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## Improving communication in the neonatal intensive care unit: a mixed methods study

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### BACKGROUND

- Communication between providers and caregivers is vital to family centered care and improved caregiver engagement in the neonatal intensive care unit (NICU)
- Disparities by primary language exist in regards to communication in our NICU
- Little is known about caregiver preference for frequency of communication from providers and frequency of communication in our level IV NICU

### AIMS

- AIM 1: Determine caregiver preferences for provider updates and communication using qualitative methodology
- AIM 2: Evaluate frequency of documented caregiver updates in the Electron Health Record (EHR) by race/ethnicity and primary language
- AIM 3: Identify and measure disparities in the frequency of documented caregiver updates in the NICU for racial/ethnic minorities and families with Limited English Proficiency (LEP), compared to white, English-speaking parents
- AIM 4: Improve frequency of documented caregiver updates in EHR across all languages by 20% above baseline by 2023

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### METHODS

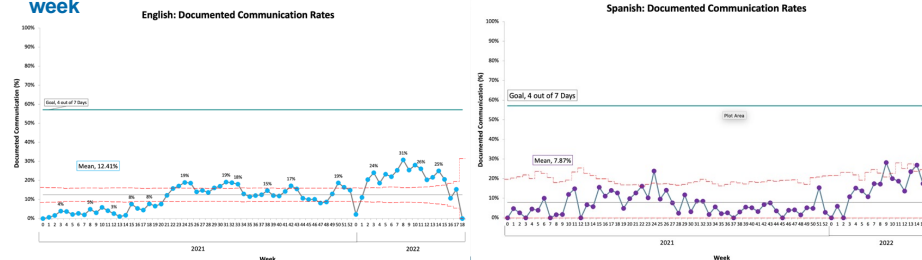
- Exploratory Sequential Mixed Methods Design
  - Qualitative interviews with caregivers of infants admitted >14 days to a level IV regional NICU using a semi-structured interview guide
  - Quality Improvement project aimed at improving frequency of provider-caregiver communication through provider education and implementation of rounding checklist
- Outcome:
  - Qualitative portion: Themes regarding caregiver preference for communication
  - Quality Improvement portion: Percentage of documented caregiver updates

### RESULTS

Table 1: Themes from Qualitative Interviews (n=12)

Theme	Quotes
<b>Personal Connection Matters</b>	"It's always better when it's someone that we have a good rapport with...There's a few people that we just know...we've been talking with them since day one and there is trust there..."
<b>Medical rounds serve different purposes for different parents</b>	"I like being a part of rounds and being able to ask my questions...Sometimes it's the only opportunity you get to talk to the whole team and if you miss it, you're out of luck for 24 hours"  "I would say sometimes it's hard to communicate during rounds."
<b>Changes need to come from MDs/NNPs</b>	"If there was a drastic change, I would want to hear that maybe from the doctors or nurse practitioners. Particularly, I'm a really detailed person...I really appreciate receiving information from someone who can also then give me all of the details about it."
<b>Parents want to be updated daily</b>	"I want to get communication from a doctor or nurse practitioner every day"

Figure 2: Process Control Charts for % of hospital days with provider communication per week



### RESULTS

- Qualitative Results (n=12)
  - 83% of interviews done with mothers, 17% with mothers and fathers
  - Mean GA 33w4 (30w-38w)
  - Mean LOS 29 days (17-46 days)
  - Thematic saturation reached in four domains
    - 1) Personal connection
    - 2) Purpose of medical rounds
    - 3) Desire for communication about clinical changes to come for provider
    - 4) Need for daily updates
- Quality Improvement Results
  - Mean percentage of hospital days with communication documented is 12.1%
  - English = 12.4%
  - Spanish = 7.8%
  - Other languages = 9.9%

### CONCLUSIONS

- Daily communication from a provider is important from caregiver perspective
- A disparity in the frequency of communication between providers and caregivers with LEP exists
- Additional research to identify the drivers of these disparities is needed