Background Due to the nature and extent of disease, hospice patients are extremely susceptible to infection (Raquel 2005). The decision to commence antimicrobial treatment is often complex (Pereira, Watanabe and Wolfe 1998, Nagy-Agren and Haley, 2002). This audit reviews the appropriateness of antimicrobial choice and course length to encourage antimicrobial policy adherence and stewardship.

Method A retrospective audit of Antimicrobial prescriptions for patients with life-limiting illness requiring inpatient hospice care at The Royal Trinity Hospice (RTH). Patients admitted over a 3 month period in 2015 were audited. The primary outcome was comparison of antimicrobial choice, dose, course and route against the local DGH Hospital Antibiotic Policy and correlation with trends from an initial audit conducted in 2014.

Results One patient was excluded due to missing documentation; this did not correlate with remarkable antibiotic use. Analysis was limited to 64 prescriptions to include 30 patients. This compared to 58 prescriptions over the complete 3 months in the previous round indicating a significantly increased antimicrobial prescribing rate. Most prevalent infections were UTI (34%), LRTI (15.6%) and cellulitis (4.6%). Our study demonstrated a significant amount of antifungal prescribing (32.8%), second in prevalence only to the most predominantly treated bacterial infection. There was minimal documentation making analysis of percentage adherence to policy, microbiology consultation and sensitivity requests difficult to interpret with confidence. Trends reflected suboptimal adherence to protocol, with sensitivities requested in 10.9%, all of which were UTI.

Conclusion Most hospices use policies from their local trusts, based on local sensitivities and this is therefore an important and relevant tool. Antimicrobials are frequently prescribed off protocol without clear documentation for the rationale, sensitivity and without microbiological input. There is a tendency towards prescribing augmentin off protocol. Antifungal prescribing policy is poorly represented considering its contribution to microbial burden and quality of life in terminal care.

P-49

'IS HOME WHERE I WANT TO DIE?' – PROGNOSTICATION AND PREFERRED PLACE OF CARE AT THE END OF LIFE IN OLDER HOSPITAL INPATIENTS

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Background Guidelines suggest that the preferred place of care (PPC) for patients at the end of life is in their own home. Existing literature is largely from younger cancer patients. Increasing numbers are living into very old age who may have different care needs and challenges. Studies on PPC and prognostication outside the 'acute' dying phase in older people are limited. We aim to investigate the casemix (cancer vs non-cancer), the PPC and accuracy of prognostication of referrals to the Palliative Discharge Team (PDT).

Methods Analysis of observational database data collected as part of routine clinical practice of the PDT - referred inpatients thought to be in the last 3 months of life. The data were analysed using Stata 14.

Results n=987. Mean age at referral 78 years. 60.2% had palliative cancer diagnoses. The odds ratio of cancer diagnosis

decreased with increasing age (OR 0.957, 95% CI 0.944–0.971; p<0.001).

Home was the PPC in 34% patients. Logistic regression analysis found an increased likelihood of change in PPC with age (OR 1.03, 95% CI 1.02–1.04; p<0).

Mean time from hospital discharge to death was 47 days. 90% of deaths occurred <109 days. No statistically significant difference in time from discharge to death with age or cancer vs non-cancer diagnosis (p=0.1684).

Discussion Home was not the PPC for the majority of patients and the association of changing PPC with older age and non-cancer diagnosis suggests this group may have different wishes from previous study participants. This is likely to be multifactorial, with different barriers to dying at home in an older population. Cancer dominance of referrals was less prominent in the oldest old. Prognostication was not significantly affected by cancer status and the accuracy suggests underuse of the service. Additional research is required into PPC in older, multi-morbid populations and what factors affect it.

P-50

HYPERCALCAEMIA OF MALIGNANCY: AN ANALYSIS OF THE MEDICAL MANAGEMENT OF PALLIATIVE CANCER PATIENTS IN COMMUNITY, HOSPICE AND HOSPITAL SETTINGS

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Background Hypercalcaemia of malignancy (HCM) is a common and significant cause of morbidity and mortality. Treatment includes clinically assisted hydration and bisphosphonates. Denosumab has been used in some centres. Clinical management of hypercalcaemia varies across settings and many recommendations are based on expert opinion.

Aim Within a Regional Palliative Care Clinical Network in the North West of England, we aimed to:

- Evaluate the management of HCM in community, hospice and hospital settings
- Develop new standards and guidelines

Method

- Systematic literature review.
- Six-month retrospective case note analysis of the management of HCM in community, hospice and hospital patients.
- Multi-professional questionnaire survey of palliative care professionals.

Results A systematic literature identified 32 articles to inform development of the regional standards and guidelines. Data for 79 patients was recorded from hospital (n=53, 67%), hospice (n=25, 32%) and community (n=1, 1%) settings. Patients reported high symptomatic burden: fatigue (n=41, 52%), weakness (n=38, 48%), drowsiness (n=32, 41%) and constipation (n=26, 37%). Intravenous fluids were administered in 72 (91%) patients; 0.9% saline was most used (n=67, 85%) within 24 hours of diagnosis (n=64, 81%). Bisphosphonates were used

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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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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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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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