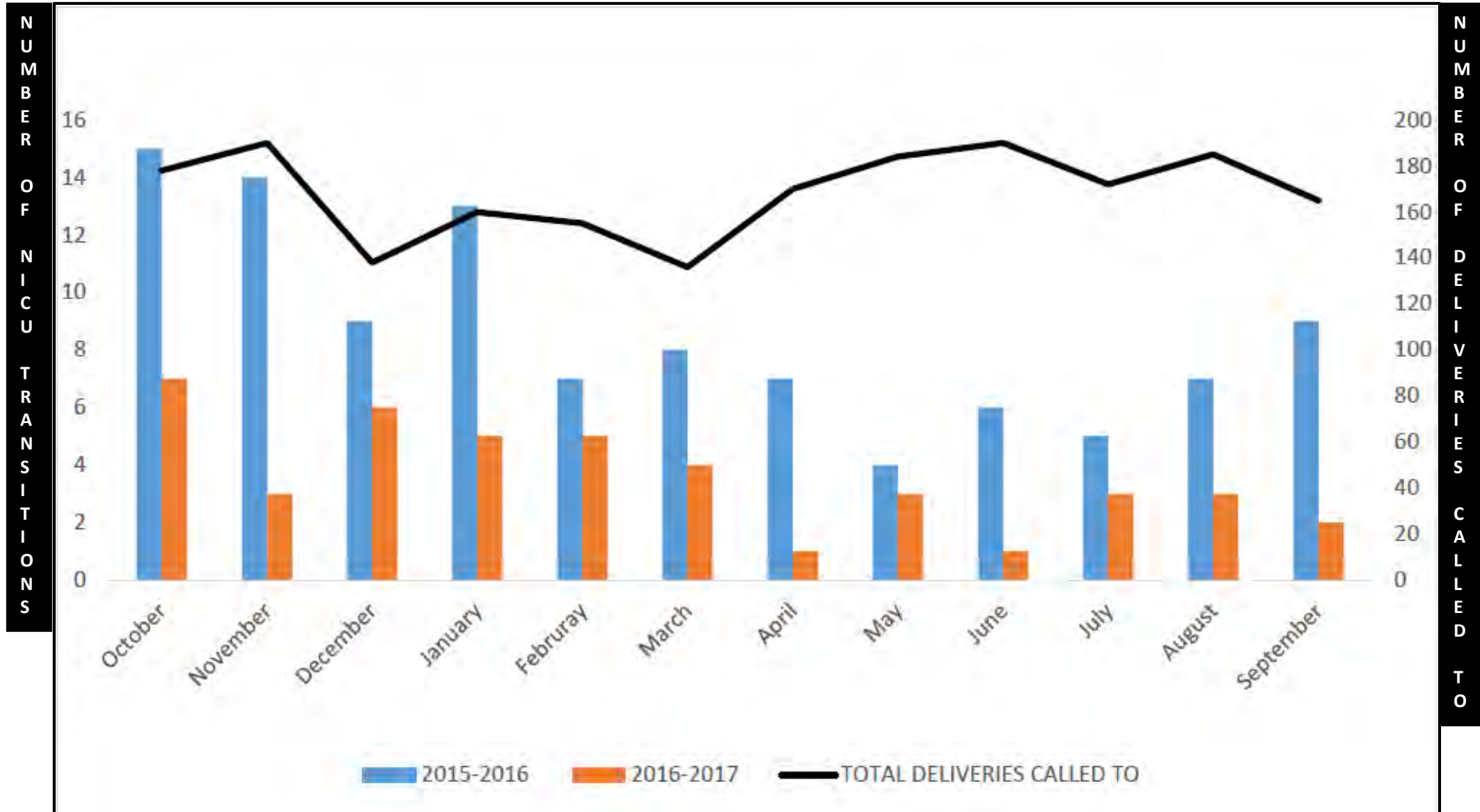
WHAT HAVE WE LEARNED

➤Interprofessional education and training has shown improved coordination between three different units – Labor & Delivery, Newborn, and Neonatal Intensive Care Unit

➤Development of a fully competent Low Risk Delivery Room Team

➤Two-team strategy now successfully caters to deliveries of different acuity enabling better resource and personnel utilization and provide appropriate standard of care

➤Successful interventions in the delivery room have facilitated the mother & baby to stay together after birth thereby decreasing admissions to the Neonatal Intensive Care Unit and its associated costs

➤Improved competency of residents (trainees) and RNs

NEXT STEPS

➢ Continue to enhance and expand the Low Risk Delivery Team's capabilities and skill set (i.e. meconium deliveries)

➢ Develop tools to assess patient satisfaction from their improved experience during labor and delivery

➢ Reassess L&D staff experience and skills

➢ Reassess resident confidence

Questions?

Kate Gitzinger MS, RN, CPNP
Katherine.Gitzinger@vidanthealth.com