

# Florida Perinatal Quality Collaborative

AT THE LAWTON AND RHEA CHILES CENTER FOR HEALTHY MOTHERS AND BABIES



Partnering to Improve Health Care Quality  
for Mothers and Babies

## Golden Hour Part I: Delivery Room Management update

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FPQC Neonatal-Focused Meeting

September 30, 2014

# Objectives

- ❖ Provide project overview
- ❖ Discuss initiative-wide results
  - ❖ Team work
  - ❖ Thermoregulation
  - ❖ Oxygen administration
  - ❖ Delayed cord clamping
- ❖ Discuss opportunities for improvement

# Selection of Pilot Hospitals

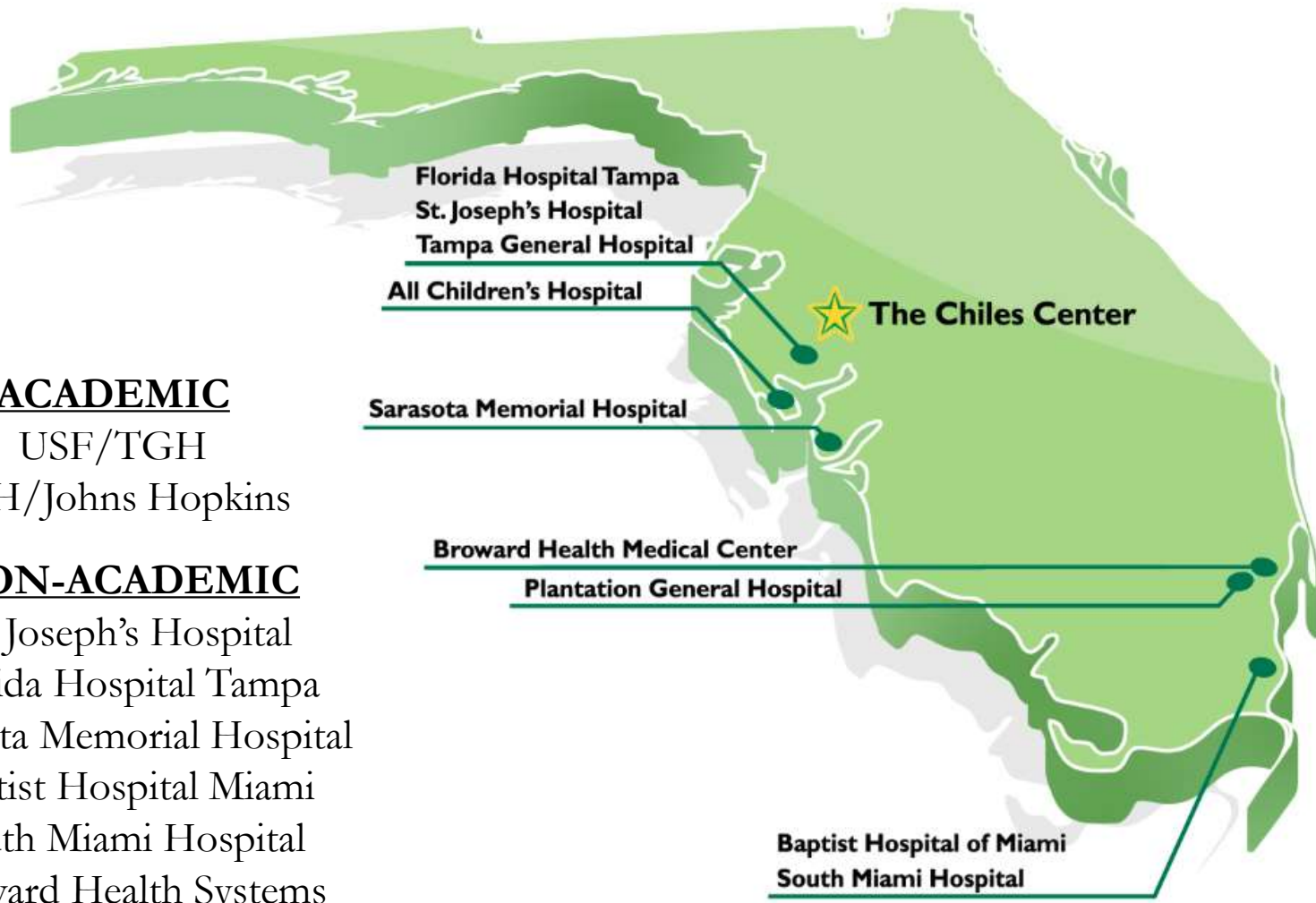
- ❖ Participate in FPQC
- ❖ Deliver babies with
  - ❖  $GA \leq 30 \frac{6}{7}$  wks
  - ❖ Anticipated  $BW \leq 1500g$
- ❖ Expressed interest in participation



## Looked for variety in:

- # births
- extent of existing quality infrastructure

# Selection of Pilot Hospitals



## ACADEMIC

USF/TGH

ACH/Johns Hopkins

## NON-ACADEMIC

St. Joseph's Hospital

Florida Hospital Tampa

Sarasota Memorial Hospital

Baptist Hospital Miami

South Miami Hospital

Broward Health Systems

Plantation Hospital

# General Descriptive Statistics

Data to 7/31/2014

Table 1. Mean birth weight and gestational age

Variable	N
Birth weight in grams	671
Gestational age in weeks	671

**\*n=565 in prospective database (i.e., after 10/1/2014)**  
**In 2012 ~2,250 VLBW infants in VON's FPQC database**  
→ From 10/2013-7/2014=9 months  
→ Estimate ~1,688 VLBW infants  
***Our efforts affected the care of ~33% of these infants***

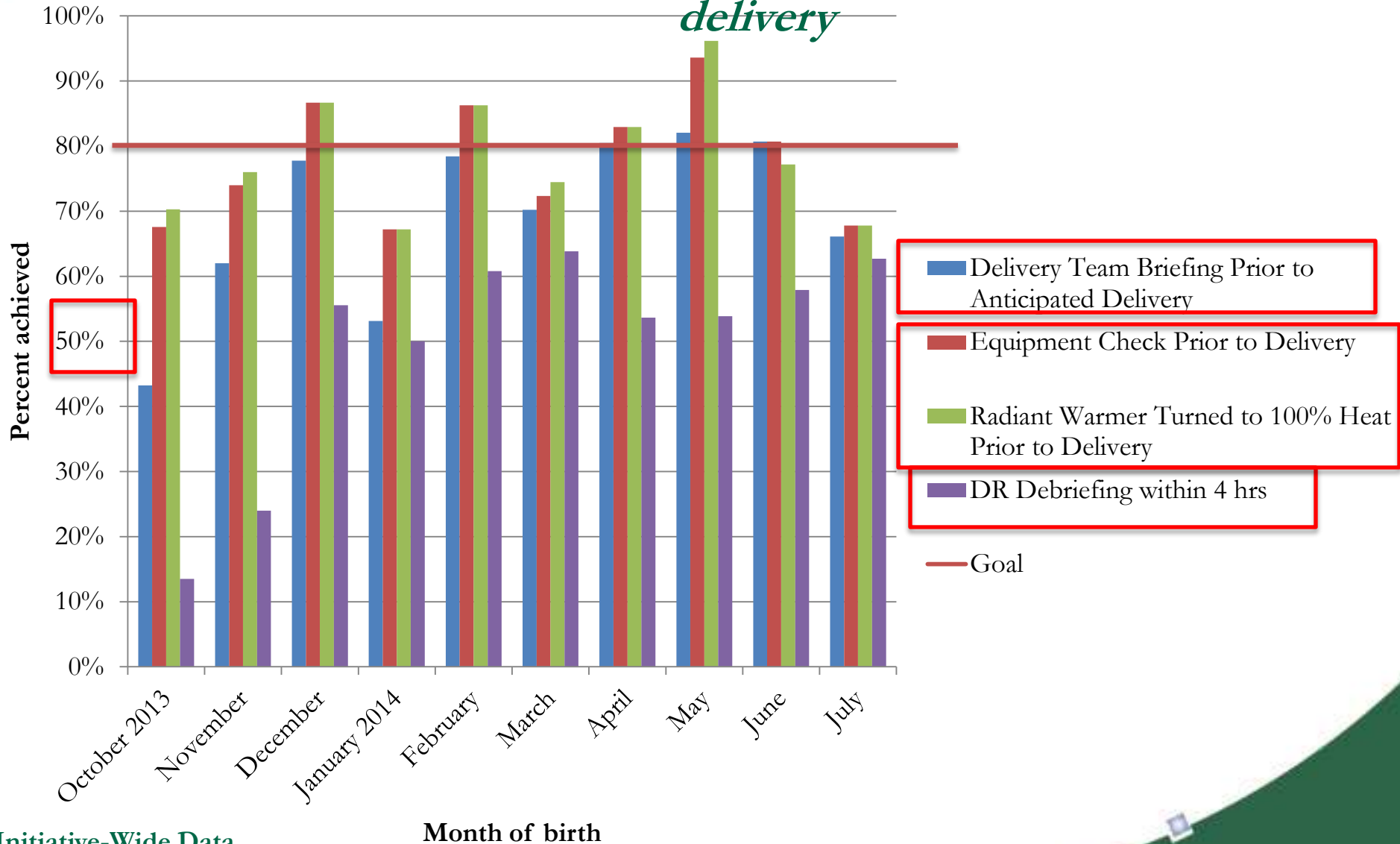
# Evidence-Based Measures in DR Management

1. **TEAMWORK**
2. **THERMOREGULATION**
3. **OXYGEN ADMINISTRATION**
4. **DELAYED CORD CLAMPING**

# Readiness bundle:

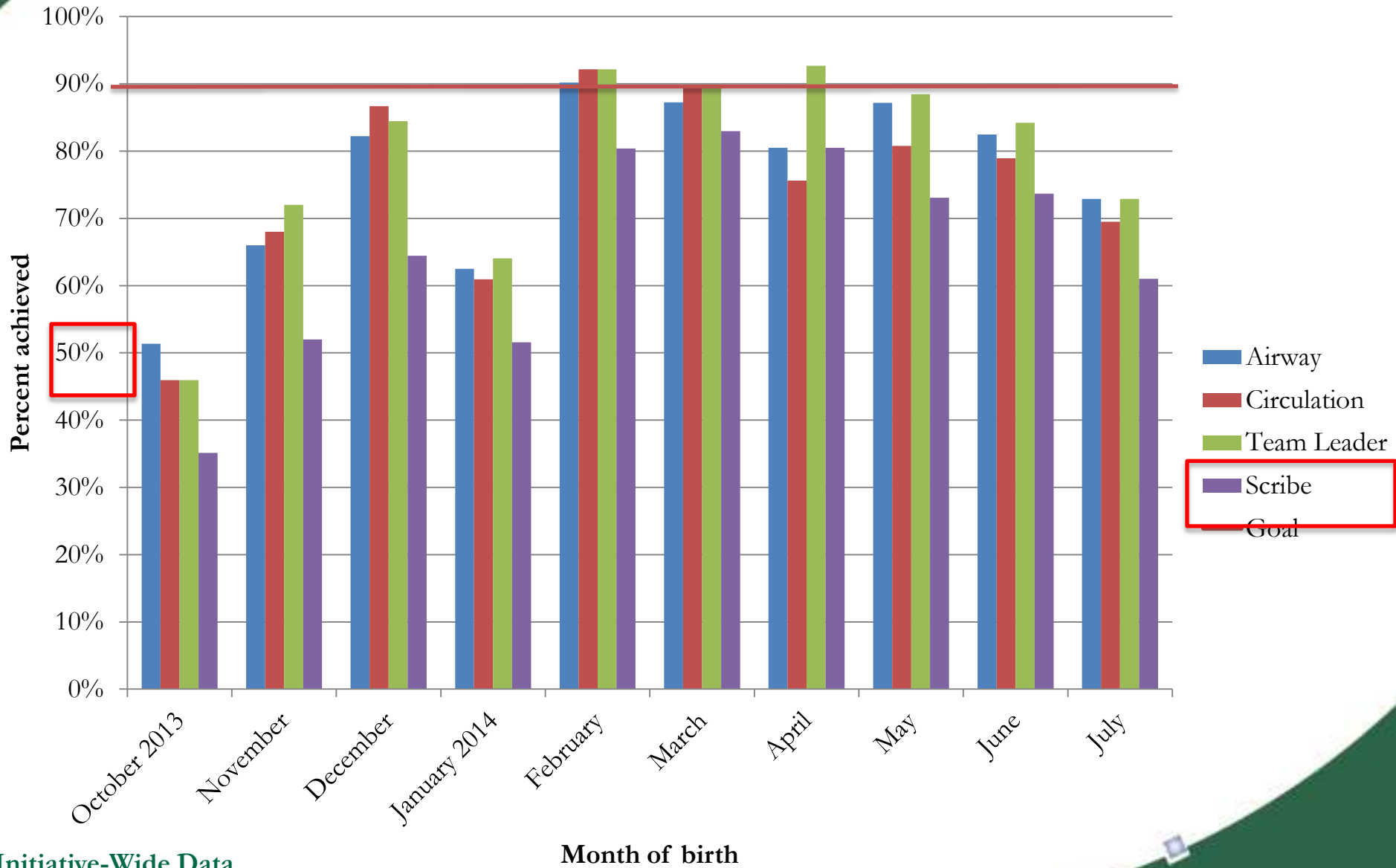
Pre-delivery DR preparation & DR debriefing

*Goal:  $\geq 80\%$  of DR team debriefings w/in 4 hours of delivery*



# Exclusive DR team roles

*Goal:  $\geq 90\%$  of DR teams having exclusive DR roles*

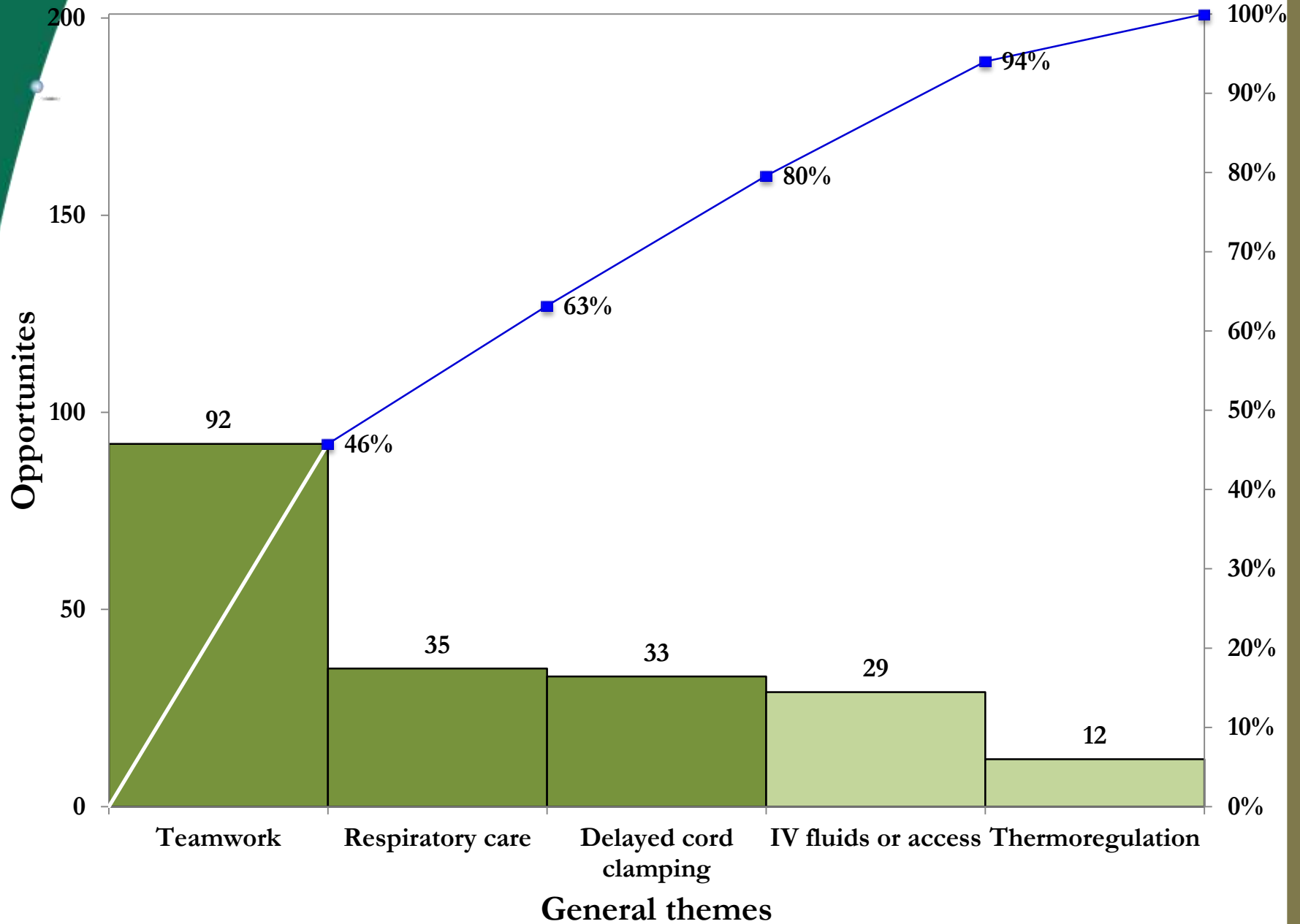




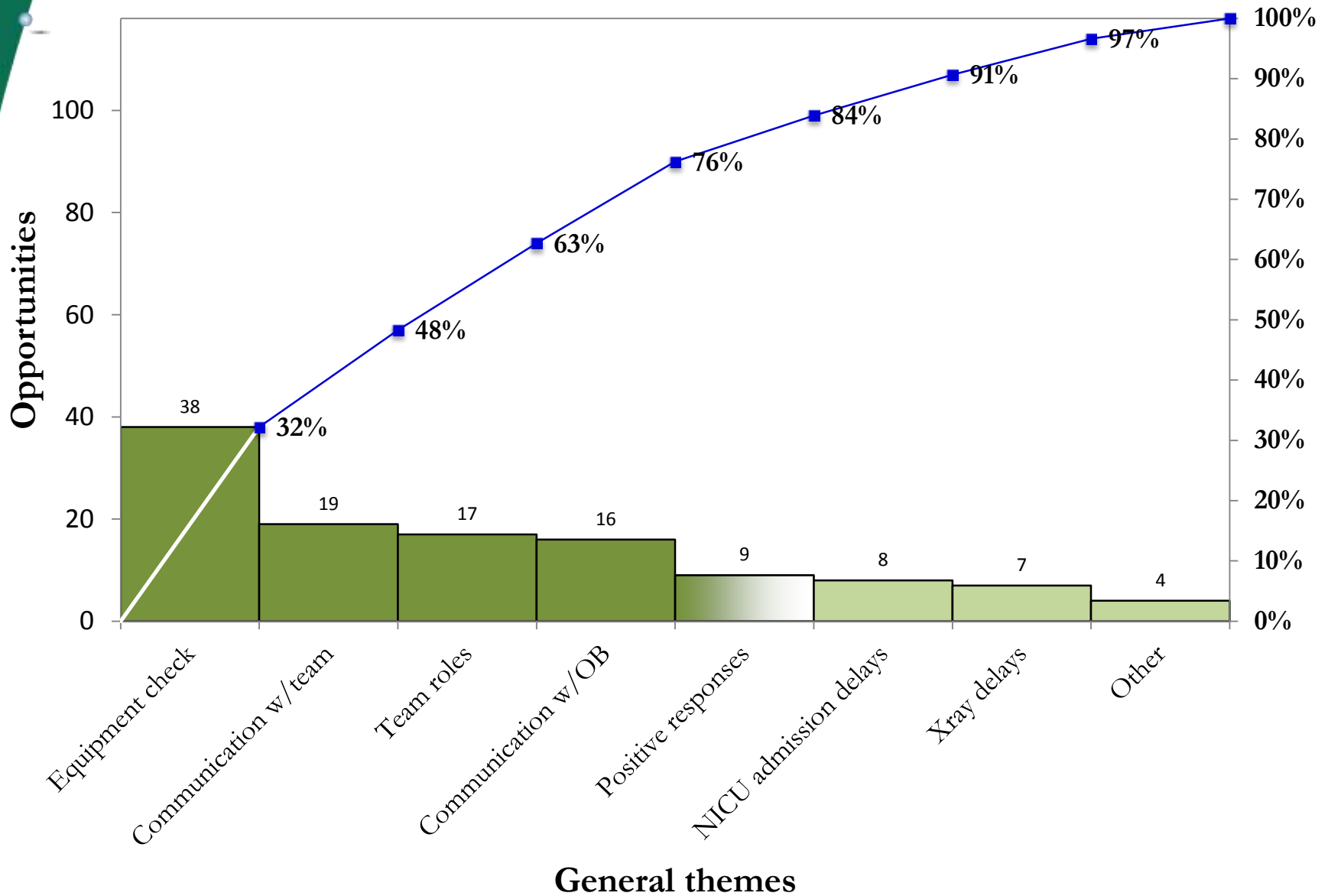
# Opportunities for improvement

- ❖ Advantage of debriefings
- ❖ Goal: 1-3 documented opportunities for each delivery
- ❖ Total # opportunities to date: 201 (for 565 deliveries)
- ❖ Pareto principle or the “80-20 rule”
  - 80% of output is created by 20% of input
  - Opportunities grouped into general themes
  - Helps highlight important areas to direct focused efforts

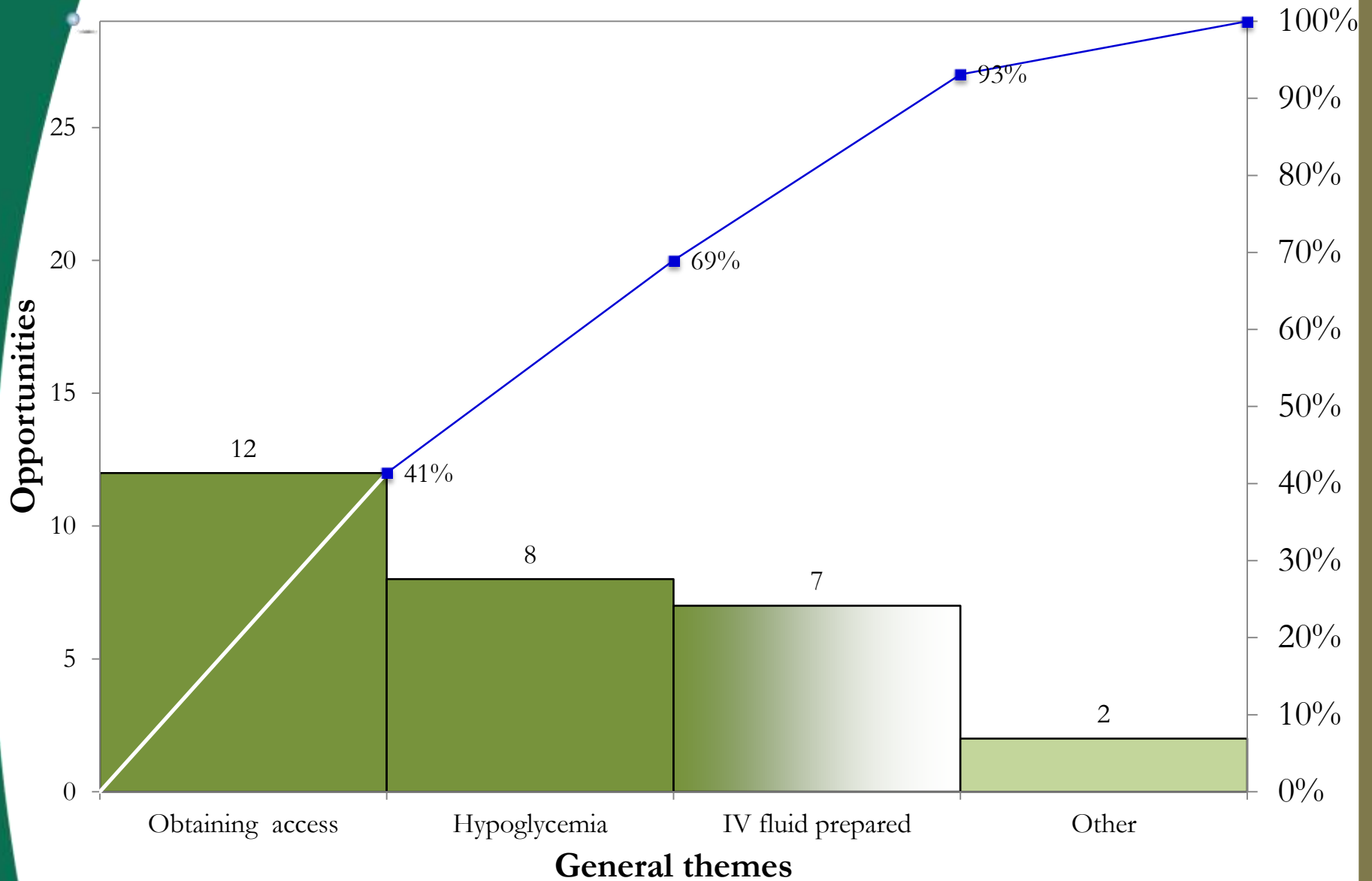
# Opportunities for improvement (n=201)



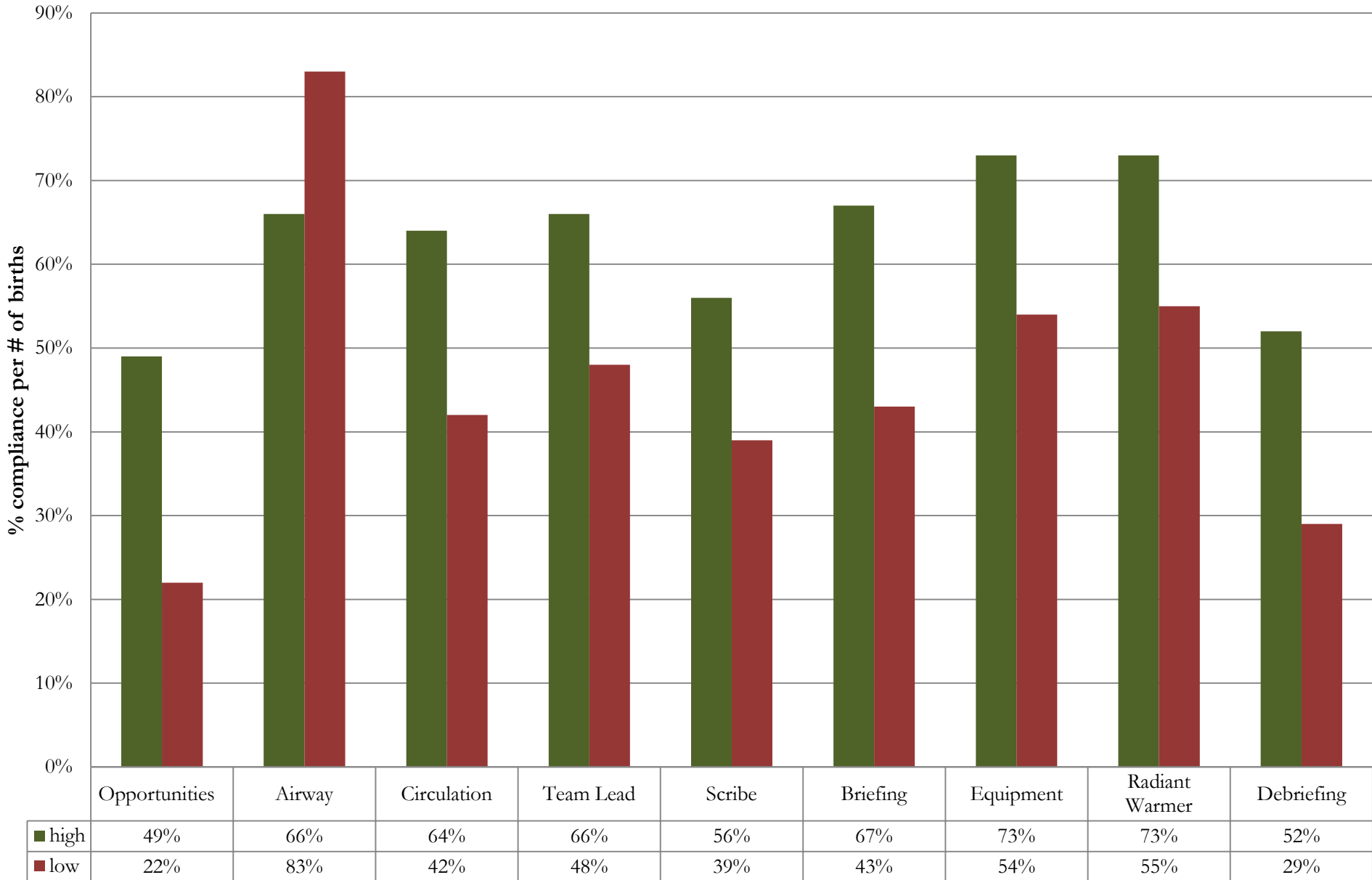
# Teamwork opportunities for improvement (n=118)



# IV fluids & access opportunities for improvement (n=29)



# Effects of level of engagement on team work



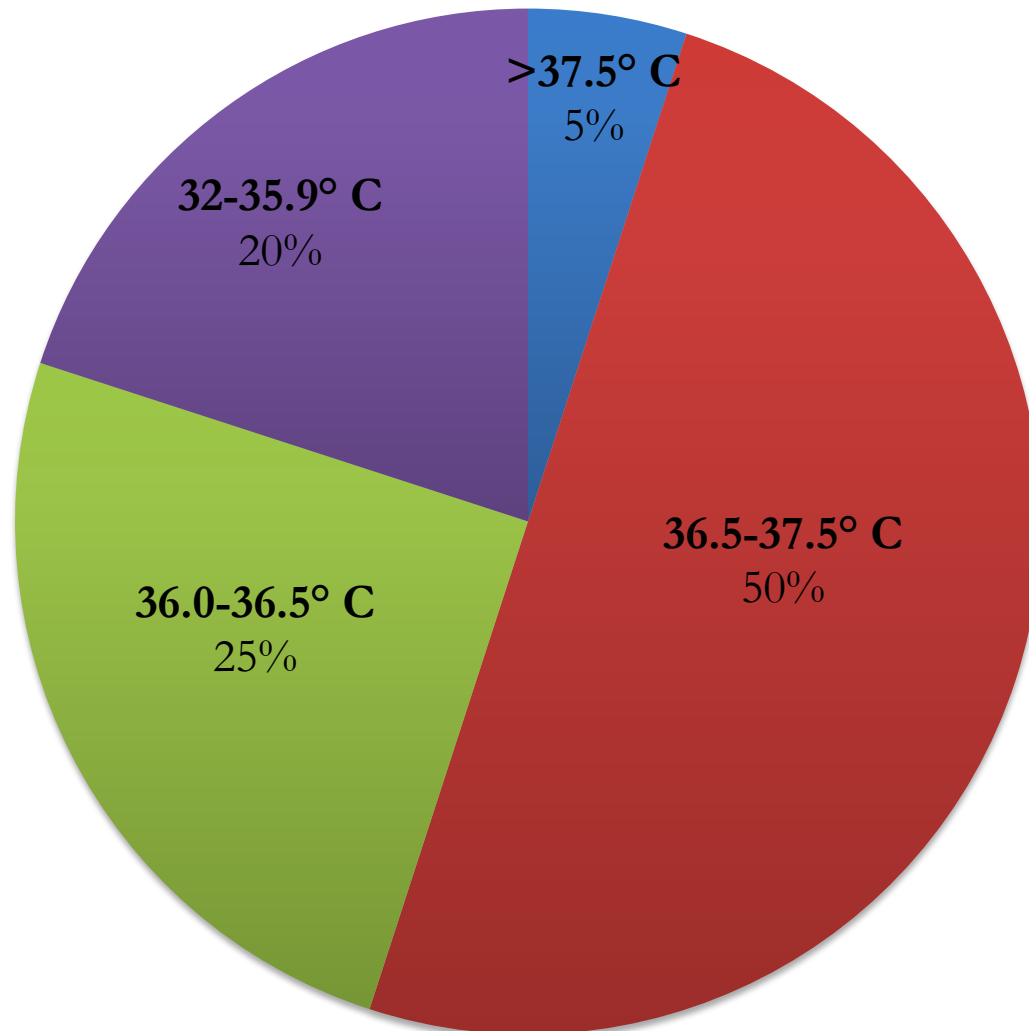
Measures of team work

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# Admission Temperature

Goal temperature: 36.5-37.5° C

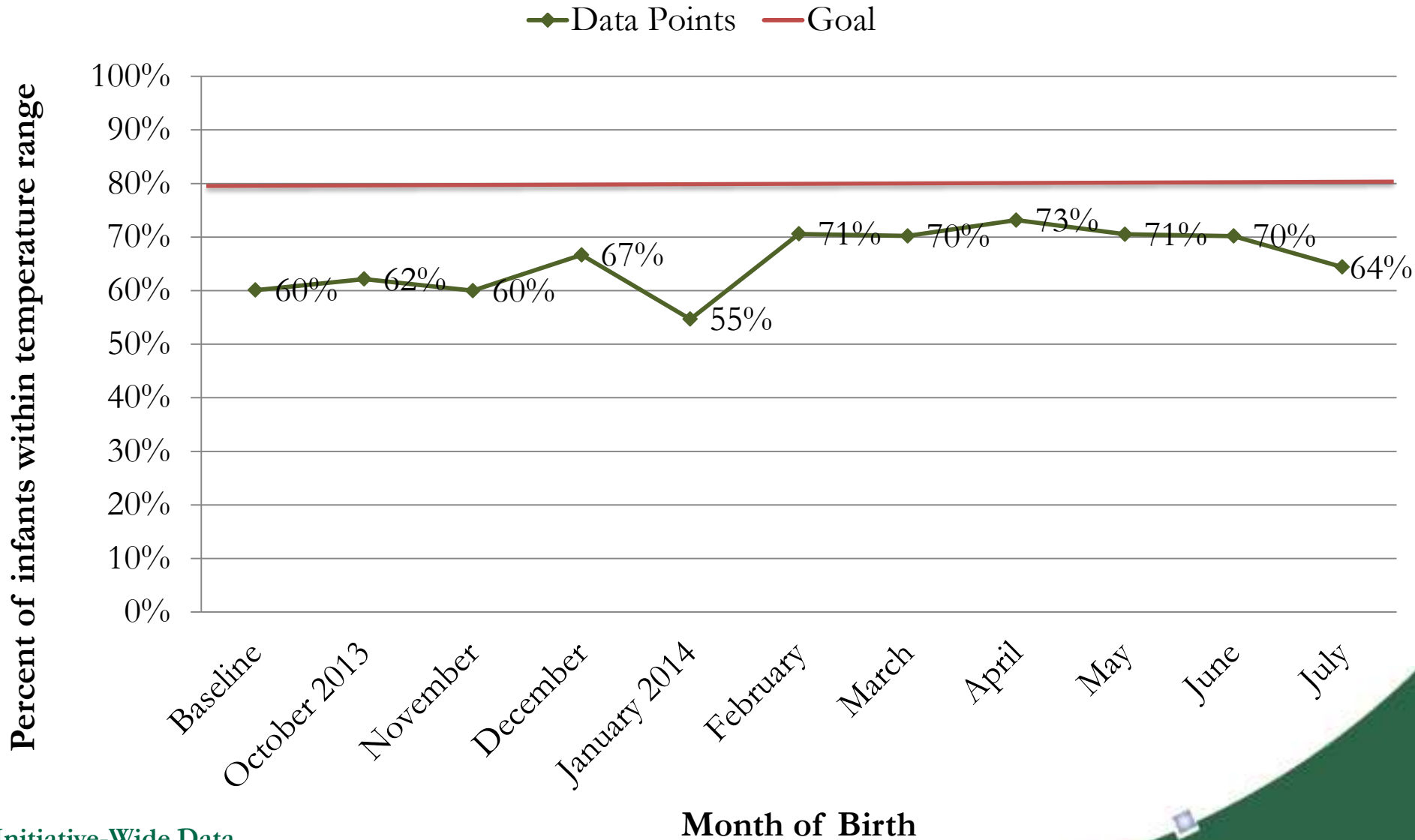


**~50% of VLBWs  
have abnormal  
admission  
temperature**

\*FPQC data is similar to  
VON network data

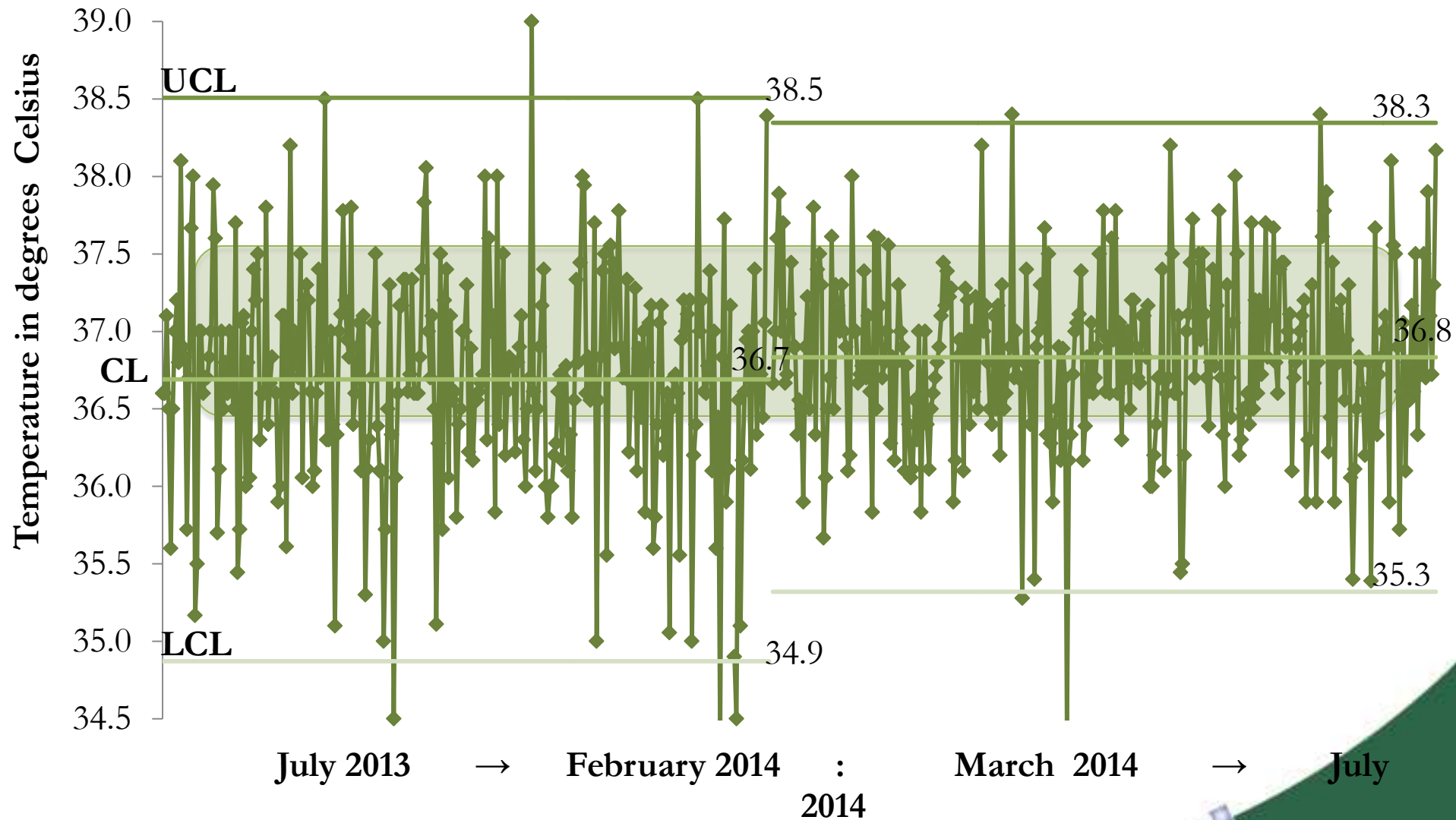
# NICU admission temperature

*Goal:  $\geq 80\%$  with NICU admission temperature of  $36.5^{\circ}$ - $37.5^{\circ}\text{C}$*

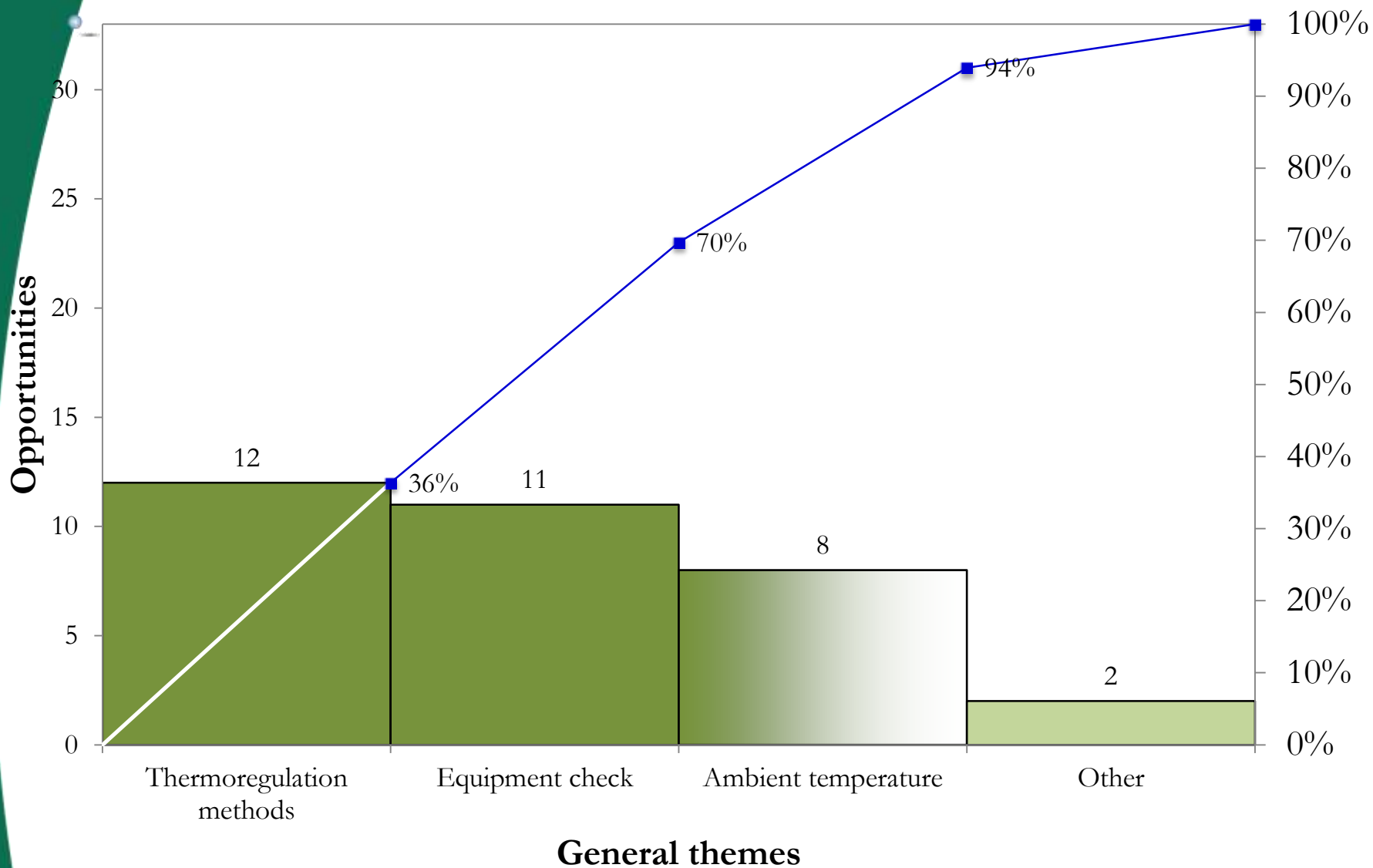




# NICU admission temperature



# Thermoregulation opportunities for improvement (n=33)



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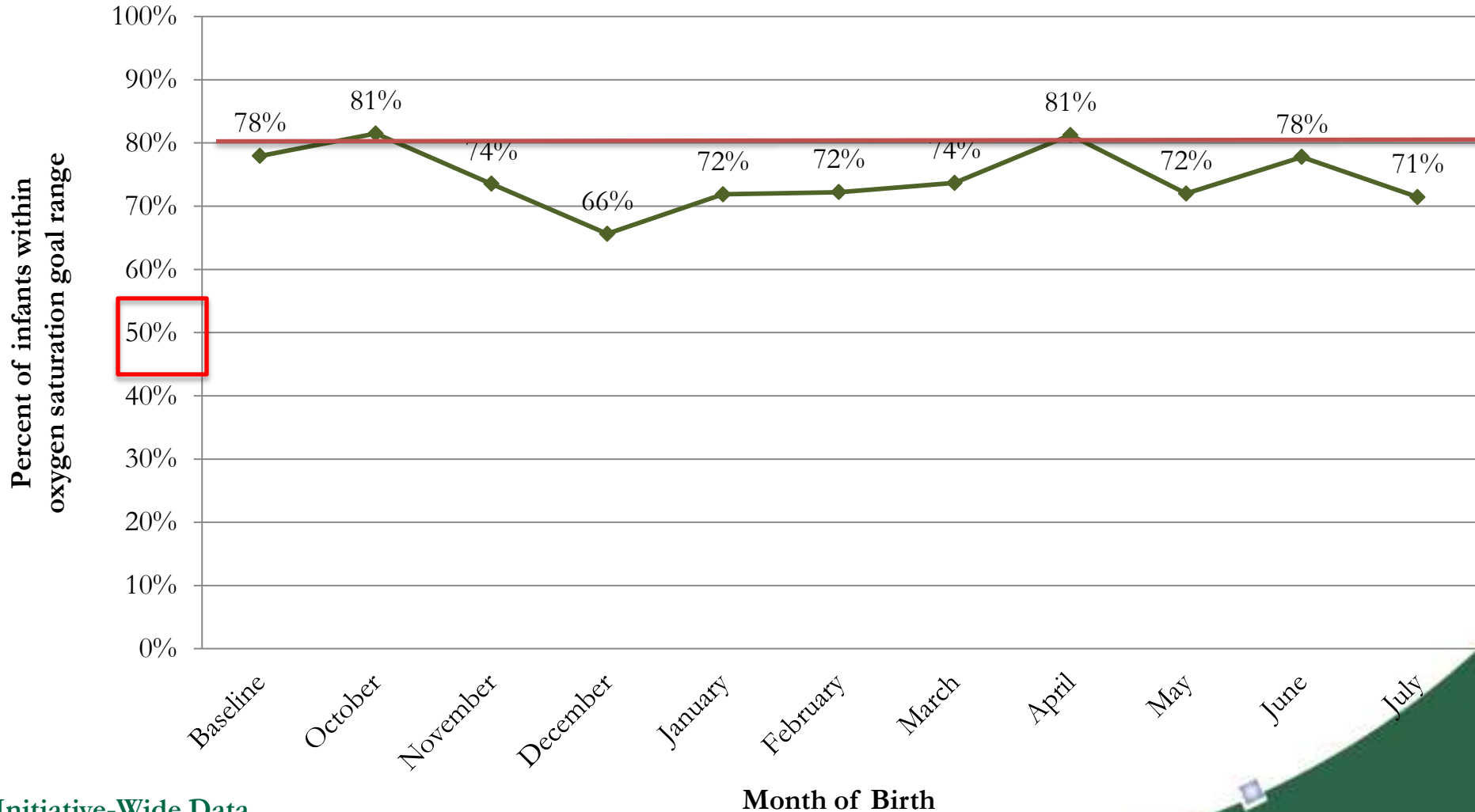
# Pre-ductal oxygen saturation at 10 minutes

*Goal:  $\geq 80\%$  compliance with NRP oxygen targets (85-95%) at 10 min*

The following infants are excluded –

1. Infants with SPO<sub>2</sub> >95% despite receiving FiO<sub>2</sub> of 21% and
2. Infants with SPO<sub>2</sub> <85% despite receiving FiO<sub>2</sub> 100%

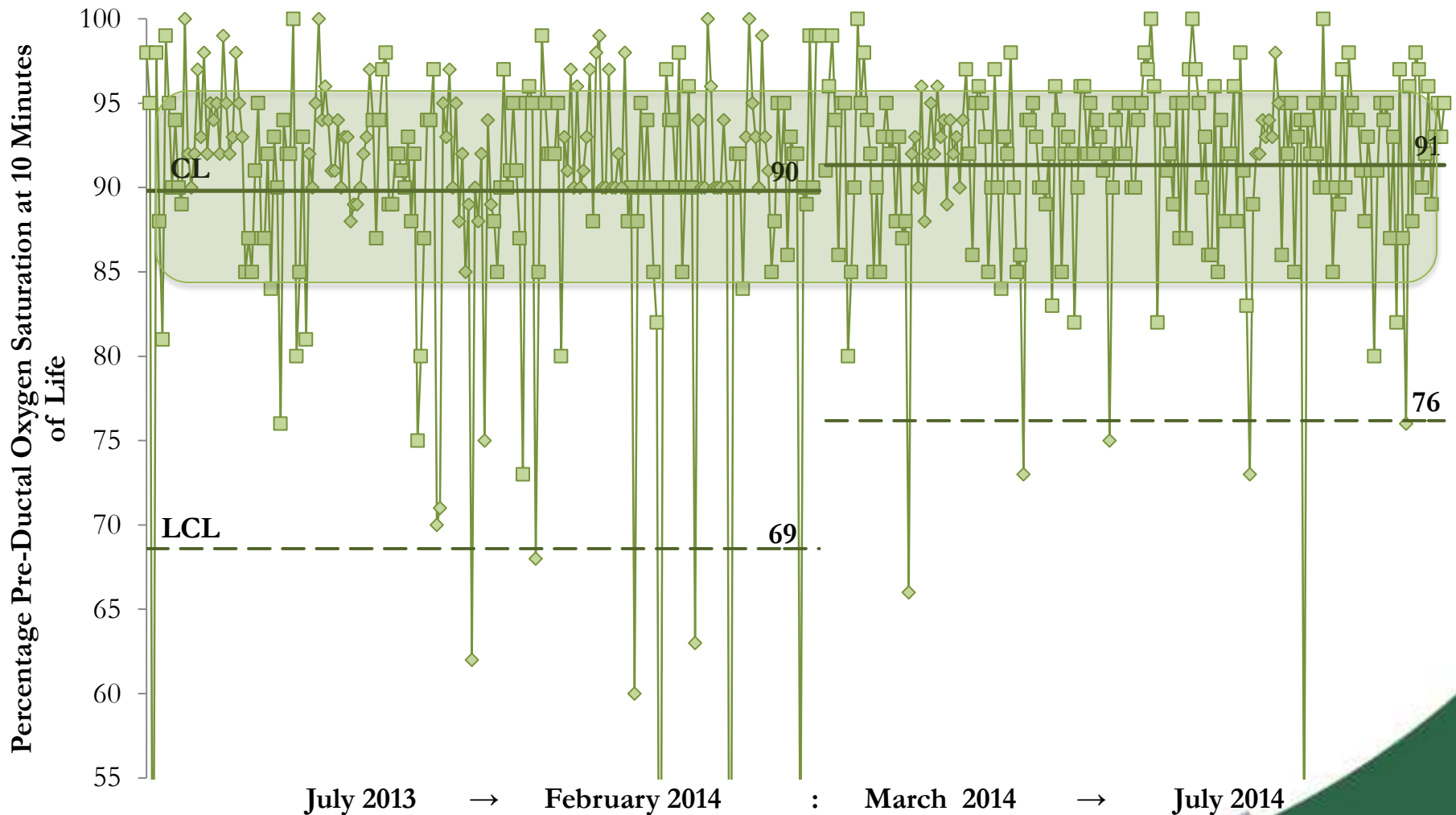
◆ Data points with excluded infants    — Goal



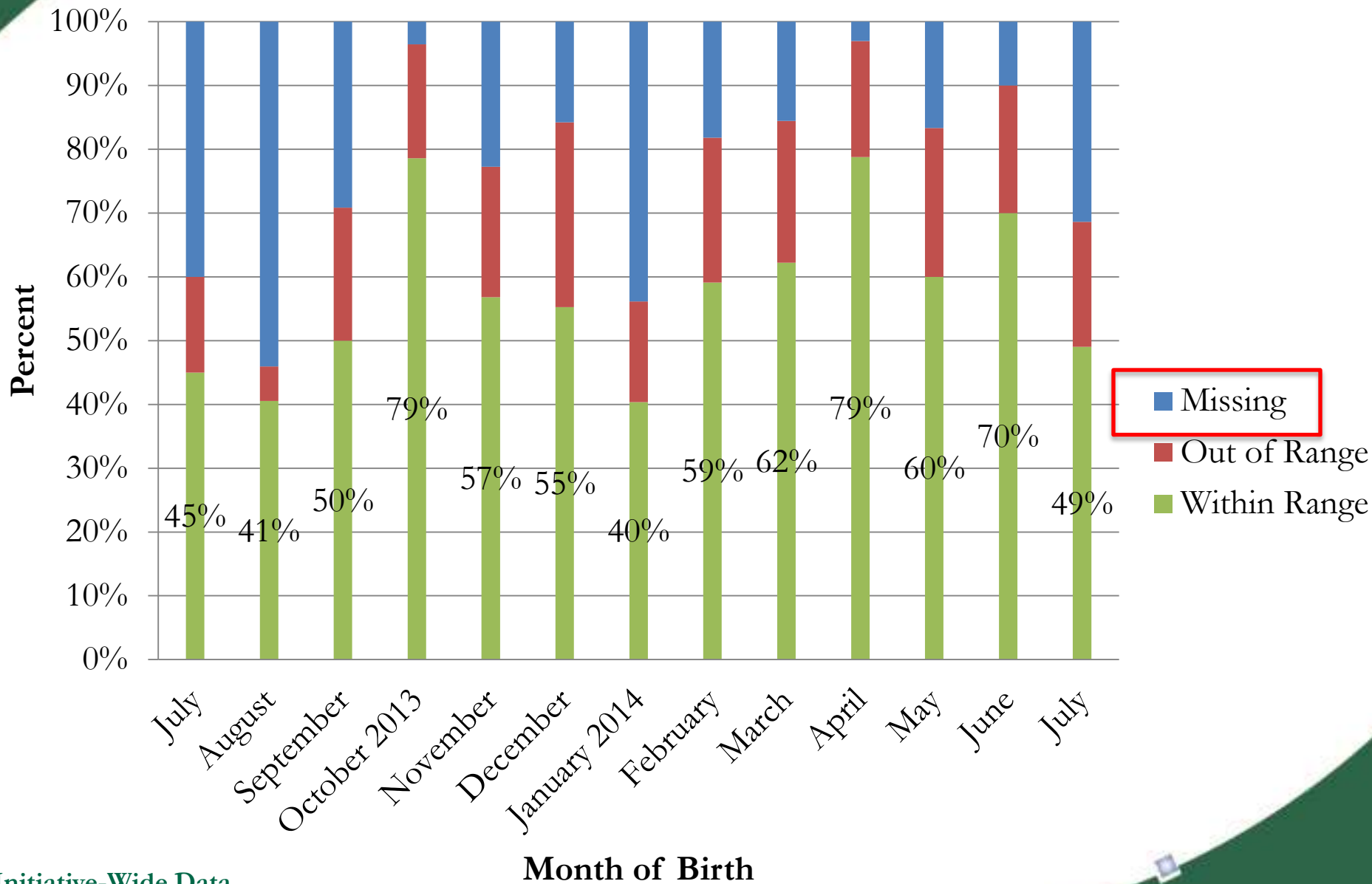
# Pre-ductal oxygen saturation at 10 minutes

*Note: The following infants are excluded –*

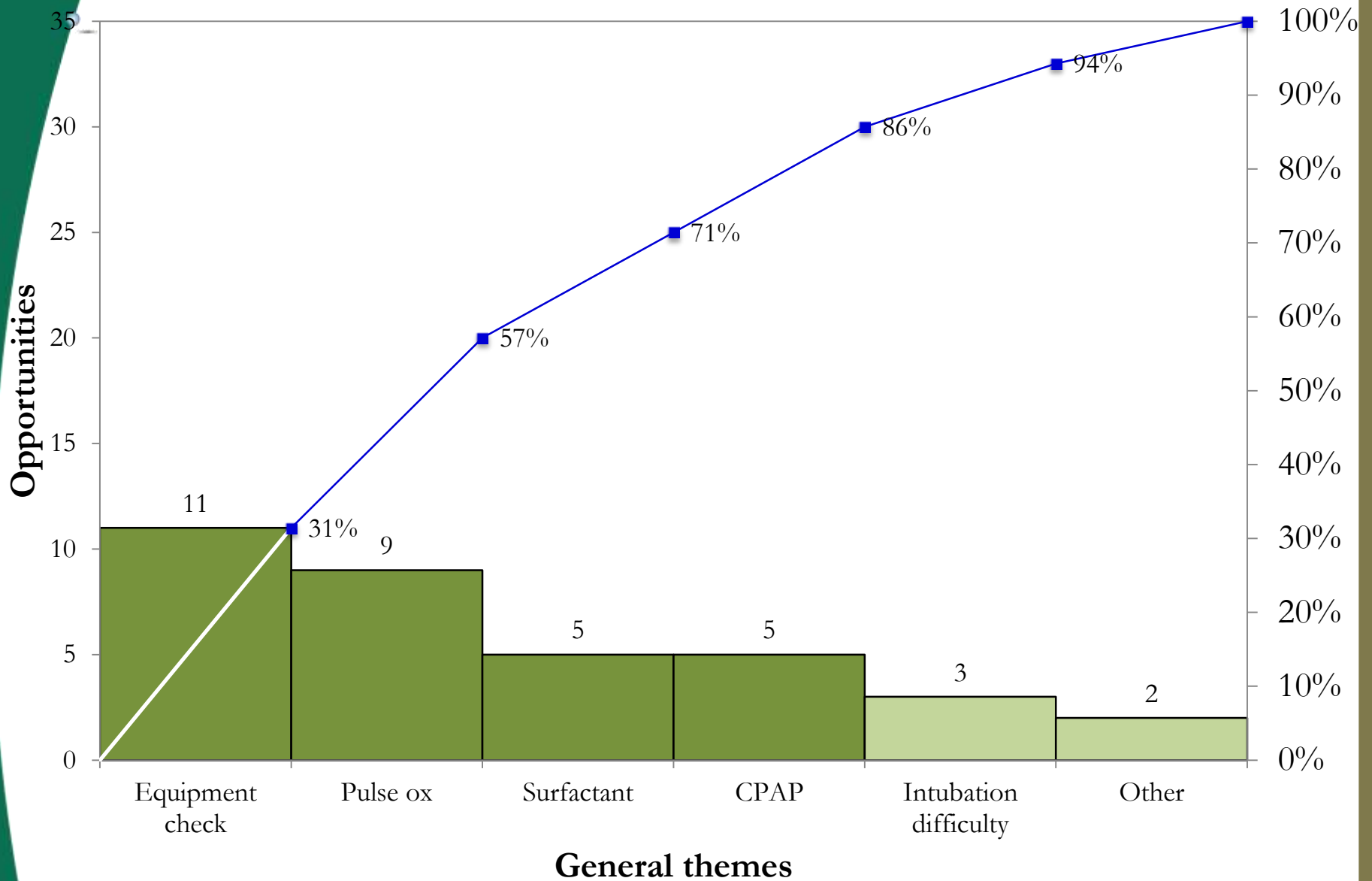
- 1. Infants with SPO2 >95% despite receiving FiO2 of 21%*
- 2. Infants with SPO2 <85% despite receiving FiO2 100%*



# Pre-ductal oxygen saturation at 10 minutes



# Respiratory care opportunities for improvement (n=35)



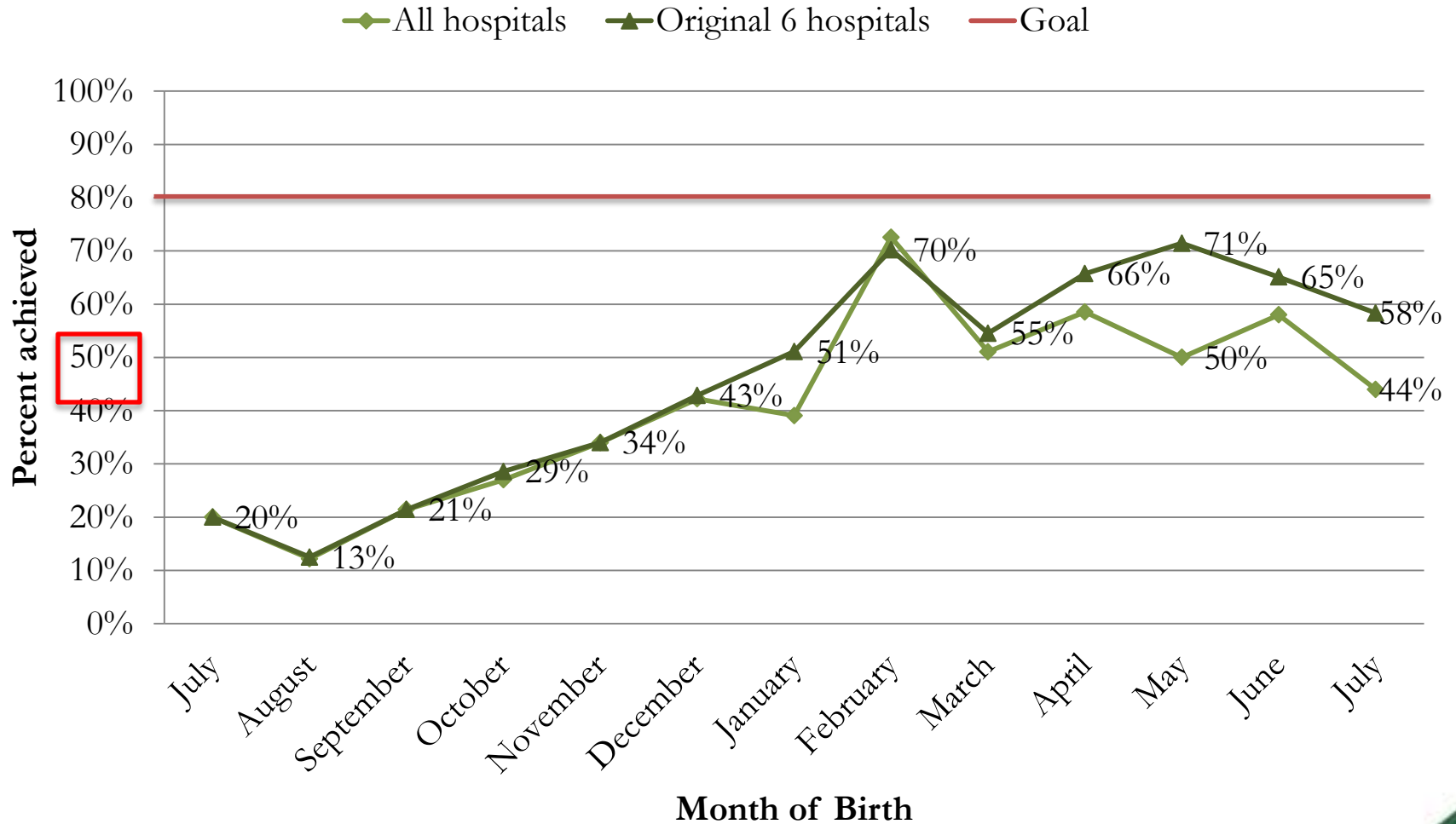
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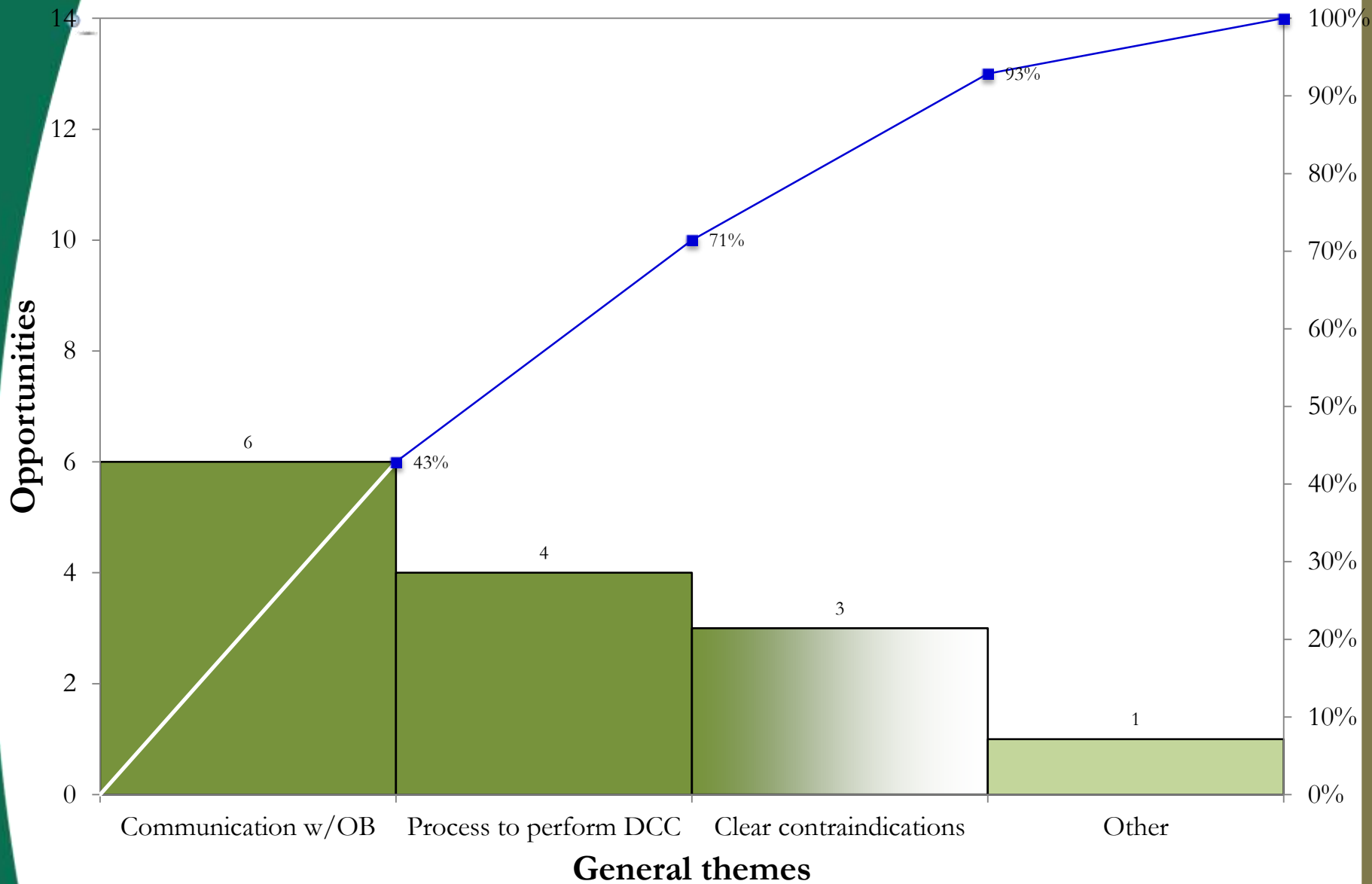


# Delayed Umbilical Cord Clamping

*Goal:  $\geq 80\%$  compliance with delayed cord clamping for 30-60 seconds*



# Delayed cord clamping opportunities for improvement (n=14)



# Some final thoughts...

- ❖ Our efforts are affecting the care of a significant number of VLBWs delivered in FL
- ❖ Engage your team members & share how well your site is doing with them!
- ❖ There is always room for improvement – keep working through your PDSA cycles.
- ❖ Start developing strategies to sustain your gains.