accounting for over 90% of these cases. Two-thirds of patients received bystander CPR and a defibrillator was attached to the patient in 14.9% (n=150) of OHCA's before arrival of emergency medical services with a shock being ultimately delivered in 3.9% (n=39) of cases. Overall survival to hospital discharge for the cohort was 6.0% (n=60) and no significant change in survival was noted over the 6-year study period. The rate of survival was dependent on OHCA aetiology, (figure 1). Independent predictors of survival to hospital discharge included bystander witnessed OHCA, a shockable initial rhythm and a bystander defibrillation attempt.

Conclusions The high prevalence of non-medical OHCA's and the OHCA location need to be considered when developing OHCA care pathways and preventative strategies to reduce the burden of OHCA's in young adults.

53 HYPERTENSION IN THE ACUTE MEDICAL ASSESSMENT UNIT IN ST. LUKE'S GENERAL HOSPITAL KILKENNY – ARE WE ADHERING TO GUIDELINES?

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Background Hypertension is a common reason for GP referral to the Acute Medical Assessment Unit (AMAU) in St. Luke's Hospital, Kilkenny (SLK). Hypertensive emergency requires urgent and aggressive blood pressure control to limit end-organ damage. Management of hypertension has been proven to reduce the incidence of cardiac events, cardiovascular death and stroke. The aims of this audit were: 1. To ascertain what percentage of patients referred with hypertension were diagnosed with hypertensive emergency. 2. To review whether or not patients referred with hypertension had had appropriate work up (with electrocardiogram and urine dipstick.) 3. To review what percentage of patients deemed not to have hypertensive emergency received unindicated stat doses of antihypertensives. 4. To assess what percentage of patients were managed in compliance with the ESC-ESH Hypertension Guidelines 2018 on discharge.

Methods We carried out a retrospective review of the case notes and discharge letters of 106 patients who were referred to the AMAU by GPs with hypertension between January 2019 and January 2020.

Results 91 patients were included in the study. 35 (38%) were male and 56 (62%) were female. The median age of patients was 60. 2 patients (2.2%) were diagnosed with hypertensive emergency. Both were managed with oral antihypertensives. 83 patients (91%) were asked about symptoms of hypertension, 86 patients (95%) had an ECG. Only 26 (29%) had a urine dipstick. Of the 89 patients deemed not to have hypertensive emergency, 43 (48%) received a stat dose of an oral antihypertensive. 11 patients (12%) had their stage of hypertension documented. Of these, 8 (73%) were discharged on an appropriate antihypertensive. 24 patients (27%) had stage 1 hypertension, 27 (30%) had stage 2 and 38 (43%) had stage 3. On discharge, 40 patients (45%) were discharged on dual/triple antihypertensive regimens (in accordance with ESC-ESH guidelines.)

Of the 89 patients discharged from the AMAU, 69 (78%) were booked for a 24 hour ABPM and 26 (29%) were referred for TTE.

Conclusion This audit highlights numerous areas for improvement in the management of patients presenting to the AMAU in SLK with hypertension. It revealed that almost half of patients deemed to have no evidence of malignant hypertension/end-organ damage requiring immediate blood pressure control received at least one stat dose of an anti-hypertensive. The staging and management of hypertension remains a confusing area for some NCHDs, evidenced by the fact that only 12% of patients had their hypertension staged during their review. Positively, almost 80% of patients who presented to the AMAU with hypertension were booked for an outpatient 24 hour ABPM, however only 29% were booked for a TTE. We aim to develop a proforma for managing patients presenting with hypertension and re-educate our staff on the investigation and management of hypertensive patients in order to closer align our practices with ESC-ESH guidelines.

54 RESIDUAL RISK IN CARDIAC REHAB: CAN WE REDUCE IT MORE? ELIGIBILITY FOR ICOSAPENT ETHYL IN PATIENTS ATTENDING CARDIAC REHABILITATION

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Introduction Patients with elevated triglycerides (TG) are at increased risk for ischemic events despite statin therapy and controlled low-density lipoprotein cholesterol (LDL-C). The REDUCE IT trial showed that a highly purified Eicosapentaenoic acid (EPA) ester, Icosapent Ethyl or Ethyl Eicosapentaenoic acid (E-EPA), reduces the risk of ischemic events and cardiovascular (CV) death in patients with elevated TG levels despite statin therapy. The NNT for the first occurrence of major adverse cardiac events for the five-point primary composite endpoint was 21. E-EPA is also a dominant strategy from a cost-effectiveness perspective in the study. Thus, the 2019 ESC/EAS guidelines recommend E-EPA for patients with persistently raised TG's despite treatment with a statin. Our aim was to assess the proportion of patients attending cardiac rehabilitation who may benefit from E-EPA therapy as per REDUCE-IT trial criteria and the 2019 ESC/EAS guidelines.

Methods We prospectively collected data on all cardiac rehabilitation patients in our centre in 2018/2019. We then performed a hierarchical analysis of these patients to determine the percentage of patients post MI/CABG that would meet criteria for E-EPA as per REDUCE-IT trial criteria and ESC/EAS guidelines. =

The REDUCE IT trial criteria were:

- ≥ 45 years and established ASCVD
- 50 years with DM and at least one other CV RF
- Fasting TG level of 1.69 to 5.63 mmol/L
- LDL-C level of 1.06 to 2.59 mmol/L
- Receiving a stable dose of a statin for at least 4 weeks

The initial trial protocol enrolled patients with a TG level as low as 1.52 mmol/L to account for the ~10% variability in TG levels. This protocol was amended and changed the lower level for TG to 2.26 mmol/L. We analysed patients as per both protocols.

As per ESC: E-EPA 2×2 g per day should be considered in combination with a statin for patients with:

- Persistently high TGs (1.5–5.6 mmol/L)
- Treatment with a statin

Results 398 patients completed cardiac rehab during this study and were included in our database. Of these 275 (69%) had a 6 month TG and LDL recorded and were included. All patients in our cohort had been on a stable dose of statin for at least 4 weeks.

Analysis as per initial REDUCE IT protocol: 14/275 patients (5%) were excluded as they were less than 45 years old. 63 patients (23%) had a TG level of 1.5–5.6 and 42 of these had an LDL-C level of 1.06–2.59 mmol/L (15.3%). This led to an overall eligibility of 15.3% for E-EPA.

Analysis as per amended REDUCE-IT protocol: 14/275 patients (5%) were excluded as they were less than 45 years old. 30 patients had a TG level eligible as per the amended REDUCE-IT protocol (10.9%) and 20 of these patients had an LDL-C level of 1.06–2.59 mmol/L (7.3%) leading to an overall eligibility of 7.3% for E-EPA.

Analysis as per the ESC/EAS guidelines: Notably the ESC guidelines do not specify an LDL level or age required for E-EPA to be considered. 64 patients had a TG level of 1.5–5.6 mmol/L despite statin therapy. As such, 64/275 patients (23.3%) of our cohort would be eligible for E-EPA.

Conclusions E-EPA is a dominant cost-effective strategy to reduce CV risk in patients with elevated TG levels despite statin therapy.

Nearly one quarter (23.3%) of patients in our cohort would be suitable for E-EPA treatment in order to further reduce their CV risk.

Rehab services should develop screening strategies to identify and treat patients eligible for E-EPA therapy.

55 INFLUENZA VACCINE UPTAKE IN A CARDIOLOGY OUTPATIENT DEPARTMENT SETTING; A MISSED CARDIOVASCULAR DISEASE PREVENTION OPPORTUNITY

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Aim Management of chronic illness is a cornerstone of care in the secondary care setting. Cardiovascular patients may have multiple indications for influenza vaccination and protection from Flu may improve both mortality and morbidity. Studies have shown a direct link between inflammation, respiratory illness and acute myocardial infarction and there is existing evidence that influenza vaccination reduces acute MI rates in both primary and secondary prevention. The aim of this audit was to evaluate if patients attending a cardiology outpatient department, with an indication for influenza vaccination, as per current guidelines, are adequately vaccinated and if an opportunity lies there in to target this patient cohort and improve outcomes.

Method Patients attending two large university teaching hospital outpatient departments were asked to fill out a survey, including simple personal medical history details, seeking to identify; patients with an indication for vaccination, patients that had been offered vaccination and reasons for refusal if they had been offered but declined. Unvaccinated patients were asked if would they avail of vaccination if it were

available on the day at the clinic. The results were collated and reviewed.

Results 142 respondents in total; average age 66.2 yrs (STD 14.2), 64.7% male, 79.6% >50 yrs, 28.9% attended a Heart Failure Unit, 81.7% overall had an indication for vaccination other than age alone and 90.8% had an indication when age >50 yrs was also included. Of the patients with an indication for vaccination, vaccination rates were; 62.9% males, 60.0% females, 73.2% Heart Failure clinic attendees, 56.8% General Cardiology attendees ($p=0.075$ for difference in vaccination rates among clinic types). Of the patients with an indication for vaccination that had not been vaccinated thus far, 48.9% would have received the vaccine on the day if offered. This would have improved the overall vaccination rate amongst patients with an indication for vaccination from 62.0% to 80.6% ($p=0.015$). Of the patients who would not opt to receive the vaccine if offered, 23% believe it doesn't work, 23% believe they would contract influenza from it and 38.5% have plans to receive the vaccine elsewhere.

56 OPTIMISING LIPID TREATMENT FOLLOWING MYOCARDIAL INFARCTION

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Introduction European Society of Cardiology (ESC) guidelines recommend intensive control of LDL cholesterol (LDL-C) following myocardial infarction (MI) to improve outcome. Early assessment of lipids post MI is confounded by acute phase response requiring re-testing to guide need for up-titration ± additional treatment.

Method We studied patients admitted with MI across a health-care region including 2 acute receiving hospitals over two years (2017–2018). Diagnosis, cardiovascular (CV) risk factors, CV history (Hx), lipid treatment before admission, lipid profile on admission, lipid treatment on discharge, lipid profiles at first and second follow up, changes to lipid treatment and readmission were recorded. Chi-squared was used to assess relationships between variables.

Results Of 638 acute MI admissions, 227(35.6%) had ST-elevation MI, 464(72.7%) were male, 174(27.3%) female. Baseline CV risk factors included diabetes 137(22.3%), family Hx 291(52.8%), smoking [current 188(30.9%); ex 164(26.9%)], CV Hx 359(58.1%). Lipid profile was tested on admission in 431(67.7%) subjects. For those already on lipid treatment, mean LDL-C was 2.22 mmol/l; for those not, mean was 2.91 mmol/l. Almost all (98.3%) were prescribed lipid lowering therapy prior to discharge (Atorvastatin 92.0%, Simvastatin 2.1%, Rosuvastatin 5.1%, Pravastatin 0.3%, Ezetimibe 0.5%). A high intensity statin was used in 94.4% of the sample. Mean time to first follow-up lipid profile was 5.65 months. Follow up profiles were available in 85.6%, in whom mean LDL-C was 1.67 mmol/l. At first follow up 349(54.7%) met the 2018 ESC target <1.8 mmol/l. For those not at target, 62 (32.8%) received no further lipid testing and 13(6.9%) had therapy increased. At final lipid test, 62.7% achieved LDL-C <1.8 mmol/l. Males ($p \leq 0.1$) and diabetics ($p = 0.01$) were more likely to achieve target. Females were more likely to receive a lower dose of Atorvastatin ($p = 0.004$). There was no significant relationship between diabetes and discharge on