pieces

Empowering Clinicians and Driving
Clinical Workflows with
Pieces Inpatient Platform

pieces

Empowering Clinicians & Driving Clinical Workflows with Pieces Inpatient Platform

Introduction

A leading hospital, consistently ranked among the nation's best, has consistently strived for excellence in healthcare. In pursuit of this mission, the hospital partnered with Pieces, a pioneer in clinical AI, to tackle challenges in patient care and operational efficiency.

The Challenge

Despite the hospital's reputation for delivering exceptional healthcare, it encountered obstacles that affected its efficiency and patient care quality. These challenges included:
● Navigating Complex Patient Information: Managing and synthesizing vast amounts of patient data to inform treatment decisions and care coordination.
● Streamlining Clinical Workflows: Healthcare providers faced a significant workload, spending considerable time reviewing patient charts, which posed risks of cognitive fatigue and potential burnout.

● Optimizing Patient Throughput: Enhancing the accuracy of Length of Stay (LoS) predictions was crucial for effective discharge planning and optimal resource allocation, ensuring the hospital could maintain its high standards of patient care while accommodating new admissions.

The Approach

In response, the hospital integrated Pieces AI-generated Working Summaries into care staff's workflows, becoming the first in the nation to use Generative AI at scale in the inpatient environment. This strategic move aimed to provide a singular clinical summary to coordinate multi-disciplinary teams, reduce cognitive burden, and improve prediction accuracy for discharge planning.

2X

Pieces generated more than twice as many discharge predictions (70,388 vs. 25,743), providing valuable insights for proactive care coordination.

73.7%

Improved accuracy translated to a remarkable 73.7% adjusted success rate for Pieces' predictions of immediate discharge (today or tomorrow).

Pieces Impact

● AI-Generated Working Summaries: Created a unified view of patient data through a plain clinical language summary, enhancing decision-making and care coordination.
● Advanced Predictive Analytics for Discharge Planning: Provided reliable discharge predictions, so the hospital could better coordinate care and ensure that patients receive timely and efficient care transitions.
● Widespread Adoption Across Clinical Teams: Demonstrated the practical utility and effectiveness of Pieces' AI-powered solutions in clinical settings.

Results
Time Savings and Prediction Accuracy

Pieces Inpatient Platform significantly enhanced discharge planning efficiency. Compared to the manual process, Pieces generated more than twice as many discharge predictions (70,388 vs. 25,743), providing valuable insights for proactive care coordination. Additionally, the PDD model by Pieces demonstrated superior predictive accuracy, achieving 2.1 times greater success in predicting correct discharge dates. This improved accuracy translated to a remarkable 73.7% adjusted success rate for Pieces' predictions of immediate discharge (today or tomorrow), far exceeding the hospital's manual process with only a 20.5% adjusted accuracy rate.

"Pieces' clinical generative AI tools will help us to maximize provider and staff efficiency while aiding in providing operational transparency on the patient's hospital journey."

Enhanced Operational Efficiency and Patient Care

The integration of Pieces Inpatient Platform facilitated a more efficient discharge planning, leading to reduced unnecessary hospital days, and potentially reduced healthcare costs. While specific cost savings data are not available yet, this improved efficiency translates to a better patient experience by minimizing unnecessary delays in discharge. "The Pieces system is remarkable and really showcases the power of AI for real world healthcare, says a hospital leader. "Pieces' clinical generative AI tools will help us to maximize provider and staff efficiency while aiding in providing operational transparency on the patient's hospital journey."

Looking Ahead

The hospital's successful implementation of Pieces Inpatient Platform has not only addressed critical challenges but also underscored the transformative potential of AI in healthcare. The hospital continues to explore new ways to leverage Pieces' innovative solutions to further enhance patient care delivery and operational workflows, setting new benchmarks in healthcare excellence.

Pieces Inpatient Platform: AI for the Frontline Care Staff
Pieces leverages AI to empower clinicians with real-time insights directly in their Epic workflow.

● Working Summaries: Reduce manual effort with auto-generated patient summaries.
● Predicted Discharge Dates: Proactive planning with data-driven discharge predictions.
● Discharge Barriers: Identify and manage potential delays in discharge earlier.

pieces