

INTRODUCTION

Targeted therapies have transformed NSCLC care, but rural India faces limited molecular testing, diagnostic delays, treatment costs and fragmented care.

These challenges contribute to delayed treatment initiation and poorer patient outcomes. This study evaluated access, barriers and opportunities to improve equitable uptake.

METHODS

Mixed-methods cross-sectional study using facility surveys, patient records, interviews and comparative review of breast and colorectal cancer models.

Quantitative data assessed diagnostic capacity, molecular testing and treatment access.

Qualitative interviews explored patient, provider and health system barriers. Comparative findings were used to identify scalable strategies for improving equitable access to targeted therapy in rural India.

DISCUSSION AND CONCLUSION

Decentralized diagnostics, strengthened referral pathways, subsidized testing, telemedicine-supported molecular tumour boards and community education can improve equitable access. Early molecular testing should be integrated into routine lung cancer care. Capacity building at district-level healthcare facilities is essential to improve diagnostic access. Patient navigation services can facilitate timely referral and treatment initiation. These strategies have the potential to reduce disparities and improve outcomes for patients with lung cancer in rural India.

REFERENCES & ACKNOWLEDGEMENTS

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RESULTS

- Limited molecular testing
- Reliance on urban laboratories
- Low biomarker testing
- Cost, referral delays and logistics were major barriers
- Telepathology, courier networks and patient assistance identified as potential solutions.

FIGURE 1. BARRIERS TO ACCESSING TARGETED THERAPY IN RURAL INDIA

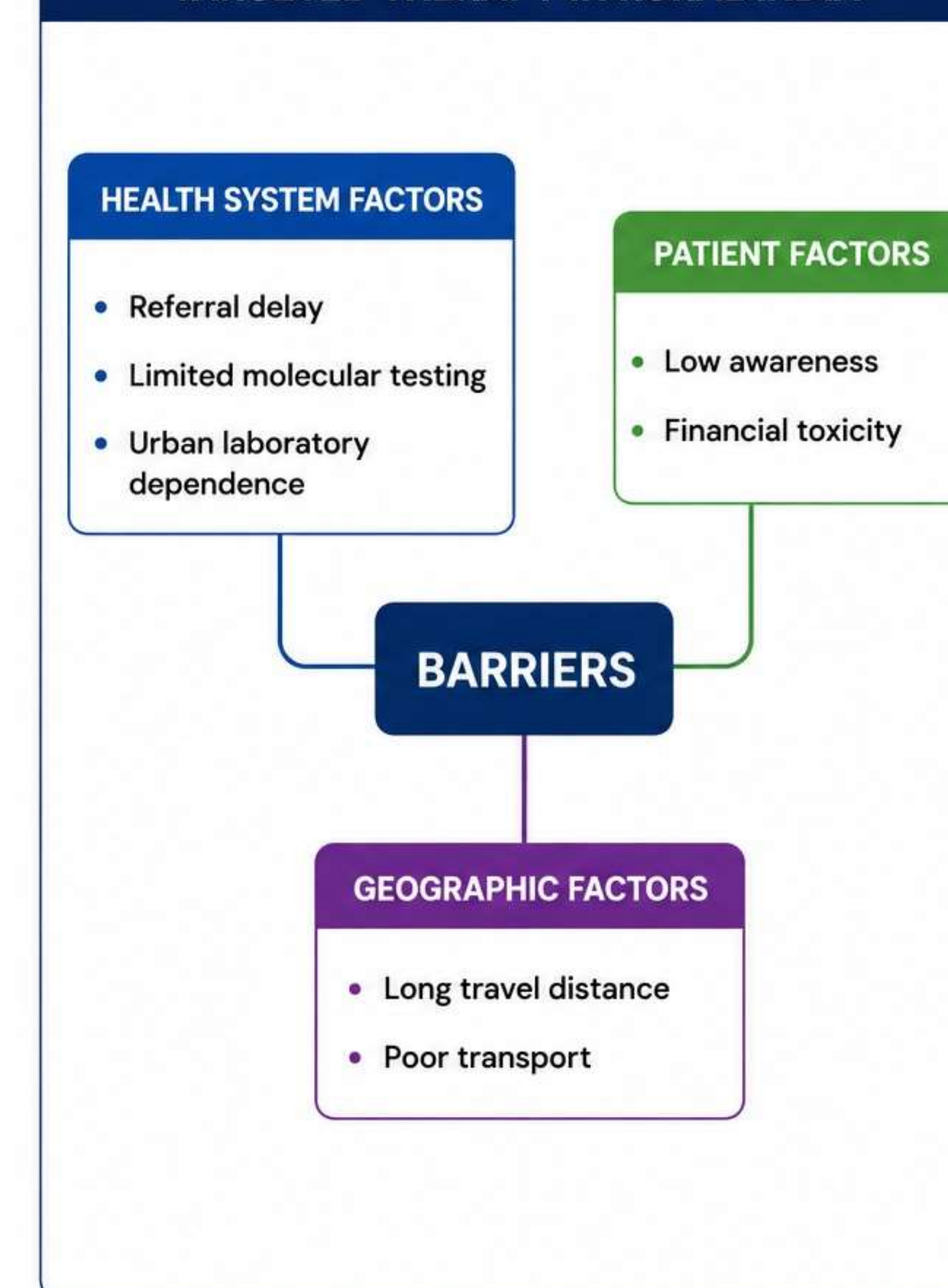
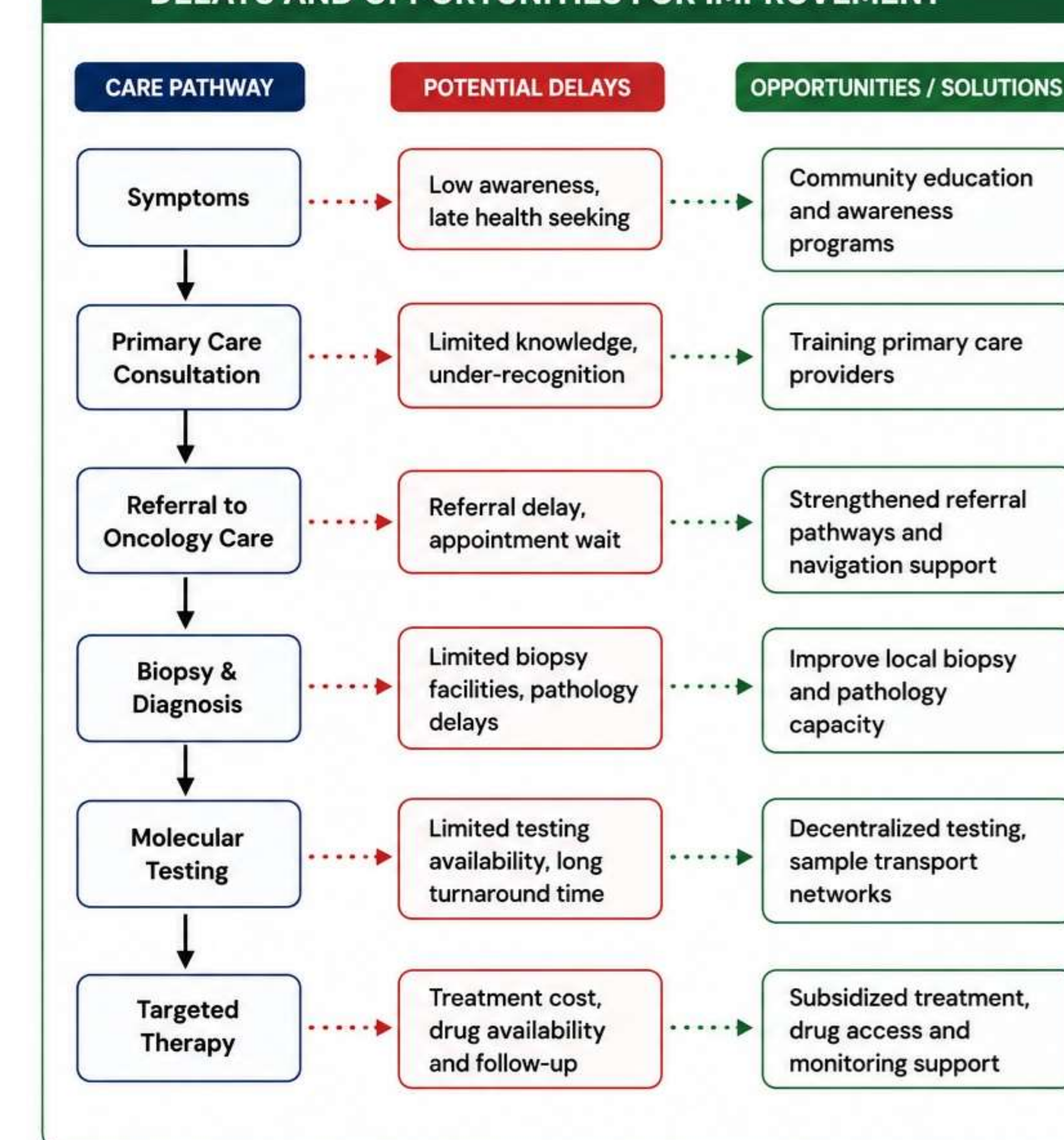


FIGURE 2. RURAL LUNG CANCER CARE PATHWAY: DELAYS AND OPPORTUNITIES FOR IMPROVEMENT



TAKE-HOME MESSAGE: Improving access to molecular diagnostics is the first step toward equitable targeted therapy in rural India. Strengthened referral systems, decentralized testing, patient navigation, and tele-oncology can bridge the molecular divide and improve outcomes for patients with lung cancer.

Disclosure

The authors declare no conflicts of interest.

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