



Timeliness of the Breast Cancer Diagnostic Pathway From First Presentation to Multidisciplinary Team Discussion

A Single-Cycle Clinical Audit

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INTRODUCTION

Timely diagnosis and coordinated management are key components of high-quality breast cancer care and are central to the WHO Global Breast Cancer Initiative.¹ Specialist breast services rely on structured, multidisciplinary pathways to integrate diagnosis, staging and treatment planning, with multidisciplinary team (MDT) discussion forming an important component of coordinated care.^{2,3} However, breast cancer pathways involve several sequential diagnostic and referral steps, and assessment of overall waiting time alone may fail to identify where delays arise within the pathway.^{4,5} Evaluating stage-specific intervals can therefore help identify potential bottlenecks and guide targeted quality-improvement efforts.⁴ This study aims that pathway delay, often reported only as a single overall interval, be mapped stage by stage to identify exactly where it accumulates.



Aim & Objectives

To evaluate the timeliness of the breast cancer diagnostic and MDT care pathway by measuring the duration of each clinical interval from first presentation to first MDT discussion, and identifying the stages where delays occur.

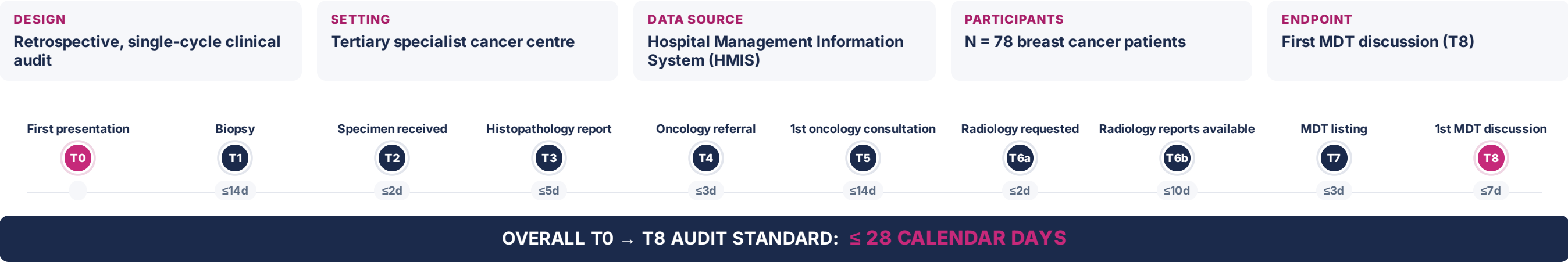
- 01

MEASURE
Stage-specific & total pathway duration
- 02

COMPARE
Performance against predefined benchmarks
- 03

IDENTIFY
Stages contributing to delay

MATERIALS & METHODS

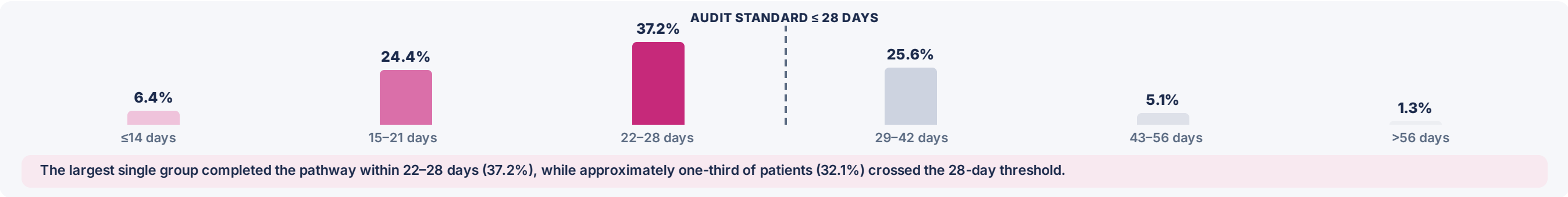


RESULTS

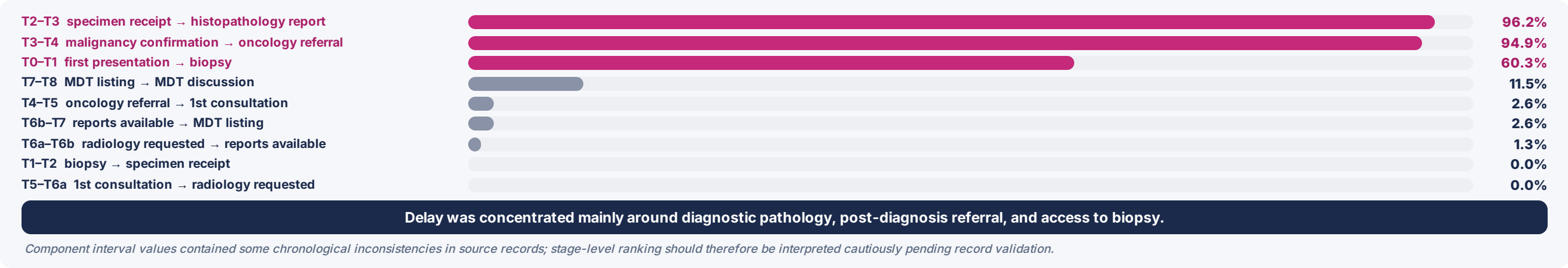
PRIMARY OUTCOME · TIMELINESS OF THE OVERALL PATHWAY



SECONDARY RESULT · DISTRIBUTION OF PRESENTATION-TO-MDT TIME



WHERE BENCHMARK NON-COMPLIANCE OCCURRED



78 Patients (N)	43.3 ± 8.3 Mean age, years	62.8% Rural residence	21.8% Formal education	16.7% Family history, BCa
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DISCUSSION

OVERALL PATHWAY

Most patients reached MDT within 28 days, although 32.1% exceeded the benchmark, highlighting a clinically relevant delayed subgroup.⁴

PATHWAY PROCESSES

Non-compliance clustered at selected diagnostic and referral transitions, supporting targeted pathway review and quality improvement.^{5,6}

PATIENT FACTORS

No significant associations were found between pathway timeliness and education, residence, or family history; these results should be interpreted in the context of the study's limited sample size and single-centre design.^{5,7}

CONCLUSION

67.9% of patients (53/78) completed the presentation-to-MDT pathway within 28 days, while 32.1% (25/78) exceeded the audit standard. Benchmark non-compliance was concentrated within selected diagnostic and referral transitions, identifying priority areas for focused quality-improvement work and subsequent re-audit.

INVESTIGATE → IMPROVE → TRACK → RE-AUDIT

REFERENCES

1. World Health Organization. Global breast cancer initiative implementation framework: assessing, strengthening and scaling up of services for the early detection and management of breast cancer. Geneva: World Health Organization; 2023.

2. Biganzoli L, Cardoso F, Beishon M, et al. The requirements of a specialist breast centre. Breast. 2020;51:65–84.

3. Curigliano G, Marotti L, Barrios C, et al. Multidisciplinary meeting for breast cancer care: EUSOMA recommendations for optimization. Breast. 2026;85:104682.

4. Mohd Mujar NM, Dahlui M, Emran NA, et al. Breast Cancer Care Timeliness Framework: a quality framework for cancer control. JCO Glob Oncol. 2022;8:e2100250.

5. Subedi R, Houssami N, Nickson C, et al. Factors influencing the time to diagnosis and treatment of breast cancer among women in low- and middle-income countries: a systematic review. Breast. 2024;75:103714.

6. Vijayakumar C, Maraju NK, Srinivasan K, Reddy KS. Clinical audit system as a quality improvement tool in the management of breast cancer. Int J Surg. 2016;35:44–50.

7. Shamsi U, Khan S, Azam I, et al. Patient delay in breast cancer diagnosis in two hospitals in Karachi, Pakistan: preventive and life-saving measures needed. JCO Glob Oncol. 2020;6:873-883.