

Improving Diabetes Care in a Pediatric Post-Anesthesia Care Unit (PACU)

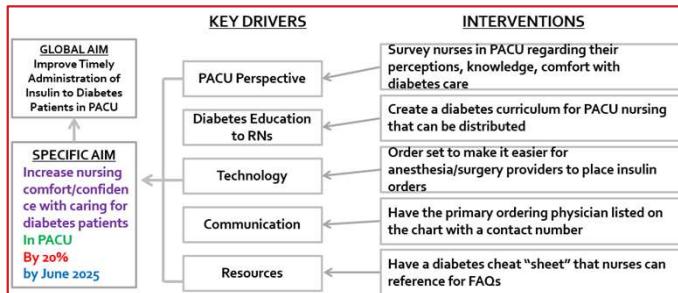


Chaitanya Sambangi, DO, MPH; Kimberly Ho, BSN, RN, CPN, CDCES; Abby Meyers, MD; Shideh Majidi, MD, MSCS

OBJECTIVE

- Despite preoperative diabetes plans, pediatric patients with diabetes often experience delays in insulin administration in the post-anesthesia care unit (PACU)
- Informal feedback from PACU RNs highlighted discomfort and limited understanding regarding diabetes care
- Specific aim: increase PACU nursing confidence in managing diabetes by 20% over one year
- Global aim: improve timely insulin delivery in PACU
- A fishbone analysis was conducted to identify contributing factors. Interventions and key drivers are noted in Figure 1

FIGURE 1. Fishbone Analysis



INTERVENTION #1 – PACU QI SURVEY

- Surveyed PACU RNs (n=45) using a REDCap survey (PACU QI) regarding their perceptions and knowledge of diabetes care
- After three rounds of outreach to the PACU RN team- total of 10 responses (22% response rate)
- 80% reported delays in diabetes care at least half the time**
- 70% were unsure who to contact for insulin orders**
- 60% had experienced insulin order delays**

INTERVENTION #2 - INFORMATION SHEET

- Survey results highlighted gaps in knowledge and communication and informed the development of a diabetes information sheet (Figure 2)
- Uptake to be being monitored via intranet click tracking

INTERVENTION #3 – EDUCATION SESSION

- Developed a PACU-tailored education session delivered in two separate PACU meetings with a pre + post PACU QI survey
- 21 individuals participated: only 11 completed both pre + post surveys
- "On a scale of 0-10 (10 being the highest), rate the following statement: *I feel confident taking care of diabetes patients post-op*" - mean improved from 5.74 to 6.83; 11% increase in confidence managing diabetes. By unpaired t-test this change was not statistically significant (p=0.18)

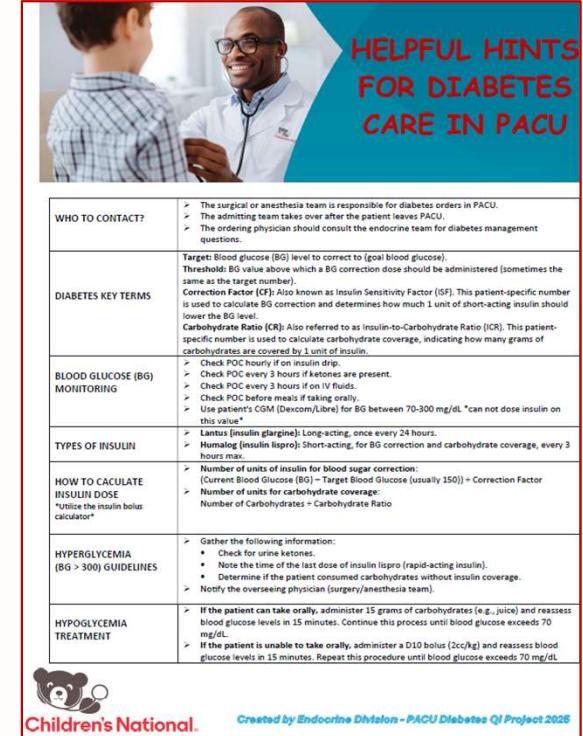
CONCLUSION

- Discomfort with diabetes management was addressed through two different methods: an information sheet and an education session
- General feedback to the education was very positive, especially as a refresher specific to PACU team. Hands-on skill session was suggested to further improve comfort with managing diabetes
- Limitation: capturing only a portion of the PACU RN team - nursing turnover, often require float RNs or travel RNs to assist in the unit

FUTURE DIRECTIONS

- PACU RN education session with hands-on skills
- Target the anesthesia providers with similar education- including logistics surrounding insulin timing and orders

FIGURE 2. Information Sheet



Children's National

Created by Endocrine Division - PACU Diabetes QI Project 2026