

Case Study

Over half a day shorter LOS, nearly \$1M in savings

Corewell Health's DKA ROI uncovered



A system by | **Monarch Medical
Technologies**

The customer

Corewell Health West, a leading healthcare system in Michigan, used EndoTool IV, a patient-specific computerized insulin dosing system since 2009 to support safe, effective glycemic management and improve hospital efficiency.

In recent years, Corewell experienced a 20% rise in Diabetic Ketoacidosis (DKA) admissions, reflecting a broader national trend of a 55% increase over the past decade. While the system had already achieved strong outcomes, clinical leaders sought to understand the value their approach was delivering in the face of growing demand.

To answer this, Corewell conducted a retrospective analysis of DKA patient outcomes and care efficiency across their system.

The challenge

Corewell Health West set out to evaluate the impact of EndoTool IV on DKA patient outcomes with a focus on:

- Reducing inpatient length of stay (LOS) to lower costs and increase capacity.
- Improving clinical outcomes, including mortality and hypoglycemia rates.
- Decreasing the cost of care per DKA patient.

The review

A retrospective study evaluated DKA patients treated at Corewell Health West from **January 2023 to June 2024**.

Corewell's outcomes with EndoTool IV were benchmarked against risk-adjusted expected outcomes from the Vizient Clinical Data Base and an internal comparison group of 115 academic medical centers.



Better outcomes, lower cost

Corewell Health West achieved better clinical and financial outcomes with EndoTool IV. They reduced hospital stays and costs, lowered mortality, and improved ICU efficiency while virtually eliminating severe hypoglycemia.



“By treating all of our DKA patients with EndoTool, we were able to reduce the cost of care by \$1,200 per patient and shorten hospital stays. Outcomes that other hospitals have been unable to achieve without EndoTool.”

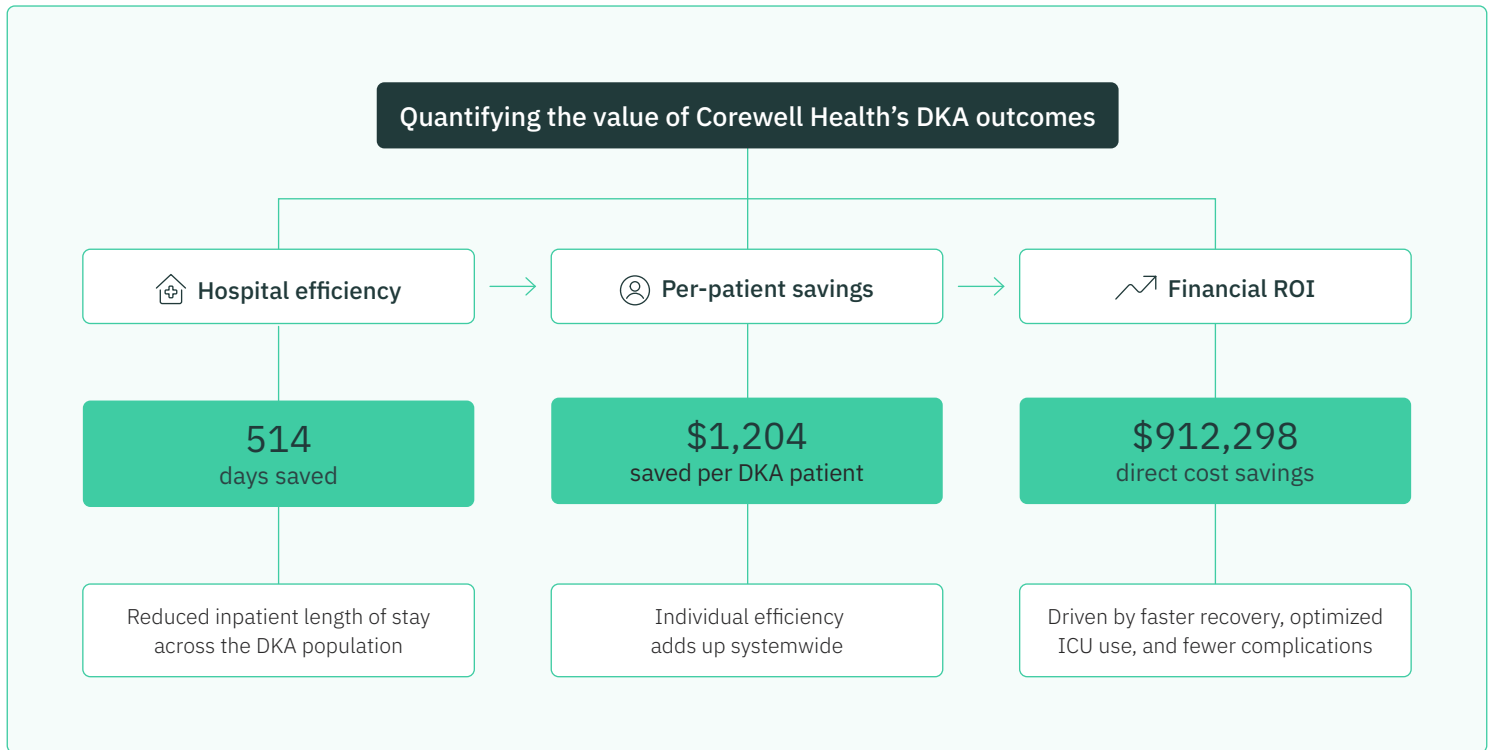


Dr. Gregory Deines, DO
 Division Chief of Diabetes and Endocrinology, Corewell Health West

How actual outcomes surpassed expectations

Metric	Actual Outcomes	Expected Outcomes	Impact
LOS (all patients)	5.15 days	5.82 days	514 hospital days saved
Mortality	2.3%	3.2%	6 fewer deaths
Cost per DKA Patient	\$8,125	\$9,329	\$1,204 saved per patient
Severe Hypoglycemia	0.006%	Not measured	Extremely low risk
ICU Utilization	85%	49%	Efficient high-acuity care





EndoTool IV enabled Corewell Health West to deliver higher-quality care at a lower cost, demonstrating clear ROI even in high-acuity settings.



A strategic framework for reducing LOS and driving ROI

Corewell Health West's implementation of EndoTool IV proves patient-specific insulin dosing achieves significant clinical improvements while generating meaningful financial returns.

By shortening total hospital stays, and saving over \$1,200 per patient, Corewell Health avoided more than \$900K in direct costs in high acuity settings over the 18 month period.

For healthcare leaders seeking to improve care quality and financial performance simultaneously, Corewell's experience offers a compelling, data-backed example of how patient-specific insulin management leads to stronger outcomes and operational efficiency where it matters most.

Why leading health systems trust EndoTool

EndoTool is the only patient-specific insulin dosing software, designed to improve glycemic management with real-time adaptability and advanced safety features. EndoTool prevents insulin stacking and hypoglycemia by precisely calculating every dose using multiple clinical factors like kidney function and past insulin administration, offering a level of accuracy unmatched by any other system or protocol. Backed by 50+ independent, peer-reviewed studies, EndoTool is FDA-cleared, fully integrates with major EHRs, and is trusted by top hospitals nationwide. See why leading health systems rely on [EndoTool](#).

References

1. McCoy RG, Herrin J, Galindo RJ, et al. Rates of hypoglycemic and hyperglycemic emergencies among U.S. adults with diabetes, 2011–2020. *Diabetes Care* 2023;46:e69–e71
2. Benoit SR, Zhang Y, Geiss LS, Gregg EW, Albright A. Trends in diabetic ketoacidosis hospitalizations and in-hospital mortality – United States, 2000–2014. *MMWR Morb Mortal Wkly Rep* 2018;67:362–365



Experience the future of care with patient-specific insulin dosing.

Visit monarchmedtech.com

Monarch Medical Technologies
877-349-4582
info@monarchmedtech.com
monarchmedtech.com

