

Can We Get Your Number?

(Your Blood Glucose Number)

Marie Holloway, Jennifer Goings, Jessica Olson
NSG 405: Senior Leadership Change Project, Spring 2022

Assessment

Opportunity

- Providing nursing students glucometer training and access to obtain patient blood sugars (BS)
- Students will obtain accurate BS checks and deliver insulin in a timely manner

Driving Forces

- Patient safety and satisfaction
- Improve timing accuracy of patient BS levels and insulin administration
- Faculty and nursing professional development support

Restraining Forces

- Limited availability of lab staff
- Lack of knowledge of barcode system/ID numbers
- Communication Issues

Literature Review

- Improvement of BS monitoring, meal tray delivery, and insulin administration led to improved glycemic control. Improved timing of insulin delivery allows for patient education on proper insulin timing.¹
- Nurses were unaware of the 30-minute recommendation, and patient-care technicians (PCT's) did not understand the significance of checking a patient's BS too early. Administering insulin based on early glucose checks leads to "insulin stacking" which plays a key role in hypoglycemic episodes.²
- Reduction in post-meal glucose levels of 30% and less hypoglycemia when insulin was given 15-20 minutes before meals.³

Planning

Short Term Goal

- Pilot second semester senior nursing students to use glucometers in the clinical setting

Long Term Goal

- Enable nursing students to use glucometers in the clinical setting
- Follow evidence-based practice of staying in a 30-minute window of BS check and insulin administration

Strategies to Hardwire Change

- Converse with Quality Assurance Coordinator (QAC) to assign IDs to students
- Develop a training process for students with the simulation coordinators (SC)
- Inform clinical faculty of student glucometer pilot

Evaluation Plan

- Confirm training process and implementation for Fall 2022 clinical

Implementation

Implementation Steps

- Identified barriers of glucometer training and creating barcodes
- Discussed implementation of glucometer training with Nursing Professional Development
- Located supplies for glucometer training for SC
- Developed IDs for piloting senior nursing students

Strategies for Handling Resistance

- Utilized chain of command communication to encourage input from key stakeholders

Evaluation

Evaluation of Change

- Confirm with SC on training processes for implementation of project to begin in Fall of 2022
- Collaborate with clinical faculty regarding trial

Strategies to Stabilize

- Develop procedure for student ID system
- Glucometer change project will begin in Fall 2022

Summary

What We Learned

- The communication process can be a lengthy process and should include everyone
- When an appropriate length of time has been given for email response, it is appropriate to reach out in varying formats
- Perseverance is important

What We Would Do Differently

- Enhance collaboration among group members
- More efficient follow up and communication process

Acknowledgements

- **Jessica Bliven**, MSN, RN, Assistant Professor, Simulation Center Coordinator, BRCN
- **Joan Ruhs**, MSN, RN, CCRN, Assistant Professor, Simulation Center Coordinator, BRCN
- **Kendra Meany**, BSN, RN-BC, Manager, Nursing Professional Development, Blessing Hospital (BH)
- **Julie Bruening**, QAC, BSMT (ASCP), POC specialist AACC, BH

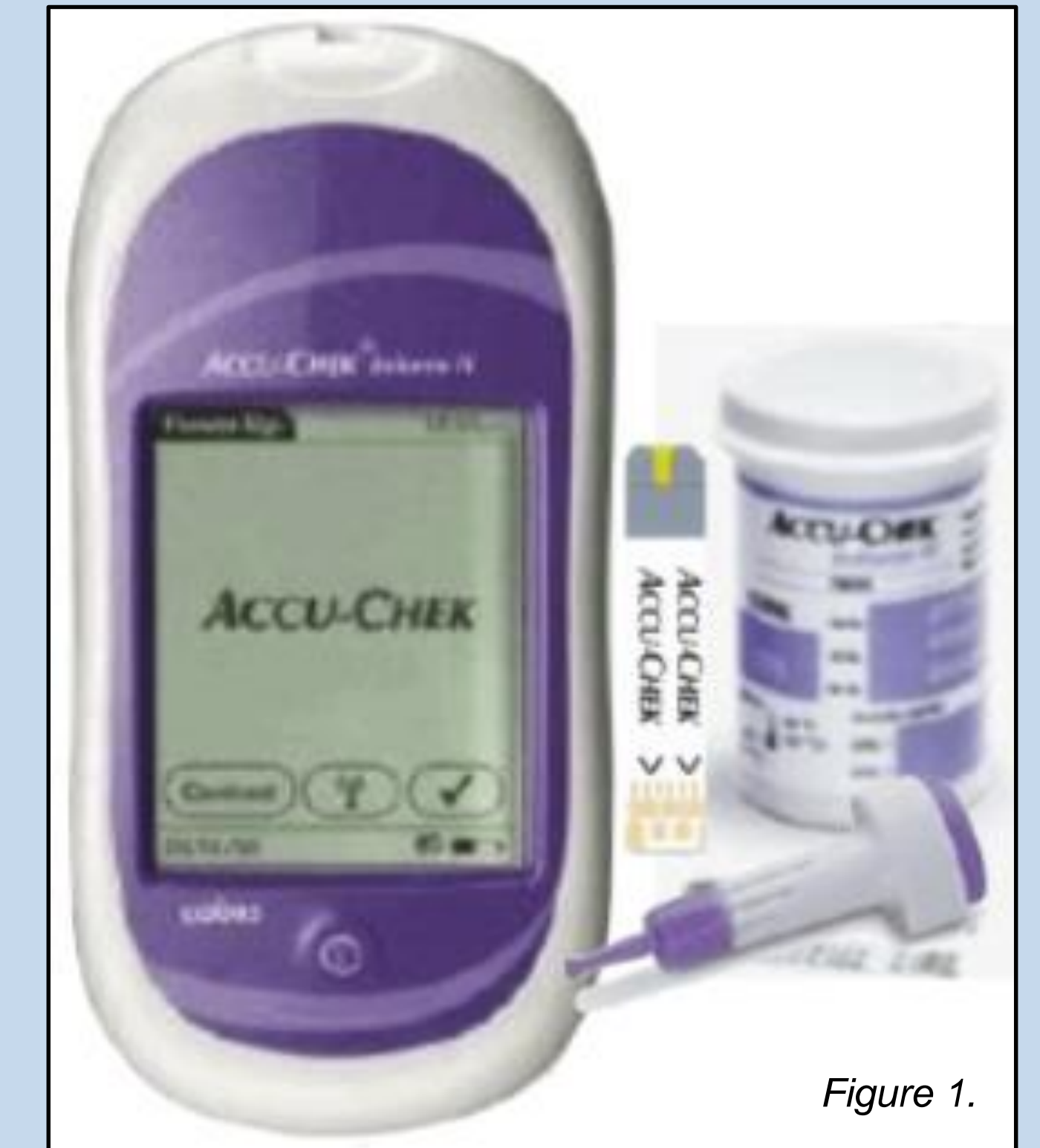


Figure 1.

References

1. Engle, M., Ferguson, A., & Fields, W. (2016). A journey to improved inpatient glycemic control by redesigning meal delivery and insulin administration. *Clinical Nurse Specialist, 30*(2), 117–124. doi: 10.1097/NUR.0000000000000190
2. Rolen, M., Richter-Giffort, B., & Sleutel, M. (2020). 30 minutes or less: Closing the gap between blood glucose checks and insulin administration. *Nursing Critical Care, 15*(3), 43-48. doi: 10.1097/01.CCN.0000660412.23959.21
3. Slattery, D., Amiel, S. A., & Choudhary, P. (2017). Optimal prandial timing of bolus insulin in diabetes management: A review. *Diabetic Medicine, 35*(3), 306-316. doi: 10.1111/dme.13525

Figure List

Figure 1. Hey Med Supply [Online Image]. (n.d.) Retrieved April 1, 2022, from <https://heymedsupply.com/cntrl-inform-ii-accu-chck-2ea-bx-10bx-cs-roche-diag-05213509001-case-20>