



# AI Literacy for Medical Practices: Safely Transform Workflow and Care

Designed & presented by:

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## *Acknowledgement of Country*

Train IT Medical acknowledge the traditional owners and custodians of land and waterways we meet on today.

We wish to pay our respects to Aboriginal and Torres Strait Islander elders past, present and future.

# Your Presenter:



## Katrina Otto

**Managing Director, Train IT Medical Pty Ltd**  
Bachelor's degree in Adult Education,  
Diploma of Business, Health Administration  
Certificate IV Training & Assessment  
Certificate – Social Welfare

30 years experience in wide variety of medical practices.  
25 years experience as a TAFE teacher of medical administration & practice management.  
Approved trainer for Dept of Health, Best Practice, Medical Director, Australian Digital Health Agency, AAPM, APNA, RACGP, APNA, ACRRM, Rural Doctors Network, Avant Mutual, Primary Health Networks and others.



## Learning Outcomes:

1. Understand **AI Technologies** and their applications in clinical, administrative, and patient engagement contexts.
2. Identify practical ways AI can improve workflow efficiency, reduce clinician workload, and enhance patient care.
3. Evaluate the risks, limitations, biases, and ethical implications of using AI in healthcare.
4. Explain patient consent, privacy, and regulatory requirements, and the importance of human oversight.
5. Apply practical steps to trial, select, and integrate AI tools safely into your practice.
6. Lead your team confidently through AI adoption, fostering collaboration and maintaining patient-centered care.



# Module 1: Understanding AI and Its Applications

# What is Artificial Intelligence (AI)?

**Technology** that enables computers and machines to **simulate human intelligence** and problem-solving capabilities.

Involves large amounts of **complex data**.

Examples:

**Language** – Large Language Model (LLM) eg Chat GPT.

**Recommendation systems** – chatbots

**Images** – AI can read scans eg radiography

**Robotics** – surgery

**Task Automation** – appointments, bulk import



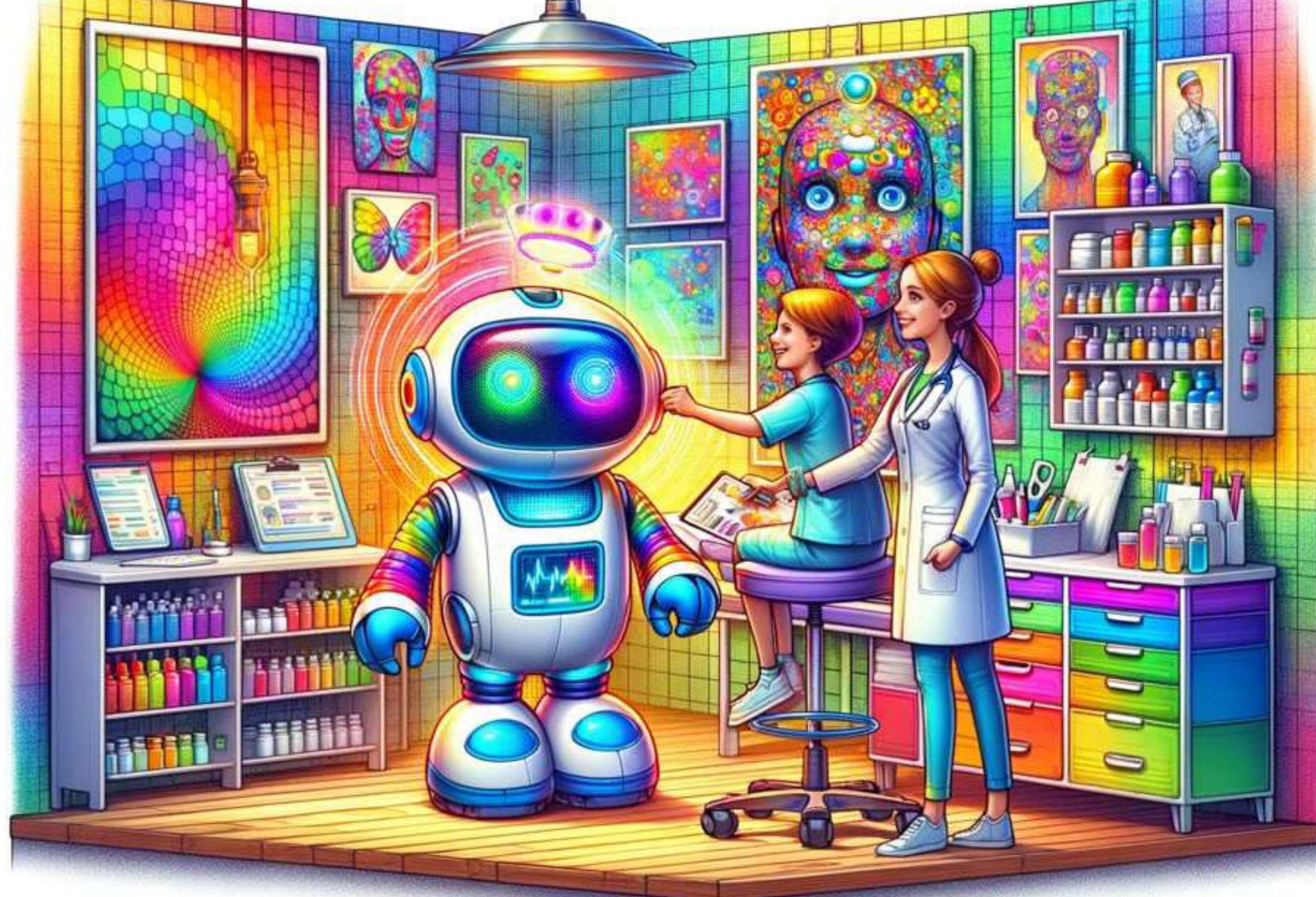
SIMPLE AI



COMPLEX



GENERATIVE AI



# Generative AI

## HOW TO USE YOUR INHALER

1. Remove the cap



2. Breathe in slowly through your mouth



3. Hold your breath for 10 seconds

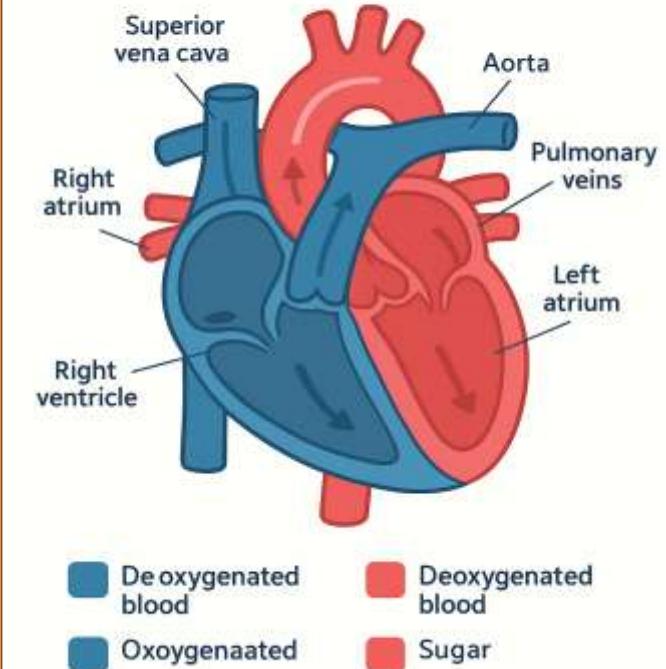


4. Breathe out slowly

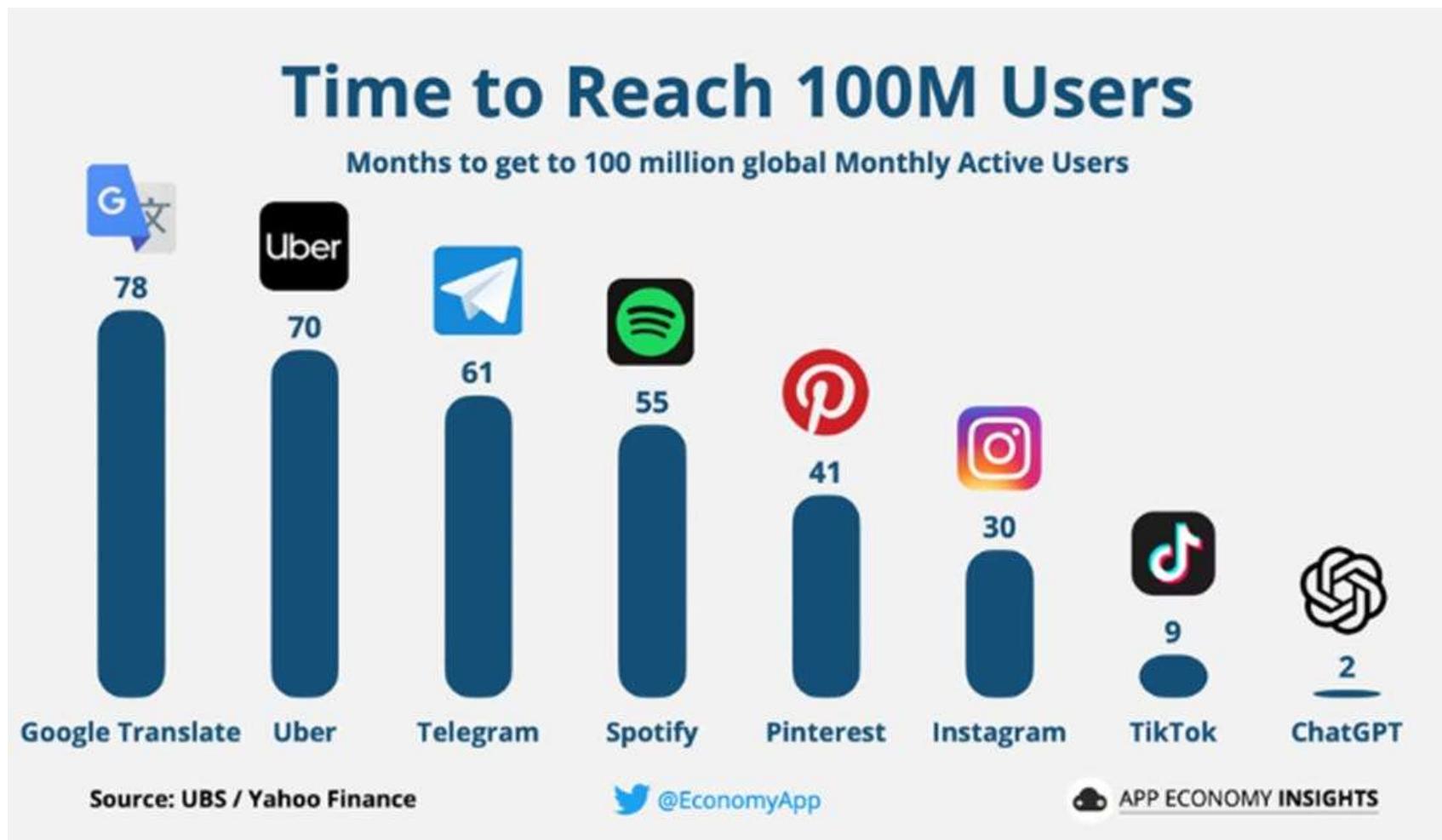


A subfield of AI that uses generative models to produce text, images, videos, or other forms of data.

## DIAGRAM OF THE HEART SHOWING BLOOD FLOW



# Rapid uptake of AI globally



# Module 1 - Summary



1. AI enables computers **to simulate human intelligence and problem-solving**.
2. Applications include **task automation, image recognition, natural language processing, recommendation systems, and robotics**.
3. In primary care, AI is currently being used for a limited range of activities to support **practice efficiencies**, but this is likely to expand significantly.
4. Tasks AI can help with:
  - Pre-consult/booking/triage
  - Consultation documentation
  - Post consultation follow up
  - Workflow/documentation/staff support
5. Change Mindset



# Module 2: Practical Examples in Clinical and Admin Workflows

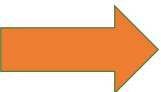
# Examples of AI in use

- **Diagnosis**
  - Diabetic retinopathy screening
  - Dermatology image analysis platforms (e.g. Molemap AI assist)
  - Analysing medical images – Breastscreen NSW
- **Triage**
  - Symptom checkers for patient self triage
  - Smart online booking & routing
  - Nurse led after hours triage support



# AI Patient tools

1. Access the Symptom Checker
2. Answer a series of questions
3. Receive a recommendation



## Symptom Checker

Not sure if you need a doctor? The Symptom Checker can help you decide what to do next.

### About

- The Symptom Checker advises if you should see a doctor or care for yourself at home.
- It can also help you find healthcare providers.
- It is designed for people in Australia.
- The data that you share with us is safe, secure and unidentified.
- The Symptom Checker cannot give you a diagnosis and is not a substitute for professional healthcare.



### How to use it

- Answer questions about your symptoms — this takes an average of 6 minutes.
- You need to answer each question unless it's marked as optional.



### Get started

Who is this symptom check for?



Me



Someone else

By using this tool, you agree to our [Terms of Use](#) and [Privacy Policy](#).

[Start a symptom check](#)

See a doctor within a week

# AI uses in Primary Care

## Pre-Consult/Booking

## Consultation

## Follow Up



AI Receptionists/  
Voice agents/Chatbots

### Clinical documentation

- AI scribes, letters, care plans

### Billing support



### Clinical Decision support

Evidence synthesis, research,  
summarising guidelines.

- Follow up missed appointments
- Patient summary & education
- Automated outbound call systems
- Monitor patient compliance
- Inbox/Email/Scanning auto-allocation
- Analytics



# AI uses per role

## Practice Managers

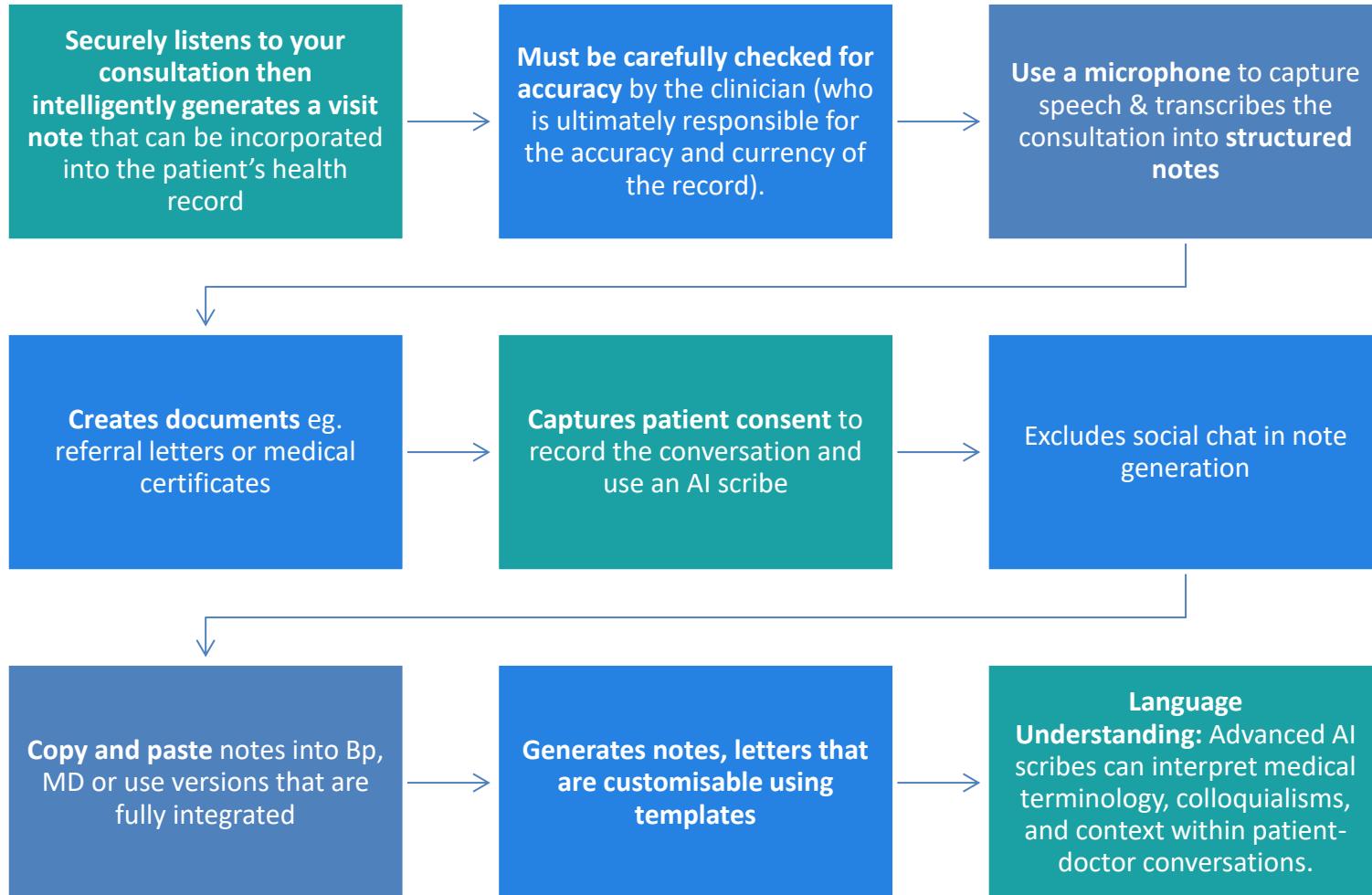
## Clinicians

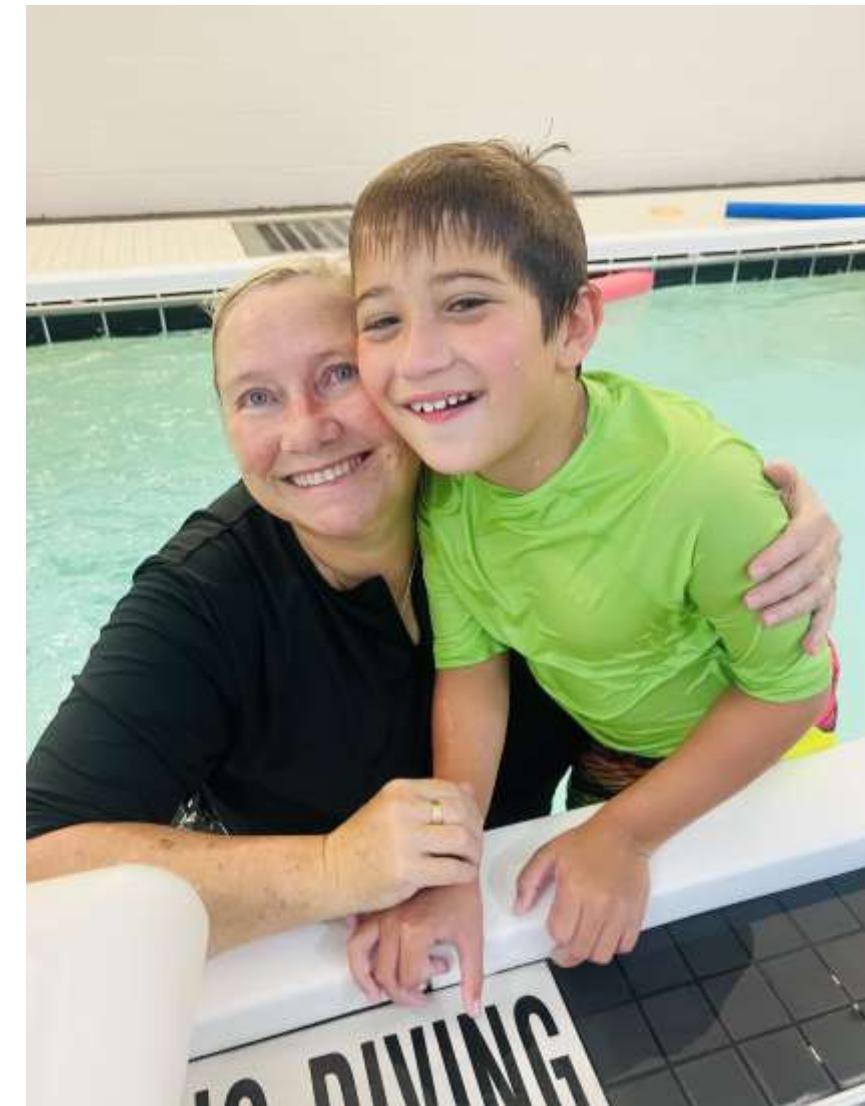
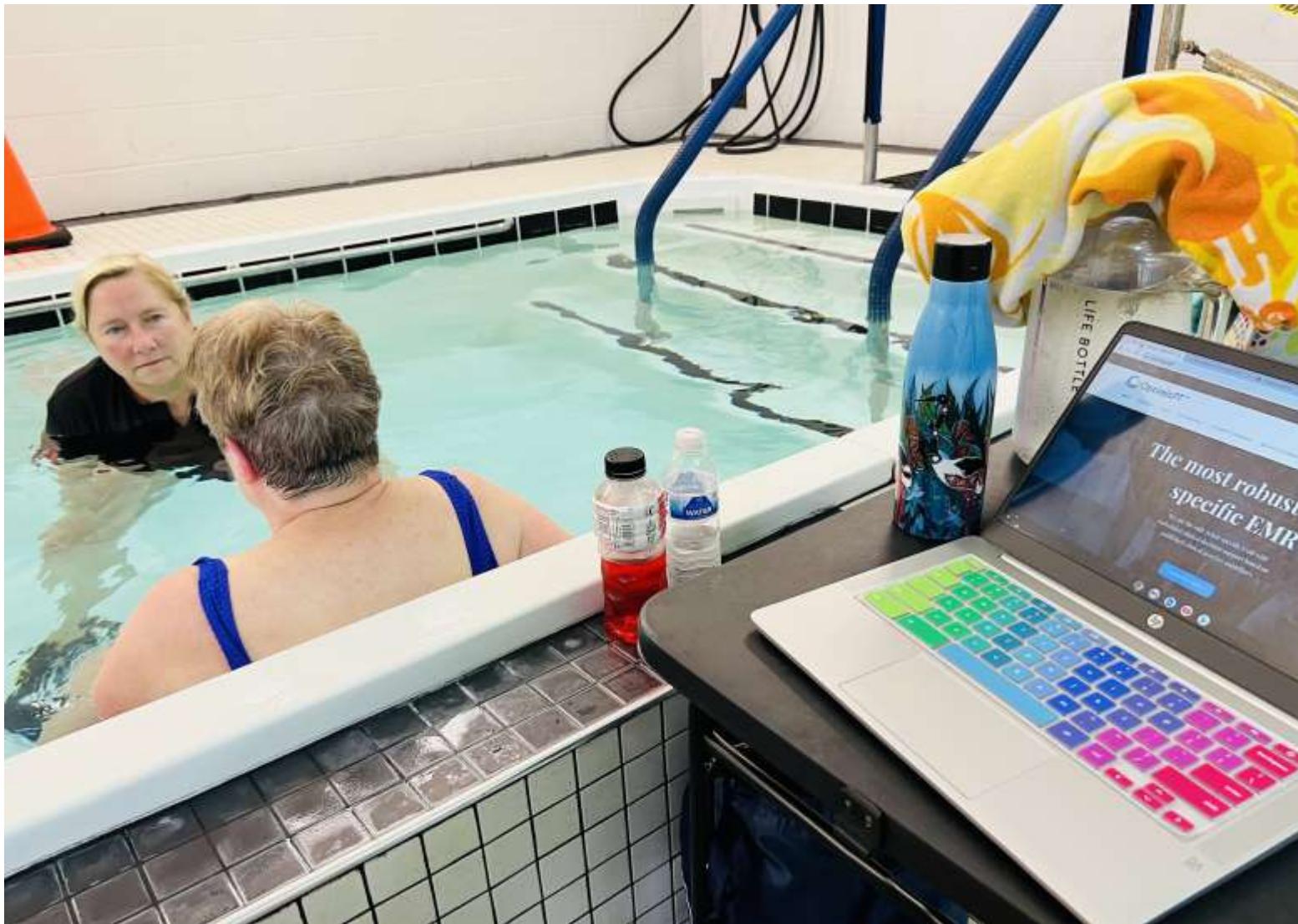
## Receptionists

- Meeting minutes
- Quality Improvement ideas
- Team building ideas
- Rewording agendas to suit CPD requirements.
- Patient education
- Rostering staff
- Recruitment
- Contracts
- Policies & Procedures
- Invitations
- Training Resources
- Social media/practice promotion
- This list is endless.



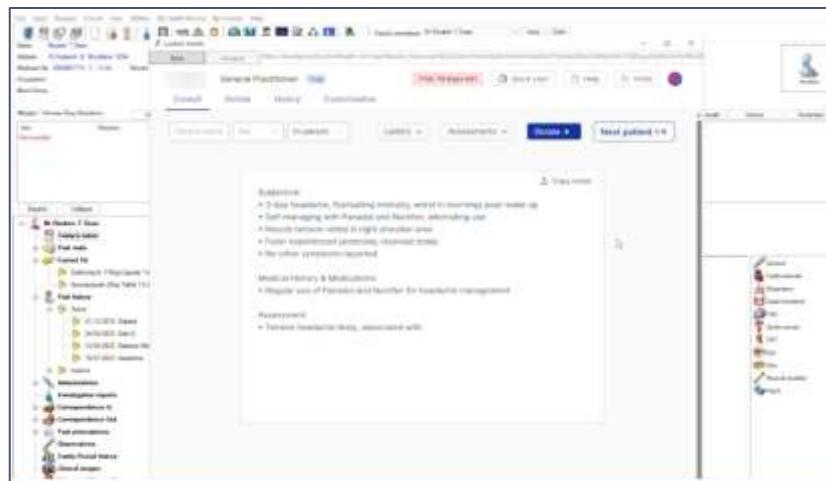
# What is AI medical scribe software?





# Potential benefits of medical scribe software

- ✓ Allow **clinicians to focus on the patient** during the consultation
- ✓ Improve **clinical notes**, especially for sharing, team-based care
- ✓ **Reduce administrative task burden for GPs**
- ✓ **Increase revenue** with smart billing
- ✓ **Improve patient satisfaction**
- ✓ **Reduce doctor burnout**



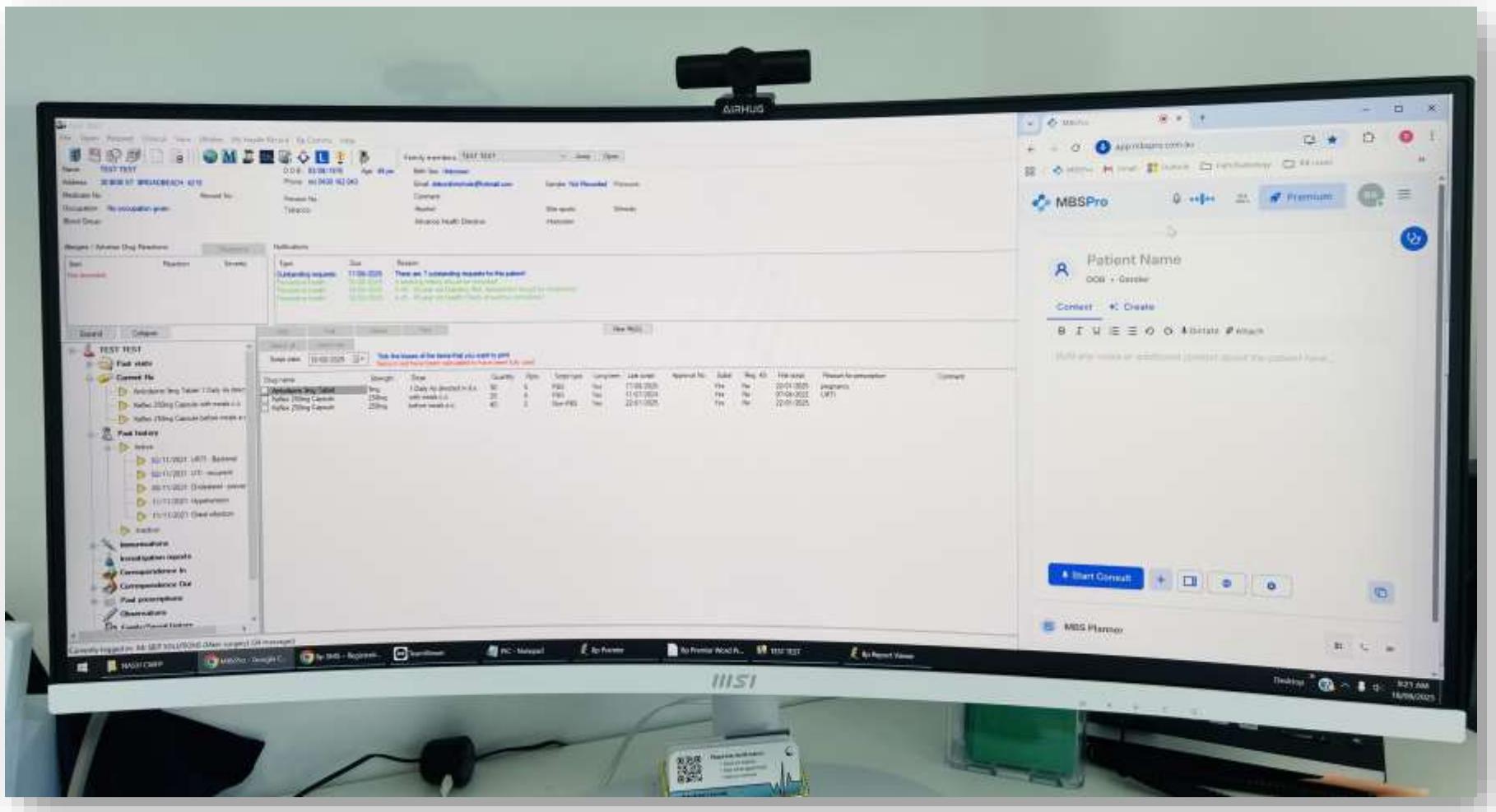
## Evidence

- Reduce time spent per consult on documentation by 51%
- Increase note quality satisfaction by 38%
- Decrease documentation-related stress by 58%
- Boost confidence in documentation accuracy by 33%
- Reduce after-hours admin by 61%
- Improve work-life balance satisfaction by 45%

<https://www.lyrebirdhealth.com.au>



# Integrated or Non-Integrated



# Chronic Disease & Preventive Care



The screenshot shows the NSW BreastScreen website. The top navigation bar includes links for 'Screening locations', 'About us', 'FAQs', 'News', 'Contact us', a search bar, 'Book now', and 'Call 13 20 50'. Below the navigation is a main menu with 'Breast cancer and screening', 'Your appointment', 'Community support', 'Health professionals', and 'Resources'. The main content area features a large image of a woman's profile on the right and a breast ultrasound image on the left. The page title is 'New machine reading technology' and the sub-headline is 'Published on 24/11/2024'.

## Computer image recognition technology

**AI health app to supercharge living well with type 2 diabetes**



**ECG analysis to identify diabetes risk**

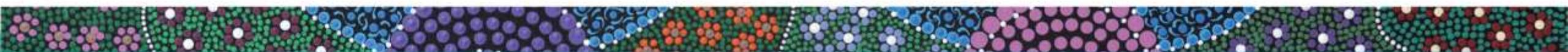


## Early detection using wearables



The screenshot shows the CSIRO Total Wellbeing Diet website. The top navigation bar includes links for 'The Diet', 'Results', 'Pricing', 'Resources', 'Login', 'Free Goal Weight Quiz', and 'Get Started'. Below the navigation is a banner for 'Black Friday Sale | Only \$20/Month!'. The main content area features a section titled 'AI-inspired weight loss coach' with the sub-headline 'Meet your AI-inspired weight loss coach'. It lists two bullet points: 'Next evolution in the science behind the program' and 'Lose more weight with our digital weight loss coach'. At the bottom are 'Get Started' and 'Free Weight Loss Quiz' buttons.

**CSIRO weight loss coach**



# AI and Chronic Condition Management

[Home](#)[About](#)[Features](#)[FAQ's](#)[Blog](#)[Contact](#)[Log In](#)

## Achieve Speed, Efficiency & Compliance In GPCCMPs

To make GPCCMPs financially sustainable, practices need speed without sacrificing quality — and that's exactly what MyGPMPtool delivers to your team.

With coverage of more than 1,000 chronic conditions, our AI agent can generate tailored care plans for virtually any condition you need to manage.

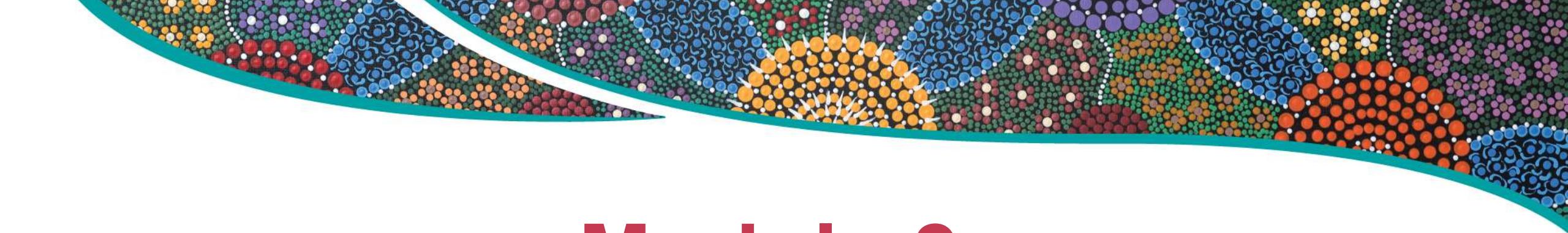


# Module 2 - Summary

## Key examples where AI is impacting clinical care



1. Diagnosis: AI assists in diabetic retinopathy screening, dermatology image analysis and medical imaging (eg mammography).
2. Triage: Symptom checkers, smart online booking, and nurse-led helplines use AI for efficient patient routing.
3. Administrative Workflows: AI scribes, virtual assistants, and automated reminders reduce clinician workload.
4. Chronic Disease & Preventive Care: AI supports early detection (wearables, ECG analysis), personalized care plans, and patient engagement.
5. Consider starting with AI scribe tools, whether integrated with your software or not.



# **Module 3:**

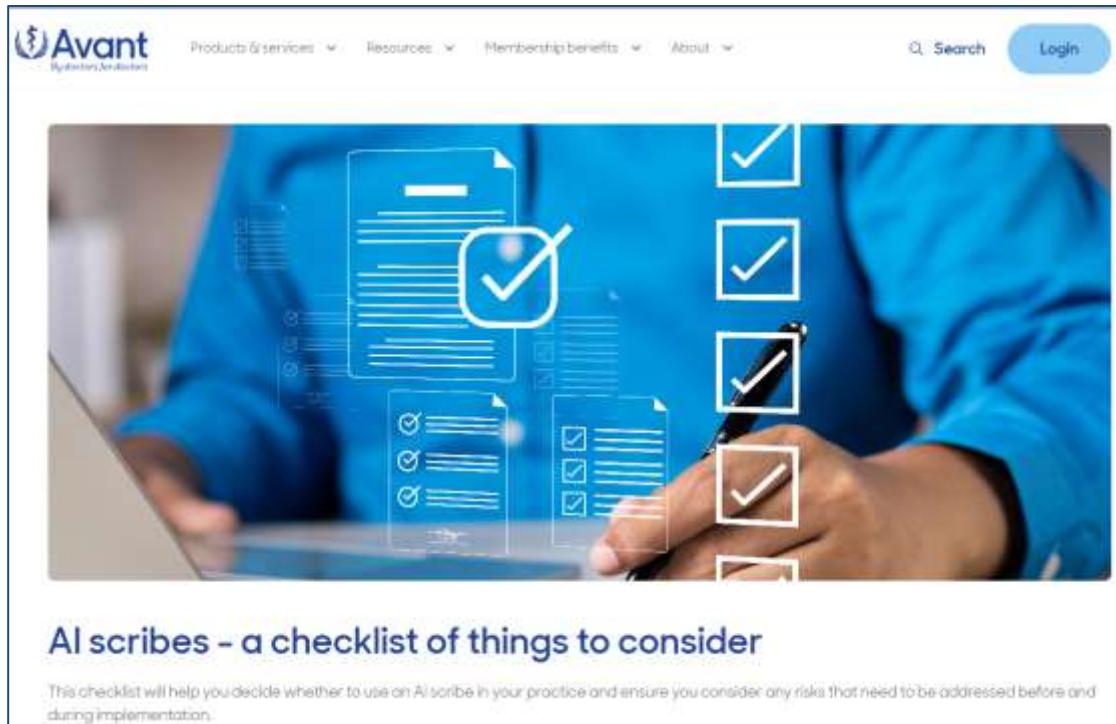
## **Discuss the limitations, risks, consent and ethical implications of using AI in healthcare**

# Risks of AI scribes

1. An emerging field so limited data on clinical validity/utility/patient safety
2. AI scribes can make errors that affect the meaning and accuracy
3. Non-verbal cues not captured
4. Clinicians are responsible for errors even if generated by an AI Scribe
5. Clinicians could become over reliant on scribe tools
6. The process of writing the documentation might be clarifying for the author
7. Privacy and security issues – obtaining and recording consent
8. Potential for data breach to occur (data encryption, storage and destruction)
9. Bias and hallucinations
10. Low level of adoption across the team will reduce overall benefits.



# Due diligence



The screenshot shows the Avant website with a navigation bar at the top. Below the navigation is a large image of a person in a blue medical coat holding a pen over a digital interface displaying a checklist with several items checked. Below the image is the title 'AI scribes - a checklist of things to consider' and a brief description: 'This checklist will help you decide whether to use an AI scribe in your practice and ensure you consider any risks that need to be addressed before and during implementation.'

**AI scribes - a checklist of things to consider**

This checklist will help you decide whether to use an AI scribe in your practice and ensure you consider any risks that need to be addressed before and during implementation.

1. Healthcare suitability
2. Privacy and compliance
3. Consent and controls

## AI Scribe Vendor Assessment Checklist

Created by Dr Darran Foo, Deputy Chair RACGP Digital Health & Innovation SIG. Last updated 7<sup>th</sup> July 2025.

Based on:

- RACGP, Fact Sheet on Artificial intelligence (AI) scribes: <https://www.racgp.org.au/running-a-practice/technology/business-technology/artificial-intelligence-ai-scribes>
- Avant, AI scribes - a checklist of things to consider: <https://avant.org.au/resources/ai-scribes-a-checklist-of-things-to-consider>
- MDA National, AI Vendor Requirements Checklist: <https://www.mdanational.com.au/advice-and-support/library/concise-advice/using-artificial-intelligence-tools-for-record-management-in-doctor-consultations>

### 1. Clinical Validity and Development

- Was this AI system specifically designed for medical documentation in a clinical setting?
- What validation processes have you implemented to ensure the AI scribe's outputs are clinically accurate and appropriate for medical documentation?
- Can you provide peer-reviewed publications or validated research data demonstrating your AI scribe's clinical safety and effectiveness?
- What role have practicing GPs played in the development and testing of your AI scribe system?
- Can I access historical data and information about how the AI worked at a particular point in time? (i.e. How do you address the issue of explainability?)
- Does your AI scribe product require approval from the Therapeutic Goods Administration (TGA) to be used in Australia? Can you demonstrate why?
- Do you offer your AI scribe product overseas? If so, does the product require approval with the equivalent regulators to be used in the countries you offer the product in?

### 2. Data Privacy and Security

- How does your system comply with the Australian Privacy Act and Australian Privacy Principles? Please provide specific examples of compliance measures.
- What cyber security measures are in place (penetration testing, encryption, security certifications etc)?
- What data, if any, is collected or retained by you/your product?
- How do you handle patient identifiable information, and what de-identification

# Patient Consent for AI Scribes

Once you have provided information to the patient on the first occasion you use the scribe about how the scribe works and how it will be used in your practice, it is sufficient for you to seek the patient's verbal confirmation that they consent to the use of the tool at the start of each subsequent consultation and then document this in the patient's record."

Avant

<https://avant.org.au/resources/ai-scribes-and-patient-consent>



Have you obtained consent to record?

You must obtain patient consent to use Lyrebird

Lyrebird never stores audio files. Conversations are encrypted and transcribed in real-time to help with your clinical notes.

[This one-pager can help educate a patient about Lyrebird](#)

No

Yes, begin  
Enter

# Limitations of AI tools



**Narrow capability** – Most AI clinical tools are currently task-specific (eg. diabetic retinopathy detection) and cannot interpret broader patient context.



**Data dependency** – Performance depends on quality and completeness of training and input data.



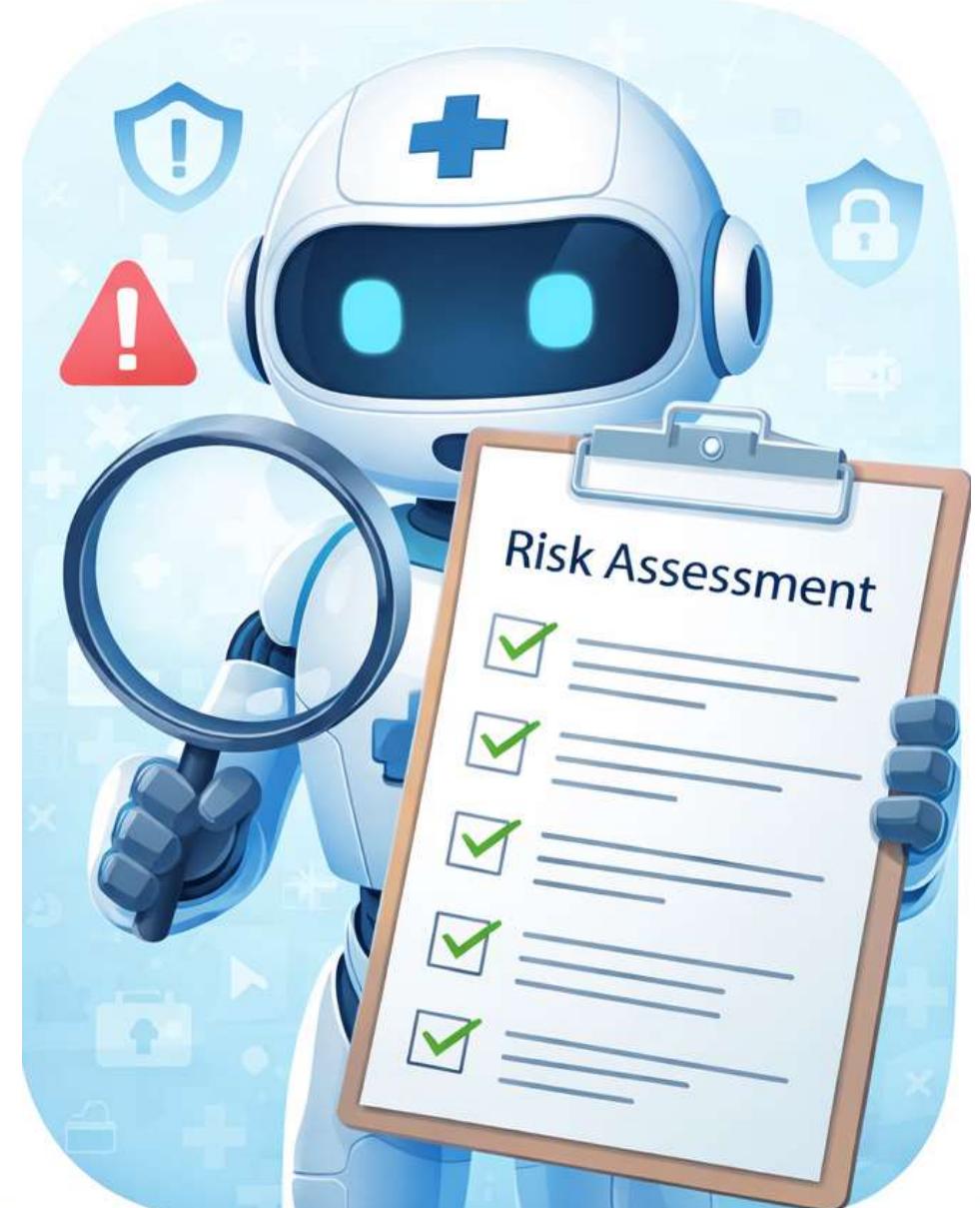
**Integration barriers** – Many AI tools are not yet seamlessly integrated into Best Practice, MedicalDirector, other practice management systems.



**Regulatory uncertainty** – AI capabilities evolve faster than TGA guidance, making it harder to ensure ongoing compliance.

# Risks of using AI technology

1. Patient privacy and data security
2. Clinical validity and patient safety
3. Bias and 'hallucinations'
4. Over-reliance and loss of clinical judgement
5. Regulatory and compliance uncertainty
6. Integration and adoption barriers



# Ethics, privacy and regulation

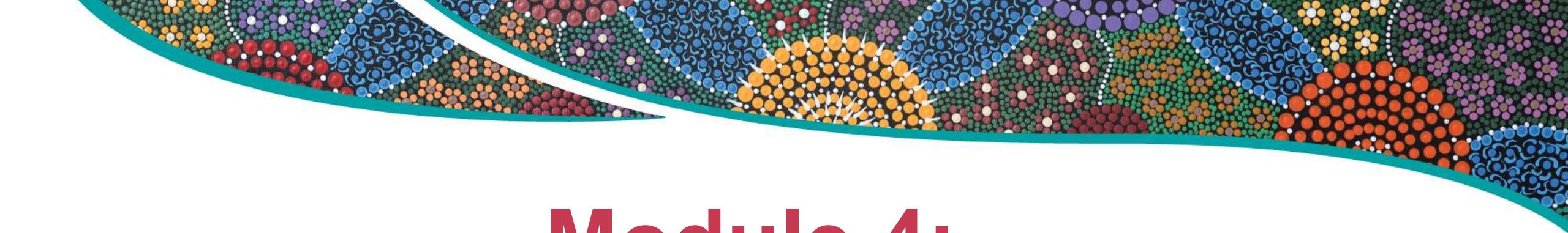
- 1. Data consent and ownership** - patient consent for each encounter is needed. Can be verbal but must be documented.
- 2. Privacy notice updates** - to include use of AI.
- 3. Data security and storage** - to meet Australian privacy and security standards data must be stored securely onshore
- 4. Patient identifiers redacted** from transcripts, audio file not stored
- 5. Regulation of AI tools** - AI scribes are not regulated medical devices in Australia, therefore approval not needed by TGA – peak body guidelines (not enforceable standards)
- 6. AI-driven errors** remains the responsibility of clinicians
- 7. Algorithmic bias and equity concerns**
- 8. Monitoring and auditing**



# Module 3 - Summary



- 1. Risks:** Patient privacy, data security, clinical validity, bias, and over-reliance on AI tools are major concerns. Clinicians remain responsible for errors, even those generated by AI.
- 2. Limitations:** Most AI tools are task-specific, depend on high-quality data, and often lack seamless integration with clinical systems. Regulatory guidance is still evolving.
- 3. Ethics & Privacy:** Patient consent and data ownership are essential. Data must be stored securely and onshore, with ongoing monitoring and auditing recommended.
- 4. Human Oversight:** AI should supplement—not replace—clinical judgment. Human review of AI-generated outputs is critical for safe and effective care.



# **Module 4:**

# **Recognize opportunities**

# **and practical steps to**

# **safely integrate AI tools**

# **into practice**

# Identifying and Overcoming Barriers to adoption of AI

1. Clinician Trust
2. Lack of clear regulation
3. Lack of evidence
4. Lack of clear benefits
5. Data quality/privacy
6. Low maturity of AI tools.
7. Integration issues
8. Training
9. Patient skepticism
10. Change fatigue



# Guide to getting started with AI tools

- 1. Select 1 low-risk tool** (e.g., scribing, AI phone receptionist).
- 2. Perform due diligence** on the selected tool/s.
- 3. Run a trial** with clear evaluation metrics.
- 4. Review outcomes** – workload, accuracy, patient feedback.
- 5. Expand scope** gradually, compliance and oversight processes in place.
- 6. Encourage team collaboration**
- 7. Embed into policy** – Update relevant policies & staff checklists.



# Compare AI technology solutions

## Requirements for choosing AI note taking service



Ref #	Requirement	Comments	Priority	Vendor Response
<strong>Functionality</strong>				
1	Functionality	Ease of use, does it meet requirements	Select	▼
2	Training & Support	What training is provided/documents	Select	▼
3	Software features	Dashboards, reports, user experience	Select	▼
4	Transcriptions format	SOAP, Chief Compliant Style, word for word, summary analysis	Select	▼
5	Sign off functionality	Does Dr need to approve notes?	Select	▼
6	Who sees the notes	Authority over access	Select	▼
7	Consent process	How is this managed	Select	▼
8	Other features of software	Templates for notes?	Select	▼
9	Languages	Does it transcribe other languages	Select	▼
10			Select	▼
<strong>Data Management/IT requirements</strong>				
11	Privacy	Does it meet the Privacy Act and APPS	Select	▼
12	What format is the data captured in	Digital recording, note format	Select	▼

[MDA National AI technology comparison tool](#)

# AI Maturity Model: Key Progression Steps



# Pre and post trial user surveys



## Pre-pilot GP Survey

1. Have you used TOOL or any other transcribing software before?
2. How satisfied are you with the current quality of your clinical notes?
3. What are the biggest challenges you face in completing accurate, high-quality clinical notes?
4. How easy or difficult is it for you to manage your current administrative workload?
5. On average, how many minutes do you currently spend on clinical documentation per patient consultation?
6. Do you routinely work overtime hours (claimed or unclaimed) to complete clinical documentation?
7. On average, how many additional hours per week do you work to complete clinical documentation?
8. Do you have any other feedback you would like to share?

## Post Pilot GP Survey

1. Do you feel you received enough support and resources during the pilot to confidently use TOOL?
2. Since using TOOL, how satisfied are you with the quality of your clinical notes?
3. Before you started using TOOL, how often did you feel you enjoyed your work?
4. How has your enjoyment of work changed since using TOOL?
5. How comfortable were your patients with the use of the TOOL AI scribing tool during the consultation?
6. What proportion of your patients did NOT consent to the use of TOOL within consultations?
7. How would you rate how user-friendly TOOL is to use at work?
8. Before using AI Scribing tools, approx how much time did you spend each day on clinical documentation? (mins per day)
9. Approximately how much time do you now spend each day on clinical documentation by using TOOL? (mins per day)
10. To what extent has using TOOL helped you see more patients?

# Sample Goals

**What are we hoping to achieve?    How will success be measured ?**

1. Decrease average consultation time per clinician
2. Reduce patient wait times
3. Reduce clinician stress/minimize burnout
4. Improve clinical note quality
5. Improve clinical note accuracy, completeness
6. Improve encounter quality for patients
7. Usage stats - % weekly active users / adoption rate by clinicians



# Manage the technology change

1. Define the need and goals
2. Engage stakeholders early
3. Prepare workflows and data
4. Train staff
5. Pilot, review and refine
6. Monitor outcomes
7. Embed the change



## Module 4 - Summary



1. Start with a low-risk tool (e.g., scribing, AI phone receptionist)
2. Perform due diligence and run a trial with clear evaluation metrics
3. Review outcomes and expand scope gradually
4. Encourage team collaboration and update policies
5. Use checklists and surveys to evaluate and compare tools
6. Define goals, measure success, and manage technology change closely
7. Focus on patient outcomes and maintain human-centered care.

# Bring the whole team on the AI journey



# AI supports us, it doesn't replace us



# Links and Resources

## Artificial Intelligence

- [Position Statement: Artificial Intelligence \(AI\) in primary care | RACGP](#)
- [Meeting professional obligations when using AI | AHPRA](#)
- [Using Artificial Intelligence \(AI\) tools for record management in doctor consultations | MDA National](#)
- [Artifical Intelligence | NSW Health](#)

## AI Medical Scribes

- [AI Scribes Fact Sheet | MIPS](#)
- [“Requirements for Choosing AI note taking service” | MDA National](#)
- [Factsheet: Artificial Intelligence scribes | RACGP](#)
- [AI Scribes: A checklist of things to consider | Avant](#)

## Compliance

- [Artifical Intelligence: What you need to know | Avant](#)
- [AI Scribes in practice: common errors to consider | Avant](#)
- [Webinar: AI Scribes – cascading consequences | Avant](#)
- [ChatGPT for medical practice websites – what medical practices need to consider | Avant](#)
- [Medical records – the essentials | Avant](#)

# Other AI tools used in healthcare

Tool	Purpose / Description	Key Features
<b>Google NotebookLM</b>	AI research + learning assistant grounded in your uploaded files	<ul style="list-style-type: none"><li>• Summarizes and explains documents</li><li>• Generates tailored insights and content</li><li>• Acts as an on-demand research assistant</li></ul>
<b>Open Evidence</b>	Medical information platform for clinicians	<ul style="list-style-type: none"><li>• Rapid access to high-quality medical literature</li><li>• Evidence-based recommendations</li><li>• Designed for clinical decision support</li></ul>
<b>Perplexity AI</b>	AI search engine and conversational answer tool	<ul style="list-style-type: none"><li>• Direct, cited answers (not just links)</li><li>• Uses large language models for natural responses</li><li>• Strong for research, fact-checking, quick synthesis</li></ul>
<b>Otter.ai</b>	AI meeting assistant with transcription	<ul style="list-style-type: none"><li>• Real-time transcription</li><li>• Automated meeting summaries &amp; action items</li><li>• Live chat + collaboration tools</li></ul>
<b>P2oV.com and creativepixel.ai</b>	Generates anatomical illustrations or medical diagrams from reference images or descriptions.	<ul style="list-style-type: none"><li>• Creating clear, labelled diagrams for patients — e.g. organ systems, anatomical sketches, before/after visuals</li></ul>
<b>Scribe (Scribehow)</b>	Automated process documentation tool	<ul style="list-style-type: none"><li>• Creates instant step-by-step guides</li><li>• Captures workflows automatically</li><li>• Saves time on training and documentation</li></ul>



# Train IT Medical

Competence with Confidence

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<https://www.surveymonkey.com/r/KD3BWWZ>

We would love to hear if you found this training & resources helpful. Please leave us some feedback.  
Thank you and best wishes, Katrina Otto and team Train IT Medical.

