

Artificial Intelligence in Medical Communications — Global Perceptions and Observations

Anupama Kapadia^a, Aruna Meka^a, and Raghuraj Puthige^a

^aEnago Life Sciences-Crimson Interactive Pvt. Ltd., Mumbai, India

BACKGROUND

- Medical communications (MedComms) play a critical role in disseminating complex medical information to diverse audiences
- As technological advancements continue, the integration of artificial intelligence (AI) into MedComms practices has become a topic of interest¹
- Generative AI, in particular, has shown transformative potential in various industries, prompting us to investigate its current status and future implications within the realm of MedComms

AIMS AND OBJECTIVES

- To investigate the current adoption of AI tools among MedComms professionals, categorising respondents by roles and experience levels
- To assess the familiarity and utilisation of AI related tools within MedComms environment
- To explore and identify distinct perspectives, opinions, and practices regarding the utilisation of AI in MedComms
- To assess perceptions and concerns related to the potential impact of AI on job security, the quality of work, and ethical considerations in MedComms

METHODS

- Study Design:** An anonymous online survey was designed, consisting of 22 questions including both multiple-choice and open-ended formats
- We disseminated the survey primarily through LinkedIn and the ISMPP community
- The survey was conducted over a 25-day period, from September 15 to October 9, 2023

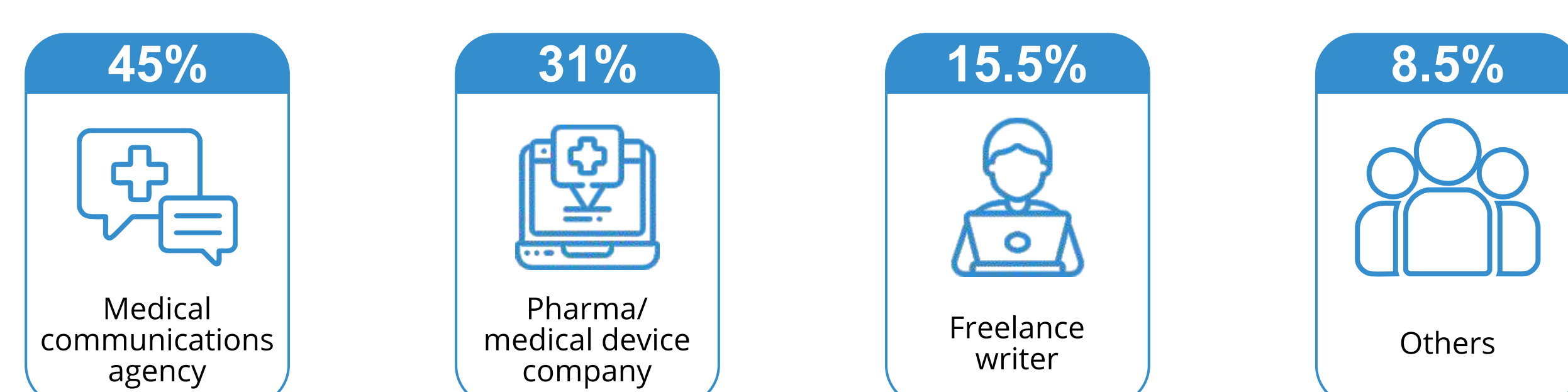
RESULTS

A total of 71 participants from 15 countries contributed their insights to the survey. Most of the participants were from the United Kingdom, the United States, and India

Participants' Professional Experience

- About 90% of the participants were medical writers working under various professional categorisations (**Figure 1**)
- More than half of the survey participants (56%) reported having ≥10 years of experience in MedComms

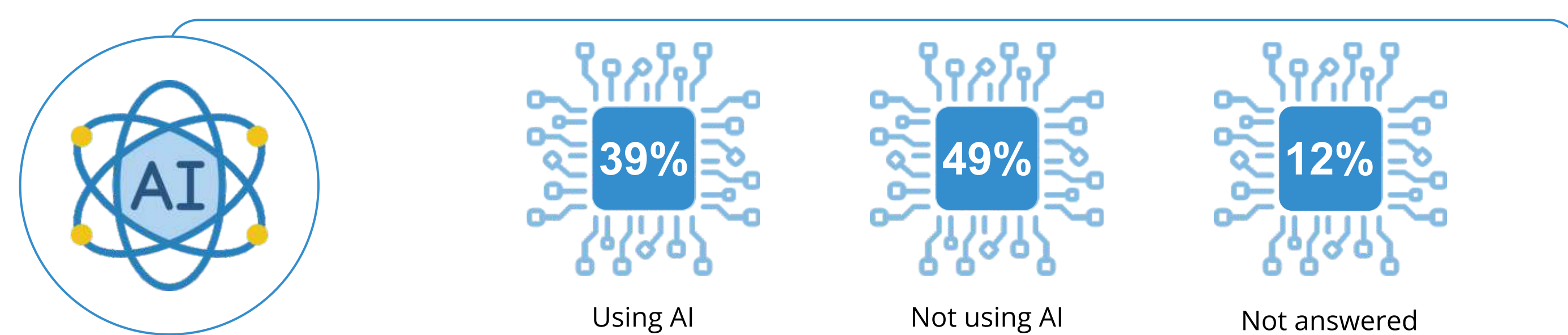
Figure 1: Professional Categorisation of the Survey Participants



Familiarisation of Participants with AI

- Even though nearly three fourths of the study participants were familiar with the concept of AI (74.6%), the utilisation of AI tools was limited
- Around 49% reported not using AI or unaware of AI being used in MedComms (**Figure 2**)

Figure 2: Utilisation of AI in MedComms



Perceived Influence of AI in MedComms

(a) Efficiency vs quality

- 76% of respondents expressed confidence in AI's potential to enhance efficiency, while only 18% believed it could improve the quality of their work (**Figure 3**)
- 35% of respondents believed AI had no impact on quality and 6% had similar opinion with respect to efficiency

CONCLUSIONS

The survey presents a dual perspective on the integration of AI within the MedComms community

Even though a majority of participants support AI's potential to transform MedComms sector, the persistent concerns about job security and the quality of work prompt a thoughtful consideration of the evolving MedComms landscape

The eagerness to engage in training reflects a proactive mindset among MedComms professionals, and demonstrate their commitment to adapting and flourishing in the dynamic convergence of AI and MedComms

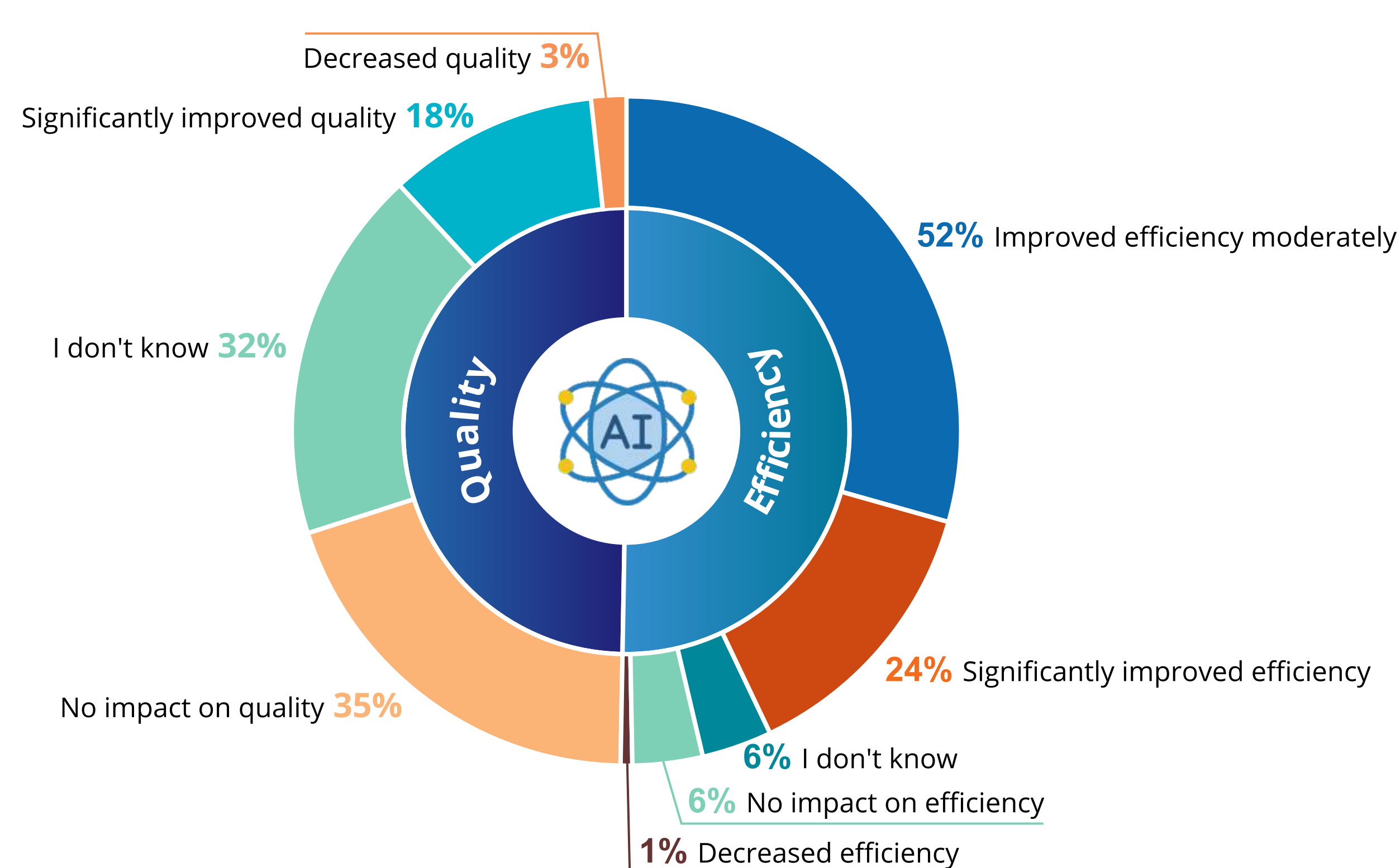
FUTURE AVENUES

Developing AI training programs to nurture confidence and adaptability among professionals in the MedComms community

Facilitating the integration of AI within the MedComms sector while still acknowledging and prioritising the human aspect

Future studies should explore the impact of AI training and its implications in addressing concerns about job security and work quality as identified in the survey on the integration of AI in the MedComms community

Figure 3: Perceived Efficiency vs Quality of AI in MedComms



(b) Restructuring, replacement, and revamping

- 50% of the participants did not perceive AI as a threat to job security, while 28% expressed concerns about its potential impact
- Despite 60% reporting no restructuring due to AI integration, only 21% expressed unconcern about potential replacement by AI
- Limited number of participants responded to open-ended question describing the changes experienced due to integration of AI in the workplace. Some of the changes reported by participants included
 - adapting to more strategic roles
 - changing job descriptions
 - automation of work previously done by vendors
 - reduced time spent on drudge work

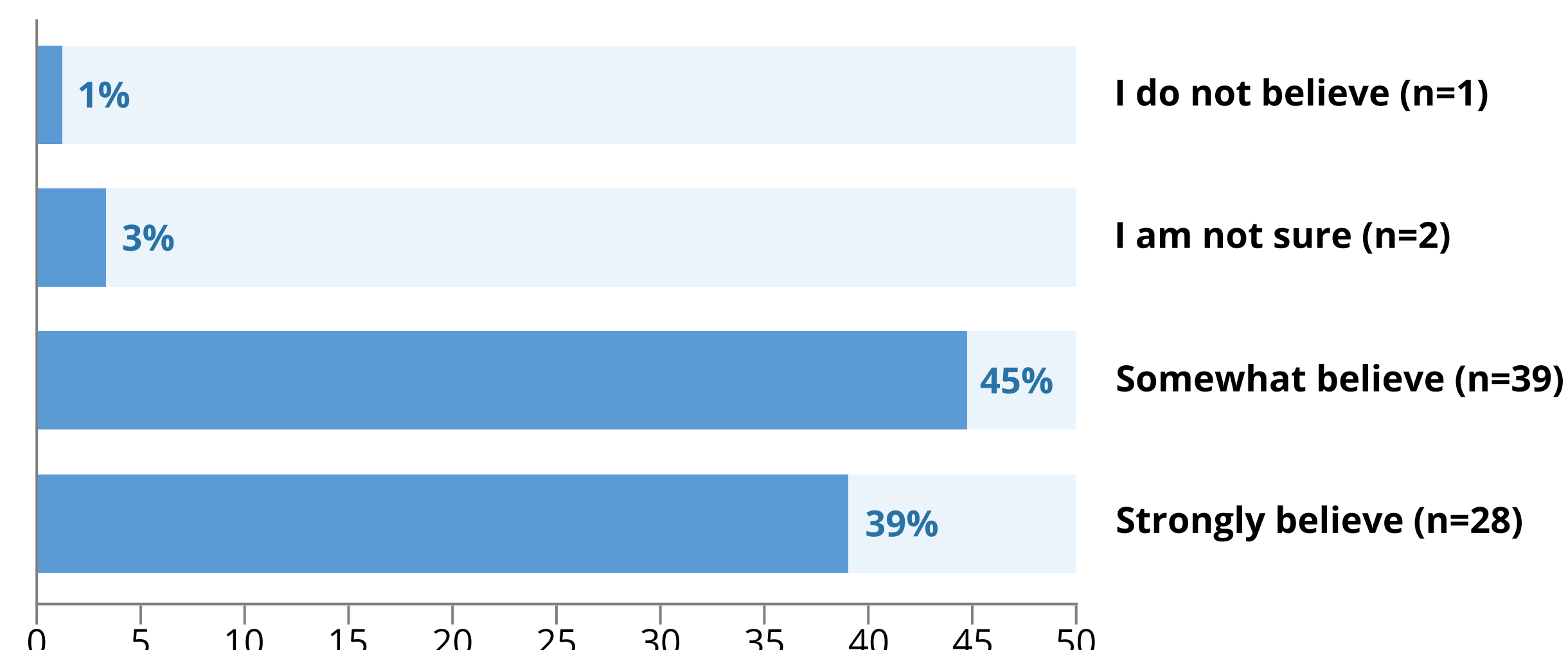
(c) Ethical considerations and training readiness

- 48% of survey participants believed that use of AI could raise ethical concerns in MedComms; however, the participants did not provide details on any particular concern that they foresee with AI
- 46% of participants were either actively pursuing or considering additional training to adapt to the evolving AI landscape

(d) AI and MedComms - future outlook

- 84% of participants opined that AI will significantly influence the landscape of MedComms in the coming years (**Figure 4**)

Figure 4: Perceived Influence of AI in MedComms



Limitation:

- As sample size is small, it's not possible to ascertain the views of respondents as representative of others in MedComms sector
- Selection bias as respondents may have been more interested in AI and may have expressed more favourable views compared to non-participants

Reference: 1. The benefits and drawbacks of integrating AI in medical writing. Accessed on 20 Dec,2023 <https://www.bhampharma.com/blog/ai-in-medical-writing>

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