

# What Can AI Do for You? Improving the Primary Care Physician Experience

## Using an Artificial Intelligence Ambient Scribe

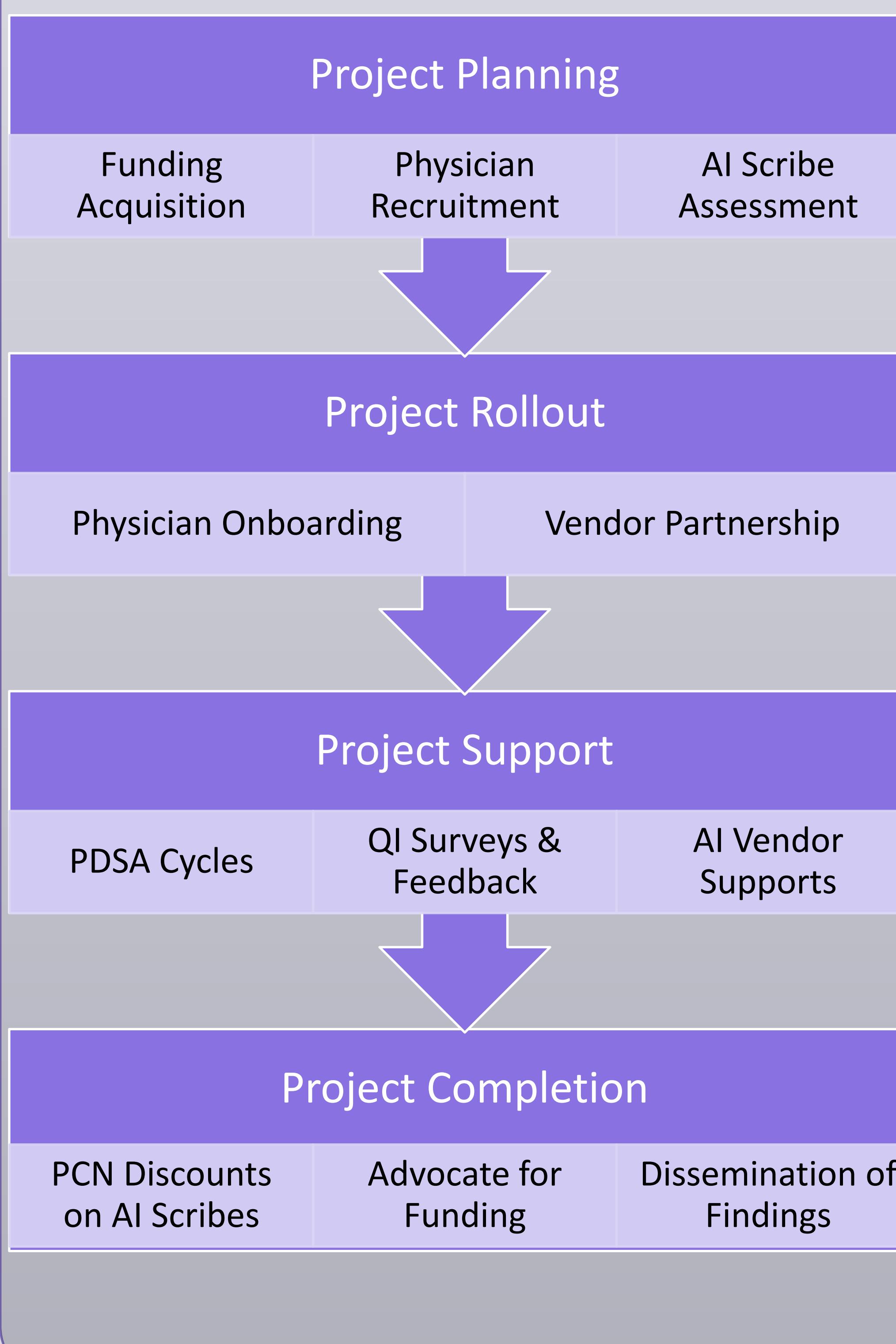
Michael Sergio Taglione<sup>1,2</sup>, Jeremy Chad<sup>1,2</sup>, Rafi Al Jame<sup>2</sup>, Amanda Cheung<sup>2</sup>, Tiffany Florindo<sup>1,2</sup>,  
Maria Muraca<sup>1,2</sup>, Rebecca Stoller<sup>1,2</sup>, Kevin Lai<sup>1,2</sup>, Mala Shastri<sup>2</sup>

<sup>1</sup>Department of Family and Community Medicine, North York General Hospital, University of Toronto, Toronto, Ontario, Canada, <sup>2</sup>North York Toronto Health Partners, Toronto, Ontario, Canada

### BACKGROUND & PROJECT OUTLINE

- 2.3 million Ontarians do not currently have a family doctor and burnout has led many family doctors to leave comprehensive primary care<sup>1</sup>
- An overwhelming administrative burden is one reason for the level of burnout with the average family doctor spending about 19 hours per week on paperwork<sup>2</sup>
- Ambient artificial intelligence (AI) scribe programs have emerged as a potential tool that reportedly decrease time spent charting and improve provider satisfaction<sup>3</sup>
- A joint project between the North York Toronto Health Partners OHT Primary Care Network (PCN) and the North York General Hospital Department of Family and Community Medicine (DFCM) was undertaken to provide office-based family physicians with access to an ambient AI Scribe tool for 6 months at no personal cost
- Quality improvement data was collected at baseline and routinely through a 6-month period

### PROJECT DEVELOPMENT



### AIM STATEMENTS

#### AIM Statement 1: Physician Charting Time

- Reduce the average amount of time physicians spend charting by 30% by the end of the 6 month project

#### AIM Statement 2: Provider Experience

- Improve the averaged index of provider satisfaction metrics by 1.0 (20% absolute improvement) by the end of the 6 month project

### PDSA CYCLES

#### PDSA 1

- Provision of AI scribe tool at no cost to providers

#### PDSA 2

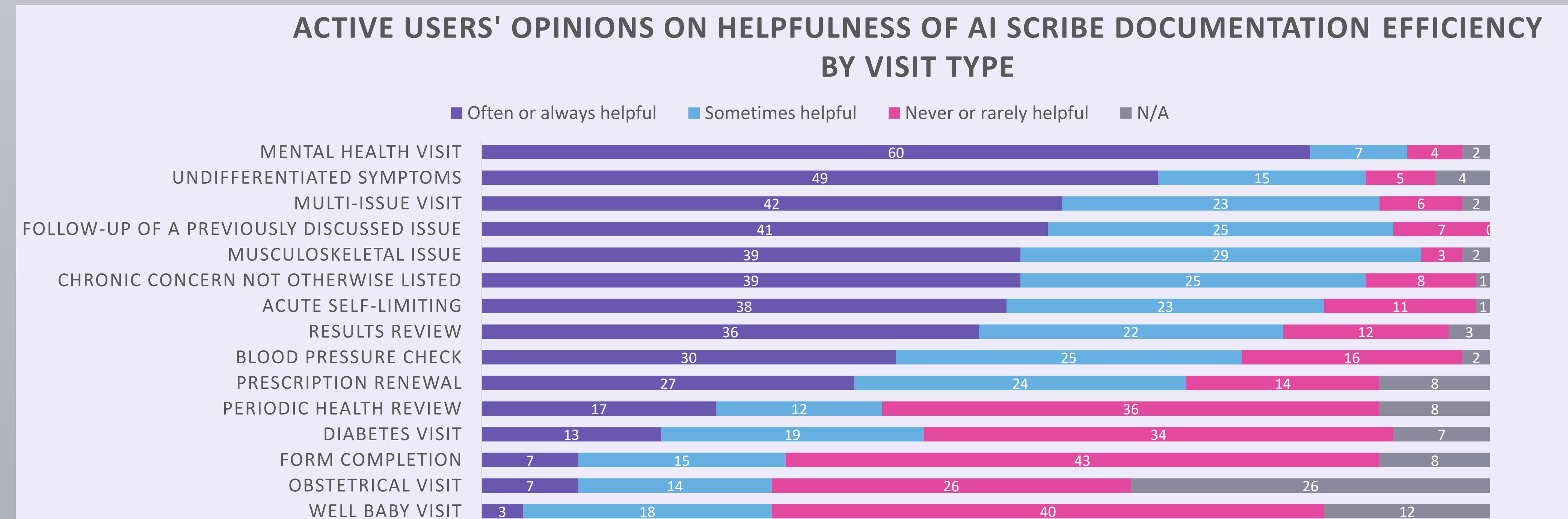
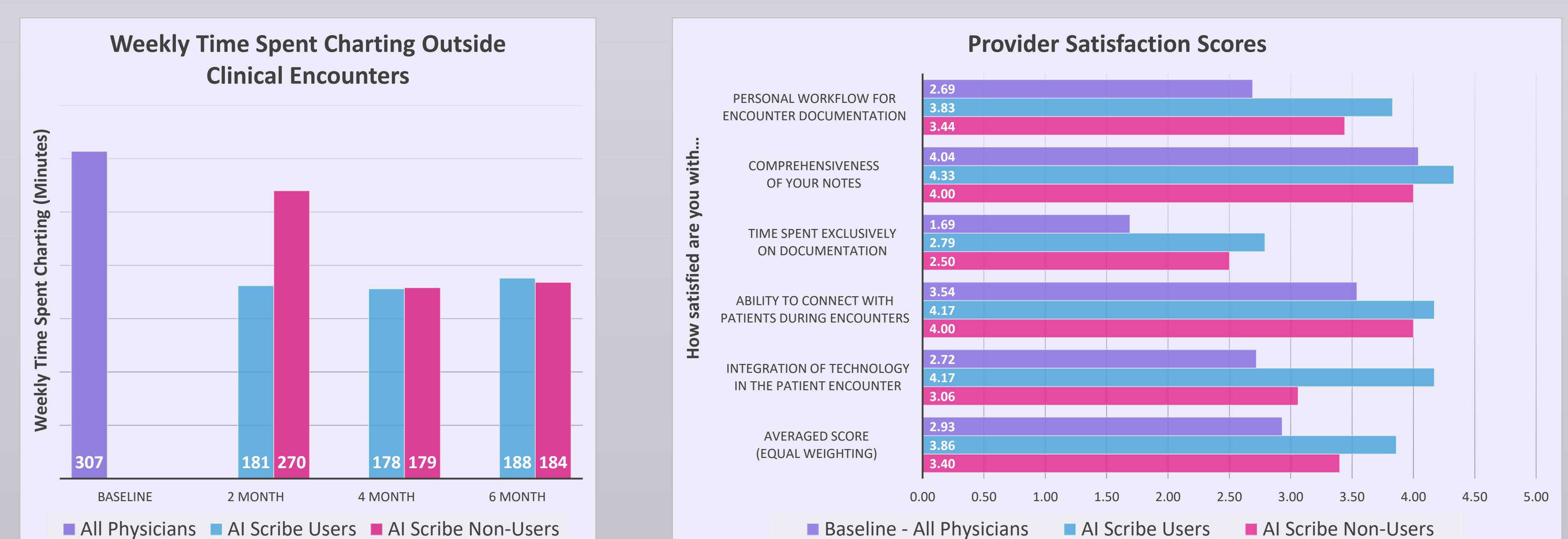
- AI scribe vendor hosted webinar and user optimization

#### PDSA 3

- Physician-only roundtable regarding use of the AI scribe

### RESULTS

	RESPONSE RATE	ACTIVE USERS	FORMER USERS	NEVER USERS	ACTIVE USERS' OPINION: REDUCED DOCUMENTATION TIME?		ACTIVE USERS' OPINION: IMPROVED PATIENT ENCOUNTER?	
					YES	NO	YES	NO
BASELINE	55/57	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2 MONTH FOLLOW-UP	52/57	40	10	2	28 (70%)	12 (30%)	31 (78%)	9 (22%)
4 MONTH FOLLOW-UP	47/57	33	13	1	26 (79%)	7 (21%)	27 (82%)	6 (18%)
6 MONTH FOLLOW-UP	42/57	24	17	1	21 (88%)	3 (12%)	23 (96%)	1 (4%)



### PROJECT LEARNING POINTS

#### Benefits of the AI Scribe

- Reduced charting time
- Reduced cognitive load
- Improved provider experience

#### Challenges Faced by Participating Physicians

- Impacts on pre-existing workflow
- Minimal supported languages
- Note accuracy and formatting limitations

#### Project Enablers

- Full funding of AI scribe and audio equipment
- A well-established OHT PCN with a supportive leadership group and strong communication channels
- Project management support through the OHT PCN
- Privacy and security oversight provided by the hospital

### CONCLUSIONS & FUTURE DIRECTIONS

- AI scribes can be a useful tool for providers to reduce time spent documenting patient encounters, though benefits vary greatly by individual provider needs and preferences (ex. languages, ease of use, integration)
- Collaboration between the OHT PCN, DFCM quality improvement physician leads, and OHT staff was crucial in successfully implementing and facilitating this project
- Further work will explore supporting physicians in the community with expanded options regarding ambient AI scribes as well as other AI and digital tools

### REFERENCES

- More Than Four Million Ontarians Will Be Without a Family Doctor by 2026. Ontario College of Family Physicians. November 7, 2023. <https://ontariofamilyphysicians.ca/news/more-than-four-million-ontarians-will-be-without-a-family-doctor-by-2026/>
- OCFP Statement: Administrative Burden. Ontario College of Family Physicians. April 24, 2024. <https://ontariofamilyphysicians.ca/news/ocfp-statement-administrative-burden/>
- Clinical Evaluation of Artificial Intelligence and Automation Technology to Reduce Administrative Burden in Primary Care. OntarioMD & WIHV. July 31, 2024. [https://www.ontariomd.ca/documents/ai%20scribe/ai%20scribe%20evaluation\\_final%20report\\_vf.pdf](https://www.ontariomd.ca/documents/ai%20scribe/ai%20scribe%20evaluation_final%20report_vf.pdf)

#### Authors Contact Information:

Michael Sergio Taglione: [mtaglione.md@gmail.com](mailto:mtaglione.md@gmail.com)  
Jeremy Chad: [jeremy.Chad@nygh.on.ca](mailto:jeremy.Chad@nygh.on.ca)