Introduction

Background
Patients with chest pain comprise a large group of adult emergency presentations. Once acute coronary syndrome is excluded, patients are either admitted or discharged with specialist outpatient clinic (SOC) follow-ups.

Even though there are guidelines to risk-stratify such patients, they have not been adhered to strictly. This thus leads to inappropriate streamlining of patients.

Aim
This project aims to risk-stratify chest pain patients based on a standardised scoring system (HEART score – History, ECG, Age, Risk Factors, Troponin T), thereby allowing patients to receive care based on their individual risk profile.

Methodology

A&E
Patient presents with chest pain

A&E
A&E Doctor assesses patient based on HEART score

Patient fulfils inclusion criteria?

Yes
A&E
A&E Doctor discharges patient to Chest Pain Clinic

No
A&E
A&E Doctor follow-up accordingly

Chest Pain Clinic (FV)
Cardiologist decides on test required, if any

Patient is discharged

Cardiac Clinic (TV)
Patient undergoes stress test

Cardiac Clinic (RV)
MO sees patient

Results

• After risk stratification, 17.8% of chest pain patients receive a SOC appointment within 2 weeks.

Number of Patients Referred from A&E to Cardiology (30 Jul 2018 to 30 Sep 2018)

<table>
<thead>
<tr>
<th>Referred to Chest Pain Clinic</th>
<th>Not Referred to Chest Pain Clinic</th>
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<tbody>
<tr>
<td>75 (17.8%)</td>
<td>346 (82.2%)</td>
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• The average SOC appointment lead time decreased by 14 days for patients referred to Chest Pain Clinic.

Average Lead Time (Days) for Cardiology SOC Appointment

<table>
<thead>
<tr>
<th>Chest Pain Clinic</th>
<th>Cardiology SOC (Non-Chest Pain Clinic)</th>
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<tbody>
<tr>
<td>8</td>
<td>22</td>
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Streamlining patients leads to:
• Increased patient safety, as appropriate care is timely offered for at-risk patients.
• Efficient use of manpower and SOC slots, since Chest Pain Clinic sessions are held in the mornings before the commencement of regular SOC clinic sessions.
• Increased availability of regular SOC slots for patients referred from Polyclinics. Such patients could therefore have reduced SOC appointment lead times.

Sustainability

Consultant-led Chest Pain Clinic is perennial and patients from A&E will continue to be referred to this Clinic after HEART score-risk stratification. The demand for Chest Pain Clinic sessions will be regularly monitored, and more clinic slots could be made available in the future if required.

Conclusion

This new workflow streamlined interdisciplinary care protocol for chest pain patients, leading to increased patient safety and ensures that patients at risk are assessed early to receive appropriate care in a timely manner.