

# Translating Guidelines into Practice: Improving Continuous Glucose Monitoring Device Validation for Patients Using Insulin Pumps During Hospitalization



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## Background

- Wearable diabetes technology (insulin pump, CGM) evolving rapidly and increasing utilization of Automated Insulin Delivery (AID) mode
- Professional societies endorse and patients prefer continuation of insulin pump systems during hospitalization
- June 2021, The Joint Commission (TJC) issued Quick Safety 59 which included recommendation that organizations implement a process to validate accuracy of CGM compared to hospital approved glucometer

## Goal

The purpose of this project was to increase the percentage of patients admitted to the hospital wearing an insulin pump and a continuous glucose monitor (CGM) who have their CGM validated against the hospital approved glucometer per the institutional Clinical Practice Guideline (CPG)

## Review of Literature

- Clinical Decision Support (CDS) embedded in the electronic health record (EHR) that provides actionable information can improve nursing process outcomes

## Intervention

Interactive nursing task reduced RN documentation from 3 steps (open patient chart, chart CGM on LDA Avatar which auto-populated CGM flowsheet row, open VS flowsheet, document BG and CGM to activate validation calculation rows) to 2 clicks

\*Test patient no PHI

Using *Model for Improvement PDSA methodology*, we implemented CDS in the form of an interactive nursing task integrated into standard nursing workflow

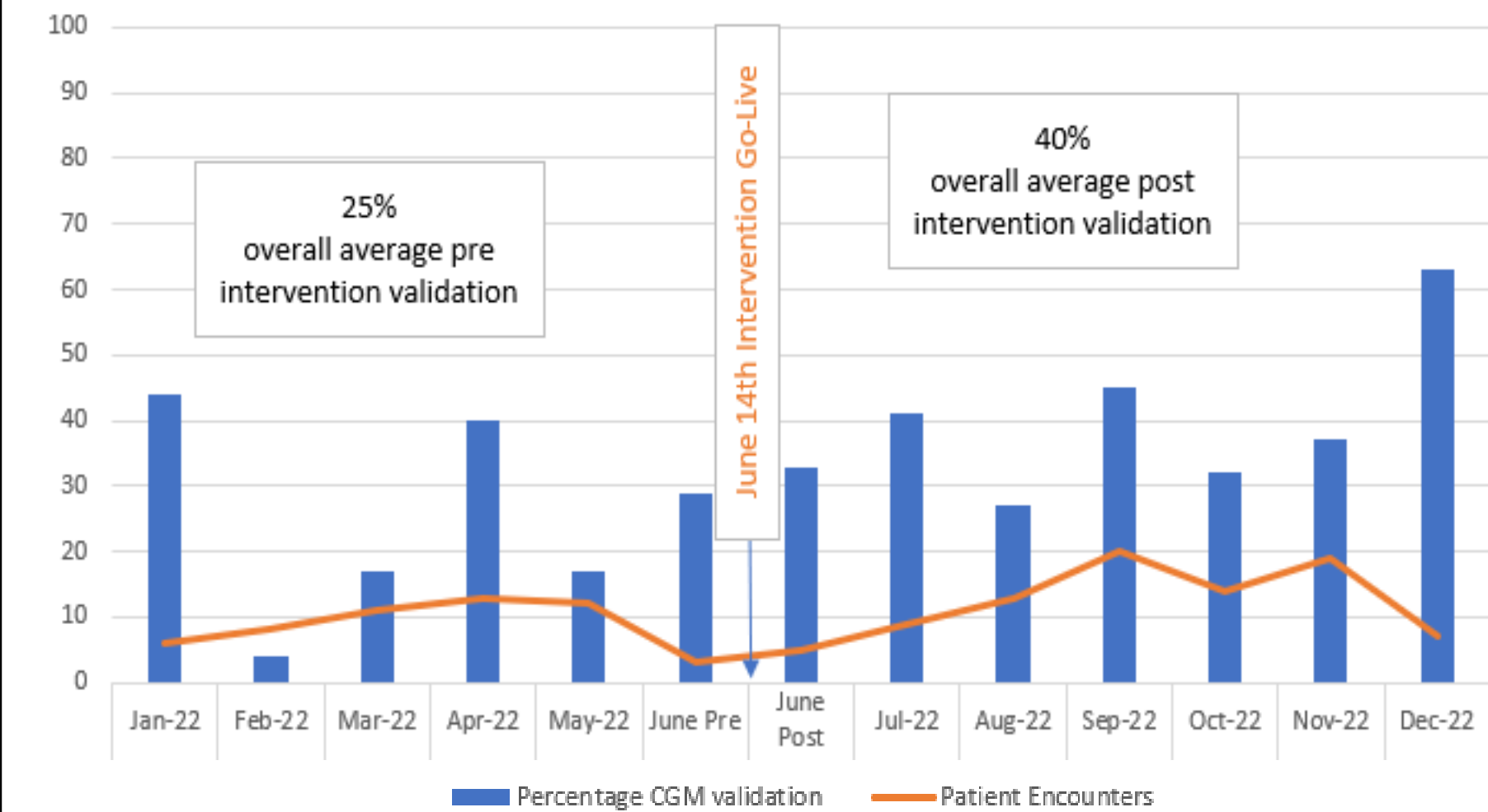


References

Acknowledgements: Laurie Brock MSN RN Nurse Informaticist UVA Health

## Results

### Percentage of CGM Validation that Occurred Per the Clinical Practice Guideline Criteria



- CGM validation *improved from 25% to 40%*
- 71 out of 89 post implementation patient encounters continued AID mode during hospitalization

## Evaluation

- CDS targeting nursing practices can improve compliance with CPGs
- Contextual factors within EHRs such as customization within modules impacts effectiveness of CDS
- Opportunities for repeat PDSA:
  - ✓ Tailoring documentation to different modules in EHR that don't utilize nursing workspace
  - ✓ Targeting admission workflow for CGM validation documentation