Adherence to European Society of Cardiology (ESC) Guideline for Diagnosis of MINOCA

SaTH Improvement Hub

Theme | Patient Safety

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Case Study Date | 14/11/2025

NHS The Shrewsbury and Telford Hospital NHS Trust

REASON WHY?

MINOCA (myocardial infarction with non-obstructive coronary arteries) is a form of heart attack where myocardial damage occurs without significant coronary artery obstruction. It accounts for 5–10% of acute myocardial infarctions and is more common in females. ESC 2023 guidelines recommend cardiac magnetic resonance imaging (CMR) after invasive angiography when the diagnosis remains uncertain, which can identify the underlying cause in up to 87% of MINOCA cases to enable more accurate diagnosis and appropriate treatment.

SMART AIM

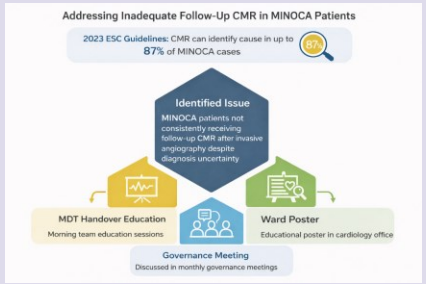
S SPECIFIC | M MEASUREABLE | A ACHIEVABLE | R RELEVANT | T TIME-BOUND

Increase adherence to cardiac MRI (CMR) investigation in indicated MINOCA patients by 10% over 2 months, in line with ESC guidelines, at Princess Royal Hospital, Shrewsbury and Telford Hospital NHS Foundation Trust.

PLAN

The team identified that was a issue with patients diagnosed with MINOCA after invasive angiography not having a follow-up CMRI despite an unclear diagnosis which is contradictory of the recommendation by the latest 2023 European Society of Cardiology (ESC) Guidelines.

The team raised awareness by trialing continuous medical education at morning MDT handovers, by putting a poster up in the cardiology ward, and initially aimed to raise awareness during monthly governance meeting.



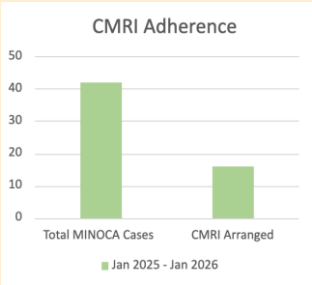
DO

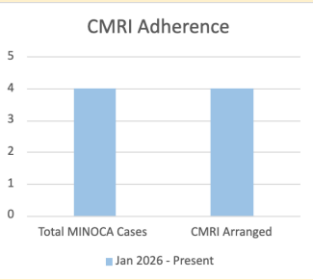
Following interventions were undertaken (refer to table). The poster used is shown below.

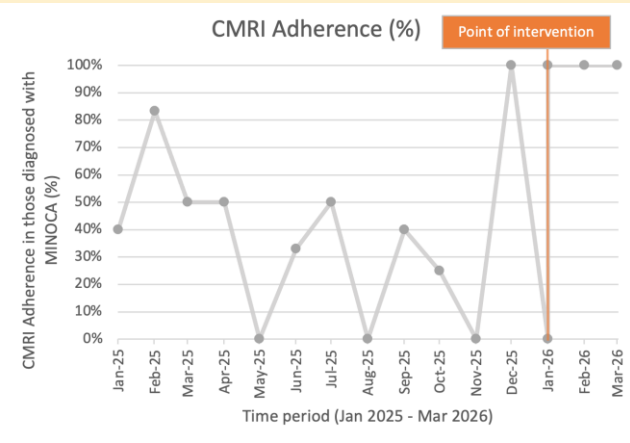
Date	Intervention
27/2/2026	Daily board round reminder
30/1/2026	Poster

STUDY

Focusing on patients diagnosed with MINOCA between January 2025 and March 2026, the following bar charts exemplify the total number of MINOCA cases and those that subsequently had a CMRI arranged prior to (green) and following (blue) intervention.







The run chart denotes the percentage of CMRI adherence in patients diagnosed with MINOCA during the mentioned period.

Following interventions from January 2026, we observed that percentage of adherence rose to and persisted at 100%, up until project completion in March 2026, signifying that all indicated patients diagnosed with MINOCA had a CMRI, in line with ESC guidance, and as intended by implementation of interventions.

ACT

Adopt: Poster intervention was found to be an effective intervention and the team aims to continue to adopt this for future.

Adapt: Daily morning board-round reminders were found to be impractical upon implementation. We later adapted to active identification of MINOCA patients on the ward with opportunistic reminders to arrange CMRI for eligible patients, which was found to be effective and more practical.

Abandon: The planned governance meeting presentation was cancelled initially in February to allow further data collection, and later in March due to agenda constraints. However, the team have decided to further explore future opportunity with the department following completion of this project to create a sustainable culture by raising awareness.

What is Next step?
To build a more sustainable culture by raising awareness through departmental teaching and aim to present at the next clinical governance meeting.

ACKNOWLEDGEMENTS & REFERENCES | We would like to thank the Department of Cardiology at The Princess Royal Hospital, Telford, for supporting this project, and Dr Jayesh Makan for his supervision. We would also like to thank James Owen and Craig Godbold from the Improvement Hub for their ongoing support throughout the project.