Using A Smart EHR UI To Improve Clinician Satisfaction and EHR Efficiency

Introduction

In the ever-evolving landscape of healthcare technology, Electronic Health Records (EHR) have been a cornerstone, yet not without their challenges. The modern EHR system, while critical, often grapples with issues that significantly impact healthcare delivery. Clinicians and healthcare providers frequently encounter problems such as technology-induced burnout, clinical mistakes due to information overload, and a lack of interoperability among different systems. These challenges not only hinder the efficiency of healthcare delivery but also pose risks to patient safety.

However, imagine a scenario where the EHR system transcends these limitations. Envision an EHR system seamlessly integrated with an AI-powered platform, boasting an exceptional user interface experience. This innovative approach could enable clinicians to access important, relevant clinical data precisely when it's needed. Consider the possibilities if the EHR system could proactively alert clinicians to the availability of test results, eliminating the time-consuming task of sifting through mountains of data for pertinent information.

This transformative vision of integrating EHR with advanced technology is exactly what CEO Craig Limoli set out to do when creating Wellsheet. At the CHIME 2023 Fall Forum track session titled, "Using a Smart EHR UI to Improve Clinician Satisfaction and EHR Efficiency," Trish Gallagher, Chief Nursing Information Officer and Assistant Chief Information Officer at Medical University of South Carolina, along with Christopher A. Fore, MD, Chief Quality Officer at Concord Hospital and John Glaser, Executive-in-residence at Harvard Medical School shared how Wellsheet has transformed operations and care delivery at their respective healthcare environments.

This report will explore key insights from their presentation, specifically focusing on how the integration of Wellsheet has aided in reducing clinician burnout, saving costs, minimizing the length of hospital stays, increasing capacity, and ultimately leading to financial savings for their organizations.

The Key Objective is Understanding How A Smart EHR UI Can:

- **Enhance clinician experience and reduce burnout:** streamline user interface design in EHR systems to improve clinician satisfaction and reduce the stress associated with technology use.
- **Improve efficiency and effectiveness of healthcare delivery:** Leverage AI-powered systems and data analysis for timely access to relevant clinical data to reduce the length of hospital stays, and facilitate better patient care.
- **Optimize operational performance and increase capacity:** Save operational costs and increase hospital capacity by enhancing decision-making processes and promoting interdisciplinary collaboration.
- **Facilitate interdisciplinary collaboration for better care delivery:** Promote teamwork among clinicians, care managers, social workers, and rehab specialists through shared digital platforms.

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Case Study: Ascension and the Integration of Wellsheet

Gallagher began the presentation by sharing the weight of EHR burdens on Ascension clinicians. "So our hospitalists were spending an average of an hour a day before they went on rounds, to fill out a piece of paper, collect all their information, and then they would go on their rounds. And then during the rounds, they would sign in and out of devices."

The strain on clinicians extended beyond mere time constraints; it translated into prolonged patient lengths of stay, resulting in limited capacity. This, in turn, contributed to clinician burnout, leading to an upsurge in turnover rates. In essence, the overarching issue can be encapsulated in a single word: costly.

In response, Ascension created an Innovation Studio with the intention of creating a solution to their EHR woes. The Innovation Studio's experts were shocked to discover the challenges clinicians faced. "They would say, do you know that nurses do this? And do you know that providers do this? And we nod our head and say, yep, we do. They'd ask us why. Well, that's because the EHR vendors that we use, this is how they do it."

The product was in development for a year and a half before being shut down due to COVID, when it was time to start back up again Gallagher discovered Wellsheet. "That's what we're trying to build and someone has already built it."

In Wellsheet, they found their dream solution, a mobile product that:

- Provides push notifications to alleviate the burden of information retrieval
- Offers relevant data based on the provider's role and the patient's specific needs
- Displays a body system specific view based on preexisting conditions
- Requires minimal training and integrates in clinicians' existing workflows
- Is a seamless hand off tool that could cross the interdisciplinary team.

Gallagher describes how the AI-powered Wellsheet system has been successfully implemented in a hospital setting, with providers using it to receive real-time notifications and improve patient care.

"We put it in the hands of providers. I've been doing this for 25 years. I've never seen a solution get used that way the first day. They picked it up on their phones and they immediately started to use it," said Gallagher. "This has been a game changer for them. They are seeing more satisfaction, less burnout. They're feeling happier, they feel like they see their information more quickly and easily. For the first time they had a mobile application that really supported rounding."

Wellsheet not only addresses the gap in notifications but also provides a customizable solution for specific alerts. "So you can say, tell me when the lactic acid is back, you can say tell me when the stress test is back. And the provider will get an alert on his phone or his watch," Gallagher shared. "We have not been able to solve that problem for 20 years with that level of personalization."

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> **Trish Gallagher**
> Chief Information
> Nursing Officer
> **Medical University of
> South Carolina**

Importance of Integration

Gallagher provided insights into the successful implementation of Wellsheet, underscoring its efficiency and seamless integration with their existing Electronic Health Record (EHR) systems. **It only took 5-6 weeks to successfully deploy Wellsheet**, leaving a positive impression on all stakeholders involved.

"I can't emphasize the importance of the integration enough. We were doing a pilot with Google but their application sat outside the EHR. Adoption did not happen because the provider said, 'Why am I going to click over there and go somewhere else?'"

When it came to using Wellsheet, there was a seamless transition, Gallagher shared. "The clinicians don't realize they're leaving the EHR, so they think they're still in Cerner, on their mobile phone, they don't see that broken experience."

Glaser echoed these sentiments, underlining the importance of applications such as Wellsheet complimenting a core transactional system.

Limoli contributed insights on the paramount importance of consistency in user experience across various EHR systems. He specifically noted Wellsheet's embedded design within major EHR systems such as Cerner, Epic, and Athenahealth.

Wellsheet's implementation lies not only in its rapid deployment but also in its seamless integration with existing EHR systems, providing a unified and efficient experience for healthcare providers. The failure of the Google pilot project underscores the crucial role that integration plays in the adoption of new healthcare technologies. Wellsheet provides a seamless user experience design, ensuring that clinicians can effortlessly incorporate it into their workflow without disruption.

Concord Hospital
Optimizing Inpatient Length of Stay

Dr. Fore presented a comprehensive overview of their successful initiative aimed at optimizing inpatient length of stay within a three-hospital system in northern New England, Concord Hospital. The primary focus of the presentation was on the utilization of interdisciplinary teamwork and data analysis, with a particular emphasis on the implementation of the Wellsheet platform to achieve operational gains.

"We've been trying to reduce our average length of stay with 'vim, vigor, and vitality' for the past 5 years," Dr. Fore shared. As a rural hospital, it was especially important to reduce the average length to in turn increase capacity. After implementing Wellsheet, "In the last 12 months, we've actually reduced our length of stay for inpatients by about a day and a half. So for an organization of our size, little under a billion dollars, this is about a $35 million top line addition to our operations."

Dr. Fore highlighted the instrumental role of Wellsheet in streamlining workflows and improving clinical documentation across the three-hospital system. He emphasized the impact on operational efficiency, stating, "Literally, [a clinician] picks up his phone and takes off his lead and starts walking towards the unit where the patient is. By the time he gets there, all the relevant clinical data has been reviewed, clinical documentation, trending laboratory data, and that's actually a fairly impressive enhancement."

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Christopher A. Fore, MD
Chief Quality Officer
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Discharge Barrier Meetings

Concord Hospital has embraced a Six Sigma, LEAN-INspired approach to healthcare management. At the forefront of Concord Hospital's commitment to efficiency and quality patient care is the implementation of discharge barrier meetings—a strategic initiative designed to decipher the critical components necessary for the seamless discharge of patients.

This team meets Monday, Wednesday, and Friday. We meet for about 30 minutes and in this meeting we use Wellsheet, which allows us to go through each case," Dr. Fore shared. "We can review clinical data and clinical notes. We can figure out what the cardiologist said and what the gastroenterologist said. We can look at what the patient's echocardiogram looked like."

"So really, at the end of this process, what we're doing for patients with discharge barriers is creating multi-contributor group notes about patients that serve as notes to ourselves. What are we doing? What have we tried? Where are we at? What's the status of this patient at a glance? Overall, it's been really helpful."

Wellsheet allowed clinicians across the board to review pertinent clinical results and make high level decision making, he shared. "You can get a clinical vignette. You can also see what the active issues are. You can see the assessment and plan. You can see the provider's diagnosis list. You can see trending medications when a patient receives them, you can see all their vitals."

Improving Healthcare Efficiency through Data Analysis

During this segment of the presentation, the focus was on the crucial role of impactful products and services in the healthcare industry, particularly in addressing burnout and capacity issues. Healthcare veteran Glaser, as former CEO of Siemens Healthcare Services and Senior Vice President of Cerner Population Health, began by emphasizing the need for more effective solutions.

He highlighted the importance of improving decision-making capacity, asserting that it can enable individuals and teams to focus on relevant data, ultimately leading to evidence-driven decisions and better patient outcomes.

Dr. Glaser underscored the practical benefits of improving decision-making capacity, emphasizing that it saves time, creates capacity, and facilitates the seamless progression of the care process. This emphasis on efficiency became a recurring theme throughout the presentation, setting the stage for discussions on healthcare technology and user experience.

In the current state of healthcare, marked by challenges and complexities, **solutions like Wellsheet represent a monumental leap forward for all stakeholders involved—patients, providers, and healthcare organizations as a whole.** Wellsheet not only streamlines decision-making processes but also signifies a substantial improvement in the overall healthcare landscape.

"The way that we collectively apply technology to improve care delivery is a form of guerilla war. It is a series of small, more medium-sized victories that add up over time," shared Glaser. "Those of you are history buffs, there's no Battle of Midway here, which turned the tide. We need to just progressively chisel away at it, and the world will be better. Wellsheet is an important tool in our efforts to make healthcare safer, of higher quality and more efficient."

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John Glaser
Executive-In-Residence
Harvard Medical School

About Wellsheet

Wellsheet envisions a much different future, one in which providers make decisions with a comprehensive view of relevant information, structured precisely for their needs. Predicting providers' information needs is a tremendous technology challenge, only possible through exceptional engineering and design talent, the latest advances in machine learning, and partnership with EHR vendors. Wellsheet brings these together to deliver the first comprehensive workflow support system that learns and anticipates providers' needs.

Learn more

About DHI

Digital Health Insights delivers trusted information to senior professionals driving digital transformation through their healthcare organizations. The website and weekly newsletter serve the needs of a broad segment of healthcare stakeholders – health systems, physician practices, health plans, government, life sciences, and technology providers – seeking to leverage the rapid development of technology to deliver better patient outcomes, ease provider burnout and increase business performance.

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