Although hospital death may sometimes be unavoidable, these findings suggest that greater support may be needed to facilitate discussions and, where possible, enable patients to die in their preferred location.

**Abstracts**

**37 USE OF ANTIBIOTICS IN DETERIORATING PALLIATIVE PATIENTS – A RETROSPECTIVE ANALYSIS**

1Andrew Page, 2Clare Rayment, 3St Gemma’s Academic Unit of Palliative Care, University of Leeds; 4Marie Curie Hospice, Bradford

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**Background** In palliative care, 24–48hr antibiotic trials are prescribed in patients who have clinically changed and may be entering the last days of life(LDOL), but where infection is considered a possible reversible factor. Does this treatment benefit or burden patients?

**Aim** To determine the incidence of this in hospice practice, assess survival rates and identify common predictive factors of poor response.

**Method** Using SystmOne, a retrospective analysis of admissions to Marie Curie Hospice, Bradford Inpatient Unit between August-October 2018 was conducted. Data was collected for all inpatients starting antibiotics including diagnosis, OACC, details of antibiotic therapy, and admission outcome (discharge/death). Patients documented to be potentially entering LDOL when therapy was initiated were identified.

**Results** 78 patients were admitted, of which 40% (31/78) received antibiotics. Of those receiving antibiotics, 77% (24/31) had cancer and 25% (8/31) received multiple antibiotic courses. In 35% (11/31) cases, concerns the patient may be entering LDOL were documented when antibiotic therapy was initiated. Of these, 91% (10/11) died during the admission. Of those who died, all had cancer; the majority with metastatic disease (8/10), Karnofsky scores =40%, a ‘Deteriorating’ (5/10) or ‘Unstable’ (3/10) Phase of Illness and mean duration from antibiotic initiation to death was 3.4 days (range:1–12). In patients who received multiple antibiotic courses, 75% (6/8) died during admission.

**Discussion** Antibiotic use in this context appears relatively common and generally has a poor outcome, suggesting treatment could be an unnecessary burden for this patient group. Metastatic cancer, Karnofsky scores =40%, an ‘Unstable’ or ‘Deteriorating’ Phase of Illness and multiple antibiotics during admission may help predict a poor response.

**38 GROWING NEED, GROWING COMPLEXITY: PROJECTIONS OF PALLIATIVE CARE NEED AND MULTI-MORTALITY IN SCOTLAND**

1Anne Finucane, 2Anna Bone, 3Simon Etkind, 4David Carr, 5Richard Meade, 6Rosalia Munoz-Arroyo, 1Sebastian Moine, 2Scott Murray, 7Aghimien Iyayi-Igbinovia, 3Catherine Evans, 4Irene Higginson, 5Kristy Boyd, 6Marie Curie Hospice Edinburgh, UK; 7Division of Population Medicine, Cardiff University, UK

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**Background** Due to population ageing, serious health related burden is rising. In England and Wales, the number of people requiring palliative care is projected to grow by 42% by 2040 (Etkind et al. 2017). We sought to estimate future palliative care need in Scotland, extending previous work by examining the contribution of multi-mortality (deaths from multiple conditions), to identify priorities for future service delivery.

**Methods** Simple linear modelling of deaths requiring palliative care from 2017–2040, using national death registry data (National Records of Scotland) and official mortality forecasts (Office of National Statistics). Palliative care need was estimated using previously defined chronic progressive illnesses, identified from i) leading cause of death; ii) contributory causes of death.

**Results** Using different methods, we projected that by 2040, the number and proportion of people requiring palliative care will increase, equating to between 75% (minimal estimate) and 94% (maximal estimate) of all deaths. Deaths due to >2 disease groups (cancer, organ failure, dementia, other) are projected to account for 42% of all deaths by 2040, up from 27% in 2017. Deaths due to dementia and cancer will increase. Most deaths will occur for those aged >85. If current trends continue, care complexity will rise.

**Conclusions** Estimates of palliative care need using leading and contributing causes of death demonstrate the complexity and extent of care needs. The forthcoming rise of palliative care need in Scotland requires strategic action to prepare, including greater palliative care training provision for generalist health professionals where people reside and receive care.