

Abstract

Type 1 diabetes (T1D) is increasing in prevalence and incidence in both children and adults. Persons with T1D are increasingly choosing wearable diabetes technology to manage their blood glucose. The complexity of wearable diabetes technology, insulin pumps and continuous glucose monitors (CGMs), has increased over the past six years since the first insulin pump system to operate in automated insulin delivery (AID) mode became commercially available. AID relies on CGM values to drive an algorithm to make automatic insulin dosing adjustments. Professional societies endorse and persons with diabetes express preference for continuation of these systems when hospitalized. The Joint Commission (TJC) recommends that all organizations have a process to validate the accuracy of a CGM against hospital glucometer for patients continuing the use of their insulin pump systems. Using the Model for Improvement PDSA framework, this project aimed to improve nursing documentation of CGM validation through implementation of actionable clinical decision support (CDS) integrated into standard nursing workflow. An interactive nursing task for CGM validation was implemented in June 2022. The rate of CGM validation was determined based on whether the CGM validation occurred per the organizational clinical practice guideline (CPG). Pre-implementation, validation occurred 25% of the time. Post-implementation, validation occurred 40% of the time. Results indicate that interactive CDS targeted at nursing processes can improve compliance with organizational CPG's.