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

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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 (σ :26.28ms). OH is a decrease of ≥ 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 (σ :2.55) and 12 (σ :1.73) respectively. Mean SDNN (n=20) was 25.53 ms (σ :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?

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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

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10.1136/bmjspcare-2017-00133.48

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