



Sydney
Local Health District

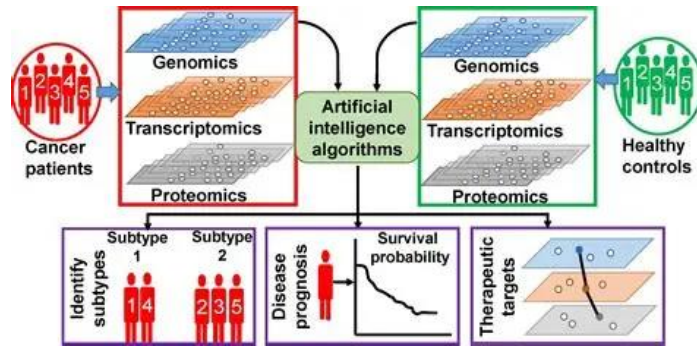
Dr Sophie Hogan
Director IAS

Dr Adrian Boscolo
Acting CMIO

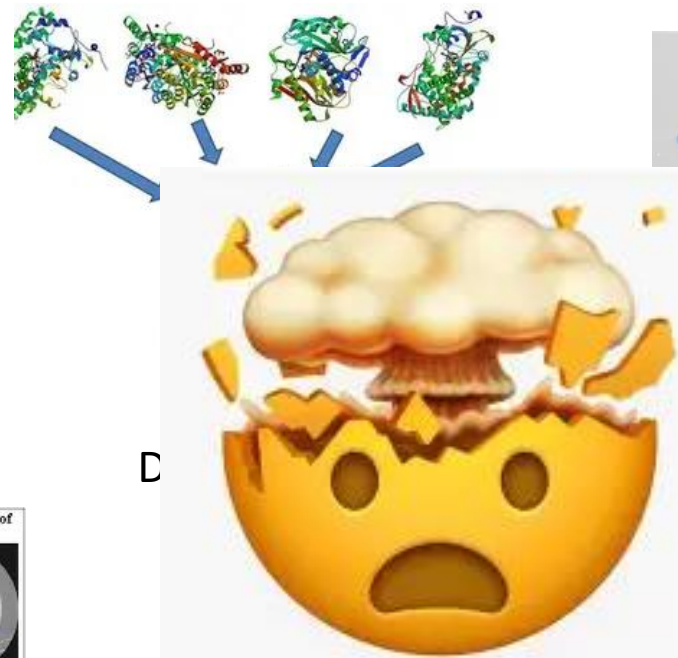
Innovations in AI

AI

AI in Healthcare



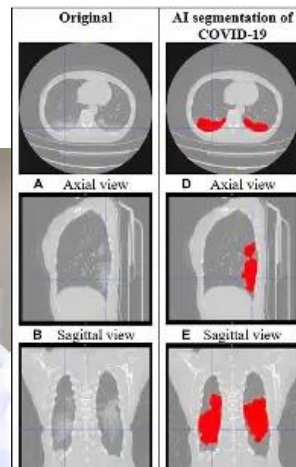
Disease prediction



D



Patient care



Medical image analysis

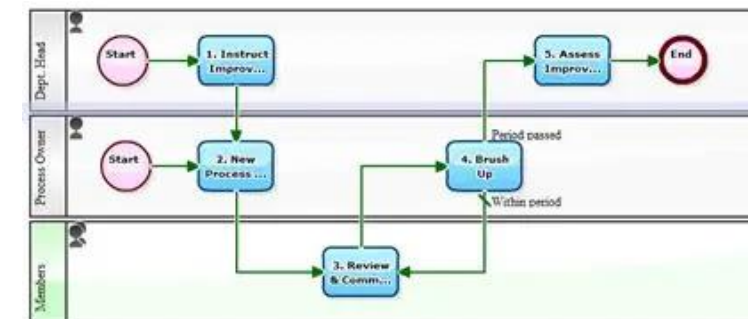


Early detection and personalised treatment

Education



Surgical assistance



Operational benefits

AI scribe

- Need
- Process
- Challenges
- Monitoring

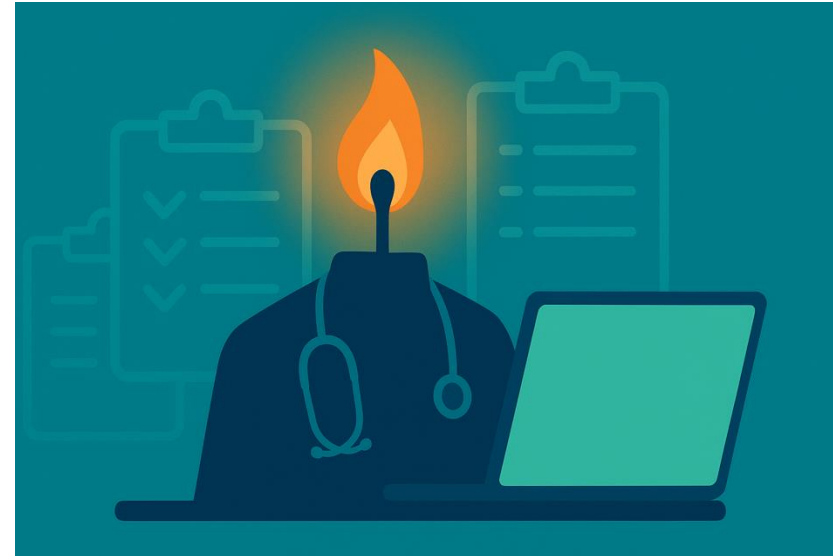
Clinician Time is Being Lost to Documentation

- Hospital physicians spend 3.8 hrs a day (~ 37 %) on the eMR¹
- Interns spend ≈ 45 % of their workday on eMR tasks¹
- “We look forward to a medical AI scribe being approved to use in our clinics - it is the future! I would even pay out-of-pocket to use it.” – Email from SLHD clinician



Documentation Burden Fuels Burnout

- 61 % of physicians say “too many bureaucratic tasks” are the top driver of burnout³
- Burnout doubles safety incidents and low professionalism; more than doubles patient dissatisfaction⁴
- Burned-out physicians are three times more likely to plan to leave clinical roles⁴



What is an AI scribe?

- An AI scribe is a software tool that uses artificial intelligence to transcribe and summarise audio conversations
- These tools listen to a conversation, extract key information, and compile it into a structured note or other document like a referral letter.



AI Scribes Have Entered Mainstream Care

- USA: 7,260 doctors used an ambient scribe in > 2.5 M visits
→ 16 k hours saved⁵
- Nuance DAX: 7 min/encounter saved; 70 % report less burnout⁶
- In NSW, 22 % of GPs have already tried an AI scribe⁷



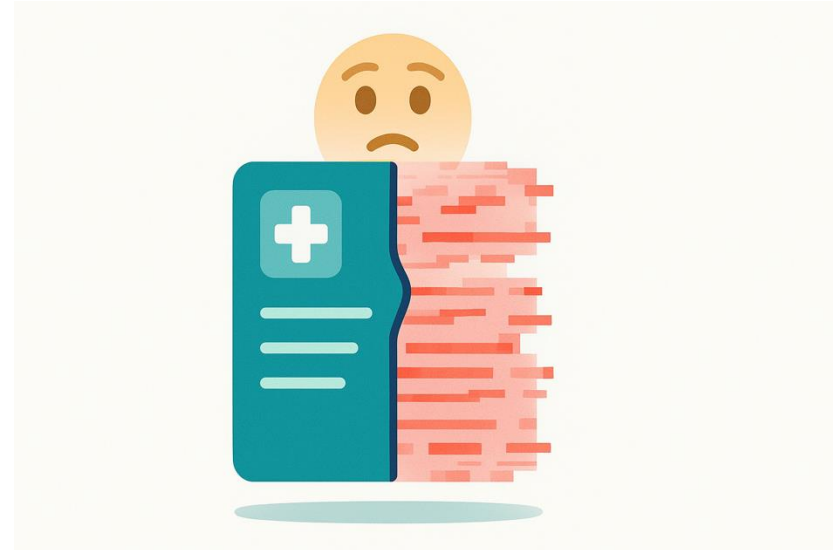
Privacy and Cybersecurity Safeguards Are Non-Negotiable

- Data is sensitive health information (PPIP Act, HRIP Act)
- Threats: data leakage, prompt injection attacks, ransomware
- Third-party scribe solutions may store data offshore unless governed



AI Output Can Hallucinate and Introduce Errors

- Draft notes may contain transcription or reasoning mistakes
- Inaccurate records erode trust and create clinical risk
- Continuous oversight and strong governance is required to manage risks



Digital Health Resources Are Limited

- Staff shortages
- Competing projects limit capacity for large-scale roll-outs
- Change fatigue in clinical teams after rapid COVID-era rollouts



RPA Sarcoma Clinic is the Ideal Pilot Site

- State-wide referral hub with complex documentation
- Small, motivated team of clinicians and admin staff
- High appetite to cut paperwork and improve patient focus



Governance Framework Safeguards

Privacy & Security

- Explicit patient consent workflow with opt-out signage
- No audio retained; transcripts encrypted, Australian Storage, auto-purged after 1–90 days
- PIA & Cyber Risk Assessment Completed
- NSW AI Assessment Framework
- Single Sign On
- Oversight via SLHD AI & Data Governance Committee



HeidiAI Pilot Keeps Clinicians in the Loop

- Ambient audio captured on secure device
- Real-time transcript → concise summary draft
- Clinician reviews then files to eMR—human approval is mandatory



Pilot Evaluation Will Focus on Safety and Workload Impact

- Measure note-time per consult, clinician focus score, patient satisfaction, costs
- Spot-check accuracy and track any incidents
- Metrics will guide decision on wider adoption



Thank you

References

1. Verma G, Ivanov A, Benn F, Rathi A, Tran N, Afzal A, *et al.* Analyses of electronic health records utilisation in a large community hospital. *PLOS One*. 2020;15(7):e0233004. doi:10.1371/journal.pone.0233004. Available from: <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0233004>
2. Smallwood N, Karimi L, Bismark M, *et al.* High levels of psychosocial distress among Australian frontline healthcare workers during the COVID-19 pandemic: a cross-sectional survey. *General Psychiatry*. 2021;34(5):e100577. doi:10.1136/gpsych-2021-100577. Available from: <https://pubmed.ncbi.nlm.nih.gov/34514332/>
3. Medscape. *Medscape National Physician Burnout & Depression Report 2023: "I Cry but No One Cares"*. New York: Medscape; Jan 2023. Available from: <https://www.medscape.com/slideshow/2023-lifestyle-burnout-6016058>
4. Hodkinson A, Zhou A, Johnson J, *et al.* Associations of physician burnout with career engagement and quality of patient care: systematic review and meta-analysis. *BMJ*. 2022;378:e070442. doi: 10.1136/bmj-2022-070442. Available from: <https://pubmed.ncbi.nlm.nih.gov/36104064/>
5. Tierney AA, Gayre G, Hoberman B, Mattern B, Ballesca M, Wilson Hannay SB, *et al.* Ambient Artificial Intelligence Scribes: Learnings after 1 Year and over 2.5 Million Uses. *NEJM Catalyst Innovations in Care Delivery*. 2025;6(5):CAT-25. doi:10.1056/CAT.25.0040
6. Nuance Communications, Inc.; Epic Systems Corp. Nuance and Epic expand ambient documentation integration across the clinical experience with DAX Express for Epic [Internet]. Burlington (MA): Nuance Communications; 2023 Jun 27 [cited 2025 Jul 21]. Available from: <https://news.nuance.com/2023-06-27-Nuance-and-Epic-Expand-Ambient-Documentation-Integration-Across-the-Clinical-Experience-with-DAX-Express-for-Epic>
7. Attwooll J. AI scribe initiative to assess impact of new technology [Internet]. *newsGP*. 2025 Apr 16 [cited 2025 Jul 21]. Available from: <https://www1.racgp.org.au/newsgp/professional/ai-scribe-initiative-to-assess-impact-of-new-techn>
8. RACGP [https://www.racgp.org.au/running-a-practice/technology/artificial-intelligence-ai/artificial-intelligence-ai-scribes#:~:text=An%20artificial%20intelligence%20\(AI\)%20scribe,accurate%20and%20up%20to%20date](https://www.racgp.org.au/running-a-practice/technology/artificial-intelligence-ai/artificial-intelligence-ai-scribes#:~:text=An%20artificial%20intelligence%20(AI)%20scribe,accurate%20and%20up%20to%20date).
9. Department of Health, Disability and Ageing, TGA, [https://www.tga.gov.au/products/medical-devices/software-and-artificial-intelligence/manufacturing/artificial-intelligence-ai-and-medical-device-software/digital-scribes#:~:text=Digital%20scribes%20\(also%20referred%20to,LLMs\)%20and%20deep%20learning%20technologies](https://www.tga.gov.au/products/medical-devices/software-and-artificial-intelligence/manufacturing/artificial-intelligence-ai-and-medical-device-software/digital-scribes#:~:text=Digital%20scribes%20(also%20referred%20to,LLMs)%20and%20deep%20learning%20technologies)