

Glytec®

**TIME TO  
TARGET**



*The Glycemic  
Management  
Journey*

**Leveraging People,  
Process, and Technology**

**Optimizing Glycemic  
Management**

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10.25.2023



# Agenda

- 2023: Year in Review
- Collaborating on Change Management
  - Review of new resources available to customers
- Looking Ahead: Glucommander Product Roadmap

# 2023: A Year in Review

## Highlights

- Relaunched GlucoMetrics
- Released Glucomander 3.5.3.0
- Performed upgrades for 13 hospitals
- Expanded use of Glucomander at 25 hospitals



# Other Key Highlights

## *Uniting teams around patient safety*

- Treated more than 100,000 patients on Glucommander with over 369K patient days
- Achieved a rate of 0.21% patient days <40mg/dL
  - Non-Glucommander/usual care data is typically 5-10x higher
- **Fully eliminated** (0%!) severe hypoglycemia <40mg/dL for patients treated on Glucommander at **132 facilities**

# Looking Ahead: Our Journey Together



# Collaborating on Change Management

Change management is sprawling, and incorporates many different areas including:

- Institutional support & governance structure
- Data & analytics
- Standardization & workflows
- Education/engagement plans

# Glytec's Blueprint for Success

*Based on this framework and our experience working with partners of varying sizes at varying stages in their glycemic management journey, we've created a **Blueprint for Success**.*

## Core Elements:

The Right Mindset: ***This is a journey***. not a switch

- It requires all the same change management of any other clinical practice change
- It will take time
  - SubQ optimization may happen slowly, with outcomes less noticeable than IV at first
- Ultimately, goals aligned with patient safety as paramount

A Clear Path

- **Rooted in best practice** – but customizable based on your goals
- And likely, you've already taken many of the steps in the pathways identified (and Glytec's here to walk with you)

# We're Here to Help



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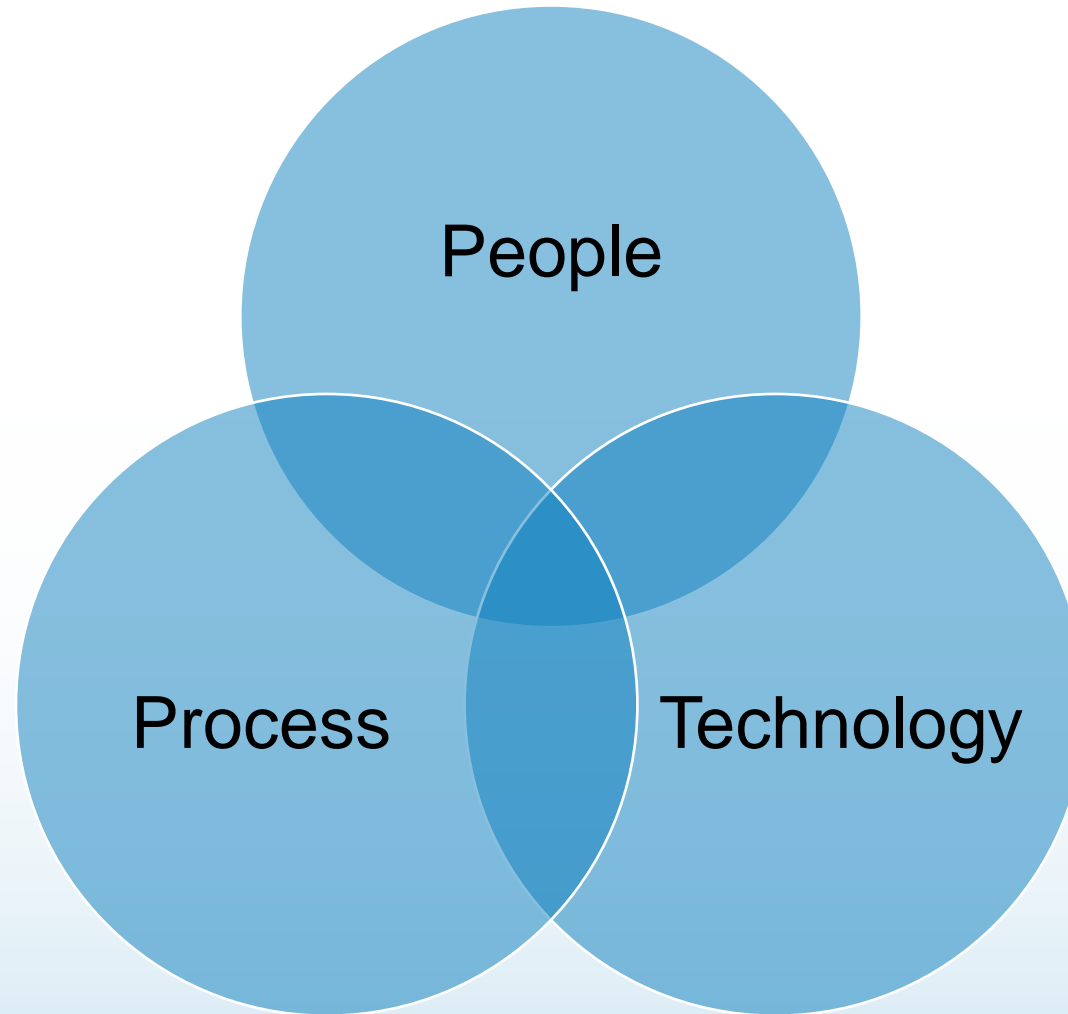


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# Opportunities & Available Resources

All new in the last year



# Building Engagement/Buy-In

- Communicating the “why” can be an essential part of building engagement with your team, and Glytec has created several resources to aid in the process

## Solution-Oriented Resources

- Position Statement Template
- Internal announcement templates for pre- and post- expansion/upgrade projects
- Framework for Improvement Presentation for an executive audience

*Want access to these resources?  
Reach out to your CCSM!*

### Why Optimal Glycemic Management Matters *Our Commitment to Patient Health and Safety*

#### OUR WHY, AT-A-GLANCE

Contextualize your position statement by starting with your key takeaways. We've included a sample framework (why me, now, us) as well as sample language to get you started.

#### *Why me?*

*Glycemic management, including the utilization of insulin in the hospital, is complex and is best optimized through a team-based approach.*

#### *Why now?*

*Centers for Medicare and Medicaid Services has made it clear that severe hypoglycemia related to insulin is hospital harm and should be a never event.*

#### *Why us?*

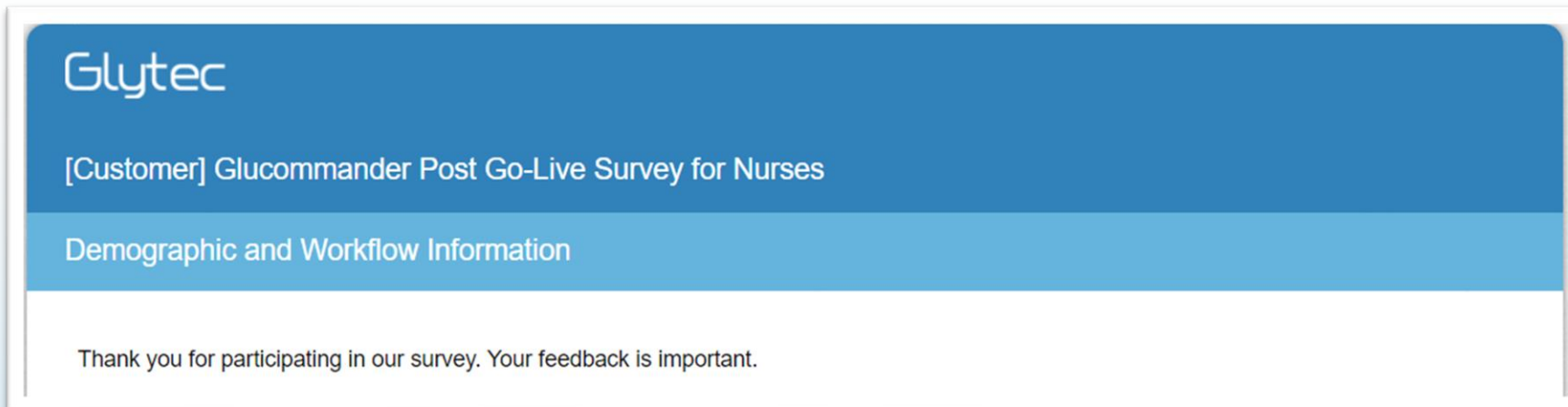
*We have identified insulin management as a top patient safety opportunity at our institution.*

# Encouraging Great Ideas to Trickle Up

- Great ideas can come from anywhere, but how do you catalogue, assess, and prioritize those ideas when resources are limited?

## Solution-Oriented Resources

- Standard optimization surveys available
  - Surveys tailored for nurses and providers/pharmacy
  - Where to focus optimization efforts



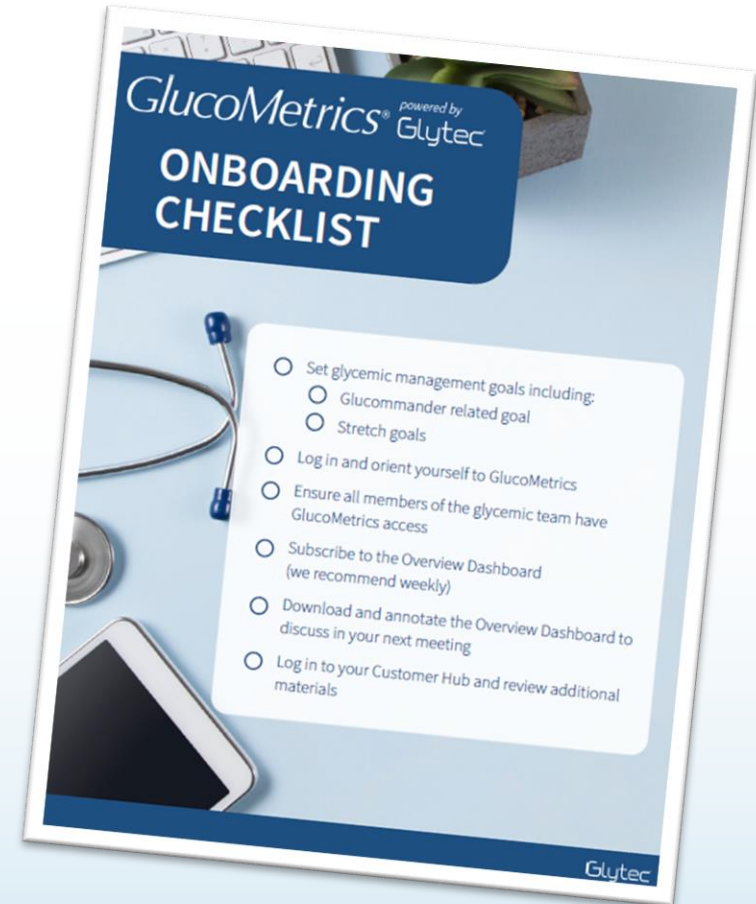
The image shows a screenshot of a survey interface. At the top, the Glytec logo is displayed in white on a dark blue background. Below the logo, the survey title "[Customer] Glucomander Post Go-Live Survey for Nurses" is written in white. Underneath the title, there is a light blue section labeled "Demographic and Workflow Information". At the bottom of the survey, a white box contains the text "Thank you for participating in our survey. Your feedback is important."

# Fostering a Stronger Understanding of Data & Analytics

- Data and analytics play a key role in driving program optimization, but different people have different levels of understanding.

## Solution-Oriented Resources

- GlucoMetrics tool kit including:
  - Getting Started with GlucoMetrics user guide, checklist
  - Overview videos
  - Release notes
- Site-specific training presentations
  - Available at your request, led by your CCSM
- Data review meetings with CCSM
  - Also available with our CMO by request



# Training your Team

- Training is key to proper usage of Glucommander, but requires time away from the floor. It can also be challenging to when turnover is high.

## Solution-Oriented Resources:

Based on feedback from thousands of evaluations, Glytec is streamlining training for all users – *both new and existing*

### For Existing Users:

- Only trained on changes
  - Tip sheets available (IV, Transition, SubQ) detailing changes

### For New Users:

- All modules have been shortened, in some cases significantly
  - Examples:
    - IV and SubQ end user trainings were 50 minutes, now 30 – **20 minutes savings each**
    - Super user trainings for IV and SubQ shorter now, too

**97** New or  
Updated Training  
Assets for  
3.5.3.0

# Training your Team – Just in Time

- Just-in-time training can play an integral role in the ongoing support of teams, but it needs to be easy to find, easy to access, and easy to digest. Same for high-priority documents like downtime forms.

## Solution-Oriented Resources:

- Expanded library of support documentation

### ▲ IV Videos

[Initiate IV Patient Demo \(04:41\)](#)

[IV Meal Bolus Administration Demo \(02:24\)](#)

[IV Cancel Meal Demo \(00:48\)](#)

[Treat Hypoglycemia Demo \(03:56\)](#)

[Void Blood Glucose Demo \(01:19\)](#)

[Edit Multiplier Demo \(01:04\)](#)

Click [HERE](#) to download all videos

### ▲ IV Practices

To access the practices from the IV End User eLearning Module, download practices here.

Note: You should complete the practices only after you have reviewed the online module or watched the corresponding video demonstration.

[Initiate IV Patient on Glucommander](#)

[Treat Hypoglycemia in Glucommander IV](#)

[D10W Hypo Treatment](#)

[Oral Carbs Hypo Treatment](#)

[Meal Bolus Administration](#)

[Edit Multiplier](#)

[Edit the Patient's Weight](#)

[Practice Void BG](#)

### ▲ SubQ Practices

Note: You should complete the practices only after you have reviewed the online module or watched the corresponding video demonstration.

[Bedtime Snack](#)

[Edit SubQ Dose](#)

[Hypoglycemia Blood Glucose Entry](#)

[Initiate Patient in Glucommander](#)

[Void Basal](#)

[Void BG](#)

### Completed Downtime Form Examples instead of eLearning Modules

[IV Downtime Form Example](#)

[Basal, Bolus + Correction SubQ Downtime Form Example](#)

[Basal + Correction SubQ Downtime Form Example](#)

# Training your Team – Providers

- Different people learn differently, and it's important to meet people where they're at.

## Solution-Oriented Resources

- Developed additional content to support a blended learning approach
  - Micro and nano learnings (videos, CBLs)
  - Additional tip sheets
  - Instructor-led training materials

# Training your Team – Diabetes 101

- A good foundation of the basics of inpatient diabetes management is essential for Glucomander optimization, but there are varying levels of understanding that must be accounted for.

## Solution-Oriented Resources:

- *Inpatient Diabetes Management* module
- *Basics of Carb Counting* module
  - Importance of meal triad
- New training decks:
  - Inpatient Standards of Care in Glycemic Management and Leveraging Glucomander to Meet Them
  - Meal Triad

# Training your Team – Super Users

- Super users are key to the ongoing optimization of Glucommander on the floor, and their ongoing education can't be short-changed.

## Solution-Oriented Resources:

- New Glucommander IV dashboard training

### Glucommander IV Dashboard:

*Glucommander IV: Reach out to the nurse if=>*

- ❑ BG checks > 15 minutes past due
- ❑ Hypoglycemia BG recheck is past due

The screenshot shows the Glucommander IV dashboard interface. At the top, there's a header with 'CURRENT PATIENTS', a hospital selection dropdown (General Hospital), and a user dropdown (MedSurm). Below this is a section for 'IV Insulin Infusion Patients (5)' with a warning icon. An alert message states: 'ALERT: Click to view patients that have experienced at least 2 BGs > 180 mg/dL'. The main table lists three patients: ENDIV, MACK; BRADDIX, CHAD; and FITZGERALD, MACK. Each row displays patient details (MRN, Department, DOB), last BG, last insulin rate, target range, and next BG due time. The background color of each row indicates the status: Red for 'BG DUE!', Amber for '4:44' (less than 5 minutes), and White for '50:37' (no BG entry is due).

Patient Name	MRN	Department	DOB	Last BG	Last Insulin Rate	Target Range	Next BG Due	Status
ENDIV, MACK	MEVMk4	MedSurg	05/23/1957	127 mg/dL	1.3 units/hr	120-160 mg/dL	02/20/2023 at 20:29	Red (BG DUE!)
BRADDIX, CHAD	MBxC44	MedSurg	05/23/1962	153 mg/dL	1.5 units/hr	120-160 mg/dL	02/20/2023 at 20:44	Amber (4:44)
FITZGERALD, MACK	MFDmk4	MedSurg	05/23/1957	119 mg/dL	0.9 units/hr	120-160 mg/dL	02/20/2023 at 21:29	White (50:37)

A countdown timer indicates the time remaining until the next BG entry is due.

The background color of each listed patient changes depending on patient status. For example, the background is:

Red when a "BG DUE!" message appears.

Amber when a BG entry is due in less than 5 minutes.

White when no blood glucose (BG) entry is due.

# Communicating Across Shifts

- Clear and concise communication across shifts is key and must fit into standing workflows in order to be effective.

## Solution-Oriented Resources:

- Glucommander Shift Report Checklist

### Glucommander Shift Report Checklist:

#### GLUCOMMANDER IV REPORT CHECKLIST:

PATIENT NAME: \_\_\_\_\_

PATIENT MRN: \_\_\_\_\_

LAST BG RESULT: \_\_\_\_\_

WHEN IS THE NEXT BG DUE? \_\_\_\_\_

LAST INSULIN INFUSION RATE RECOMMENDED BY GLUCOMMANDER: \_\_\_\_\_

CURRENT INSULIN INFUSION RATE ON INFUSION PUMP: \_\_\_\_\_

*Note: The Glucommander recommended infusion rate should match the infusion pump rate*

ANY HYPOGLYCEMIC EVENTS DURING YOUR SHIFT? \_\_\_\_\_

IS THERE EVIDENCE THAT THE PATIENT IS READY TO TRANSITION OFF AN INSULIN INFUSION OR ONTO SUBQ INSULIN?

CONSISTENT BGS BETWEEN 70-180 MG/DL (YES / NO)

LOW VARIABILITY IN INSULIN INFUSION RATE (YES / NO)

CRITICAL ILLNESS IS RESOLVING (YES / NO)

DKA RESOLVED BASED ON LABS (YES / NO / NA)

HAS THE IV MEAL BOLUS BEEN USED FOR ALL FOOD >30 GRAMS OF CARBS? (YES / NO)

IV MEAL BOLUS SHOULD BE USED FOR ALL FOOD OR BOLUS TUBE FEEDS > 30 GRAMS TO PREVENT HYPERGLYCEMIA.

HAS THE PATIENT HAD PERSISTENT HYPERGLYCEMIA (BGS ABOVE TARGET RANGE)? IF SO:

- Is the IV site patent? (Yes / No)
- Are the blood glucose values trending down? At least 50 mg/dl per hour
- Assess for other causes for insulin resistance

HAS THE PROVIDER PLACED ANY EDIT ORDERS IN THE PAST 24 HOURS? IF YES, HAVE THE EDITS BEEN COMPLETED IN GLUCOMMANDER? (YES / NO)

#### DKA/HHS ONLY:

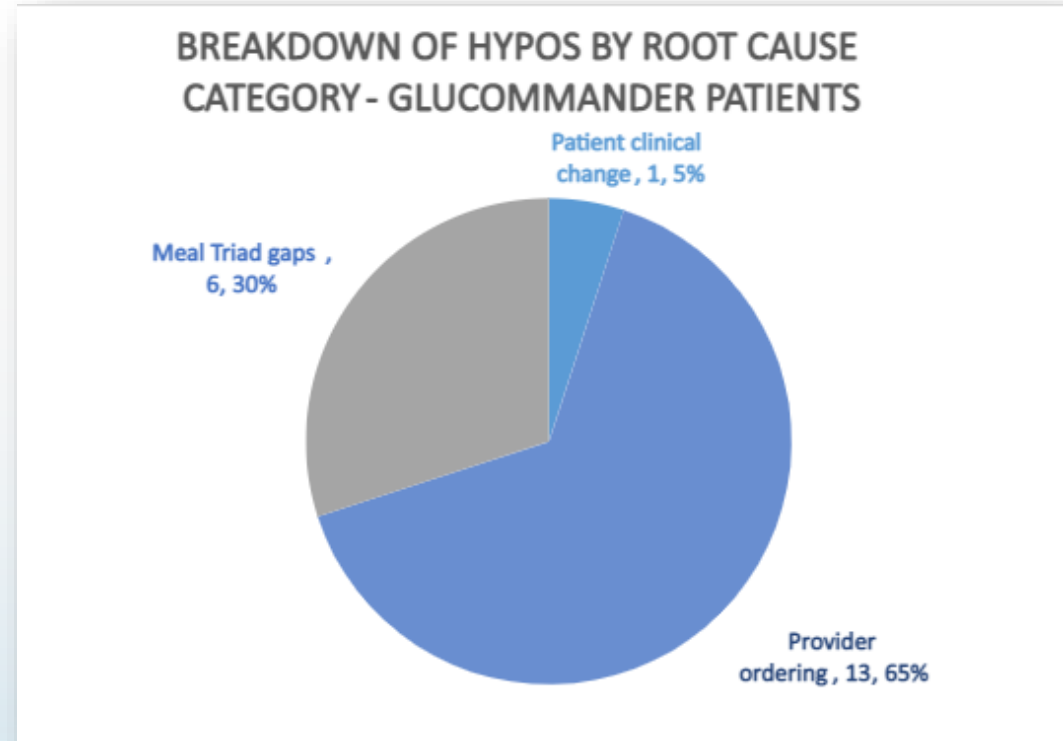
- What is the current Potassium? \_\_\_\_\_
- When is the next serum K lab draw? \_\_\_\_\_
- Have dextrose containing fluids been started? (yes / no)

# Understanding Causes of Hypoglycemia

- You need to be able to fully understand a problem in order to propose a solution. Partnering through case review support, Glytec's team of clinical experts can help you better understand hypoglycemia to drive improvements.

### Solution-Oriented Resources:

- Hypoglycemia Resource Tool
- Hypoglycemia RCA Tool



# Leveraging Technology

- Glucommander SubQ is a technology-driven approach to Basal Bolus
  - Purpose-built to overcome challenges
  - Designed to help your team meet the Hospital Care Delivery Standards in a standardized, consistent manner



# Glucommander SubQ: Purpose-Built

## Common Challenges with Insulin Management

- Overuse of Sliding Scale
- Basal insulin but NO prandial insulin (meal coverage)

Inconsistent adjustments of basal/bolus insulin doses

Rebound hyperglycemia due to overtreatment of hypoglycemia

## Advantages of Glucommander SubQ

**Basal/Bolus + Correction**  
(eating patients)  
**Basal + Correction**  
(NPO patients)

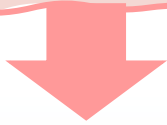
Daily adjustment  
recommendations based on  
blood glucose trends

Precise dose  
recommendations for IV  
dextrose, oral carbs, IM  
glucagon

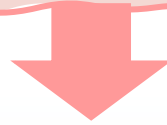
# Glucommander SubQ: Purpose-Built

## Common Challenges with Insulin Management

Fixed prandial insulin dose regardless of carbohydrate intake



Correction insulin dose isn't individualized to the patient



Untreated hyperglycemia or unawareness of hyperglycemia



## Advantages of Glucommander SubQ

Customized meal insulin dosing based on carbohydrates consumed

Customized correctional insulin dose based on patient's Total Daily Dose (TDD) of insulin and insulin sensitivity

Track hyperglycemia rates with real-time reports: GlucoSurveillance

## ITERATIVE CHANGES OVER TIME

### GOALS

- Make Glucommander easy and intuitive to use
- Reduce opportunity for error
- Enhance safety and efficacy
- Increase nurse and provider engagement

3.5.0.0

- Orders Initiation and Medication Confirmation Integrations
- Improve user experience (nursing workflows)
- Enhance hypoglycemia treatments options (Glucagon)

3.5.1.0

- Improve safety and efficacy
- Require use of Meter Max
- BG Recovery Feature

3.5.2.0

- Support multiple time zones
- SmartClick V3 enhancements
- Improve safety – Remove custom carb option

3.5.3.0

- Streamline nurse workflows at transition
- Enhance hypoglycemia treatment options
- Reduce opportunity for error
- Support more flexible order design

# Glucommander 3.5.4.0

## All users:

Streamline insulin dose and order set edits  
Improve visibility of edits  
Enhance auditability

## For Nurses:

- Improve dose and order set edit workflow
- Reduce the need of manual entry of order edits

## For Providers:

- Support flexibility of dose and order set edits
- Align Glucommander ordering practices with current provider workflows

# Streamline Insulin Dose and Order Set Edits

## Process order edits through integration

- Glucommander will receive messages for order edits through the interface
- Edit messages will be processed immediately when received
- Glucommander will automatically update the dose or other parameter on the patient detail page
- If Glucommander is unable to process due to a validation failure, a message will be display explaining why the ordered could not be processed

# Improve Visibility of Edits

Add  $\Delta$  icon on patient detail screen to indicate edits

PATIENT DETAILS

NAME:

Smith, John

✓

ACCOUNT #:

987654

DOB:

04/20/1952

HEIGHT:

177 cm

WEIGHT:

112 kg

BMI:

36

A1C:

9.3

FACILITY:

Heart Hospital

UNIT:

Stepdown

Edit

INSULIN DOSES

✓ Given

✗ Not Given

Δ Edited

BASAL DOSE:

glargine (Lantus)

Due Today

21:00

24 Units Δ

Confirm

Void Basal

MEAL BOLUS:

aspart (Novolog)

04/04/2023

Breakfast

✓ 9 Units

Lunch

✓ 7 Units

Dinner

Δ ✓ 20 Units

View Tomorrow

ORDER SET

Δ

Edit

BASAL/BOLUS + CORRECTION

TARGET RANGE: 120-160 mg/dL

TDD: 49

CF: 35

Lunch

Enter BG

Void BG

26

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# Align Provider Workflow

## Initial Ordering

- Custom Basal Dosing
  - Provider will specify the basal dose that will be given with each administration
  - Providers will no longer have to order the total basal dose when selecting BID distribution

## Edits

- Provider ordered basal dose and distribution edits will be used for the next recommendation
- New recommendations for order set design that allows the provider to edit the original insulin order instead of using a modification order

# Support Flexibility of Dose and Order Set Edits

## Dose Edit Prior to Calculation

- Allow basal dose edits to occur prior to Glucommander calculating the next recommendation
- Allow bolus dose edits to occur prior to Glucommander calculating the next recommendation.
  - Breakfast, Lunch and Dinner doses can all be edited at the same time.

## Unlock Basal Editing

- Increase the times that basal edits are allowed
- Includes basal dose, distribution and time

# Enhance Auditability

## Improve Messaging in Glucommander Audit History

- Make audit history messages easier to read and understand
- Update descriptions to allow the user to determine if an edit occurred:
  - Through the manual process or through integration
  - Before Glucommander calculated the recommendation

Description	Date
Order message processed to edit today's basal dose from x units(s) to x unit(s)	Date/Time Processed

Description	Date
Order message processed to edit today's basal dose to x unit(s) prior to system calculation.	Date/Time Processed

# Glytec's eGMS User Experience Goals

- Make Glucommander easier to use and reduce opportunity for error
- Delight providers and nurses
- Reduce cost of training and support

## Strategy

- Engage with professional user experience designers and researchers
  - Perform Testing for 3.5.4.0 release
  - Customer engagement on design and validation sessions
  - Access to conduct testing with a Hyperdrive simulator

# Thank You!



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