SingHealth

Empowering Healthcare through Generative AI

Sharing of SingHealth's Journey and Experiences

Benedict Tan | 16th January 2026

PATIENTS. AT THE HEART OF ALL WE DO.®

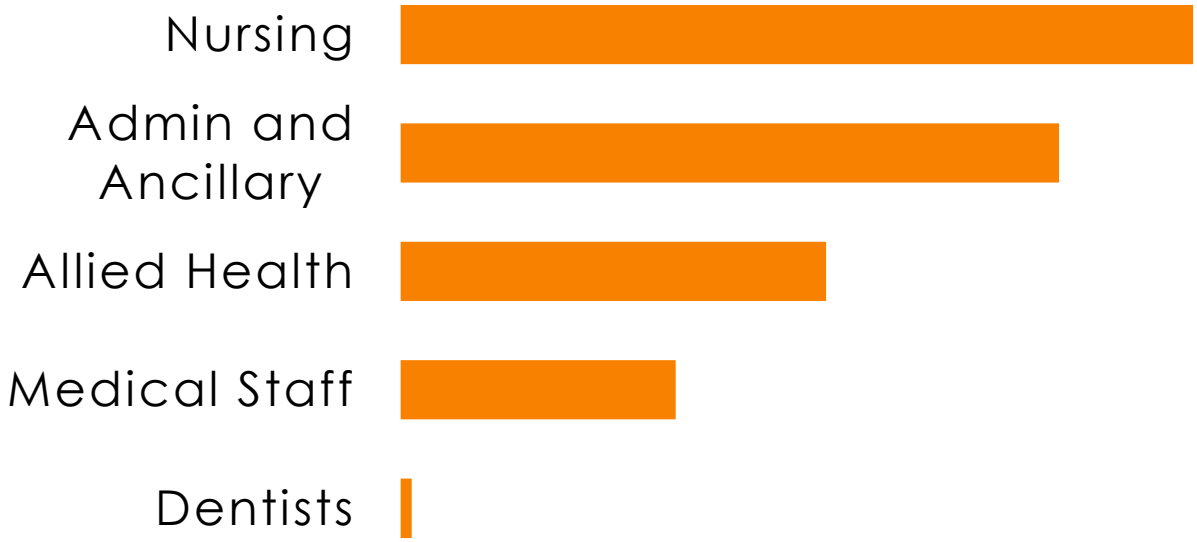
SingHealth DukeNUS ACADEMIC MEDICAL CENTRE

Singapore General Hospital | Changi General Hospital | Sengkang General Hospital | Eastern General Hospital | KK Women's and Children's Hospital | National Cancer Centre Singapore

National Dental Centre Singapore | National Heart Centre Singapore | National Neuroscience Institute | Singapore National Eye Centre | SingHealth Community Hospitals | Polyclinics SingHealth

Singapore's Public Healthcare Delivery Network

We are the largest public healthcare cluster in Singapore



As at Mar 2025

STAFF STRENGTH	
Nursing	14,565
Admin and Ancillary	11,344
Allied Health	7,364
Medical Staff	4,677
Dentists	197

38,147

Manpower figures based on FTE, which includes MOHH Hired Doctors

Figures may not add up to the totals due to rounding.

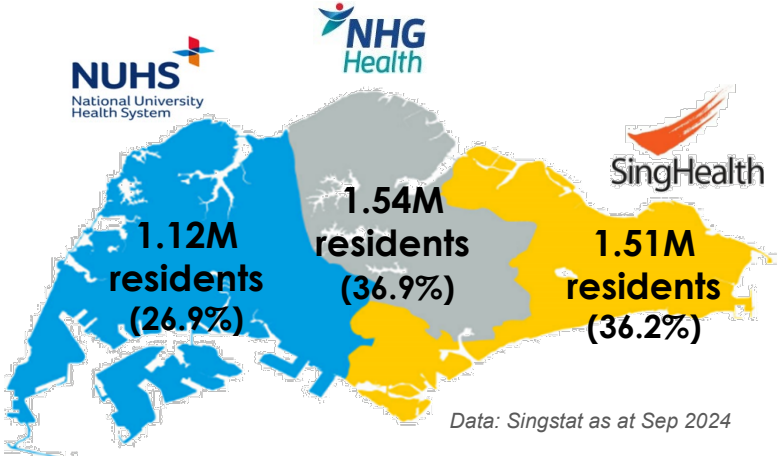
PRIMARY CARE
Polyclinics SingHealth

HOSPITALS

NATIONAL CENTRES

INTERMEDIATE / LONG TERM
SingHealth Community Hospitals
Outram • Sengkang

… and a Major Health Service Provider, responsible for almost half of the nation's healthcare needs

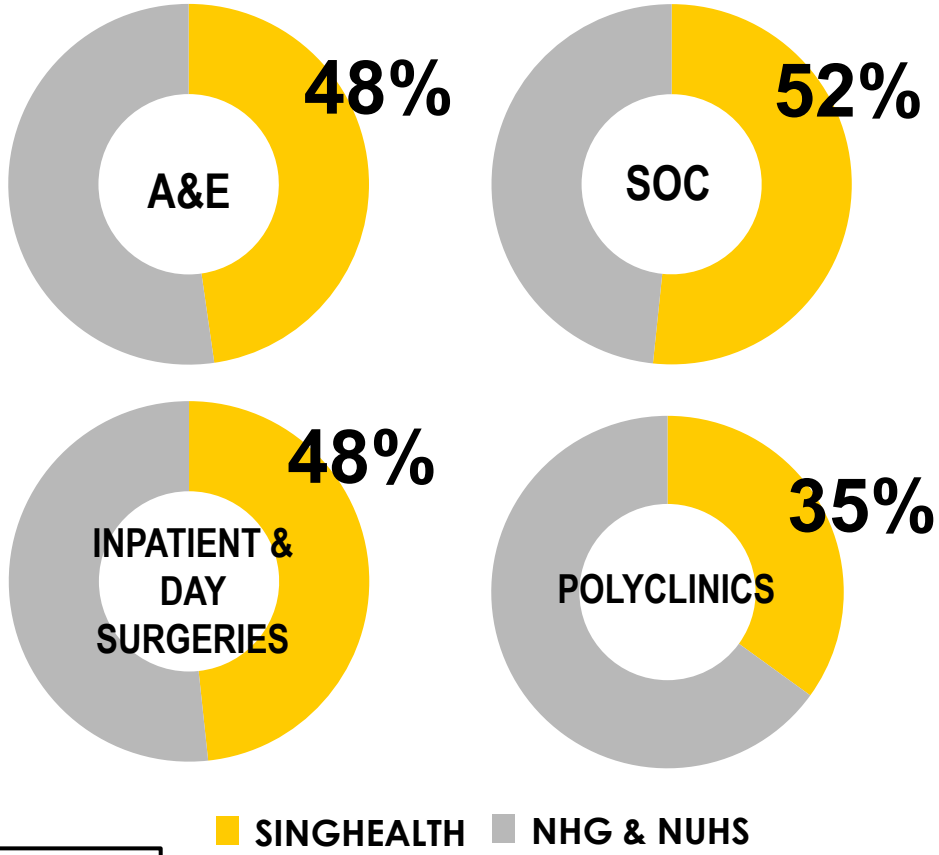


Data: Singstat as at Sep 2024

SINGHEALTH GROUP

A&E ATTENDANCES	523,977
SOC ATTENDANCES	2,839,291
INPATIENT & DAY SURGERIES	352,465
POLYCLINIC ATTENDANCES	1,927,614

Jul 2024 – Jun 2025 Data source: eSingHealth Statistics



Our Shared Vision, Mission & Common Purpose

SingHealth

Vision

Defining Tomorrow's Medicine

Mission

Care to Heal.
Educate to Empower.
Innovate to Advance.

SingHealth
Defining Tomorrow's Medicine

Purpose

PATIENTS. AT THE HEART OF ALL WE DO.

Adoption timeline

* Pair was launched in Jul 2023 for Singapore Government Agencies

Pair, Tandem, NoteBuddy

Pair

AI chatbot assistant powered by large language models (LLMs) for public officers

It functions as a secure, government-specific alternative to public AI chatbots.

Developed by Open Government Product (OGP)

Tandem

GenAI platform for public healthcare staff to leverage GenAI applications

It functions as a secure, public healthcare alternative to public AI chatbots.

Developed by Synapxe

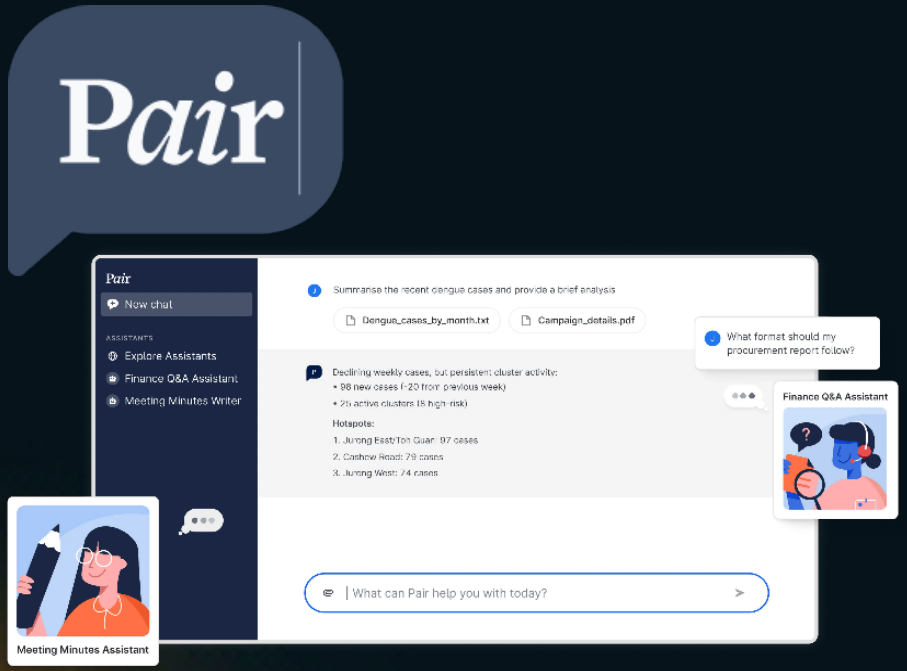
NoteBuddy

Ambient AI solution powered by GenAI to assist public healthcare clinicians in clinical documentation

It is deployed on Synapxe Tandem platform.

Developed by SingHealth with Microsoft support

Pair



>13,900 users as at Dec 2025

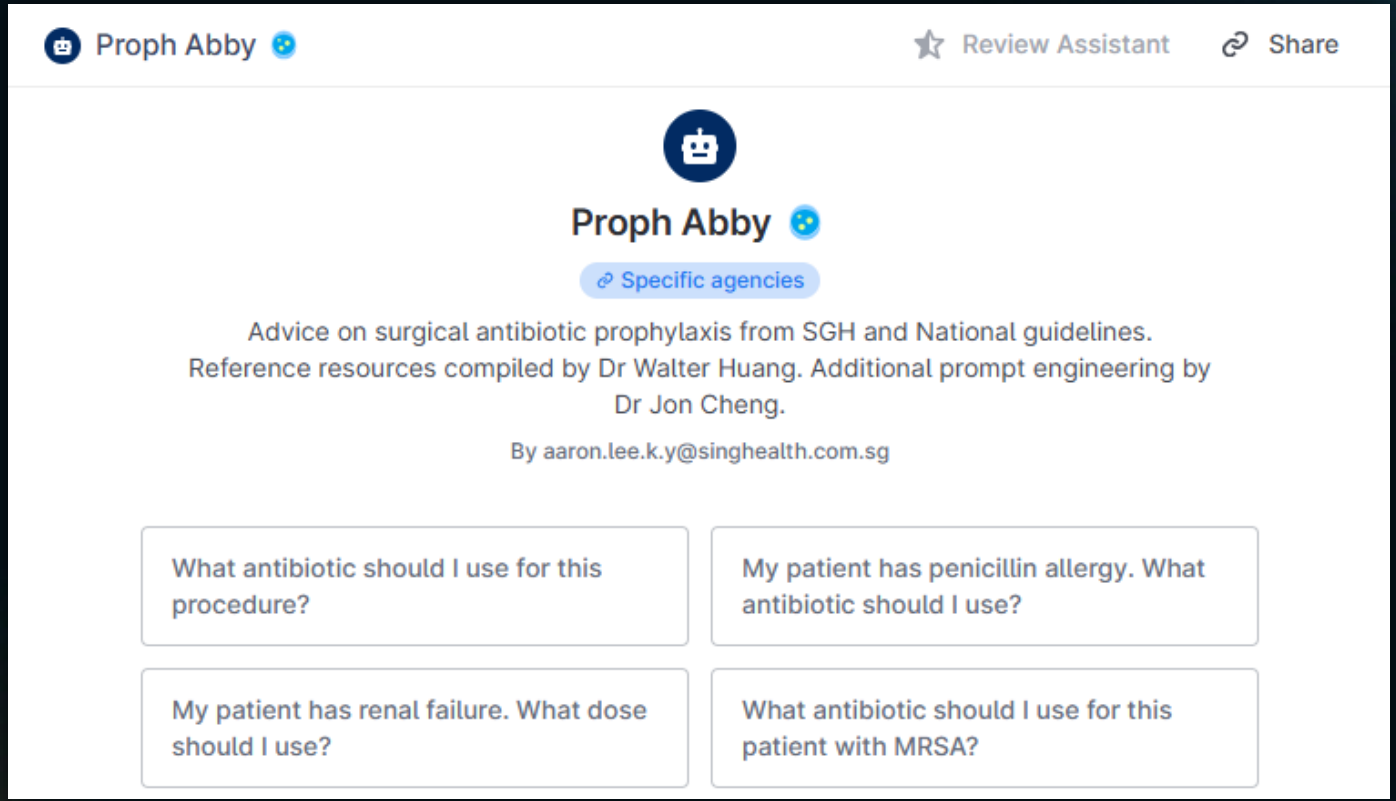
(35% of SingHealth staff)

>3,900 Pair assistants

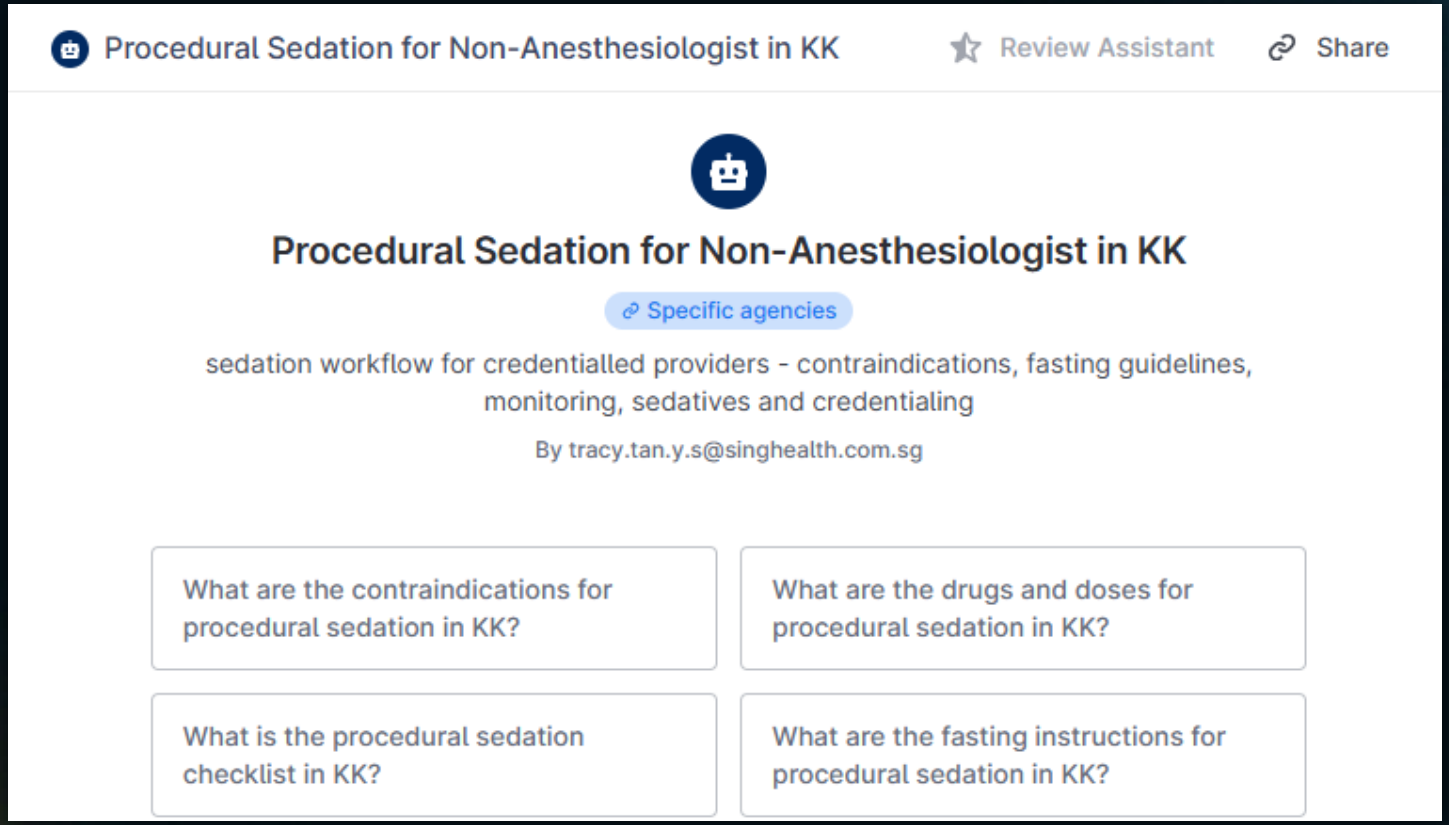
as at Nov 2025

PEACH

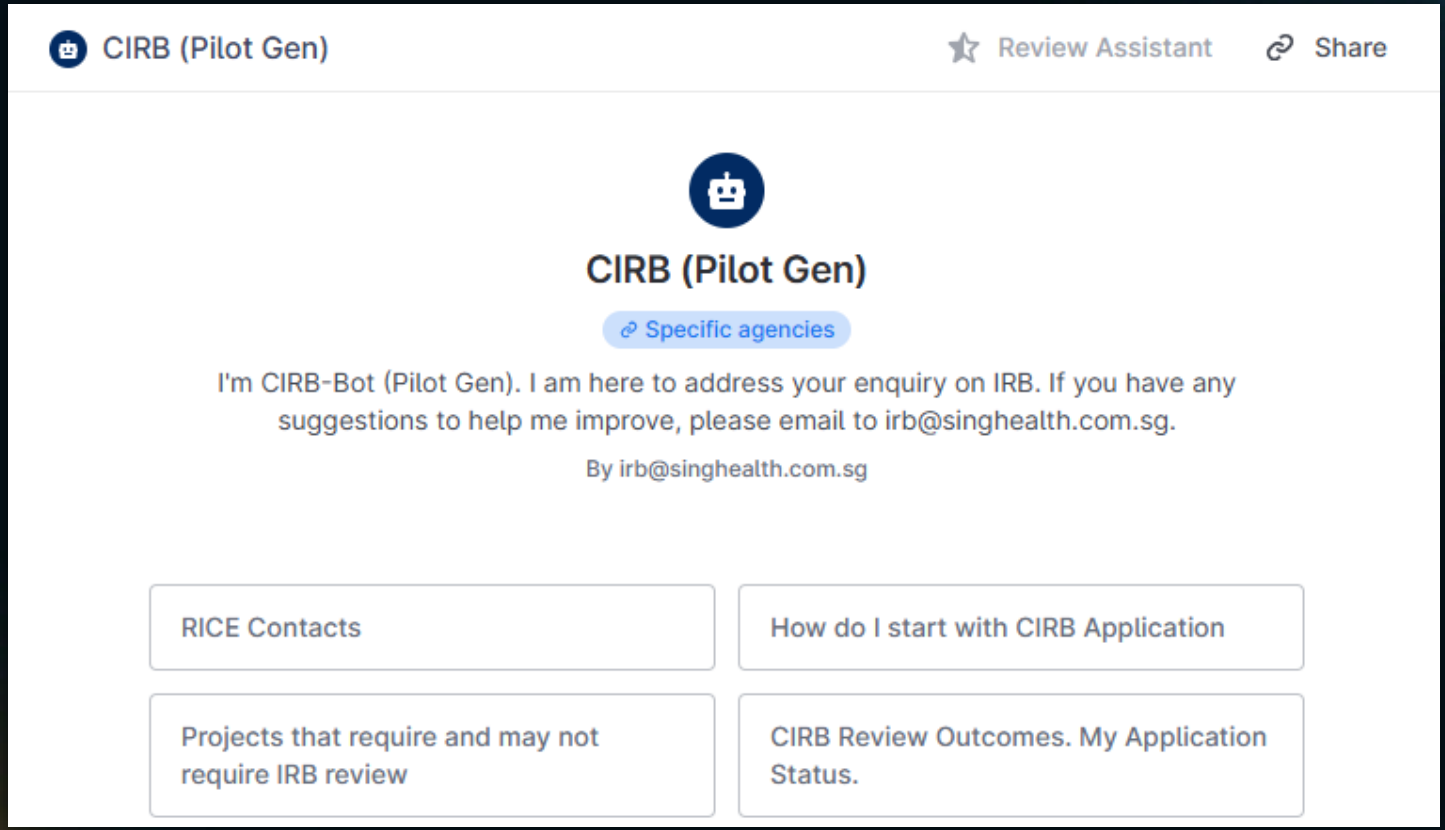
Proph Abby



Procedural Sedation for Non-Anaesthesiologist



CIRB



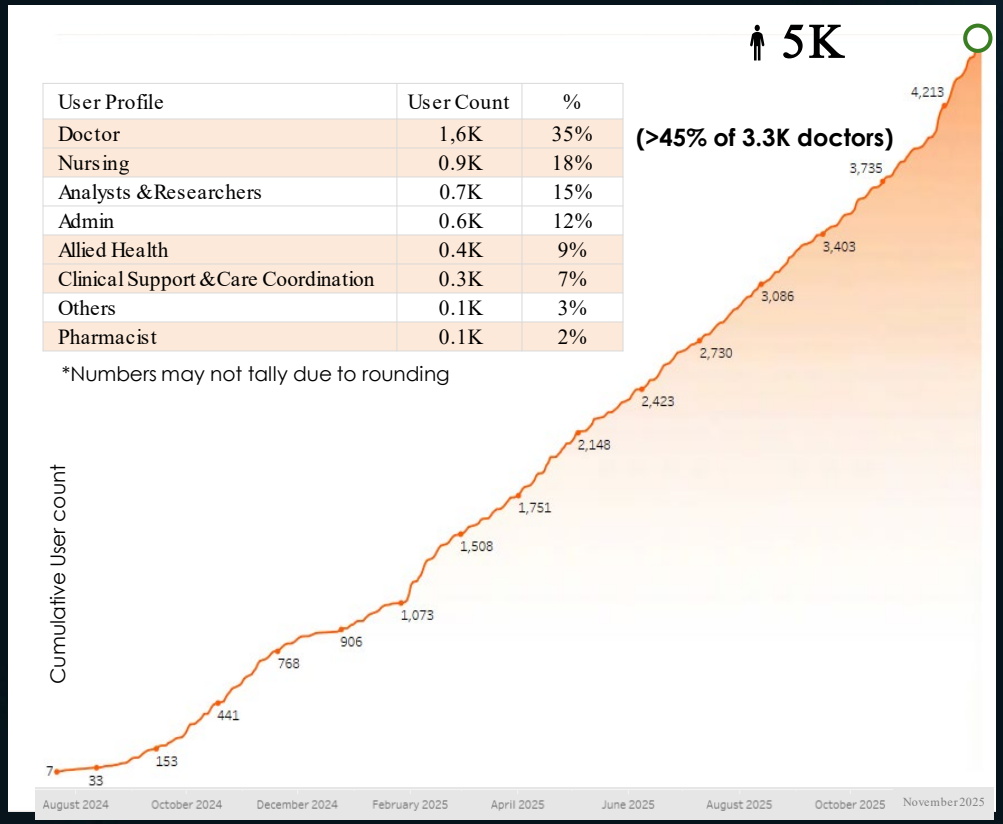
NoteBuddy

- Developed by SingHealth with Microsoft support, and deployed on Tandem platform. Development team comprises doctors, nurses and allied health colleagues and AI engineers
- 5 languages – English, Mandarin, Malay, Tamil and Cantonese
- > 5,000 users and >67K notes created (about 45% of doctors)
- 15% reduction in documentation time and increased patient engagement
- Ongoing development:
  - Real-time translation
  - Incident reporting
  - Diagnosis coding
  - Voice-to-voice AI agents

NoteBuddy – Number of Users

User Profile	User Count	%
Doctor	1,6K	35%
Nursing	0.9K	18%
Analysts &Researchers	0.7K	15%
Admin	0.6K	12%
Allied Health	0.4K	9%
Clinical Support &Care Coordination	0.3K	7%
Others	0.1K	3%
Pharmacist	0.1K	2%

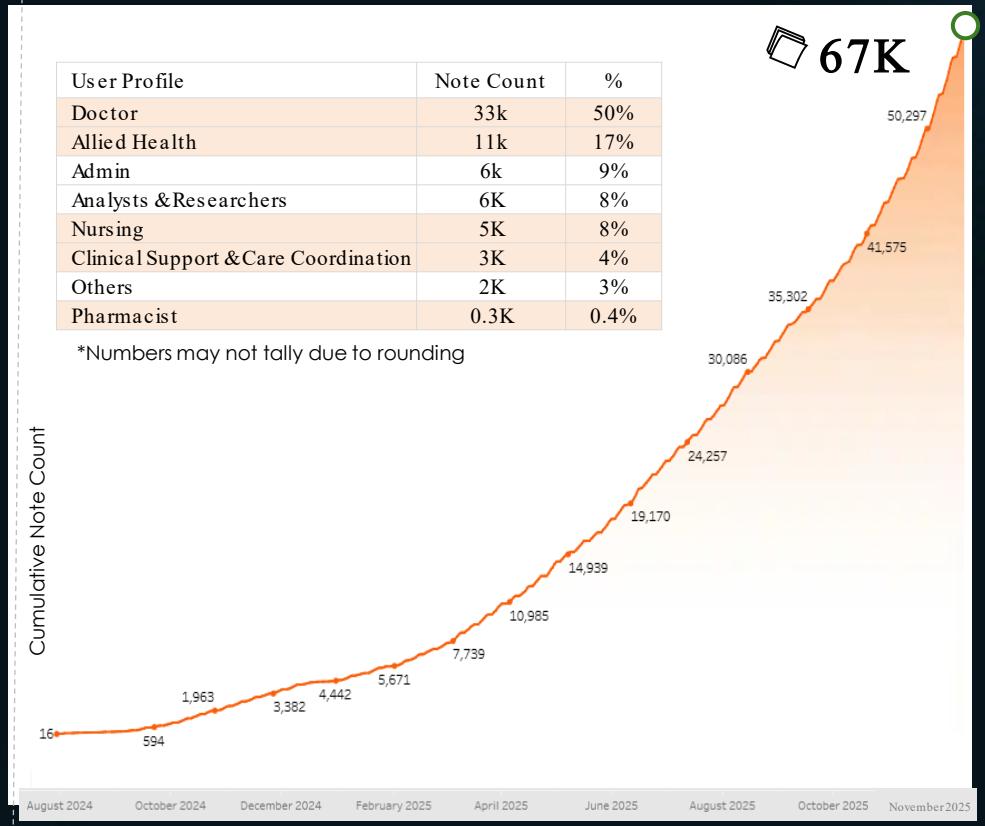
*Numbers may not tally due to rounding



NoteBuddy – Number of Notes Created

User Profile	Note Count	%
Doctor	33k	50%
Allied Health	11k	17%
Admin	6k	9%
Analysts & Researchers	6K	8%
Nursing	5K	8%
Clinical Support & Care Coordination	3K	4%
Others	2K	3%
Pharmacist	0.3K	0.4%

*Numbers may not tally due to rounding



Study 1: A pilot study using ambient AI scribes in clinical documentation in a Urology outpatient clinic

A pilot study evaluated Note Buddy (AI scribe) in a Urology clinic. The **AI-generated notes matched human documentation quality**, with comparable PDQI-9 scores (33.63 vs 32.88) and **were preferred in 55% of evaluations**. Results suggest AI scribe could effectively reduce physicians' documentation burden.

Table 1 Scores for AI- and human-written consultation notes by attribute.

Attribute	AI scribe		Clinician		P
	Mean (SD)	Range (min.–max.)	Mean (SD)	Range (min.–max.)	
Accurate	4.22 (0.620)	2.0 (3.0–5.0)	4.20 (0.464)	2.0 (3.0–5.0)	0.839
Thorough	4.22 (0.768)	2.0 (3.0–5.0)	4.00 (0.555)	2.0 (3.0–5.0)	0.137
Useful	4.30 (0.648)	2.0 (3.0–5.0)	4.15 (0.483)	2.0 (3.0–5.0)	0.244
Organised	4.35 (0.580)	2.0 (3.0–5.0)	4.13 (0.516)	2.0 (3.0–5.0)	0.070
Comprehensible	4.30 (0.648)	2.0 (3.0–5.0)	4.25 (0.439)	1.0 (4.0–5.0)	0.687
Succinct	4.00 (0.961)	4.0 (1.0–5.0)	4.22 (0.577)	2.0 (3.0–5.0)	0.208
Synthesised	4.08 (0.797)	3.0 (2.0–5.0)	3.70 (1.018)	4.0 (1.0–5.0)	0.070
Internally consistent	4.15 (0.770)	3.0 (2.0–5.0)	4.22 (0.423)	1.0 (4.0–5.0)	0.591
Total	33.63 (4.759)	16.0 (24.0–40.0)	32.88 (3.228)	13.0 (27.0–40.0)	0.412

AI, artificial intelligence.

Source:

BJUI
BJU International

Research Letter

A pilot study using ambient artificial intelligence scribes in clinical documentation in a urology outpatient clinic

Julene Hui Wun Ong, Joshua Yi Min Tung, Gerald Gui Ren Sng, Daniel Yan Zheng Lim, Xinyan Yang, Iffat Bin Mohamad Rafi, Michelle Zhen Yuan Loke, Ajeet Kumar, Jonathan Yue En Tan, Eileen Yi Lee Lew, Mark Kok Hong Heng, Henry Sun Sien Ho ... See fewer authors

First published: 20 May 2025 | https://doi.org/10.1111/bju.16784

Study 2: Note Quality Assessment using Physician Documentation Quality Instrument (PDQI-9) on clinical notes of end-users from EMR before and after using Note Buddy

This study indicates that **when clinicians use Note Buddy to support their note-taking, the resulting notes show meaningful improvements**.

Specialties	Prior to Note Buddy Mean (SD)	After Note Buddy Mean (SD)	P-value Mann-Whitney U Test
Endocrinology	27.61±2.87 (N=152)	33.03±4.21 (N=162)	0.000
Upper Gastrointestinal & Bariatric Surgery	29.85(2.83) (N=121)	34.03 (3.25) (N=116)	0.000
Respiratory and Critical Care Medicine	26.0(2.63) (N=80)	27.80(3.53) (N=98)	0.003
Vascular and Interventional Radiology	23.97 (4.05) (N=65)	33.95 (4.32) (N=104)	0.000

*Note quality assessed using a different LLM from the one used in Note Buddy

Study 3: Comparison of AI-generated notes with final saved notes in EMR by Senior Consultant using Note Buddy in various specialties

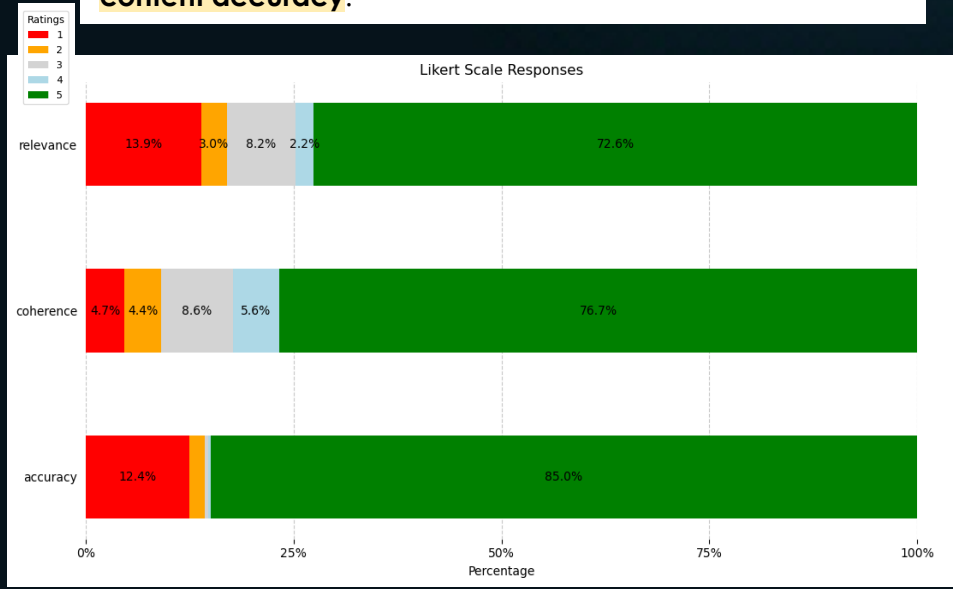
Across 2063 senior-consultant encounters in specialties, **clinicians made minor tweaks to Note Buddy drafts before signing the notes in the EMR**.

Specialties	Number of notes analyzed	Average Consultation Time (minutes)	Average Character Similarity (%)	Average ROUGE score	Medical Term Recall (MTR)
Cardiology	878	7.55±5.06	89.8%	0.991	0.96
Endocrinology	485	13.72±9.29	89%	0.985	0.96
Upper Gastrointestinal & Bariatric Surgery	327	12.17±7.98	87.2%	0.948	0.86
Respiratory and Critical Care Medicine	212	10.59±6.00	91.03%	0.986	0.93
Vascular and Interventional Radiology	161	9.69±6.40	77.5%	0.994	0.94

Definitions:
Medical Term Recall (MTR): the fraction of medical terms in the reference note that are captured in the generated note.
Recall-Oriented Understudy for Gisting Evaluation (ROUGE): measures the amount of reference note included in the generated note

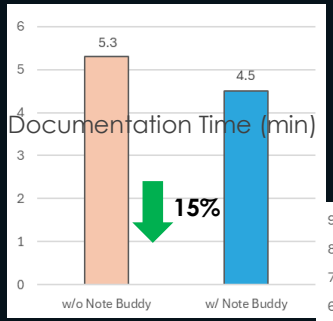
Study 4: Early Findings from Automated Evaluation of Production data (2025-07-01 to 2025-07-23).

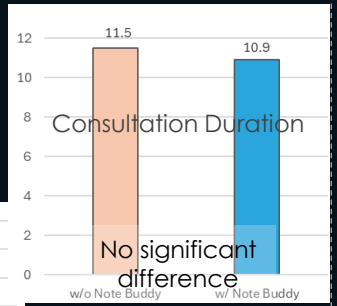
This evaluation was conducted using automated metrics, focusing on key dimensions such as accuracy, relevance, and coherence. We observed that **over 85% of the generated notes achieved ratings above 3 in terms of content accuracy**.

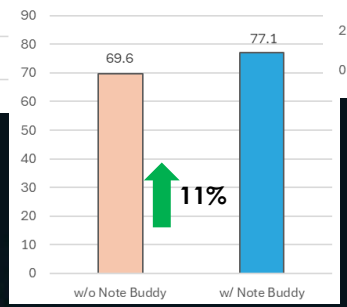


Study 5A: Time motion comparison study with 9 senior clinicians from 7 specialties over 169 consultations (78 with Note Buddy, 91 without).

When clinicians used Note Buddy, **eye contact with patients increased 10.6%** with no significant change in overall consult length. Meanwhile, **documentation time dropped by 15%** — investing time back to patient care.







Time spent in eye contact (%)

Source:

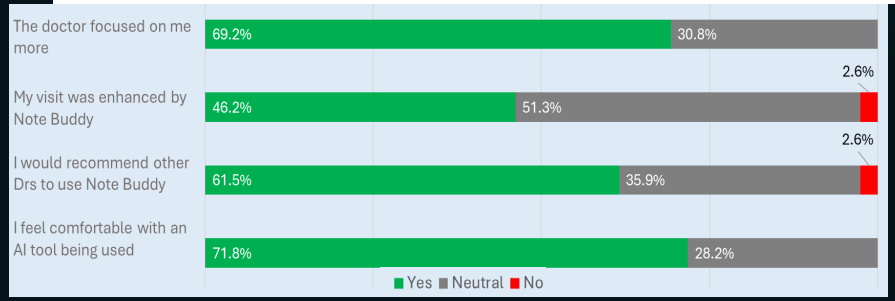
JMIR Preprints Tan et al

Impact of a Multilingual Ambient AI Scribe: A Real-World Time-Motion Study

Jonathan Yue En Tan[1*+], Iffat Bin Mohammad Rafi[1*], Gerald Gui Ren Sng[2,4], Joshua Yi Min Tung[2,5], Daniel Yan Zheng Lim[2,6], Jasmine Chiat Ling Ong[3,7], Gek Hsiang Lim[8], Eileen Yi Lee Lew[9], Kuok Wei Chia[1], Mark Kok Hong Heng[9]

Study 5B: Patient experience survey with 39 participants (majority aged 65 & above and preferred English as their primary language).

Patient feedback indicates strong acceptance of AI-assisted tools in consultations. Over 70% of patients felt comfortable with an AI tool, and nearly 69% believed the doctor focused more on them. While 61.5% would recommend Note Buddy to other doctors, only 46.2% felt their visit was significantly enhanced by it, suggesting opportunities to improve perceived value.



Thank you

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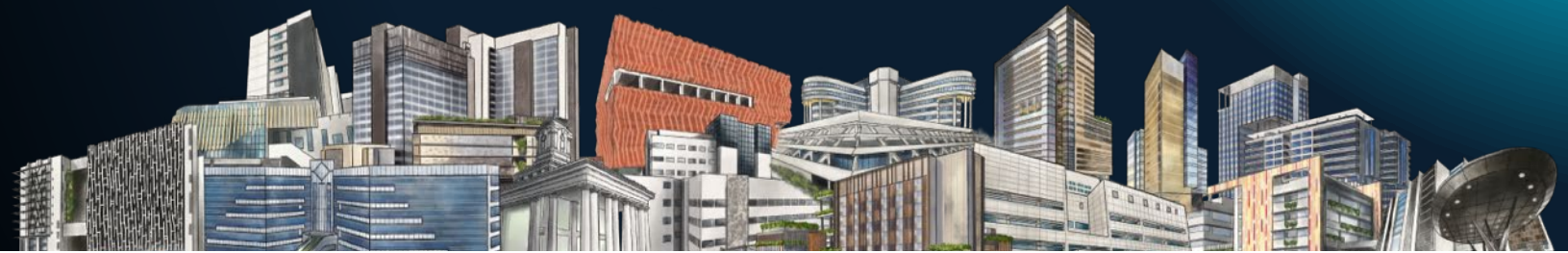

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