Results 491 (8.6%) patients had hs-cTnl concentrations above the manufacturer’s ULN. There were 4157 (72.8%) patients in whom the hs-cTnl was performed solely as part of the study, with 309 (7.4%) of these above the ULN. Five patients died in ED. Of the remaining patients, 3603 (63.2%) were admitted to hospital. The rate of admission increased with rising hs-cTnl concentrations (table 1). A cardiovascular diagnosis was the most frequent discharge diagnosis in those with a hs-cTnl above the ULN. However, a neurological condition was most common in the patients in whom the test was only performed as part of the study. Increasing hs-cTnl concentrations were associated with increasing in hospital mortality regardless of whether the hs-cTnl was requested for clinical reasons or not (figures 1 & 2). Furthermore, hs-cTnl demonstrated good discriminative ability for in-patient mortality (area under receiver operator curve 0.834). Hs-cTnl above the ULN remained an independent predictor of mortality on multivariate analysis. The median length of stay was also associated with increasing hs-cTnl concentrations.

Conclusion In consecutive patients presenting to ED, hs-cTnl elevation is common. Furthermore, increasing hs-cTnl concentrations are associated with increased admission rates from ED, longer in-patient stays and higher in-hospital mortality. Hs-cTnl may therefore represent a biomarker for in hospital outcomes in these patients.

Conflict of Interest Unrestricted research grant from Beckman Coulter (who had no role in the design, analysis, interpretation of the study)

Abstract 26 Table 1 Admission rate for hs-cTnl concentrations

<table>
<thead>
<tr>
<th>Hs-cTnl (whole cohort)</th>
<th>Admission rate (clinically requested)</th>
<th>Admission rate (study requested only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 ng/L</td>
<td>52.0%</td>
<td>52.7%</td>
</tr>
<tr>
<td>1 - 9 ng/L</td>
<td>55.3%</td>
<td>55.5%</td>
</tr>
<tr>
<td>10 - 19 ng/L</td>
<td>70.5%</td>
<td>70.9%</td>
</tr>
<tr>
<td>20 - 40 ng/L</td>
<td>79.8%</td>
<td>79.8%</td>
</tr>
<tr>
<td>&gt;40 ng/L</td>
<td>90.0%</td>
<td>86.3%</td>
</tr>
</tbody>
</table>
syndromes and assessed the effect of on patient understanding.

Methods Multi-language animations explaining angiography and angioplasty, (www.explainmyprocedure.com/heart) were introduced at nine district hospitals for patients with acute coronary syndrome (non-ST elevation myocardial infarction and unstable angina) before urgent transfer to a cardiac centre for their procedure. Patients watched the animations on wards using personal devices or internet-free videobooks. Reported understanding of the reason for transfer, the procedure, its benefits and risks in 100 consecutive patients were recorded before introduction of the animations into practice (no animation group) and in 100 consecutive patients after their introduction (animation group). Patient understanding in the 2 groups was compared. Figure 1 shows a flow diagram of the pathway.

Results Table 1 shows the characteristics of patients in the animation and no animation groups. Following introduction,
83/100 patients reported they had watched the animation before inter-hospital transfer (3 declined and 14 were overlooked). The proportions of patients who understood the reason for transfer, the procedure, its benefits and risks, in the no animation group (n=100) were respectively, 58%, 38%, 25% and 7% and in the animation group (n=100), 85%, 81%, 73% and 61% (p<0.001 for all comparisons, figure 1).

**Conclusion** Use of animations explaining angiography and angioplasty is feasible before urgent inter-hospital transfer and was associated with about a 2-fold improvement in understanding of the benefits and a 9-fold improvement in understanding of the risks. The approach is not limited to cardiology and has the potential to be applied to all specialties in medicine.

**Conflict of Interest** Founder of Explain my Procedure

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**PROBABILITY OF CORONARY DISEASE AND CLINICAL OUTCOMES IN PATIENTS WITH TYPE 2 MYOCARDIAL INFARCTION**

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**Background** Type 2 myocardial infarction is common in clinical practice. However, despite these patients having a similar rate of major adverse cardiovascular events as those with atherothrombotic type 1 myocardial infarction, there is currently no consensus on how these patients should be evaluated or managed. Whether risk assessment for coronary artery disease can identify patients at increased risk of death is unclear.

**Methods** The High-STEACS trial was a stepped wedge cluster randomised controlled trial in ten hospitals across Scotland, including 48,282 consecutive patients with suspected acute coronary syndrome. The index diagnosis was adjudicated in all patients and the likelihood of underlying coronary artery disease recorded as either low probability, high-probability, or known based on the clinical history, risk factors and comorbidities. The adjudicators were blinded to the primary and secondary outcomes including all-cause mortality at one year.

**Results** High-sensitivity cardiac troponin I concentrations were above the sex-specific 99th centile in 22% (10,360/48,282) of patients. The adjudicated diagnosis was type 1 and type 2 myocardial infarction in 55% (4,981/9,115) and 12% (1,121/9,115), respectively. Compared to patients with type 1 myocardial infarction, those with type 2 myocardial infarction were older and more likely to be women. In patients with type 2 myocardial infarction, 20% were low-probability, 55% were high-probability and 25% had known coronary artery disease.

All-cause mortality was highest in patients with known or suspected coronary artery disease (22.5% and 23.3%, respectively). Those with a low-probability of coronary artery disease had the lowest event rate (8.8%), even compared to those with type 1 myocardial infarction (figure 1).

**Discussion** A simple clinical assessment of whether patients have a low- or high-probability of coronary artery disease is associated with future risk of death in patients with type 2 myocardial infarction. Whether incorporating this assessment into clinical practice to guide secondary prevention could improve outcomes requires prospective evaluation.

**Conflict of Interest** None

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**THE USE OF RESIDUAL SYNTAX SCORE FOR PROGNOSTICATION IN ELDERLY PATIENTS UNDERGOING PERCUTANEOUS CORONARY INTERVENTION**

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**Introduction** The residual Synergy Between Percutaneous Coronary Intervention with Taxus and Cardiac Surgery (SYNTAX) Score is an objective measure of the degree and complexity of residual stenosis after percutaneous coronary intervention (PCI). A raised residual SYNTAX score (rSYNTAX) has been shown to correlate with significantly increased mortality. Octogenarians are likely to pose the greatest technical challenges in terms of achieving complete revascularisation due to the complexity of their coronary artery disease, vascular calcification requiring the use of adjunctive therapies and limitations related to the use of radiographic contrast due to concomitant renal dysfunction. The aim of our study was to determine the association between incomplete revascularisation, as assessed by the rSYNTAX score, and one-year mortality in octogenarians undergoing PCI.