

# Building an Enterprise Healthcare AI Platform: Partnering with Hospitals to Transform Patient Care

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## Overview

In the ever-evolving landscape of healthcare, the integration of Artificial Intelligence (AI) and data analytics has become a pivotal force in reshaping how providers deliver care. For healthcare systems, partnering with Artificial Intelligence providers is crucial to achieving meaningful advancements that not only improve patient outcomes but also alleviate the immense burdens placed on healthcare providers. **Let's explore how the symbiosis of an enterprise AI platform developed in collaboration with hospitals can reduce provider burden and cognitive burnout, expand data sources, and maintain strong feedback loops and relationships.**

## Reducing Provider Burden and Cognitive Burnout

Healthcare providers are under constant pressure to deliver high-quality care while managing an overwhelming number of administrative tasks and data. This dual responsibility often leads to cognitive burnout, affecting their ability to provide the best care possible. An enterprise healthcare AI platform can play a significant role in mitigating these challenges.

### 1. Enhancing Clinical Decision Support

AI-driven decision support systems can analyze vast amounts of medical data to provide evidence-based recommendations. These systems assist providers in making informed decisions quickly, reducing the cognitive burden of sifting through extensive medical literature and patient records.

For example, at a large Ohio-based hospital system, HDAI's predictors are integrated seamlessly into Pre-Admission Testing triage workflows, helping the team decide on the level of care necessary in the Pre-Surgical Clearance process.

### 2. Streamlining Communication

AI platforms can facilitate seamless communication between different departments and care teams. By providing real-time updates and insights, HealthVision™ ensures that all team members are on the same page, reducing the chances of miscommunication and improving efficiency. At Houston Methodist, HDAI is empowering the Case Management teams to engage in data driven discussions during multi-disciplinary rounds. This work has led to proactive, appropriate intervention by hospice and palliative teams, and to valuable discussions about patient recovery needs in the post-discharge phase.

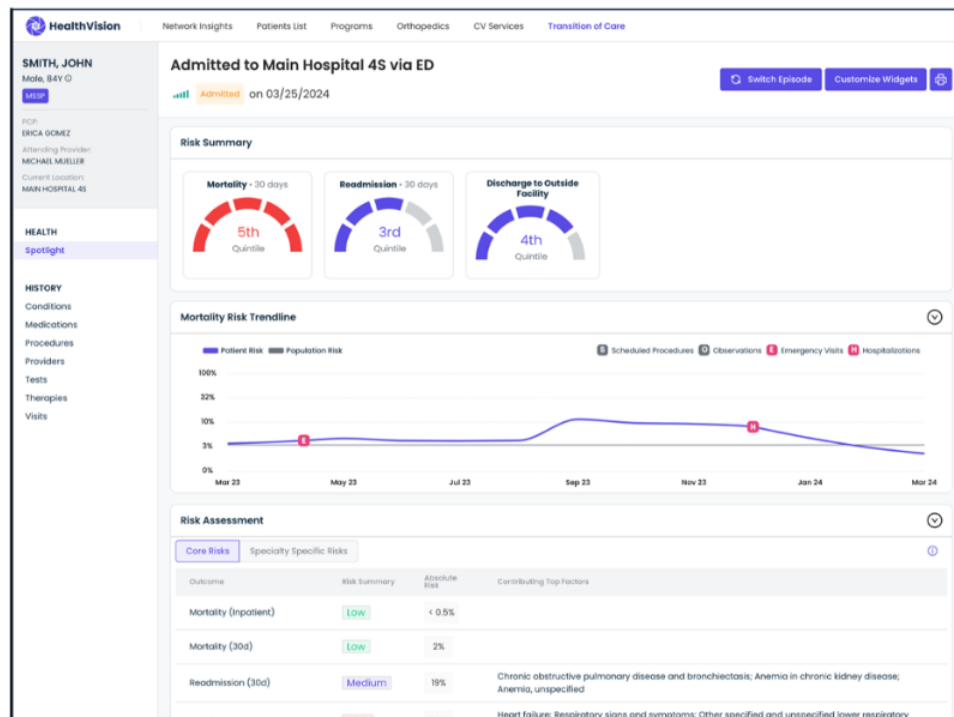
## Expanding Data Sources and Synthesizing Information

In healthcare, the volume of data generated is staggering. However, much of this data remains underutilized due to the lack of tools to synthesize and analyze it effectively. An enterprise healthcare AI platform, like HealthVision™, addresses this challenge by expanding access to data sources and synthesizing it into actionable insights.

### 1. Integrating Diverse Data Sources

HealthVision integrates data from various sources, including electronic health records (EHRs), billing claims, and even social determinants of health. This integration creates a holistic view of each patient, enabling more accurate baselines and valuable

insights that are delivered within the provider's native electronic medical record (EMR).



## 2. Real-Time Data Analysis

AI algorithms can process and analyze data in real-time, identifying patterns and trends that might be missed by human analysis. By leveraging HL7 and FHIR integrations, professional billing data as well as data from Medicare servers where applicable, we can rapidly ingest, synthesize and deliver insights and predictions at the point-of-care. This allows physicians to make decisions proactively, preventing adverse events and excess utilization, which facilitates stronger outcomes and workflows that can be scaled across an enterprise.

## Maintaining Strong Feedback Loops and Relationships

Developing an enterprise healthcare AI platform is not a one-time effort; it requires continuous collaboration and feedback from healthcare providers to ensure its effectiveness and relevance. Establishing and maintaining strong feedback loops and relationships with hospital partners is essential.

## 1. Building Trust and Transparency

Maintaining transparency about how the AI algorithms work and ensuring data privacy and security builds trust with healthcare providers. Transparent communication about the benefits and limitations of the AI platform fosters a collaborative relationship, leading to thoughtful and scalable innovation. With all our collaboration partners, including Houston Methodist, we maintain open lines of communication allowing them to build trust with our product and our predictors, and shape the offering of the product while maintaining responsible use of AI predictors.

## 2. Pilot and Demonstration Programs

Engaging in pilot programs with hospitals allows for real-world testing and refinement of the AI platform. Providers can offer valuable insights and feedback, helping to fine-tune the system to meet the needs of the market. At Houston Methodist, we work with the Cardiovascular Service Line to optimize readmissions by enabling data driven discussions throughout the patient journey, from pre-operative optimization to post-operative discharge and intraoperative interventions, as needed. They are applying the risk models to prioritize the highest risk patients for follow-up appointments. While seemingly simple, this targeted intervention is resulting in promising reductions in adverse events.

### 3. Ongoing Training and Support

Continuous training and support for healthcare providers are crucial for the successful implementation of AI. Ensuring that providers are comfortable and proficient with the AI tools leads to better adoption and utilization. By maintaining close touchpoints with key teams within a hospital system, we can interact with providers at every point of the care journey, as they navigate their daily workflows, interacting with different disciplines, specialties and modalities. This allows for a natural scaling of the product in parallel with at-elbow support for care teams as they adapt to utilizing the product in daily operations.

### 4. Regular Feedback Mechanisms

Establishing regular feedback mechanisms, such as surveys, focus groups, and user committees, allows for the continuous collection of input from end-users. This feedback is vital for identifying areas of improvement and ensuring that the AI platform evolves in line with the needs of the providers.

Developing an enterprise healthcare AI platform in partnership with hospitals is a transformative endeavor that can significantly enhance patient care while reducing provider burden and cognitive burnout. By enabling real-time synthesis of information, AI platforms empower providers with the tools they need to make better-informed decisions. Maintaining strong feedback loops and relationships with hospital partners ensures that the platform remains relevant, effective, and continuously improving. Together, we can harness the power of AI to create a healthier future for all.

### Contact us!

If you would like to discuss your work in the healthcare space and learn more about HDAI, please reach out to [info@hda-institute.com](mailto:info@hda-institute.com). We would love to speak with you.