

THE EFFECT OF DIGITAL TRACKING ON PATIENT FLOW EFFICIENCY AND PATIENT SATISFACTION IN ONCOLOGIC IMAGING PROCEDURES

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INTRODUCTION

- Delays, poor coordination and limited real-time monitoring can affect patient experience and departmental efficiency.



RESEARCH OBJECTIVES

- To evaluate the effect of a digital patient tracking system on work flow efficiency and patient satisfaction in patients undergoing oncologic imaging procedures.



ROOT CAUSE ANALYSIS



No Real-Time Trackable Records



Lack of Record Monitoring



Difficulty Finding Delay Causes



STUDY DESIGN



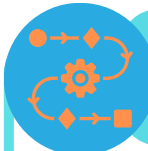
Study Duration

January 2026 - July 2026

Study Location



Nuclear Medicine and
Theranostics Department, DUHS
Ojha Campus



DIGITAL APPLICATION

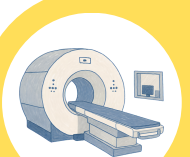
ONE APPLICATION
3 SOLUTIONS



Patient appointment
waiting time monitoring

2

Patient waiting time
monitoring (registration
to end of process)



Equipment up and
down time status

3



FRONT VIEW

Patient Appointment Logs

Patient Queue

Equipment History Log

Monthly Summary

1. Add New Patient Manually to Live Counter Queue

MIR Number:

Patient Name:

Modality:

-- Select Modality --

Add to Queue

Active Patient Records

MIR Number	Patient Name	Modality	Status	Action	Start Time	End Time	Duration	Feedback & Comments
200514-1110306430	MUHAMMAD ASGHAR	PET/CT	Start	End	02:25:28 PM	-	-	Waiting
200520-1110301328	MEHDI	General Nuclear Medicine	End		11:51:33 AM	02:41:51 PM	2h 50m 18s	Served: Happy

Appointments Booked On This Day (History)

Patient Name	MIR #	Appointment Given Date	Scan Date	Scan Name	Waiting Days	Benchmark Status
MR GEORGE	1111050459	25-Sep-2026	12-Oct-2026	PET/CT	17 Days	Out of Benchmark
MOHSIN KHAN	115002193	25-Sep-2026	12-Oct-2026	PET/CT	17 Days	Out of Benchmark



RESULT VIEW

Month	Scan Name	% Within Benchmark (≤ 5 Days)	% Out of Benchmark (> 5 Days)
September 2026	NM Whole Body Scan	0%	100%
September 2026	Nuclear Cardiac	0%	100%
September 2026	PET/CT	1.71%	98.28%

1. Patient Satisfaction Counter Metrics

Total Patients	392	Happy	373	Neutral	8	Angry	0
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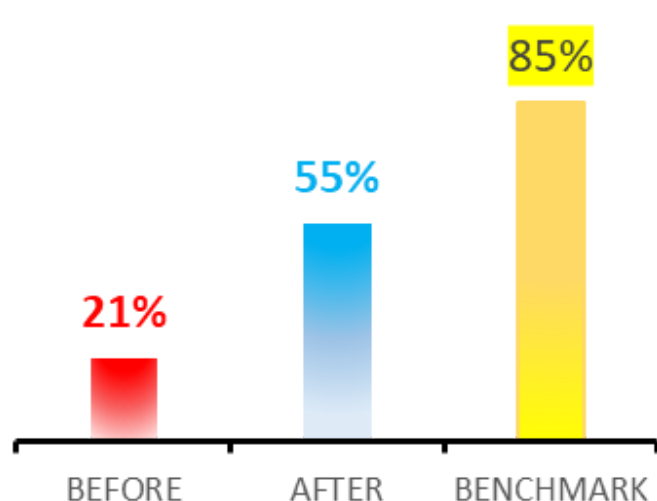
2. Overall Equipment Shift Availability Metrics (8:30 AM - 4:30 PM Basis)

Shift Hours UP Time	100%	Shift Hours DOWN Time	0%
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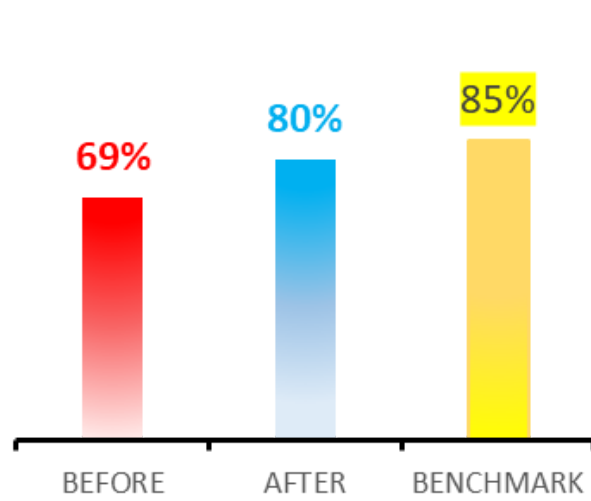


DATA VISUALIZATION

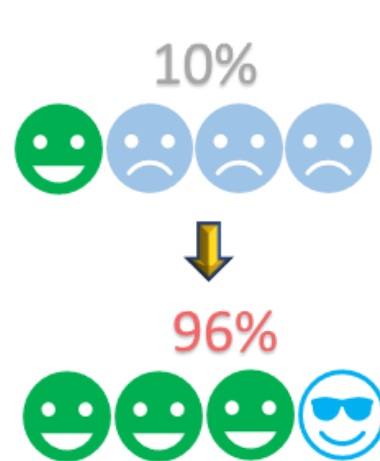
Appointment Waiting Time (<5d days)



Patient Scanning Time



Patient Satisfaction



KEY OPERATIONAL IMPACT



Waiting time Decreased



Completion time Decreased



Patient Satisfaction Increased



CONCLUSION

Digital patient flow tracking improves coordination, efficiency, patient satisfaction, and imaging resource utilization.