in 55 (70%): zoledronic acid (n=28, 35%) and pamidronate (n=24, 30%) were most common. Two (3%) received denosumab and one (1%) calcitonin. Thirty-four (43%) had a previous episode of HCM, 20 (25%) had an episode in previous 4 weeks of which 12 (60%) achieved normocalcaemia following bisphosphonates.

Plans for monitoring serum calcium were not documented in 33 (43%) cases. Many healthcare professionals considered treatment inappropriate in dying patients (n=51/66, 77%) and 8 (12%) had used denosumab previously for HCM.

Conclusion This analysis provides quantitative data about management of HCM across a variety of settings and has informed development of standards and guidelines. Further study is needed to determine the role of denosumab in management of HCM.

P-51 THE DEVELOPMENT OF A FRAMEWORK TO PERSONALISE HYDRATION MANAGEMENT IN CANCER CARE: THE USE OF NON-INVASIVE TECHNOLOGY TO EVALUATE FLUID STATUS AND DEHYDRATION-RELATED SYMPTOMS

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10.1136/bmjspcare-2017-00133.51

Background The role of hydration in causing or alleviating suffering in patients with advanced cancer is poorly understood. The evidence for the efficacy of clinically assisted hydration in advanced cancer is limited, conflicting and inconclusive. Bioelectrical impedance vector analysis (BIVA) is an accurate validated method of assessing body composition. Previously we have used BIVA to demonstrate statistically significant relationships with hydration status and symptoms (dry mouth, thirst, taste and fatigue), physical signs (mouth moisture, sunken eyes and axilla dryness), oedema and survival in advanced cancer. Further work is needed to investigate how hydration status affects symptoms and quality-of-life in the dying phase.

Aim The aim of this feasibility study is to develop the necessary methodology and advanced consent procedure to conduct hydration research assessments in dying cancer patients.

Methodology This study will involve an observational longitudinal analysis using BIVA assessments to evaluate hydration and its relationship with clinical symptoms and quality-of-life. Family-caregivers experiences will be evaluated via questionnaire. Thirty patients with advanced cancer will be recruited initially from a hospital-based specialist palliative care inpatient unit. Following this recruitment from additional hospice sites will be facilitated.

Results This study is supported by the Academy of Medical Sciences, the UKH Foundation, North West Cancer Research and the Liverpool Clinical Commissioning Group (CCG) Research Capability Funding (RCF) grant. Recruitment is planned to commence in early 2017.

Proposed findings The outcomes of this study will determine the feasibility of the methodology and will inform the development of further work. The identification of variables that are associated with hydration in the dying will facilitate the development of a clinical hydration assessment tool. This will

ultimately help to develop a framework to clinically assess and manage hydration states patients with cancer.

P-52 IMPLEMENTATION OF A NALOXONE ALGORITHM INTO A HOSPICE IN-PATIENT SETTING

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10.1136/bmjspcare-2017-00133.52

Background Naloxone is an opioid antagonist, indicated for the reversal of central nervous depression and respiratory depression, in the treatment of opioid overdose/intoxication. A National Safety Alert in 2014 (1) highlighted that doses commonly used to treat opioid overdose in the Emergency Department are not appropriate to manage opioid induced respiratory depression and sedation in the palliative care setting. There is very little published literature about the use of naloxone in the palliative care setting.

Method A collective case study approach was used to guide a service development project. The clinical notes of three hospice in-patients, treated with naloxone for critical opioid induced respiratory depression and sedation, in the absence of being in the dying phase of their illness, were reviewed to identify themes and evaluate whether the management of these cases could be improved.

Results An "Emergency use of naloxone for iatrogenic opioid overdose", algorithm was developed for use on the in-patient unit. It is divided into: assess, monitor, act and aims to guide the clinician through using naloxone in a palliative care setting once the diagnosis of opioid overdose has been established.

The algorithm has been introduced to the hospice through teaching sessions and has been re-evaluated, following its introduction, on three further patients in whom the algorithm guided management.

Conclusion Using naloxone for iatrogenic overdose is uncommon in the hospice setting, however introduction of the algorithm has standardised assessment and ensured appropriate doses of naloxone are being used.

P-53 2016 NATIONAL COMPARATIVE AUDIT OF RED BLOOD CELL TRANSFUSION IN HOSPICES

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10.1136/bmjspcare-2017-00133.53

Background The aim of this audit, the first of its kind, is to examine the practise of red cell transfusion in hospices and identify opportunities for improving patient care through the increased use of Patient Blood Management. 200 hospices throughout the UK are invited to participate, which collects data on the reason for red cell transfusion, whether investigations have been conducted to manage reversible iron deficiency anaemia, and on patient safety aspects of transfusion administration to identify ways to reduce the risk of patients receiving blood intended for someone else. Many transfusions are potentially avoidable, giving the opportunity to reduce the burden on the patient and reduce costs for hospices.

Methods Participating hospices collect data in a 3 month period from the case notes of inpatients or day patients who

have received a red cell transfusion. Data is entered onto an online proforma and reported back in a format that allows each hospice to compare its own performance against national results. The reports act as a benchmark, allowing hospices to evaluate their performance against pre-determined standards.

Results Results from other, similar national comparative audits have shown that there is room for improvement in compliance with evidence based patient blood management practise, particularly in respect of testing for anaemia and in the area of patient safety. We expect this audit to produce similar results.

Conclusion The audit will demonstrate areas of practice which are amenable to change, particularly in the spheres of anaemia investigation and management, as well as patient safety. These include being sure of the reason for transfusion and the benefits the patient will derive, making the patients aware of the risks and alternatives to transfusion and ensuring that patients are adequately monitored especially with the increasing awareness of the prevalence of Transfusion Associated Circulatory Overload.

P-54

WAS IT WORTH IT? INTRATHECAL ANALGESIA FOR CANCER PAIN; THE VIEWS OF CARERS

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10.1136/bmjspcare-2017-00133.54

Background Intrathecal Drug Delivery (ITDD) is known to reduce pain in patients where conventional systemic analgesia has been ineffective or intolerable. However more information about how this intervention affects quality of life (QOL) and function in those with advanced incurable cancer is required.

Aim To explore the views of bereaved carers regarding the physical and psychosocial effects of ITDD in patients with advanced incurable cancer.

Methods Qualitative interviews were undertaken with carers of deceased individuals who received ITDD (percutaneous, external system) as part of their pain management. Interviews were analysed using thematic analysis.

Results Eleven interviews were conducted in two United Kingdom centres with established ITDD services. The themes were: (1) 'making the decision to have the ITDD', family carers described very severe pain and/or sedation, in which the suffering individual would try anything; (2) 'timing and knowing they were having the best', ITDD and the associated increased access to pain and palliative care services, meant relatives felt everything possible was being done, making the situation more bearable; (3) 'was it worth it?', the perceived benefits were weighed up against the inconveniences and side effects of the ITDD; family carers judged the ITDD to be of overall benefit, despite side effects, where it had enabled the individual to be themselves through their final illness and dying phase.

Conclusion ITDD was perceived to be of greatest value when it improved QOL for patients by reducing pain and systemic side effects, thus enabling individuals to be themselves for as long as possible; under these circumstances significant side effects were judged to be acceptable. The family carers conveyed comfort in knowing that the patient was receiving what

they felt was the best available management, support and specialist care. These findings should inform discussions between patients, physicians and palliative care teams around the management of severe uncontrolled pain in advanced malignancy.

P-55

HIGH FIDELITY SIMULATION TRAINING IN END OF LIFE CARE; ONE CHANCE TO GET IT RIGHT

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10.1136/bmjspcare-2017-00133.55

Background High fidelity simulation uses technologically-advanced manikins to simulate complex clinical situations to train professionals in technical skills and human factors in a multidisciplinary group. We have expanded the use of simulation training (SIM) to educate about end of life care (EOLC). **Aims** To evaluate the impact SIM training at Epsom and St Helier University Hospitals NHS Trust (ESTH) has on participant confidence, understanding and skills in EOLC and their perception of their role in end of life care.

Methods A 1 day end of life care course was initially designed by The Simulation and Interactive Learning Centre at Guy's and St Thomas' Hospital and subsequently delivered twice at ESTH. The ESTH Team adapted the scenarios and held a further 6 courses from January 2015 to June 2016. Five scenarios covered subjects including the 5 priorities for care of the dying person, individualised care planning, cultural beliefs, the Mental Capacity Act, compassion and communication.

The courses took place in the Simulation Centre, allowing a realistic ward or home setting, utilising a professional actor to enhance the scenarios.

Participants were given pre and post course questionnaires with free text sections. Information from these was used to identify themes.

Results 63 nurses and doctors of varying seniority attended the courses. Over half of the participants had worked in the NHS for at least a decade. Analysis of the data revealed that high fidelity simulation had a significant impact on the participants' confidence, understanding and skills in EOLC and their perception of their role in EOLC.

Additionally, the free text sections identified learning in patient centred care, communications skills, honesty and the importance of cultural factors.

Conclusion Use of high fidelity simulation to teach EOLC had a positive impact on the participants. We are now looking to expand the course into community settings.

P-56

FAST TRACK DISCHARGE TO PREFERRED PLACE OF CARE – IDENTIFYING MODIFIABLE DELAYS

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10.1136/bmjspcare-2017-00133.56

Background The need to facilitate dying patients spending time in their preferred place of care (PPC) was highlighted in the Department of Health's Review of Choice in End of Life Care (2015). The Fast Track process (FT) ensures patients with a rapidly deteriorating condition can be discharged to their PPC in a timely manner with the appropriate support.