

Managing Diabetes in the Hospital with an Insulin Pump and or Continuous Glucose Monitor (CGM): Nurse's Perspective

Christine Byer-Mendoza, MSN,RN,CNS,CPN; Kimberly McNamara, RN, BSN,CDE;
Carla Demeterco-Berggren, MD, PhD

UCSD, Rady Children's Hospital
San Diego, CA, US
cbyer-mendoza@rchsd.org

Objective:

Describe the experience of nurses caring for hospitalized patients who are managing blood glucose levels with an insulin pump and/or CGM.

Propose actions based on the results of this study, to enhance the care of the patient managing diabetes in the hospital with an insulin pump and/or CGM.

Method:

Qualitative descriptive study. Setting: Pediatric inpatient care units of a 524 bed Pediatric Academic Hospital. In October 2019, 104 nurses from medical, surgical, OR/PACU units participated in this study by completing a self-administered questionnaire.

Result:

Although 70% of nurses have cared for at least one patient on insulin pump during hospitalization, almost 50% were uncomfortable to manage a patient wearing an insulin pump. About 80% of nurses were unable to retrieve insulin pump's settings such as targets, basal rates, insulin to carbohydrate ratio or sensitivity/correction factor. About 50% of the nurses did not establish goals and expectations with the patients and their caregivers regarding the management of their insulin pump and about 70% was unaware of the hospital insulin pump policy. Regarding the use of CGM in the hospital, 70% of nurses did not feel comfortable to manage a patient wearing a CGM in the inpatient setting and did not establish goals and expectations with the patients and their caregivers regarding the uses of CGM while hospitalized.

Conclusion:

Nurses reported having knowledge gaps regarding the use of insulin pump and/or CGM in the inpatient setting. Implementing a comprehensive insulin pump and CGM training program that addresses these practices gaps would help mitigate this problem.