

EVALUATING AI SCRIBE'S IMPACT ON CLINICAL WORKFLOW, ADMINISTRATIVE BURDEN, AND PATIENT SATISFACTION

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DESCRIPTION

Clinicians at Humber River Health (HRH) face rising documentation demands that impact time available for direct patient care, efficiency, and contribute to burnout. To address this, HRH piloted AI Scribe technology, using ambient listening and natural language processing to evaluate its potential for improving documentation workflows, enhancing provider experience, and supporting strategic goals in digital innovation, workforce wellness, and quality of care.

From April to June 2025, AI Scribe was deployed across nine clinical programs, engaging 26 participants (Physicians and Nurse Practitioners) across ambulatory and inpatient settings. The pilot tested the performance of a standalone AI Scribe product, which was not integrated into existing documentation systems. A structured evaluation collected quantitative and qualitative data from clinicians and patients.

OBJECTIVE

To evaluate how the use of an AI scribe product can impact clinician workflows, documentation time, coding accuracy, and patient satisfaction.

ACTIONS TAKEN

Executive sponsorship and engagement of clinical and operational stakeholders ensured broad involvement. Demonstrations were conducted, followed by training to build provider confidence. Educational materials supported clinicians and patients. The technology was deployed with ongoing support and check-ins, capturing a total of 2,159 patient-clinician interactions. Pre- and post-implementation evaluations measured documentation time, clinician and patient satisfaction, and coding quality to guide continuous improvement.

Patient Experience: Effect of AI Scribe on Clinician Engagement

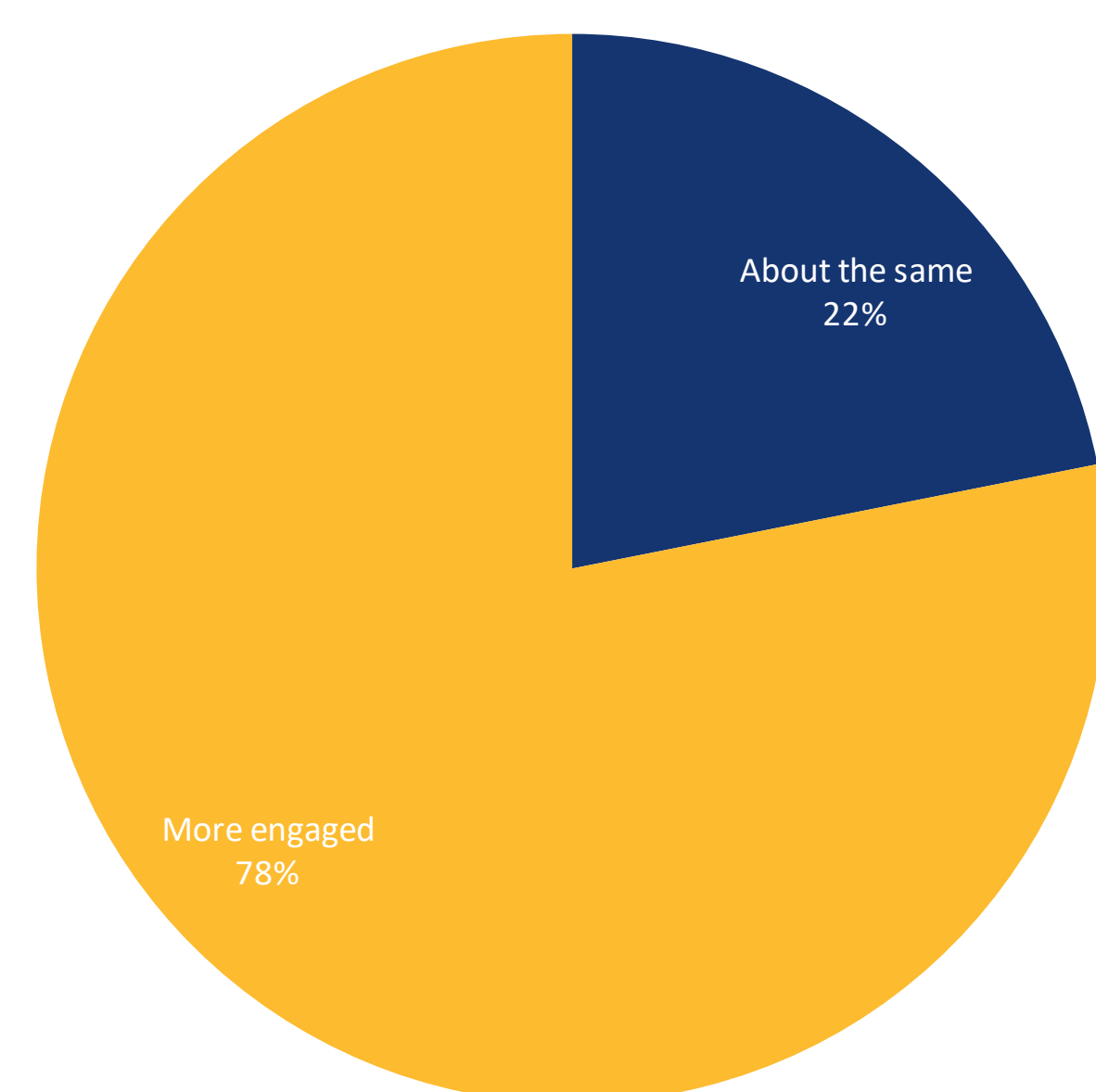


Figure 1. The majority of patients surveyed felt that the use of AI Scribe during their visit allowed the clinician to be more engaged.

Patient Experience Survey on Use of AI Scribe

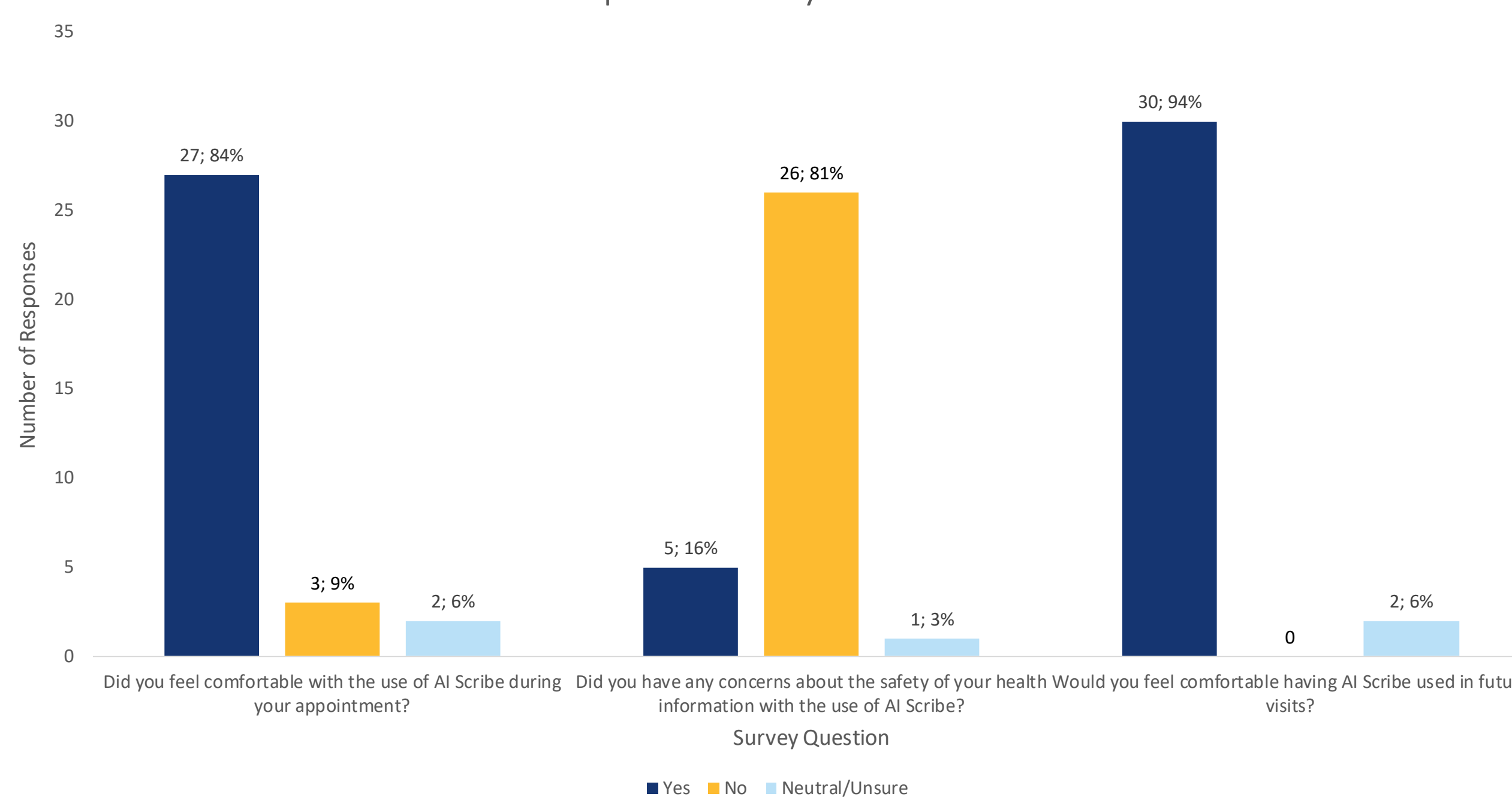


Figure 2. The majority of patients surveyed were comfortable with the use of AI Scribe during their visit and would be comfortable using it in the future. Very few had concerns about the safety of their health information.

Documentation Time Before and After AI Scribe

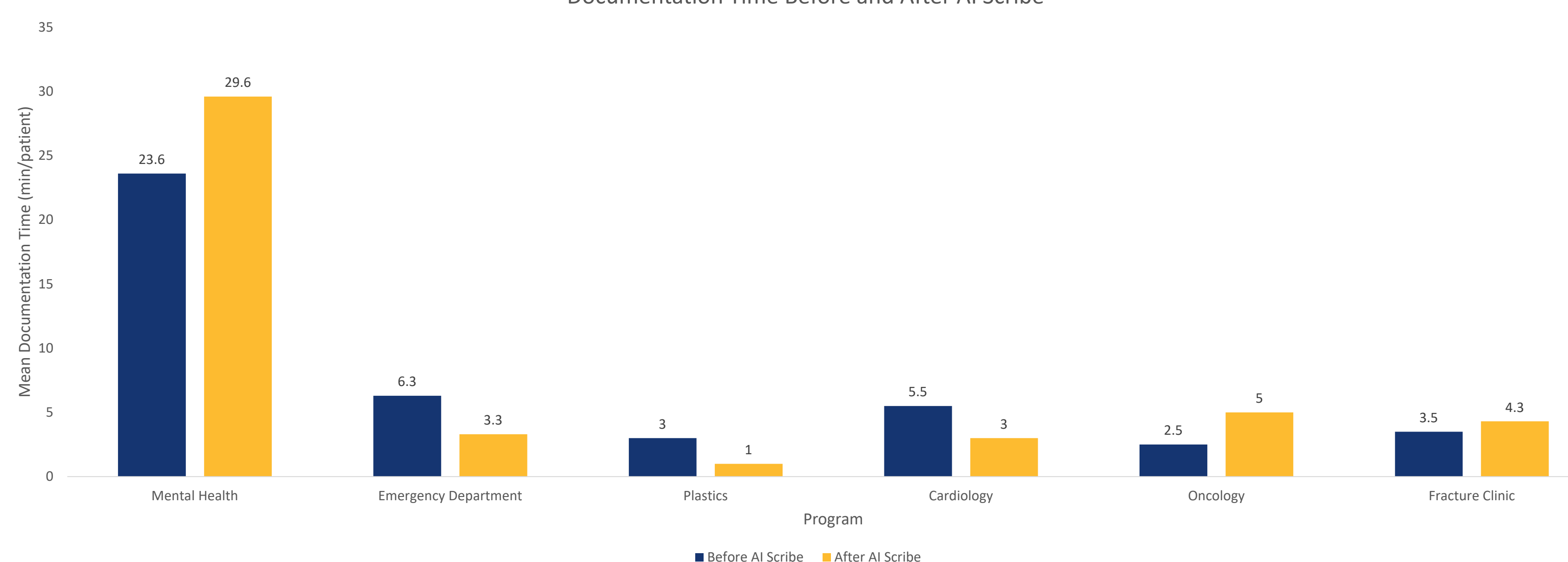


Figure 3. High volume specialties like the Emergency Department and Cardiology had lower documentation time as a result of using AI Scribe.

SUMMARY OF RESULTS

Benefits were most evident in high-volume specialties like Cardiology and Emergency, with clinicians reporting reduced documentation burden and more patient-focused interactions. Challenges emerged elsewhere: overly lengthy notes in Plastics/Orthopedics, inadequate treatment documentation in subspecialties, high editing burden overall, and overly summarized notes in Mental Health. Median documentation time decreased from 5.99 to 4.85 minutes, though average times rose due to narrative-heavy cases. Only 38.5% of AI-generated ICD-10 codes met Canadian Institute for Health Information (CIHI) standards. Patient feedback was positive: 94% were comfortable with future use, and 74% noticed improved provider engagement. The pilot showed strong potential, particularly in structured, high-volume workflows. Insights gathered from pilot suggest a need for more streamlined and specialty-sensitive documentation tools to improve clinician satisfaction.

LESSONS LEARNED

With ongoing refinement and strategic integration, AI Scribe offers scalable potential to support clinician wellbeing, optimize documentation workflows, and advance patient care in a digital-first health system.

