outcomes were compared between individuals in atrial fibrillation and sinus rhythm.

517 (14.4%) of patients presenting to Emergency Departments with confirmed myocardial injury were found to be in atrial fibrillation. One year all-cause mortality was higher in this population compared to patients presenting in sinus rhythm (24.8% vs 16.9%; p<0.001). Patients in atrial fibrillation were less likely to undergo invasive coronary angiography (21.5% vs. 59.8%; p<0.001) or urgent revascularisation with either percutaneous coronary intervention or coronary artery bypass grafting (13.2% vs. 45.2%; p<0.001). These patients were also more likely to receive an adjudicated diagnosis of myocardial injury or type 2 myocardial infarction (67.1% vs. 25.2%; p<0.001). However, there was no related increase in the incidence of unplanned coronary revascularisation in the year following index presentation (4.5% vs. 6.9%; p=0.05). Although patients in atrial fibrillation have poorer clinical outcomes, these results are likely to indicate an older population with higher multimorbidity rather than a missed opportunity for active treatment during initial presentation to the Emergency Department.

013 PARAMEDIC HEART SCORES IN THE PREDICTION OF MACE AND AMI. THE AMBULANCE CARDIAC CHEST PAIN EVALUATION IN SCOTLAND (ACCESS) STUDY

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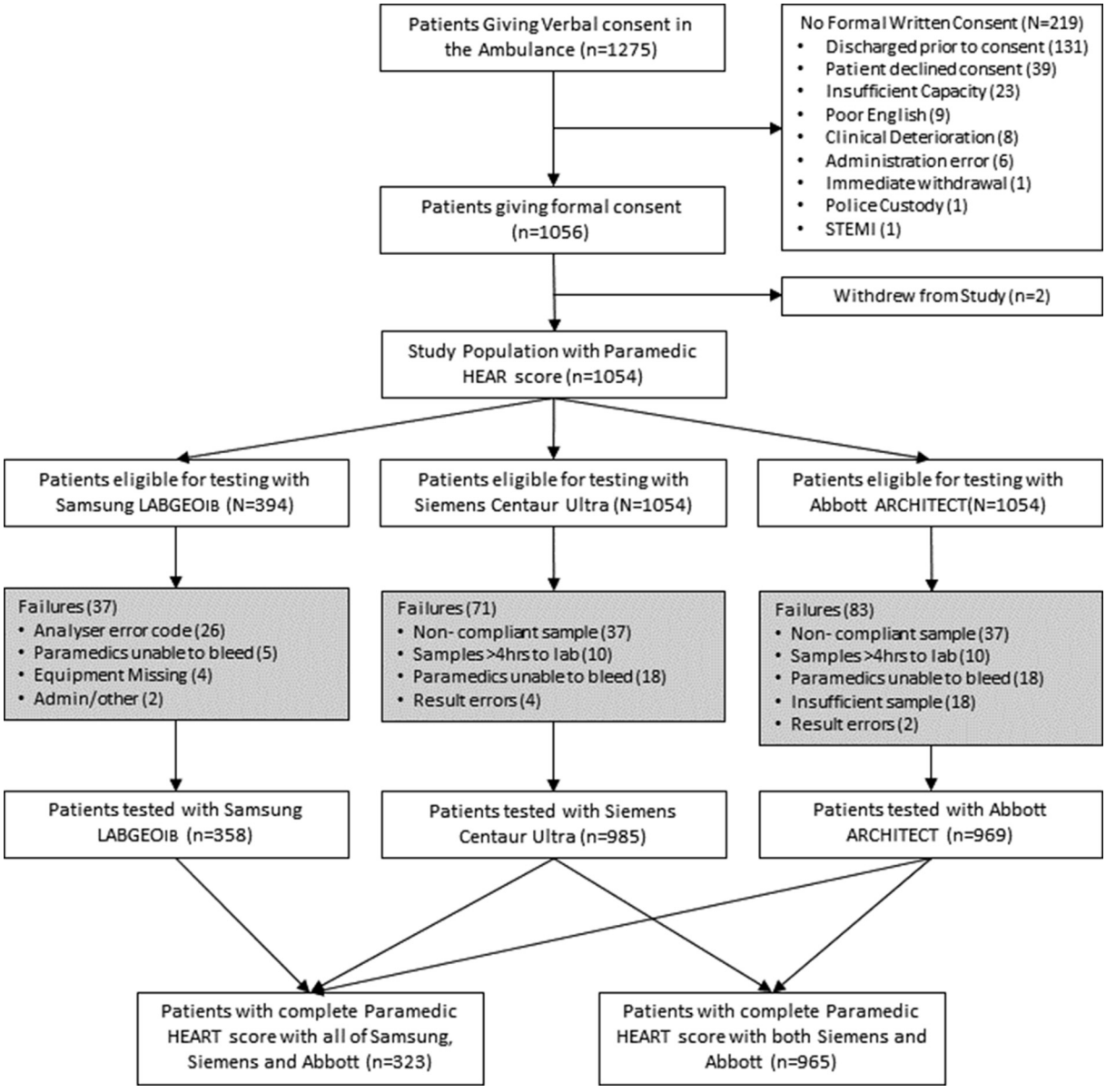
10.1136/emermed-2019-RCEM.13

Background Cardiac sounding chest pain represents about 5% of all Emergency Department (ED) attendances in the United Kingdom (UK), often via 999 ambulance.



Abstract 013 Figure 1 Patient flow diagram

Much work has focused on the rapid distinction of the 1 in 5 patients without ST elevation on ECG, who are suffering from a non ST elevation myocardial infarction (NSTEMI). Pre-hospital translation of such work may allow improved access to specialist treatment for patients with NSTEMI and also identify a low risk population suitable for management without immediate ambulance transfer to hospital.

The objective was to determine the accuracy of a wholly paramedic calculated pre-hospital HEART score to predict a 30-day Major Adverse Cardiac Event (MACE). The potential implications of pre-specified low-risk and high-risk cut offs were also to be determined.

Method and results Prospective diagnostic accuracy study in Northeast Scotland (UK) on adult (>18 yr) patients with cardiac sounding chest pain, attended by a paramedic ambulance and who had no ST elevation on initial ECG.

A real time paramedic HEAR score was calculated and blood drawn for analysis with a POC cTn assay and later with both laboratory based contemporary and high-sensitivity cTn assays. Normal care then ensued and patients were followed up to 30 days for development of MACE.

Conclusions Between Nov 2014 and April 2018, 1275 patients agreed to participate in the ambulance and 1056 later gave informed consent with 1054 completing 30 day follow up.

358 patients had complete Paramedic HEART scores with all 3 assays and 969 patients with the 2 lab based assays (figure 1)

Sensitivities and specificities (95% CI) for the HEART scores vs MACE will be calculated and ROC curves generated. Diagnostic properties at different score cut-offs will be presented and analysis of the impact of the different cTnI assays presented.

Apologies: Independent AMI adjudication due to complete next week, so no full results yet.

014 SHARED DECISION MAKING: T-MACS CHOICE FOR CHEST PAIN PATIENTS IN THE ED

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The concept of shared decision making (SDM) has gained increasing attention across healthcare fields including emergency care, with a focus shift towards patient-centred medicine.

With cardiac chest pain accounting for approximately 6% of all emergency department (ED) attendances we aimed to co-design a personalised decision aid based on the established Troponin-only Manchester Acute Coronary Syndromes (T-MACS) prediction model to increase patient involvement in the decision making on serial troponin testing and follow up.

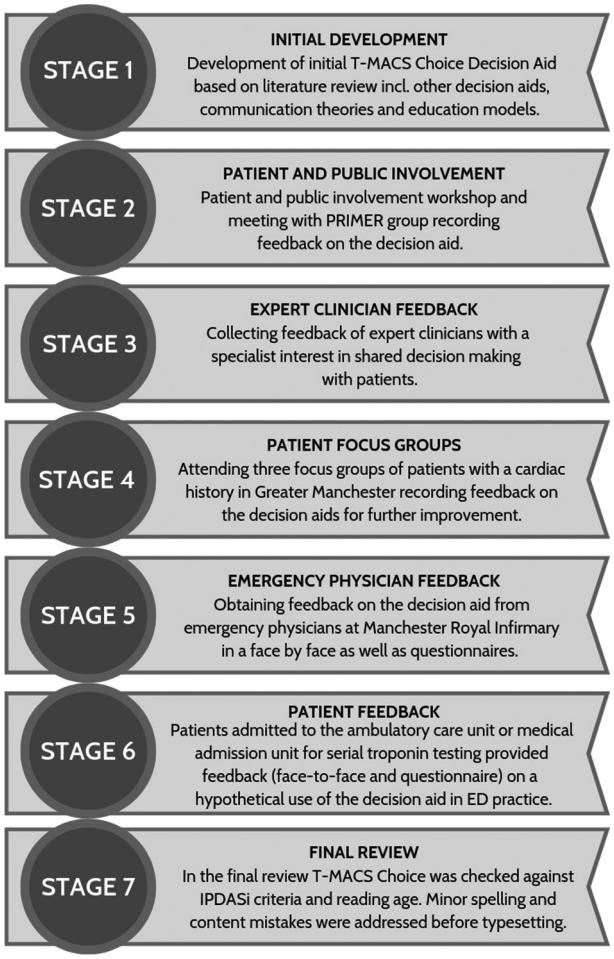
The T-MACS Choice decision aid was co-designed with patient and physician involvement in 7 stages using a mixed-methods approach (figure 1) at the Manchester Royal Infirmary (MRI) from March to May 2017. The initial prototype was developed based on a) a literature review of SDM, b) the AHRQ health literacy toolkit and c) the International Patient Decision Aid Standards instrument.

In subsequent stages the prototype was improved based on feedback provided by the PRIMER patient and public involvement group, three SDM expert clinicians, focus groups interviews involving 26 members from patient groups with a history of cardiac problems, questionnaires from 29 emergency physicians and 14 patients presenting to MRI ED with chest pain and admitted for serial troponin testing.

The final T-MACS Choice decision aid is personalised for the individual patient, reflecting their distinct risk group with the relevant choice options (figure 2).

In the initial development stages the most common themes identified were the importance of a personalised design and the use of clear, understandable language avoiding medical jargon. Both patients and physicians highlighted the importance of including information on heart health and prevention. In the final stages both sides agreed that T-MACS Choice had the right amount of information, was clear and engaging patients in the decision making.

Further research on clinical implementation of T-MACS Choice is needed to determine its impact on patient choice and safety.



Abstract 014 Figure 1 T-MACS choice development flowchart