Anecdote

A Bit About Me

I wondered: how are these electronic tools and their designs affecting the quality of clinical care?

Computers in the clinical encounter: a scoping review and thematic analysis

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ABSTRACT

Objective Patient-clinician communication has been associated with increased patient satisfaction, trust in the clinician, adherence to prescribed therapy, and various health outcomes. The impact of health information technology (HIT) on the clinical encounter in general and patient-clinician communication in particular is a growing concern. The purpose of this study was to review the current literature on HIT use during the clinical encounter to update best practices and inform the continuous development of HIT policies and educational interventions.

Methods We conducted a literature search of four databases. After removing duplicates, reviewing titles and abstracts, performing a full-text review, and snowballing from references and citations, 51 articles were included in the analysis. We employed a qualitative thematic analysis to compare and contrast the findings across studies.

Results Our analysis revealed that the use of HIT affects consultations in complex ways, impacting eye contact and gaze, information sharing, building relationships, and pauses in the conversation. Whether these impacts are positive or negative largely depends on the combination of consultation room layout, patient and clinician styles of interaction with HIT as well as each other, and the strategies and techniques employed by clinicians to integrate HIT into consultations.

Discussion The in-depth insights into the impact of HIT on the clinical encounter, especially the strategies and techniques employed by clinicians to adapt to using HIT in consultations, can inform policies, educational interventions, and research.

Conclusion In contrast to the common negative views of HIT, it affects the clinical encounter in multiple ways. By applying identified strategies and best practices, HIT can support patient-clinician interactions rather than interfering with them.

(Crampton et al 2016)

Today I'm a clinician researcher at Toronto Western Family Health Team and health tech entrepreneur

- I decided to complete a Masters of Health Informatics after family medicine residency

- I practice clinically but also work to evaluate and solve health system pain points using digital tools
  - 12 publications and 4 grants
  - I feel at home in both academia and industry

- One of my research projects on AI ambient scribes in the pre-GPT era (2018)
  - Technology was quite successful for the time
  - So my AI engineer co-founder and I took the plunge into entrepreneurship: Mutuo Health was founded
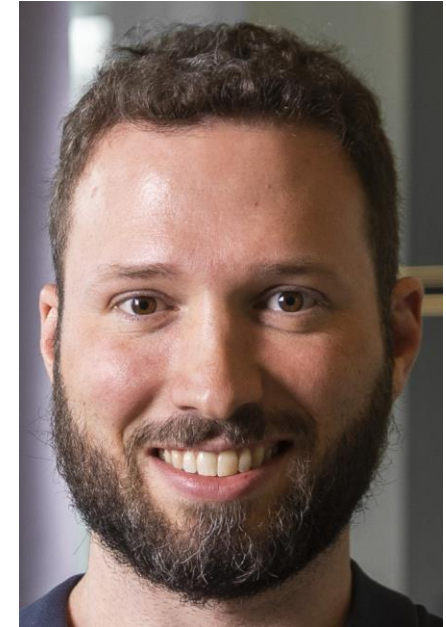
Solution

**Introducing AutoScribe™:
A doctor's digital scribe assistant powered by AI**
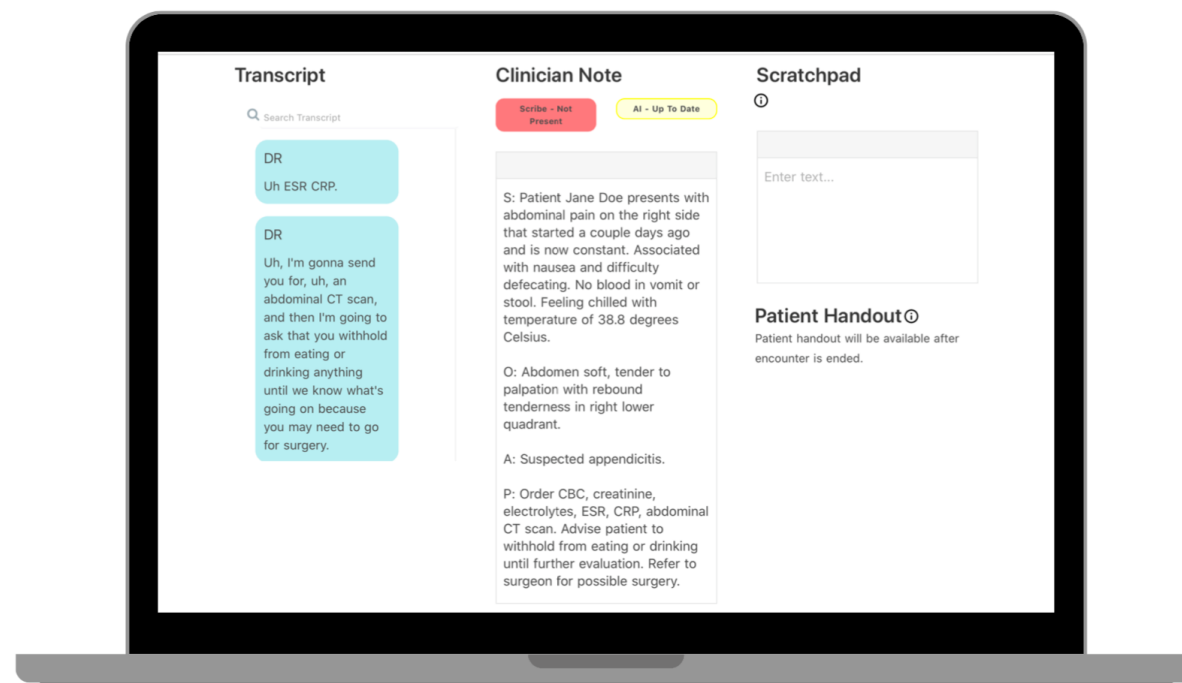
1: CLINICIAN-PATIENT CONVERSATION TRANSCRIBED

2: AI GENERATES MEDICAL NOTE IN REAL-TIME

3: CLINICIAN ACTS AND EDITS NOTE; AUTO-INSERTS INTO EMR

4: AI IMPROVES FROM EDITS AND PERSONALIZES

Solution Benefits

More **engaged** doctor-patient experiences

More **efficient, cost-effective** clinical encounters

Reduced patient wait times

Reduces administrative burden

6

Current and upcoming features *(blue coloured means unique in market)*

Current Features/Benefits	AutoScribe
Real-time generation	✓
Note Style Personalization	✓
Medical specialty template flexibility	✓
Documentation standards/ structured coded data (ICD/ SNOMED in FHIR format)	✓
Summary for patient	✓
Laboratory requisition prediction	✓
Include patient context from EMR	✓
Multi-lingual input and output (28 languages)	✓

New unique features in development or in Alpha release:

-Optimized AutoScribe for:
- **Mental Health / neuropsychological visits**
- **Bedside or virtual rounds**

-"e-Referral content prediction" feature

-"Pre-visit patient questionnaire" feature

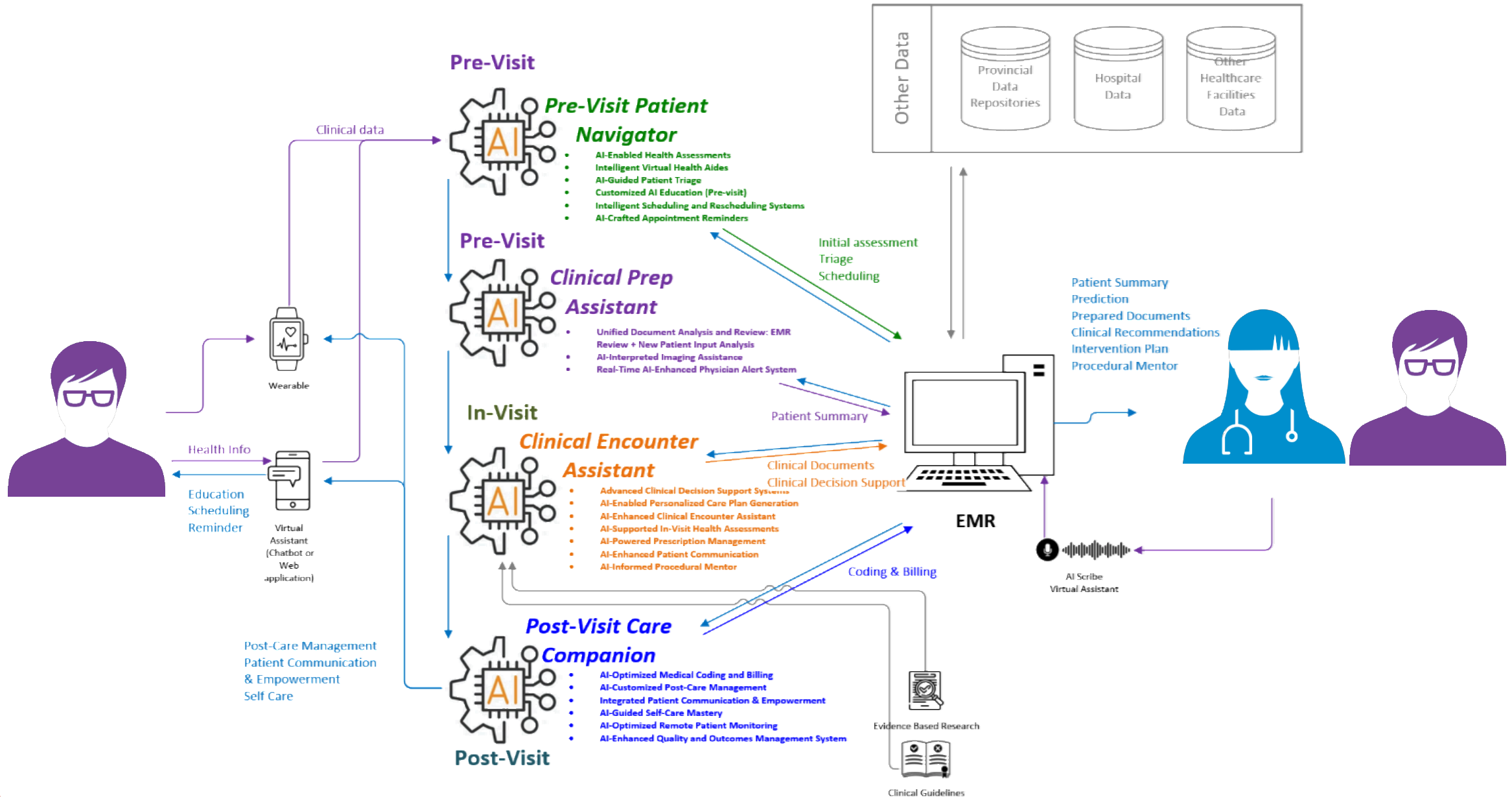**-AutoForm: "PDF form auto-preparation" feature**

Current company status

- Mutuo Health is now a subsidiary of Healwell AI Inc, 51% ownership acquired in Nov 2024
- Growing team of 10 employees with $1.2M ARR; in next 12 months predicting $2M ARR

Vision of AI-integrated Primary Care

Discussion today: Agentic AI- are we ready?