

# IMPROVING THE FREQUENCY AND DURATION OF SKIN TO SKIN HOLDING TO PROMOTE PARENTAL CONFIDENCE IN NICU

Elizabeth Jeanson PT DPT; Sheri Fischer, MSN RN CBC; Andrea Bunn DNP RN; David Munson, MD; Jessica Schnyers BSN RN; Nate Harris BSN RN

## OBJECTIVE

Sanford USD Medical Center supports skin to skin (STS) holding for infants in the neonatal intensive care unit. STS holding in the preterm infant population has been shown to improve:

- velocity of growth
- parent infant bond
- breast milk production
- breast feeding rates
- brain density and function
- sleep and respiratory stability
- length of stay

The goal of this project was to increase the frequency of STS holding by 20% and duration of STS holding and parental confidence by 40% by September 2019.

## BACKGROUND

This project examined the frequency and duration of STS holding at the Sanford USD Medical Center. A trend to initiate at later gestations and at low frequency was noted.

Parental confidence prior to initiation of the STS holding wrap was assessed using the PREEMI Parental Confidence Inventory (PPCI). Reduced confidence in providing daily cares and interactions was noted.

Sanford strives for excellent patient experience. Parental confidence can be used as an accurate reflection of positive patient experience.

## ACTIONS TAKEN

April/May 2019 - Chart review for baseline data on frequency, duration of STS holding and survey inventory of parental confidence for basic infant care were completed.

- STS holding frequency = 31% of the opportunities
- Holding duration = 95 minutes
- Parent confidence for caring for their infant = 1.85 on a 3 point scale (Preemi Parental Confidence Inventory)

A trial of a hands free STS holding wrap was introduced to increase the frequency and duration of skin to skin holding

July 2019 -Applicable parent infant dyads were recruited from those families with stable babies not requiring mechanical ventilation.

- Parents voluntarily participated in the program
- Education was completed for parents and staff with follow up support
- Kangaroo care devices were distributed

## METRICS

### PLAN

Extend the frequency and duration of STS holding in the NICU population through use of a holding wrap.

### DO

Collect parental confidence data and compare to pre and post wrap use.

### STUDY

Review charting to determine change in duration and frequency of holding. Analyze change in parental confidence.

### ACT

Expand study scope to include infants requiring mechanical ventilation. Share Stage 1 study results with enterprise NICUs.



## ANALYSIS

August 2019 - Post implementation scores were obtained.

- Parental confidence increased by 62% on the PPCI
- Duration of STS holding increased by 62%
- Frequency of STS holding increased by 26%

Post intervention data continues to be collected.

Factors affecting frequency include:

- Acuity of nurse assignment
- Overall morale in the unit
- Staffing
- Parent confidence for asking to hold baby
- Unexpected infant instability
- Availability of extra staff to help
- Resistance to change
- Disbelief in the value of STS holding

## KEY QUALITY PARAMETERS

**Patient Centered:** Improving parental confidence and infant benefit through increased duration and frequency of STS holding.

**Data Driven:** Baseline data indicated that both duration and frequency of holding were sub par based on national standards noted in the literature.

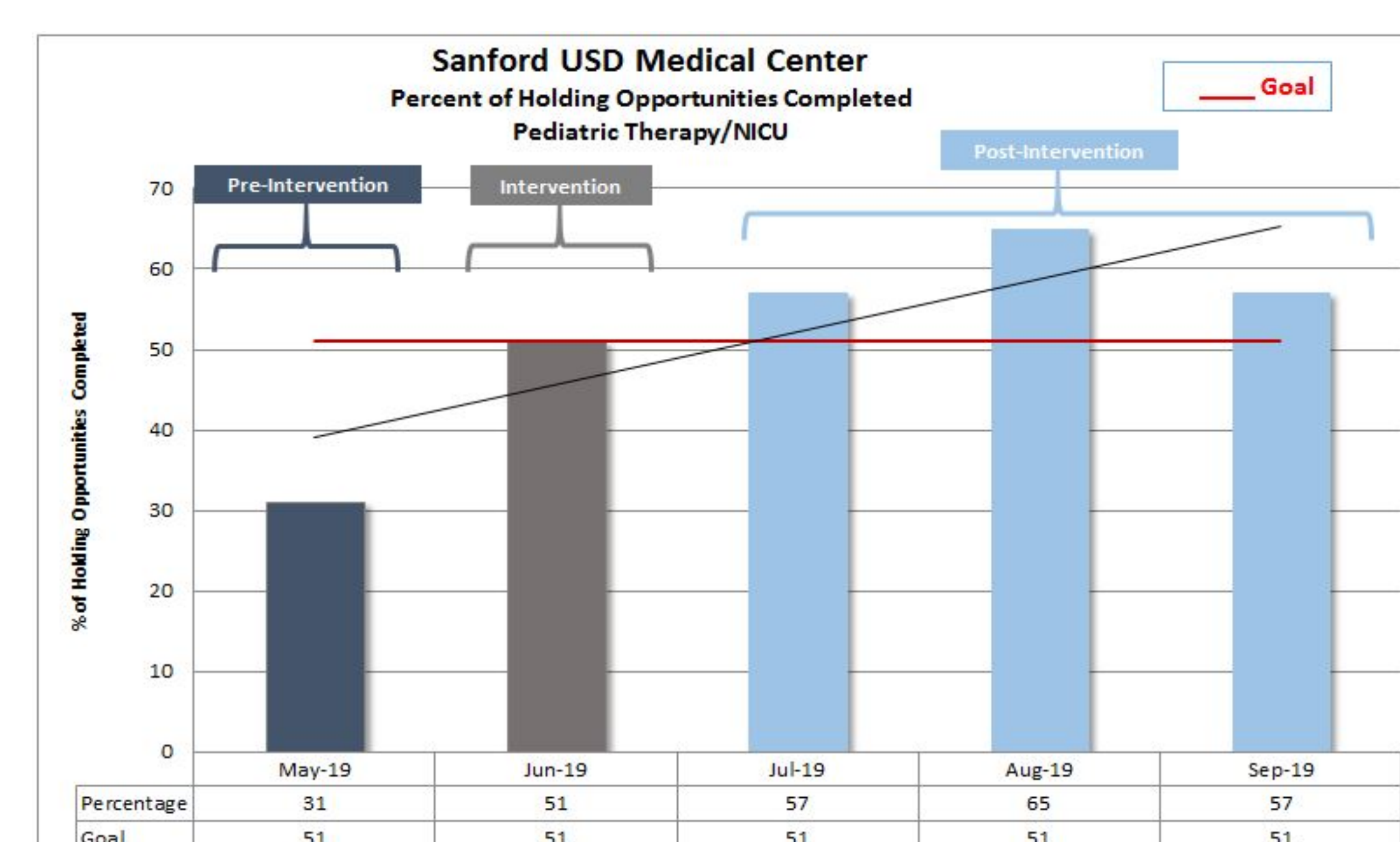
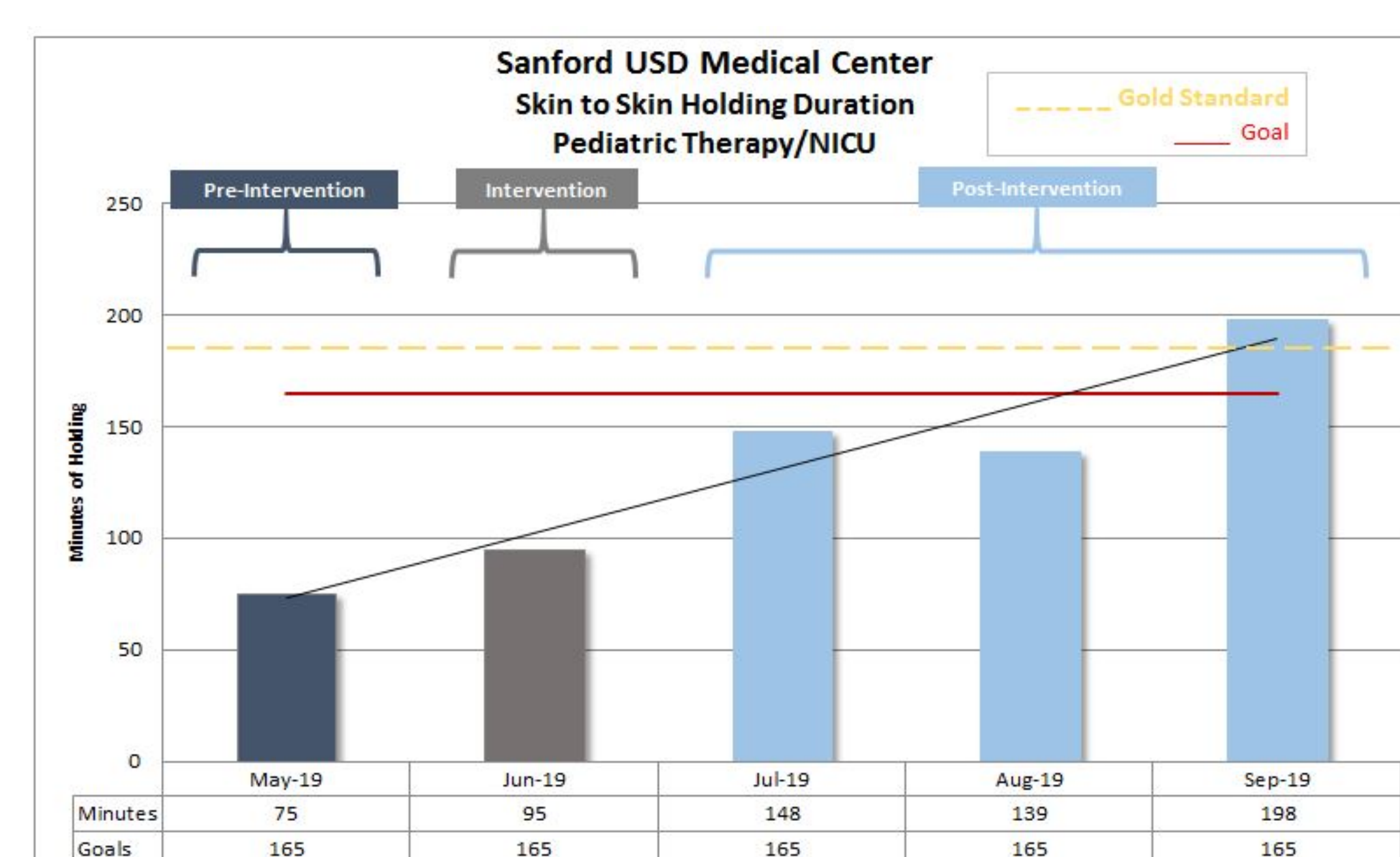
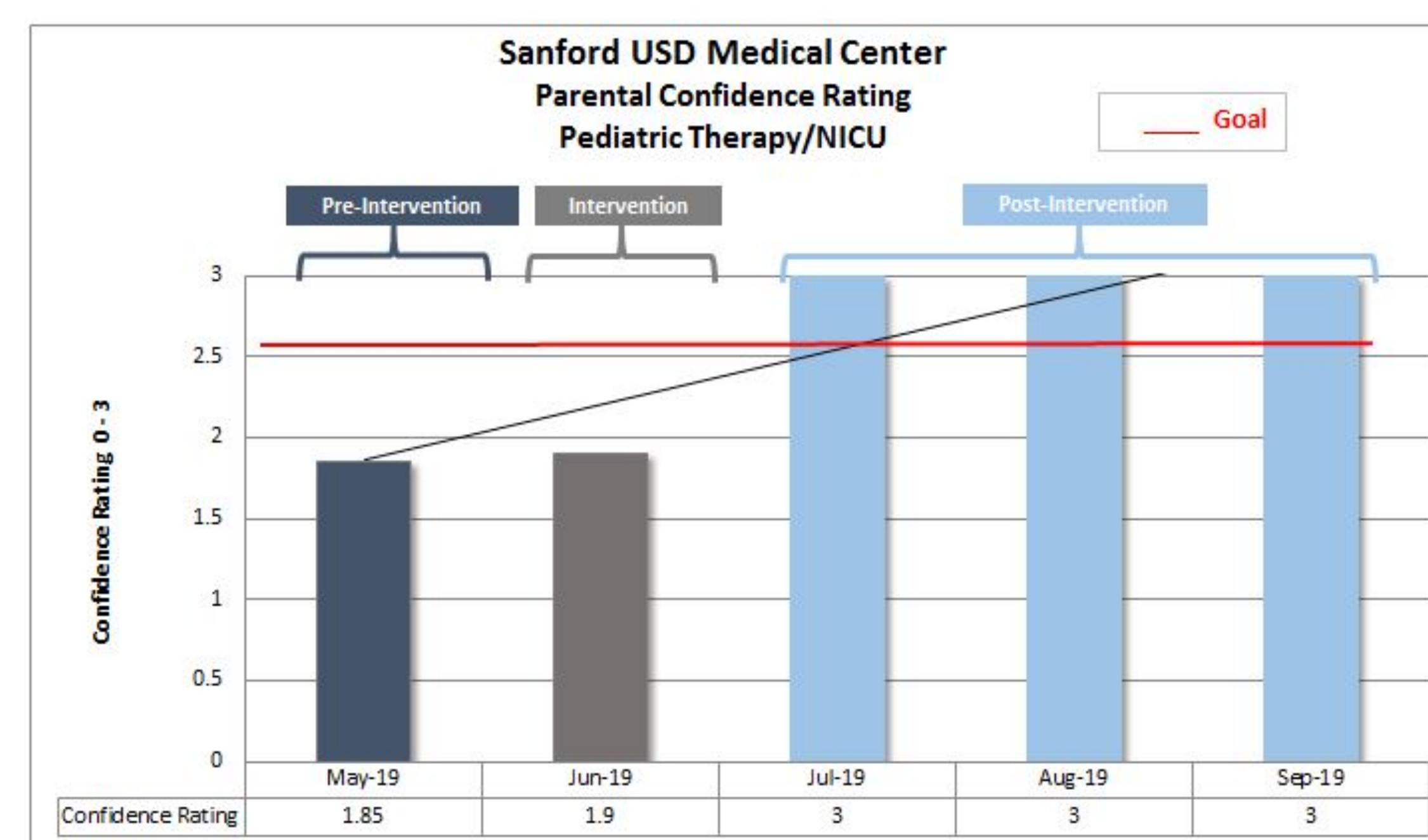
**Quality Tool:** PDSA cycle used to examine the impact of new intervention on baseline values.

**Leadership Directed:** Project approval and support approval from executive leadership, NICU and PM&R administration.

**Sanford Hospital Priority:** Improving the patient experience.



Photos with The Zaky ZAK are used with explicit permission



## NEXT STEPS

1. Stage II cycle of PDSA to include infants supported by mechanical ventilation
2. Implementing the 4 Disciplines of Execution model for unit wide education and process change
3. Sharing results of Stage 1 at Fall QI fair in Fargo then Stage 2 at Spring QI fair in Sioux Falls
4. Sharing results at the National Association of Neonatal Therapist's Conference Spring 2020



Sanford USD  
Medical Center & Clinics



Cultivating skills. Growing improvement leaders