

EMR Transition in Eye Hospitals

Navigating challenges and strategies for digital health transformation.

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Introduction

- Electronic Medical Records (EMR) are central to modernizing healthcare globally
- In India EMR adoption rose from 15% (2018) to 35% (2023) and have a projected CAGR of approx. 7.5%
- Initiatives like Ayushman Bharat Digital Mission (ABDM) is driving digitization efforts in the country.
- Ophthalmology requires precise diagnostic data and follow – up tracking – making EMRs highly relevant.

EMR Adoption: Global vs. India

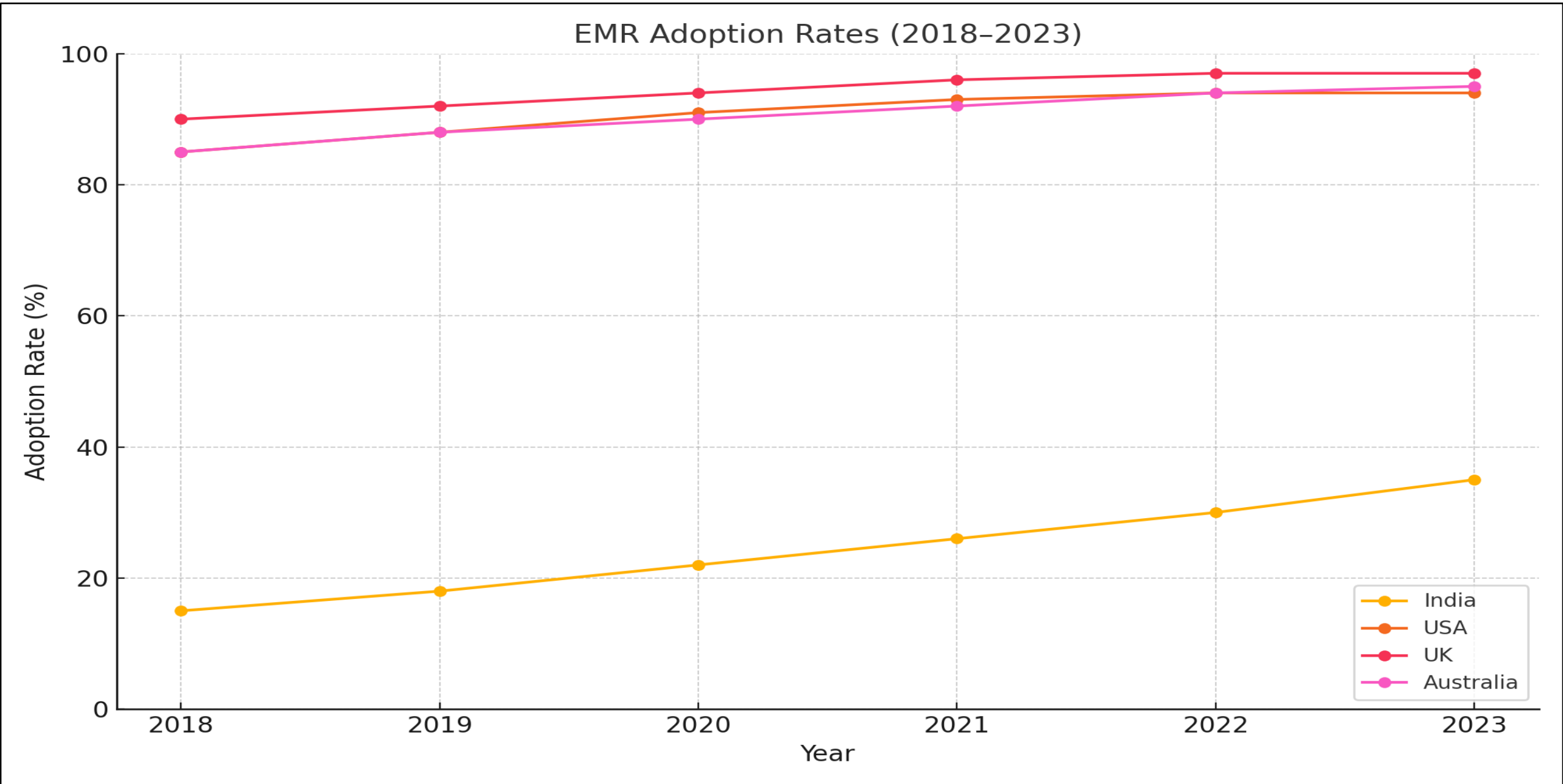


Fig 1: Comparison of EMR adoption rates

Source - Research and Markets. Global Electronic Medical Records Markets, 2016–2021, 2022–2026, & 2026–2031

Study Objectives

Assess staff attitudes and willingness toward EMR training.

Identify barriers to implementation and training.

Evaluate perceived usefulness and ease of use of EMRs.

Propose a context-specific implementation strategy.

Methodology

Primary data via structured questionnaire (Google Form).

Sample Size: 50 hospital staff (Doctors, Nurses, Admin, etc.).

Quantitative & Qualitative analysis (Likert scale + open-ended).

Descriptive stats and thematic analysis used.

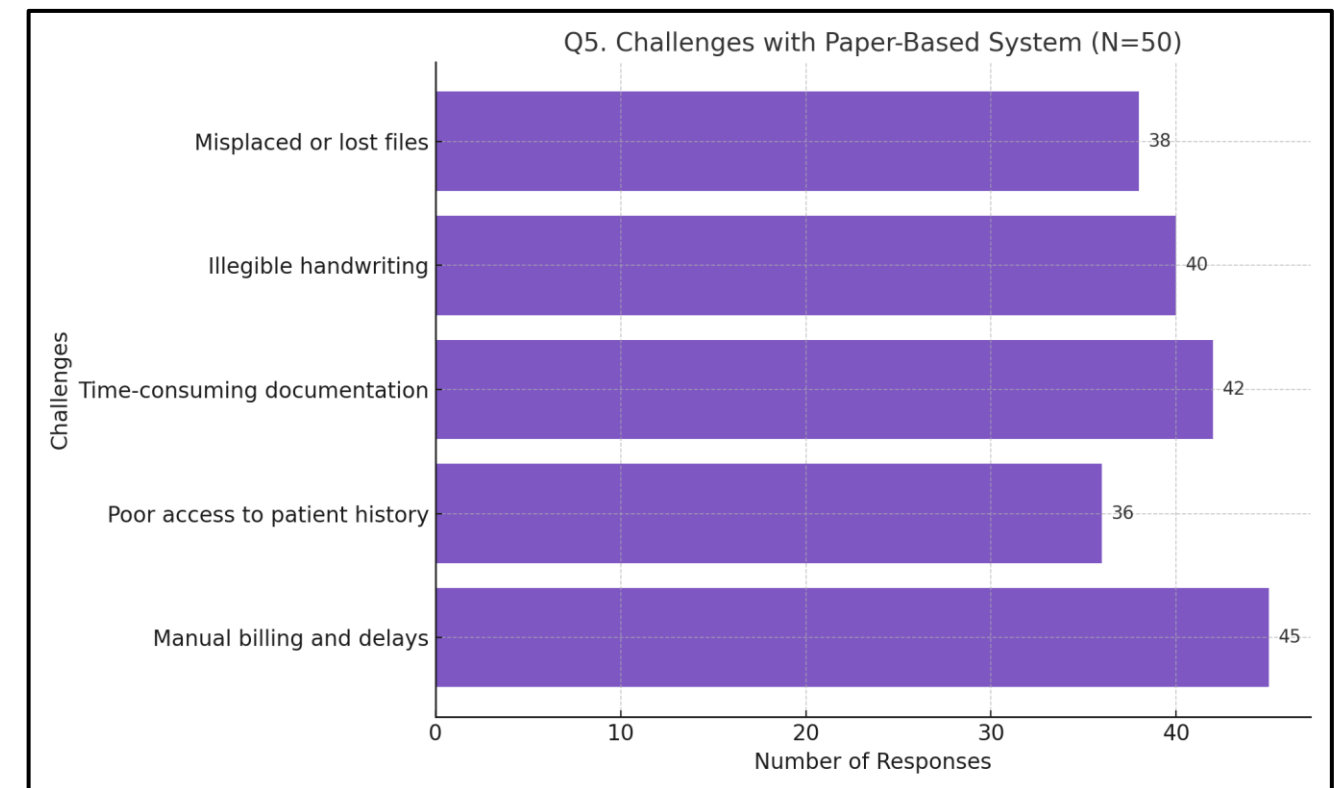
L I T E R A T U R E R E V I E W	Author(s)	Year	Title	Study Setting	Methodology	Key Findings	Relevance to Study
	Jones et al.	2021	Impact of EMR Systems on Clinical Efficiency	Multi-specialty hospitals, USA	Quantitative (Pre-post analysis)	EMR reduced documentation time and improved patient record access	Highlights operational benefits of EMR, useful for post-implementation analysis
	WHO	2019	EMR Implementation in Low-Resource Settings	Global	Review Report	Identifies cost, training, and infrastructure as major barriers	Applicable to EMR adoption challenges in resource-constrained eye hospitals
	Kumar & Patel	2020	Managing Resistance to EMR Adoption	Tertiary Care Hospital, India	Qualitative (Interviews with staff)	Resistance due to fear of job loss, lack of digital skills	Supports focus on staff-related challenges and change management
	Williams F, Boren SA	2008	The Role of the EMR in Care Delivery Development in Developing Countries: A Systematic Review	Developing countries	Systematic Review	EMRs improve care coordination but face infrastructure and policy barriers	Important for context on EMR implementation in developing settings like India
	Kumar S, Aldrich K	2011	Overcoming Barriers to EMR Implementation in the US Healthcare System: A Comparative Study	United States	Comparative Case Study	Barriers include cost, usability issues, and lack of interoperability; success driven by leadership and training	Offers insights into overcoming systemic challenges applicable across contexts
	Vishwanath et al.	2011	A case study of an EMR system at a large hospital in India: Challenges and strategies for successful adoption	Sankara Netralaya Hospital, India	Ethnographic Case Study	Identified major challenges like infrastructure, user adaptation, and workflow integration; emphasized	Directly applicable case study of EMR transition in an Indian eye hospital

Limitations of Manual Records

1. Manual billing delays (90%)
2. Time consuming documentation (84%)
3. Illegible handwriting (80%)
4. Misplaced or lost files (76%)
5. Poor access to patient history (72%)



Fig 2: Existing records storage

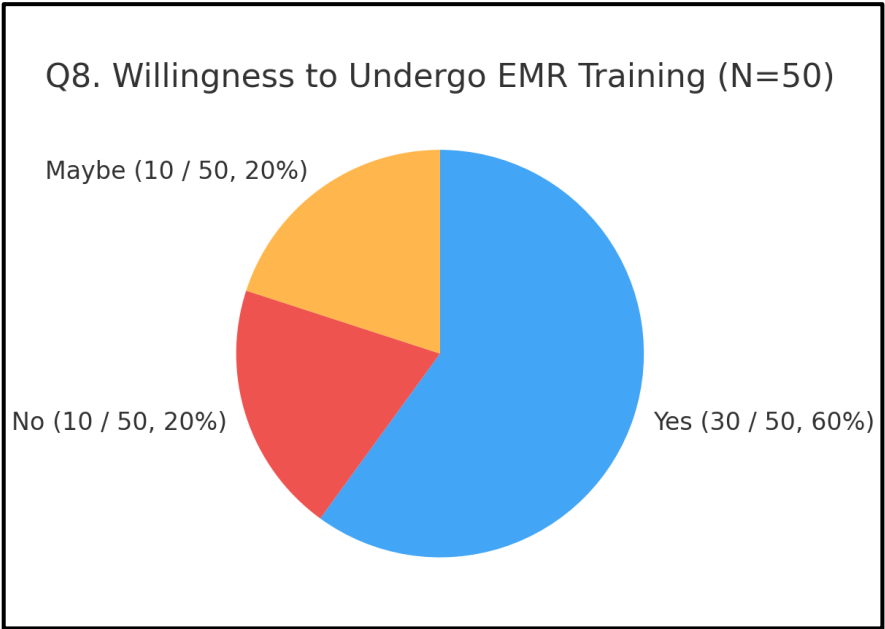


Graph 1 : Challenges faced by the paper-based system

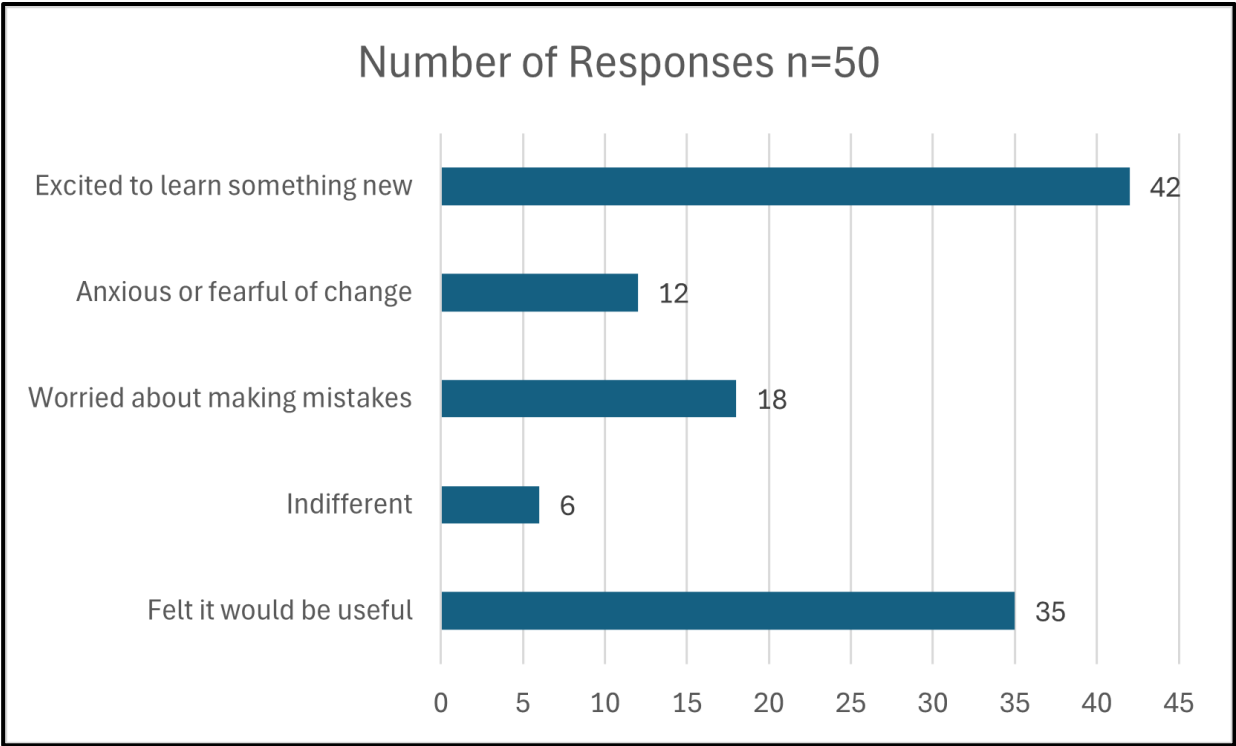
Staff Attitudes and Training

60%
Willing to undergo EMR
Training

84%
Excited to learn something
new



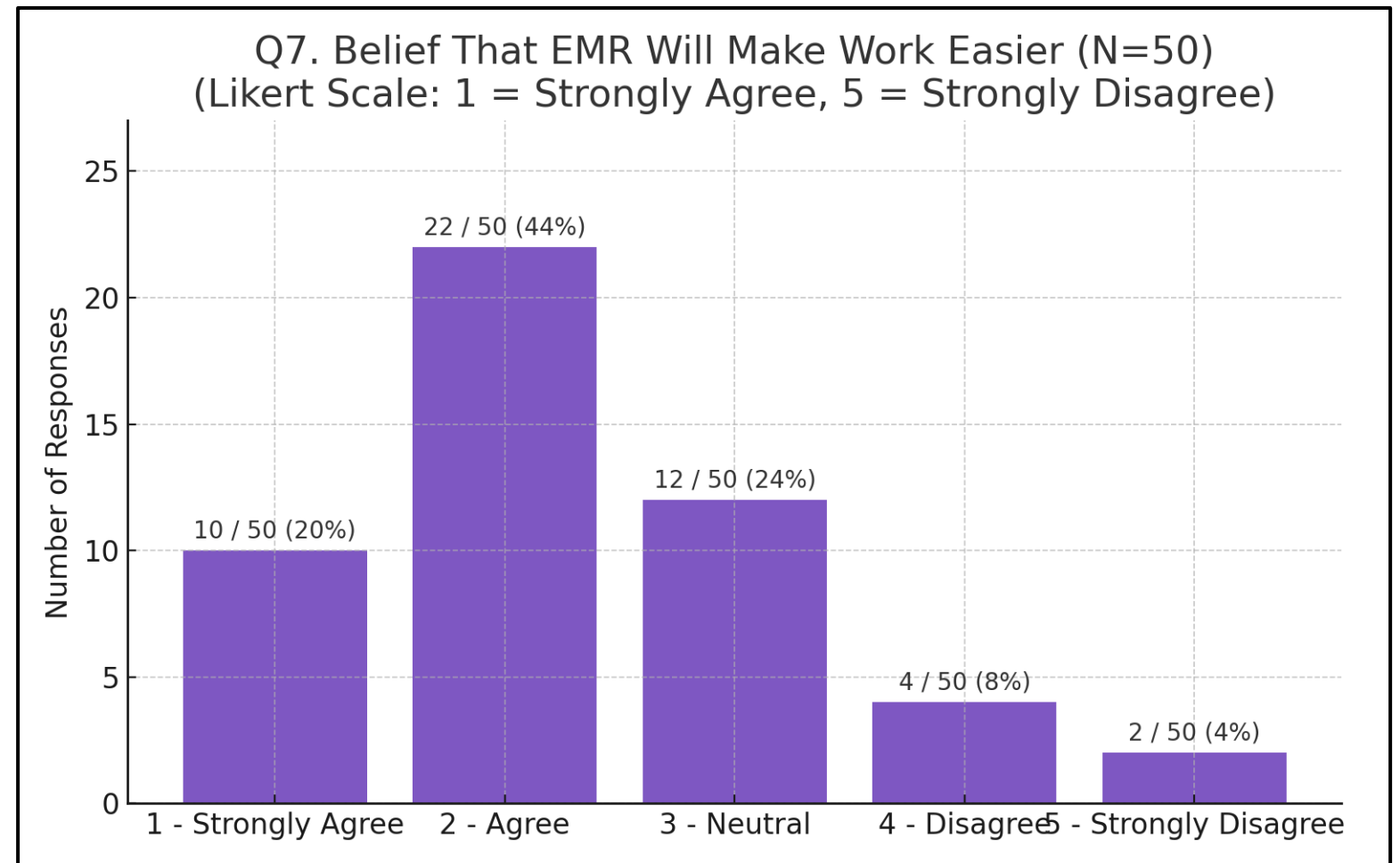
Graph 2: EMR training willingness



Graph 3: Percieved usefulness of EMR adoption

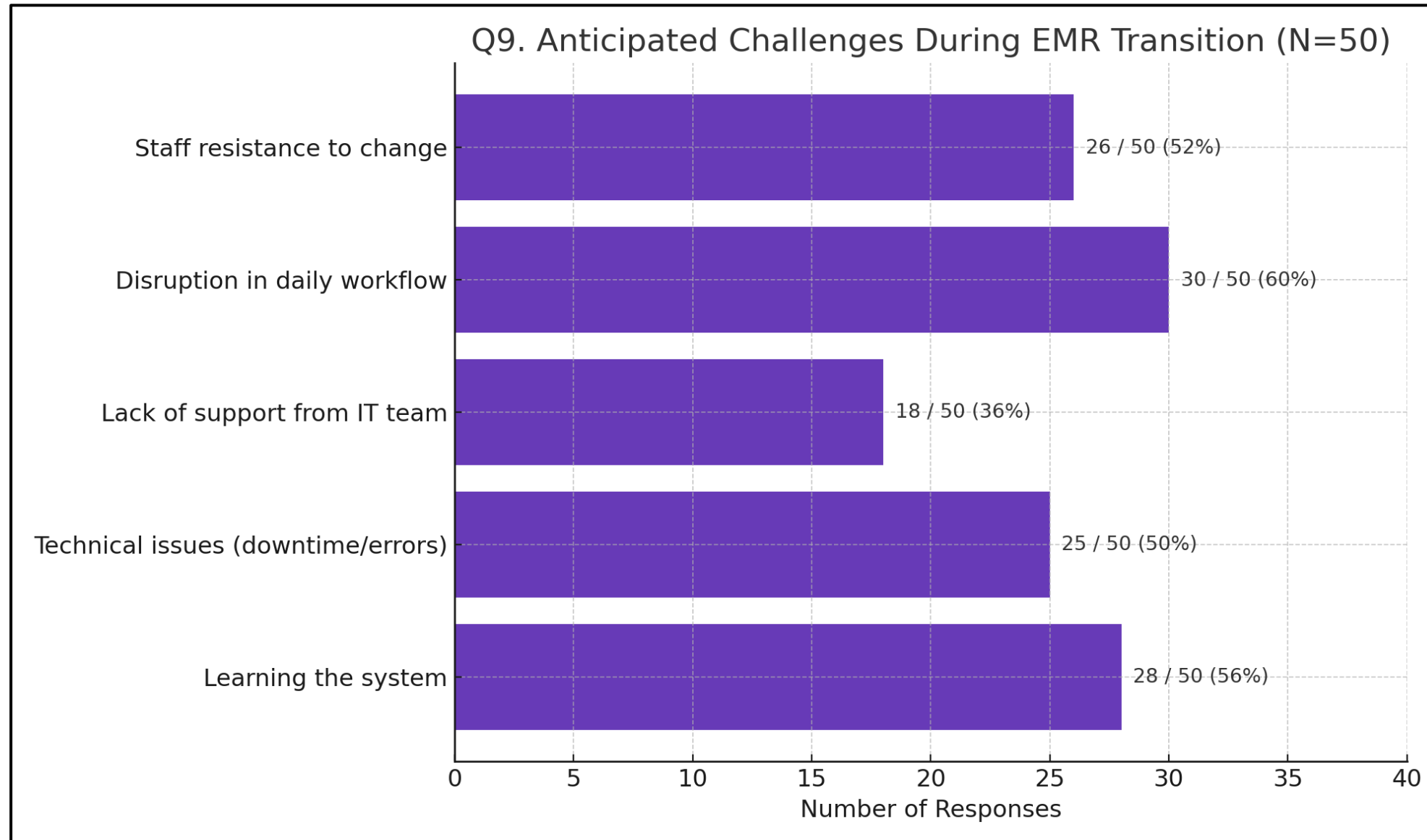
Staff Attitudes and Training

44%
Believe EMR will make their
work easier



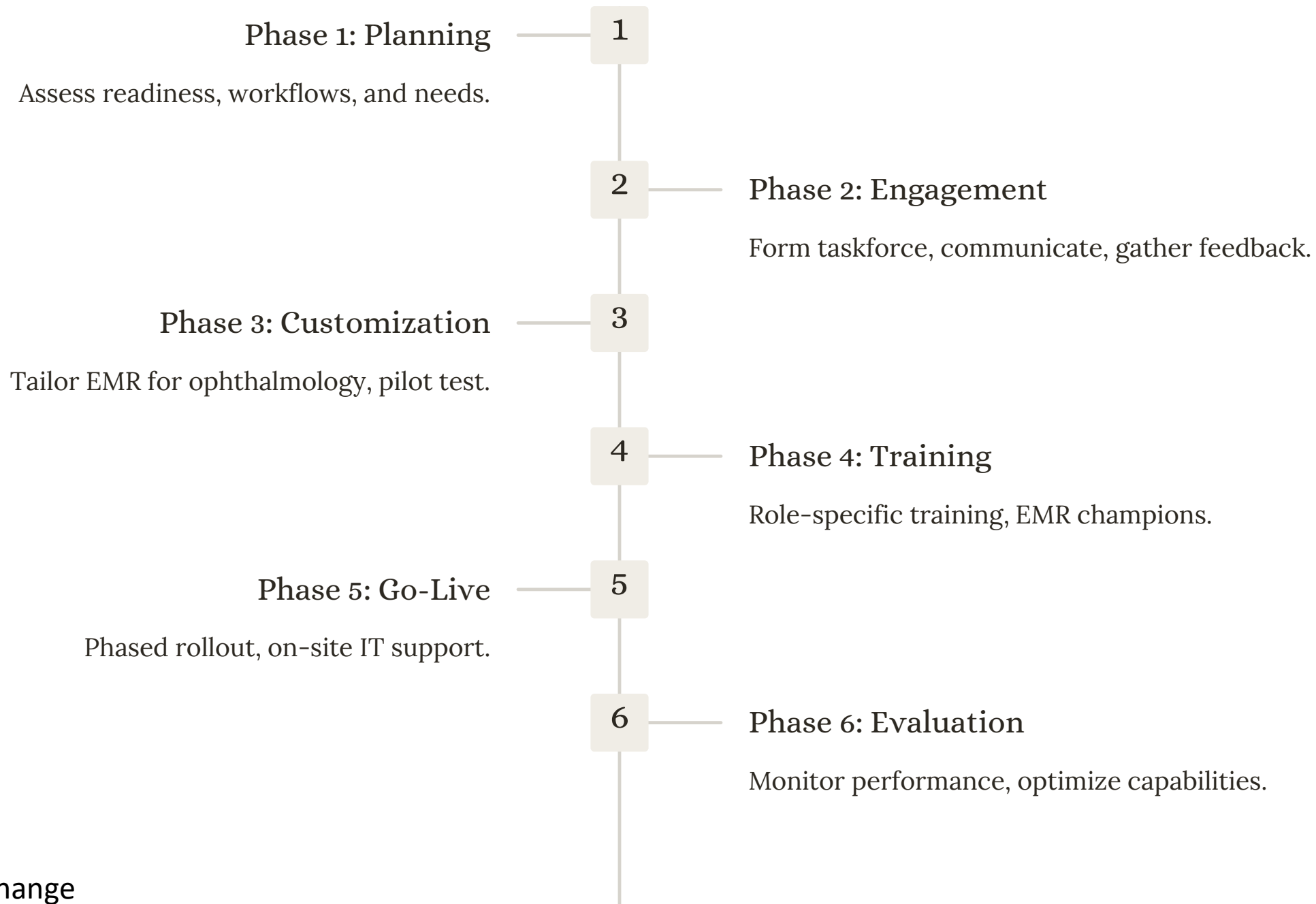
Graph 3: Perception of EMR Usefulness in Improving Work Efficiency

Challenges



Graph 4: Anticipated Challenges During EMR Transition

Proposed Implementation Strategy



*This considers Kotter's change model and TAM and TATUAT models

Conclusion

- EMR transition depends as much on people as on technology.
- Staff engagement, leadership support, and clear communication are key.
- The study contributes to EMR research in specialty hospitals.
- Future work: inter-hospital comparisons, long-term patient outcomes, and policy alignment.

THANK YOU