Conclusions The baseline data suggested poor compliance with the NCEPOD recommendations. This may be anticipated given that these data preceded the recommendations. To establish improvements, reliance on junior doctors had some effect in improving adherence, but required constant reinforcement. A more effective intervention was to rely on the heart failure CNS which provided more continuity, they had more buy-in and through their knowledge of the patients the data could be completed quickly and reliably. These interventions allowed more information to be conveyed to general practice and other healthcare professionals caring for the patients.

Conflict of Interest Nil

89 THE SIZE OF THE POTENTIAL IMPACT OF SODIUM-GLUCOSE COTRANSPORTER 2 INHIBITORS IN CARDIOLOGY PATIENTS AT A CENTRAL LONDON TEACHING HOSPITAL

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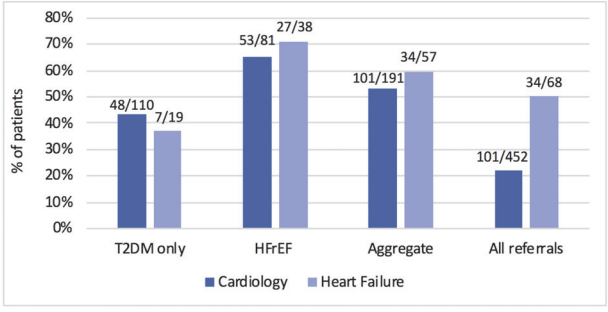
Introduction Sodium-glucose cotransporter 2 (SGLT2) inhibitors are known to reduce the risk of cardiovascular events in patients with type 2 diabetes (T2DM). The recent groundbreaking DAPA-HF trial has shown similar results in patients with heart failure with reduced ejection fraction (HFrEF) regardless of whether they have T2DM. Guidelines on their use in HFrEF patients are widely anticipated. Our study aims to identify the proportion of cardiology patients who may benefit from SGLT2 inhibitors in a central London teaching hospital.

Methods We retrospectively analysed two patient cohorts from August 2019 to January 2020: 1) Inpatient (IP) Cardiology referrals (452 patients), and 2) Inpatient Heart Failure Service referrals (68 patients). Using four large-scale cardiovascular outcome trials - EMPA-REG, CANVAS, DECLARE-TIMI 58 and DAPA-HF; we generated a set of screening criteria for the suitability of SGLT2 inhibitors in patients with T2DM and HFrEF, and applied them to our cohorts (Table 1).

Results Over the 6 month period, 452 patients were referred for an IP Cardiology review; 191 (42%) of these patients had T2DM or HFrEF. Using our criteria, 101 (53%) of these 191 patients would be suitable, representing 22% of all Cardiology referrals. Only 5 patients were already on SGLT2 inhibitors. Looking at this more closely, 44% (48/110) of T2DM only patients were suitable for an SGLT2 inhibitor compared to 65% (53/81) of the HFrEF population. In the second patient cohort (IP Heart Failure referrals), half (34/68) of patients were suitable for SGLT2 inhibitors. The trend was broadly similar to the Cardiology referrals cohort, with 37% (7/19) of patients with T2DM only and 71% (27/38) of patients with HFrEF found to be suitable (Figure 1).

Of all HFrEF patients who would be suitable for SGLT2 inhibitors, 81% (48/59) were on an angiotensin-converting-enzyme inhibitor, angiotensin-receptor blocker or sacubitril-valsartan; 92% (54/59) were on a beta-blocker; 25% (15/59) were on a mineralocorticoid receptor antagonist and 59% (35/59) were on a diuretic on admission. The main exclusion criteria in our patient cohorts was an estimated glomerular filtration (eGFR) rate below 30 mL/min/1.73m2 of body-surface area.

Conclusions Ahead of expected release of guidelines on SGLT2 inhibitor use in patients with HFrEF, we have formulated a set of screening criteria for suitability of SGLT2 inhibitors and applied them to our patient cohorts. The results



Abstract 89 Figure 1 Proportions of patients suitable for SGLT2 inhibitors from cardiology and inpatient heart failure referrals

Abstract 89 Table 1 Inclusion and exclusion criteria for SGLT2 inhibitor suitability in patients with T2DM and HFrEF

T2DM	HFrEF
Inclusion criteria	**Inclusion criteria**
• HbA1C ≥ 48 and < 108 mmol/mol	• Ejection fraction ≤ 40%
• High risk for cardiovascular (CV) event, defined as:	
• Established CV disease	
• One of: STEMI/NSTEMI, PCI (+/- stent)/CABG, stroke, occlusive peripheral arterial disease	
OR	
• At least 2 CV risk factors, defined as:	
• Age ≥ 55 years in men and ≥ 60 in women	
AND	
• Any of the following: hypertension, hypercholesterolaemia, current smoker	
Exclusion criteria	**Exclusion criteria**
• eGFR <30 or on dialysis	• T1DM
• ACS, stroke, TIA, any revascularization within 2 months or on admission	• eGFR <30
• Notable endocrine disorder excluding hyper or hypothyroidism	

show that 50% of patients referred to the IP Heart Failure Service and over 20% of patients referred to IP Cardiology may be suitable for SGLT2 inhibitors, which are much higher potential use rates than we had anticipated. This has important ramifications for cardiology services across the country when thinking about who will initiate this new heart failure therapy and in which setting.

Conflict of Interest None

90 IMPLANTABLE CARDIAC DEFIBRILLATOR DEACTIVATION; CONTEMPORARY OUTCOMES FROM A LARGE CASE SERIES

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Introduction Implantable cardiac defibrillator (ICD) therapy is a lifesaving intervention for many of our patients, however with increasing age and competing comorbidity towards the end of life device therapy is often no longer advantageous. Historically advance care planning and discussions around deactivation of ICD's have been lacking(1) and this has resulted in a large number of patients receiving inappropriate ICD shocks at the end of life.(2) We conducted a retrospective analysis of all patients under-going device deactivation to identify trends in outcomes and rates of inappropriate shock.

Methods Our electronic patient record was searched for all ICD deactivations between 2016 and 2019. These results were incorporated with hospital episode statistics to gather mortality and morbidity data.

Results During the study period 327 patients had device deactivation performed and 293 unfortunately died. The cohort was predominantly male (84%) and the ICD had been implanted for on average 5.1 years, with devices predominantly implanted for primary prevention (64%). Devices were most commonly deactivated in the inpatient hospital setting (45%), with 15% turned off in clinic and 11% in the patients home. 71% of deactivations occurred prior to death with palliative/end of life care being the most common indication. 29% had devices deactivated after death and this caused 11 (3.8%) patients to have one or multiple shocks at the time of death (range 1-18, mean 4.5). 5.1% of patients received shocks in the last month of life.

Conclusions A significant proportion of ICDs are still deactivated after death. The number of patients experiencing shocks at the end of life was lower than previously published literature but this is still a source of significant avoidable morbidity. ICD deactivation should be discussed with patients prior to implant and services need to be able to regularly review the ongoing appropriateness of device therapy.

Conflict of Interest None

Abstract 90 Table 1 Patient demographics

	No of patients (n= 327)
Average age (range)	76.5 (27-96)
Male	274 (84%)
Female	53 (16%)
Deceased	293 (90%)
Average age of device (years)	5.1
Primary prevention	208 (64%)
Secondary prevention	119 (36%)
Severe LV impairment	276 (84%)
CRT	168 (51%)

Abstract 90 Table 2 Outcomes after deactivation

Shocks at the time of death	11 (3.8%)
Average number of shocks	4.5 (range 1-18)
Shocks in the last month of life	15 (5.1%)
DNAR	149 (50.9%)
Repeat hospital admission	5
Indications for deactivation;	
Patient felt to be end of life	200 (61%)
Post death	97 (29%)
Patient preference	23 (7%)
Other/unknown	8 (3%)
Location of de-activation;	
Inpatient hospital setting	149 (45%)
Outpatient clinic	50 (15%)
Patients home	36 (11%)
Hospice	5 (2%)
Mortuary/funeral home	87 (27%)
Timing of device deactivation;	
After death	97 (29%)
Day of death	24 (7%)
1-5 days	56 (17%)
6-10 days	13 (4%)
11-30 days	39 (12%)
31 days or more	98 (30%)

91 SHORTER STATURE IN WOMEN IS A DRIVER OF SEX-DIFFERENCES IN THE PREVALENCE OF HEART FAILURE WITH PRESERVED EJECTION FRACTION

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Background Altered ventricular-vascular coupling (VVC) is a key mechanism in the pathogenesis of heart failure with preserved ejection fraction (HFpEF). Arterial elastance (Ea), an integral component of VVC, has a static and pulsatile component which could be affected by the physical differences in men and women. We hypothesised differences in height may explain some of the sex-differences in pulsatile load, which has been linked to the development of HFpEF.

Methods We retrospectively analysed echocardiographic data from a large prospective community study of people aged >60 years. Height, arterial elastance (Ea), the pulsatile and static components of Ea (total arterial compliance (TAC) and systemic vascular resistance (SVR)), were calculated and compared between the sexes and across three groups: HFpEF, hypertensive (HTN) controls, and healthy controls.