

predictors of poor prognosis and thus requiring CIED implantation. We propose a scoring system based on age >75, male sex, presence of ischaemic heart disease, heart failure and hypertension as key markers of conduction abnormalities requiring CIED implantation (see figure 1).

**Conflict of Interest** None

### 98 CARDIAC RESYNCHRONISATION THERAPY IN THE OVER 85S PRODUCES SIMILAR OUTCOMES AND COMPLICATION RATES AS YOUNGER PATIENTS

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**Background** Patients over 85 are rarely included in clinical trials but potentially have a lot to gain from interventions. They have less physiological reserve and clinicians may be hesitant to perform procedures for fear of higher complications without clear benefits.

**Methods** Electronic health record data was reviewed for all patients receiving a cardiac resynchronisation therapy (CRT) device between January 2014 and December 2021. Results 529 CRT procedures were performed. 59 (11%) patients were over 85 (mean  $87 \pm 1.9$ , 85% male) including 1 CRT defibrillator and 58 CRT pacemakers. Indications for device implant are described in table 1.34 (58%) were elective and 25 (42%) were inpatients. 12/25 (48%) were heart failure hospitalisations (HFH). 7/34 (21%) elective cases stayed overnight, 45/59 (76%) patients were discharged within 24 hours of the procedure. 19/25 inpatient cases were discharged within 72 hours of implant. The other 6 remained an inpatient for 1 week (2), 2 weeks (2), 3 weeks (2). Inpatients who remained in hospital more than 7 days from implant had a higher mortality than those discharged within 72 hours (67% vs 21%  $p=0.059$ ), and elective cases (67% vs 36%  $p=0.075$ ), reflecting their lower physiological reserve. Complications occurred in 7 (12%) of which 3 had to be re-admitted. 4 patients experienced a procedural complication. 1 haematoma, 2 coronary sinus dissections and 1 pneumothorax. All resolved without intervention. The haematoma patient was re-admitted for review and observation. 3 patients experienced a complication during follow up. 1 superficial wound infection managed with washout and antibiotics, 1 atrial lead displacement and re-do, (both readmitted) and 1 LV lead failure at four months. 37/59 patients had a home monitor. Mean daily physical activity (PA) at baseline was  $0.7 \pm 0.5$  hours per day. Overall, PA improved in 21/37 (61%) by  $1.7 \pm 1.3$  hours. No change in physical activity was seen in 16 patients. Patients with a HFH after CRT implant had a higher mortality than those who remained out of hospital (78% vs 20%  $p=0.001$ ). Patients with a HFH before CRT implant were no more likely to have a HFH after implant (20%), than those who had never been admitted with HF (12%) ( $p=0.48$ ) 17 patients died during a median follow up of 1.8 years. 9 patients died from left ventricular systolic dysfunction (LVSD), the remainder were non-LVSD deaths (cancer, infection, aortic stenosis, aortic aneurysm rupture, dementia). Of those who died, 10 patients survived less than 1 year ( $0.5 \pm 0.3$  years). The remaining 7 survived 2 years or more ( $3.1 \pm 1.3$  years).

**Conclusion** In this selected population of very elderly patients, physical activity improved in 61% of patients. There was a

### Abstract 98 Table 1 Indications for CRT implant or left ventricular lead upgrade

Indication	New implants	Upgrades	Ejection Fraction (%)
EF <35% with a left bundle branch block >120ms	18	1	25 ± 9
Bradycardia and impaired LV function	14	2	30 ± 8
Both indications	3	0	22 ± 12
Pacing induced cardiomyopathy	0	21	32 ± 7
Total	35	24	29 ± 9

trend towards a higher mortality in those with prolonged hospital stays and further HFH after CRT implant. Complication rates are similar to those seen in randomised control trials performed in younger patients.

**Conflict of Interest** nil

### 99 A MULTI-DIMENSIONAL APPROACH TOWARDS IMPLEMENTING THE EFFECTIVE USE OF REMOTE ELECTROCARDIOGRAPHIC MONITORING – EVALUATION OF CLINICAL CORRELATION AND PATIENT EXPERIENCE

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**Background** Inappropriate use of telemetry results in the over-use of limited resources, disrupted provider workflow, higher costs of care, and false alarms with resultant alarm fatigue. Moreover, identifying a useful implementation blueprint is an important component of promoting its appropriate use. Telemetry can influence patient experience during their stay as potentially it can disturb sleep, contribute to delirium, and increase patient frustration and anxiety. We stipulate that even minor adjustments to monitoring practices can influence optimised patient care. We aimed to evaluate the co-existing standards of practice regarding use of telemetry across Shrewsbury and Telford Hospital NHS Trust (SaTH). We implemented a patient-centred approach towards quality improvement by incorporating record of patient experience as a tool to guide effective use of this limited resource across our district general hospital settings.

**Methods** Patients across two hospital sites were selected to conduct a prospective health service evaluation related to the use of telemetry. A likert scale survey was conducted to record patient perspective of telemetry monitoring including a section with an opportunity to provide feedback towards service improvement. The data of patients receiving telemetry was collected from December 2021 to February 2022. American Heart Association (AHA) consensus statement for remote electrocardiographic monitoring was utilized to evaluate the proposed indication for telemetry. However, the rating system helped group patients receiving telemetry monitoring as Class I (definitely indicated), Class II (maybe indicated), or Class III (not indicated). Clinical notes and electronic telemetry system was employed to record parameters including patient demographics; presenting complaint; class (I-III) of indication; whether an indication for telemetry was documented; the length of telemetry; and the details of any significant events that occurred during monitoring including escalation. Where possible, patients were asked to anonymously provide feedback

via set questionnaire focusing on quality of care received by the patient. Results: Among the 30 patients who were included in our analysis, 7 were females and the average age in our cohort was found to be 72.8. In about 56% of the patients, there was no clear indication mentioned in the clinical notes regarding continuation/discontinuation of telemetry. Based on proposed indication, about 36.66% (11 patients out of which 2 were female) were identified to be at significant risk of an immediate life-threatening arrhythmia (Class I). Among this group, 2 patients were reported to have significant arrhythmia event necessitating treatment. Further analysis revealed that from our cohort, 46.66% (14 patients) had a Class II indication for their telemetry monitoring out of which only 2 patients had a significant event recorded. However, only 16.66% (5 patients) were found to meet the eligibility for Class III indications and none of them encountered a significant arrhythmia. From anonymously filled patient questionnaires, around two-third of the patients reported not being informed about the utility of telemetry and its predicted duration of stay. One-third of patients reported the device to be inconvenient, intrusive and heavy.

**Conclusions** To accomplish a sustainable improvement, a patient-centred approach should be exercised to help identify the gaps in quality of care delivered. Our analysis showed that significant number of patients received telemetry when it was not clinically indicated. The proposed interventions include adopting formal request process for telemetry, predicting its duration, use of patient education tools and exploring compatibility of telemetry device used. Larger scale studies are required to gain more insight into the appropriateness and impact of telemetry in a hospital setting.

**Conflict of Interest** None

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#### EFFICACY OF VASOPRESSIN, STEROID, AND EPINEPHRINE PROTOCOL FOR IN-HOSPITAL CARDIAC ARREST RESUSCITATION: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS WITH TRIAL SEQUENTIAL ANALYSIS

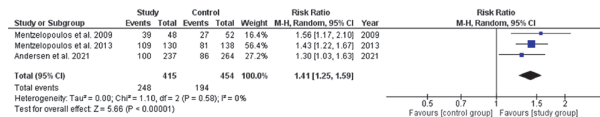
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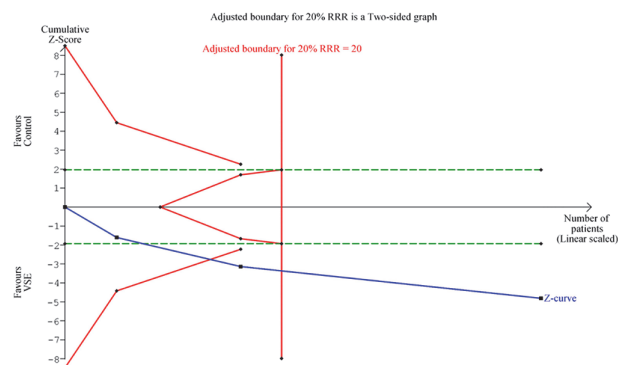
**Objectives** To assess the effect of vasopressin, steroid and epinephrine (VSE) combination therapy on return of spontaneous circulation (ROSC) after in-hospital cardiac arrest (IHCA), and test the conclusiveness of evidence using trial sequential analysis (TSA).

**Methods** The systematic search included PubMed, EMBASE, Scopus, and Cochrane Central Register of Controlled Trials. Randomized controlled trials (RCTs) that included adult patients with IHCA, with at least one group receiving combined VSE therapy were selected. Data was extracted independently by two reviewers. The main outcome of interest was ROSC. Other outcomes included survival to hospital discharge or survival to 30 and 90 days, with good neurological outcomes.

**Results** We included a total of three RCTs (n=869 patients). Results showed that VSE combination therapy increased ROSC



Abstract 100 Figure 1



Abstract 100 Figure 2

(risk ratio, 1.41; 95% CI, 1.25–1.59) as compared to placebo. TSA demonstrated that the existing evidence is conclusive. This was also validated by the alpha-spending adjusted relative risk (1.32 [1.16, 1.49],  $p < 0.0001$ ). Other outcomes could not be meta-analysed due to differences in timeframe in the included studies.

**Conclusion** VSE combination therapy administered in cardiopulmonary resuscitation led to improved rates of ROSC. Future trials of VSE therapy should evaluate survival to hospital discharge, neurological function and long-term survival.

**Conflict of Interest** None

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#### CLINICAL PROFILES OF HOSPITALIZED PATIENTS DIAGNOSED WITH AF COMPARED TO THOSE DIAGNOSED IN AN AMBULATORY SETTING: ANALYSIS FROM THE JORDAN ATRIAL FIBRILLATION (JOFIB) STUDY

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**Introduction** Atrial fibrillation (AF) is the most prevalent sustained cardiac arrhythmia in clinical practice with a progressively increasing incidence and prevalence worldwide. Despite the prominent morbidity and mortality associated with AF, no previous studies have compared the clinical characteristics between hospitalized patients (H-pts) and ambulatory care patients (A-pts) with AF. The purpose of this cross-sectional study is to compare the epidemiology and clinical characteristics among patients with AF in both hospitalized and ambulatory settings.