

were given drugs both by continuous subcutaneous infusion and as stat doses. The drugs were most often given by generalist community nurses or nursing home staff (91%). There was little difference between drug prescription and administration in malignant or non-malignant disease.

**Conclusions** When prescribe, injectable medication is frequently used in the last week of life, especially diamorphine, midazolam, cyclizine and glycopyrronium. Administration is usually by staff who are not specialist in palliative care, highlighting the need for support and education for community healthcare professionals.

#### P-43 EVALUATION OF OPIATE PRESCRIBING AND ADJUSTMENT IN RENAL IMPAIRMENT IN AN ACUTE MEDICAL ADMISSIONS UNIT

<sup>1</sup>Kate Howorth, <sup>1</sup>Katie Frew, <sup>1</sup>Jane Atkinson, <sup>1</sup>Eleanor Grogan, <sup>1</sup>Alastair Green, <sup>1</sup>Emma Foggett. <sup>1</sup>Northumbria Healthcare NHS Foundation Trust, Cramlington, UK

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**Background** Incorrect opioid prescribing can have significant consequences for patient safety and quality of care (1), adjustment of opioid is often needed in renal impairment (2,3). The audit aimed to assess if an acute medical assessment unit (AMU) was meeting current guidance regarding opioid prescribing in acute medical admissions

**Methodology** A retrospective case note audit was conducted of all patients admitted to AMU who were prescribed an opioid from 1 st to 7 th March 2016. Notes were reviewed to establish: the opioid and dose prescribed; any change to an established opioid or dose on admission; initiation dose of opioid if opioid naïve; any documentation of a rationale behind prescribing in impaired renal function. Laboratory results were reviewed to look for AKI and calculate eGFR.

The audit standards used were the local trust guidelines (4) and the North of England Cancer Network Palliative Care Guidelines (5).

**Results** 14 patients were prescribed an opioid and only 5 met the audit standards. 4 out of 6 opioid naïve patients commenced on morphine IR solution were prescribed a dose higher than recommended. 1 of 5 patients on a long-acting opioid had a correct PRN dose prescribed. A half of patients with a reduced eGFR were prescribed morphine. There was no documentation regarding rationale behind opioid prescribing.

**Conclusion** The results demonstrated that opioid prescribing on AMU did not adhere to local or regional guidance.

#### Recommendations

1. Conduct a live audit of patients admitted to AMU over two weeks to expand data
2. Develop specific guidance for opioid adjustment in AKI and for initiating opioids in patients with a reduced eGFR on AMU.
3. Share audit findings and conduct teaching for acute medicine trainees regarding opioid prescribing in acute medical admissions.
4. Repeat audit after interventions taken place.

#### P-44 THE EFFECTS OF EHEALTH INTERVENTIONS IN PALLIATIVE CARE: A META-REVIEW

<sup>1</sup>Hannah O'Donnell, <sup>1</sup>Claudia Pagliari, <sup>1,2</sup>Anne Finucane. <sup>1</sup>University of Edinburgh; <sup>2</sup>Marie Curie Hospice Edinburgh

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**Background** eHealth involves the use of information and communication technologies (ICTs) for the delivery of healthcare and health information, including direct consumer technologies. eHealth strategies may help alleviate the burden on health systems in a cost-effective way and expand palliative care services.

**Aim** To systematically identify and synthesise evidence from published systematic reviews on the effects of eHealth interventions in palliative care for patients, caregivers and health professionals.

**Methods** Systematic reviews focused on eHealth and palliative care were eligible for inclusion in this meta-review. Nine databases including MEDLINE, EMBASE, PsychINFO, and the Grey Literature Report were searched for reviews in any language between 2006 and 2016. The Assessment of Multiple Systematic Reviews (AMSTAR) tool was used to critically appraise all included reviews. Data was then extracted and results were presented in a narrative synthesis.

**Results** Thirteen reviews were included. Methodological quality was low to moderate with AMSTAR scores ranging from 2 to 5 out of 11. eHealth interventions were primarily used for facilitating communication, symptom reporting and monitoring, education, information provision, clinical consultations, and decision-making in palliative care settings. There were positive effects of eHealth interventions on cost-effectiveness, decision-making, communication, education, and support for patients, caregivers and health care professionals. Inconsistent findings were reported regarding effects on quality of life (QOL), depression, and anxiety.

**Conclusion** The majority of reviews on eHealth interventions in palliative care report positive effects of interventions on patients, caregivers and professionals. While there were inconsistent findings in regards to depression, anxiety, and QOL, no negative outcomes were reported. This provides promising evidence for the value of eHealth interventions in palliative care. Further research, cost-analyses, and clinical studies are needed to strengthen the evidence base for eHealth interventions and to inform policy in this area.

#### P-45 AUDIT OF ADULTS WITH INCAPACITY DOCUMENTATION IN AN ACUTE PALLIATIVE CARE UNIT

Mairi Finlay. NHS Grampian, Aberdeen, UK

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**Background** In-patients receiving palliative care may lack capacity to make decisions regarding their medical treatment for many reasons e.g. delirium, dementia. If it is felt that a person cannot consent to treatment an Adults with Incapacity (AWI) Act (Scotland) Section 47 certificate can be completed, allowing healthcare staff to provide treatment while enshrining a number of safeguards for the patient. In 2016 NHS

Grampian introduced new AWI Section 47 documentation and its use was audited in an acute palliative care unit.

**Methods** Data was collected from all in-patients in an acute palliative care unit over a 1 week period. Information was collected on four domains:

- was an AWI certificate present in the medical notes,
- was the decision to complete an AWI certificate documented in the medical notes (including the reasons for this decision),
- was the AWI certificate completed correctly,
- was there documentation of a discussion with Welfare Power of Attorney or next of kin regarding the decision to complete an AWI certificate.

**Results** Data was collected on 16 in-patients, 8 male and 8 female, mean age 71 years.

- 31% had an AWI certificate completed.
- AWI certificate completed correctly in all cases.
- 1 patient had documentation of an assessment of capacity/ completion of AWI certificate recorded in medical notes.
- 2 patients had documentation of discussion with Welfare Power of Attorney/next of kin.

**Conclusions** The proportion of patients with an AWI Section 47 certificate is in keeping with the prevalence of delirium in medical wards. There was good compliance with completion of the new AWI Section 47 certificates. Documentation of assessment of capacity/decision making and discussion with relevant others was lacking - these are important principles of the act and further education and training should address these areas.

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#### ORTHOSTATIC HYPOTENSION AND HEART RATE VARIABILITY IN THE DIAGNOSIS OF AUTONOMIC DYSFUNCTION IN ADVANCED CANCER

<sup>1</sup>Chang Sheng Leong, <sup>2,3</sup>Michelle Barrett, <sup>1,3</sup>David Joyce, <sup>1,2,3</sup>Dedan Walsh. <sup>1</sup>University College Dublin, Belfield, Ireland; <sup>2</sup>Trinity College Dublin, Ireland; <sup>3</sup>Our Lady's Hospice, Care Services, Ireland

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**Background** Autonomic dysfunction (AD) is common in advanced cancer. Cardiovascular signs include loss of heart rate variability (HRV) and later, orthostatic hypotension (OH). OH increases risk of falls and mortality. HRV is the time difference between successive heartbeats, measured as a standard deviation (SDNN). The mean SDNN found in normative population is 41.51ms ( $\sigma$ :26.28ms). OH is a decrease of  $\geq 20$ mmHg in systolic and/or 10mmHg in diastolic blood pressure (BP) upon orthostatic stress. Persistence of OH (POH) is OH beyond three minutes

**Methods** This prospective, observational study aimed to identify prevalence of OH and POH, examine the relationship between autonomic symptoms (AS) and OH, and to ascertain whether OH and HRV are equivocally reliable for AD diagnosis. Consecutive ambulant adults attending day or in-patient hospice services were recruited. Interviews established demographics and AS. Objective tests for HRV and BP measurement were conducted. Postural symptoms were recorded during testing.

**Results** 22 (12 male, 10 female) participants were recruited. Median age was 70 (33–89). Eight had OH, three of these had POH. None with OH reported postural symptoms. Mean

number of AS reported in non-POH group (n=5) and POH group (n=3) was 8 ( $\sigma$ :2.55) and 12 ( $\sigma$ :1.73) respectively. Mean SDNN (n=20) was 25.53 ms ( $\sigma$ :17.55ms). Association between OH and HRV ( $p=0.048$ , unpaired t test).

**Conclusions** OH was prevalent in this advanced cancer cohort and was associated with increased HRV. No association was found between AS and OH. Therefore, AS profile was not a useful tool for assessing AD. Active stand test was tolerated by all participants and could be considered for routine screening in advanced cancer. HRV screening may be an alternative for frailer patients

P-47

#### A QUALITY IMPROVEMENT APPROACH TO COGNITIVE ASSESSMENT ON HOSPICE ADMISSION: COULD WE USE THE 4AT OR SHORT CAM?

Lucy Baird, Juliet Spiller. Marie Curie Hospice, Edinburgh, Scotland

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**Background** Prevalence studies show that 15%–42% of patients admitted to specialist palliative care inpatient units have delirium. Symptoms of delirium are often subtle and easily missed, or misdiagnosed as fatigue or even depression, and so the use of a screening tool could improve early identification and management of delirium and lead to improved outcomes. Patients admitted to the hospice are often frail and tired, therefore a quick and easy-to-use method of cognitive assessment is essential.

**Methods** A quality improvement (QI) approach (PDSA: Plan, Do, Study, Act) was used to improve screening for delirium on admission to a hospice unit. A baseline measure was taken of the rate of performing cognitive assessment on admission. Five PDSA cycles were then undertaken which involved implementing change and then evaluating results through auditing case-notes and interviewing staff.

**Results** The first cycle determined staff preference between the Short CAM and the 4AT. Two further PDSA cycles embedded the 4AT (the preferred tool) into the admission process, establishing it as a usable tool in the hospice setting for up to 92% of admissions. A subsequent cycle showing poor sustainability prompted further improvements to staff education and changes to admission documentation.

**Conclusions** The 4AT is a usable tool in the hospice inpatient setting to assess patients' cognitive state on admission, and can easily be incorporated into the admission process. The QI approach highlighted the need to link staff awareness of their use of the screening tool with perceived improvements in the treatment of delirium, which prompted the creation and implementation of a delirium checklist in the unit. Some lack of sustainability of the initial improvement was addressed by staff education and changes to the admission paperwork to ensure compliance with the use of the 4AT and sustained improvement in screening for cognitive impairment on admission.

P-48

#### ANTIMICROBIALS IN END OF LIFE CARE: AN AUDIT AT THE ROYAL TRINITY HOSPICE

Eleanor De Rosa, Barbara Sheehy-Skeffington. Royal Trinity Hospice, London, England.

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