**COST-EFFECTIVENESS ANALYSIS FOR THE INTEGRATED CARE FOR ADVANCED RESPIRATORY DISORDER (ICARE) PROGRAM – A MULTIDISCIPLINARY PALLIATIVE REHABILITATION PROGRAM FOR CHRONIC LUNG DISEASE IN A COMMUNITY HOSPITAL**

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**Introduction**

Patients with chronic breathlessness suffer high symptom burden and unmet needs, driving repeated hospitalizations. ICARE program, based on a novel construct of ‘Palliative Rehabilitation,’ integrates early palliative care with post-exacerbation, inpatient rehabilitation for patients with advanced non-malignant lung diseases. This study aims to examine ICARE’s impact on healthcare resource utility, as well as secondary clinical and functional outcomes.

**Methods**

This study compared the number of admissions and total length of stay (TLOS) 6-months pre-enrolment and post-discharge from ICARE. Formal healthcare cost is calculated using daily unit costs provided by Ministry of Health. Functional improvement before-and-after ICARE are measured via 6-minute-walk test (6MWT) and Modified Barthel Index (MBI). Clinical issues are identified and tracked using an assessment template.

**Results**

88 patients were eligible for analysis. There were significant reductions in acute-hospital TLOS (mean 14.0 days, <0.05) and number of admissions (mean 1.17, <0.05). By projection, reduction in TLOS accrued to an annual 2464 bed-days saved for the tertiary hospital. Net cost deficit was $581 per patient. Subgroup analysis revealed patients with recurrent admissions 6-months prior to ICARE (N=44) generated annual savings of $308,949, while 1-time admitters (N=44) incurred deficit of $410,810. Notably, 1-time admitters had longer LOS in their index tertiary hospital admission and had poorer 6MWT and MBI on enrolment, suggesting more severe exacerbations with greater deconditioning. Functionally, significant improvements in 6MWT (median 30 m, <0.05) and MBI (median 12.5 points, <0.05) were observed. 76.5% clinical issues identified were improved/resolved.

**Discussion**

ICARE leads to a cost deficit of $581/patient, equivalent to only an additional half-a-day stay in tertiary hospital. Considering that patients functionally were not fit for discharge at point of enrolment into ICARE, this study demonstrates that ICARE is potentially cost-saving, particularly for recurrent admitters. ICARE also alleviates tertiary hospital bed-occupancy rate while improving clinical and functional outcomes.

**Free papers 16 – 18: future**

**TO DRIP OR NOT TO DRIP: INADEQUATE EVIDENCE TO GUIDE PRACTICE. A SYSTEMATIC LITERATURE REVIEW AND NARRATIVE SYNTHESIS**

Arjun Kingdon, Stephen Barclay, Anna Spathis. University of Cambridge

10.1136/spcare-2020-PCC.16

**Background**

The impact of clinically assisted hydration on quality of life or survival in the last days of life is not known. A previous systematic review evaluated only trial data, mostly from studies focusing on patients in the last weeks of life, and found insufficient evidence to draw firm conclusions. This issue is often highly emotive. Practice varies significantly worldwide.

**Aim**

To review the published evidence concerning assisted hydration in the final days of life, focusing on symptoms, side effects, survival, quality of life, and the views of patients and families.

**Design**

Systematic literature review and narrative synthesis of studies using a range of methods. Databases were searched up to September 2019 alongside reference and journal hand searches. Research quality was appraised using Gough’s ‘Weight of Evidence’ framework.

**Results**

The search yielded 4053 studies. Of the 27 papers included in the synthesis, only one study was judged to be of high quality and relevance. Most studies demonstrated little or no impact of clinically assisted hydration on quality of life, symptoms, or survival: many were poorly designed or underpowered. Of the ten studies investigating delirium, four (including the only high quality study) suggested an association
between clinically assisted hydration and lower rates or delayed onset of delirium.

**Conclusion** There is insufficient evidence to draw conclusions on the impact of clinically assisted hydration on quality of life in the last days of life. Further research should focus on populations who are in the very final days of life. There is a lack of studies in non-cancer populations, and a lack of evidence relating to communication with patients and families about this uncertain area of clinical practice.

**IN YOUR OPINION WHAT ARE THE MOST IMPORTANT ETHICAL ISSUES FOR THE SPECIALITY IN THE NEXT FIVE YEARS AND HOW COULD WE ADDRESS THEM**

Beth Robbins, University of Leeds

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A multitude of challenges are likely to confront the field of palliative care in the coming years, many of these with huge ethical implications. With demographic shifts resulting in the over-65 population resting at almost 12 million, combined with an unprecedented increase in the burden of diseases of old age such as dementia; it is likely that palliative care as a specialty will need to adapt to new demands. These challenges are compounded by considerable uncertainties surrounding funding, which will undoubtedly lead to difficult resource allocation decisions. Furthermore, ease of access to palliative care services varies considerably across society, with individuals with mental health conditions, a non-cancer diagnosis or belonging to BAME or LGBT communities all facing substantial barriers to access. This essay aims to examine how the fundamental principles of medical ethics such as beneficence, non-maleficence, justice and autonomy can be applied to the aforementioned challenges.

No proposals in isolation are likely to address all of the above challenges. Improved integration between general practice and palliative care services could significantly improve access to care however this will require further investment in an already overstretched primary care service. Extending opportunities to learn about palliative care to other health care professionals may also help to improve their confidence in treating this population. With projections indicating that care homes are likely to become the ‘hospices of the future’ it is vital that individuals working in these areas are adequately trained and able to work within a well-supported multi-disciplinary team. Disparities in access between societal groups will also need to be further studied in order for these to be levelled. Crucially addressing the above challenges must be done in a way that retains the holistic and individualistic nature, that is so integral to the specialty.

**ARE UK PALLIATIVE CARE PATIENTS WILLING TO PARTICIPATE IN A TRIAL OF BISPECTRAL INDEX (BIS) TECHNOLOGY FOR ASSESSING LEVELS OF CONSCIOUSNESS? FINDINGS FROM AN EXPLORATION OF FEASIBILITY FOR I-CAN-CARE**

Anna-Maria Krooupa, Paddy Stone, Stephen McKeever, Bella Vivat. University College London, Kingston University and St George’s University London

10.1136/spcare-2020-PCC.18

**Background** Bispectral Index (BIS) monitoring uses electroencephalographic data to measure patients’ level of consciousness. Our I-CAN-CARE study sought to explore the use of BIS in palliative care. Our preliminary work indicated that while a few clinicians had some reservations about the technology, patients and relatives did not. We therefore proceeded to investigate BIS in practice.

**Objective** To evaluate the feasibility of trialling BIS monitoring with conscious UK hospice patients.

**Methods** We conducted a prospective study of BIS with hospice inpatients, trialling the technology for a period of four hours. Feasibility was assessed against the following a priori criteria: percentage of recruited patients 15%, and three criteria related to BIS specifically: percentage of eligible patients refusing to be approached for technology-related reasons 10%; percentage of technology-related refusals to participate 10%; and rate of non-completion due to the technology 10%

**Results** In 12 months, 332 hospice inpatients were screened for eligibility, and 177 (53.3%) deemed eligible for the researcher to approach for consent. For reasons related to the technology, one patient refused approach (1/177); 34 could not be approached for other reasons. Six of those approached (6/142; 4.2%) refused consent due to the technology. In all, 40/142 (28.2%) agreed to participate. Thirty-nine of the 40 recruited were monitored with BIS (it was impossible to monitor the other patient successfully). Two participants (2/39; 5.1%) requested that monitoring stop before the endpoint for reasons relating to the technology.

**Conclusions** Our findings show that it is feasible and acceptable to conduct research into BIS technology with conscious inpatients on a palliative care unit. The use of BIS did not markedly limit recruitment or retention, and most participants were content. Our analysis will proceed to examine data from these participants on the utility of BIS monitoring.

**Free papers 19 – 21: symptoms**

**MANAGEMENT OF OPIOID INDUCED HYPERALGESIA**

F Murray-Brown. Derriford Hospital, Plymouth

10.1136/spcare-2020-PCC.19

**Background** Opioid-induced hyperalgesia (OIH) is a clinical phenomenon, characterised by increasing pain in patients who are receiving increasing doses of opioids. Many doctors are unaware of this phenomenon, often leading to a long latency between the classic presentation of the syndrome and its eventual recognition and treatment. There is no recognised management strategy for the treatment of OIH and several interventions have been used, with varying success.

**Aim** To review and assess the management of opioid-induced hyperalgesia in palliative patients.

**Methods** Electronic databases, grey literature, clinical trials registries and handsearching for studies describing OIH. Full papers were obtained if relevant and studies graded.

**Results** 30 papers were included in the analysis, including case reports and case series of a total of 54 patients. Clinical features included worsening or more widely distributed pain, 50% of patients also had myoclonus, 35% allodynia, and 15% agitation. 1 patient (2%) suffered a seizure. Ten different interventions were used for the management of OIH, with many patients receiving more than one intervention.

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