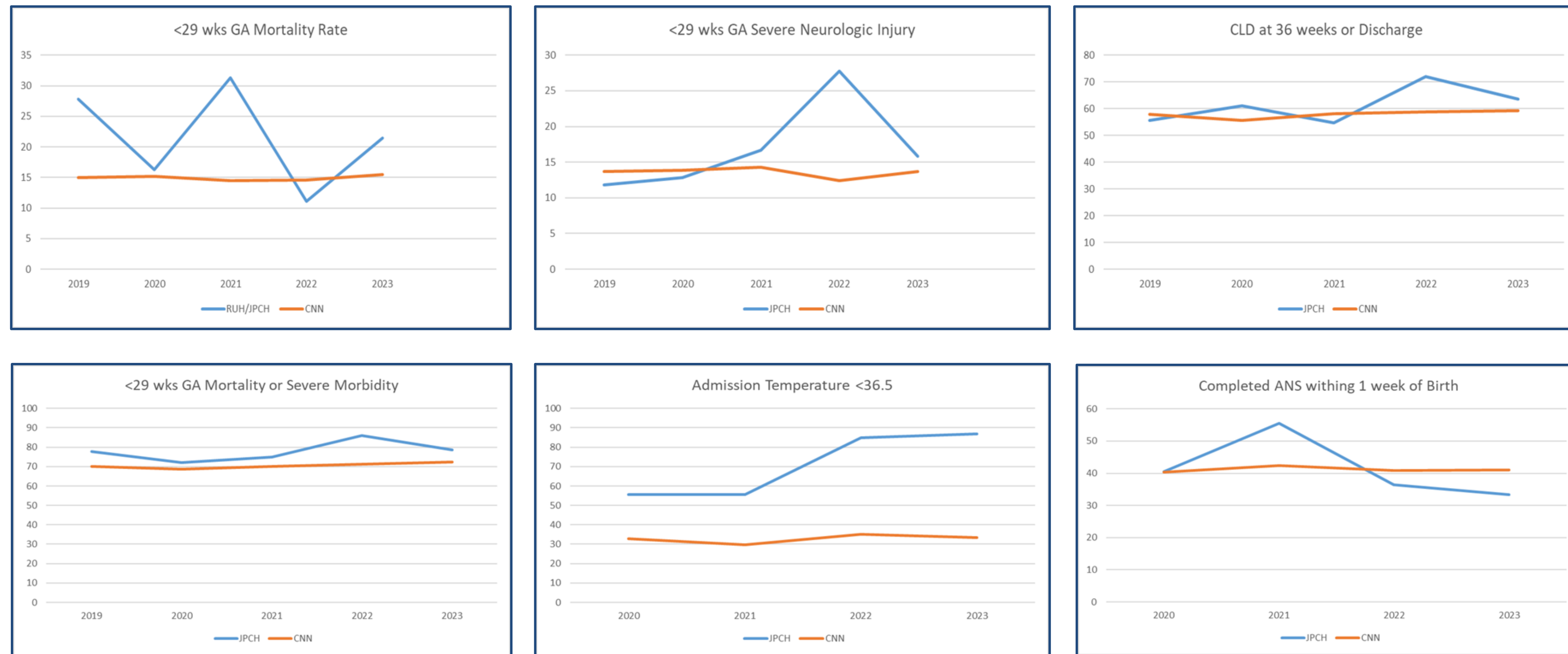


## Aim

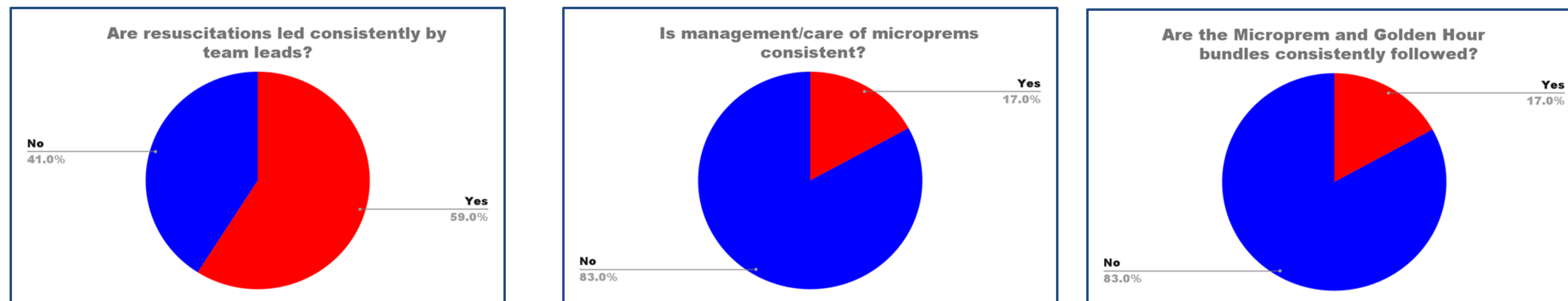
- To create a group of highly skilled and trained health care providers dedicated to improving care and outcomes of premature infants born at a gestational age less than 28 weeks
- To improve outcomes and promote family integrated care by utilizing evidence based and standardized consistent care
- To develop a comprehensive care bundle which will standardize processes in both delivery room and NICU management of microprems

## Importance

Local Outcomes of Concerns



Staff Survey



- 54% of those surveyed say they are not comfortable attending the delivery of a microprem
- We believe that standardizing care will improve patient outcomes and increase family and staff satisfaction
- Currently 122 RNs that could potentially attend delivery, and 154 RNs potentially caring for microprem infant after admission. Following implementation, this number decreases to 40.



## PLAN

- Review of Current Process
- Engage stakeholders to support QI initiative
- Formation of Executive and Steering Committees
- Staff Survey to gain perception of current state and areas that need to be addressed
- Establish criteria for RN team members and send out call for interest
- Plan for involvement of all staff from ground up to improve buy in and satisfaction

## DO

- First Meeting of Steering Committee - Nov 2023
- Identification of Working Groups
- Working groups led by Neonatologist/NNP
- Working group includes at least one physician, NNP/CA, RN, RRT, and where appropriate, dieticians, pharmacists, obstetricians
- Parent partners are included in the Family group
- Working groups reviewed literature and existing bundles to develop processes, protocols, and guidelines for their domain
- Simulations
- Implementation

## STUDY

- Audit completion of education component
- Audits of Golden Hour
- Audits of Care Bundle Compliance
- Ongoing evaluation of team performance
- Mortality and morbidity outcomes
- Staff survey post-implementation

## ACT

### NEXT STEPS

- Education
  - Education to be developed and delivered by each working group
  - Targeted to all members of the Microprem team, including RNs, RRTs, Neonatologists, NNPs/CAs, transport team members, and other health care team members involved, to ensure understanding of the importance of each intervention
  - Mostly online modules
- Series of PDSA cycles to improve our care
- Full Implementation - Nov 2025

### FAMILY

*Antenatal Consultation  
Family Involvement  
Developmental Care  
Goals of Care/Ethics  
Loss/Bereavement*

### RESUSCITATION & STABILIZATION

*NICU notification  
Delivery room management  
Golden Hour  
Admission to NICU*

### RESPIRATORY MANAGEMENT

*Intubation  
Respiratory Support  
Surfactant*

### HEMODYNAMICS

*Includes Blood Sampling and Transfusions*

### 1st 72 Hours

### Day 3-7

### Day 8 - 21

### GI/NUTRITION

*IV Access/Lines  
Metabolic  
NEC*

### NEUROPROTECTION

*Handling/Positioning  
Pain Control  
Sedation  
IVH*

### INFECTION

*THERMOREGULATION*

*SKIN CARE*

### POCUS

*Standards/guidelines*

*Minimal handling  
balanced with  
benefits*

*Specialized POCUS team*