

# Thermoregulation upon admission to the NICU: a quality improvement project

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## Identifying the Problem

- 2020: **52%** of NICU admissions at TOH-GC were normothermic (36.5 – 37.5); **26%** were hypothermic
- 7/29 (24%)** of babies <32 weeks had an admission temperature  $\leq 36.0$

### Problem statement:

One quarter of babies <32 weeks are hypothermic on admission which may increase the risk of IVH and/or mortality

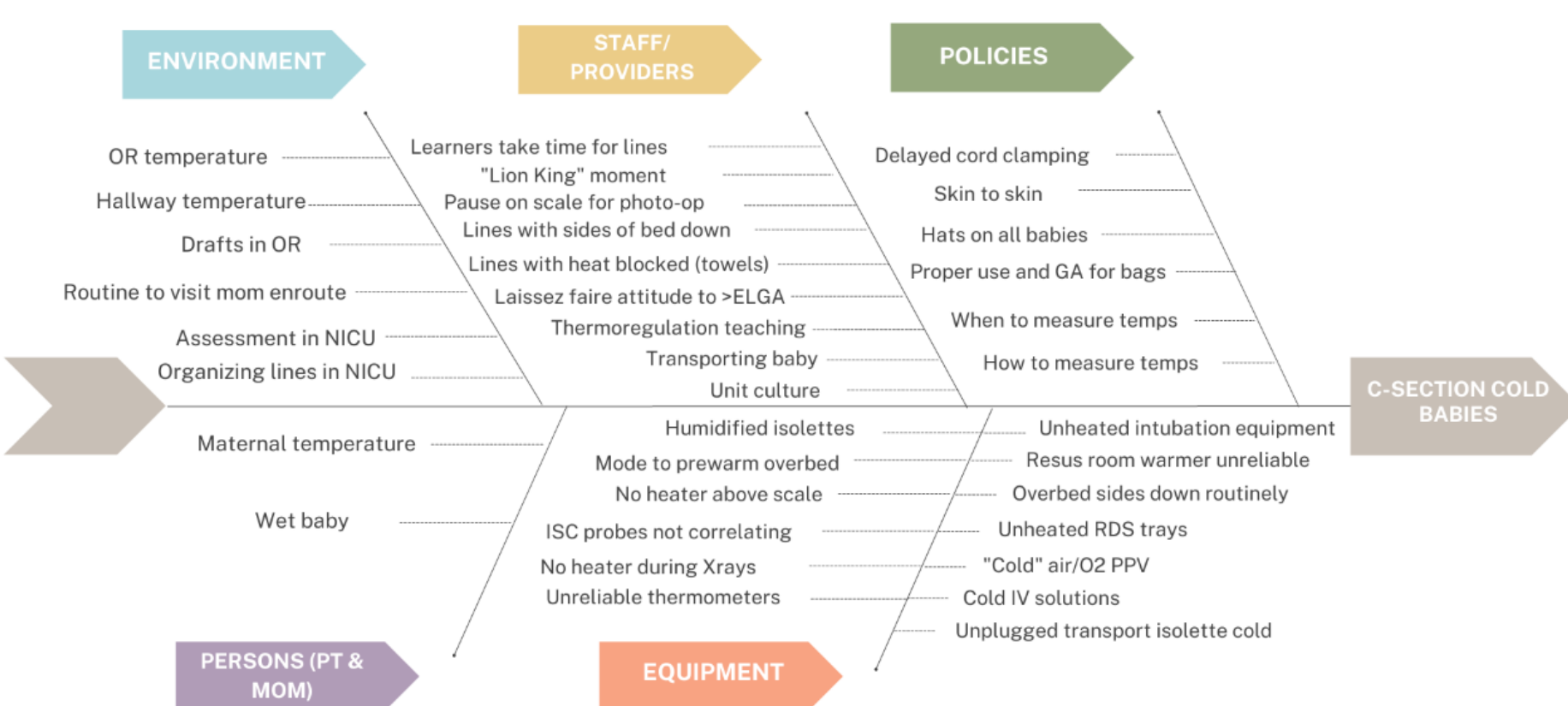
### Project aim

To reduce the proportion of very preterm infants with an admission temperature <36.5 by 50% in the next 12 months

**Balancing measure:** hyperthermia (> 37.5)

## Methods of Analysis

Fishbone Diagram C/S

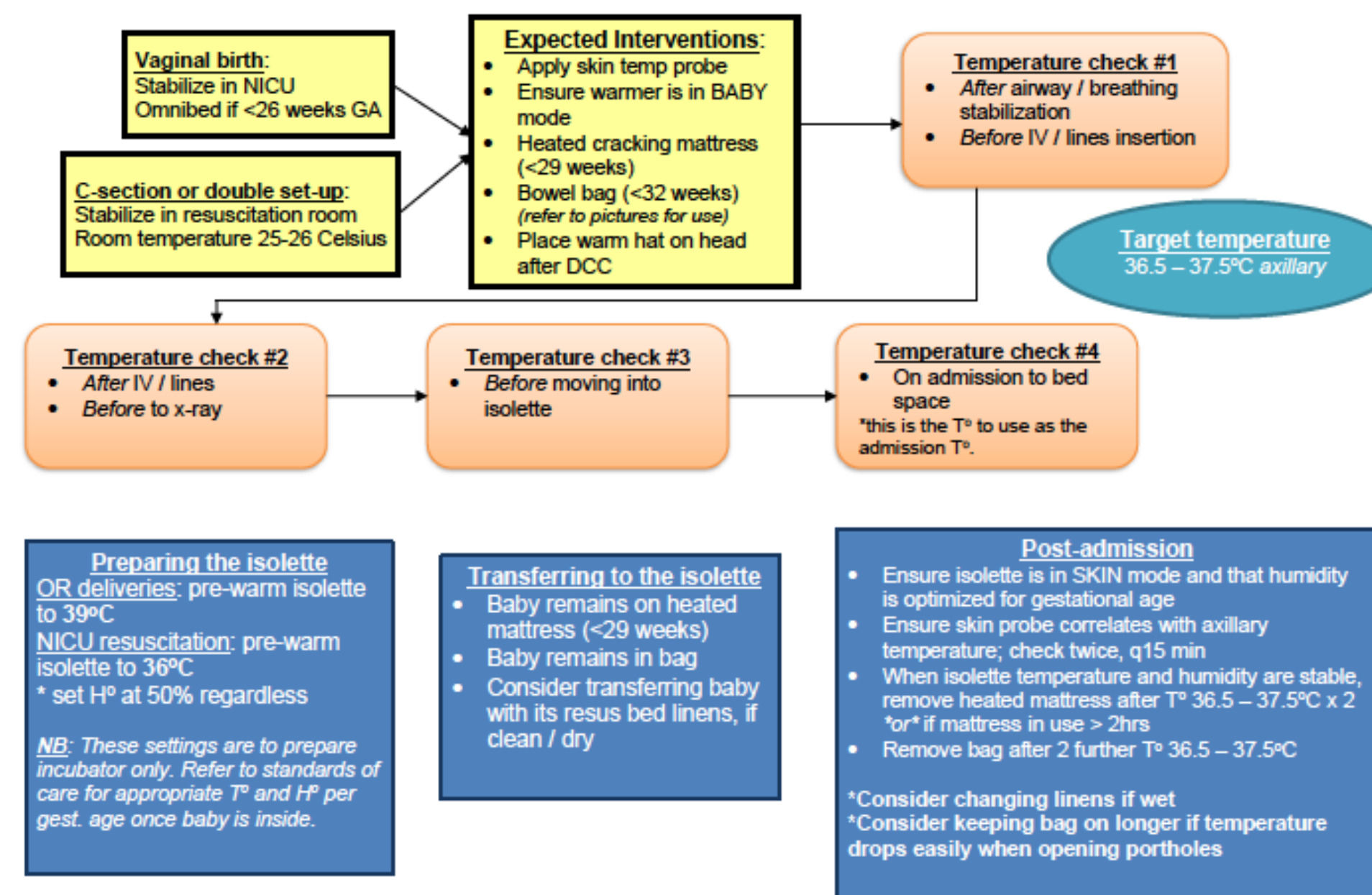


No clear process to:

- measure temperature during stabilization
- secure temperature probe
- prewarm the transfer isolette

## Intervention

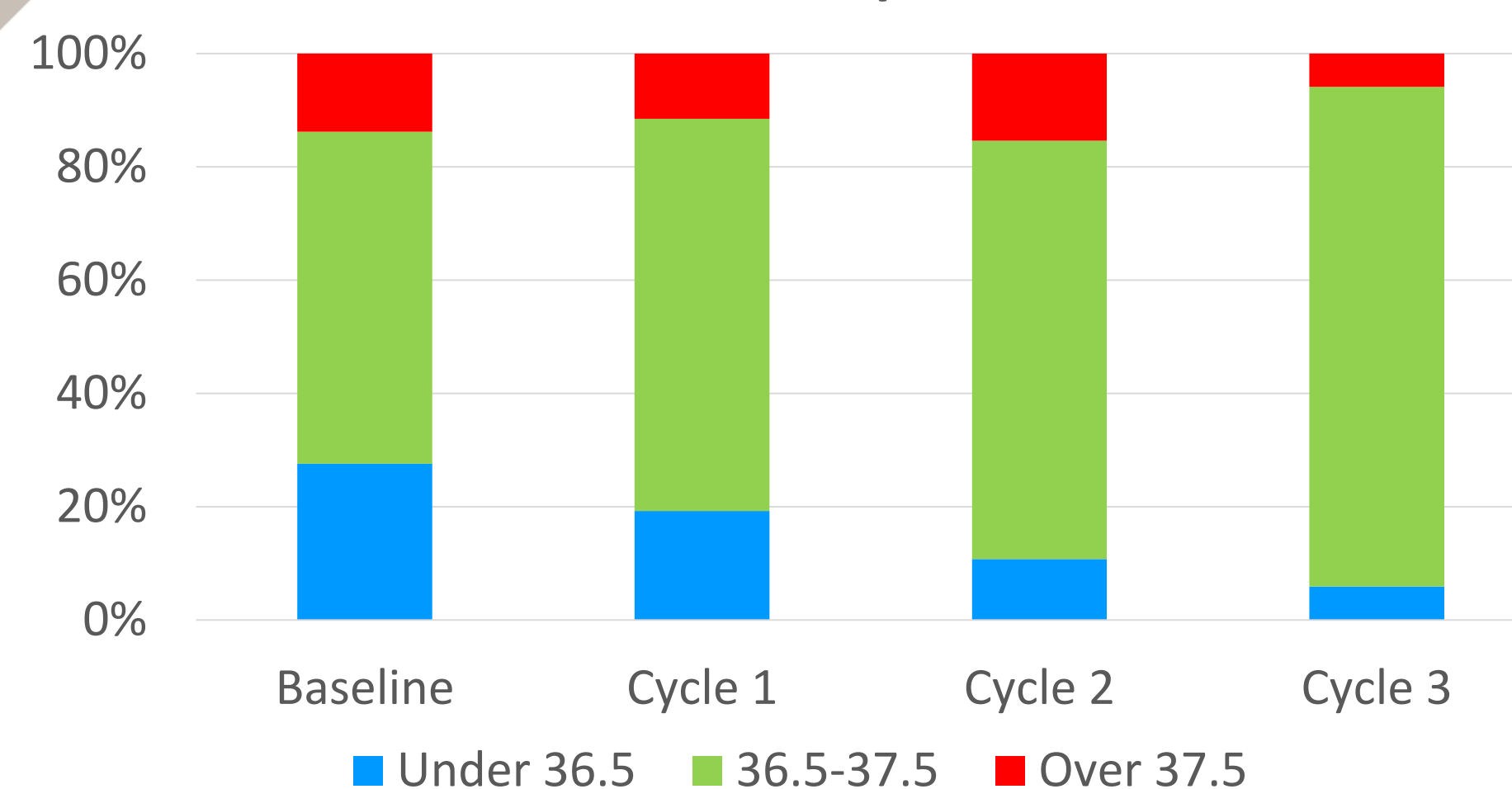
Thermoregulation from DR to post-admission for babies <32 weeks GA



Baseline: Ziploc bag for <29 w  
PDSA cycle 1: bowel bag for <29 w  
PDSA cycle 2: bread bag + heated mattress for <29 w  
PDSA cycle 3: bread bag for <29 w + heated mattress only if <1kg or <26 w

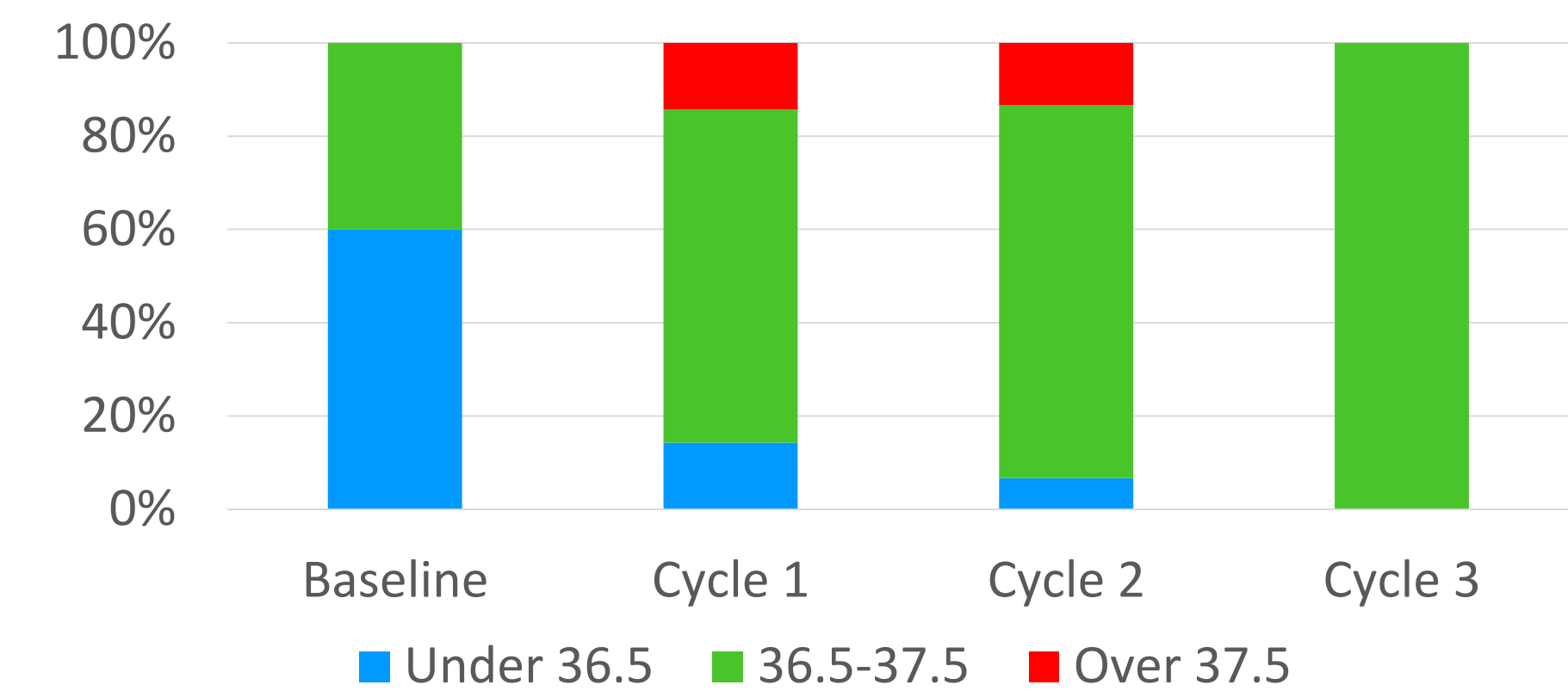
## Data / Results

### Admission temperature

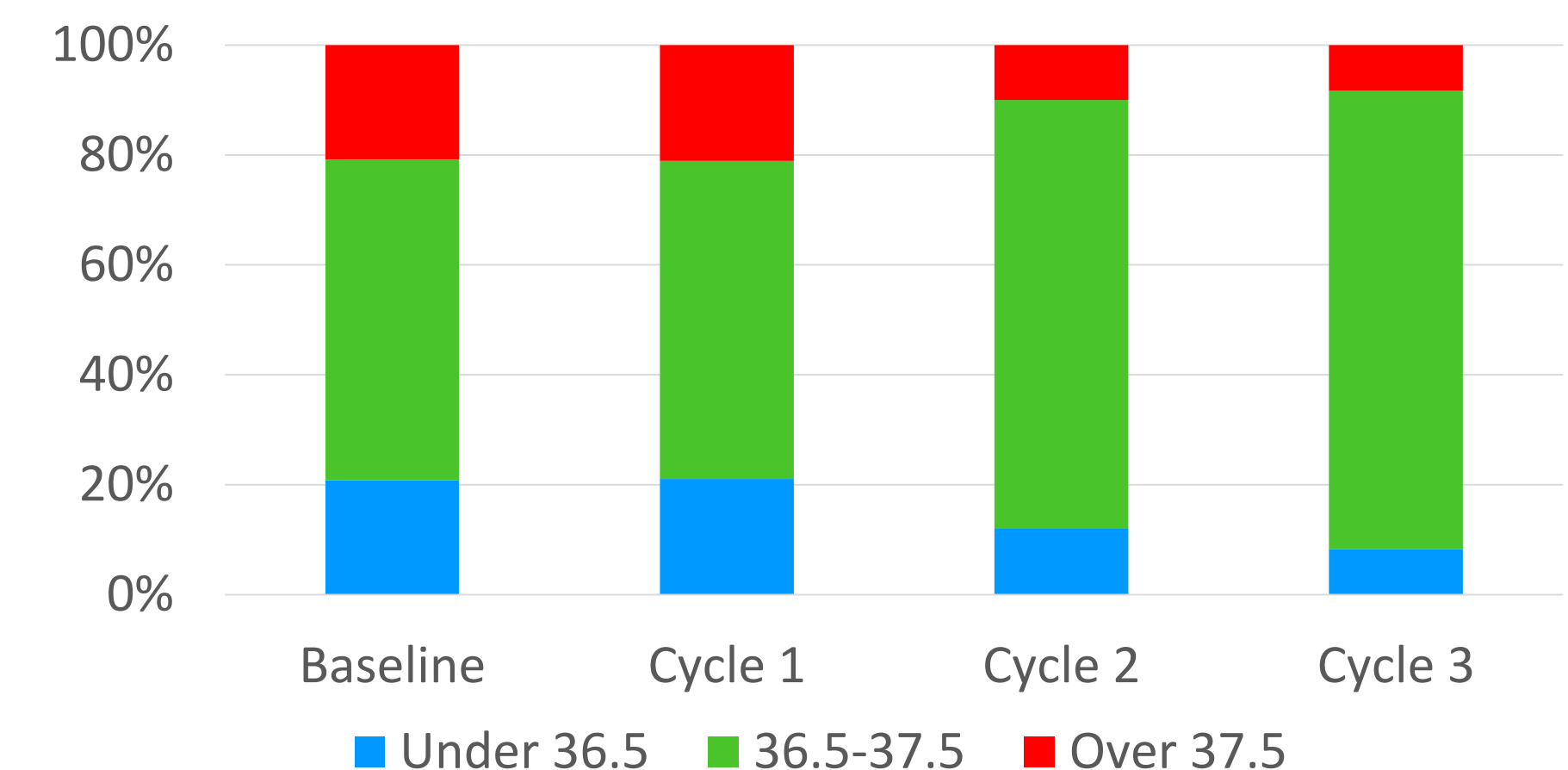


## Data / Results

### NICU stabilization



### OR stabilization/c-section birth



## Next Steps

- Change pre-set isolette temperature for OR stabilization (39.0 to 38.0)
- Keep isolette plugged until baby is in isolette and ready to transfer to the NICU

