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ABSTRACTS

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PLATFORM PRESENTATIONS

535. SP - Scientific Presentation - SP - Other (Other medical condition)
Platform Presentation

ELF 2: Defining the Denominator ELF Study Group.

Angeline Price, Elizabeth Mclennan, Jemma Boyle on behalf of the ELF2 study group

Salford Royal NHS Foundation Trust; University Hospital Ayr; RCS(England) and London School of Hygiene and Tropical Medicine

Introduction The collaborative UK Emergency Laparotomy and Frailty (ELF) study was one of the first to investigate the older adult population undergoing emergency surgery. Despite accounting for almost half of emergency laparotomies and many considered high-risk, there remains a paucity of research in this population. One undefined area is the older patient who presents with acute abdominal pathology treatable by laparotomy but who do not undergo surgery.

Aims The primary aim is to estimate the 90-day mortality in older patients presenting with acute abdominal pathology potentially treatable by emergency laparotomy who do not undergo surgery (NoLap). The secondary aims are characterisation of this group, including frailty and sarcopenia with comparison to those older adults that have undergone emergency laparotomy (NELA and ELLSA). In addition, the decision-making process will be explored.

Method Multicentre prospective cohort study via established research collaboratives (Welsh Barbers, SSRG, OPSOC). ELF 2 requires at least 47 centres, recruiting 700 patients for 3 months prospective data collection via REDCap of NoLap patients with the same NELA inclusion/exclusion criteria. This data will be compared with a matched cohort from NELA and ELLSA. ELF2 data collection includes demographics, co-morbidities, frailty and sarcopenia. Each patient will be followed up for 90-day and 1-year mortality. Heuristics behind the decision will be analysed.

Discussion This trainee led collaborative project aims to improve understanding of the older adult population being considered for emergency laparotomy. With the ageing population being the dominant health users of the future, defining the denominator is essential for shared decision-making.

471. CQ - Clinical Quality - CQ - Patient Centredness
Platform Presentation

Let's Talk Dementia

Ashraf M; Mahmood A; Honney K

Queen Elizabeth Hospital Kings Lynn

Introduction: By 2021 over one million people will be living with dementia (1) costing the government an estimated £30bn a year (2). However, cognitive decline is often misdiagnosed or missed completely in hospital admissions, resulting in delays in detection and treatment for patients. Quick and simple screening tools such as the Abbreviated Mental Test Score (AMTS) could help provide early detection and faster treatment times for such patients. Data from Queen Elizabeth Hospital Kings Lynn showed that only 56.8% of patients over the age of 75 were being assessed for cognitive function on admission, while the national targets are set at 90%.

Methods: A multi-cycle, trust wide, quality improvement project was used to improve screening outcomes for dementia in QEHKL. A baseline measure of screening was taken by QEHKL coding department. Five PDSA (Plan Do Study Act) cycles were undertaken, implementing interventions to aid screening at each stage. Examples include improved medical clerking booklets, trust wide education and allocated ward "Dementia Champions". Performance was assessed by auditors, through patient notes and discharge letters.

Results: Over a 4-month period, 432 patient notes were inspected on six medical wards. Results after interventions showed a significant rise in Dementia Screening from 58.7% to 89.8%. AMTS completion was 70.7% in September 2020 on medical wards which improved to 85.7% in November 2020. Results were collected during the COVID-19 pandemic however, COVID wards were excluded.

Conclusion: The QI project has highlighted that education and accessible tools can improve cognitive screening numbers. An important note is, due to increased pressures during the COVID pandemic it is plausible that screening rates were adversely affected. Despite this, our figures still show positive improvement. The next cycle of our project includes surgical wards and we expect by the time of presentation to have this data to show.

547. CQ - Clinical Quality - CQ - Patient Safety
Platform Presentation

Quality Improvement Project in Prescribing Thickeners Post Stroke

Dr S. Abubacker; Dr A. Attia; Dr C Alcock

Queen Elizabeth Hospital Kings Lynn

Introduction: One of the therapies that Speech and Language Therapy (SALT) provide is a level to which fluids must be thickened to ensure a safe swallow. The thickening agent should be supplied by the hospital to the patient on discharge. This requires the thickening agent to be added to the electronic discharge letter (EDL) and, "To Take Out" (TTO) medication list by ward doctors.

Method: samples of 10-20 EDLs, taken from SALT list of stroke patients between interventions. Cycle 1: SALT were initially attempting to contact the physicians responsible for writing the EDL Cycle 2: SALT kept a register of patients that they had seen the recommended thickener prescription. This list was kept in the doctor's office. This list was mentioned in handover every morning for doctors to update EDL Cycle 3: The aforementioned list was continued, and responsibility for transfer onto EDLs was delegated to the on call Senior House Officer (SHO) Cycle 4: In addition to the above measures, custom made stickers were added to the prescription chart as an indicator to add thickener to the TTO.

Results Cycle 1: 20% Prescribed (n=10) Cycle 2: 78% Prescribed (n=18) Cycle 3: 93% Prescribed (n=14) Cycle 4: 100% Prescribed (n=10)

Conclusion: This project has built up a multidisciplinary system to a multidisciplinary problem. Through repeated cycles and system improvement, we have seen and demonstrated a collaborative effort resulting in consistent and improving results.

434. SP - Scientific Presentation - SP Psych (Psychiatry & Mental Health)
Platform Presentation

Look Out! visual assessment tool: Utility in older person's mental health care settings

Sami Hussain; Chandran Thavachelvi; Eladia Ruiz-Mendoza

Foundation Year 1 Doctor, Cavell Centre, Cambridgeshire and Peterborough Foundation Trust; Consultant Old Age Psychiatrist, Cavell Centre, Cambridgeshire and Peterborough Foundation Trust; Consultant Geriatrician, Peterborough City Hospital, North West Anglia Foundation Trust

Introduction: Patients on old age psychiatry wards are at high risk of falls. It has been shown that poor visual acuity significantly increases the risk of recurrent falls in the elderly. The National Audit of Inpatient Falls (NAIF) Report 2015 found that vision was poorly assessed. The Look Out! Visual assessment has been developed for patients over 65 to receive visual screening on admission to reduce the risk of falls. To date, there has been no research into the applicability of the Look Out! test in mental health settings. Our aims are two-fold: (i)To investigate how often vision is assessed for inpatients on old age psychiatry wards and (ii) To identify the challenges of visual assessment in a mental health care setting.

Methodology: Data was collected at a mental health unit with two wards dedicated to old age psychiatry patients. Data was collected for patients admitted from May 2020 to July 2020 and analysing qualitative and quantitative data.

Results: From the 30 patients reviewed, 27% of patients had ophthalmic history, such as glaucoma or cataracts, 23% of patients had a fall during admission, yet only 43% of patients had a Look Out! vision assessment completed and documented. 54% of patients who had a Look Out! Assessment were found to have an abnormality; of those with an abnormality detected on Look Out! , 57% were new presentations of an eye abnormality. On questionnaires, we found it more challenging to complete assessments of patients that were agitated or with advanced dementia but assessments were fully completed if more time was dedicated.

Conclusions: These findings demonstrate that the Look Out! test is applicable in mental health settings, helping to identify those with visual impairments and raising the need to complete the screening tool in all patients admitted to inpatient mental health facilities.

407. SP - Scientific Presentation - SP - Psych (Psychiatry & Mental Health)
Platform Presentation

Qualitative assessment of cognitive training for people living with dementia: An individualised approach is needed Authors

Lucy Beishon; Victoria Haunton; Hari Subramaniam; Elizabeta Mukaetova-Ladinska; Ronney Paneraia; Thompson Robinson; Rachel Evley

University of Leicester, Department of Cardiovascular Sciences, Leicester, UK; NIHR Leicester Biomedical Research Centre, British Heart Foundation Cardiovascular Research Centre, Glenfield Hospital, Leicester, UK; The Evington Centre, Leicestershire Partnership NHS Trust, Leicester, UK; University of Leicester, Department of Neuroscience, Psychology and Behaviour, Leicester, UK; Division of Clinical Neurosciences, University of Nottingham, UK

Background Cognitive training (CT) may be beneficial in mild cognitive impairment (MCI) and early dementia. However, few studies have qualitatively evaluated CT programmes in dementia. The aim of this analysis was to explore the benefits and barriers to a home-based computerised CT programme for healthy older adults, and people living with MCI or dementia.

Methods This was a nested qualitative study within a larger feasibility randomised trial of CT. Participants underwent semi-structured interviews after 12 weeks of CT. Where possible, participants were interviewed with their carers. The interview schedule and analysis were underpinned by the health belief model. Interviews were audio-recorded, transcribed, open-coded, and categorised into themes. The analytical framework was developed, and themes were condensed under four major categories: benefits and efficacy, barriers, threat, and behaviour.

Results 37 participants underwent interviews (10 healthy older adults, 4 MCI, 5 dementia, 9 patient-carer dyads [2 MCI, 7 dementia]). CT was feasible and acceptable to participants. Benefits included: enjoyment, improved awareness, benchmarking cognitive function, reassurance of abilities, and giving back control. Barriers were more prevalent amongst those with dementia: problems with technology, frustration, conflict between patients and carers, apathy and lack of insight, anxiety or low mood, and lack of portability. Perceived risk susceptibility of dementia varied between participants. Healthy older adults and MCI perceived the severity of dementia risk as high, which was only partially mitigated by CT. Participants living with dementia valued a more individualised approach to training, accounting for baseline characteristics. For people living with dementia, maintenance was as valued as improvement of cognitive function.

Conclusions CT was a feasible intervention for healthy older adults, and people living with dementia and MCI. Benefits were present, but the identified barriers need to be addressed for CT to be implemented successfully.

462. SP - Scientific Presentation - SP - Psych (Psychiatry & Mental Health)
Platform Presentation

Counselling in Care Homes

Dr Jo Pybis; Natalie Chigariro; Jeremy Bacon

British Association for Counselling and Psychotherapy

Introduction Although many people live well within care homes, it is estimated that 60% of those living in residential care have poor mental health (Age Concern & Mental Health Foundation, 2006) and 40% suffer from depression (The Royal College of General Practitioners, 2014). Antidepressant prescribing has been reported to be nearly four times greater in care homes than for older people living in the community (Harris, Carey, Shah, Dewilde & Cook, 2012). However, antidepressants have been found to be ineffective for people with dementia (Dudas, Malouf, McCleery & Dening, 2018). With two-thirds of care home residents having some form of dementia, there is a need to find alternative interventions. Talking therapies, such as counselling, may be a useful alternative.

Method Adopting a qualitative approach using semi-structured interviews and focus groups with counsellors (N = 12) who have experience of working in this context and with care home managers (N = 3) and care teams (N = 6), this study aimed to explore the feasibility of implementing counselling in a care home setting. We explored the views of care home staff towards counselling and identify barriers to service implementation, alongside the experience of counsellors who have delivered counselling in care homes to understand what service delivery models are currently adopted. Data were analysed thematically.

Results Findings fell under the following key themes: The funding and referral process for counselling in a care home; skills and competences required; training needs; adaptations to practice; barriers to implementing counselling in a care home.

Conclusions It is timely to consider the role of psychological therapy in supporting the mental health of care home residents. There is a need for further research to explore a service delivery model of counselling in care homes.

484. SP - Scientific Presentation - SP - Other (Other medical condition)
Platform Presentation

Changing Practices of Decision Making regarding Do-Not-Attempt-Cardiopulmonary-Resuscitation Orders amid the COVID-19 Pandemic

David Connellan; Kara Diffley; John McCabe; Aoife Cotter; Tara McGinty; Gerard Sheehan; Karen Ryan; Walter Cullen; John Lambert; Elizabeth Callaly; Lorraine Kyne

Mater Misericordiae University Hospital, Eccles Street, Dublin 7; School of Medicine, University College Dublin, Belfield, Dublin 4

Introduction: The COVID-19 pandemic has brought the decision-making process regarding cardiopulmonary resuscitation into focus. This study aims to analyse Do-Not-Attempt CPR (DNACPR) documentation in older hospitalised patients before and during the COVID-19 pandemic.

Methods: This was a retrospective repeated cross-sectional study. Data including co-morbidities and resuscitation status was collected on 300 patients with COVID-19 hospitalised from March 1st to May 31s t 2020. DNACPR documentation rates in patients aged ≥65 years with a diagnosis of COVID-19 were compared to those without COVID-19 admitted during the same period. Pre-COVID-19 pandemic DNACPR documentation rates were also examined. Factors associated with DNACPR order instatement during the first wave of the COVID-19 pandemic were identified.

Results: Of 300 COVID-19-positive patients, 28% had a DNACPR order documented during their admission. 50% of DNAR orders were recorded within 24 hours of a positive swab result for SARS-CoV-2. Of 131 patients aged 65 years or over within the cohort admitted with COVID-19, 60.3% had a DNACPR order compared to 25.4% of 130 patients ≥65 without COVID-19 ($p<0.0001$). During a comparable time period pre-pandemic, 15.4% of 130 older patients had a DNACPR order in place ($p<0.0001$). Independent associations with DNACPR order documentation included increasing age (Odds Ratio [O.R.] 1.12; 95% CI 1.05-1.21); nursing home resident status (O.R. 3.57; 95% CI 1.02-12.50); frailty (O.R. 3.34; 95% CI 1.16-9.61) and chronic renal impairment (O.R. 5.49; 1.34-22.47). The case-fatality-rate of older patients with COVID-19 was 29.8% versus 5.4% without COVID-19. Of older COVID-19-positive patients, 39.2% were referred to palliative care services and 70.2% survived.

Conclusion: The COVID-19 pandemic has prompted more widespread and earlier decision-making regarding resuscitation status. Although case-fatality-rates were higher for older hospitalised patients with COVID-19, many older patients survived the illness. Advance care planning should be prioritised in all patients and should remain clinical practice despite the pandemic.

494. SP - Scientific Presentation - SP - Psych (Psychiatry & Mental Health)
Platform Presentation

Discomfort in people with dementia admitted to an acute general medical hospital: a hospital crosssectional study of prevalence

Mr Richard Low; Dr Emily West; Prof Liz Sampson

University College of London, London, United Kingdom

Introduction: The acute hospital is a challenging place for a person with dementia whose ability to communicate discomfort and need is impaired. Their discomfort may go unnoticed due to insufficient staffing and time resources in this acute environment. Concerns have been raised about the consequences of these overlooked discomfort (e.g., distress and agitation), and hence how we can correctly identify their sources and severity. This study aimed to describe the source of discomfort and challenging behaviours in people with dementia (PwD) in UK acute hospital.

Method: A cross-sectional observational study of 49 patients with dementia admitted to a NHS acute hospital. Their discomfort was detected and its sources were identified (Sources of Discomfort Scale) during an hour observation when they were at rest and moved by staff. Their challenging behaviours were also recorded (Neuropsychiatric Inventory) through interviewing with the ward staff, as well as documentation of severity of dementia and presence of delirium.

Results: The overall prevalence of discomfort was 98%, with excessively sleepy or tired being the commonest; 39 (80%) participants experienced three or more type of discomfort. The commonest sources of discomfort were physical (e.g., constipation) and environmental (e.g., physically restrained), affecting up to 43 (88%) and 42 (83%) participants respectively. There was also evidence of an association between delirium and sleepiness or tiredness's discomfort, meaning that PwD with delirium were nearly triply as likely to feel uncomfortable because of sleepiness or tiredness. Challenging behaviours affected over 80% of our participants, with agitation or aggression being the commonest. On average, these behaviours were moderately severe.

Conclusion: Discomfort and challenging behaviours were very common in PwD admitted to acute hospitals. Patients and staff would benefit from more accurate and frequent detection of discomfort by focusing on non-pain-related discomfort and using observational scales.

505. SP - Scientific Presentation - SP - Stroke (Stroke)
Platform Presentation

Interleukin-6, C-Reactive Protein, Fibrinogen, and Risk of Recurrence after Ischemic Stroke: Systematic Review and Meta-analysis

McCabe JJ; O'Reilly E; Coveney S; Harbison J; Collins R; Healy L; McManus J; Mulcahy R; Moynihan B; Cassidy T; Hsu F; Worrall B; Murphy S; O'Donnell M; Kelly PJ.

Health Research Board (HRB) Stroke Clinical Trials Network Ireland (SCTNI), Dublin, Ireland

Background: Recent randomised trials showed benefit for anti-inflammatory therapies in coronary disease but excluded stroke. The prognostic value of blood inflammatory markers after stroke is uncertain and guidelines do not recommend their routine measurement for risk stratification.

Methods: We performed a systematic review and meta-analysis of studies investigating the association of C-reactive protein (CRP), interleukin-6 (IL-6) and fibrinogen and risk of recurrent stroke or major vascular events (MVEs). We searched EMBASE and Ovid Medline until 10/1/19. Random-effects meta-analysis was performed for studies reporting comparable effect measures.

Results: Of 2,515 reports identified, 39 met eligibility criteria (IL-6, n=10; CRP, n=33; fibrinogen, n=16). An association with recurrent stroke was reported in 12/26 studies (CRP), 2/11 (fibrinogen) and 3/6 (IL-6). On random-effects meta-analysis of comparable studies, CRP was associated with an increased risk of recurrent stroke [pooled hazard ratio (HR) per 1 standard-deviation (SD) increase in loge-CRP (1.14, 95% CI 1.06-1.22, p <0.01)] and MVEs (pooled HR 1.21, CI 1.10-1.34, p<0.01). Fibrinogen was also associated with recurrent stroke (HR 1.26, CI 1.07-1.47, p<0.01) and MVEs (HR 1.31, 95% CI 1.15-1.49, p<0.01). Trends were identified for IL-6 for recurrent stroke (HR per 1-SD increase 1.17, CI 0.97-1.41, p=0.10) and MVEs (HR 1.22, CI 0.96-1.55, p=0.10).

Conclusion: Despite evidence suggesting an association between inflammatory markers and post-stroke vascular recurrence, substantial methodological heterogeneity was apparent between studies. Individual-patient pooled analysis and standardisation of methods are needed to determine the prognostic role of blood inflammatory markers and to improve patient selection for randomised trials of inflammatory therapies.

527. SP - Scientific Presentation - SP - Diab (Diabetes)
Platform Presentation

Frailty and multimorbidity in type 2 diabetes: A UK Biobank analysis

Peter Hanlon; Bhautesh D Jani; Elaine Butterly; Barbara Nicholl; Jim Lewsey; David A McAllister; Frances S Mair

Institute of Health and Wellbeing, University of Glasgow

Introduction: Frailty and multimorbidity are common in type 2 diabetes (T2D), including people <65 years. Guidelines recommend adjustment of treatment targets in people with frailty or multimorbidity, however guidelines do not differentiate these two related states. It is unclear how recommendations to adjust treatment targets in people with frailty or multimorbidity should be applied to different ages. It is also not known if the relationship between HbA1c and outcomes is similar in people with and without frailty. We assess implications of frailty/multimorbidity in middle/older-aged people with T2D.

Methods: Analysis of UK Biobank participants (n=20,566) with T2D aged 40-72 years comparing two frailty measures (frailty phenotype and frailty index) and two multimorbidity measures (Charlson comorbidity index and a simply count of 40 long-term conditions (LTCs)). Outomes: mortality (all-cause, cardiovascular- and cancer-related mortality), Major Adverse Cardiovascular Event (MACE), hospitalization with hypoglycaemia or fall/fracture.

Results: Measure choice influenced the population identified: 42% of participants were identified as frail/multimorbid by at least one measure; only 2.2% were identified by all four measures. Both frailty and multimorbidity, by all measures, were prevalent throughout the age range studied. Each measure was associated with mortality, MACE, hypoglycaemia and falls. The absolute 5-year mortality risk was higher in older versus younger participants with a given level of frailty (e.g. 1.9%, and 9.9% in men aged 45 and 65, respectively, using frailty phenotype) or multimorbidity (e.g. 1.3%, and 7.8% in men with 4 LTCs aged 45 and 65, respectively). Using frailty phenotype, the relationship between higher HbA1c and mortality was stronger in frail compared with pre-frail or robust participants.

Conclusion: Assessment of frailty/multimorbidity should be embedded within routine management of middle-aged and older people with T2D. Method of identification as well as features such as age impact baseline risk and should influence clinical decisions (e.g. glycaemic control).

530. SP - Scientific Presentation - SP - Diab (Diabetes)
Platform Presentation

Interpretation of HbA1c values in geriatric patients with type 2 diabetes: large divergence between clinical practice guidelines

A Christiaens 1,2,3; B Boland 2,3,4; S Henrard 2,3

1. Fund for Scientific Research – FNRS (Brussels, Belgium); 2. Clinical Pharmacy Research Group, Louvain Drug Research Institute (LDRI), Université catholique de Louvain (Brussels, Belgium); 3. Institute of Health and Society (IRSS), Université catholique de Louvain (Brussels, Belgium); 4. Geriatric medicine unit, Cliniques universitaires Saint-Luc, Université catholique de Louvain (Brussels, Belgium)

INTRODUCTION. An individualised glycated haemoglobin (HbA1c) target according to the patients' health status is central in the glycaemic management of geriatric people with type 2 diabetes (T2D) in order to avoid hypoglycaemic events through an appropriate management of the glucose-lowering therapy (GLT). Current clinical practice guidelines (CPGs) provide different recommendations for patients' HbA1c targets. Using real-life data from geriatric patients, this study aimed at assessing the concordance in interpretation of HbA1c values according to three current major CPGs from the Diabetes Canada-2018 (DC18), the Endocrine Society-2019 (ES19) and the American Diabetes Association-2020 (ADA20).

METHODS. Retrospective study in consecutive older patients (≥75 years) with T2D admitted to a Belgian geriatric ward, with GLT before admission and HbA1c measurement during the hospital stay. Patients were classified into three categories of HbA1c values according to the CPGs recommendations: in-target HbA1c (appropriate-GLT), too-low HbA1c (GLT-overtreatment) and too-high HbA1c (GLT-undertreatment). Concordance of health status classifications and GLT categories between the three CPGs was assessed using Cohen's and Fleiss' κ, respectively.

RESULTS. Of the 318 patients (median age 84 years, 54% women), one-third were in intermediate health and two-thirds in poor health (κ=0.86; excellent concordance). According to the DC18, ES19 and ADA20 CPGs, HbA1c was in-target for respectively 46%, 25% and 82% of the patients, and too-low HbA1c (GLT-overtreatment) was present in 28%, 57% and 0% (κ=0.36; low concordance).

CONCLUSION. Patients' HbA1c values are interpreted differently according to these major CPGs, mainly because of differences in their recommendations about HbA1c target individualisation and specifically the definition of a too-low HbA1c value. In clinical practice, these diverging interpretations regarding overtreatment may lead to unsafe GLT prescribing and thereby to hypoglycaemic events in this high-risk population.

534. SP - Scientific Presentation - SP - Education / Training
Platform Presentation

Advanced Communication Skills: Teaching During a Pandemic

A Pedersen, M Greenhalgh, M Tan, R Terry, C Royle, K Royles

Royal Blackburn Hospital

Introduction In the first wave of the COVID-19 pandemic, it was recognised there would be an increased demand on clinicians to provide patients and relatives with bad news. The national ban on hospital visiting rapidly changed the way in which this news would be delivered. In recognition of these new challenges, our team sought to design a teaching course that could be implemented quickly and cost effectively, with the aim of improving clinician's confidence around these difficult skills.

Methods A teaching programme was created using senior geriatric and palliative care clinicians as simulated patients, open to any grade and speciality. Learners were required to break bad news (BBN) without any visual feedback, to simulate skills required when using the telephone. Surveys were collected to determine self–assessed confidence across four domains (Table 1) before, immediately after and 4-20 weeks after the course. Participants were asked to rank their confidence for each skill on a 5 point scale with 1 being very unsure and 5 being very confident.

Results Pre-teaching scores showed an average of 3 (neither confident nor unsure) across all domains. After the course all domains improved, most notably around discussing end of life (EoL) care and discussing information over the phone.

Table 1	Pre-Teaching	Post Teaching	Follow up (4-20 wks)	Change from Baseline (Pre-teaching)	
				Pre and Post	Pre and F/U
Discussing resuscitation and DNACPR	3.36	4.20	4.07	+0.84	+0.71
Discussing End of Life Care	3.13	4.14	3.97	+1.01	+0.84
Discussing resuscitation and DNACPR	3.20	4.14	3.7	+0.94	+0.50
Discussing clinical information over the phone	3.26	4.31	4.2	+1.05	+0.94

Conclusion This project has highlighted a lack of confidence across all skill levels when it comes to BBN. This confidence is easily improved by a short, cost-effective teaching course. It remains to be seen if this improved confidence translates to better communication with relatives.

536. SP - Scientific Presentation - SP - HSR (Health Service Research)
Platform Presentation

Negotiating Individually Tailored Urgent Care Plans for Older People in Ambulatory Emergency Care

Sara Mckelvie

University of Southampton; Oxford Health NHS Foundation Trust

Introduction: Ambulatory emergency care (AEC) provides hospital-equivalent medical care in out-of-hospital settings for acutely unwell complex older patients. This ethnography aimed to understand the cognitive work of the senior clinicians in the AEC environment.

Methods: Three AEC sites were purposively sampled to recruit twelve clinicians with backgrounds in Geriatrics, General Practice, Emergency and Acute Medicine. This qualitative investigation used focused ethnography within a case study approach to understand the decision-making processes in the context of the AEC environment. Participant-observation during an AEC shift was complemented by informant interviews. A framework approach to thematic analysis used a priori and data derived codes to develop explanatory themes. Ethnographic principles of constant comparison and cognitive task analysis were used to evaluate the clinicians' decision-making processes for index patient cases.

Results: This ethnographic case study showed that AEC clinicians tailored their management plans to the individual patient based on their clinical assessment and needs, using creative problem solving and reflexivity. The AEC clinicians personalised their interventions based on the patient assessment, the patients' wishes and disease severity. The individual tailoring of the AEC plan was negotiated with the patient, their next-of-kin and the multidisciplinary team (MDT). The discussions with patient and families allowed discussion of the differing priorities and facilitated compromise. AEC plans were also negotiated with the MDT to build a shared understanding of the patients' needs. The MDT also provided cognitive and emotional support by challenging and validating the senior decision-makers clinical plans.

Conclusion: This tailored approach allowed the flexible delivery of AEC to meet the patients' needs. It is hoped that by characterising the work of AEC clinician that this study will aid the development of medical training curricula, interdisciplinary working and health service design. Further research is needed on team-based decision-making for individually tailored care in urgent care settings.

548. SP - Scientific Presentation - SP - Big Data
Platform Presentation

Frailty analysis across populations: the use of the Hospital Frailty Risk Score in Specialised Services using NHS national data

Towhid Imam; Rob Konstant-Hambling; Richard Fluck;Nathan Hall; James Palmer; Simon Conroy

NHS England and Improvement, London,UK; University of Leicester, Leicester,UK

Introduction Frailty is increasingly used to risk stratify older people, but across specialised services there is no standardised approach. The aim of this study was to answer the question posed by NHS England to assess frailty could be measured and related to outcomes across Specialsed Services. The Hospital Frailty Risk Score (HFRS) was used and the data published in Age and Ageing in 2020.

Method A retrospective cohort study was performed using the Secondary Uses Service (SUS) electronic database for people aged 75 or older admitted between April 2017 and March 2018. Based on HFRS, the populations were risk stratified into mild, moderate and severe frailty risk. The relationships with length of stay, readmission rate, mortality and some selected condition specific treatment complications were quantified using descriptive statistics.

Results Frailty was differentially distributed across the specialties; around one-third had mild frailty; another third had moderate frailty and one-quarter severe frailty. Increasing frailty risk was associated with increased length of stay for the index admission, more days in hospital in the year following intervention and increased risk of dying in hospital. Severe frailty was a powerful discriminator of the risk of death; between 25 and 40% of those with severe frailty risk died at 30 months across all specialties.

Conclusions This study demonstrates the first application of the HFRS to a national dataset to describe service outcomes and mortality for older people undergoing a range of specialised interventions. This information was used to identify those that might benefit from holistic assessment, aid prognostication, commissioning and service planning. It informed the promotion of quality improvement work in this area via the Specialised Clinical Frailty Network. By implementing the HFRS, changes in outcomes can be plotted across years to assess improvements, performance and benchmarking.

PRESIDENT'S ROUND

426. SP - Scientific Presentation - SP - N & N (Neurology & Neuroscience)
President Round

Prevalence of, and risk factors for, dementia in adult outpatient referrals to a regional referral hospital in Arusha, Tanzania

Caitlin Roe; Ssenku Safic; Lawtiko Mwaipopo; Catherine Dotchin; Johanna Klaptocz; Keith Gray; Marcella Joseph; Richard Walker

Newcastle University; Mount Meru Hospital; Newcastle University and Northumbria Healthcare NHS Foundation Trust; Newcastle University; Northumbria Healthcare NHS Foundation Trust; Mount Meru Hospital; Newcastle University and Northumbria Healthcare NHS Foundation Trust

Introduction: The global burden of dementia is increasing, with the greatest increase predicted to occur in sub-Saharan Africa (SSA). Despite this there are limited previous data on the prevalence of, and risk factors for, dementia in SSA. This study aimed to estimate the prevalence of dementia, and investigate its associations, in those aged 60 years and older attending the outpatient department of Mount Meru Hospital in northern Tanzania. This is the first hospital-based outpatient dementia prevalence and risk factors study to be conducted in an east African population.

Methods: This was a one-phase cross-sectional study. Adults aged 60 years and over attending medical outpatients were screened for dementia using The Identification and Intervention for Dementia in Elderly Africans cognitive screening tool. Those who scored ≤9 were clinically assessed using the DSM-IV criteria. Demographic, medical comorbidity and lifestyle information were collected during a clinical assessment.

Results: Prevalence of dementia was 5.0% (95% confidence interval: 3.7-6.3). Binary logistic regression found female sex (odds ratio (OR)=2.778), having no formal education (OR=6.088), quantity of alcohol consumption (units/week) (OR=1.080), uncorrected visual impairment (OR=4.260), body mass index <18.5kg/m2 (OR=6.588) and stroke (OR=15.790 with wide 95% confidence interval (3.48-74.475)) to be significantly, independently associated with dementia.

Conclusions: The prevalence of dementia in this population is lower than previously reported community-based rates in Tanzania, and similar to those in high-income countries. This is the first time the association between uncorrected visual impairment and dementia has been reported in SSA. Other associations identified are in keeping with previous literature. Further research on the management of dementia and its risk factors, and the support and education of carers and patients in east African populations is required.

451. SP - Scientific Presentation - SP - BMR (Bone, Muscle, Rheumatology)
President Round

The best marker for cognition – relative handgrip strength, asymmetry or weakness?

V Ho; C Chen; R A Merchant

National University Hospital, Singapore; Saw Swee Hock School of Public Health, National University Singapore

Introduction Handgrip strength (HGS) is increasingly used to estimate overall muscle strength. Association between low HGS and cognitive decline has been well documented. Recently, McGrath's team elucidated a new dimension of HGS asymmetry with important implications on physical and cognitive limitations. It is unclear if these effects can be generalised. The Asian working group for sarcopenia (AWGS) has called for "special considerations" due to "anthropometric and cultural or lifestyle-related differences"6. Hence, we aim to investigate if HGS asymmetry is associated with cognition in Asians.

Methodology We defined sarcopenia by AWGS consensus: HGS <28 kg for men; <18 kg for women. Asymmetry was HGS >10% stronger on either hand; relative HGS was HGS adjusted for BMI. Low cognitive function was defined as MMSE<26. We compared weakness alone, any HGS asymmetry or relative HGS alone and combination of weakness and HGS asymmetry or relative HGS asymmetry. Each model was adjusted for demographic characteristics, hand dominance, obesity, frailty, physical activity, depression and perceived health status.

Results 738 Asian subjects participated. Mean age 70.8±0.2 years, 45.1% males, 82.5% Chinese. More than 50% have multimorbidity. 5.4% were frail. Mean BMI 24.4±0.1kg/m2. Mean HGS 22.6±0.3. 93 (12.7%) had symmetrical HGS and not weak, 59 (7.8%) asymmetrical and not weak, 321 (43.6%) symmetrical and weak, 265 (35.9%) asymmetrical and weak. Mean MMSE scores for weakness alone, asymmetry alone and combined weakness and asymmetry are 26.6±0.1, 26.8±0.2 and 26.5±0.2 respectively. HGS asymmetry alone was not associated with better cognitive function OR 0.66 (95%CI: 0.30-1.44). Combined asymmetry and weakness was non-significantly linked to worse cognition OR 2.14 (95%CI: 0.79-5.82). We found relative HGS to be protective for cognitive decline, OR 0.31 (95%CI: 0.12-0.78, p=0.012).

Conclusion Our study highlights the impact of ethnicity in sarcopenia research. Our population shows association of relative HGS with cognition. Further longitudinal studies are needed.

454. SP - Scientific Presentation - SP - Cardio (Cardiovascular)
President Round

Association between statins and major adverse cardiac events among older adults with frailty: A systematic review

Matthew Hale (1,2); Hadar Zaman(3); David Mehdizadeh(3,4); Oliver Todd(1); Harriet Callaghan(1,2); Chris P Gale(5,6,7); Andrew Clegg(1,2)

1. Academic Unit for Ageing and Stroke Research, University of Leeds, UK; 2. Bradford Teaching Hospitals NHS Foundation Trust; 3. School of Pharmacy and Medical Sciences, University of Bradford, UK; 4. NIHR Yorkshire and Humber Patient Safety Translational Research Centre (YHPSTRC); UK 5. Leeds Institute of Cardiovascular and Metabolic Medicine, University of Leeds; UK 6. Leeds Institute for Data Analytics, University of Leeds; UK 7. Department of Cardiology, Leeds Teaching Hospitals NHS Trust, UK

Background Statins reduce the risk of major adverse cardiovascular events (MACE), however, their clinical benefit for primary and secondary prevention among older adults with frailty is uncertain. This review investigates whether statins prescribed for primary and secondary prevention are associated with reduced MACE among adults aged ≥65 years with frailty.

Methods Systematic review of studies published between 01.01.1952 and 01.01.2019 in MEDLINE, Embase, Scopus, Web of Science, Cochrane Library and the International Pharmaceutical Abstracts. Studies that investigated the effect of statins on MACE among adults ≥65 years with a validated frailty assessment were included. Data were extracted from the papers as per a pre-published protocol, PROSPERO: CRD42019127486. Risk of bias was assessed using the Cochrane Risk of Bias in non-randomised studies of interventions.

Finding 18 794 abstracts were identified for screening. From these, six cohort studies fulfilled the inclusion criteria. There were no randomised clinical trials. Of studies involving statins for primary and secondary prevention (n=6), one found statins were associated with reduced mortality (hazard ratio (HR) 0.58, 95% confidence interval (CI) 0.37-0.93) and another found they were not (p=0.73). One study of statins used for secondary prevention found they were associated with reduced mortality (HR 0.28, 95%CI 0.21-0.39). No studies investigated the effect of statins for primary prevention or the effect of statins on the frequency of MACE.

Discussion This review summaries the existing available evidence for decision making for statin prescribing for older adults with frailty. This study identified only observational evidence that, among older people with frailty, statins are associated with reduced mortality when prescribed for secondary prevention, and an absence of evidence evaluating statin therapy for primary prevention. The findings of this study highlight that randomised trial data are urgently needed to better inform the use of statins among older adults living with frailty.

488. SP - Scientific Presentation - SP - Epid (epidemiology)
President Round

Grip strength from midlife as an indicator of later-life cognition and brain health: Evidence from a British birth cohort

Q Dercon1; J Nicholas2; S-N James3; J Schott4; M Richards3

1. MRC Cognition & Brain Sciences Unit, University of Cambridge; 2. Department of Medical Statistics, London School of Hygiene & Tropical Medicine; 3. MRC Unit for Lifelong Health & Ageing, University College London; 4. Dementia Research Centre, University College London

Introduction: Grip strength is an objective measure of physical function with potential predictive value for health in ageing populations. We aimed to assess whether levels and changes in grip strength from midlife predicted later-life brain health and cognition.

Methods: 446 participants in an ongoing British birth cohort study, the MRC National Survey of Health and Development (NSHD), had their maximum grip strength measured at ages 53, 60-64, and 69, and underwent neuroimaging as part of its neuroscience sub-study, Insight 46, at 69-71. A group-based trajectory model identified latent groups of individuals in the whole NSHD cohort with below- and above-average grip strength over time, plus a reference group. Trajectory group membership, plus standardised grip strength levels and change from age 53, were each related to MRI-derived measures of whole-brain volume (WBV) and white-matter hyperintensity volume (WMHV), plus several cognitive tests. Models were adjusted for sex, body size, head size (where appropriate), sociodemographics, and behavioural and vascular risk factors.

Results: Consistently below-average grip strength from midlife was associated with lower WBV and non-verbal reasoning ability at age 69-71 (e.g., low group WBV vs. reference group β=-13.38cm^3; 95% CI=(-24.12cm^3, -2.64cm^3); p=0.015). There was some accompanying evidence that above-average maximum grip strength showed a positive association with WBV, which was more pronounced in female participants (high group female WBV vs. reference group β=18.30cm^3; 95% CI=(1.34cm^3, 35.29cm^3); p=0.034). Steeper than average declines in grip strength between 53 and 69 were additionally weakly associated with an estimated 10% higher WMHV at age 69-71 (β=1.10, 95% CI=(1.00, 1.22); p=0.053).

Conclusion: This study provides preliminary evidence that tests of maximum grip strength may have value in predicting brain health. Future work should assess how these observed differences relate to later-life negative health outcomes, and whether changes in grip strength reflect concurrent changes in brain structure and connectivity.

495. SP - Scientific Presentation - SP - Education / Training
President Round

Conversations on living & dying: An intervention to increase cognitively-able, community-based frail elders' engagement with ACP

Combes S; Gillett K.; Norton C.; Nicholson C.J.

Florence Nightingale Faculty of Nursing, Midwifery and Palliative Care, King's College London.; St Christopher's Hospice, London.; Faculty of Health and Medical Sciences, Surrey University, Guildford.

Introduction: Advance care planning (ACP) can support person-centred end-of-life care by helping individuals articulate their end-of-life preferences. Frail elders' vulnerability to deterioration makes ACP engagement particularly relevant; however, their engagement with ACP is uncommon. This study aimed to develop an intervention to increase ACP engagement with cognitively-able, community-dwelling frail elders.

Methods: Multiple methods were used to establish ACP barriers and facilitators: a systematic integrative review, modified e-Delphi survey (multidisciplinary health and social care professionals (H&SCPs) n=73), and semi-structured interviews (frail elders n=10, family members n=8). A conceptual model, developed from the integrative review, underpinned data collection for the e-Delphi and interviews. Triangulation, including patient and public involvement, was then used to identify H&SCPs behaviours that needed to change and decide intervention content and implementation. The intervention was developed using behavioural change theory. Prototype refinement consisted of pre and post questionnaires, use of the intervention in practice, and focus groups (H&SCPs n=26).

Results: The prototype intervention consists of a 3.5-hour training and education session for H&SCPs, supported by a toolkit. The intervention focuses on the relevance and experience of ACP for frail elders and ACP strategies H&SCP can use to encourage frail elders' ACP engagement. Strategies include recognising the importance of decision-making in relationships and living well now, starting early, using an honest but gentle approach, and helping frail elders prepare for ACP conversations. Participants report that the intervention helps them think differently about ACP and encourages them to engage frail elders with ACP.

Conclusions: To our knowledge this is the first intervention underpinned by behaviour theory that focuses on supporting H&SCPs to engage community-dwelling, cognitively-able frail elders with ACP. Refinements, such as additions to the toolkit, have been suggested. However, H&SCPs appear to find the intervention acceptable, feasible, engaging, and useful in their practice.

496. SP - Scientific Presentation - SP - Other (Other medical condition)
President Round

Non-randomised feasibility study of the Rehabilitation Potential Assessment Tool (RePAT) in frail older people in acute setting

Cowley A 1; Goldberg SE 2; Gordon AL 3,4,5; Logan PA 3,5,6

1. Nottingham University Hospitals NHS Trust; 2. Faculty of Medicine and Health Sciences, University of Nottingham; 3. School of Medicine, University of Nottingham; 4. University Hospitals of Derby and Burton NHS Foundation Trust; 5. NIHR Applied Research Collaboration East Midlands (ARC-EM), Nottingham; 6. Nottingham CityCare Partnership CIC

Introduction: Clinicians are often required to decide about patients' potential to respond to rehabilitation. 'Rehabilitation potential' can determine what services patients can access. In acute hospitals clinicians have limited time to assess and deliver rehabilitation which takes into account the complexities of frailty and ageing. We set out to evaluate whether the Rehabilitation Potential Assessment Tool (RePAT) – a 15 item assessment tool and training package which emphasises person-centred approaches - was feasible and could aid rehabilitation decisions.

Method: A non-randomised feasibility study with nested semi-structured interviews, set in the acute hospital, explored whether RePAT was deliverable and acceptable to staff, patient and carers. A maximum variation sample of physiotherapists and occupational therapists was recruited. Patient and carer participants were recruited from Healthcare of Older People wards. Staff and patient characteristics were summarised using descriptive statistics. Interview data were analysed thematically. Fidelity of completed RePAT items was assessed on how closely they matched tool guidance by two reviewers. Mean values of the two scores were calculated.

Results: Six staff participants were recruited and trained, and assessed a total of 26 patient participants using RePAT. Mean patient age was 86.16 (±6.39) years. 32% were vulnerable or mildly frail, 42% moderately frail and 26% severely or very severely frail using the Clinical Frailty Scale. Mean time to complete RePAT was 32.7 (±9.6) minutes. 13 out of 15 RePAT items achieved fidelity. RePAT was acceptable and tolerated by staff and patients. Staff participants reported RePAT enabled them to consider the complex and dynamic nature of rehabilitation decisions in a more structured and consistent way.

Conclusion: RePAT was found to be acceptable and tolerated by staff, carers and patients. It allowed clinicians to make explicit their reasoning behind rehabilitation potential decision-making and encouraged them to become more cognisant of ethical dilemmas and biases.

500. SP - Scientific Presentation - SP - HSR (Health Service Research)
President Round

30-DAY SURVIVAL AND RECOVERY AFTER HIP FRACTURE BY MOBILISATION TIMING AND DEMENTIA: A UK DATABASE STUDY

Katie J. Sheehan; Aicha Goubar; Finbarr C. Martin; Chris Potter; Gareth D. Jones; Catherine Sackley; Salma Ayis ;

Department of Population Health Sciences, School of Population Health & Environmental Sciences, Faculty of Life Science and Medicine, King's College London, London, UK; Guy's and St. Thomas's National Health Service Foundation Trust, London, UK

Introduction: To compare 30-day survival and recovery of prefracture ambulation between patients mobilised early (on the day of or day after surgery) and patients mobilised late (2 days of more after surgery) in England and Wales. To determine whether the presence of dementia influences the association between mobilisation timing and 30-day survival and recovery.

Methods: Secondary analysis of the UK National Hip Fracture Database linked to hospitalisation records for 126,897 patients 60 years or older who underwent surgery for nonpathological first hip fracture in England or Wales between 2014 and 2016. We used logistic regression to regress survival and ambulation recovery at 30-days with respect to mobilisation timing, overall and by dementia, with adjustment for confounding using a propensity score for mobilisation treatment with respect to confounders.

Results: Overall, 99,667 (79%) patients mobilised early. Among those who mobilised early compared to those who mobilised late, the weighted odds ratio of survival was 1.92 (95% CI 1.80–2.05), of recovering outdoor ambulation was 1.25 (95% CI 1.03 – 1.51), and of recovering indoor ambulation was 1.53 (95% CI 1.32 – 1.78) by 30 days. Early compared with late mobilisation led to a 3.8% increase in the weighted probability of survival, 22.8% increase in weighted probability of recovering outdoor ambulation and 10.0% increase in the weighted probability of recovering indoor ambulation, by 30-days. Patients with dementia were less likely to mobilise early but increases in survival and ambulation recovery were observed both for those with and without dementia.

Conclusion: Early mobilisation led to increase probability of survival and recovery for patients (with and without dementia) after hip fracture. Early mobilisation should be incorporated as a measured indicator of quality internationally. Reasons for failure to mobilise early should also be captured to inform quality improvement initiatives.

501. SP - Scientific Presentation - SP - HSR (Health Service Research)
President Round

DISCHARGE AFTER HIP FRACTURE SURGERY IN RELATION TO MOBILISATION TIMING BY PATIENT CHARACTERISTICS: A NATIONAL DATABASE STUDY

Katie J. Sheehan; Aicha Goubar; Finbarr C. Martin; Chris Potter; Gareth D. Jones; Catherine Sackley; Salma Ayis;

Department of Population Health Sciences, School of Population Health & Environmental Sciences, Faculty of Life Science and Medicine, King's College London, London, UK; Guy's and St. Thomas's National Health Service Foundation Trust, London, UK

Introduction: Early mobilisation leads to a two-fold increase in the odds of discharge by 30-days compared to late mobilisation. Whether this association varies by identified reasons for delayed mobilisation is unknown.

Methods: Audit data linked to hospitalisation records for patients 60 years or older surgically treated for hip fracture in England/Wales 2014 - 2016. Adjusted proportional odds regression models tested whether the cumulative incidences of discharge differed for early compared with late mobilisation across subgroups defined by dementia, delirium, hypotension, prefracture ambulation and residence, accounting for competing risk of death.

Results: Overall, 34,253 patients presented with dementia, 9,818 with delirium, and 10,123 with hypotension. Prefracture, 100,983 were ambulant outdoors, 30,834 were ambulant indoors only, 107,144 were admitted from home, and 23,588 from residential care. 10%, 8%, 8%, 12%, and 12% fewer patients with dementia, delirium, hypotension, ambulant indoors only prefracture, or from residential care mobilised early compared to those without dementia, delirium, hypotension, with outdoor ambulation prefracture, or from home. Adjusted odds ratios of discharge by 30-days for early compared with late mobilisation were 1.71 (95% CI 1.62-1.81) for those with dementia, 2.06 (95% CI 1.98-2.15) without dementia, 1.56 (95% CI 1.41-1.73) with delirium, 2.00 (95% CI 1.93-2.07) without delirium, 1.83 (95% CI, 1.66-2.02) with hypotension, 1.95 (95% CI, 1.89-2.02) without hypotension, 2.00 (95% CI 1.92-2.08) with outdoor ambulation prefracture, 1.80 (95% CI 1.70-1.91) with indoor ambulation only prefracture, 2.30 (95% CI 2.19-2.41) from home, and 1.64 (95% CI 1.51-1.77) from residential care.

Conclusion: Irrespective of dementia, delirium, hypotension, prefracture ambulation or residence, early compared to late mobilisation increased the likelihood of discharge by 30-days. Fewer patients with these conditions, poorer prefracture ambulation, or from residential care mobilised early. There is a need reduce this care gap by ensuring sufficient resource to enable all patients to benefit from early mobilisation.

509.SP – Scientific Presentation – SP – Pharm (Pharmacology)
President Round

Potentially Inappropriate Medication Use and Mortality in Patients with Cognitive Impairment

Buckley E; Jonsson A; Flood Z; Lavelle M; O'Sullivan N; Nurdin N; Dowling P; Duggan E; McCreevey C; Duggan J; Kyne L; McCabe JJ

Mater Misericordiae University Hospital, Dublin

Introduction Potentially inappropriate medications (PIMs) are associated with falls, hospitalisation, and cognitive decline. Few studies have investigated the association between PIMs related to cognitive impairment (PIMCog) and mortality in dementia or mild cognitive impairment (MCI).

Methods: This was a retrospective observational study. Patients diagnosed with MCI or dementia (DSM-IV criteria) presenting to a tertiary-referral memory clinic from 2013-2019 were eligible. The primary outcome was all-cause death. Secondary outcomes were vascular death and non-vascular death defined according to formal certification. The primary exposure variable of interest was PIMCog, defined as any medication in the Beers 2015 or STOPP criteria, classified as potentially inappropriate for patients with cognitive impairment. Anticholinergic burden was measured using the anticholinergic cognitive burden (ACB) scale. Polypharmacy was defined as ≥5 medications. Cox proportional hazard models were used to calculate hazard ratios (HRs) and 95% confidence intervals (95% CIs).

Results: There were 418 patients included (n=261 dementia, n=157 MCI). The median age was 79 (interquartile range {IQR} 74-82) and median follow-up was 809 days (IQR 552-1571). One or more PIMCog was prescribed in 141 patients (33.4%). PIMCog use was associated with all-cause mortality after adjustment for age, sex, dementia severity, Charlson Co-morbidity Index, chronic obstructive pulmonary disease, congestive cardiac failure, and peripheral vascular disease. (HR 1.96, 95% CI 1.24-3.09). PIMCog use was associated with vascular death (HR 3.28, 95% CI 1.51-7.11) but not with non-vascular death (HR 1.40 95% CI: 0.78-2.52). Neither an ACB ≥3 (HR 0.87, 95% CI: 0.46-1.64) or polypharmacy (HR 1.87, 95% CI: 0.67-5.24) were associated with death.

Conclusion The burden of PIMCog use in patients with cognitive impairment is high. PIMCog use is independently associated with all-cause mortality and vascular death. This is a potential modifiable risk factor for death in patients with neurocognitive disorders. Further research is required to independently validate this finding.

514. SP - Scientific Presentation - SP - BMR (Bone, Muscle, Rheumatology)
President Round

Frailty in osteoarthritis and the influence of co-morbidity

Michael J Cook; Suzanne M M Verstappen; Mark Lunt; Terence W O'Neill

Centre for Epidemiology Versus Arthritis, University of Manchester; Centre for Epidemiology Versus Arthritis, University of Manchester; Centre for Epidemiology Versus Arthritis, University of Manchester; Centre for Epidemiology Versus Arthritis, University of Manchester and NIHR Manchester Biomedical Research Centre, Manchester University NHS Foundation Trust

Introduction: Risk factors for frailty, including low physical activity and chronic pain, are common among people with osteoarthritis. The aim of this analysis was to determine the association between osteoarthritis and frailty and to determine whether comorbidities interact additively with OA to increase the likelihood of frailty.

Methods: Men and women aged 40-69 years who contributed to the UK Biobank were analysed. Data about self-reported physician-diagnosed diseases was collected, as well physical measurements, including hand-grip strength. Frailty (robust, pre-frail, frail) was assessed using a modified frailty phenotype, comprising five components: low grip strength, slow walking speed, weight loss, low physical activity, and exhaustion. The association between osteoarthritis and the frailty phenotype was determined using negative binomial regression, adjusting for age, sex, body mass index, smoking status, and Townsend deprivation score. We calculated the attributable proportion of risk of frailty due to additive interaction between osteoarthritis and common co-morbidities (cardiovascular disease, diabetes, COPD, and depression).

Results: 457,561 people were included, 35,884 (7.8%) had osteoarthritis. The adjusted relative risk ratio (95% CI) for pre-frailty and frailty (versus robust), respectively was higher among people with (versus without) osteoarthritis: 1.58 (1.54, 1.62) and 3.41 (3.26, 3.56). There was significant additive interaction between the presence of osteoarthritis and each of the co-morbidities considered in increasing risk of frailty, particularly diabetes (attributable proportion of risk due to additive interaction with osteoarthritis (95% CI)), 0.49 (0.42, 0.55), coronary heart disease 0.48 (0.41, 0.55), and depression 0.47 (0.41, 0.53).

Conclusions: Our results suggest that people with OA are at increased risk of pre-frailty and frailty. The mechanisms are not fully understood, though co-morbidity appears to contribute to the risk of frailty beyond the expected additivity of risk due to OA and co-morbidity. Early diagnosis and optimal management of co-morbidities in people with OA may be beneficial.

POSTERS: CLINICAL QUALITY

411. CQ - Clinical Quality - CQ - Clinical Effectiveness
Poster

Efficacy of CDSS in improving Anti-resorptive Bone Protective Therapy amongst OrthoGeriatric Inpatients: A comparison study

Bhandary L; Mohd Asri NA; Taylor A; Muslim A; Hickey P; Lenihan B; Condon F; Ryan J

The University Hospital Limerick

Background: Hip fractures have a mortality rate of 20% in the year following the fracture. Therefore, patients presenting with hip fractures should be assessed and prescribed anti-resorptive bone protective therapy (ABPT) to reduce the risk of further fractures. In our institution, this decision is undertaken by a specialist only. Purpose: The objective of this study is to compare the proportion of patients commenced on ABPT by surgical interns following the introduction of a Clinical Decision Support System (CDSS) in January 2020 to support appropriate ABPT prescribing amongst non-specialists.

Methods: The study compares the orthogeriatric patient cohort before and after CDSS introduction within the same time period (Jan 1st to June 30th) in 2019 and 2020. Data were extracted from the Irish Hip Fracture Database and statistically analyzed using SPSS. The Mann-Whitney two-tailed test was employed to calculate statistical significance.

Results: In 2019, 31% (55/178) of patients admitted during the study period (n=178) did not receive orthogeriatric specialist input and only 27% (15/55) of these had ABPT prescribed during their admission. In 2020, 17% (32/185) of patients admitted during the study period (n=185) did not receive specialist input; however, 44% (14/32) of these were commenced on ABPT. Overall, more patients were prescribed ABPT in 2020 (78%;146/185), as compared to 55% (98/178) in 2019 (z-score 6.57069; p-value < 0.01). The number of patients awaiting specialist outpatient appointments before being prescribed ABPT also dropped from 40% (71/178) in 2019 to 13% (24/185) in 2020 (p-value < 0.01).

Conclusion: This study highlighted the significance of a CDSS to improve inpatient ABPT prescribing by non-specialists and to reduce outpatient specialist appointments. This could have a major impact on the long-term reduction of mortality rates amongst orthogeriatric patients and the reduction of future healthcare costs.

435. CQ - Clinical Quality - CQ - Clinical Effectiveness
Poster

The Impact of Comprehensive Geriatric Assessment in the Outcomes of Older Acute Neurosurgical Patients

Soutter L; Sivapathasuntharam D, Uff C; Yordanov S

Department of Geriatrics, Royal London Hospital, Barts Health NHS Trust; Department of Geriatrics, Royal London Hospital, Barts Health NHS Trust; Department of Neurosurgery, Royal London Hospital, Barts Health NHS Trust; Department of Neurosurgery, Royal London Hospital, Barts Health NHS Trust

Introduction: As the population ages, an increasing proportion of the neurosurgical caseload is comprised of older patients. This trend is reinforced by technical advances and anaesthetic considerations within the field, allowing a higher proportion of patients eligible for surgery. Comprehensive geriatric assessment (CGA) is the gold standard clinical approach for evaluating older patients. Peri-operative care of older people (POPS) has provided strong evidence that CGA services can result in fewer post-operative complications. However, this evidence stems largely from trauma and orthopaedic surgery. Currently, there is little evidence of the impact CGA has on older neurosurgical patients. The study aimed to investigate whether CGA for older neurosurgical patients improved outcomes such as thirty-day mortality and length of stay.

Methods: A control group was established by collecting retrospective data for all acute neurosurgical patients over the age of 65. This was then compared with an intervention group who received CGA in the form of regular geriatric consultant reviews. 49 patients were recruited into each group.

Results: Analysis showed that the interventional group had a significantly higher mean age and level of frailty. They also had more confirmed complications with a significant difference in the diagnosis of pneumonia ($p=0.05$) and hyponatremia ($p=0.015$). Despite this, the thirty-day mortality was lower and average length of stay was on average two days shorter compared to the control group, although this did not reach statistical significance ($p=0.701$). The study showed that more patients who received a CGA were discharged home ($p=0.209$).

Conclusion: Our findings suggest that CGA input for older neurosurgical patients improves outcomes and should be incorporated routinely into neurosurgical clinical pathways.

460. CQ - Clinical Quality - CQ - Patient Centredness
Poster

The Impact of the Bone MDT: exploring changes in bone protection decisions between 2015 and 2018

Brooks S; Harper A; Pack L; Wheatley T

Princess Royal Hospital, Haywards Heath

Introduction: The Hip fracture Multidisciplinary metabolic bone Team (MDT) was developed in June 2016 as a collaboration between Orthogeriatricians and the Metabolic Bone Team. The objective was to improve the quality of bone protection treatment decisions. This audit aimed to assess the impact of the new MDT by reviewing treatment decisions prior to and post its introduction. Data collection and

Methodology: Case notes were reviewed for admissions from September to October 2015 and from September to November 2018. For both time periods the inpatient list, discharge summary and blood tests were reviewed in order to collect data regarding demographics, type of surgery, co-morbidities, calcium and vitamin D levels, bone protection prior to admission and bone protection decisions at discharge.

Results: In 2015, 83% of patients were admitted with no form of bone protection. Around 6% of patients were admitted on a bisphosphonate and 36% were discharged on a bisphosphonate. Less than 2% of people received denosumab prior to their admission, with this number rising to 9.4% at discharge. In 2018, 77% of patients were admitted on no form of bone protection. 5.4% were admitted on a bisphosphonate rising to 16% on discharge. No patients were admitted on denosumab, but 27% were discharged having received it in hospital, or with a plan to receive it from their GP.

Conclusions: There was a fall in bisphosphonate use and a significant increase in the frequency of denosumab prescription after the introduction of the Bone MDT. This MDT facilitated better decision-making through access to the further specialist skills from the endocrinologist and specialist nurses. Individual case discussion enhanced the delivery of personalised medicine.

463. CQ - Clinical Quality - CQ - Clinical Effectiveness
Poster

The Use of Ferinject to Manage Iron Deficiency Anaemia in Patients with Neck of Femur Fractures

Meakin O; Adejumo S

Wrightington, Wigan and Leigh Foundation Trust

Introduction: Iron-deficiency anaemia is a condition that is regularly seen in patients admitted with neck of femur fractures (NOFF) and is associated with increased morbidity peri-operatively. Intravenous ferinject is a method of iron replacement that leads to a more rapid increase in haemoglobin than oral replacement, therefore is often more favourable in this patient group, leading to better patient outcomes.

Method: A quality improvement project was undertaken. An initial audit was conducted to analyse the demographic of patients with NOFF and to assess the current practice of the orthogeriatric team when managing iron deficiency anaemia. This reviewed NOFF patients admitted in July 2017. The indications and benefits of ferinject were distributed to the medical team, encouraging use clinically, and a further audit was performed 2 years later to compare outcomes and practice, reviewing patients with NOFF admitted July-September 2019.

Results: It was found that 87% of patients with NOFF are iron-deficient on admission, and that introducing the use of ferinject meant that 50% fewer blood transfusions were required. Additionally, it highlighted that those who received ferinject during their admission had a smaller range of discharge haemoglobin levels than those who did not. Finally, it was found that the use of ferinject did not affect the rates of readmission in the assessed patient cohort.

Conclusions: The introduction of the use of ferinject in NOFF patients with iron-deficiency anaemia leads to a reduction in the requirement of blood transfusions required and to a reduction of the range of discharge haemoglobin levels. Ferinject therefore aids in improved recovery of NOFF patients. It does not, however, appear to have any effect on readmission rates in this patient group. Further education is required amongst the orthogeriatric team about the indications and benefits of ferinject to ensure that all
eligible patient receive ferinject, improving their recovery.

464. CQ - Clinical Quality - CQ - Patient Centredness
Poster

Escalation During COVID-19

Magee M

Craigavon Area Hospital, Southern Health and Social Care Trust

Introduction: During the first surge of COVID-19 it was well recognised that early identification of a plan for escalation in the event of deterioration for each patient was vital. If no decision is documented it results in junior staff frequently making decisions regarding escalation in the out of hours period. This leads to patients, or family members, having these conversations with a doctor they may never have met before. My aim was to improve the documentation of escalation plans in all patients within the first 24hrs of admission.

Method: Baseline data was collected in September 2019 with further samples in April 2020 and August 2020. Patient medical notes were reviewed to identify if an escalation plan had been made during the period from admission to post take ward round. A COVID admission pathway document was introduced with a specific section on Clinical Frailty Score and Escalation plan between the baseline and April 2020 data.

Results: Baseline data showed that only 12.8% of medical patients had a documented escalation plan within the first 24hrs of admission to hospital. During the first surge in April 2020 this number had improved to 47% following introduction of the COVID-19 admission pathway. This included 100% of patients admitted to respiratory wards. Unfortunately when reassessed in August 2020, this number had fallen to 16%.

Conclusion: Introduction of clinical frailty scoring and an area specifically to document escalation discussions resulted in a marked improvement. Heightened awareness of rapid deterioration of patients during the first surge almost certainly played a role in this. Unfortunately this was not sustained once staff discontinued the use of COVID-19 admission document. Moving forward we will incorporate these sections into the medical and surgical admissions pathways in the hope it produces similar results.

467. CQ - Clinical Quality - CQ - Patient Safety
Poster

Frailty In Situ Simulation

Dunnell L1, Chu K1, Barnard A1, Walker G1

1. Older Persons' Unit, Guy's and St Thomas' NHS Foundation Trust

Introduction: The ability to recognise and manage frailty and its associated presentations is variable among acute hospital staff. Patients living with frailty who are admitted to hospital are more likely to suffer adverse effects than those without. We created an inter-professional in-situ simulation programme designed to improve recognition and management of frailty and its common adverse events. The programme objectives align with recommendations from the British Geriatric Society's "Frailty Hub" and Royal College of Physicians' "Acute Care Toolkit" for frailty.

Method: Over a two month period, seven sessions were completed on the Older Persons Unit (OPU) at St Thomas' Hospital. These comprised a simulated scenario followed by facilitated debrief - including technical skills and human factors highlighted by the scenario. Quantitative data was collected through pre and post session questionnaires using the Human Factors Skills for Healthcare Instrument (HuFSHI) and frailty based questions. Post session qualitative data was also collected.

Results: 30 participants attended the sessions (nursing, medical and allied health professional). All participants completing the post course questionnaire found the sessions useful. When comparing pre and post session data, participant confidence in 10/12 sections of the HuFSHI and 8/9 frailty based questions demonstrated improvement. The qualitative data showed common learning themes around improved communication, teamwork and escalation. Participants found that the sessions were a valuable "opportunity to reflect" and "debrief", and learn together as a multidisciplinary team.

Conclusion: In-situ simulation is an effective tool for improving knowledge and confidence in managing frail patients. It increases awareness and understanding of human factors, which are key to the multidisciplinary approach frail patients require. The course is being expanded across the OPU and now has funding for a departmental manikin. The programme can be disseminated to other units to help improve the care and safety of those with frailty in hospital.

468. CQ - Clinical Quality - CQ - Clinical Effectiveness
Poster

Improving Advance Care Planning skills in Junior Doctors

Cohen S; Singh R; Khalid N; Young J; Aldiwani M; Roy D; Edwards I

Kettering General Hospital

Introduction: Junior doctors are increasingly encountering Advance Care Planning (ACP) when they look after frail, older or multi-morbid patients during their hospital rotations. However, there remains a lack of formal training and resources, particularly with DNACPR discussions and when engaging patients and their loved ones with Emergency Health Care Planning (EHCP). We aimed to assess the need for ACP, improve the infrastructure by which ACP is delivered, and better support junior doctors to have these difficult conversations.

Method: Discharges from the Geriatrics Department at Kettering General Hospital were reviewed initially in May 2019 and again in January 2020 following intervention. We introduced a focused communication skills training session delivered at departmental teaching, which included a combination of simulation training and lectures. We additionally designed and implemented an EHCP template to aid junior doctors' discussions. This could also be copied to the discharge letter, to facilitate safe transfer of care to primary care.

Results: In May 2019 of 32 patients, 100% met at least one SPICTTM criterion, with median of 4 criteria, thus indicating a high need for ACP in this cohort. Despite this, only one discharge letter included an EHCP and two had a request for GP colleagues to complete one. Evaluation of discharges again in January of 2020 reconfirmed a similar need for ACP, but following our interventions, the number of EHCP's performed had increased. Of 22 identified patients 4 had a completed EHCP and 3 were requested for completion by their GP. Qualitative questionnaires demonstrated an improvement in both knowledge and confidence amongst junior doctors following the training session.

Conclusion: We have shown that there is a necessity for ACP to be considered for Geriatrics inpatients, and that providing structure and training in this challenging area offers benefit to both patients and junior doctors.

472. CQ - Clinical Quality - CQ - Patient Centredness
Poster

A pilot Colorectal and Geriatric Medicine (CGM) clinic for older, frail patients referred via a 2 week wait pathway

Michael Thomas; Katrina Cookson; Robert Clark; Lyndsay Pearce; Jenny Fox; Angeline Price

Department of Colorectal Surgery; Department of Colorectal Surgery; Department of Colorectal Surgery; Department of Colorectal Surgery; Department of Ageing and Complex Medicine; Department of Ageing and Complex Medicine; Salford Royal Foundation NHS Trust

Introduction: The two week wait (2ww) colorectal referral pathway was introduced to expedite referrals where cancer is suspected, facilitating prompt diagnosis +/- intervention. Older frail patients are referred via this 2ww pathway even when invasive testing and intervention may not be appropriate. These patients may benefit more from holistic assessment than a universally surgical approach. A Colorectal and Geriatric Medicine (CGM) 2ww referral clinic was piloted, delivered by an urgent referral colorectal specialist nurse and an advanced clinical practitioner in geriatric medicine.

Method: Patients > 65 years with a Clinical Frailty Scale (CFS) score of 5 or more at referral were directed to the CGM clinic. A telephone consultation was undertaken, incorporating both 2ww assessment and aspects of comprehensive geriatric assessment.

Results: 42-patients were reviewed in the clinic. Mean age was 86.1 years and mean CFS 6. 12-patients underwent CT, and 2 CT virtual colonoscopy. No patients underwent endoscopic investigation and 28-patients declined any investigation. Of those who underwent investigation, no cancers were identified. 1 patient was referred on for endosocpic mucosal resection of polyps. 5-patients had severe diverticular disease, which accounted for their symptoms. Medication recommendations were made for 30-patients, some of which led to symptom cessation. Onward referrals were made to a community geriatrician, diabetes and continence teams, and palliative care specialists. 9-patients were identified as meeting criteria for advance care planning. This was commenced during the consultation and communicated back to the referring clinician for further action.

Conclusion: Older, frail patients are often not able, nor wish to undergo, invasive investigations but should not be disadvantaged or delayed in their pathway. Further work is needed to determine the most appropriate referral pathway for this group of patients. Holistic assessment that leads to improvement in symptoms and future planning may not be achievable through a solely surgical assessment.

475. CQ - Clinical Quality - CQ - Improved Access to Service
Poster

Developing a Virtual Care Home Support Forum During the COVID-19 Pandemic

L Ferrigan1, R Hartley1, E Hadley1, L Steward2, S Ngwenya2, J Harmer2 3, A Robinson2, S Cosmos3, I Wilkinson1, P Tucker1, A Flores1, R Baker1.

1. Surrey and Sussex Healthcare NHS Trust; 2. Integrated Response Team Sussex Community Foundation Trust; 3. First Community Health and Care CIC, East Surrey

Introduction: COVID-19 has had a devastating effect on care homes, increasing both morbidity and mortality of residents and staff. Between 2 March and 12 June 2020, COVID-19 was the main cause of death in male care home residents(33.5%) and second for female(26.6%).1 By 1 May 2020, the death rate from all causes in care homes exceeded that in hospital(6409 versus 6397).2 Thus, care homes had to rapidly adapt to facilitate safe care of patients and staff.

Method: An expert outreach team visited a number of care homes in Surrey and Sussex to explore COVID-19 issues in care homes. Key themes were identified that informed topics for the Virtual Care Home Forum, where a series of virtual teaching, training and peer support sessions were hosted either live or on-demand, accessible for all care home staff.

Results: 12 sessions were held with an average attendance of 25 people, predominantly care home managers and community healthcare professionals. Real time qualitative feedback was collected and an electronic survey was completed at the end of the series which showed 100% felt the sessions had improved their understanding of the topic, 100% felt the knowledge and skills obtained from the sessions would be useful in their job, 87.5% agreed the sessions would impact or change their practise and 100% felt more supported during the pandemic.

Conclusion: It has been an unprecedented year for the NHS, and the care home sector has suffered significantly. In order to provide the best level of care for patients and support for our community colleagues, we must work collaboratively, including provision of education and training. To ensure equal access for all, maintaining user-safety and compliance with government legislation, virtual webinars proved to be an excellent modality. We plan to continue providing training, teaching and support through this means in the future.

480. CQ - Clinical Quality - CQ - Clinical Effectiveness
Poster

Information Overkill: if the walls across hospitals wards could talk...

Pramudi Wijayasiri; Htet Phyo Than; Mohsin Munir; Opinder Sahota

Nottingham University Hospitals

Background: The walls across hospital wards are cluttered with posters, which, in some places, are peeling and staining with the years. Hospital management and well intention ward users dictate these displays, however their effectiveness in delivering essential information is rarely measured. We undertook a survey to establish: a) Whether posters are effective, b) What information ward users want, c) How they want information to be delivered.

Methods: 100 participants (68 staff and 32 patients' relatives) were surveyed across three 28 bedded wards for older people. They had to recall as many posters as possible then identify useful posters from a current list. They were asked about unmet information needs, other media that they would utilise and alternative uses for ward walls. Interventions were made on one ward based on initial findings: 1. An 'Information for Relatives' board was created, 2. A mural was installed. 20 relatives were asked to complete an anonymous form reviewing the board.

Results: Only 23% of participants were able to recall at least 3 posters. 34% could not find a single useful topic among the current posters. The most popular unmet information needs, among many, were 'the discharge pathway', 'delirium' and 'falls'. Most participants said they would engage with alternative information media, suggesting leaflets, email and websites. A quarter felt walls should be for artwork, not posters. The 'Information for Relatives' board was well received. In the second survey, new unmet information needs were uncovered and, despite the new mural, 45% called for more paintings still.

Conclusions: Most people do not read the information on the walls on hospital wards. An appetite exists for alternative media. Paintings were earnestly called for at every point; a comforting ward environment should be part of the holistic care we aim to offer, especially for older patients.

487. CQ - Clinical Quality - CQ - Efficiency and Value for Money
Poster

Nottingham (N-ICE) Cream-A more nutritious, palatable and preferred high protein, vitamin D fortified vanilla ice cream-A step too far?

Arunpreet Sahota;Jack Wallman;Richard Worrall; Opinder Sahota

University of Leicester; University of Nottingham; Nottingham University Hospitals NHS Trust

Introduction: Oral Nutritional Supplement (ONS) drinks are commonly used to support nutritional intake in older people, however these are poorly consumed and frequently wasted. Fortified ice-cream offers a more acceptable ONS.

Methods: In collaboration with the University of Nottingham, Department of Food Sciences, we developed a high protein, vanilla ice cream (20g/120mL serving), fortified with vitamin D (400IU)-Nottingham Ice (N-ICE) Cream. An anonymised Google consumer survey was untaken amongst older patients from the Nottingham Osteoporosis Patient Support group. We evaluated (on a rating scale of 1-10): Taste (1 unpleasant to 10 tasty), Mouthfeel (1 grainy to 10 smooth), Smell (1 unpleasant to 10 enticing), Appearance (1 off-putting to 10 inviting) and Colour (1 dull to 10 appealing) of the N-ICE Cream. Further comparison was made with an over-the-counter ONS drink Amyes Complete™ (similar in energy and protein content to N-ICE Cream).

Results: 32 participants completed the consumer survey. The mean (SD) age of the patients was 79.1 (4.5) yrs. The mean (SD) score out of 10 for Taste was 8.95 (1.02), Mouthfeel 9.14 (0.98), Smell 8.86 (1.06), Appearance 8.95 (1.12) and Colour 9.10 (1.14). Overall acceptability was 8.92 (1.18). 64% of the participants were able to consume all of the 120mL tub, 22% ¾, 10% ½ and the remaining only ¼ (4%). 30/32 participants preferred the Taste, 29/32 Mouthfeel and 28/32 the Smell of N-ICE Cream, when compared to the ONS drink, and overall if given a choice, 30/32 (94%) of the participants preferred N-ICE Cream over the Amyes Complete™ ONS drink.The retail cost of Amyes Complete was £2.50 and 28/32 of the participants said they would be willing to pay the same amount for N-ICE Cream.

Conclusion: N-ICE Cream is highly acceptable, nutritious and preferred by the consumer group evaluated when compared to an ONS Amyes Complete™ drink.

508. CQ - Clinical Quality - CQ - Patient Safety
Poster

Improving patient safety by reducing the incidence of missed medications in elective surgical patients.

Dr Anna Halstead; Dr George Williams

Poole General Hospital

Introduction: Following a number of patient safety incidents within elective surgical admissions we sought to improve prescribing practices in elective admissions and take steps to improve similar errors recurring in the future. We found these errors particularly affected frail patients with multiple medications and patients with Parkinson's disease.

Method: We formed a team of interested junior doctors. By looking at patient pathways we targeted specific areas vulnerable to error. Patients and their drug histories are scrutinised by nurses, doctors and theatre staff during their admission. We highlighted areas where small but important changes could be made. Changes were then made using iterative PDSA cycles. Firstly, the admission proforma had no column for dose or frequency in the drug history, so this was added. Secondly, we instructed the admitting team to prescribe all required medications at the patients' pre-operative assessment. Thirdly, various prompts were provided to the on-call junior surgical team to provide assurance that all medications for elective patients had been prescribed. A two week time period was chosen to calculate the number of patients who had missed a dose of medication due to lack of prescribing. Effect, ease and sustainability in real world practice were carefully tested by individual teams.

Results: We found that missed doses could be reduced significantly from a 9% error rate to <1%. The most effective intervention resulted from changes to the proforma. Though all interventions were deemed to be effective, only two were considered maintainable in real world practice. These changes have been implemented.

Conclusions: Several processes in the healthcare system are set in stone, as they have been used for years, if not decades. However, we proved that simple changes in operating procedures can make a huge difference to patient safety, health and outcome.

520. CQ - Clinical Quality - CQ - Patient Centredness
Poster

An evaluation of virtual music therapy to patients on an acute Health Care of Older People ward during the COVID-19 pandemic

Jo McAulay; Marc Block; Vicky Booth; Alison Cowley

Nottingham University Hospitals (NUH) NHS Trust; Wellspring Music CIC; NUH NHS Trust/Nottingham University; NUH NHS Trust

Introduction Music therapy has been shown to reduce anxiety and social isolation for elderly patients in the acute hospital setting. At Nottingham University Hospital NHS Trust a programme of live, face-to-face music has been delivered by Wellspring Music on Healthcare of Older Peoples wards since 2015. In response to COVID-19, face-to-face delivery was stopped and a virtual method was proposed. This project investigated feasibility of virtual live music delivery.

Method Twelve, two-hour music therapy sessions were delivered by Wellspring Music to 41 patients over six weeks. The validated Arts-obs tool was used by staff members facilitating the sessions to record observations of patient mood, relaxation, and distraction from the ward setting on Likert scales. Patient, ward staff, and facilitator feedback were also recorded. Qualitative and quantitative analyses were conducted by an Occupational Therapist.

Results Data from the Arts-obs tool showed that thirty-two patients had an observable improvement in mood, seven had no mood change, and two presented a slightly worsened mood. Fourteen patients were fully engaged with the music therapy, sixteen were partially engaged, and eleven were focussed on the hospital environment. Thirty-four patients were visibly more relaxed, and seven showed no change. Patient feedback ranged from gratitude and expressions of enjoyment of the session to finding it too loud. Ward staff feedback ranged from appreciation to finding the music too distracting. The Wellspring musician and staff facilitators reported occasional loss of internet connection, and patients sometimes focusing on the facilitator rather than the musician.

Conclusion It is feasible to deliver virtual music therapy to inpatients on Health Care of Older People wards. Feedback shows that this was largely acceptable to staff and patients. Improvements in mood, relaxation and distraction were found.

524. CQ - Clinical Quality - CQ - Patient Centredness
Poster

Quality Improvement Project: Incorporating Comprehensive Geriatric Assessment into Community Hospital Clerking

Anastasia Oates

Amersham Hospital

Elderly patients transferred to community hospitals often have complex medical, social, psychological, functional and pharmacological backgrounds that require careful assessment in order to create and deliver a high quality, patient-centred care plan. Unfortunately, time pressures experienced by staff in acute hospitals can make Comprehensive Geriatric Assessment (CGA) unfeasible for every patient. Moreover, junior members of the medical team may be unsure as to which aspects of a patient's background and presentation constitute important elements of a CGA. Failure to recognise and document pertinent issues can lead to prolonged admissions, disjointed care and failed discharges.

Admission to a community hospital presents a convenient 'checkpoint' in the patient's hospital journey at which to undertake a CGA. Recording the relevant information in an effective clerking proforma when the patient is admitted ensures that this information is displayed clearly and in a way that is accessible to all members of the multidisciplinary team. The pre-existing clerking proforma at Amersham Community Hospital omitted several important elements of CGA (such as examination of feet and gait, assessment of mood, FRAX-UK score, creation of a problem list etc.) The aim of this quality improvement project was to create a thorough, yet user-friendly and time-efficient clerking proforma which incorporated the important components of CGA.

Using BGS guidance and NICE quality standards, alongside suggestions from the medical team, the existing clerking proforma was adapted and reformed. After one month, feedback from the team was used to further improve the clerking proforma, ensuring that it was user-friendly, whilst meeting the standards set out by NICE and BGS. This was repeated as part of a second PDSA cycle.

The improved clerking proforma enables junior doctors to undertake a thorough and holistic assessment, promoting efficient detection of issues and the delivery of a higher quality of care.

525. CQ - Clinical Quality - CQ - Patient Centredness
Poster

Everyone Needs to Poop: Reducing constipation in the elderly inpatient population.

JCRG Rollo-Walker

Department of Medicine for the Elderly, Poole Hospital, University Hospitals Dorset NHS Foundation Trust

Introduction Due to a variety of factors when elderly patients are admitted to hospital they can become constipated. This can impact the entire admission increasing morbidity and mortality for what is a treatable problem. The aim therefore was to assess how prevalent constipation was across the inpatient population; analyse if there were any common themes and implement interventions that might help solve these.

Method Data was collected over 15 days across the department (up to 87 patients) using nursing handover sheets to review the date bowels had last been opened. Patients were classified as constipated if they had not opened their bowels for more than 3 days. On two days common themes in the constipated patients were reviewed and analysed. On average 27% of patients were constipated. The majority of these had been deemed "Medically Ready for Discharge". They all had either no or only a reduced range of aperients prescribed. Stakeholders including patients, nursing staff, prescribers and Consultants were surveyed. First cycle intervention was to highlight those constipated at morning Multi-disciplinary Team (MDT) meetings to prompt medical review. Second cycle intervention: an e-prescribing bundle was designed to allow for simple prescription and for nurses to give aperients on an as required basis. A laxative prescribing guide sheet was also written to aid prescribers.

Results Aim is to reduce constipation to less than 20% thereby reducing morbidity and mortality in inpatients. Highlighting patients at MDT had little effect partly as it was person dependent. Effect of prescribing bundle yet to be determined but received positively by stakeholders. Prescribing guide received positively by Consultants and junior prescribers.

Conclusions Person dependent intervention was ineffective at reducing constipation highlighted by staff sickness due to Covid-19. A prescribing bundle is more system based. If used at admission hopefully will be effective and sustainable.

528.CQ - Clinical Quality - CQ - Patient Safety
Poster

Evaluating the prescription of Opiates in patients with Neck of Femur Fractures in Out of Hospital and Emergency Care setting.

Sagar Kanabar; Dylan Mistry; Hira Naeem; Rhys Smith; Faiza Zahir; Aneeta Kumar; Yug Kumari Gurung; Apurba Chatterjee

Department of Elderly Care Medicine, Royal Berkshire Hospital, Reading, UK

Introduction Opiate based analgesia forms a key component of Hip Fracture management. If prescribed inappropriately, opiate based analgesia can lead to respiratory depression, nephrotoxicity, and delayed recovery. The aim of this project was to evaluate opiate prescription in NOF patients in both out of hospital (OOH) and Emergency Department (ED).

Methods 100 consecutive patients were identified from National Hip Fracture Database between January and August 2019. Medical records were reviewed in both care settings, reviewing dose of morphine in comparison to body weight and renal function. Outcomes measured include constipation, acute kidney injury, respiratory compromise, and mortality. Statistical tests (t-test and chi square) were used to discern significance. Following the first cycle of results, results were disseminated to paramedics and at local governance meetings. Teaching was undertaken to increase awareness of harms associated with inappropriate opiate prescribing. A second cycle evaluated 30 consecutive NOFs from July 2020.

Results In our study population, 74% were female and the average age was 84. The range of morphine doses given OOH ranged from 2-40mg, in comparison to 2.5-20mg in ED. 18% of patient suffered from Respiratory depression with 48 hours of their admission with a further 7% suffering from an acute kidney injury. After intervention, OOH morphine doses ranged between 5-10mg, a reduction of 75% on maximum dose, with increased use of adjuvants as guided by the WHO pain ladder. No adverse outcomes were noted within 48 hours of admission.

Conclusion Patient safety should be high on the agenda whilst caring for frail patients with Hip Fractures and opiate prescription is one of the most critical in the patient's journey. Reducing harm by prescribing the optimal opiates helps to reduce mortality, morbidity, improve rehabilitation and patient flow within the NHS pathways. A guideline has been published to aid opiate prescription in elderly patients.

532. CQ - Clinical Quality - CQ - Patient Centredness
Poster

Caring For and Caring About Older People Living with Severe Frailty During Covid-19

Dr Richard Green; Helen King; Professor Caroline Nicholson

University of Surrey, Guildford; St Christopher's Hospice, London; University of Surrey, Guildford and St Christopher's Hospice, London

Introduction: An ongoing study collected survey and interview data from older people with frailty living in the community near end-of-life during the Covid-19 pandemic.

Methods: Unstructured interviews with older people with frailty living in the community (N=10), which included accounts from unpaid carers (N=5), were video and audio recorded between October-November 2021. Six of these older people have died since fieldwork completion. A face-to-face survey collected data from a further 10 older people. Participants ages ranged from 70-99, 11, men, and 9 women, living in owned, rented, or sheltered accommodation, with Clinical Frailty Scores of 6 (N=8), 7 (N=9), and 8 (N=3).

Results: Topics raised in relation to the pandemic included loss of social contact and increased loneliness, concern about not physically getting out, and losing physical function. Older people struggled to gain access to health and social care for support and previously received services were withdrawn. Most participants did not have access to internet and relied heavily on families to facilitate virtual contact with health professionals. Families and friends were the main anchor in facilitating social and health care including chasing up medications, liaising with social care to ensure quality and consistency of care provided, and monitoring older people's health. Where older people's conditions worsened family provided intense support, though family carers described the strain and unsustainability of this provision. Older people and their families felt they had been forgotten.

Conclusions: These are insights from hard-to-reach population that are frequently invisible. Greater examination of the impact of using communication technologies in care provision on those with poor access to and capabilities with using these technologies is required. Unpaid carers need more information and resources to support the care they provide and to facilitate access to appropriate social and health care services for those they care for.

533. CQ - Clinical Quality - CQ - Patient Centredness
Poster

Readmissions to Geriatric Medicine in a District General Hospital, a thematic analysis.

Dr Rebecca Whiting, Consultant Geriatrician; Renee Comerford, Nurse Consultant for Older People and Head of the Acute Frailty Service

Calderdale and Huddersfield NHS Foundation Trust

Introduction: 621 patients were readmitted within 30 days of discharge from our Geriatric Medicine department between October 2019 and March 2020. This project was undertaken to better understand whether some of these readmissions could be prevented.

Methods: Analysis showed a clear peak of 78 patients returning at day one post discharge, and a subsequent Pareto analysis revealed that nearly 80% of these were discharged from 2 locations, our frailty unit and MAU. This cohort became the focus of our review. With support from the Acute Frailty Network, a virtual structured case note review was undertaken by a multidisciplinary team including an independent Geriatrician. This considered the patient's case, whether they were cared for by the right team in the right place, whether they were readmitted with a new diagnosis and whether any improvements in the discharge process or wider service could have prevented their readmission.

Results: The case note review process was halted early as clear recurring themes emerged. Firstly, feedback showed that all frail patients were identified early in the patient pathway, were cared for by the appropriate team and a CGA was commenced promptly. Secondly, whilst the majority of day one readmissions had a diagnosis of delirium, most were not diagnosed as such until their re-attendance, despite documented confusion. Failure to recognise this, treat their delirium, and plan for fluctuations in cognition upon discharge were found to contribute to a high readmission rate.

Conclusion: We found that delirium identification was a key factor in early readmissions to our service. We identified clear opportunities to strengthen and formalise delirium diagnoses, and better plan patient management and discharge plans as a result. A multidisciplinary quality improvement group looking at delirium has been initiated and has already achieved a statistically significant improvement in the use of 4AT, a delirium assessment tool.

546. CQ - Clinical Quality - CQ - Efficiency and Value for Money
Poster

Quality Improvement Project: Improving Content in Discharge Summaries for Coding

Dr C Alcock; Dr P Oluwamayowa; Ms E Wallace

Queen Elizabeth Hospital Kings Lynn

Introduction: Hospital coding provides a pivotal service, integral to data collection, national statistics and hospital finances. The system of accurately coding depends almost entirely on the information put into Electronic Discharge Letters (EDLs). This project aims to up skill doctors with the expertise of the coding department, so that the EDLs reflect more accurately the experiences of the patient in hospital.

Method: Cycle 1; A member from the coding department was invited to the ward once a week to join with junior doctors writing their discharge letter. The coding from the discharge letters produced during this time were compared to those immediately prior to the coding department's involvement. Cycle 2; The lead author and a member from the coding team took a sample of 12 notes from the Ambulatory Emergency Clinic (AEC), for patients presenting in January and February of 2020

Results: Cycle 1; there was no significant difference in the number of co-morbidities or revenue gained from EDLs written with the support of the coding team compared to doctors writing ELDs independently Cycle 2; For 9 of the 12 patients (75%), co-morbidities were added. This changed the Healthcare Resource Group coded of 5 patients, resulting in an increasing the revenue to the hospital by £757 on average. For the number of patients seen in AEC in January, this could represent £218,271 of lost revenue, in addition to other benefits of accurate record keeping

Conclusion: The role of the physician cannot increase indefinitely, and there is a wealth of knowledge and experience to be gained from our colleagues in the coding department. This collaboration in assiduously improving the service that our patients receive brings the possibility of large financial gains as well as more accurate health care records.

551. CQ - Clinical Quality - CQ - Clinical Effectiveness
Poster

Easing the Strain of Constipation in Care Homes

Fiona Kirkpatrick; Paula Crawford

Medicines Optimisation in Older People (MOOP) Pharmacy Team, Belfast Health and Social Care Trust, Belfast, Northern Ireland

Introduction Older individuals are particularly prone to constipation with a reported prevalence of up 50% for those living in community with the prevalence rising to 70% within nursing homes (De Giorgio et al, 2015 1).

Objectives
To assess impact of staff education & pharmacist intervention on appropriateness of laxative use:
Staff education
Examine the baseline knowledge of care home staff on constipation and laxative use
Formulate an education package to deliver to care home staff on key aspects of laxative use
Evaluate the staff knowledge, post the educational intervention.
Impact of pharmacist medication review on laxative use
Evaluate impact of pharmacist review on appropriateness of laxative use in care Homes

Method Three BHSCT Care Homes being case managed by the Medicines Optimisation Pharmacist were included in the study. Staff Education: The baseline knowledge of care home staff was examined by questionnaire, pre- and post-educational intervention on key aspects of laxative use. Staff directly administering medication or directly impacting on patients' care in were included. An education package on key aspects of laxative use for delivery in nursing homes was designed and implemented. Impact of Pharmacist medication review on laxative use: We retrospectively examined if 30 patients were prescribed multiple laxatives from the same group as an indicator of inappropriate laxative use, pre and post pharmacist intervention

Results Staff education: Thirty Three staff completed the questionnaires. The educational package developed on laxative use had a positive impact on the knowledge of the staff on constipation and laxative use with statistically significant improvements in staff knowledge post education, with p-value <0.05. Healthcare assistants' mean percentage increase in knowledge following education mirrored that of nursing staff at almost 50%. Impact of Pharmacist medication review on laxative use: There was a statistically significant improvement in appropriateness of laxative prescribing following the pharmacist led medication review of 30 residents. Fewer patients were prescribed laxatives from the same class following medication reviews with a p value of < .00001, the result is significant at $p < .05$.

Discussion The positive impact of this study supports the conclusion by Chen et al 2 (2014) that patient and carer education should be first line treatment for non-severe constipation. Shen Q et al 3 (2018) suggested that educational intervention for patients can effectively improve constipation symptoms, treatment and result in improved health habits however this study provides further evidence that the education of care home staff plays a significant role in improving the appropriate management of constipation for care home residents. Pharmacist-led review of laxatives has the potential to improve a Care Home resident's quality of life, as previously suggested by Dennison et al 4 (2005), with the potential to reduce the risk of complications or hospital admissions from ineffective treatment of chronic constipation.

Conclusion The development & delivery of a bespoke laxative educational package along with pharmacist medication review of residents' current laxatives regimes resulted in a statistically

improved appropriateness in laxative use. The education package developed will be shared with Medicines Optimisation for Older People (MOOP) Care Home Pharmacists for delivery in NI trusts.

References

1.De Giorgio et al 2015. Chronic constipation in the elderly: a primer for gastroenterologist. BMC Gastroenterology, 14:130.Dennison, C et al., 2005. the health-related quality of life and economic burden of constipation. Pharmaceoconmics 23 (5), 461-476.
2.Chen I. C. et al (2014). Prevalence and effectiveness of laxative use among elderly residents in a regional hospital affiliated nursing home in Hsinchu County. Nursing and Midwifery Studies, 3(1), e13962.
3.Shen Q et al (2018) Nurse-Led Self-Management Educational Intervention Improves Symptoms of Patients With Functional Constipation. West J Nurs Res. 2018 Jun;40(6):874-888
4.Dennison et al (2005) The Health-Related Quality of Life and Economic Burden of Constipation. Pharmacoeconomics, 23 (5), 461-476.

559. CQ - Clinical Quality - CQ - Patient Centredness
Poster

Identifying patients with mood disorder following admission with hip fracture with a view to starting treatment & provide advice

Dr Karla Giles; Dr Philip Hall; Dr Helen Wilson; Dr Lisa Macpherson; Dr Maria del Pilar Martin-Hernandez; Keri Thompson; Sarah Bailey

St Charles Hospital; Royal Surrey Hospital; Royal Surrey Hospital; Royal Surrey Hospital; Royal Surrey Hospital; Royal Surrey Hospital

Introduction : The signs of depression in the elderly often go unnoticed. The MDT at RSCH observed that low mood could negatively impact on patient's recovery, affecting pain thresholds and leading to poor engagement with rehabilitation. Proactive identification and management of mood disorder is an important part of CGA, but not routinely performed. The aim of this QI project is to improve identification and management of mood disorder in patients over 65 years admitted to RSCH with hip fractures by introducing a standardised assessment tool to guide appropriate interventions.

Method: Notes of patients with hip fracture admitted over a four-month period were retrospectively reviewed to establish if patients were screened for low mood. A mood screening tool, Cornell Score, was chosen and implemented by OT's and junior doctors over a four-month period. Those identified with depression or probable depression were issued verbal advice, an information leaflet and follow-up arranged.

Results: Ninety-eight patients were included in the retrospective cohort; There was no indication that mood was considered or assessed at any point during admission. During the four-month prospective period, 86 patients (96%) were screened for low mood; 9% had major depression and 16% probable depression. Feedback from our occupational therapists and doctors was positive, with the tool being easy to use in patients with or without cognitive impairment. Much of the assessment could be incorporated into initial assessment or in gaining collateral history. Anecdotally, considering patients psychological well-being had a positive impact on inpatient therapy sessions guided the MDT in supporting the patient appropriately.

Conclusion: Implementation of a standardised and validated mood screening tool enabled us to identify that a quarter (25%) of the patients had, or probably had depression. This allowed us to intervene with simple measures such as verbal advice and an information leaflet and consider pharmacological intervention where appropriate.

573. CQ - Clinical Quality - CQ – Improved Access to Service
Poster

Delirium Screening Quality Improvement Project

Dr Salam Al-Alousi; Dr Asad Ullah Khan; Dr Emily Laithwaite

University Hospitals of Leicester NHS Trust

Introduction Delirium is a common neuropsychiatric syndrome in patients over the age of 65 presenting to medical admissions units yet remains under-diagnosed despite significant associated mortality and morbidity. Our trust?s delirium screening tool incorporates a four-step approach, with completion of validated 4AT test warranted in all those over 65 years of age admitted with increased confusion or social withdrawal. Our aim was to measure current uptake of this delirium screening and introduce measures to improve practice.

Method We retrospectively collected data from medical records of patients on two Geriatric inpatient wards (42 patients) at the Leicester Royal Infirmary, to determine whether appropriate delirium screening was taking place for at-risk patients on admission. We then introduced two PDSA (plan, do, study, act) cycles: 1. teaching at departmental weekly educational meetings with sending electronic communications to all doctors in medicine highlighting importance of delirium screening; and 2. displaying posters on all admissions wards. A third cycle was planned involving visiting wards to raise awareness, however this was interrupted by the COVID pandemic.

Results Initial baseline results showed only 5% (1 of 18) of at-risk patients were fully screened for delirium. Following our first intervention, this increased to 13% (3 of 23). Second intervention involving display of posters led to an increase to 44% (8 of 18) of at-risk patients being screened. Proportions of dementia were comparable across PDSA cycles.

Conclusions Education, raising awareness, and display of reminder posters can improve delirium screening uptake of at-risk patients on admission to medical admission units, despite growing pressures associated with the COVID pandemic. Further interventions are planned to improve and maintain awareness and uptake of delirium screening.

576. CQ - Clinical Quality - CQ – Patient Centredness
Poster

Establishing virtual multidisciplinary round in Belfast Trust Nursing Homes: Pharmacist, nursing & healthcare team collaboration

Paula Crawford; Fiona Kirkpatrick; Oonagh Galway; Katherine Watson

Belfast Health & Social Care Trust

Introduction During the first covid surge, 25% of Belfast HSC Trust (BHSCT) care homes were affected, rising to 44% by surge 3, resulting in limited face to face access for healthcare professionals. Nursing home residents required medicine reviews post-covid infection to optimise medicines and reduce pill burden.
Method
The Care Home Nursing Support Team (CHNST), consultant pharmacist for older people and the lead care home pharmacist ? medicines optimisation older people(MOOP), rapidly established a multidisciplinary virtual round. Four main steps included:

- establishing Standard Operating Procedure(SOP)
- proforma template design
- inclusion of resident
- evaluation

An SOP was established to ensure consistent pathway for nursing home inclusion criteria and team roles. The inclusion group included residents who were furthest from their baseline including weight loss, swallowing difficulties, decreased mobility, altered sitting balance and polypharmacy. The pharmacist developed a proforma template for completion by the nursing home staff to gather key information ahead of the round to improve efficiency eg swallow, renal function, pain, falls risk. The care home resident was included on video link by ipad following careful consent processes. Benefits included enhanced assessment of frailty, mobility, dexterity and adherence.
Results:

- 40% residents reviewed had increased Rockwood frailty score
- 50% residents reviewed had weight loss post-covid- average 4.8kg
- Average 2.4 pharmacy medicines interventions per resident including:
    - Reducing doses & nephrotoxic medicines due to poor renal function
    - Deprescribing
    - Onward referral to psychiatry for signs of depression
    - Formulation changes due to swallowing difficulties
- Evaluation from the multidisciplinary team and nursing home staff was overwhelmingly positive, emphasising the opportunity for shared learning

Conclusion
The multidisciplinary care home rounds provided an efficient means to collaborate with other professionals, while providing holistic & patient-focussed care. Plans are underway for development of an NI MOOP care home pathway

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600. CQ - Clinical Quality - CQ - Patient Centredness
Poster

Escalation Decisions during the COVID-19 Pandemic amongst older adults

Lucie Bishop, Divya Tiwari

The Royal Bournemouth Hospital Foundation Trust

Introduction NICE guidance recommends that during the COVID-19 pandemic all adults are assessed for frailty, suitability for resuscitation and escalation to critical care on admission to hospital. Risks, benefits and likely outcomes should be discussed with patients/relatives.

Aim To investigate impact of intervention on treatment escalation plan (TEP) use during the first wave (W1) and second wave (W2) of pandemic.

Intervention W1: An ethically approved TEP and a Critical Care Decision Aid (CCDA) was added to the admission booklet.
W2: The TEP update included a "confirm discussed with patient/relatives" section.

Method W1: We conducted retrospective review of 62 case-notes of patients admitted through COVID-19 pathway and grouped into >80 and $\leq$ 80 years old. Resuscitation, TEP, CCDA and communication with patient/relatives were collected.
W2: 60 further case-notes of patients with COVID-19 admitted in January 2021 were analysed.

Results W1: 100% patients had resuscitation decisions and 95% had TEPs in both groups. Significantly higher proportions of Frailty scores were calculated in >80s (58% vs 35% p=0.04). On average resuscitation and TEPs were made within 13.8 hours of admission (range 1-72 hours). 53.2% of resuscitation decisions and 30% TEPs were discussed with patients of whom higher proportions were discussed in younger age group, majority were discussed at the time of deterioration.
W2: 98.3% patients had resuscitation decisions made and 96.7% had TEPs across both groups. On average resuscitation decisions were made within 14.9 hours of admission. In the >80s, 86.7% of resuscitation decisions were discussed and 63.3% of the TEPs were discussed with patient/relatives. In the <80s, 82.8% of resuscitation decisions were discussed and 71.4% of TEPs were discussed with the patient/relatives.

Conclusion We significantly improved Treatment Escalation planning during W1 and W2 of pandemic by introducing the TEP in W1 and adding prompt to improve communication with patients/relatives in W2 (p=0.02).

601- CQ - Clinical Quality – CQ- Clinical Effectiveness
Poster

Improving Delirium Assessment in a District General Hospital

Charlie Finlow, Lara Azaden, Cameron Abbott

Wrexham Maelor Hospital

Introduction Delirium affects a up to 20% of medical inpatients1. Patients in the high-risk category include those over 65, pre-existing cognitive impairment, current hip fracture and those with a serious illness1,2.
Often delirium goes undetected but is often related to high morbidity and motility rates with complications of insitionalisation, increased risk of dementia, high risk of falls and prolonged hospital stays1,2, recognition is the first step to reducing these risks. NICE guidance suggests that those patients showing indicators of delirium should have a formal cognitive assessment and a tailor-made plan should be documented within 24 hours2.
The detection of delirium can be sort using licensed tools including the 4AT score with the 4AT being the most sensitive, specific and practical1. Due to the ongoing risks of delirium, high risk patients on the Geriatric medicine firm and poor detection rate a quality improvement methodology was used to increase the rates of detection of delirium.
The aim to have 90% of Geriatric medicine patients screened within 24h admission and within 24h of arrival to COTE ward/ first consultant ward round within 4 months.

Method 4 PDSA cycles were designed to trial changes including education of the Geriatric medicine team, lanyard cards, introduction of 4AT on the frailty proforma and a non-intervention cycle to see if these changes were sustained.
Data was collected from the care of the elderly ward not including outliers of 27 patients. Any formal cognitive assessment that was documented either on admission or on arrival to the ward was included. Not included was those patients who were assessed for delirium or change in cognition after first consultant ward round or after 24h of being on the ward.

Results The uptake of 4AT improved by 50% after education and the lanyard cards. This was largely as a shift away from other assessments rather than more cognitive assessments done overall.
During service redesign an Older Person's Assessment Unit was formed with a Geriatrician based at the front door. This will improve the use of the 4AT for older patients admitted to hospital in the near future and is the subject of the next PDSA cycle.

Conclusion Our journey to embed the 4AT is ongoing and we will continue to improve uptake using QI methodology.

POSTERS: SCIENTIFIC PRESENTATION

529. SP - Scientific Presentation - SP - Psych (Psychiatry & Mental Health)
Poster

Assessing discomfort and distress in older inpatients with dementia

E West 1; E L Sampson 2; N Davies 3

1 Marie Curie Palliative Care Research Department, University College London, UK; 2 Barnet Enfield, Haringey Mental Health Trust Liaison Psychiatry Team, North Middlesex University Hospital, London, UK,3. Marie Curie Palliative Care Research Department, Division of Psychiatry, University College London and UK Centre for ageing population Studies, Research Department of Primary Care and Population Health, University College London,

Introduction Up to 42% of acute hospital inpatients have dementia. This can make it more difficult for patients to communicate their needs, this in turn may lead to distress and agitation. The aim of this study is to explore the prevalence of distress and discomfort in inpatients with dementia in acute hospitals who may not be able to communicate their needs.

Methods A series of existing clinical and observational methods were used to measure various aspects of the experience of hospitalised inpatients with dementia, and staff working with these patients on wards. These measures looked to identify sources of discomfort, observe the effect of the environment, understand how staff currently identify discomfort and explore associations with behaviours that challenge.

Results 94 patients and their next of kin have been approached; 79 consented to being included in the study, and 67 have been fully assessed. Almost 20% of patients assessed have severe psychiatric problems. ~70% of patients were severely disoriented at assessment. Patients assessed were often sleepy (62%), hadn't moved for a long period of time (48%) and reported agitation (60%), anxiety (60%) and depression (70%). Staff reported agitation and aggression in 56% of patients, with high frequencies of incidents per patient.

Conclusions Signs of distress and agitation are common in hospitalised persons with dementia. Patients are often disoriented, which impedes communication of needs. This also has a high burden on staff, as many behavioural and psychiatric symptoms of dementia are experienced daily on wards.

416. SP - Scientific Presentation - SP - Falls (Falls, fracture & trauma)
Poster

Analgesia and peri-operative practice in fractured neck of femurs at York Teaching Hospitals NHS Foundation Trust.

Dr Sarah Easby, Dr Jonathan Dilley

York Teaching Hospitals NHS Foundation Trust

Introduction Fractured neck of femurs are a significant public health issue. Prompt assessment and response to pain as per NICE guidelines aids speedy recovery and helps to prevent complications such as delirium in and already high risk, elderly population. Previous audits have found poor documentation of the assessment of pain and the rate of nerve blocks in A+E and theatres. This completed cycle audit will assess the interventions made in response to these audits including adding pain scores to e-observations and training staff to perform nerve blocks. The aim of this audit was to assess current anaesthetic and analgesic practice.

Method This was a retrospective review of 32 case notes and electronic prescribing over November – December 2019. Data collected included documentation of pain assessment, which analgesia was prescribed as per NICE guideline CG124 [1] and rate of nerve block in A+E and theatres.

Results The audit found that 100% of patients received analgesia as per NICE guidelines. Documenting the assessment of pain scores has improved from 44% to 63% in A+E, 64% to 81% on the ward pre-operatively and 0 to 100% post op. On admission, 41% of patients received a nerve block and 94% intra-operatively, up from 22% and 55% respectively, the majority of patients received a fascia iliaca block (FIB).

Conclusions The large increase in post op pain assessment is likely credited to mandatory input as part of e-observations and overall practice has improved significantly. A refresher training session will be provided for nursing staff to re-iterate the importance of assessing and responding to pain. The Hip Fracture Specialist Nurse is now competent to perform FIBs which may further increase the number performed on admission.

References
1. NICE. Hip fracture: management. Clinical guideline [CG124]. https://www.nice.org.uk/guidance/cg124 (accessed 15/11/2020)

433. SP - Scientific Presentation - SP - HSR (Health Service Research)
Poster

Same Speciality, Different Reality?

A Gomez, A Capon-Saez A3, A Gomez-Mosquera A2, Y Parada-DeFreitas Y3, JJ Arechaderra-Calderon JJ4, 6, E Hoyos E5, H Jackson1, F Ramon-Espinoza F6, A Vilches-Moraga A5.

1Stepping Hill Hospital, 2Hospital de Sant Joan Despi Moises Broggi, 3Hospital Clinico San Carlos, 4Hospital Universitario de Guadalajara, 5Salford Royal NHS Foundation Trust, 6Complejo Hospitalario de Navarra

Introduction The United Kingdom and Spain run government-funded social and health care services, free for the user at the point of delivery. Acute Geriatric Units (AGU) carrying out Comprehensive Geriatric Assessments improve the clinical outcomes of older patients. Little is known about the similarities and differences between countries, and how these may impact on clinical outcomes.

Methods Prospective observational study of consecutive patients admitted to AGU of 2 hospitals in the UK and 4 hospitals in Spain between the 1st to the 30th of October 2019 and from the 1st to the 29th of February 2020. We followed up the patients for a 90 day period.

	UK	Spain
Number of Patients	297	715
Mean Age	85.6	89.6
Females	61%	58%
Number of Comorbidities	6	7
Frail Patients (Rockwood 5+)	75%	71%
Avg. Length of Stay (Days)	7	9
Inpatient Mortality	12%	17%
30-Day Mortality	8%	8.6%
90-Day Mortality	14.6%	18.3%
30-Day Readmission	13%	10.8%
90-Day Readmission	28.3%	20.5%
Community Dwellers	68.4%	65.9%
Incontinence	35.4%	67.1%
Incidence of Delirium	33.7%	31.3%
Independently Mobile	79.1%	64.9%
Patients discharged home	57.5%	54.3%
Use of Antipsychotics	1%	29.6%
Mental Health Team	4.4%	2%
Palliative Care Team	7.8%	9.1%
Occupational Therapy	60.6%	6.9%
Physiotherapy	67.7%	9.9%
SALT	6.7%	0.4%
Social Services	31.3%	49.7%
Medications on Admission	7.9	8.9
Medications on Discharge	8.2	8.7

Conclusions Frailty, multimorbidity and polypharmacy were prevalent in both cohorts. English patients were younger, with shorter hospital stay, mortality and use of antipsychotic medication but

higher readmission rates. Involvement from Allied health care professionals was higher in UK hospitals.

436. SP - Scientific Presentation - SP - Cardio (Cardiovascular)
Poster

Postoperative systolic hypotension in fractured neck of femur patients

Rebecca Jones, James Cook; Abigail Cannon

University Hospitals Bristol and Weston NHS Foundation Trust

Introduction: Secondary analysis of outcomes after 11,085 hip fracture operations from the prospective UK Anaesthesia Sprint Audit of Practice (ASAP 2) found an association between reduced intraoperative systolic arterial pressure (SAP) and postoperative mortality at five and 30 days. We sought to determine the incidence of hypotension in the postoperative period, rather than just intraoperatively, in a small sample of patients with fractured neck of femur.

Method: We performed a retrospective review of the notes, electronic vital signs and electronic general practice records from 40 patients with fractured neck of femur. We identified the latest SAP performed at their general practice (if done within one year before admission). We noted the pre-operative baseline SAP reading from the ward as well as the lowest SAP during several time periods: the pre-operative period; the fracture surgery; the recovery room; and during each 24-h period postoperatively until the fifth postoperative day.

Results: A SAP recording from general practice within the previous year was only accessible in 21 (53%) of patients, but where it was accessible, it was within 20% of the immediate preoperative SAP in 14 (66%) of patients. The incidence of relative hypotension (< 80% preoperative SAP) was 54% in the operating theatre, 41% in the recovery room, 65% on the ward during the remainder of the first postoperative 24 h, 55% during postoperative day 2, 53% during day 3, 33% during day 4 and 41% during day 5.

Conclusions: Postoperative hypotension was common in our sample. In our analysis, the highest incidence was on the ward during the first 24 hours postoperatively. However, 41% of patients still had hypotension 5 days postoperatively.

450. SP – Scientific Presentation – SP Education / Training
Poster

Educational programmes for frail older people, their families, carers, and health-care professionals: A Systematic Review.

Rachel J Viggars: Andrew Finney: Barnabas Panayiotou

North Staffordshire General Practice Federation, 69-71 Stafford Street, Hanley ST1 1LS, England: School of Nursing & Midwifery, Keele University, Staffordshire ST5 5BG: Postgraduate School of Medicine, Keele University, Staffordshire ST5 5BG, England. , England:

Introduction: With an ever-increasing, ageing population, there is inevitable increase in people living with frailty with a growing demand on the NHS in the UK. Healthcare policy emphasises holistic care and a multimorbid approach to meet these needs. Frailty is seen as a measurable, complex, fluid and variable state affected by a balance of resilience versus vulnerability across domains which impact on quality of life. The FCCF positions frailty as a LTC and suggests that a holistic and person-centred approach to education is required for people living with frailty, their families, carers and health care professionals. This is a systematic review of research studies providing educational programmes or initiatives to these groups and addresses whether the content and application will compliment and support the facilitation of the FCCF.

Methods: Following standardised methods and guidelines, electronic databases were searched. Two reviewers were involved in the research collection process, applying the inclusion and exclusion criteria. Quality appraisal tools were used to ensure robust quality assessment and then the findings were narratively synthesised.

Results: There was real heterogeneity of study design with variable quality according to the tools used. There was a paucity of high-quality evidence; (2 = high quality, 3 = low quality, 5 = medium quality). There were four thematic domains prominent from the synthesis: 1) Health Promotion (namely exercise and nutrition), 2) Empowerment, 3) Self-care, 4) Online platform delivery.

Conclusion: It is evident that educational programmes and initiatives are vital for the prevention and management of frailty. To be truly effective, such programmes must include a combination of health promotion, empowerment and self-care and be accessible to all target populations. Further work is needed to look at effective, accessible, sustainable delivery systems, including that of online digital platforms.

455. SP - Scientific Presentation - SP - Epid (epidemiology)
Poster

Prospective evaluation of frailty in individuals with knee pain in Malaysian Elders Longitudinal Research (MELoR) study

Chiaw Lee Chiew1; Sumaiyah Mat2,3; Kioh Sheng Hui3; Maw Pin Tan2,3

1Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia; 2Department of Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia; 3Ageing and Age-Associated Disorders Research Group, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia

Introduction: Osteoarthritis (OA) is a major cause of physical impairment in older persons. Few studies have determined the relationship between the presence of OA and frailty. We evaluated the prospective relationship between knee pain and frailty in a Malaysian longitudinal cohort.

Method: Data from Malaysian Elders Longitudinal Research (MELoR) study were utilised. Baseline data were obtained from home-based computer-assisted questionnaires and hospital-based health-checks from 2013-2015. The presence of knee pain was determined with the single question, "do you have pain in your knee(s)?". Frailty status was determined at follow-up in 2019 using SARC-F.

Results: Data from 1226 individuals, mean age (SD) = 68.97 (7.48), range= 54-97 years and 56.6% women at baseline, were included. 408 (33.3%) had knee pain. Individuals with knee pain were significantly more likely to be female (66.2% vs 51.8%, p<.001). Ethnic differences existed in the presence of knee pain (Malay 43.4% vs Chinese 24.8% vs Indian 31.9%, p<.001). Individuals with knee pain was more likely to have diabetes (40.1% vs 29.9%, p<.001), hypertension (38.3% vs 27.0 %, p<.001), dyslipidaemia (38.4% vs 26.5 %, p<.001) and obesity (52.6% vs 30.2%, p<.001). After adjustment for confounders, individuals with knee pain were more significantly to develop frailty at follow-up [odds ratio(95% confidence interval) =2.71(1.61-4.58)].

Conclusion: Knee pain was associated with an increased risk of frailty with 5-years follow-up in an urban population in Kuala Lumpur. More detailed evaluation using imaging and clinical diagnosis of osteoarthritis is now indicated. Future studies should also seek to identify modifiable risk factors for the development of frailty in individuals with knee OA and develop strategies to prevent frailty.

457. SP - Scientific Presentation - SP - Other (Other medical condition)
Poster

Nutrition, Sarcopenia and Frailty

Weihong Du

University of Greenwich and Queen Elizabeth Hospital, Lewisham and Greenwich NHS Trust

Many older people admitted to hospital are malnourished /at risk of malnourishment (30%), have swallowing problems (55%), are frail (25%), have sarcopenia (50%) or a combination of these. On admission to hospital frail older people are at significant risk of worsening nutritional status and prolonged hospital stay. Nutritional status should be identified, documented, food intake monitored and where appropriate they should be referred to the dietitian.
The question remains, do staff recognise that frail older people may not eat their food increasing their risk of poor nutrition and outcome.

Methods Older people admitted to a "Frailty" Ward were directly observed during lunchtime by WD. The Minimal Eating Observation Form –Version II (MEOF-II) was used to document how much they ate. Frailty status (CFS), presence of Sarcopenia (Sarc-F) and whether a referral to dietetics or speech and language therapy (SLT) was completed.

Results 39 patients were observed. Mean age was 82.38 years; median CFS 6 (3-8); median Sarc-F 4(0-9). Median MEOF II was 0 (0-5). Two patients were referred to dietetics and 4 to SLT. 7/40 (17,5%) were at high risk for undernutrition, a further 8/40(20%) were at moderate risk. 82% were severely frail , the remaining were mildly frail. 94% (16/17) exhibited sarcopenia. There was significant correlation between MEOF II and CFS ($r=0.4887$, $p=0.00162$); MEOFII and Sarc-F ($r=0.4395$, $p=0.00512$). There was correlation between CFS and Sarc-F ($r=0.80296$, $p<0.00001$). Only one (6%) was referred to the dietitian.

Conclusion Frail older adults are often undernourished on admission to hospital. Nutritional intake is often poor with acute illness. Screening, observation and monitoring of nutritional intake should highlight concerns and needs for intervention. These study high lights that a significant number of older people are frail, fail to complete meals, are at significant risk of under nutrition, yet proactive intervention does not occur.

466. SP - Scientific Presentation - SP - Other (Other medical condition)
Poster

Prevalence and impact of frailty in patients hospitalised with COVID-19. The Salford experience in waves 1 and 2.

Amarah Khan(1); Fernanda Ramon Espinoza(1); Thomas Kneen(1); Angeline Price(1); Anna Dafnis(1); Hala Allafi(1); Ben Carter(2); Maria Narro-Vidal(1); Roxanna Short(2); Rebecca Upton(1); Arturo Vilches-Moraga(1)

Salford Royal NHS Foundation Trust(1); Department of Biostatistics and Health Informatics, Institute of Psychiatry, Psychology & Neuroscience King's College London(2)

Introduction: The COVID-19 pandemic has had an extensive impact on the frail older population, with significant rates of COVID-related hospital admissions and deaths amongst this vulnerable group. There is little evidence of frailty prevalence amongst patients hospitalised with COVID-19, nor the impact of frailty on their survival.

Methods: Prospective observational study of all consecutive patients admitted to Salford Royal NHS Foundation (SRFT) Trust between 27th February and 28th April 2020 (wave 1), and 1st October to 10th November 2020 (wave 2) with a diagnosis of COVID-19. The primary endpoint was in-hospital mortality. Patient demographics, co-morbidities, admission level disease severity (estimated with CRP) and frailty (using the Clinical Frailty Scale, score 1-3=not frail, score 4-9=frail) were collected. A Cox proportional hazards regression model was used to assess the time to mortality.

Results: A total of 693 (N=429, wave 1; N=264, wave 2) patients were included, 279 (N=180, 42%, wave 1; N=104, 38%, wave 2) were female, and the median age was 72 in wave 1 and 73 in wave 2. 318 (N=212, 49%, wave 1; N=106, 39%, wave 2) patients presenting were frail. There was a reduction in mortality in wave 2, adjusted Hazard ratio (aHR)= 0.60 (95%CI 0.44-0.81; p=0.001). There was an association between frailty and mortality aHR= 1.57 (95%CI 1.09-2.26; p=0.015).

Conclusion: Frailty is highly prevalent amongst patients of all ages admitted to SRFT with COVID-19. Higher scores of frailty are associated with increased mortality.

483. SP - Scientific Presentation - SP - Education / Training
Poster

Improving the Provision of Regional Geriatric Medicine Teaching During the COVID-19 Pandemic

Nicola Smith; Charlotte Owen; Tom Mankelow

University Hospital Southampton NHS Foundation Trust; Portsmouth Hospitals University NHS Trust

Introduction In Wessex Deanery, prior to the COVID-19 pandemic, Geriatric Medicine trainees from 10 NHS trusts attended face-to-face regional teaching sessions. In response to the pandemic, this teaching was suspended to reduce disruption in service provision and support social distancing. There was a clear need to reintroduce teaching for continued professional development and trainee progression.

Methods In July 2020, Geriatric Medicine trainees in Wessex completed a questionnaire survey to identify their desire for socially distanced teaching and an acceptable format for delivery. Two half-day pilot teaching sessions via MS Teams were organised in September and October 2020. Trainees provided feedback via a questionnaire survey about the relevance and quality of teaching, and to identify any barriers to attendance. Subsequently, a monthly full-day virtual teaching programme was implemented. We reported reflections of our experiences on our trainee website to support future sessions.

Results All trainees (n=15) were eager for regional teaching to recommence through socially distanced education. Trainees had a preference for MS Teams, which can support interactive teaching. Attendance to the pilot sessions exceeded previous face-to-face sessions. 19 trainees attended the first session; 17 provided feedback. 28 trainees attended the second session; 12 provided feedback. Feedback was overwhelmingly positive; all reported the sessions were interesting and 82% (n=14) that they would lead to changes in their practice. Some trainees expressed that full-day sessions would enhance curriculum coverage. 94% (n=16) were positive of the virtual platform; it reduced travel and sessions could be recorded. Local trainees attended the second session in-person, which enhanced interactivity.

Conclusion Virtual teaching has been successful in Wessex Deanery, with high attendance and positive feedback. Trainees can engage remotely without the need for travel and disruption. After the pandemic we hope to develop a regional teaching programme integrating virtual and face-to-face sessions to improve attendance and accessibility.

499. SP - Scientific Presentation - SP - Education / Training
Poster

Developing a Novel Teaching Programme for Physician Associate Students Within Elderly Medicine

Dr Samuel Mottaghi-Taromsari, Dr Lindsey Wileman

Wythenshawe Hospital, Manchester Foundation Trust

Introduction The Physician Associate course has been running in the North West since 2016. As such, the format and layout of clinical placements for its students are still in their relative infancy. First year students, similar to third year medical students, begin clinical placement after an intensive lecture series at the University. Placements at Wythenshawe hospital typically involved an initial and closing meeting with their supervisor with little teaching activity organised specifically for them. We therefore set out to devise a formal teaching programme within their elderly care attachment to better address their learning needs.

Methods We devised a programme for the placement involving a formal induction, orientation and then rotation through different elements of the elderly medicine faculty. The students spent 4 weeks in total in 3 different clinical areas to obtain different experiences. Formal teaching was arranged once per week with a clinician to cover topics relevant to geriatrics and general medicine. Feedback forms were used to assess the students' views on the quality of the induction and teaching. A pre-placement questionnaire was used at the start to assess understanding of frailty and confidence with assessing falls. This was then repeated at the end of the placement to evaluate progression.

Results From the initial pilot involving 3 cohorts (10 students total), 90% of the students rated the placement positively as a learning opportunity with 100% commending the organisation and structure of the programme. 100% of students rated the content and delivery as good for the organised teaching sessions. Understanding of frailty and confidence in assessing falls also saw marked improvements over the course of the placement.

Conclusion We have demonstrated how a better structured teaching programme is valued by the physician associate students and will now proceed to develop and expand this model in elderly medicine and beyond.

502. SP - Scientific Presentation - SP - Epid (epidemiology)
Poster

Outcomes of hospitalised patients with covid-19 six months after index admission

E Tullo; C Dotchin; S Jaiswal

Northumbria Healthcare NHS Foundation Trust; NIHR Newcastle Biomedical Research Centre in Ageing and Longterm Conditions, Newcastle University; School of Population and Health Sciences, Newcastle University; Newcastle University Medical School

Introduction Early outcomes for hospitalised patients with covid-19, including admissions to critical care and mortality have been widely published. Less is known about the longer-term patient outcomes such as readmissions, deaths after discharge and level of care required on discharge. Methods Following an audit of 360 consecutive admissions of patients with covid-19 requiring level 1 inpatient care in spring 2020, we collated data about mortality, readmissions, and residential status for the same cohort at six months after index admission.

Results The cohort had a median age of 78: 70% survived to discharge. Median length of stay was nine days (range 1-90). Of 252 patients discharged, a further 35 (14%) had died by six-month follow-up. 95 patients (38%) required at least one further hospital admission in the following six-month period. 40 (16%) of discharged patient required increased support, defined as new or increased package of care or an alternative interim or permanent change of residence. (Table 1). Table 1 emailed separately as will not transfer into this space Of the 40 patients requiring increased support on discharge, 7 (18%) died, 15 (38%) returned to their preadmission residential status, and 17 (43%) still required increased support.

Conclusions Covid-19 has a high mortality rate in those admitted to hospital. Patients receiving level 1 care in hospital and surviving to discharge have a high risk of readmission or death in the following six-months. For those requiring increased support on discharge, the majority do not return to their pre-admission residential status.

511. SP - Scientific Presentation - SP - Other (Other medical condition)
Poster

Do Oral Nutritional Supplements Improve Quality of Life in the Frail Elderly- a systematic review

Ryan, C; Hynd, I

Department of Medicine for the Elderly, Glasgow Royal Infirmary; Department of Medicine for the Elderly, University Hospital Monklands

Background Oral nutritional supplements (ONS) are regularly used in older frail adults to help reduced oral intake, recovery from acute illness and weight gain. As,many frailer patients have limited life expectancies the priority for treatment should be improving quality of life (QoL). We set out to find if ONS increase QoL in the frail elderly adult.

Method We searched Embase, Medline and OVID databases for using terms for ONS, frail older adults and QoL. The two authors independently reviewed all papers with any dispute was resolved by discussion. Each paper was then reviewed by both authors to extract data and determine bias before collation.

Results The search returned 516 papers. Each paper was briefly reviewed to check for relevance leaving 65 papers for detailed review of which 8 papers were included. Two systematic reviews were included. One was unable to draw conclusions from the 3 papers (out of 17) that included QoL as the graded evidence was too poor. The other showed no impact on QoL (in the 2 out of 12 papers that included QoL) in patients post hip fracture receiving ONS. One paper interviewed frail elderly patients about the perceived benefits of their ONS. Nursing home residents perceived that ONS improved their ability to see family which was inferred as improving QoL. Three papers assessed ONS in conjunction with physical exercise. Two showed an improvement in quality of life in the ONS group despite controls also receiving a physical exercise programme. Two papers assessed the impact of ONS on patients discharged from hospital and those chronically unwell- neither showed any difference in QoL.

Discussion Quality of life has been a neglected area of study when assessing the impact of ONS on frail elderly patients. When used in conjunction with physical exercise it seems to have a positive effect.

512. SP - Scientific Presentation - SP - Other (Other medical condition)
Poster

A case of an idiopathic acquired hemophilia A in an elderly woman

EE Phyu1; HP Than2; M Hayward1

1. Dept of Elderly Care, Medway Maritime Hospital; 2. Dept of Elderly Care, Basildon University Hospital

Introduction Acquired Hemophilia is a bleeding diathesis caused by autoantibodies that interfere with factor VIII (FVIII). Reasons for autoantibodies production are not clear but may be related to gene polymorphisms and/or CD4+ T lymphocytes. 1.3 to 1.5 cases per million population per year are reported in the UK. Half of the cases are secondary to malignancy, pregnancy related conditions, connective tissue disorders or drug reactions while the rest are idiopathic.

Case Report We report a case of an acquired hemophilia A in an 86-year-old lady with underlying type 2 diabetes, hypertension, and cognitive impairment, being treated as the left lower limb cellulitis with antibiotics. She was found to have a sudden hemoglobin drop and her CT (Abdomen) confirmed a spontaneous intra-abdominal hematoma. Clotting profile showed prolonged APTT to 168.5 seconds, being not corrected at mixing study, with normal PT and INR. The FVIII assay was reduced to 18.4 iU/dL with FVIII inhibitor concentration of 0.7 Bu. Viral and autoimmune screenings were negative. The idiopathic acquired hemophilia A was diagnosed. Red blood cell transfusions, bypassing agents (FEIBA) and oral tranexamic acid were given for acute bleeding episode. Concomitantly, oral prednisolone was used to reduce the inhibitor levels. Repeated FVIII assay showed 121 iU/dL and 199iU/dL on day 6 and 12, respectively. Steroid was continued for the next 4 weeks and then gradually tapered. No further bleeding episode was noted.

Conclusion The diagnosis of acquired hemophilia should be considered in any elderly patient with prolonged APTT. Mixing study is to measure the presence of inhibitors of coagulation or to detect coagulation factor deficiency. Quantitative coagulation factor assays and Bethesda Assays are performed for definitive diagnosis. Immunosuppressive regimens are the mainstay treatment. However, premorbid conditions and co-morbidities should be taken into consideration before initiating the aggressive immunosuppressive therapy in the elderly patients.

513. SP – Scientific Presentation – SP – Other (Other medical condition)
Poster

The influence of frailty on outcomes for older adults admitted to hospital with benign biliary and pancreatic disease

M Thomas1; M Baltatzis1; A Price2; L Pearce1; J Fox2; A Vilches-Moraga2

1. Department of General Surgery, Salford Royal Foundation Trust, Salford, United Kingdom; 2. Geriatric Medicine Unit, Salford Royal Foundation Trust, Salford, United Kingdom

Introduction: The prevalence and complications of biliary disease increase with age. We describe the prevalence of frailty in older patients hospitalised with benign biliary and pancreatic disease and establish its association with mortality and duration of hospital stay.

Methods: Prospective observational cohort study of patients aged 75 years and over admitted with a diagnosis of acute biliary disease to a surgical hospital unit between 17/09/2014 and 20/03/2017. Clinical Frailty Scale (CFS) score was recorded on admission.

Results: We included 200 patients with a median age of 82 (75-99), 60% females, 89% lived in their homes, 154 (77%) were independent for personal and 99 (49.5%) for instrumental ADLs, 95% mobilised independently, 17.5% had memory impairment and 8% low mood. Acute cholecystitis was the most common diagnosis (43%) followed by acute cholangitis (36%) and acute pancreatitis (21%). 99 patients were non-frail (NF = CFS 1-4) and 101 were frail (F= CFS ≥5). 104 patients received medical treatment only. Surgery was more common in non-frail (F 2% vs. NF 11%), percutaneous drainage more frequently carried out in frail patients (15% vs. NF 5%) and endoscopic cholangiopancreatography (ERCP) was similar in both groups (F 32%vs. NF 31%). Frailty was associated with worse clinical outcomes in F vs. NF: functional deconditioning (34% vs. 11%), increased care level (19% vs 3%), length of stay (12 vs. 7 days), 90-day (8% vs. 3%) and 1 year-mortality (48% vs. 24%).

Conclusion: Half of patients in our cohort of older adults hospitalised with acute biliary disease were frail. Higher scores of frailty are associated with increased mortality. Compared with non-frail patients, individuals living with frailty were less likely to undergo surgical treatment, spent longer in hospital and were less likely to remain alive at 12 months after hospital discharge.

538. SP - Scientific Presentation - SP - Stroke (Stroke)
Poster

A case report and literature review - Impact of fracture and stroke outcomes

Ambreen Ali Sheikh, Soma Banerjee, Harri Jenkins

Charing Cross Hospital, Imperial College London

A healthy 80 years British female was blue lighted to the stroke team for a possible stroke with initial FAST positive assessment at scene. The patient was shopping when suddenly fell and was noted to have left sided weakness and speech difficulty. Paramedics found her in fast Atrial Fibrillation, which was of new onset. Her initial hospital assessment suggested her having moderate stroke, with National Institute of Health Stroke Scale (NIHSS) of 8 and her Glasgow Coma Scale (GCS) was 14.

She felt suddenly as "buckling under her weight" and fell but there was no significant injuries, seizures or loss of consciousness. There were no contraindications for thrombolysis .Non-contrast CT head was normal and CT Angiogram showed occlusion of distal A1, branch of Anterior Cerebral Artery. She was thrombolysed with Alteplase (0.9 mg/kg BW). She weighed 102 kg. As per protocol, she was reassessed post thrombolysis and found to have worsening of left leg weakness. She complained of new onset left hip pain and also had swelling of her left thigh. An urgent CT hip was arranged and found to have fracture neck of femur and hematoma. Cryoprecipitate was given to reverse Alteplase as per local protocol and hematology advice. Orthopedics team successfully operated on her 24 hours after reversal of Alteplase.

She had an uneventful recovery and was commenced on Direct Oral Anticoagulants. Stroke and bone fracture share some common risk factors, such as hypertension and diabetes mellitus. Animal studies have shown that bone fracture shortly before or after ischemic stroke exacerbates stroke injuries.

Our case report highlights a need to raise awareness that stroke and fractures together carry worse outcomes .Both conditions share common risk factors, but many contradictory treatments. We will discuss literature on role of neuro-inflammation in stroke and fracture, current studies, treatment and future direction.

558. SP - Scientific Presentation - SP - Other (Other medical condition)
Poster

Prevalence and impact of frailty in patients hospitalised with COVID-19. The Salford experience in waves 1 and 2.

Amarah Khan(1); Fernanda Ramon Espinoza(1); Thomas Kneen(1); Angeline Price(1); Anna Dafnis(1); Hala Allafi(1); Ben Carter(2); Maria Narro-Vidal(1); Roxanna Short(2); Rebecca Upton(1); Arturo Vilches-Moraga(1)

Salford Royal NHS Foundation Trust(1); Department of Biostatistics and Health Informatics, Institute of Psychiatry, Psychology & Neuroscience King's College London(2)

Introduction: The COVID-19 pandemic has had an extensive impact on the frail older population, with significant rates of COVID-related hospital admissions and deaths amongst this vulnerable group. There is little evidence of frailty prevalence amongst patients hospitalised with COVID-19, nor the impact of frailty on their survival.

Methods: Prospective observational study of all consecutive patients admitted to Salford Royal NHS Foundation (SRFT) Trust between 27th February and 28th April 2020 (wave 1), and 1st October to 10th November 2020 (wave 2) with a diagnosis of COVID-19. The primary endpoint was in-hospital mortality. Patient demographics, co-morbidities, admission level disease severity (estimated with CRP) and frailty (using the Clinical Frailty Scale, score 1-3=not frail, score 4-9=frail) were collected. A Cox proportional hazards regression model was used to assess the time to mortality.

Results: A total of 693 (N=429, wave 1; N=264, wave 2) patients were included, 279 (N=180, 42%, wave 1; N=104, 38%, wave 2) were female, and the median age was 72 in wave 1 and 73 in wave 2. 318 (N=212, 49%, wave 1; N=106, 39%, wave 2) patients presenting were frail. There was a reduction in mortality in wave 2, adjusted Hazard ratio (aHR)= 0.60 (95%CI 0.44-0.81; p=0.001). There was an association between frailty and mortality aHR= 1.57 (95%CI 1.09-2.26; p=0.015).

Conclusion: Frailty is highly prevalent amongst patients of all ages admitted to SRFT with COVID-19. Higher scores of frailty are associated with increased mortality.

603. SP - Scientific Presentation – SP-Cardiology
Poster

Challenges in the management of severe orthostatic hypotension associated with supine hypertension in a patient with autonomic dysfunction on background of Nasopharyngeal carcinoma and type II diabetes mellitus

Ng QM Rachel, Mamun K, Nguyen MH

Department of Geriatric Medicine, Singapore General Hospital, Singapore

Introduction Combined chemotherapy and radiotherapy increases long term survival in patients with nasopharyngeal carcinoma. However, radiotherapy of the carotid sinus or brain stem can evolve labile hypertension and orthostatic intolerance from chronic baroreflex failure. Diabetes would also cause this neuropathy. Management of patients with Supine hypertension-Orthostatic hypotension can be very challenging.

Methods A case report was done on a 71-year-old man with metastatic nasopharyngeal carcinoma status post radiation therapy who was admitted with severe supine hypertension-orthostatic hypotension. Patient was managed with both non-pharmacological and pharmacological methods, and monitored for postural symptoms, complications of severe supine hypertension – which has been linked to left ventricular hypertrophy and kidney dysfunction, and placed on 24hour ambulatory blood pressure monitoring to aid in management so as to prevent hypertension induced organ damage.

Results This review outlines the pathophysiology of Supine hypertension-Orthostatic hypotension, treatment complications and potential management strategies recommendations for this group of patients. It revealed the benefit of having a 24hour ambulatory blood pressure monitoring, which provides insight on the timing and magnitude of an individual's blood pressure fluctuations throughout the day so as to further guide management.

Conclusion Chronic baroreflex failure is a late sequela of neck irradiation for naso-pharyngeal carcinoma due to accelerated atherosclerosis in the region of the carotid sinus baroreceptor. Treatment goal is achieved with adequate control of pre-syncopal symptoms and prevention of long term complications. Non-pharmacological interventions remain the first line of therapy, followed by pharmacological interventions as necessary. Nonetheless, management of blood pressure in these elderly patients with baroreflex dysfunction remains challenging and should be individualized. Moving forward, a prospective study on the incidence of late onset, iatrogenic baroreflex failure as a late complication of neck irradiation and its particular relationship to carotid arterial rigidity should be conducted to increase awareness, timely diagnosis and management of the condition among physicians.

537. SP - Scientific Presentation - SP - Other (Other medical condition)
Poster

Age, frailty and comorbidity in COVID-19 inpatients 65 and older (poster)

Nonyelum Obiechina, Atef Michael, Rana Rashid Ali Khan, Meithem Ali, Muhammad Zainu din, Tarunika Mekala, Ciara-Marie Doyle, Angela Nandi

Queen's Hospital, Burton on Trent, UK & Russells Hall Hospital, UK

Introduction: Higher incidence of COVID-19 and poorer outcomes have been shown to be associated with age, frailty and comorbidity. Older people have more risk of severe COVID 19; hospitalization, ITU admission, ventilation and mortality.

Aim: To assess the correlation between age, frailty and comorbidity in COVID-19 inpatients 65 years and older

Methods: A retrospective, cross-sectional analysis was carried out on COVID 19 inpatients 65 and older in a UK district general hospital. Patients with no microbiological evidence of COVID-19 and patients with incomplete data were excluded from the study. Demographic data, frailty score and comorbidity index were extracted from the electronic records of patients. SPSS 27 statistical software was used to perform descriptive analysis and linear regression coefficient.

Results: 357 COVID-19 patients 65 and over were assessed; 207 males and 150 females. Mean age was 81.9 +/- 9.31. Frailty scores were measured using the Rockwood Clinical Frailty Scale (CFS) and comorbidity was calculated using the Charlson Comorbidity Index (CCI). There was positive correlation between age and Clinical Frailty Scale (r=. 436; p<. 001), between age and Charlson Comorbidity Index (r=. 448; p<. 001, and between frailty and comorbidity (r=. 429; p<. 001)

Conclusion: In COVID-19 inpatients 65 and older, there was positive correlation between age and Clinical Frailty Scale, between age and Charlson Comorbidity Index and between frailty and comorbidity. More studies are needed to explore the interaction between age, frailty and comorbidity and COVID 19 morbidity and mortality.