Case Study: How WellSpan is Leveraging AI to Innovate Care Delivery

As Leading Health Systems continue to navigate their AI implementation strategy, many are grappling with getting organizational buy-in and identifying the best AI use cases to invest in. For WellSpan Health, positioning AI as an enabler of innovation helped them get the Board of Directors and care teams engaged early on in creating and executing their AI pilots. In this piece, we highlight how WellSpan socialized AI with their organization and two use cases that demonstrate success.

1 Getting Multistakeholder Buy-in

- From senior leaders to caregivers, getting multistakeholder support is critical for adopting AI and new processes needed to optimize it.
- Innovation is a core component of WellSpan's organizational culture and strategic goals. Therefore, positioning AI as an enabler of innovation helped secure support of AI adoption from care teams and the Board of Directors.
    - For board members, WellSpan educated them on AI and involved them in the early planning stages so they can understand AI's potential and help navigate the complexities of implementation.
    - For care teams, WellSpan got providers engaged in the AI piloting process early on and relied a lot on their feedback to make sure AI solutions are well integrated with existing data platforms and user friendly.

> *"By approaching AI with curiosity and engaging our teams on this journey, we head off fears of the unknown or trepidation that jobs will be displaced and focus more on the clinical and administrative benefits to be gained."*
> – CEO, WellSpan Health

2 Identifying the Most Valuable Use cases

- For WellSpan, AI is just one component of their approach to innovation. To identify specific AI use cases, they start with identifying a problem or opportunity; then applying various forms of AI as part of the overall solutions they design.
- For example, workforce and financial challenges, combined with the pandemic's lasting impact on care delivery made WellSpan focus on AI use cases that improves workforce productivity, health outcomes, and the patient experience while generating greater efficiencies. Specific use cases they have deployed include:
    - Supporting diagnostics and clinical decision support with visual AI that reads imaging studies
    - Streamlining clinical documentation through voice AI that writes clinical notes
    - Simplifying the consumer experience through digital bill pay and scheduling
    - Improving acute care outcomes by using visual AI to monitors patient movement for fall risk

Virtual Nursing and Remote Patient Monitoring Pilot Augments Bedside Nurses

Initial Use Case: Improve patient safety and address nurse burnout in its rehabilitation inpatient hospital.

Model:

Virtual Nurses

- Uses **telehealth** for conducting discharges, admissions, and patient education.
- Can see a wider group of patients and has time to thoroughly answer patients' questions.

Bedside Nurses

Has more capacity to focus on bedside care

Nursing Assistants

- Uses **AI-embedded software** to remotely monitor patients and alert care team to potential falls.
- Has dedicated focus on patient safety across more patients.

Pilot outcomes show improved patient outcomes, employee satisfaction, and productivity

2h Time saved for every nurse, every shift

15% Decrease in patient falls

21% Rise in nurse communication satisfaction

11% Reduction in nurse turnover

Current Status: Virtual nursing and RPM is being expanded to other inpatient nursing units.

> "Our bedside care teams saw the value of virtual nursing and it **brought more joy back to nursing**. Our leaders did a great job reinforcing the benefits and purpose to make jobs easier and patient care safer." – CEO, WellSpan Health

AI-Enabled Diagnostic Imaging Pilot Supports Productivity and Health Outcomes

Initial Use Case: Improve quality of care and generate greater efficiencies for interpreting radiology imaging.

Model:

Visual Generative AI

- Visual AI solution reviews hundreds of images from a CT scan within three minutes and reports back to physician list.

- It prioritizes the most concerning findings for the radiologist up to 81% faster than traditional review.

Radiologists

- Radiologists have a more comprehensive overview of imaging to help them make better clinical decisions.

- Radiologists can provide more timely care for critical cases that can translate into better health outcomes for patients.

Pilot outcomes show improved productivity and quality of care

Faster prioritization of key findings:

AI-powered diagnostics have critical prioritizations up to 77% faster than human workflow alone

Greater efficiency:

AI-powered diagnostics services perform 20-24% above industry benchmark for productivity

Fewer errors:

40% of radiologists state AI caught something they might have overlooked

Physician satisfaction:

More than 90% of physicians engage with AI and more than 80% are supportive of its use

Current Status: The visual AI solutions has been embedded across all CT scans. Other modalities are being explored.