accuracy of CGM at identifying stable CAD and ACS, and identify other novel clinical applications of the technology.

Methods Using a pre-defined search strategy, electronic databases (MEDLINE and Embase) were searched for papers published between 1946–June 2015 and reference lists were pursued. For inclusion, papers had to be original research articles that investigated the clinical application of CGM. Sixteen publications were identified from our search; seven investigated the diagnostic accuracy of CGM to identify stable CAD; one investigated the diagnostic accuracy of CGM to identify ACS; one investigated CGM as a screening tool for cardiac allograft vasculopathy in heart transplant patients and seven investigated specific CGM parameters without commenting on diagnostic accuracy. If data was available and suitable for collation, it was pooled to calculate a comprehensive overview on markers of diagnostic accuracy, which included sensitivity and specificity.

Results When looking at studies investigating the diagnostic accuracy of CGM to identify stable CAD the figures of diagnostic accuracy varied: Sensitivity (64–89%) and specificity (64%–82%), however CGM consistently outperformed 12-lead ECG in terms of sensitivity (29–76%) and was comparable in terms of specificity (18–95%). The collated data pooled for our analysis included 772 patients, of which 473 had stable CAD. Our analysis showed CGM has a sensitivity of 70% and specificity of 82% at identifying stable CAD, being significantly more accurate than 12-lead ECG. The one study identified investigating the diagnostic accuracy of CGM to identify ACS included patients with non-ST segment elevation ACS and used multiple comparators including 12-lead ECG. It showed that the sensitivity and specificity of CGM to identify non-ST segment elevation ACS was 69% and 54% respectively, having significantly higher sensitivity than 12-lead ECG. The diagnostic accuracy reported for CGM to detect cardiac allograft vasculopathy was 100% and 88% respectively for sensitivity and specificity. **Conclusion** CGM has superior diagnostic accuracy to 12-lead ECG at identifying patients with stable CAD and is significantly more sensitive than 12-lead ECG at identifying patients with non-ST segment elevation ACS. It may have an important role in screening patients with stable CAD and those with acute chest pain.

96 THE IMPACT OF "CONSULTANT OF THE WEEK (COW)" INPATIENT MEDICAL CARE ON PATIENT OUTCOMES

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Introduction There appears to be growing evidence that increasing consultant-led multidisciplinary team (MDT)-delivered care is associated with better patient outcomes, quicker decision making and more efficient uses of resources. There is still inconsistency across different hospitals, on how consultant led care can be best delivered when treating inpatients. Our hypothesis was that compared to a five single on call day service by separate Cardiologists, a consultant-led oncall week which consists of a twice daily inpatient ward round by the same consultant would improve patient outcomes in terms of discharge rates (DRs), length of stay (LoS), inpatient mortality rates (MRs) and readmission rates (RRs).

Settings Good Hope Hospital is a 521 bed district general hospital with 6 consultant cardiologists, and has an inpatient capacity of 6 CCU and 22 cardiology beds. Traditionally, all patients on CCU as

Abstract 96 Table 1 Comparison of monthly patient discharges, length of stay, readmission rate and inpatient mortality prior to and after the intervention

Variable	Monthly mean (April 2012 to November 2013)	Monthly mean (December 2013 to February 2015)	P value
Discharged patients (n)	103 ± 12	118 ± 17	P = 0.008
Length of stay (days)	7.9 ± 1.0	6.4 ± 1.0	P = 0.0001
Readmission rate (%)	21.7 ± 7.9%	23.4 ± 6.6%	P = 0.56
Inpatient Mortality (%)	4.3 ± 1.6%	4.2 ± 1.5%	P = 0.96

well as new patients on the ward were reviewed by the on call consultant who was on call on a set day of the week. After the initial post take ward round, these patients were seen on a twice weekly basis by their admitting consultants and were looked after by junior doctors in the interim.

Methods This was a retrospective observational study of inpatient average length of stay and discharge rates between April 2012 to March 2015 and included the data of 3289 patients. The intervention was implemented on 1st November 2013. All data were collected by the hospital IT department on a daily basis and reported on a monthly basis. We compared the inpatient MRs and RRs to assess any adverse effects on the quality of patient care. Statistical analysis was performed using student T-test. The p value <0.005 was considered significant. Results are expressed as means ± SD.

Results The data of 2058 patients prior to the consultants of the week method were compared to 1771 after the change. The monthly means ± SD of discharge rates, length of stay, readmission rate and mortality rate are shown in table 1. There is a significant increase in discharges and reduction in length of stay following the intervention. Despite a 15% increase in patient discharge rate, the readmission rate and inpatient mortality rate did not change significantly.

Conclusions Focused daily consultant input has a significant impact on reducing inpatient length of stay, ensuring timely discharges, and saving the NHS resources in bed days and creating more beds available for new admissions.

Acute coronary syndromes

97 MULTI-VESSEL ANGIOPLASTY AT THE TIME OF STEMI HAS EQUIVALENT MORTALITY TO A CULPRIT ONLY STRATEGY: RESOLVING THE PARADOX OF RANDOMISED CONTROLLED TRIALS AND OBSERVATIONAL STUDIES IN MULTIVESSEL DISEASE AND STEMI

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Abstract 97 Figure 1

Background Patients with ST-elevation myocardial infarction commonly have multi-vessel disease. After treating the culprit, the optimal strategy for residual disease is unknown. Large observational studies suggest deferring treatment of residual disease, but smaller randomised controlled trials (RCTs) suggest multi-vessel primary percutaneous coronary intervention (MV-PPCI) is safe. We examine if allocation bias of high-risk patients could explain conflicting results between observational studies and RCTs.

Methods A meta-analysis of registries comparing culprit-only PPCI to MV-PPCI was performed. A meta-regression was performed to determine if allocation bias of high-risk patients could explain differences in outcomes between therapies.

Results 47,717 patients (19 studies) were eligible. MV-PPCI had higher mortality than culprit-only PPCI (OR 1.59, 95% CI 1.12 to 2.24, $p = 0.03$). Higher risk patients were more likely to be allocated to MV-PPCI (OR 1.45, 95% CI 1.18 to 1.78, $p = 0.0005$). When this was accounted for, there was no difference in mortality (OR 0.99, 95% CI 0.69 to 1.41, $p = 0.94$).

Discussion Clinicians preferentially allocate higher-risk patients to MV-PPCI at the time of STEMI. When this is accounted for, these large observational studies in 'real world' patients support the conclusion of the smaller RCTs in the field: MV-PPCI has equivalent mortality to a culprit-only approach.

98

ASSESSMENT OF ENDOGENOUS THROMBOLYSIS PREDICTS CARDIOVASCULAR RISK IN PATIENT WITH ST-ELEVATION MYOCARDIAL INFARCTION

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Background Increasingly potent antithrombotic medications have been developed to reduce thrombosis in patients presenting with ST-elevation MI (STEMI). These reduce thrombosis but increase bleeding risk. Identification of STEMI patients at high risk of recurrent thrombosis could allow targeted treatment with potent antithrombotic medications, with less potent agents in others, to reduce bleeding. We aimed to assess the risk of thrombosis by assessing platelet reactivity, as well as the efficacy of endogenous thrombolysis, the innate ability to dissolve thrombus.

Methods In 150 patients with STEMI, global thrombotic status was assessed at baseline, immediately before primary percutaneous coronary intervention (PPCI), at hospital discharge and at 30 days. Peripheral, non-anticoagulated blood was tested using the point-of-care Global Thrombosis Test, which assesses the time to form an occlusive thrombus under high shear (occlusion time, OT), and the time to dissolve this *in vitro* formed thrombus, through endogenous thrombolysis (lysis time, LT).

Results Impaired endogenous thrombolysis (prolonged LT ≥ 3000 s), seen in 9% of patients pre-PPCI, was significantly associated to the occurrence of major adverse cardiac events at 30 days (HR: 3.26, 95% CI: 2.32–29.19, $p = 0.004$), driven by cardiovascular death (HR: 3.12, 95% CI: 3.82–35.23, $p < 0.001$). Enhanced (rapid) endogenous thrombolysis (median LT 1040s [IQR: 940–1105]s), seen in 17% of patients pre-PPCI, was associated with spontaneous coronary reperfusion, ST-segment resolution, TIMI-2/3 flow pre-PPCI, favourable outcomes and longer baseline OT (515 ± 178 vs. 385 ± 177 , $p < 0.001$). Pre-PPCI OT was shorter in those with recurrent myocardial infarction and stroke than those without (244 ± 130 s vs. 414 ± 183 s, $p = 0.025$). OT was prolonged at hospital discharge (500 ± 141 s vs. 407 ± 184 s, $p < 0.001$) and 30 days (577 ± 131 s vs. 407 ± 184 s, $p < 0.001$).