Methods Data regarding naloxone prescribing was obtained for two three-month periods; prior to and following the introduction of a prescribing order set which included guidance on the indications for naloxone use and appropriate doses. The notes of all patients who received naloxone in each time period were reviewed; and only patients prescribed long term opioids for pain were included in the audit. Data collected included age, sex, type and dose of opioid, equivalent doses of oral morphine per day, dose of naloxone administered, stated indication for use, respiratory rate, oxygen saturations and time to death where applicable.

Results Prior to the intervention 15 patients were identified. All of these received inappropriately high doses of naloxone. Following the intervention, the number of patients reduced by more than 50% (n=7), however all patients still received inappropriate doses. Worryingly there were no patients in either time period who had documented evidence of respiratory depression; most clinicians cited reduced level of consciousness as the reason for administering the drug.

Conclusion This intervention may have reduced the number of inappropriate prescriptions of naloxone in this subset of patients. However, more education is required to improve knowledge around the appropriate use of this potentially harmful drug. Future training sessions are planned to include staff from the emergency department and acute medicine.

Case Series of the Safe Use of Intravenous Iron in a Hospice Setting
Tom Steele, Helen Bonwick, Amara C Nwosu, Laura Chapman. Marie Curie Hospice Liverpool

Background Anaemia is common in palliative care. Treatment of iron deficiency, if present, is recommended to improve symptoms and reduce dependency on blood transfusion. Previously, use of intravenous iron has been limited by the risk of anaphylaxis, however newer preparations have greatly improved safety profiles. Despite this, the feasibility of their use in hospices is unclear.

Methods A policy for administering intravenous iron at Marie Curie Hospice Liverpool was developed as part of a project to improve the targeted treatment of anaemia. Retrospective review of electronic patient and laboratory records was performed for patients receiving the intervention between October 2018 and July 2019. In all cases a single dose of Monoferr (iron (III) isomaltoside) was given in keeping with the product literature.

Results 12 infusions were given to 10 patients. 4 were inpatients, the remainder day cases. Mild extravasation occurred in one case, leading to discolouration but no pain. There were no other adverse reactions. 30, 60 and 90-day survival was 92%, 92% and 58% respectively. Baseline haemoglobin was 80 g/L in 6 cases, 80–100 in 3 and >100 in 3. All met recommended criteria for diagnosing iron deficiency anaemia (ferritin <100μg/L and transferrin saturation <20%). Fatigue was documented for all, alongside breathlessness in 4 and bleeding in 2.

Conclusion This case series demonstrates the feasibility of using intravenous iron, within its product specification, to treat iron deficiency anaemia in a hospice setting. Research is required to confirm the efficacy and optimum targeting of this approach in palliative care populations.

Polypharmacy in Children and Young People with Life-Limiting Conditions: An Observational Cohort Study in England
Johanna Taylor, Deborah Gibson-Smith, Stuart Jarvis, Andrew Papworth, Michelle Hills, Veronica Neefjes, Lorna Fraser. University of York, Martin House Hospice

Background/Aims Polypharmacy, which refers to taking several medications concurrently, is often appropriate for children and young people (CYP) with life-limiting conditions (LLCs) but can increase the risk of drug-drug and drug-disease interactions, medication errors and non-adherence, and cause unnecessary burden for families as they manage complex medication schedules. Despite this, little is known about polypharmacy in this population. This study aims to determine the prevalence of polypharmacy in CYP with LLCs.

Methods An observational cohort study of all CYP (age 0–19 years) with a diagnosed LLC in the Clinical Practice Research Datalink (primary care dataset in England) from 2000 to 2015 (n=15,630). Unique prescriptions were identified and common definitions of polypharmacy were used to determine the prevalence in each year for all medications and for regular medications (those with at least 3 prescriptions in a 12 month period). Regression analyses were used to explore factors associated with an increased risk of polypharmacy.

Results In each year, approximately 30% of CYP were prescribed at least 5 unique medications, and 10% were prescribed at least 10 (medium annual average=2, range=0–52). When limiting polypharmacy to regular medications, 29% were prescribed at least 2 medications per year, and 14% were prescribed at least 4. Children with a primary respiratory, neurological, metabolic or circulatory diagnosis were at the greatest risk of polypharmacy. Having a second LLC or other co-morbidity were also risk factors. The proportion of children exposed to polypharmacy remained similar throughout the study period.

Conclusion This ongoing study shows that CYP with LLCs are exposed to high rates of polypharmacy. Workshops with families and clinicians held as part of the study revealed that primary care data are likely to underestimate polypharmacy in this population, and allow for limited exploration of important factors that influence their exposure to inappropriate polypharmacy.

Xerostomia and Xylimelts Use in Hospice Inpatients: Using the Integrated Palliative Care Outcome Scale (IPOS) to Evaluate
Jessica Z Walding, Rosie Matt, Siwan Seaman. Marie Curie Hospice, Cardiff and the Vale

Background Xerostomia is the subjective experience of oral dryness and is reported in up to 88% of advanced cancer patients. Despite use of mouthwashes, artificial saliva and...
hydration, studies reveal that xerostomia persist or deteriorate during admission. Thus, newer saliva stimulating agents have become increasingly popular. XyliMelts are an example of this newer alternative.

**Aims** To ascertain whether using Xylimelts amongst hospice in-patients reduces the degree patients are affected by sore/dry mouth.

**Methods** Data was collected prospective at the Marie Curie Hospice, Cardiff and Vale over a 4-month period. Patients with refractory dry mouth were identified. This was defined as failure to respond to daily use of Glandosane spray and Biotene Oral Balance Gel. Once identified, patients were asked to grade the degree they had been affected by a sore/dry mouth over the past 3 days, using IPOS scores. This score was repeated after Xylimelt use. A score of 4 reflected they were overwhelming affected by the symptom whereas a score of 1 indicated they were only slightly affected.

**Results** 18 patients received Xylimelts over the 4 months in our 28-bedded hospice. 93% of these patients had a cancer diagnosis. Results suggest that XyliMelt use was effective at alleviating dry mouth with a p-value of 0.007, mean IPOS score of 3.1 (pre-use) and 1.6(post-use). XyliMelt use was well tolerated with no reported adverse reactions amongst our patient group.

**Conclusion** Xylimelts appears to be effective and well tolerated amongst hospice in patients with refractory xerostomia.

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**Abstracts**

**Introduction** A tool was created to guide management of terminal agitation. The patient is assessed and treated for reversible causes. If symptoms continue, patients are assessed against the modified Richmond Agitation-Sedation Scale (mRASS). This was initially developed to assess agitation in intensive care but has been modified and validated for use in palliative care.

**Methods** A retrospective audit was completed after 6 months. This included all patients who died in the hospice during July 2019. A staff survey was also circulated.

**Results** 21 patients died in total, of whom 16 (76%) required medicinal intervention for agitation. All patients had an assessment for reversible causes of agitation on a per shift basis. When medication was required, an appropriate low dose of benzodiazepine was used first line in 100% cases. This dose was titrated to response in 75% of cases with 1 out of 4 repeating the same dose despite failure to settle symptoms. Patients were escalated to levomepromazine in 100% of cases. Only one case may have benefitted from a higher dose of levomepromazine, but a repeated lower dose was administered. No patients required escalation to third line phenobarbitone.

Five nurses responded to the survey. 100% found the tool helpful, felt more confident in what medication to use and knew when to contact a doctor. 80% felt more confident in escalating doses with 1 saying this would improve with repeated use of the tool. 80% felt using the tool had made a positive difference for their patient, 1 patient’s symptoms being more complicated to settle.

**Conclusions** The tool is effective in supporting management of terminal agitation and received positive feedback from staff. Appropriate escalation of doses is likely to improve with repeated use of the tool.