

Quality Improvement Aims

Overarching Aim: Improve neurodevelopmental outcomes in infants born <32 weeks

Project Aim: Standardize our developmental care (DC); implementation of the SENSE program

- PDSA 1: Provide DC education to 80% NICU nurses by Dec 2023
- PDSA 2: 100 % of infants born < 32 0/7 weeks have appropriate SENSE card at bedside by Dec 2023

Background

- Preterm infants are at higher risk for adverse neurologic & developmental outcomes
- NICU environment has noxious sensory stimuli with limited positive sensory experiences
- Evidence supports use of positive sensory exposures to enhance neurodevelopment
- Our current NICU DC was unstructured & sporadic
- Need for improved education for staff & parents

SENSE Program

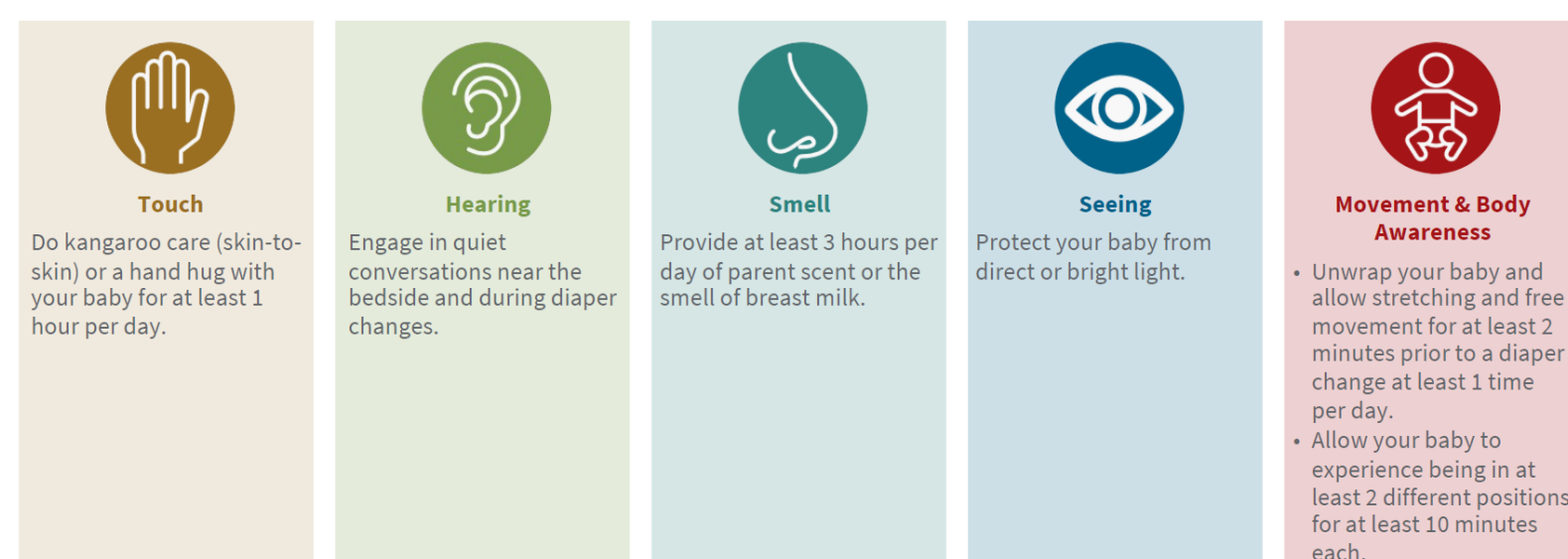
- Evidence-based, GA appropriate & engages parents
- Delivered by parents with staff support
- Includes bedside cards & parent education material: family cards & parent booklet
- Focuses on touch, hearing, smell, seeing, movement & body awareness

More info:

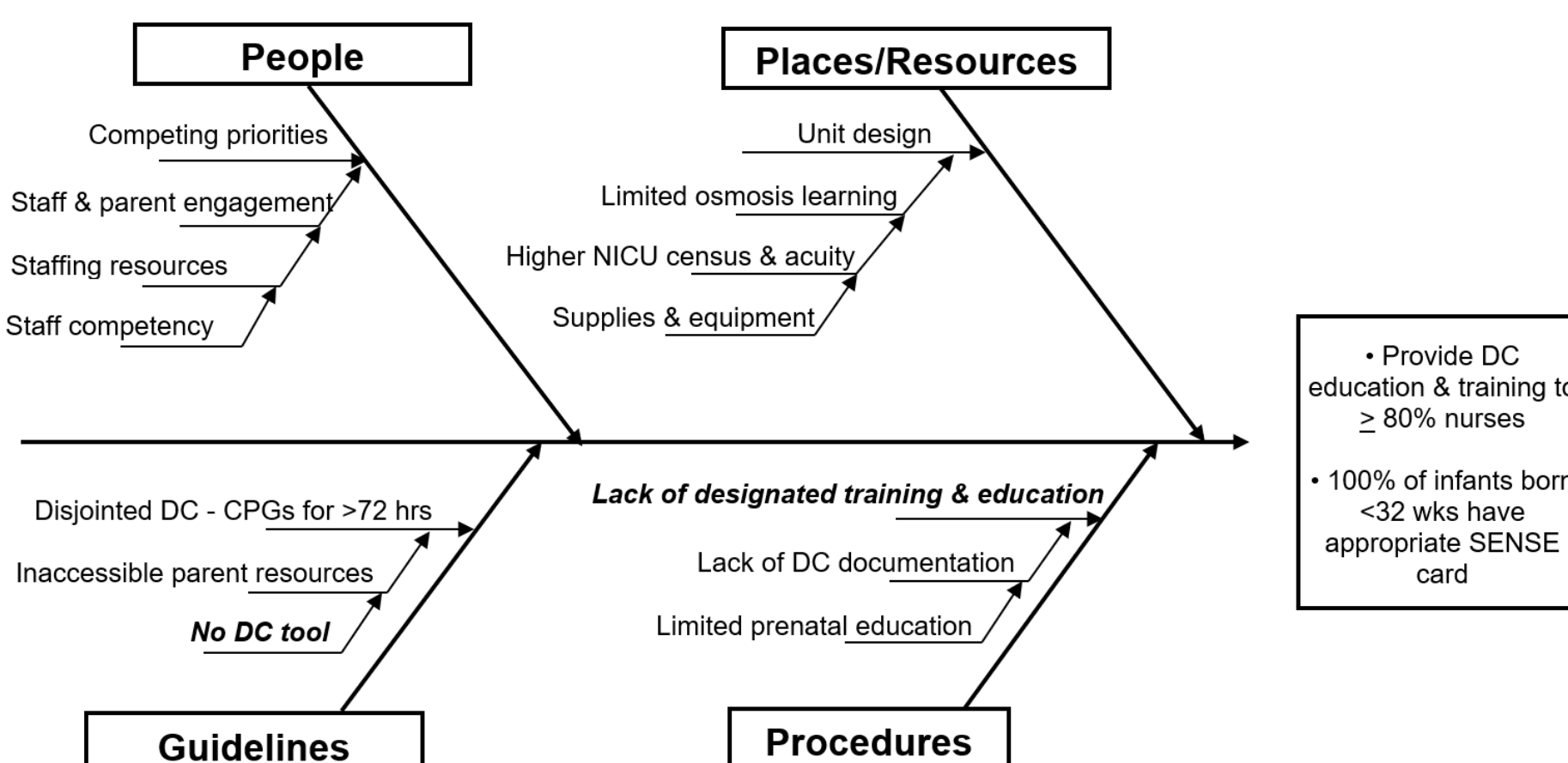


Sensory Support: ≤ 23 to 27 Weeks

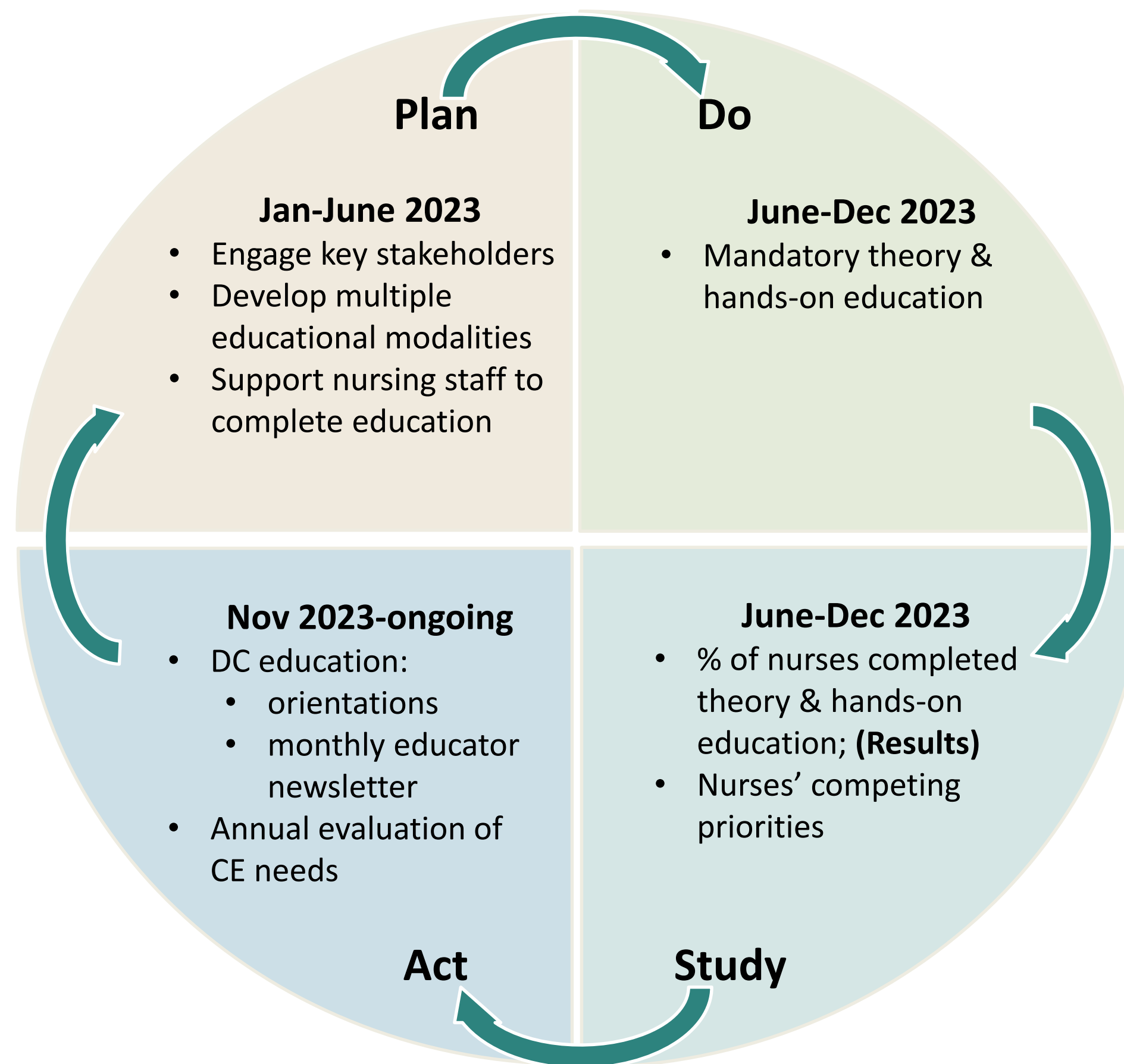
Here are some things to do with your baby each day this week
(as long as tolerated)



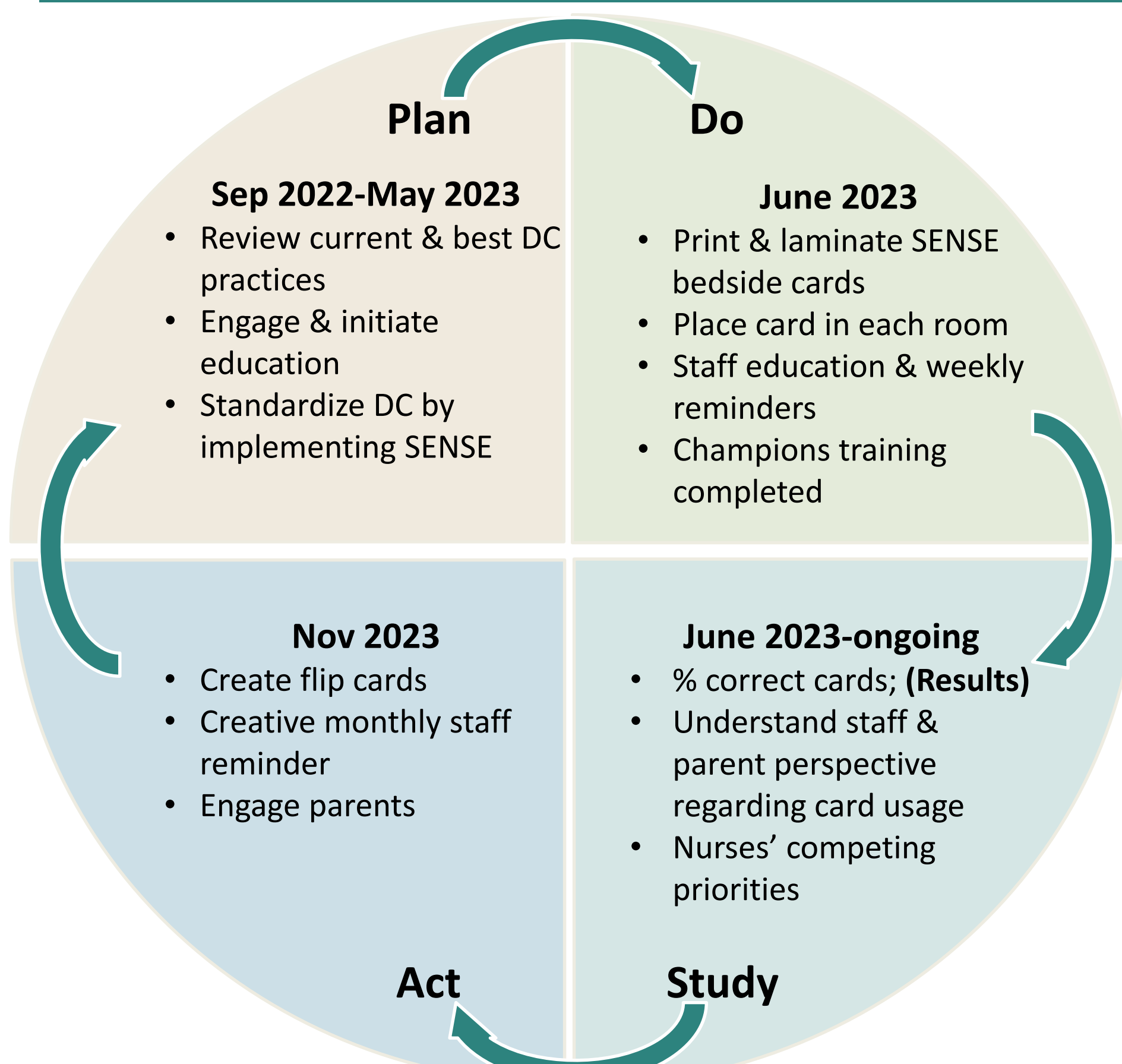
Fishbone Driver Diagram



PDSA Cycle - 1



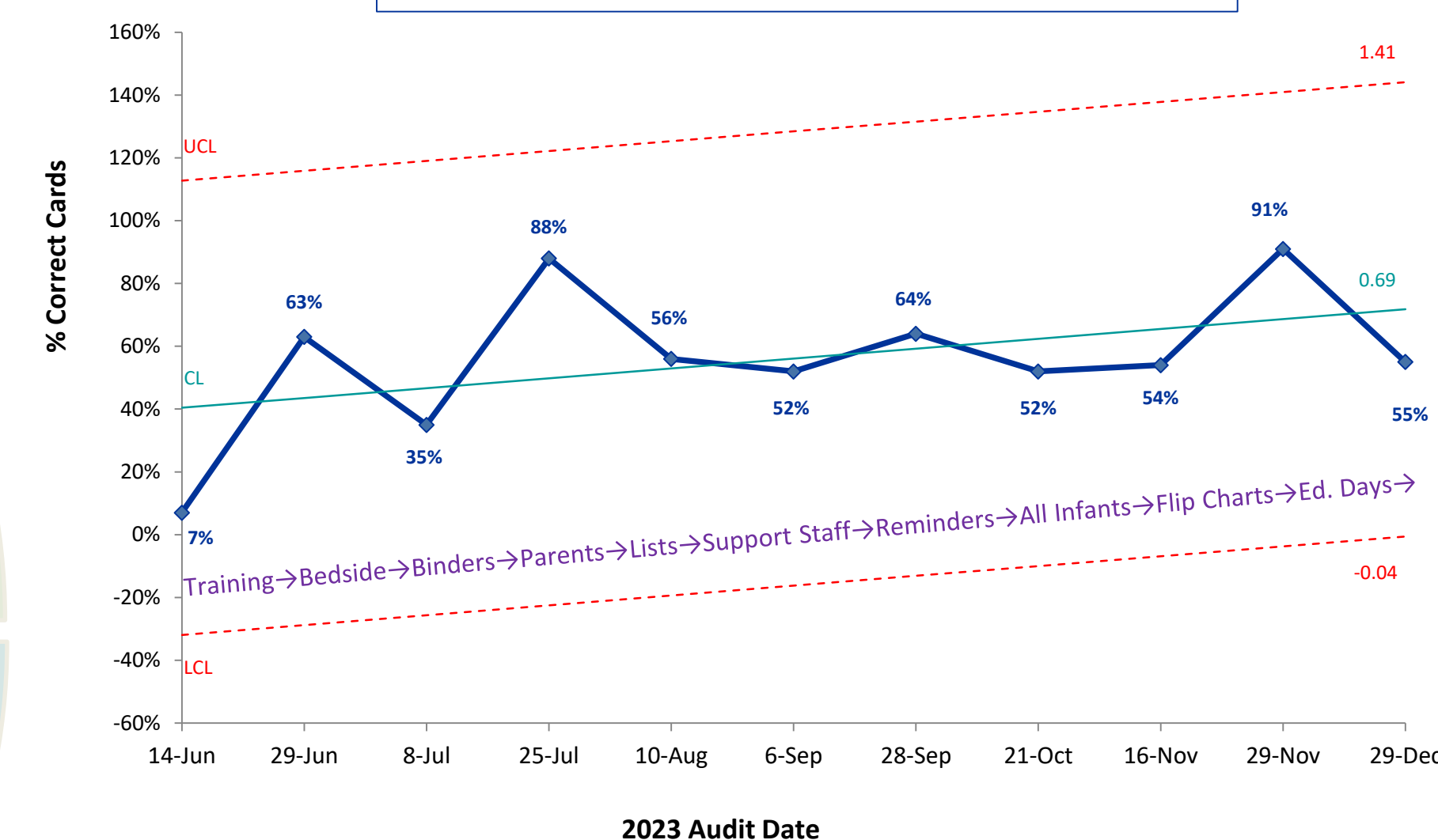
PDSA Cycle - 2



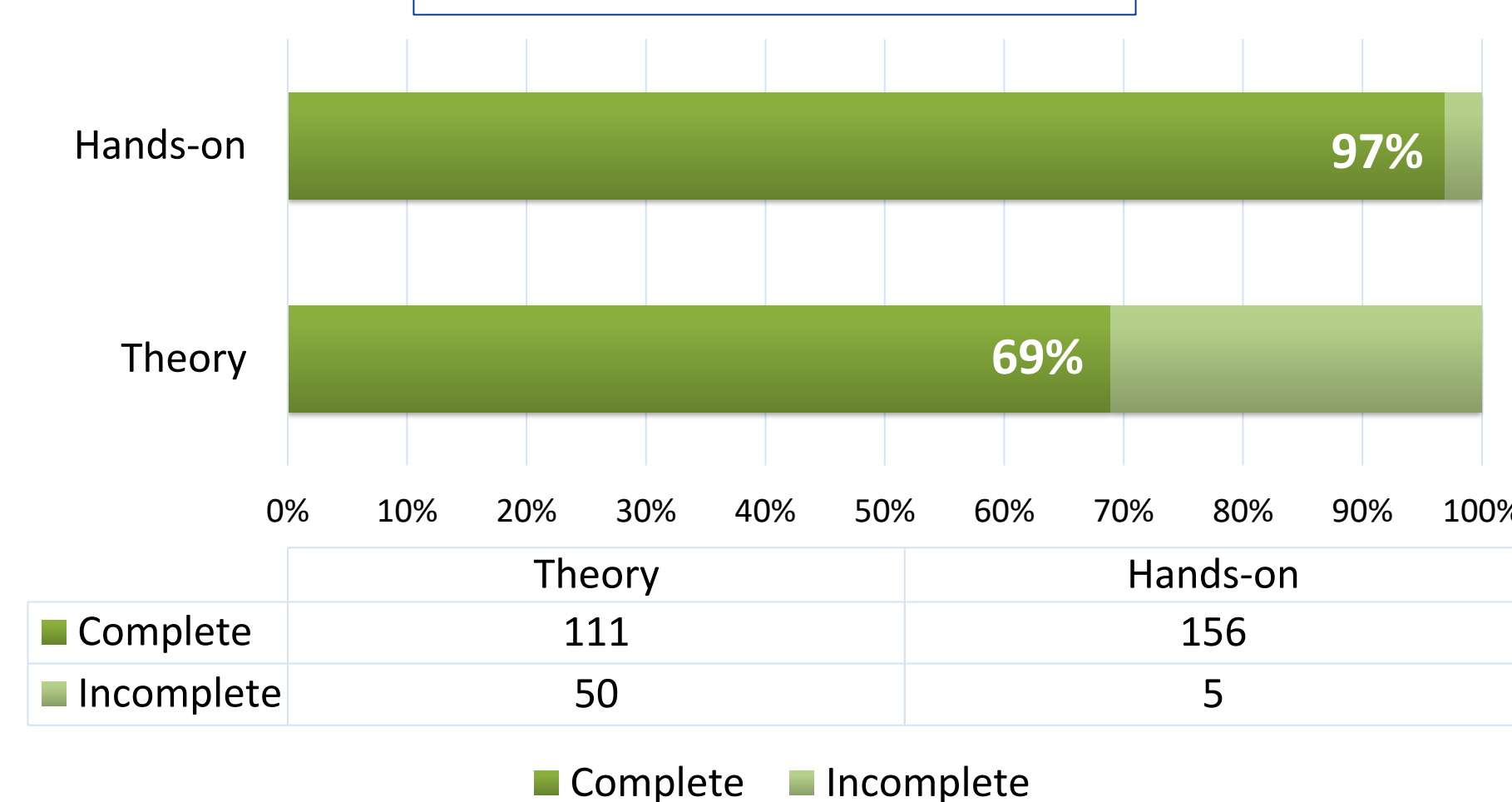
Acknowledgements: Health Sciences Centre Winnipeg Brain Health Group, EPIQ Committee members & NICU staff

Results

SENSE Cards in Infant Room - XmR Trend



Nurses DC Education – Dec 2023



Conclusion & Lesson Learned

- Rate of correct cards at bedside > 50%; consistent goal of 100 % not achieved
- Education: Theory = 69% ; Hands-on = 97%
- Lesson learned:
 - Consistency & compliance challenging to sustain
 - Excellent staff engagement; program expanded to all infants
 - Staff appreciative of standardized DC tool & enhanced parent engagement

Next Steps

- Maintain DC competency & compliance audits
- Integrate SENSE program into CPGs
- Plan sustainable program
- Audit outcomes (CNFUN)
- PDSA cycles:
 - All staff training
 - Parent education
 - Parent satisfaction
 - DC documentation