clinicians in recognising dying, in particular how to distinguish dying from reversible acute deterioration.

Objectives To critically appraise the literature on biological factors that may be used as prognostic indicators in advanced cancer patients.

Methods A systematically structured review was conducted using three electronic databases. Studies reporting prognostic biomarkers in cancer patients with a median survival of ≤ 90 days.

Results 30 articles were included. Seven prognostic biological factors demonstrated Grade A evidence (lymphocyte count, white blood cell count, serum C-reactive protein, albumin, sodium, urea and alkaline phosphatase). An additional eleven prognostic factors were identified with Grade B evidence (platelet count, international normalised ratio, serum vitamin B12, prealbumin, bilirubin, cholesterol, aspartate aminotransferase, alanine transaminase, 40 lactate dehydrogenase, pseudocholinesterase and urate). A number of biomarkers were specifically identified in the last two weeks of life but limitations exist.

Conclusions The biology of dying is an important area for future research, with the evidence focused on signs, symptoms and prognostic factors. This review identifies a number of common themes shared amongst advanced cancer patients and highlights candidate biomarkers which may be indicative of a common biological process to dying.

P-114 THE ROLE OF THE INFECTION PREVENTION NURSE IN THE HOSPICE SETTING

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10.1136/bmjspcare-2017-hospice.139

Introduction The role is often carried out by Infection Prevention Link staff who also have the role of providing care to the patients. LOROS changed this profile three years ago by employing a dedicated qualified infection prevention specialist. As most of the patients within the hospice are vulnerable to infection this role was to look at areas which could be improved and reduce the risk of hospice acquired infections and promote patient, staff and visitors' safety.

Aims The aims were to ensure that LOROS was compliant with national and local guidelines on Infection Prevention. To identify any areas for concern or non-compliance and how it could improve the patient's journey and ensure infection prevention and safety were everyone's business.

Method A review of national and local infection prevention literature was undertaken and the Infection Prevention Lead was part of the Infection Prevention Society (IPS) whose vision is that 'no person should be harmed by a preventable infection'. They have also produced a suite of infection prevention audits that can be used in all healthcare settings. These were used as a starting point for starting to identify any good/excellent areas of compliance and any areas which may need improvement.

The hospice also wanted to ensure compliance with the Department of Health's Health and Social Care Act 2008 The Hygiene Code. This Act established the CQC and sets out the overall framework for the regulation of health and adult social care activity. Outcome 8 of the CQC was the driving force for some of the changes that were implemented.

Conclusion From the initial audits areas of good practice were identified, for example the general cleanliness of building, staff

adherence to uniform/dress code and hand hygiene but they also identified area for improvement. The list below is an example of some of the changes implemented but it is not an exhaustive list and work continues to identify good practice and areas for improvement

- The purchase of all new commodes
- Fabric riser recliner chairs started to be phased out
- Green labels were introduced identifying equipment had been cleaned
- Detergent cleaning wipes
- Link Staff had a dedicated two day training day
- Oak Ward refurbishment
- Safer needles
- Introduction of Sepsis Pathway
- Patient leaflets
- Cleaning schedules and policy
- Development of an audit Programme.

P-115 TO FEED, OR NOT TO FEED, THAT IS THE QUESTION: MULTI – PROFESSIONAL TEAM TRAINING ON FOOD AND DRINK FOR THE DYING PATIENT

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10.1136/bmjspcare-2017-hospice.140

Aim Whether or not someone can, or should, eat and drink in the last hours and days of life is a dilemma faced by patients, their families and staff. A perception that food or drink has been withheld, and consequently contributed to death, can cause significant distress to bereaved relatives. This project aims to equip Health Care Professionals (HCPs) with the skills to assess the wishes and needs of dying patients, and develop a plan of care with patients and their 'families' regarding eating and drinking.

Design Following review of local audits of care of the dying and initial training sessions with palliative care staff, a half-day interactive training session was developed focusing on:

- Clinical assessment and benefits
- Professional guidelines and the law
- Ethical decision making in clinical practice
- Conversations and documentation.

The session was refined following feedback from participants, a teaching resource pack developed and team-teaching utilised to ensure consistent delivery by different facilitators. Training was offered to all HCPs working across a locality in the North of England.

Results Training sessions were fully booked with 323 trained in the first six months. Participants were multi professional (nurse 38%, health care assistant 25%, doctor 24%, other 13%) and from a variety of settings (care home 43%, hospital 32%, community 11%, hospice 14%). Feedback was excellent and comments demonstrated the session had been thought provoking and enjoyable.

Lessons Learnt Participants report clinical decision making and the accompanying conversations about eating and drinking for dying patients is challenging. Differentiating between 'food and drink' and 'clinically assisted hydration and nutrition' is valuable.

Uniting staff with different experiences stimulated excellent reflective debate and shared learning. Staff report increased confidence to develop and review plans in accordance with

patients' wishes. This session is now part of ongoing end of life training locally.

P-116 TO FEED OR NOT TO FEED

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10.1136/bmjspcare-2017-hospice.141

Background It is well known that swallowing problems are a common symptom in palliative care patients (Bogaardt et al., 2015). The emotional, physiological and psychological impact of swallowing problems cannot be underestimated on the patient, their families and carers.

Aims To reduce the impact of swallowing difficulties by ensuring patients can eat and drink safely, efficiently and nutritiously.

To develop and roll out a training programme for healthcare professionals involved in the preparation, formation and delivery of modified diets/fluids.

Method A collaborative working party including Speech and Language Therapy (SLT), Dietetics, Catering and Housekeeping was set up to review and improve the modified diets and fluids that are offered to our patients with swallowing difficulties. The review included patient and staff feedback and focused on consistency, appearance, taste and texture. As a multi-disciplinary team, each discipline provided a different knowledge base: SLT focusing on swallowing safety, Dietician focusing on nutritional content, Catering with the preparation and cooking of the food and Housekeeping with food presentation.

Results A new puree menu has been developed with standardised texture and consistency with the use of puree moulds to improve appearance. A daily smoothie round is now offered to our inpatients and day hospice. A formal evaluation is in progress. Initial feedback from patients and staff has been positive. 'It looked like chicken and even tasted like chicken. This is the first puree meal I have actually enjoyed!'

A training programme on modified diets was developed and is being delivered on a rolling basis.

Conclusions We believe by evaluating and improving our modified diets and fluids that are offered to patients with swallowing difficulties, these patients can continue to eat and drink safely and nutritiously through the development of an innovative new modified diet menu thus reducing the distress that can be caused by the impact of these difficulties.

P-117 PLANT: 'PALLIATIVE LIFE-STATE & NUTRITION TOOL'© – A PROTOTYPE TOOL

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10.1136/bmjspcare-2017-hospice.142

Background Previous work by the author and, in collaboration with the Food and Nutrition Group at Hospice UK and the Department of Nutrition at the University of Surrey, highlighted the need for a specialist nutrition tool in palliative care. Nutrition can be influenced by disease and treatment-related factors as well as emotional, social and cultural factors. In addition, food allergies/intolerances and preferences should be taken into account when offering food or dietary advice.

Last but not least, weight and nutritional changes can be a useful adjunct to the prognostic algorithm.

Aim The PLANT tool has been designed to explore a number of symptoms that can affect the nutritional status of palliative patients.

Methods The prototype PLANT was designed and developed in the last two years with the feedback of patients, doctors, nurses and dietitians. It has two parts: a patient questionnaire and a clinical assessment. It has been used in different settings.

Results PLANT is a practical tool that can be used in the hospice, community and outpatient settings. It can:

- identify potentially reversible causes (such as pain, nausea, constipation etc) which can influence the patient's food intake and nutritional status
- highlight specific food and nutritional needs that can be translated into care plans
- facilitate communication between multidisciplinary team members
- assist healthcare professionals in estimating survival of patient.

Conclusions Nutritional and wellbeing status should be assessed, except if patients are within the last days of life ('dying' phase of illness). The PLANT tool, by taking into account aspects of life-state and food and nutrition, supports healthcare professionals in their history-taking and decision-making, to provide better care. There are a number of challenges for its use, such as changing practice, introducing yet another tool but, most importantly providing education and training on nutritional and lifestyle care.

P-118 JOINT WORKING WITH ANAESTHETICS: AN INTERVENTIONAL PAIN MANAGEMENT SERVICE FOR COMPLEX CANCER PAIN

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10.1136/bmjspcare-2017-hospice.143

Background A small number of cancer patients' pain syndromes remain inadequately controlled despite applying the principles of the World Health Organization Analgesic Ladder. These patients often have neuropathic pain and experience severe symptoms. They may also experience medication side effects which limit dose escalation. NICE guidelines recommend that specialist palliative care teams should have access to pain management specialists with nerve blocking and neuro-modulation expertise. A recent paper concluded that patient care and outcomes will be enhanced by establishing more formal relationships between pain services and palliative medicine. There is evidence of under-referral for advanced pain management procedures and a lack of integrated services nationally. Interventional pain management has been a long-standing gap in the commissioning of cancer services in our locality.

Aims To improve the care of patients with complex cancer pain by establishing a collaborative hospice-based service with a chronic pain management anaesthetist.

Methods A service-level agreement was established between the hospice and the local hospital trust to commission input from a chronic pain anaesthetist in January 2017. Fortnightly sessions were established to review hospice inpatients and to