

Return on Investment: Estimates show Riverside Healthcare saved more than \$2.6 million annually with eGMS®



RIVERSIDE HEALTHCARE

Introduction

LaTivia Carr, RN, MSN, NEA-BC, Vice President and Chief Nursing Officer at Riverside Healthcare, knew that there had to be a better way to manage her patients’ insulin needs than the standard paper protocol, and suspected that better clinical outcomes for patients would lead to better financial outcomes for the hospital. She also recognized that up until this point, the hospital hadn’t been taking advantage of technological innovations in the field. With this in mind, she had worked diligently alongside other members of the Riverside team to implement Glytec’s eGlycemic Management System® (eGMS) featuring Glucommander™.

And yet the journey had been difficult, with many voicing concerns along the way that implementing a new solution would take time and money that they just didn’t have - they were already stretched thin. Ultimately though, Riverside chose to roll out Glucommander and the results from their initial internal financial impact study were in. Had it been worth it? Carr couldn’t wait to find out.

Thinking Back to the Original Problem

Riverside Healthcare is a nationally recognized, award-winning hospital with a reputation for nursing excellence, and their teams are always seeking ways to improve patient care. Carr and others had long known that an area in need of improvement was the treatment of patients requiring insulin - many were receiving inconsistent care due to a lack of standardization and use of complicated paper protocols for insulin titration in the Critical Care Unit.

They needed a solution that would decrease length of stay and improve quality of care, especially among critically ill patients with COPD, CHF and DKA. But finding a solution wouldn’t be easy - it would need to integrate with their existing system, and Carr further hoped to standardize protocols and enable the analysis of glycemic management data.

FACILITY TYPE:

Regional Medical Center

FACILITIES:

1

BEDS:

300

LOCATION:

Illinois

SYNOPSIS

With a specific focus on patients with COPD, CHF and DKA, the team at Riverside collected data over the course of one year on 382 patients who required IV and/or subcutaneous insulin.

What they found was that compared to those treated using paper protocols - or the “old school method” - patients whose insulin titrations were managed using Glucommander experienced less hypoglycemia, spent less time in critical care, and received a higher quality of care.

As a result, Riverside estimates an annual cost savings in excess of **\$2.6 million**.

“At the executive level, we want to see what [a new solution] is providing to the organization from an outcomes perspective. So having that data, and being able to share it — both at the executive level and the frontline so they can see how their work is positively impacting patients and our organization — is key. And it helps to boost morale and... drive change.”

LaTivia Carr
RN, MSN, NEA-BC, Vice President and Chief Nursing Officer, Riverside Healthcare

Implementing their Solution

Carr and the team at Riverside ultimately selected Glytec’s eGMS because it was the only solution that met all their requirements, especially when it came to providing the resources needed to guide them through the implementation process.

Working with Glytec, they optimized workflows and reduced clinical care variation, standardized population-based order sets, developed nurse-driven protocols and integrated with their EHR.

They also prioritized engagement of all stakeholders. The Riverside team made sure that patients and their families understood the new methodology and how it would help manage blood sugar; that providers understood how to utilize Glucommander to maximize benefits for patients; and that nursing teams knew the new workflow and were onboarded and educated about their role. Additional core teams including hospital dietitians were engaged to refine the meal triad process to give patients the best outcomes.

“Being able to integrate this tool into our Epic system was key for us from an efficiency standpoint, and a provider and nurse satisfaction standpoint. And [workflow optimization]... helped to streamline things and make things easier.”

LaTivia Carr
RN, MSN, NEA-BC, Vice President and Chief Nursing Officer, Riverside Healthcare

As a strong believer that data drives change, Carr made sure that transparency was built into the system from the very beginning. Utilizing the GlucoMetrics® dashboards, the team was able to review data in real time, and in weekly, monthly, and quarterly increments, and share that information with every stakeholder, from the board

and executives to frontline staff. With this new level of insight, Carr was able to quickly boost morale, coordinate care, and drive change within the organization.

But by that same token, Carr also knew that to truly call the implementation a success, there would need to be an internal study measuring the clinical and financial outcomes of Glucommander’s computer-driven dosing protocols versus the previous paper protocols.



Study Results

After a year's worth of data had been accumulated, Riverside conducted an internal retrospective quality improvement study and the results were in.

The facility estimated \$2.1 million in savings due to an 18% lower Critical Care Unit length of stay (a 0.25 day reduction for 3,500 patients with diabetes).

In the study, the length of stay index was 1.12 days with Glucommander versus 1.37 days with the standard protocols.

Better management of hypoglycemic patients led to estimated savings of \$544,756: 73% fewer patients experienced severe hypoglycemia when managed by Glucommander IV or SubQ versus standard protocols, resulting in better resource utilization and cost savings.

There were no Critical Care Unit bouncebacks for 12 months. Before implementing eGMS, Riverside saw one to two patients readmitted to the CCU per month.

“Every point that we are able to shave off that length of stay generates about half a million dollars to the bottom line of the organization. Not to mention, complications are greatly reduced when we reduce the length of stay for our patients.”

LaTivia Carr
RN, MSN, NEA-BC, Vice President and Chief Nursing Officer, Riverside Healthcare

In Conclusion

LaTivia had been confident that the results of the study would show that the implementation journey had been worth it, but she was still relieved to finally have the data in hand.

The results of the study were clear - the time and money spent on implementing a new way of doing things had been an investment that would pay dividends to Riverside, LaTivia and her colleagues and their patients for years to come.

**Get the full story
from LaTivia Carr**

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The eGlycemic Management System® is a modularized solution for glycemic management across the care continuum that includes Glucommander™. Glucommander™ is a prescription-only software medical device for glycemic management intended to evaluate current as well as cumulative patient blood glucose values coupled with patient information including age, weight and height, and, based on the aggregate of these measurement parameters, whether one or many, recommend an IV dosage of insulin, glucose or saline or a subcutaneous basal and bolus insulin dosing recommendation to adjust and maintain the blood glucose level towards a configurable physician- determined target range. Glucommander™ is indicated for use in adult and pediatric (ages 2-17 years) patients. The measurements and calculations generated are intended to be used by qualified and trained medical personnel in evaluating patient conditions in conjunction with clinical history, symptoms, and other diagnostic measurements, as well as the medical professional's clinical judgment. No medical decision should be based solely on the recommended guidance provided by this software program.

Glucommander™ is only available for use in the United States.

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Customer service: (888) 458-2683

