ECHO IDAHO:
Healthcare Vitality

The Robots can HAVE My Job:

Leveraging AI to Reduce EHR Hours

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Learning Objectives

- Understand current state of physician/APP burden

- Understand how AI can be used to decrease burden

- Identify challenges to use of AI in healthcare

- Intro to future applications

Understanding the Problem

- Complex care and payment systems require complete and accurate documentation

- It is not possible to provide care and document care at the same time

- The primacy of documentation and data review decreases the time and energy to provide compassionate and empathic care

- Result:
  - 53% of clinicians report burnout
  - $260 million per year attributable to burnout-related PCP turnover

Targets for Intervention

- Documentation
  - Use of generative AI and voice recognition (a.k.a. "ambient listening") to create a note from patient interaction.

- Data Review
  - Use of AI to collate discrete data and past notes to create patient summaries for primary care providers and interim/discharge summaries for inpatient providers

- Patient Messaging
  - Use of LLMs to draft responses to patient messages and queries

Early Successes

- St. Luke's piloted use of ambient listening software
  - 40% reduction in documentation time
  - 38% reduction in documentation time outside of work hours
  - 27% reduction in reporting severe burnout
  - 75% of clinicians reported reduced cognitive load

- Ambient documentation expanding to additional users in selected specialties
- ED and Inpatient tools in development
- 4 clinics piloting draft patient message responses

Expected Challenges

- Need for review and editing

- Transferring LLM training bias to documentation bias

- Misinterpreting under-represented speech patterns, terminology, accents

- "Good enough" software trains users to over-trust system

Expected Benefits

- More time for patient care

- More energy for patient care

- Happier clinicians

- Longer careers

Additional AI Applications

- Better use of information we already have
  - Incidental findings and confirmation of follow-up

- Better acquisition of information
  - Highlighting abnormalities that we can find, but not consistently

- Augmenting human capacity
  - Digital pathology applications in histology

- Analyzing data that outside human perception
  - Cardiac CT example

References

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