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Ref: MC-1815 Presidents Round

R Rogans-Watson1&2, C Shulman2&3, D Lewer4, M Armstrong2&3, B Hudson2&3

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Title: Frailty, older age-associated conditions, and multimorbidity amongst people experiencing homelessness in a hostel in London

Category: Scientific Presentation (SP)

Sub Category: BSG (Biology & social gerontology)

Introduction

People experiencing homelessness (PEH) face poor health outcomes and extreme health inequity, and evidence suggests earlier onset of older age-associated conditions and signs of premature ageing. This is the first UK study to assess frailty in this population. The objective was to assess frailty, age-associated conditions, and multimorbidity in PEH residing in hostel accommodation, drawing comparisons with population data.

Methods

Participants were drawn from a hostel in London for PEH aged over 30. Age-associated conditions were identified using validated tools and a questionnaire modelled on comprehensive geriatric assessments. Participants' keyworkers completed questionnaires to provide collateral information. Frailty was defined according to five criteria in Fried's phenotype model: participants with three or more criteria are classified as frail, one or two criteria as vulnerable, and no criteria as not frail. Multimorbidity was defined as the presence of two or more long-term conditions in one person. Comparisons were made with population data from The English Longitudinal Study of Ageing and Health Survey for England.

Results

Thirty-three people participated (83% of eligible residents), with a mean age of 55.7 years (range 38-74). Frailty was identified in 18/33 participants (55%), with 13/33 (39%) classified as vulnerable, and 2/33 (6%) as not frail. Participants met an average of 2.6/5 frailty phenotype criteria, comparable to 90-year-olds in the general population. The most common age-associated conditions identified were: falls (in 61%), visual impairment (61%), low grip strength (61%), mobility impairment (52%), and cognitive impairment (45%). Multimorbidity was present in all thirty-three participants.

Conclusions

A wide range of unmet health needs was identified. The high prevalence of frailty and age-associated conditions support evidence of premature ageing, indicating a need to include holistic older-age assessments in PEH at a younger age. Involvement of health professionals with experience of working with older people could contribute to improving health outcomes for homeless patients.

Ref: MC-1817

Author Name: A Veloso Costa, A Zhunus, B Storey, M Salik Sait, S Shah, F Sanei, J Mathew, M Heitor

Author Provenance: Princess Royal University Hospital (King's College Hospital NHS Foundation Trust), London

Abstract Title: Improving urinary catheter documentation and care in geriatric wards

Category: Clinical Quality

Sub Category: Clinical Effectiveness

Introduction: NICE guidelines state that urinary catheter insertion, changes and care should be documented. Duration of catheterization is directly linked to the risk of developing a catheter-associated UTI. Furthermore, Public Health England has announced a national aim to reduce the incidence of Gram-negative bacteraemia by 50% by March 2021, and targeting catheters is one of the first steps.

Local problem: These issues are relevant to the elderly population at Princess Royal University Hospital, where documentation surrounding catheters was found to be inadequate. Despite there being an Electronic Patient Record (EPR) order for catheter insertion and monitoring available, this was not being used. Our primary aim was for all patients to have this order. We also hoped to reduce the weekly rate of catheter days (catheter days per 100 bed days), and improve documentation in clinical notes.

Methods: We focused on two medical wards and sampled all patients admitted over a period of 4 months who had a catheter at the time of data collection. We identified catheterized patients and whether they had an EPR catheter order on a daily basis. Additional parameters such as indication, insertion date, inserter, and documentation standards were extracted from EPR on a weekly basis. Patients were kept "live" and contributing to catheter day calculations until they were no longer on the ward or if the catheter was removed.

Interventions: We implemented changes over 2 PDSA cycles. Interventions included the addition of catheter columns to boards and education sessions for doctors and nurses (cycle 1), as well as catheter posters, alert cards, and circulation of emails with guidance to doctors and nursing staff (cycle 2).

Results: A total of 87 patients were analysed during the project. There was an increase in EPR orders being used, with the 100% target being reached on the final data collection point, and with data showing a significant shift above baseline. Furthermore, there was a decrease in the weekly rate of catheter days, but changes were difficult to sustain. We also saw a general improvement in documentation standards.

Conclusion: By improving documentation and reducing unnecessary catheterization, we hope to have reduced the overall risk of infection whilst improving patient comfort and experience. Lessons may be transferrable to other trusts.

Ref: MC-1818

Author Name: W Rycroft, B Madi

Author Provenance: Care of the Elderly Department, Barnsley Hospital NHS Foundation Trust

Title: A New Ambulatory Frailty Pathway at Barnsley Hospital

Category: Clinical Quality

Sub Category: Patient Centredness

Topic

At Barnsley Hospital we targeted an improvement in the care of frail patients. The first objective was to improve the patient journey by reducing the amount of time that frail patients spend in busy acute environments. The second objective was to deliver more effective Comprehensive Geriatric Assessment which is recognised as gold standard management (Ellis, G. BMJ 2011;343:d6553).

Intervention

A new frailty chaired area was opened in July 2018 with capacity to receive up to 6 patients per day from acute admission areas and aim for same day discharge.

We developed our own bespoke criteria to ensure that suitable ambulatory patients were identified to access this new pathway. This was called 'FACT' Criteria- Frail, Ambulatory, Clinically stable, Time to call. Patients received an MDT model of care which was documented using a newly developed electronic tool called electronic Comprehensive Geriatric Assessment (eCGA).

Improvement

To evaluate the patient journey we measured the average time between the Acute Medical Unit (AMU) Post Take Ward Round (PTWR) and onward move. Comparison was made between the 2 month periods July – August and November – December 2018. This demonstrated that the average time reduced from 10.3 to 5.1 hours.

Between July 2018 and April 2019 a total of 689 patients were assessed in the frailty chaired area of which 60.8% were discharged from the hospital the same day.

Discussion

The patient journey for frail ambulatory patients now involves significantly less time on AMU awaiting onward move. Comprehensive Geriatric Assessment is delivered more effectively and documented electronically using eCGA. This tool promotes better information sharing and has a specific section for advance care planning.

This new pathway has a high same day discharge rate of 60.8% which reduces length of stay for our frail patients.

Ref: MC-1819

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Author Provenance: 1. Age Research Group, NIHR Newcastle Biomedical Research Centre, 2. University of Dundee, 3. NHS Tayside, 4. NHS Lothian

Title: IS MITOCHONDRIAL FUNCTION MEASURED BY 31P MAGNETIC RESONANCE SPECTROSCOPY ASSOCIATED WITH PHYSICAL PERFORMANCE IN OLDER PEOPLE WITH FUNCTIONAL IMPAIRMENT?

Category: Scientific Presentation (SP)

Sub Category: BMR (Bone, muscle & rheumatology)

Background

Mitochondrial dysfunction has been proposed as a therapeutic target to improve muscle strength and endurance, but the contribution that mitochondrial dysfunction makes to impaired skeletal muscle performance in older people remains unclear. We studied the relationship between phosphocreatine recovery rate (a measure of skeletal muscle mitochondrial function) and physical performance in older people.

Methods

We analysed data from the Allopurinol in Functional Impairment (ALFIE) trial. Participants aged 65 and over, who were unable to walk 400m in six minutes, underwent 31P magnetic resonance spectroscopy of the calf after exercise at baseline and at 20 weeks follow up. The phosphocreatine recovery half-life time (t-half) was derived as a measure of mitochondrial function. Participants also undertook the 6-minute walk distance, the Short Physical Performance Battery test (SPPB), and had muscle mass measured using bio-impedance analysis. Bivariate correlations and multivariable regression analyses were conducted to determine associations between t-half and baseline factors.

Results

One hundred and seventeen people underwent baseline 31P magnetic resonance spectroscopy, mean age 80.4 years (SD 6.0); 56 (48%) were female. Mean 6-minute walk was 291m (SD 80) and mean SPPB score was 8.4 (SD 1.9). T-half was significantly correlated with SPPB score (r=0.22, p=0.02) but not with 6-minute walk distance (r=0.10, p=0.29). In multivariable linear regression, muscle mass and weight, but not t-half, were independently associated with SPPB score and with 6-minute walk distance. The change in t-half between baseline and 20 weeks was not significantly associated with the change in SPPB (r=0.03, p=0.79) or with the change in 6-minute walk distance (r=-0.11, p=0.28).

Conclusion

Muscle mass, but not phosphocreatine recovery time, was associated with Short Physical Performance Battery score and 6-minute walk distance in this cohort of older people with functional impairment.

Ref: MC-1821

Author Name: Dr Nicholas Saxton, Dr Deborah Mayne

Author Provenance: Sunderland Royal Hospital

Title: Renewing the Frailty Experience: bringing CGA into the Emergency Department

Category: Clinical Quality

Sub Category: Efficiency and Value for Money

Topic

Early recognition and multidisciplinary management of frail patients in acute care is a national priority. This is reflected in the NHS 10 year plan, NHS Improvement (NHSI) and Getting It Right First Time (GIRFT) ambitions for acute care. The Sunderland Royal Hospital acute frailty service currently reviews frail patients on the Medical Admissions Unit (MAU) each morning. Analysis of our emergency department (ED) data demonstrates that most frail patients arrive to the ED between 12pm and 18pm leading to a cohort of frail patients who are not receiving comprehensive geriatric assessment early in their patient journey. Here, we present our piloted expansion of the frailty service into the ED.

Intervention

Currently the frailty service is provided on MAU between 9am and 1pm. The pilot service expansion ran for five weeks between September and October 2018 and involved the acute frailty team being available to ED and MAU from Monday to Friday 0830am to 1700pm. Frail patients were proactively identified using the ED patient tracker as well being referred to the team by ED staff.

Improvement

During the pilot, the team reviewed 131 additional patients. 85% were seen in ED. 61 patients were discharged directly from ED and 33 patients were admitted directly to a back of house medical ward resulting in reduced MAU occupancy rates in the evenings. Concerns that bringing full MDT assessment into ED might result in increased time spent in ED were proven to be unfounded. Median length of stay for admitted patients was low with 49% discharged within 7 days and 9.9% 30 day readmission rate. Feedback from ED and community teams was positive.

Discussion

It is recognised that early CGA is beneficial for patients with frailty syndromes who are admitted to hospital. Most commonly, this takes place on medical admissions wards. Through this pilot, we have demonstrated significant added benefits of bringing the acute frailty team and crucially CGA into the emergency department setting. As well as increased discharges directly from

ED, we demonstrated a reduction in length of stay and readmissions as well as improved patient flow. Our aim is to permanently implement a seven day frailty service with input on MAU as well as ED.

Ref: MC-1823

Author Name: Ellen Haire, George Kimpton

Author Provenance: North Bristol Trust

Title: Improving discussions around treatment escalation decisions in patients with subdural haematomas on a neurosurgical ward.

Category: Clinical Quality

Sub Category: Patient Centredness

Background

It is becoming increasingly accepted that discussion and documentation of patient wishes and clinical decisions regarding treatment escalation planning are an essential part of patient care. Following the Tracey judgement, it became a legal requirement, rather than a recommendation, for doctors to involve patients and their families in DNAR decisions.

A previous audit in the neurosurgical department found a high prevalence of patients at risk of deterioration with little evidence of attempt to discuss or document treatment escalation decisions (TEDs).

Aims

- To improve the documentation of TEDs in the neurosurgical department
- To improve confidence and communication about TEDs within the multi-disciplinary team

Methods

We conducted surveys of the multi-disciplinary team within the neurosurgical department to gain a better understanding of their opinions about the current discussion and documentation of TEDs in the department. These contained a mixture of rating scales and free text answers. Following this we engaged senior staff in plans to improve this by introducing these discussions to governance meetings and educated all members of the ward using e learning and tea trolley teaching.

Results

Amongst 18 healthcare professionals, 12 felt patients did not have clear TEDs. Ten felt discussions were not appropriately timed. Response themes included feeling unsupported, poor timing of conversations and low quality documentation. Following this a consensus decision from the consultant body mandated documentation of TEDs in patients presenting with

chronic subdural haematomas. We have worked closely with the national ReSPECT programme and established the neurosurgical ward as a lead for the introduction of the new form.

Conclusion-The neurosurgery department is now at the forefront of the move to improving discussions and documentation about patient wishes in the Trust. Additionally, we have opened the conversation within the multi-disciplinary team and provided training and education about the importance of TEDs.

Ref: MC-1824

Author Name: Hnin Mon, Rachel Holt

Author Provenance: H Mon, R Holt (Mid Yorkshire Hospitals NHS Trust)

Title: Quality improvement project on delirium care in older patients at Mid Yorkshire Hospitals NHS Trust (MYHT)

Category: Clinical Quality

Sub Category: Clinical Effectiveness

Background
To improve delirium care in older patients admitted to a large district general NHS Trust in the UK, a quality improvement project was conducted.

Introduction
The national NICE guidelines (CG103) and recent SIGN guidelines recommend delirium is diagnosed by a clinical assessment based on DSM criteria (e.g. CAM or 4AT) and managed by identifying and treating the causes alongside multicomponent interventions.
The results of MYHT's 2018 delirium audit showed the use of CAM or 4AT was 32.5% and delirium care plan was 20%. A quality improvement project was developed and implemented for 6 weeks on a frailty admission unit.

Method
The quality improvement project introduced a delirium care checklist sticker for medical notes in cases of suspected delirium, brief education sessions for ward doctors regarding delirium care and use of the sticker and reminder emails, all implemented by the elderly medicine registrar. The target measures were completion of stickers, 4AT and delirium care plan. Data was collected by the registrar once a week for 6 weeks and entered into a run chart. Feedback was collected from staff on barriers to use.

Results
31 patients with suspected delirium has their notes reviewed. The sticker use gradually reduced from 57% of cases in week 1, to 0% in week 6. The 4ATwas completed in 57%, 50% and 100% of cases in the first 3 weeks, but dropped to 40%, 4.2% and 1.3% in the last 3 weeks. A delirium care plan was initiated in 42% and 37% of cases in the first two weeks but ended at 0% by week 6.
Barriers included a lack of education sessions from week 2 onwards due to registrar on call shifts. Also junior doctor changeover in week 3. Feedback indicated barriers were time taken to complete, and confusion over ownership of completing 4AT and care plan between medical and nursing teams.

Conclusion
Although a delirium care checklist sticker and brief education sessions can improve delirium care, sustained improvement requires ongoing education and addressing barriers to completion.

References
1. National Institute for Health and Care Excellence (2019) Delirium: prevention, diagnosis and management(NICE Guideline CG103). Available at:https://www.nice.org.uk/guidance/cg103 Accessed 21/09/2019].
2. Scottish Intercollegiate Guidelines Network(2019) risk reduction and management of delirium(SIGN Guideline 157).Available at https://www.sign.ac.uk/assets/sign157.pdf.Accessed21/09/2019.

Ref: MC-1826

Author Name: Dr Cheng Khuang Lim, Carol Miller, Dr Theodora Jones

Author Provenance: Salford Royal Foundation Trust

Title: Promoting Advance Care Planning of patients with Parkinsonism in the community

Category: Clinical Quality

Sub Category: Patient Centredness

Introduction

NICE guideline recommends that all patients with Parkinson's disease should be reviewed every 6-12 months and offered opportunities to discuss Advanced Care Planning (ACP) (1,2). There is evidence demonstrating that Advanced Care Plans results in shorter length of stay in the last year of life and lower hospital costs (2,3). A local baseline audit showed that Advanced Care Planning was not performed adequately.

Methods

A local baseline audit on community care home patients with Parkinsonism was completed in February 2018. A community-based Parkinson's clinic was commenced in June 2018. Patients with parkinsonism who were unable to attend hospital clinics due to underlying frailty, neuropsychiatry and physical issues, were reviewed. At each visit, advice was provided on medicines management and there were discussions around Advance Care Planning.

A re-audit was completed in August 2019. Patient's Electronic Patient Records were scrutinised to evaluate progress and identify those who had died. Data was analysed using Microsoft Excel.

Results

	Baseline audit	*Re-audit*
Total number of patients	56 patients	46 patients
Male: Female ratio	27:28	24:22

Mean age	79.89	82
Percentage of patients with dementia	64.29%	67%

Table 1: Demographic data of patients

	Baseline audit	*Re-audit*
Number of patients who passed away within 15 months	21 (37.5%)	17/46 (23.4%)
Number of patients who were seen PD specialist 12 months before decease	4/21 (19%)	17/17 (100%)
Number of patients who passed away in		
Care home	11/21 (52.4%)	11/17 patients (64.70%)
Hospital	7/21 (33.33%)	4/17 patients (23.5%)
Hospice	0	1/17
Unknown	3/21	1/17
Advance Care Plan completed	10/21 (52.4%)	12/17 (70.6%)

Table 2: Patients who passed away within 15 months

The initiative contributed directly to end of life care in 7/17 patients. Parkinson's disease medications were rationalised in 11/17 (64.70%). 14/17 (82.35%) had a community-based Do Not Resuscitate order completed.

Conclusions

The community Parkinson's clinic service promoted Advance Care Planning in patients with Parkinsonism. This service provides specialist input in frail older people with Parkinsonism who were unable to attend hospital clinic, promoting end of life choices around where they wished to die and avoiding unnecessary hospitalisation in the final stages of their life.

Ref: MC-1828 Platform Presentation

Author Name: N Thorley1, M Chakravorty1, R Schiff1, E Oikonomou2, R Symes1, E Seymour1, C Vincent2, PACT group3

Author Provenance: 1. Department of Ageing and Health, Guy's and St Thomas' NHS Foundation Trust; 2. Department of Experimental Psychology, University of Oxford; 3. Bradford Institute for Health Research and University of Leeds.

Title: Quality of Care Transitions: Older Adults' Experiences in an Integrated Care Trust

Category: Scientific Presentation (SP)

Sub Category: HSR (Health services research)

Introduction

The transition of care from hospital to home is a high-risk time for older adults. The Partners at Care Transitions (PACT) programme aims to improve safety and quality of care transitions. We aimed to test the feasibility of using the Partners at Care Transitions Measure (PACT-M) to evaluate older adults' experiences of the transition from hospital to home in an Inner London Integrated Care Trust and to identify factors impacting transition quality.

Methods

The PACT-M, a validated patient-reported questionnaire designed to evaluate care transitions, was administered to patients ≥65 years at 7, 30 and 90 days post-discharge. Likert scores were analysed quantitatively and manual thematic analysis performed on free-text comments.

Results

101 participants were recruited. Mean age 77.8 years. 84, 70 and 65 participants completed follow-up at 7, 30 and 90 days, respectively.

- At 7 days, 92% felt prepared to be at home. 61% felt staff prepared them for things they might find difficult at home.
- By 30 days, 81% reported an adverse event, most commonly unplanned healthcare utilisation.

- At 90 days, 78% felt they had adequate support from community services. 40% had difficulty getting an appointment with a healthcare professional.

Factors impacting patients' experience of transition quality are shown in Table 1.

Table 1: Factors impacting transition quality

In Hospital	Integration	In the Community
Hospital experience	Continuity	Access to social care support
Patient involvement and information	Co-ordination	Access to healthcare support

Conclusions

- The PACT-M was a useful measure that allowed us to explore older adults' experiences of care transition and identify areas for improvement.
- By improving continuity and co-ordination, Integrated Care has the potential to improve transition safety and quality.
- Older adults' experience of transition was largely positive; however, greater cohesion of services is needed to overcome gaps in the Integrated Care pathway experienced by patients.

Ref: MC-1830 Presidents Round

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Author Provenance: 1 Manchester University NHS Foundation Trust, Manchester 2 School of Health Sciences, Faculty of Biology, Medicine & Health, The University of Manchester 3 School of Social Sciences, Faculty of Humanities, The University of Manchester 4 School of Biological Sciences, Faculty of Biology, Medicine & Health, The University of Manchester 5 Salford Royal NHS Foundation Trust, Manchester

Title: Loneliness, social isolation and frailty among older adults in England: Results from the English Longitudinal Study of Ageing

Category: Scientific Presentation (SP)

Sub Category: EPID (Epidemiology)

Introduction

Ten percent of over 65s and between a quarter and half of over 85s are frail. Loneliness and social isolation are associated with increased falls, rates of hospitalisation and mortality. Lonely and socially isolated older adults may also be at risk of frailty. We examined the relationship between loneliness, social isolation and incident frailty among older adults in England longitudinally over 12 years.

Method

The study sample are 9,171 older adults aged ≥ 50 years participating in a population representative longitudinal panel survey, the English Longitudinal Study of Ageing Waves 2-8. To define frailty across the biannual waves, we used the Frailty Index (FI), analysed continuously and into categories (FI ≤0.08 non-frail, 0.08-0.25 pre-frail and ≥0.25-1 frail). We used baseline (Wave 2): loneliness measure using the UCLA 3-item loneliness scale; social isolation measure using previously reported method (Banks et al. The Institute for Fiscal Studies. 2006.). Both were categorised into low/medium/high. To examine relationships, we used linear mixed methods modelling (for the continuous FI), and Cox proportional hazard model (for the categorical FI).

Results

Loneliness (β= 0.023; 95% CI= 0.022, 0.025) and social isolation (β=0.007; 95% CI= 0.003, 0.010) were significantly associated with increased FI, after adjusting for cofounders (gender, age, marital status, smoking status and wealth). There was a 60% greater relative risk of belonging to the frail class with a medium loneliness score compared to low (HR= 1.570; 95% CI 1.492, 1.652) and a 160% greater relative risk with high loneliness score compared to low (HR= 2.621; 95% CI 2.488, 2.761). Although less pronounced, there was a 1% greater relative risk of developing frailty with a medium social isolation score compared to low (HR=1.010, 95% CI 1.010, 1.197) and a 30% greater relative risk with high social isolation score compared to low (HR= 1.267; 95% CI 1.154, 1.390).

Conclusions

Our research indicates both loneliness and social isolation increase risk of developing frailty, expanding on previous evidence. This provides further support to the importance of understanding approaches to promote social inclusion of older adults.

Ref: MC-1831 Platform Presentation

Author Name: Yawen Xiang

Author Provenance: The University of Edinburgh

Title: Adiposity and Development of Dementia:a systematic review of recently published longitudinal studies

Category: Scientific Presentation (SP)

Sub Category: EPID (Epidemiology)

Background and Objectives

The socioeconomic burden of dementia is very high and on the rise. Currently there is no cure for dementia; therefore, it is key to identify the modifiable risk factors for this condition. The association between adiposity and dementia is not yet convincingly established. This systematic review aimed to critically appraise the quality and to synthesise the findings of recently published longitudinal studies examining the association between adiposity and the development of dementia.

Methods

A comprehensive literature search on longitudinal studies published between 2013 and 2018 was conducted across MEDLINE, EMBASE, PsycINFO and SCOPUS. The quality of selected papers was assessed using the Newcastle-Ottawa Quality Assessment Scale for cohort studies (NOS) and PRISMA-IPD checklist. The results of the included studies were qualitatively synthesised.

Results

Of the 1370 citations identified and reviewed, 10 completely met the inclusion criteria. Of the 10 included studies, 9 were high quality cohort studies, scoring an average of 8.4 out of 9 for NOS. One study was an individual patient data meta-analysis study (IPD). The IPD had high scientific rigour and largely adhered to the PRISMA-IPD checklist. In total, the 9 cohort studies

included more than 2 million subjects, with 3 cohorts recruiting exclusively men. The IPD contained data from 39 cohorts and 1.3 million participants. 4 studies were conducted in highly selective cohorts. Apart from European male populations, the other populations were markedly under-represented. All studies used body mass index (BMI) as a proxy for adiposity. None of the included studies did a sample size calculation. Only half of the included studies were able to produce significant results, suggesting insufficient sample size and lack of power. The included studies reached contradictory results, with half of the studies favouring a protective effect of adiposity.

Conclusions

In view of the results and quality of the studies, this review found that there was insufficient evidence to establish the association between adiposity and dementia. Current evidence suggests an association between mid-life obesity and dementia development in late-life. Longer studies were more likely to conclude that adiposity was detrimental to health. The inconsistent conclusions could be the result of reverse causality. To conclusively establish the link between adiposity and dementia, more research with robust methodology is warranted.

Ref: MC-1832 Platform Presentation

Author Name: Yawen Xiang, Kit Chan, Igor Rudan

Author Provenance: The University of Edinburgh

Title: Estimating the Burden of Dementia in Latin America and the Caribbean:A systematic review and meta-analysis

Category: Scientific Presentation (SP)

Sub Category: EPID (Epidemiology)

Background and Objectives

Rapid increase in life expectancy has resulted in an increase in the global burden of dementia that is expected to become a leading cause of morbidity in the future. Low- and middle-income countries are expected to bear an increasing majority of the burden, but lack data for accurate burden estimates that are key for informing policy and planning. Bayesian methods have recently gained recognition over traditional frequentist approaches for modelling disease burden for their superiority in dealing with severely limited data. This study provides updated estimates of dementia prevalence in Latin America and the Caribbean (LAC) for the years 2015, 2020 and 2030. Given the paucity of data, estimates were developed using a Bayesian methodology and confirmed by the traditional frequentist approach, with the aim of providing methodological insights for future disease burden estimates.

Methods

A comprehensive systematic literature search was conducted to identify all relevant primary studies published between the years 2010-2018. The quality of the included studies was critically assessed. A random-effects model (REM) and a Bayesian normal-normal hierarchical model (NNHM) were used to obtain the pooled prevalence estimate of dementia for people aged 60 and above. The latter model was also developed to estimate age-specific dementia prevalence. Using UN population estimates, total and age-specific projections of the burden of dementia were calculated.

Results

The prevalence of dementia in LAC was found to be 14% (10-21%) in those above age 60 based on REM, and 8% (5-11.5%) based on NNHM. The prevalence increased from 2% (1-4%) in people aged 60-69 to 29% (20-37%) in people above the age of 80. The number of people living with dementia in LAC in 2015 was estimated at 5.68 million, with future projections of 6.86 million in 2020 and 9.94 million in 2030.

Conclusions

The findings of this review found that burden of dementia in LAC is substantial and continues to rapidly grow. The projected rise in dementia cases in the future should prompt urgent governmental response to address this growing public health issue. We were also able to demonstrate that given the overall paucity of data, a Bayesian approach was superior for estimating disease prevalence and burden.

Ref: MC-1834

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Author Provenance: 1. NIHR Newcastle Biomedical Research Centre; 2. University of Dundee; 3. East Kent Hospitals NHS Trust; 4. NHS Tayside; 5. University of Aberdeen; 6. Guys and St Thomas NHS Trust

Title: WHAT ARE THE ASSOCIATIONS BETWEEN RENAL BIOCHEMISTRY AND PHYSICAL PERFORMANCE IN OLDER PATIENTS WITH ADVANCED CHRONIC KIDNEY DISEASE? FINDINGS FROM THE BICARB TRIAL COHORT

Category: Scientific Presentation (SP)

Sub Category: OTHER (Other medical conditions)

Background

Impaired physical performance is common in older people with advanced chronic kidney disease. It is unclear which metabolic derangements contribute to this impairment. This analysis examined cross-sectional associations between renal biochemical indices and physical performance in older people with advanced chronic kidney disease.

Methods

We analysed data from the BiCARB multicentre trial, which enrolled patients aged 60 and over, with chronic kidney disease stage 4 or 5, not on dialysis, and with serum bicarbonate <22mmol/L. Participants undertook baseline Short Physical Performance Battery (SPPB), grip strength and six minute walk test. Renal biochemistry (serum creatinine, cystatin C, phosphate, bicarbonate), haemoglobin, and NT-pro-B-type natriuretic peptide (NTproBNP) were measured at baseline. Associations were tested using Spearman's rho and generalised linear modelling using forced entry was used for multivariable regression analysis.

Results

The analysis included 300 participants (mean age 74 years; 86 [29%] women). Mean baseline SPPB was 8.1 points (SD 2.3); mean six-minute walk distance was 311m (SD 132). Age (r=-0.27, p<0.001) and BNP (r=-0.27, p<0.001) were most strongly associated with the SPPB. Age (r=-0.33, p<0.001), haemoglobin (r=0.24, p<0.001), cystatin C (r=-0.21, p<0.001) and NTproBNP (r=-0.32, p<0.001) were most strongly associated with six-minute walk distance. For grip strength, age (r=-0.35, p<0.001), cystatin C (r=-0.24, p<0.001), and NTproBNP (r=-0.31, p<0.001) were most strongly associated in men, with similar but weaker associations for women. Creatinine and bicarbonate concentrations were not significantly associated with any physical performance measures. Factors in multivariable regression independently associated with six-minute walk distance were age, sex, BMI, cystatin C, phosphate and NTproBNP; with SPPB were age and BMI; and with grip strength were age, sex and cystatin C.

Conclusions

Some biochemical markers related to kidney function are modestly associated with physical performance in older people with advanced chronic kidney disease; patterns differ between different performance measures.

Ref: MC-1835

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Title: DO EXERCISE PROGRAMMES FOR OLDER PEOPLE WITH SARCOPENIA OR FRAILTY DELIVER AN EVIDENCE-BASED SERVICE? FINDINGS FROM A UK SURVEY

Category: Clinical Quality

Sub Category: Clinical Effectiveness

Background

Awareness of sarcopenia and frailty is growing and both are known to be potentially reversible with effective resistance training. We aimed to establish whether existing exercise programmes offered to people with sarcopenia or frailty adhere to the known evidence base.

Methods

We conducted a national on-line survey of practitioners delivering exercise programmes to older people with sarcopenia or frailty. The link to the online survey was distributed through the British Geriatrics Society, Chartered Society of Physiotherapy Special Interest Group for Older People (AGILE), the NHS England Future Collaboration Platform ‘Supporting People Living

with Frailty' forum and social media. Questions covered target population and aims of the exercise programme, type, duration and frequency of exercise, progress assessment and outcome measures. Descriptive analyses were conducted using SPSS v24.

Results

136 responses were received from respondents who worked for NHS Trusts, clinical commissioning groups, private practices, and third sector providers. 94% of respondents reported prescribing or delivering exercise programmes to people with sarcopenia or frailty. Most programmes (81/135 [60%]) were primarily designed to prevent or reduce falls. Resistance training was reported as the main focus of the programme in only 11/123 (9%); balance training was the main focus in 61/123 (50%) and functional exercise in 28/123 (23%). Exercise was offered once a week or less by 81/124 (65%) of respondents; the median number of sessions offered was 8.5 (IQR 6 to 12). Outcome measures suitable for assessing the effect of resistance training programmes were reported by fewer than half of respondents (hand grip: 13/119 [11%]; chair stands: 55/119 [46%], short physical performance battery: 4/119 [3%]).

Conclusions

Current exercise programmes offered to older people with sarcopenia or frailty lack the frequency, duration or specificity of exercise likely to improve outcomes for this group of patients.

Ref: MC-1836

Author Name: Altug Didikoglu, Asri Maharani, Antony Payton, Maria MercÃ¨ Canal, Neil Pendleton

Author Provenance: Division of Neuroscience & Experimental Psychology, School of Biological Sciences, The University of Manchester, Manchester, UK Division of Nursing, Midwifery & Social Work, School of Health Sciences, Faculty of Biology, Medicine and Health, The University of Manchester, UK Division of Informatics, Imaging & Data Sciences, School of Health Sciences, Faculty of Biology, Medicine and Health, The University of Manchester, Manchester, UK

Title: LONGITUDINAL CHANGE OF SLEEP IN THE ELDERLY AND ITS ASSOCIATIONS WITH HEALTH

Category: Scientific Presentation (SP)

Sub Category: EPID (Epidemiology)

Introduction:

In elderly populations, sleep quality deteriorates and sleep time shifts towards earlier times. These sleep characteristics have been associated with cardiovascular, metabolic and psychiatric disorders, cognitive decline and mortality. Our aims are to examine longitudinal changes of sleep in older adults and to investigate the relationship between sleep variations, general health and mortality.

Methods:

The University of Manchester Longitudinal Study of Cognition in Normal Healthy Old Age cohort (6375 participants, recruited in the North of England, between 1983 and 1993) was used. Mixed models were used to investigate individual sleep trajectories (5 waves in 30-year period). Sleep timing and efficiency trajectories were clustered using latent class analysis and analysed against daily habits, health and mortality.

Results:

Older adults have decreased sleep efficiency (~20%) and early sleep time (~30min) between 40 and 100 years of age. Those in the high sleep efficiency latent class had minimal decrease in their sleep efficiency as they aged. Belonging to the high sleep efficiency latent class was associated with having lower prevalence of hypertension, circulatory problems, arthritis, breathing problems and recurrent depression compared to the low efficiency latent class. Results showed a higher risk of hypertension and metabolic syndrome in the evening-type latent class compared to morning-type individuals. Evening class was associated with traits related to lower health such as reduced sport participation, increased risk of depression and psychoticism personality, late eating, increased smoking and alcohol usage. Survival analysis revealed that individuals in the evening class had 1.15-fold increased risk of all-cause mortality compared to those with morning preferences.

Conclusion:

Ageing is associated with decreased sleep efficiency and early sleep timing. However, there are detectable subgroups of sleep traits that are related to prevalence of different diseases and longevity. Understating these subgroups may pave the way for new treatments for healthy sleeping habits in older population.

Ref: MC-1837 Platform Presentation CQ Session

Author Name: Lucy Owen (1), Anna Steele (2), Kristin Goffe (3), Jo Pleming (4)

Author Provenance: 1: Whittington Hospital 2: University College Hospital 3: Royal Free Hospital 4: North Middlesex University Hospital

Title: The Elephant in the Room: An innovative and effective approach to multidisciplinary advance care planning training

Category: Clinical Quality

Sub Category: Patient Centredness

Background:

Exploring patients' preferences for future care is known to reduce adverse health outcomes, limit transfers between care settings institutionalisation and improve quality of life. Patients value opportunities to have honest conversations.

In the recent 'Talking about Dying' report from the Royal College of Physicians (RCP), it was found that healthcare professionals (HCPs) find it challenging to start conversations with patients and families. Yet the report highlights a need for

HCPs to be equipped with the skills and confidence to provide opportunities for advance care planning in primary care, inpatient and outpatient settings.

Methods:

A multi-disciplinary faculty delivered simulation sessions to 115 candidates (50.4% doctors, 33% nurses and 16.5% allied health professionals) from primary and secondary care.

Eight half-day sessions have taken place across North London. Each session started with an introductory lecture, followed by simulated scenarios between a professional actor and candidate within small multi-disciplinary groups. Group discussion was facilitated and feedback given.

We focused on acknowledging the progressive, complex and unpredictable nature of frailty. Scenarios included resuscitation, re-admission to hospital, risk feeding, complex discharge planning and cultural values in older adults.

Results:

100% would recommend this multidisciplinary simulation to teach advance care planning.

Only 15.6% of candidates felt confident or very confident with conversations; this improved to 90.5% following the simulation and was maintained at 69.5% three months later. Understanding when advance care planning is appropriate improved from 70% to 100%. Three months after the training, 86% stated they had a sustained change in practice in ACP as a result of the course.

Conclusion:

We have demonstrated that our multidisciplinary simulation is an effective format of improving understanding and confidence in having advance care planning conversations. These results are evident both immediately after and at the three month follow up stage demonstrating a sustained change in practice.

Ref: MC-1838 Platform Presentation CQ Session

Author Name: Geriatric Medicine Research Collaborative

Author Provenance: United Kingdom

Title: Improving delirium screening and recognition through quality improvement crowdsourcing: results of a panspecialty multi-centre project

Category: Clinical Quality

Sub Category: Clinical Effectiveness

Background: Delirium is common in hospitalised older adults. It is distressing and devastating. Unfortunately, delirium remains under-recognised in clinical practice.

Methods: We conducted a multi-centre crowdsourced quality improvement project, with three rounds of data collection. We shared guidelines, toolkits, and educational tools in web-based folders, alongside social media and conference dissemination. We recorded delirium screening completion within 48 hours of admission and delirium recognition by the usual care team in

unscheduled admissions (≥65years). Delirium was diagnosed prospectively in Round-1 (R1) and Round-3 (R3), and retrospectively in Round-2 (R2) (validated approach).

Results: Across all rounds (82 sites), delirium prevalence was 16.3% (491/3013). Delirium screening (R1: 27.3%, R2: 29.6%, R3: 37.1%; p<0.001) and recognition (R1: 34.2%, R2: 57.1%, R3: 63.2%; p<0.001) improved across each round. Odds of screening (OR 1.52, CI 1.19 – 1.93) and recognition (OR 3.65, CI 1.94 – 6.87) were greater in R3 compared to R1 in multivariable analysis. Likelihoods of delirium screening (OR 0.49, CI 0.28 – 0.85) and recognition (OR 0.15, CI 0.03 – 0.82) were reduced in patients admitted under other surgery specialties. Local delirium teams were associated with increased screening odds (OR 1.75, CI 1.40 – 2.18), and geriatrics teams embedded into admissions units were associated with increased recognition odds (OR 1.66, CI 1.03 – 2.69). Documentation of delirium on discharge summaries also improved (R1: 28.6%, R2: 48.4%, R3: 46.6%). Odds of discharge documentation (OR 3.19, CI 1.18 – 8.82) were greater in R2 compared to R1 in multivariable analysis. Across all rounds, delirium was associated with increased hospital mortality (HR 1.83, CI 1.30 – 2.60) and length of stay (+3.18 days; p<0.001) in multivariable analysis.

Conclusion: Delirium is common across all specialties. It is associated with increased mortality and length of stay. Trainee-led quality improvement crowdsourcing can be used to improve delirium screening, recognition, and documentation on discharge summaries.

Ref: MC-1840

Author Name: Rebecca C Robey, Alexander Danson, Jo Evans, Joe Froggatt, Amanda Pederson, Tina Cross, Arturo Vilches-Moraga, Olivier Gaillemin

Author Provenance: Salford Royal Foundation Trust

Title: Using a targeted teaching intervention to drive up the quality of Discharge Summaries. SHOP 75+

Category: Clinical Quality

Sub Category: Patient Safety

Background:

Quality improvement project examining discharge communication, and a targeted teaching intervention.

Introduction:

Poor quality, incomplete or missing discharge summaries (DSs) are associated with avoidable/ameliorable adverse events after discharge [1]; preventable readmission [2,3]; failure to implement discharge plans [4]; and medication continuity errors [4,5].

Methods:

To review the quality of DSs produced, each month forty representative DSs are randomly selected from four clinical areas and qualitatively assessed (total >1000, August 2017 – to date). Alongside this, in August 2018, incoming foundation doctors were surveyed on perceptions of the purpose/importance of DSs, and training provided on writing them. They were resurveyed after teaching delivery in November 2018 and April 2019.

Interventions:

Data from QI review and survey were used to generate a teaching intervention, in the form of an interactive slide set for delivery in small group settings. This was delivered in weekly mandatory teaching sessions. PDSA cycles were completed for teaching sessions, and the slide set was developed accordingly.

Results:

After the teaching sessions, we noted improvement in satisfaction with training provided on writing DSs (from 24% to 40%), as well as confidence in writing high-quality DSs (from 28% to 100%). We demonstrated increases in responses including the patient as an intended audience for the DS (from 51% to 84%), and rating 'patient information in lay terms' of 'high importance' (from 41% to 72%). These changes in perceptions were accompanied by improvement in the quality of DSs produced, particularly with respect to the quality of follow-up actions detailed and the quality of patient information provided in lay terminology. The average monthly proportion of DSs achieving a 'great score' in these areas increased from 20% and 28% respectively (August 2017 – June 2018), to 44% and 71% (August 2018 – March 2019).

Conclusions:

These data provide proof-of-principle that targeted teaching, constructed around prior questionnaire surveys, improves awareness of the purpose of DCs and leads to improvement in the quality of DSs produced and enhanced patient safety.

Ref: MC-1841

Author Name: Dr Gina Hadley (Specialty Registrar in Geriatric Medicine), Dr Sarah Billingsley (Foundation Doctor), Dr Seneka Nakagawa (Core Medical Trainee) and Dr Chris Durkin (Consultant Geriatrician)

Author Provenance: Stoke Mandeville Hospital, Aylesbury, UK

Title: CT Head and Cervical Spine audit in patients over the age of 65: A District General Hospital Perspective.

Category: Clinical Quality

Sub Category: Patient Safety

Introduction

Cervical spine (c-spine) injury has a high morbidity and mortality in patients over the age of 65; more than 60% result from falls from standing height (Beedham et al., 2019).

The Canadian Cervical Spine Rule (Stiell et al., 2001) deems that there is a high risk of c-spine fracture if any of the following apply:

- Age >65 years
- Extremity paraesthesia
- Dangerous mechanism

The c-spine cannot be cleared clinically if the patient fits any of the above criteria. Imaging should be considered. As a result of recent clinical experiences Trust Guidelines at Stoke Mandeville Hospital now reflect this evidence (Hadley et al., 2019).

Methods

Fifty patients over the age of 65 who had a computerised tomography (CT) head scan in the Emergency Department (ED) following a traumatic head injury were randomly selected over a 1 month period. Cases were checked for examination of c-spine and/or CT c-spine. Results of the first cycle of the audit were presented at an ED Education Meeting. Indications for CT c-spine were displayed in poster format around the ED. Following these interventions, a re-audit was carried out using the same methodology.

Results

In fifty patients aged over 65 attending ED during one month, 16% had a CT c-spine in addition to a CT head. There was documented c-spine examination of 16% of those without CT c-spine on admission. In the re-audit 38% of the fifty patients who had a CT head underwent CT c-spine. In the group that did not have imaging of the c-spine, the proportion with documented cervical spine examination on admission remained the same (16%).

Conclusion

There was a 137.5% increase in the number of patients aged over 65 who appropriately underwent a CT c-spine as per Trust and National guidelines. Simple interventions (staff education and posters within the ED) were sufficient to significantly alter practice. Current trauma triage is not optimal for older patients who are reviewed by more junior doctors, less likely to be transferred to Major Trauma Centres and more likely to die than younger patients with similar injuries (Major Trauma In Older People 2017 Report). An older person's trauma team in ED with age-appropriate triage would lead to appropriate imaging in a timely fashion, potentially improving the morbidity and mortality of these vulnerable patients.

Ref: MC-1843

Author Name: Caroline Abbott (1), Wes Parkes (1) , Mariella Baxter (2), Michelle Angus (1) , Rajat Verma (1) , Laura Hammond (3) , Emily Feilding (4), Dan Holsgrove (1)

Author Provenance: (1) Manchester Centre for Clinical Neurosciences, Salford Royal NHS Foundation Trust (2) University of Manchester Medical School (3) Directorate of Quality Improvement, Salford Royal NHS Foundation trust (4) Department of Ageing and Complex Medicine, Salford Royal NHS Foundation Trust

Title: To complete a frailty quality improvement project to improve the pathway for people over 65 admitted to Salford Royal with conservatively managed low to moderate trauma thoracolumbar fractures.

Category: Clinical Quality

Sub Category: Clinical Effectiveness

Introduction

Low to moderate trauma thoracolumbar fractures in older people are often associated with frailty. Management of stable spinal fractures is usually conservative but the time taken to ascertain whether a fracture is stable can result in periods of bed rest.
Frail patients undergoing bed rest are at particular risk of deterioration. Identification of frailty can help predict those patients most at risk.
This project proposed to increase the percentage of older patients having their clinical frailty score (CFS) documented and to reduce the length of time that these patients remain on bed rest which should lead to a reduction in complications.

Method
A driver diagram was used to coordinate the project and was produced with the aid of the Frailty SCN at NHS England. The spinal Advanced Clinical Practitioners and the Geriatricians worked together to promote the use of the CFS and highlight patients for geriatric reviews.
Frailty awareness was increased across the whole spinal team with a variety of methods including data sharing, use of story boards and the use of key phrases.
A notes review was completed before the project and after 6 months of 34 consecutive patients with thoracolumbar fractures.

Results
Prior to the frailty project the CFS was not routinely completed. Post project, the CFS was completed on 88% of patients with a geriatrician assessment completed on 86% of patients with a CFS 4 or above. Prior to the frailty project the average length of bed rest was 70.3 hours with patients waiting an average of 133 hours when an orthotic device was required. This is compared to an average of 48.9 hours of bed rest and an average of 45.1 hours waiting for an orthotic post frailty project. Prior to the frailty project the 63% of patients were prescribed bed rest was 63% and 34% of patients were treated with orthotics. Post project 32% of patients were treated with bed rest and 21% of patients were treated with orthotics.

Conclusions
Increasing the awareness of frailty throughout the team led to reduced use of spinal orthotics and reduced bed rest in the frailer patients with thoracolumbar fractures. Although this was a small project, it demonstrated successful cross professional working to improve the care of our frailer patients.

Ref: MC-1845

Author Name: Dawn Robertson Emma Barnes/ Dr Jane Rimer/Dr Latana Munang

Author Provenance: WLHSCP- West Lothian Health and Social Care Partnership

Title: Improving Efficiency of a daily Rapid Run Down™ within a Community Rehabilitation service-(Rapid Elderly Assessment Community Team -REACT)

Category: Clinical Quality

Sub Category: Clinical Effectiveness

Introduction

The population aged >75 years within West Lothian is anticipated to increase by 131% by 2039. Rehabilitation at Home (as part of REACT) was established in 2013 and has seen a significant increase in its referrals since inception, currently assessing over 900 patients / year. Since inception, the REACT rehabilitation team held a morning 'rapid run down', during which patient allocation and processes were discussed. With the increase in referrals, this was taking an increasing proportion of the team's clinical time. This processed was analysed to see if there was scope for improved efficiency and resource management across the team, thereby increasing time available for clinical contact.

Method

- A test of change was carried out using a PDSA cycle (Plan-Do-Study- Act) model of Improvement, between April – May 2019, with collection of baseline data around patient numbers, allocation and time taken
- Consultation with the multidisciplinary team was held in April to allow engagement from all stakeholders, and allow more effective utilisation of resource
- The process was further refined in using PDSA methodology

Results: -

- PDSA 1Cycle: showed (Time spent daily 45mins, No of staff 10, No of days 5) overall time spent for allocation within a week: 2250minutes.
- PDSA2 Cycle: showed (Time spent daily 15mins, No of staff:12, No of days 5) overall time spent for allocation within a week: 900minutes
- PDSA 3 Cycle: showed (Time spent daily 10mins, No of staff 2; No of days 5). Overall Time spent for allocation within a week: 100minutes.

Conclusion

- Following implementation, time spent during a daily 'rapid run down' has significantly improved, with a resultant extra 35.8 hours per week of clinical time released.
- Analysis of processes has improved efficiency, staff morale and patient care.

Ref: MC-1846 Presidents Round

Author Name: J Tomlinson1 2, H Smith2, J Silcock1, K Karban1, B Fylan1 3

Author Provenance: 1. University of Bradford 2. Medicines Management and Pharmacy Services, Leeds Teaching Hospitals NHS Trust 3. Bradford Institute for Health Research

Title: Coping with Medicines after Hospital Discharge; The Invisible Work of Older Patients and Their Care-givers

Category: Scientific Presentation (SP)

Sub Category: HSR (Health services research)

Introduction

Older patients often experience medication-related problems following discharge from hospital. These can be categorised as issues with obtaining medication, taking medication, medication effects or problems with communication or care co-ordination (Nicosia et al., Journal of General Internal Medicine, 2019, https://doi.org/10.1007/s11606-019-05463-z). The aim of this study was to explore older adults' experiences of post-discharge medicines management, including the strategies they use to safely manage their changed medicines.

Methods

Following ethical approval, patients aged 75 and above, with a change in their long term medicines, were recruited during admission to one of two hospitals in Yorkshire. Semi-structured interviews took place with the participants in their own homes, approximately two weeks after discharge. Interviews were audio recorded and transcribed. Data were analysed using the Framework method.

Results

Twenty-seven patients (mean age 85 years; 6 males) consented to be interviewed. They described multiple self-management and safety strategies used to support medicines management in the early post-discharge phase. The work done included adaptations (to routines, the home environment and action plans), scaffolding (where patients and their care-givers support the primary care system by providing additional documentation or prompts to ensure medicines were supplied on time and were correct) and error avoidance (seeking information, performing checks and balances).

Conclusion

Older patients experience gaps in their post-discharge medicines-related care which they had to bridge through implementing their own strategies or by enlisting support from others. This study shines a spotlight on to the invisible work that patients have to do in order to make post-discharge medicines management fit for purpose. Further work should consider those patients who are not able to carry out these tasks or who do not have any care-givers available for support and how this potential gap in care can be addressed.

Ref: MC-1847

Author Name: D Swancutt 1, SV Hope 2,3, B Kent 2,3, M Robinson 4, V Goodwin 2

Author Provenance: 1 University of Plymouth, 2 University of Exeter, 3 Royal Devon and Exeter NHS Foundation Trust, 4 South Western Ambulance Service NHS Foundation Trust

Title: I'm on the floor and can't get up and it's really annoying: A qualitative investigation of patient and staff perceptions of options for getting up from the floor following a fall

Category: Scientific Presentation (SP)

Sub Category: HSR (Health services research)

Background

Falls are the most common reason for ambulance call-outs resulting in non-conveyance. Even in the absence of injury, only half of those who have fallen can get themselves up off the floor. Many remain there for over an hour, increasing complications risks.

It is feasible to teach people techniques to help get themselves off the floor, yet these techniques are rarely taught. To date, there are no published data on attitudes towards teaching and learning these techniques. Our study aimed to investigate patient, carer and staff attitudes towards seeking help and using techniques to get-up following a fall.

Methods

A qualitative focus group and semi-structured interviews were conducted with 28 participants, including community-dwelling older people who had experienced a non-injurious fall, carers, physiotherapists, occupational therapists, paramedics and community first responders.

Data were transcribed and analysed systematically using the Framework approach. A stakeholder group of falls experts and patients advised during analysis.

Results

The data highlighted three areas contributing to an individual's capability to get-up following a fall: the environment (physical and social); physical ability; and degree of self-efficacy (attitude and beliefs about their own ability). These factors influenced each person's capability to manage their fall response.

Staff described how they balance their responsibilities, prioritising the individual's immediate needs; this leaves limited time to address capability in the aforementioned three areas. Paramedics, routinely responding to falls, only receive training on getting-up techniques from within their peer-group. Therapists are aware of the skillset to breakdown the getting-up process, but, with limited time, select who to teach these techniques to.

Conclusion

Neither therapists nor ambulance service staff routinely teach all those at risk of falling strategies on how to get-up. Interventions to positively impact on capability to get-up following a fall should include strategies that address the environment, physical ability and self-efficacy.

Ref: MC-1848 Platform Presentation

Author Name: M D Reid

Author Provenance: Imperial College London

Title: Geriatric medicine in undergraduate written assessments: Is there a single best answer?

Category: Scientific Presentation (SP)

Sub Category: Education / Training

Introduction:

It is increasingly important for new medical graduates to be knowledgeable and skilled in the care of older people. Single best answer questions (SBAQs) form the basis of written assessments in undergraduate courses but key areas of geriatric medicine have been shown to be underrepresented in medical school assessments (A L Gordon et al. Age and Aging 2010, 39:3, 385-388). This may contribute to a Hidden Curriculum that portrays geriatric medicine negatively amongst medical students (A Meiboom et al. Gerontology & Geriatrics Education 2014, 36:1, 30-44)

Methods:

1133 questions for third year medical students were reviewed. Questions labelled as assessing "Geriatrics" were analysed for their relevance and content when compared to the British Geriatric Society's (BGS) Recommended Undergraduate Curriculum in Geriatric Medicine. Remaining questions were reviewed by topic to consider if they aligned with the BGS curriculum.

Results:

120 of 1133 questions (10.59%) were labelled as assessing "Geriatrics". Thirty-six (3.18%) of these questions covered outcomes specified in the BGS undergraduate curriculum. Questions were often inappropriately labelled as assessing "Geriatrics" due to patient age or association with certain pathologies. Of the remaining 1013 questions, 27 (2.38%) focussed on topics outlined in the BGS undergraduate curriculum. In total 63 (5.56%) of 1133 questions directly related to geriatric medicine. Many aspects of the BGS undergraduate curriculum including elder abuse, polypharmacy and frailty were not covered by the question bank.

Conclusions:

Geriatric medicine continues to be underrepresented in SBAQs and is often misleadingly portrayed in analyses of question banks due to incorrect generalisations based on patient age or pathology. SBAQs may not be suitable for testing the knowledge and skills required in the effective care of older people and new assessment methods that better test these domains may be required. Improving the methods in which geriatric medicine is assessed at an undergraduate level may in turn counter negative attitudes that exist within a Hidden Curriculum for medical students.

Ref: MC-1849

Author Name: Myat Kyi La Thein, Su Le Aung, Leila Bafdhel

Author Provenance: Southend Hospital, Essex, United Kingdom

Title: Development of Early Supported Frailty Discharge team

Category: Clinical Quality

Sub Category: Efficiency and Value for Money

Introduction

The aim of the audit is to find out whether Rockall clinical frailty score (CFS) has an effect on hospital admissions, such as length of hospital stay, readmission within 30 days after discharge. By knowing the association, we can provide early supported frailty discharge team's service to patients with specific frailty scores to reduce 30-day readmission rate.

Method

58 patients from Geriatric wards of Southend Hospital including age, reason of admission, and Proactive Elderly Advanced Care Plan (PEACE) status were collected as a baseline. Admission status, length of hospital stay, readmission and mortality were recollected on a weekly basis in the month of October and November 2019, together with clinical frailty score documented on discharge.

Results

The analysed data was left with 37 patients, after excluding 22 patients whose clinical frailty scores not documented on discharge.

Clinical frailty score was independent of age. 85% of the patients were CFS 6 and above, 15% were CFS 4 and 5.

The mean length of stay was 15 days. The severity of frailty was directly proportionate to the average number of days spent in hospital. Patients with CFS 9 had the highest mean hospital stay of 18 compared to 22 days in the group of CFS 4.

Significant 30-day readmission rate (33%) was seen in patients with clinical frailty score of 5 and 6. Patients with upper extreme end of frailty scores were associated with mortality, 83% in CFS 9. In 5 out of 20 patients with CFS of 7 and above, PEACE was put in place. It might explain the reason why there were relatively lower readmission rates in such groups.

Conclusion

From analysis of our data collection, CFS is a good predictor of duration of hospital stay which is in line with previous studies. Severity of frailty may help indicate the likely risks and frailty-related outcomes and help to plan treatments and interventions which may decrease length of stay. As a part of quality improvement project, we are introducing community early supported discharge team to CFS 5 and above patients

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Ref: MC-1850

Author Name: H Watson, L Ralston

Author Provenance: Harrogate and District NHS Foundation Trust

Title: No One Told Me I Couldn't Drive with Delirium

Category: Clinical Quality

Sub Category: Clinical Effectiveness

Introduction

Delirium is a common cause and complication of hospital admissions. DVLA(1) and Consensus guidelines(2) exist for driving with dementia or mild cognitive impairment, but there are no specific guidelines pertaining to delirium. This audit set out to find the prevalence of delirium in a district general hospital prior to implementation of a standard screening tool. It was noteworthy that a significant number of patients with delirium were drivers.

Methods

The notes of 114 patients under the care of nine specialties, both medical and surgical were prospectively reviewed. Of those with risk factors for delirium, data was collected on the number of patients who had a diagnosis of delirium made during their admission. For patients at risk with no documented screening already completed a Confusion Assessment Method (CAM) screening test was performed by the lead author. In patients identified with delirium it was also established if they were current drivers via clerking documentation or by discussion with the patient/ family. Drivers with delirium were highlighted in the medical notes and where possible discussions were had with the patient and their families regarding driving advice until the delirium had resolved.

Results

The prevalence of delirium in this group was 23% (n=26/114). 20 patients had documented evidence of delirium and a further 6 patients were diagnosed as a result of this project. 15.4% (n=4/ 26) of patients with delirium were current drivers. For this group there was no documented evidence that driving advice had been given to the patient or family.

Conclusion

This baseline audit has identified that delirium is not consistently screened for and identified. In patients with delirium, driving history is not being sought and consequently the opportunity for driving advice is being missed. Clear guidance from the DVLA on driving for patients with a resolving delirium is needed.

References

1 DVLA, 2018

2 RCPsych, 2019

Ref: MC-1853

Author Name: Aglaja Dar (1), Rebecca Wiltshire (2), Pandora Naomi Wright(1)

Author Provenance: (1) Imperial College Healthcare NHS Trust, (2) Central and North West London NHS Foundation Trust

Title: The case for a best-interest meeting decision toolkit to guide preferred place of care and interventions for community dwelling older people who lack mental capacity

Category: Clinical Quality

Sub Category: Patient Centredness

Introduction:
The Hammersmith and Fulham Community Independence Service (CIS), runs a "virtual ward" to allow people to remain independent in their own homes where possible.
Place-of-care decisions made for community-dwelling older people who lack capacity are formulated in a best-interest meeting (BIM), involving health and social care professionals, family and carers.
Often BIMs centre around beliefs and wishes of the patient or family but fail to objectively evaluate risks and mitigants of staying at home versus placement.
We observed that BIMs were not being held on a consistent basis, and when held lacked the necessary structure for an effective decision-making forum.
Even experienced professionals find it difficult to chair BIMs because of the complexity of the decision-making process. Not all involved parties may be represented.
We found BIMs more likely to be held, attended and effective when structured to identify the major relevant considerations.

Method:
The CIS "virtual ward" team developed a BIM decision toolkit, comprising: a check-list of risks and mitigants for home versus care home; a list of required attendees; who should document and chair the meeting; and who should action the interventions raised.
From 6th January to 25th October 2019, BIMs were held for 48 patients on the CIS "virtual ward".

Results:
234 interventions were carried out following toolkit-led BIMs.
1 month after BIM, 34 of 44 patients' wishes (77%) were honoured (3 not recorded, 1 died).
3 months after BIM, 23 of 31 patients' wishes (74%) were honoured (15 not recorded, 2 died)
Case studies are included in the presentation.

Conclusion:
We developed a toolkit to support decision-making for older community dwellers who lack capacity regarding their place of care. The toolkit assures standardisation and structure to minimise bias, whilst recognising personal beliefs and preferences. It enables any member of the multidisciplinary team to hold and lead a BIM, to reliably identify appropriate interventions and care plans which may not otherwise have been implemented or recognised.
The majority of the patients reviewed using the BIM toolkit remained in their preferred place of care well after the team's interventions.

Further evaluation is required to compare CIS BIM toolkit-based outcomes against other community services which do not use this toolkit, and appraise the toolkit in a hospital setting.

Ref: MC-1856

Author Name: Dr. Patrick Hogan (1), Prof. Helen Enright (2), Dr. Dan Ryan (1), Prof. Desmond O'Neill (1)

Author Provenance: 1. Dept. Age-Related Healthcare, Tallaght University Hospital, Tallaght, Dublin 24, Ireland. 2. Dept. Haematology, Tallaght University Hospital, Tallaght, Dublin 24, Ireland.

Title: Ageism in Myelodysplastic Syndrome

Category: Scientific Presentation (SP)

Sub Category: BSG (Biology & social gerontology)

Background

Myelodysplastic Syndromes (MDS) are a group of haematological disorders which are common in older people and can be amenable to treatment. Ageism has previously been identified in studies of treatment for conditions affecting older people.

Objectives: To assess for the presence of ageism in studies of treatment for MDS.

Design: A review of the Cochrane Library of Systematic Reviews

Setting: Desk-based.

Methods: Systematic reviews were analysed to determine: use of age as an exclusion criteria in randomized-control trials (RCTs); the comparison of ages of patients in RCTs to that of the median age of patients with MDS; exclusion of patients from RCTs on the basis of dementia or other conditions associated with ageing.

Results: 17 reviews were identified, 2 of which were suitable for analysis. The two remaining systematic reviews reported data on 13 RCTs – of which 2 did not report age. The median age of all patients was 68. Three RCTs used a maximum age limit for therapy – one of which was lower than the median age of diagnosis of MDS. More recent studies tended to include older patients. No studies excluded patients on the basis of cognitive status.

Conclusion: There was some evidence of ageism identified in studies of treatment for MDS. There was limited data available in the Cochrane database of Systematic Reviews, which may itself be suggestive of ageism in such reviews.

Ref: MC-1859

Author Name: Katie Sayer (Physiotherapist) Katherine Whiteaway (Physiotherapist) Jo Dawson (Physiotherapist) Dr Jane Simpson (Sports and Exercise Medicine Registrar at Public Health England) Dr Wing Chu (Sports and Exercise Medicine Registrar at Public Health England)

Author Provenance: The Royal London Hospital, Wards 14E and 14F

Title: Physical activity improvement in elderly hospitalised patients at the Royal London: Exercise as part of a multimodal intervention.

Category: Clinical Quality

Sub Category: Efficiency and Value for Money

Introduction: Approximately 65% of elderly patients admitted to hospital experience some level of deconditioning during their stay. This can lead to longer length of stays, premature admissions to care homes and loss of function whilst in hospital (British Geriatrics Society). There is evidence that exercise can be safe and effective in reversing functional decline in this population. However, there is limited evidence into the effectiveness and feasibility of running a multi modal exercise intervention (eg. Dance and Exercise) on a busy elderly care ward in the UK.

Method: An 8-week inpatient programme consisting of a 60-minute exercise classes once a week and/or 60-minute dance class once a week started on the Older Person's Wards at the Royal London. Primary outcome measures included: 5 x Sit To Stands (5xSTS) and Falls Efficacy Scale International (FES-I). Secondary measures; Rockwood score, Barthel Index, Elderly Mobility Score (EMS), Mood, 4AT and handgrip strength. Patient satisfaction scores were also recorded.

Results: 23 patients were included in the analysis, 3 patients attended the dance class, 14 attended the exercise class and 5 attended both. In total 37 sessions were completed. The average score for all outcome measures improved except one after 8 weeks. The 5xSTS times improved by an average of 7.7 seconds and the FES-I score dropped by 3.9. The Barthel score increased by 5 points. Handgrip strength increased by 2.3kg and 57% improved on their EMS. Mood improved from 5.4/10 to 6.0/10 and 4AT from 2.7 to 1.7. Overall, 70% of participants reported enjoying the classes and 90% said they would re-attend.

Conclusion: A multifactorial intervention including seated dance and exercise sessions showed significant improvements in mobility, fear of falling, cognition and functional tasks. Further work will look into the impact on length of stay and readmissions inpatient to hospital.

Author Name: Patrick Reid , Vigneswaran Kandasamy, Bradley Chambers, Lea Tomos, Henry Procter, Maj Pushpangadan, Sudantha Bulugahapitiya

Author Provenance: Bradford Royal Infirmary, Duckworth Lane, Bradford, BD9 6RJ

Title: The benefits of a virtual ward model in the management of care of elderly patients admitted with decompensated heart failure

Category: Clinical Quality

Sub Category: Clinical Effectiveness

Introduction- Heart failure in elderly patients is associated with increasing rates of hospitalisation and readmission. The Care of Elderly department at Bradford Royal Infirmary has developed a virtual ward service to support patients at home on discharge from hospital. We wished to assess if patients admitted with heart failure and discharged under the virtual ward model had a reduced length of stay in hospital and if their readmission rate was altered, compared to patients not discharged under the virtual ward.

Method- A retrospective study of patients admitted under the Care of Elderly team with decompensated heart failure was undertaken. Patients admitted over 12 months were identified and assessed length of stay and readmission rates at 7 and 30 days post admission. There were no set criteria for discharge to the virtual ward, but patients were selected for virtual ward care based on; symptom burden, renal function and ongoing PT/OT support.

Results- Of the 358 patients identified in this study, 83 (23%) were discharged to the virtual ward (VW). On average patients spent 7 days (+/- 5.3) under the virtual ward service. Average length of hospital stay for VW patients was 2.3 days compared to 6.5 days for patients not discharged under the virtual ward ($p<0.0001$). Of the patients discharged to the virtual ward, 8 (10%) were readmitted within 7 days and 23 (28%) were readmitted within 30 days, similar to readmission rates in patients not discharged under the virtual ward with 25 (11%) and 62 (27%) patients readmitted after 7 and 30 days respectively.

Conclusions-

1. The use of a virtual ward service model for selected elderly patients with heart failure reduces the length of inpatient stay.

2. The virtual ward service model, compared to conventional care, did not increase readmission rates in our study.

Ref: MC-1865

Author Name: C L Baguneid1, K L Millington1, J Pattinson1, G Ogden1, F Malcolm1, A L Gordon1,2,3

Author Provenance: 1 University Hospitals of Derby and Burton, Derby, UK 2East Midlands Academic Health Sciences Network Patient Safety Collaborative, Nottingham, UK 3 Division of Medical Sciences and Graduate Entry Medicine, University of Nottingham, UK

Title: Improving the identification and management of delirium in older surgical patients

Ethical Disclaimer: LREC did not wish to review

Category: Clinical Quality

Background

Delirium is common post-operatively in older adults and is associated with mortality, institutionalization and functional decline. Early detection and management improves outcomes.

Local Problem

A multidisciplinary team comprising a consultant geriatrician and nurse consultant reviews all patients aged ≥70 years who have an emergency laparotomy at Royal Derby Hospital. Anecdotally there is a high incidence of delirium but retrospective casenote audit found only 19% of patients admitted for emergency laparotomy July 2018-July 2019 were identified as having delirium by the surgical team.

Method

A first PDSA cycle showed that the 4AT was feasible for use by healthcare assistants on the surgical assessment unit (SAU). A second PDSA cycle, described here, sought to develop a rationale for implementation of the 4AT as part of surgical assessment by comparing true prevalence of delirium using 4AT, with the prevalence detected using methods currently mandated by our hospital. All patients aged ≥65 years admitted as part of the surgical pathway had 4AT completed by a member of our improvement team on admission, with daily review until discharge.

Results

Data were collected for 111 consecutive emergency surgical admissions. Mean (SD) age was 78.3 (7.7) years. Of these, 1 and 3 were categorised as having delirium and dementia respectively using existing hospital screening tools. Using 4AT, 36 (32%) of patients were identified as having delirium. When supplemented by clinical history, true prevalence was 40 (36%). Average (SD) length of stay was 7 (5.6) days for the whole cohort, 10 (6.5) and 5.3 (4.3) days for those with and without delirium respectively.

Conclusions

4AT was 92% sensitive for delirium in our cohort. The existing hospital tool was underutilised to the point of being useless. Patients with delirium had a longer length of stay. We have developed a modified 4AT paper tool and training materials and are now piloting routine use in SAU.

Ref: MC-1866 Presidents Round

Author Name: RM Dodds 1,2,3, A Granic 2,3, SM Robinson 2,3, AA Sayer 1,2,3

Author Provenance: 1. Department of Older People's Medicine, Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle upon Tyne, UK 2. AGE Research Group, Newcastle University Translational and Clinical Research Institute, Newcastle upon Tyne, UK 3. NIHR Newcastle Biomedical Research Centre, Newcastle University and Newcastle upon Tyne Hospitals NHS Foundation Trust, Newcastle upon Tyne, UK

Title: Sarcopenia, long-term conditions, and multimorbidity from mid-life to later life: findings from 499 046 UK Biobank participants

Category: Scientific Presentation (SP)

Sub Category: BMR (Bone, muscle & rheumatology)

Introduction

Sarcopenia, the loss of muscle strength and mass, predicts adverse outcomes and becomes common with age. There is recognition that sarcopenia may occur at younger ages in those with long-term conditions (LTCs) as well as those with multimorbidity (the presence of two or more LTCs), but their relationships have been little explored. Our aims were to describe the prevalence of sarcopenia in UK Biobank, a large sample of men and women aged 40-70 years, and to explore relationships with different categories of LTCs and multimorbidity.

Methods

We used data from 499,046 participants in the baseline of UK Biobank. Our main outcome was probable sarcopenia based on maximum grip strength below sex-specific cut-points. Participants' LTCs were recorded during an interview and categorised against a hierarchy. We used logistic regression to examine the independent associations between each category of LTCs and probable sarcopenia, including adjustment for age, sex, and body mass index. We also examined the association with multimorbidity.

Results

Probable sarcopenia had an overall prevalence of 5.3% and increased with age. The categories with the strongest associations with probable sarcopenia were musculoskeletal / trauma (OR 2.17 [95% CI: 2.11, 2.23]), endocrine / diabetes (OR 1.49 [95% CI: 1.45, 1.55]), and neurological / psychiatric (OR 1.39 [95% CI: 1.34, 1.43]) LTCs. Almost half of the sample (44.5%) had multimorbidity and they were at nearly twice the odds of probable sarcopenia (OR 1.96 [95% CI: 1.91, 2.02]) compared to those without.

Conclusions

We have shown an overall prevalence of 5.3% of probable sarcopenia at ages 40-70 in UK Biobank. The risk of probable sarcopenia was higher in those with some categories of LTCs, suggesting that these groups may stand to benefit from assessment of sarcopenia, during mid-life as well as old age.

Ref: MC-1867

Author Name: Helen Turner, Georgia Bennett, Sophie Hurst

Author Provenance: Department of Complex Health, Wythenshawe Hospital, Manchester, M23 9LT

Title: Front Door Specialist Frailty MDT Working at MFT NHS Trust - The Therapy Team Poster presentation

Category: Clinical Quality

Sub Category: Improved Access to Service

Introduction

The therapy team consists of physiotherapists, Occupational therapists and therapy technicians working generically to deliver a comprehensive therapy assessment to patients presenting in our Emergency Department, Clinical Decisions Unit and Medical Admissions Unit between the hours of

08:00-18:00 7days a week.

The therapists provide the hospitals frailty service in ED and MAU with early therapy assessment and intervention, supporting the provision of a Comprehensive Geriatric Assessment.

The aims of our service are to provide early therapy assessment of our most vulnerable patients to avoid unnecessary hospital admissions and reduce readmission rates, and for those requiring hospital care to provide early mobilisation and discharge planning to reduce length of stay and complications associated with hospital admission.

We provide the therapy component of the CGA as part of the specialist frailty MDT service and act as an interface with local community health and social services.

Method

A full review of our frailty MDT service was undertaken and a re-allocation of our resources and staff was piloted in July 2019.

During this pilot our therapy staff presence was re-distributed allowing greater patient numbers to be assessed promptly on their arrival to ED.

This adjustment supported the Frailty MDT actions of;

- Further developing and redefining the Frailty nurse role basing them in ED and triage
- Close working relationships in ED between ED and frailty teams
- Education of ED staff in using the Clinical Frailty Score
- Releasing consultant geriatrician time, enabling them to be based in ED throughout the day
- Linking with community services

Results

Data collection showed total referrals to therapy increased from 67 (June 2019) to 160 (July 2019). In July same day discharges were at 43%; discharges ≥72hours 24%; 7 day readmission at 9%; 28 day readmissions at 11% and 38% were referred to community services.

Conclusion

These changes enabled us to provide a full MDT frailty service to frail older people presenting at our ED in a timely manner and to a larger number of suitable patients.

Ref: MC-1868

Author Name: Ana Maria Irimia1, Anna Tennant1, Alexandria Waldron1, Nahida Bashir1

Author Provenance: 1Musgrove Park Hospital, Taunton, UK

Title: Outcomes of an Advanced Nurse Practitioner-Led POPS Service in a District General Hospital

Category: Clinical Quality

Sub Category: Clinical Effectiveness

Introduction: There is an increased need for geriatrician input to older adults outside of the medical wards. There is a lack of geriatricians to contribute to these services. An example includes the Proactive care of older people undergoing surgery (POPS) service where geriatricians perform comprehensive geriatric assessment (CGA) to identify comorbidities and geriatric syndromes which may lead to poor post-operative outcomes. Advanced nurse practitioners (ANP) are highly skilled staff members and are increasingly used to provide the POPS service. We wanted to review the outcomes of our Nurse Led POPS service.

Methods: Patients aged over 70 admitted as an emergency to upper gastrointestinal and colorectal surgery were assessed by the POPS ANP using CGA. Assessments were completed on a proforma. Data was collected prospectively on a data collection form documenting new issues detected and interventions made. The results were analysed using an Excel spreadsheet.

Results: 147 patients were reviewed by the ANP between November 2018 and March 2019. All patients were screened for frailty, cognitive impairment and delirium. 37.41% were clinically frail, 17.72% had cognitive impairment and 11.56% had delirium. New issues were identified in 90.47% of these patients; polypharmacy (80.27%), new catheter (53.74%), weight loss (46.94%), incontinence (36.05%), falls (29.25%) and pain (25.17%). Medical issues were also identified including electrolyte abnormalities (47% patients), acute kidney injury (22% patients), cardiac issues (8% patients) and respiratory problems (7% patients). Additional interventions included stopping medication (27.89%), starting new medication (20.41%), requesting further investigations (97.28%), referring to allied health professionals (95.24%) and advanced care planning (15.65%).

Conclusions: A POPS ANP can effectively conduct CGA identifying new medical issues and geriatric syndromes missed by the surgical teams in an acute setting.

Ref: MC-1870

Author Name: E Spurring, G Donnelly

Author Provenance: Royal Bolton Hospital, Dept of Care of the Elderly

Title: A Retrospective Observational Study into the Correct Administration of Rivaroxaban: Is It Being Taken with Food?

Category: Clinical Quality

Sub Category: Clinical Effectiveness

Intro:

In July 2019 the MHRA issued a drug safety update reminding healthcare professionals that rivaroxaban should be taken with food. This came after they received a number of thromboembolic events reported in patients prescribed rivaroxaban, thought to be linked with incorrect ingestion on an empty stomach [1].

Our aim was to establish if the healthcare professionals in our department had this knowledge and to audit our current dispensing practice to assess if our hospitalised patient cohort were being exposed to any increased risk.

Methods:

A retrospective study was conducted using electronic data from 21 patients that were prescribed rivaroxaban across 14 medical wards. A questionnaire was used to establish the staff's knowledge.

Results:

Of the surveyed healthcare professionals, 79% knew that rivaroxaban should be taken with food (86% of nurses and 79% of doctors). Despite this only 17% of patients took the tablet with food. 75% of patients had rivaroxaban incorrectly dispensed over an hour post meal and 8% were uncertain due to poor documentation. Only 14% of healthcare professionals were aware that in those with swallowing difficulties, rivaroxaban can be crushed.

Conclusions:

In our department most of the healthcare professionals had a good academic knowledge of correct rivaroxaban administration, however we have demonstrated that this is failing to correctly influence clinical practice. 75% of patients taking Rivaroxaban in hospital are being subjected to increased risk due to the hospital environment. This was found to relate to the difference in timing of the drug dispensing round in comparison to meal times. As part of the roll out of electronic prescribing in our trust, a warning now shows when both prescribing and dispensing Rivaroxaban to attempt to improve this highlighted risk. We have also highlighted this to the ward managers and at our governance meeting.

[1] Drug Safety Update volume 12, issue 12: July 2019: 3.

Ref: MC-1872

Author Name: K. Yeong, J. Santiapillai, bN. Arumainayagam, P. Murray, S. Tadtayev

Author Provenance: Ashford and St Peter's Hospitals NHS Foundation Trust

Title: Nocturia - an underappreciated "symptom" of Obstructive Sleep Apnoea?

Category: Clinical Quality

Sub Category: Clinical Effectiveness

Nocturia (>2 per night) is the most frequent cause of disturbed sleep in older people. Poor sleep results in reduced health related QoL, and is linked to the development of cognitive impairment. Nocturia can result in an increase risk of falls and fractures, and is also an independent risk factor for mortality.

The prevalence of norturia is high in the elderly, and it has been reported to be around 77.1% in elderly women and 93% in men. Historically, this bothersome symptom is thought to be mainly a result of bladder outflow obstruction due to prostatic hypertrophy or overactive bladder. More recently, nocturia has been associated witsh nocturnal polyuria (NPu) and obstructive sleep apnoea (OSA). The relationship between OSA and NPu is not fully understood but it is thought that the negative intrathoracic pressure generated by OSA causes an increase in Atrial Natriuretic Peptide (ANP) secretion, resulting in NPu.

Nocturia is highly prevalent in patients with severe OSA. However, patients are usually unaware that they have sleep apnoea, and are therefore more likely to present to urology or geriatric services. It is important that OSA is not overlooked in these clinics as intervention with CPAP is highly effective in reducing symptoms.

Here, we present the result of using the STOP-Bang questionnaire in 71 consecutive patients presenting to our urology service with nocturia. The average age was 73 years (range 34-88), male-to-female ratio 14:1 and median nocturia frequency of 4. 42 patients were at risk of undiagnosed sleep apnoea (median STOP-Bang Score of 5) – 35 were referred for sleep studies, 4 patients declined and 3 patients were not referred. Overall, 31 out of 35 sleep studies (88.6 %) demonstrated the presence of OSA; of these 23 (74.2%) confirmed moderate or severe OSA. All patients with OSA were seen and treated by the respiratory service. Overall, median nocturia frequency decreased from 4 to 1 across the whole cohort, from a combination of CPAP therapy, bladder outlet procedures and desmopressin.

Conclusion

At least a third of patients (32%) with bothersome nocturia have an undiagnosed clinically-significant OSA. Identification of OSA improves outcomes across the whole cohort, because nocturia in patients without OSA is more likely to respond to bladder outlet procedures and desmopressin. ,

Ref: MC-1873

Author Name: H Pickles, V Addy

Author Provenance: Dept of Orthopaedics, Chesterfield Royal Hospital

Title: Improving the Monitoring and Awareness of Fluid Balance on a Hip Fracture Ward.

Category: Clinical Quality

Sub Category: Patient Safety

Introduction

Fluid balance charts are frequently incomplete and inaccurate. At present our Trust does not offer fluid balance training to all ward staff. In addition, drinks given to patients by visitors are not usually documented on the fluid balance charts. The goals of this quality improvement project were therefore to:

- Improve the accuracy of fluid balance charts
- Remind staff of the importance of fluid balance monitoring
- Increase awareness of all staff of which patients require fluid balance monitoring.

Methods

Using the PDSA model a questionnaire was given to ward staff as a scoping exercise to identify the deficiencies in fluid balance education prior to the intervention and fluid balance charts were analyzed. The intervention involved:

- Educational posters on fluid balance for display on the ward.
- Bedside signs displaying information for visitors and non-medical staff about informing staff with regards to patient fluid consumption plus measurement guides for all cups used on the ward.
- Nurses station and kitchen signs indicating patients on fluid balance monitoring.
- Red coasters for patients on fluid balance monitoring.
- Post intervention questionnaires were again issued to ward staff and fluid balance charts analyzed.

Results

Pre-intervention questionnaires demonstrated that 31% of staff asked were not clear on the meaning of fluid balance and 88% felt that more fluid balance awareness was needed on the ward. In addition, 7/8 randomly selected fluid balance charts were incorrectly completed. Post intervention 87% understood the meaning of ‘fluid balance’ monitoring and 7/8 fluid balance charts were correctly completed.

Conclusion

The intervention educated all ward staff and improved the accuracy of fluid balance monitoring. It also provided information and guidance to non-medical staff and visitors regarding fluid balance monitoring. Following the success of the project the intervention is being rolled out across the Trust alongside education sessions for staff.

Ref: MC-1874 Platform Presentation

Author Name: Ben J Steel

Author Provenance: Newcastle Upon Tyne Hospitals NHS Foundation Trust

Title: A cross-sectional study of the oral health and oral-health-related quality of life of older adults admitted to an acute hospital in the north east of England

Category: Scientific Presentation (SP)

Sub Category: EET (Eyes, ears & teeth)

Introduction

Oral health has a strong relationship with general health, wellbeing and quality of life. The importance of establishing and protecting oral health in older adults is increasingly recognised. Admission to an acute hospital can be a good opportunity to assess and intervene with oral health, however data on the oral health of this population are very sparse.

Methods

A cross-sectional study of adults aged over 65 admitted to the acute medical ward within the Northumbria Specialist Emergency Care Hospital, Northumberland. Ethical approval was granted and all participants gave written consent. Data were obtained via verbal questions and a bedside visual examination by a dentist. Recorded were – gender, age, time since last dental visit, current oral symptoms, number of teeth present, number of decayed teeth, requirement for dental treatment, global oral health including health of hard and soft tissues and oral hygiene using the Oral Health Assessment Tool (OHAT) and oral-health-related quality of life using the Gohai scale.

Results

32 participants took part, 16 male and 16 female, of average age 81.9 (range 69-94). Time since last dental visit ranged from a few months to 30+ years. 14 complained of oral dryness and 7 of loose dentures. 15 had no current oral symptoms. 18 participants had no teeth. The remainder had an average of 13.3 teeth of which 5.8 were restored. 22 had dentures. 9 had active dental disease requiring treatment. OHAT score (with 0 indicating perfect health and 14 the worst score) mean 3.6. Gohai score (scored from 12 indicating best to 60 indicating worst quality of life) mean 19.4 and range 14 – 33.

Conclusions

The dental status of this group is variable but this study indicates the presence of troublesome oral symptoms and active dental disease requiring treatment, with a significant number not having seen a dentist for some time.

Ref: MC-1875

Author Name: Brook S (1), Todorov G (1) and Comninos AN (2)

Author Provenance: 1. Department of Elderly Medicine, 2. Department of Endocrinology, Imperial College Healthcare NHS Trust, London, UK.

Title: COMPARISON OF FRAX AND QFRACTURE IN PREDICTING FRAGILITY FRACTURES IN PATIENTS PRESENTING WITH FALLS

Category: Clinical Quality

Sub Category: Clinical Effectiveness

INTRODUCTION
Falls are a major risk factor for fragility fractures and patients should be appropriately assessed to reduce future fragility fracture risk. National guidelines provide recommendations on assessing fracture risk using calculators to guide therapy initiation. FRAX and QFracture are the two main calculators used, however they differ considerably in their inputs. The aim of this study was to compare the risk estimation and performance between these two frequently used calculators to help determine their appropriate utility.

METHODS
Data from patients aged ≥70 years admitted with a fall to the Acute Medical Units at Charing Cross Hospital between 1st Dec 2018–31st March 2019 were retrospectively collected, covering all inputs required for the two risk calculators.
The 10-year major osteoporotic and hip fracture risks were calculated using FRAX and QFracture and compared. The one-year major osteoporotic and hip fracture risks from QFracture were assessed against actual one-year fracture rates.

RESULTS
- There were 120 admissions, age 70-95yrs.
- Mean 10-year risk of major fracture was 28.2% for QFracture (range 5.3–75.5%) and 19.3% for FRAX (range 4.6–52%). Mean risk of 10-year hip fracture was 23.5% for QFracture (range 2.5–75.5%) and 11.5% (range 1.2–42%) for FRAX.
- Correlation between FRAX and QFracture was r=0.633 for major fracture (R2=0.401) and r=0.688 for hip fracture (R2=0.474)
- 5 patients had scores >2x standard deviations from the line of best fit. The 4 patients who had QFracture >> FRAX had multiple QFracture risk inputs, not accounted for in FRAX. The one patient with FRAX >> QFracture had an extensive alcohol history.
- One-year major osteoporotic and hip fracture rates compared to predicted are being collated (ready March 2020)
- 10 patients had incidental radiological evidence of vertebral osteoporotic fracture

CONCLUSIONS
Risk calculators are effective tools to aid the decision of bone therapy initiation. Here we demonstrate that there is a strong correlation between the two commonly used calculators. However, in terms of absolute risk values there is a mean 8.9% difference with QFracture providing higher risks in this ‘fallers’ group. As absolute treatment thresholds are frequently used to guide bone therapy initiation, opposing recommendations may result. Therefore, there is a need to further explore calculator performance and determine which would more accurately serve different patient groups

Ref: MC-1876

Author Name: Dr James Alegbeleye, Dr Myuran Kaneshamoorthy

Author Provenance: Department of Medicine for the Elderly, Basildon and Thurrock University Hospital F. NHS Trust, MSE Group, Basildon SS16 5NL, UK

Title: Is 'Medically Fit For Discharge' ambiguous and misleading to patients? A Health Service Study.

Category: Scientific Presentation (SP)

Sub Category: HSR (Health services research)

Introduction

NHS England (2015) Monthly Delayed Transfer of Care Situation Report states that 'Medically Fit for discharge' or 'Clinically optimized' is used at the point at which care and assessment can safely be continued in a non-acute setting. However, elderly patients are either frail or unlikely to be fit physically or medically before they are discharged from hospitals. A number of complaint meetings with patients and relatives suggested that doctors and healthcare professionals should consider changing the language used during discharges. The aim of the study was to identify the challenges with the use of variable languages and to provide standardization of the discharge Languages that seems appropriate for the patients within our organization.

Method

In February 2019, a discussion with major stakeholders at Basildon and Thurrock University Hospital F. NHS Trust including Medical Director and management teams, suggested the need to conduct a staff survey to explore the need for standardization of discharge languages. The survey was sent by emails to healthcare professionals between 6th June 2019 and 1st July 2019. There were 115 responders.

Results

The proportion of responders between doctors and other allied healthcare professionals was 58% and 42% respectively. 75% of responders reported the use of the term 'Medically fit' or 'Clinically optimized for discharge' had been challenged by patients or relatives. 61% of staff disapproved the term 'Medically Fit for Discharge' and 64% suggested this needed to be changed to 'Medically Stable For Discharge' which is more acceptable and meaningful language. Our survey showed that the reasons for the change are that a wrong language is not only ambiguous but misleading amongst our respondents.

Conclusion

This study has shown concern amongst the staff regarding the language used during the discharge process. Not only is 'Medically Fit for Discharge' controversial but occasionally causes dispute between patient / relatives and healthcare professionals. Our project has helped standardize the cultural language to 'Medically Stable For Discharge'. This resonates better to patients and enhances their experience and also reduces anxiety caused by ambiguous language. Further study will be required to know how this reduces the complaints rate and delayed transfer of care within our Health service.

Ref: MC-1877

Author Name: J Faraday 1,2, C Abley 1,2, F Beyer 2, C Exley 3, P Moynihan 4, J Patterson 5

Author Provenance: 1. The Newcastle upon Tyne Hospitals NHS Foundation Trust, 2. Population Health Sciences Institute, Newcastle University, 3. Faculty of Medical Sciences, Newcastle University, 4. Faculty of Health and Medical Sciences, The University of Adelaide, 5. School of Health Sciences, The University of Liverpool

Title: How do we provide good mealtime care for people with dementia living in care homes? A mixed-methods systematic review.

Category: Scientific Presentation (SP)

Sub Category: HSR (Health services research)

Introduction

More and more people with dementia are living in care homes. Often they depend on care home staff for help with eating and drinking. It is essential that care home staff have the skills and support they need to provide good care at mealtimes. Good mealtime care may improve quality of life for residents, and reduce hospital admissions. The aim of this systematic review was to identify good practice in mealtime care for people with dementia living in care homes.

Methods

Robust systematic review methods were followed. Six databases were searched: BNI, CENTRAL, CINAHL, MEDLINE, PsycINFO and Web of Science. Titles, abstracts, and full texts were screened independently by two reviewers, and study quality was assessed with Joanna Briggs Institute tools. Narrative synthesis was used to analyse quantitative and qualitative evidence in parallel. Data were interrogated to identify thematic categories of carer-resident interaction, and thematic categories of outcomes. The synthesis process was undertaken by one reviewer, and discussed throughout with other reviewers for cross-checking.

Results

The database search retrieved 4,893 studies. After title/abstract and full-text screening, 16 studies were included in the review. Eleven of these studies were qualitative, and five were quantitative. Some studies assessed mealtime care interventions, others investigated factors contributing to oral intake, whilst others explored the mealtime experience. The synthesis identified three categories of carer-resident interaction important to mealtime care: Connecting with the resident, Tailoring care to the resident, and Empowering the resident. In addition, three categories of outcomes used to evaluate mealtime care were identified: Resident behaviour, Oral intake, and Mealtime experience.

Conclusions

This synthesis has brought together a diverse body of evidence on the topic of mealtime care for people with dementia living in care homes. Findings indicate that good mealtime care is underpinned by interactions which facilitate social connection, which are tailored to residents' individual needs, and which empower residents to maximise their independence. Further

research is needed to investigate barriers and facilitators for good mealtime care, to understand how best to equip care home staff to provide this care, and to identify the most useful ways to evaluate it.

Ref: MC-1882

Author Name: Cameron Abbott, Katie Bishop, Francis Hill, Charlie Finlow, Reshma Maraj

Author Provenance: Wrexham Maelor Hospital

Title: The Evolution of a Frailty Service

Category: Clinical Quality

Sub Category: Efficiency and Value for Money

Introduction

In September 2017 our frailty service was started within our medium sized DGH in North Wales. Working with our management team we secured a significant clinical resource including:

- 10 Consultant geriatrician DCC sessions
- 1 band 7 nurse, 2 band 5 nurses, 2 HCAs
- 1.24 band 6 OT
- 1.24 band 6 PT

We describe how resources, setting and staffing develop over a 2 year period in order to create a service which meets the needs of the local population.

Method

The service has been in a constant state of development since it has been in operation, utilising a PDSA model with regular meetings of clinical and managerial staff to analyse performance.

- Cycle 1: Same day discharge patients only, sourced from the ED. These patients had a CGA, with an ongoing management plan formulated.
- Analysis: A comprehensive service low throughput – many required a short inpatient stay, which was a limitation.
- Cycle 2: Same day discharge patients and “72 hour beds” on rehabilitation wards, 3 consultants rotate within the week.

- Analysis: Initial throughput very good but subsequently limited by winter pressures and the need for stroke and orthopaedic rehabilitation beds.

- Cycle 3: Same day discharge patients and general geriatric medicine ward beds, single consultant.

- Analysis: Improved continuity has improved length of stay and throughput. Unfortunately only based in 6 beds so limited capacity.

- Cycle 4: Same day discharge patients with 12 inpatient beds on AMU functioning as both a short stay frailty unit as well as an OPAU.

- Analysis: Much improved throughput, early CGA for patients admitted.

Results

With each new PDSA cycle the amount of patients reviewed has increased. With the move to AMU we increased the monthly number of patients reviewed from 29 to 172 patients reviewed, 97 of which were discharged directly from the unit.

Conclusion

Using QI methodology our Frailty Service has improved dramatically since its inception. We will continue to analyse how we work to improve patient outcomes and cost effectiveness.

Ref: MC-1884

Author Name: Mir A, Damany S, Tay HS

Author Provenance: Healthcare of Older People Department, Nottingham University Hospitals NHS Trust

Title: A FULL AUDIT CYCLE: DOCUMENTATION OF DISCHARGE SUMMARIES AND FUNCTIONAL STATUS IN ELECTRONIC DISCHARGE LETTERS

Category: Clinical Quality

Sub Category: Clinical Effectiveness

Introduction: Electronic discharge letter is the most effective way to handover to General Practitioners for the continuity of care by providing the information about what happened during hospitalisation and what needs to happen after discharge. Well written discharge letters prevent miscommunication, missing information and medications errors as well as reduction of hospital workload. It also provides timely follow up to decrease the risk of re-hospitalisation.

The aim of this project is to analyse the documentation of discharge summaries and functional status after hospital admission in discharge letters. Discharge summary template was introduced and made compulsory in all Geriatric wards following first cycle of audit. We then compared data after introduction of discharge summary template.

Methods: Electronic discharge letters were reviewed for all patients discharged from Geriatric Department in July 2019 and results were compared with data from January 2019.

Results: 162 patients were discharged in the second cycle of audit. Among these, 18 patients were deceased, and 4 patients had no discharge letters available. Therefore, total number of discharge letters analysed was 140. Please see Table 1 for comparative results on documentation of discharge summaries in discharge letters.

Information	Not mentioned (January 2019)	Not mentioned (July 2019)
Presenting complaint	0%	0%
Primary diagnosis	0%	0%
Secondary Diagnosis	48%	37 %

Co-morbidities	0 %	1%
Investigation results	8%	10%
Management	2%	0%
Discharged to	56%	26%
Mobility	57%	27%
Number of package of care	60%	78%
Activities of daily living	82%	44%
Memory/ MOCA/ AMTs	83%	40%
Continence	89%	50%
Resuscitation status	85%	55%

Table 1: Comparison of information not mentioned in discharge letters between both cycles of audits.

Conclusions: Introduction of the discharge summary template improved the documentation of summaries in discharge letters. Well-written discharge letter ensures the smooth transition for when patients leave the hospital. Therefore, it should be accurate, precise and relevant.

Ref: MC-1888

Author Name: Hanni Cross, Jo Evans, Amanda Pederson, Daniel Yidana, David Carey, Rebecca Robey, Arturo Vilches-Moraga, Olivier Gaillemin,

Author Provenance: Salford Royal NHS Foundation Trust

Title: Continuous and regular live feedback is required to maintain an improvement in the quality of discharge summaries. SHOP 75+.

Category: Clinical Quality

Sub Category: Patient Safety

Background:

This quality improvement project aims to improve communication between secondary and primary care at the time of hospital discharge of older patients.

Introduction:

Discharge summaries (DS) are a key component of communication between secondary and primary care. Poor quality DS are associated with poorer outcomes in terms of adverse events [1], readmissions [2] and medication errors [3]. There is NICE and AMRC guidance on what constitutes a good DS [4,5].

Method:
Prospective review of DS from a range of wards was completed in August 2017 against a detailed data tool. A random selection of DS from the same wards was audited monthly from November 2017 onwards. A novel live-feedback system was introduced to the same wards in February 2018 so that the teams completing DS received feedback on how well their summaries complied with the recommendations and what areas needed improvement. A change in staffing lead to a break in the delivery of monthly feedback to the ward teams from April to September 2019 when it was re-commenced.

Results:
In the majority of areas there has been an increase in the quality of the DS from the beginning of the project until March 2019 when the regular feedback interventions were suspended. There was a decrease in the quality of summaries in July and August 2019, followed by an increase as regular feedback interventions recommenced in September 2019. The aggregate results of the four main components of DS (follow-up actions, medicines, clinical summary, and functional assessment), scored “good” in 13% of DS at baseline, 40% in March 2019, 20% in July 2019 and 31% in October 2019.

Conclusions:
The suspension of regular direct interventions resulted in a significant deterioration in the quality of discharge summaries, and this improved quickly after reintroduction of PDSA cycles in key areas. Continuous quality improvement requires uninterrupted focus on regular live feedback.

1. Clegg et al. Lancet. 2013;381:752–62.
2. Samra et al. Age and Ageing. 2017;46(6):911–9.

3. Romero-Ortuno et al. Age and Ageing. 2012;41(5):684-689.

Ref: MC-1891 Presidents Round

Author Name: D Swancutt, E Jack, H Neve, J Tredinnick-Rowe, N Axford, R Byng

Author Provenance: University of Plymouth

Title: Introducing the SHERPA model for managing multi-morbidity to trainee GPs: outcomes and relevance to elderly careÂ

Category: Scientific Presentation (SP)

Sub Category: HSR (Health services research)

Background

Primary care trainees are traditionally taught to use a consultation model which focuses on eliciting the patients' main reason for consulting 'today'. As the number of patients with multi-morbidity increases, this approach is often inappropriate or unhelpful. Patients can be left without an understanding of their interacting health issues. The SHERPA model provides a biopsychosocial framework for consulting patients with multi-morbidity. We aimed to examine the responses to this model when integrated into a training programme for newly registered GPs.

Methods

Sixteen participants provide qualitative data on their experience and follow-up use of SHERPA. Four hours of teaching were observed. Twenty-four feedback templates on training (n=18) and SHERPA application (n=6) were collected. Individual semi-structured one-to-one interviews were conducted with trainees (n=5) and trainers (n=3). Data were transcribed and, using the Framework approach, systematically analysed focussing on the trainees' reaction to the teaching sessions and their ability to use the SHERPA consultation model.

Results

Participants engaged well with the teaching sessions, enjoying the scenarios and bringing observations from their own experience. Five participants went on to apply SHERPA successfully with their patients. Barriers to using this approach were: not seeing appropriate patients with multi-morbidities (due to current placement or patient type); time; lack of confidence and familiarity; concern about missing important immediate clinical issues; and viewing the approach as 'in addition' rather than key to shared decision-making.

Conclusion

The SHERPA model was viewed as a helpful addition by trainee GPs, although practical issues, fears and not seeing it as their priority for their case-mix, limited their application of it. Regular support from trainers, where trainees reflect on their experience of using SHERPA, could increase their confidence and familiarity with this method. These findings suggest that SHERPA may be relevant to other specialities such as geriatric medicine, where multi-morbidity is common.

Ref: MC-1894

Author Name: L Jackson, J Saund, G Donnelly

Author Provenance: Geriatric Medicine, The Royal Bolton Hospital.

Title: Improving the documentation of DNACPR decisions following the transition to electronic record keeping.

Category: Clinical Quality

Sub Category: Patient Safety

Background

This quality improvement project was based at The Royal Bolton Hospital across our four Complex Care wards.

Introduction

We have recently transferred to electronic record keeping. At these points of transition there may be an adverse impact on the quality of patient care and safety. We recognised on our own ward there were inaccuracies between the required paper form and electronic documentation of DNACPR decisions. Consequently, we wanted to review and improve the accuracy of our DNACPR documentation to ensure safe and effective patient care.

Methods

To gauge the scope of the problem we audited 87 patient's electronic and paper notes, with no exclusion criteria. We reviewed whether each patient had a formal resuscitation decision, and if a DNACPR decision had been made whether we met our hospital policy by having:

- a paper DNACPR form in the correct patient's notes
- a documented electronic decision (on the daily ward round proforma)
- an electronic "Resuscitation and treatment escalation plan"

93% of the 87 patient's had an active decision regarding resuscitation, with a DNACPR decision documented for 50 patients. Of these 50 patients only 11 had all three forms of documentation. More worryingly, there were discrepancies in the documented DNACPR decisions for 11 patients across paper and electronic records.

Interventions

We escalated our concerns to the Clinical Governance team who sent out a trust wide SBAR highlighting this as an urgent clinical issue. On a directorate level we incorporated DNACPR decision documentation into our afternoon safety huddle and arranged informal teaching for medical, nursing and administrative staff.

Results

Reassuringly, the subsequent re-audit of 90 patient's notes showed only one patient to have a discrepancy between paper and electronic documentation. We saw an improvement to 98% having paper forms in the right bedside notes and 100% having a documented electronic DNACPR decision.

Conclusion

Through local education and trust-wide dissemination of our expected standards we have seen some improvement. We recognise the importance of maintaining this, and importantly that there is still work to be done. The electronic "Resuscitation and treatment escalation plan" is still rarely completed and provides important information on escalation of care and thus will be the focus of a further educational intervention.

Ref: MC-1898 Platform Presentation

Author Name: E Alcorn1, L Wentworth1

Author Provenance: 1. Manchester University NHS Foundation Trust

Title: Patient Outcomes From a General Inpatient Rehabilitation Ward, Does Frailty or Reason For Admission Make a Difference to Patient Outcome?

Category: Scientific Presentation (SP)

Sub Category: FALLS (Falls, fractures & trauma)

Introduction

With our ageing population there is increasing number of patients who experience a decline in their mobility either because of their underlying diagnosis or as a consequence of their hospital stay. There are only a limited number of inpatient rehabilitation beds and it is therefore important to identify those that would benefit the most from inpatient rehabilitation.

Method

We undertook a retrospective study looking at three months of discharges from an inpatient rehabilitation ward in Manchester. Patients were categorised based on diagnosis (Pubic rami fracture, other fractures, fall with no bony injury and finally medical reasons) and Clinical Frailty Score to see if either had any effect on whether patients mobility improved and to what degree.

Results

Patients with a reduced mobility on admission were identified and then categorised based on diagnosis. Of those patients admitted with a pubic rami fracture 66.7 % improved on the ward with 33.3 % of patients reaching their baseline mobility. The mobility of 85.7% of patients with other fractures improved with 42.9 % reaching their baseline. Patients admitted following a fall without bony injury showed, 75% improvement with 50% reaching their baseline. Of those admitted for medical reasons 88.9 % of those improved but only 22.2 % reaching their baseline mobility. The lowest proportion of any category. Those admitted for medical reasons also had the longest median average stay on the rehab ward (33.5 days) followed by other fractures (33 days) then fall with no bony injury (21.5 days) and finally the shortest average stay, pubic rami fractures (20 days).

Patients were also grouped occurring to their preadmission Clinical Frailty Score. With the exception of those who scored four (only a small number of patients), there was a negative correlation between an increasing frailty score and the proportion of patients whose mobility improved. However as frailty score increased the proportion of patients who improved to their baseline increased.

Conclusion

Our study has shown that the majority of patients benefitted from their admission regardless of diagnosis, however those admitted for medical reasons had the lowest chance of reaching their baseline mobility despite the longest admissions on the ward. Further research may be beneficial to investigate if they do better in a different rehabilitation setting

Ref: MC-1902

Author Name: L MacDiarmid1

Author Provenance: 1 Leicestershire Partnership NHS Trust

Title: Developing a Portfolio for Advanced Practitioners working with Older People

Category: Scientific Presentation (SP)

Sub Category: Education / Training

Introduction
Advanced Nurse Practitioners (ANP's) have a professional responsibility to ensure that they maintain professional competence (Whiteing, N. in Hinchcliffe and Rogers Eds pp192-219, 2008)
The aim of the portfolio is to assist ANP's in developing evidence demonstrating continued advanced level practice. At the time of the study, there was a dearth of evidence relating to competencies for qualified ANP's, working with older people. The aim was to move away from the traditional confines of 'nurse does this, doctor does this', and to embrace the concept of developing skills to meet the clinical demands of service provision for our older people.

Methods
Participatory action research methodology was adopted – using the Review, Plan and act cycle (Edwards and Talbot, p63 1999; Holloway & Wheeler p155-156, 1996)

Review
A literature search and review of competencies relating to advanced practice and older people was undertaken.

Plan
A portfolio of knowledge and skills was collated utilising the information from the review. A matrix was created incorporating four Pillars of Advanced Practice (SGHD 2008), the Nursing and Midwifery Code (NMC, 2015) and modified competencies for Joint Royal Colleges of Physicians Training Board Geriatric curriculum (JRCPTB), (2010, amended 2013 and 2015).
The portfolio was sent out to existing team members, and local Consultant Geriatricians based in the Acute Trust and local University for comment and amendments were made.

Act
The portfolio was used by staff as a trial and evaluated.
Written feedback was obtained through questionnaires.

Results
The portfolio was well evaluated by staff using it, including recommendations for improvement.
Portfolio has been shared at national groups and via social media and has been well received.

Conclusions

An Advanced Practice Portfolio of capabilities is being used, based on action research cycles, enhancing the level of care received by older people.

Ref: MC-1903

Author Name: D Saunders, M Atherton, A Mann, E Mallouppa

Author Provenance: Department of Complex Health, Wythenshawe Hospital, Manchester University NHS Foundation Trust

Title: Embedding a specialist Frailty Team in the Emergency Department: improved access, efficiency and patient outcomes.

Category: Clinical Quality

Sub Category: Improved Access to Service

Introduction

The specialist frailty service has long been established in our A&E. This consisted of therapists and junior doctors providing input 8am-6pm, with consultant support in the afternoon. Patients arriving in A&E, age over 65 are assessed for frailty using the Clinical Frailty Score (CFS). Patients would be referred to our team based on their CFS and provided they met a set of referral criteria. On assessing our data, we concluded that even though there were a lot of frail patients attending A&E and subsequently admitted to hospital, we only saw a very small proportion of these patients in A&E and that patients were either being referred too late for us to be able to intervene or not at all. This meant that we were not delivering best care as set out in our Frailty Standards.

Methodology

Following a re-assessment of our staffing, we have redesigned our team to increase efficiency. In addition to our therapists, we have reallocated our specialist frailty nurses to A&E as well as having dedicated frailty clinical fellows and increasing consultant geriatrician input to 9am-5pm. This allowed early identification of frail patients as they arrive in A&E and early multidisciplinary Comprehensive Geriatric Assessment.

Results

Since our changes, we have significantly increased the number of patients we assess, from an average of 78 patients per month to 198. 100% of patients had a CFS completed. The same day discharge rate was 39.4% and 63.6% of patients were discharged within 72 hours. Readmission rate at 30 days for those discharged within 72 hours was 13.2%. For the patients that were admitted to a complex health ward, the average length of stay was 20.6 days. The inpatient mortality rate was 5.56% and 71.7% were discharged back to their own home.

Conclusion

Our changes have significantly improved our capacity and efficiency and have improved patients' access to our service. Timely senior review has improved decision making, patient experience and discharge rates without adverse effect on readmissions or mortality. It has also had other benefits such as improved patient flow. We are currently working towards creating an acute frailty unit embedded within A&E. Our experiences of early specialist input can be valuable for other specialties working directly with A&E.

Ref: MC-1907 Presidents Round

Ref: MC-1907 Presidents Round

Author Name: Michael Corden

Author Provenance: Radiotherapy-Related Research Department, The Christie, Manchester, UK

Title: Can sarcopenia be used to estimate outcomes in elderly patients treated with chemoradiotherapy for bladder cancer?

Category: Scientific Presentation (SP)

Sub Category: OTHER (Other medical conditions)

Introduction

Ageing is a risk factor for bladder cancer, with a median age at diagnosis of 71 years. In addition, sarcopenia shows promise as a prognostic biomarker for bladder cancer. This study evaluates sarcopenia as a predictor of overall survival (OS) for older patients treated with chemoradiotherapy for bladder cancer.

Method

185 bladder cancer patients treated (from 2010-2017) with chemoradiotherapy were available for analysis. Pre-therapeutic computed tomography scans were identified and single slices at the L3 level were identified. Machine learning software was used to segment skeletal muscle and obtain its cross-sectional area. This was normalised against height squared to calculate a skeletal muscle index for each patient. Sarcopenia was defined using international consensus definitions (<39cm2/m2 in females and <55cm2/m2 in males). Differences in survival function between patients ≤75 and >75 years were visualised using Kaplan-Meier curves. Age distribution between sarcopenic and non-sarcopenic patients was also explored. Finally, a multivariable Cox proportional hazards model was conducted to investigate interactions between sarcopenia and increased age with respect to OS.

Results

Of 185 patients, 114 (61.6%) were sarcopenic and 71 (38.4%) were non-sarcopenic; 101 (54.6%) and 84 (45.4%) patients were ≤75 and >75 years old respectively. No differences in OS were observed between the two age groups (p = 0.50). There was no interaction between sarcopenia and age as a continuous variable was observed with respect to OS (p=0.682); however, when age was categorised an interaction was seen (p=0.058). Nevertheless, after adjusting for performance status, T-stage, hydronephrosis, albumin, haemoglobin, neutrophil and lymphocyte counts, the interactions between age and sarcopenia were no longer observed (age continuous, p=0.474; age categorized, p=0.765).

Conclusions

Patients with bladder cancer over 75 years of age have a modest increase in probability of developing sarcopenia but this does not impact on OS.

Ref: MC-1908 Presidents Round

Author Name: S Mclachlan1, M Chakravorty1, J Odone1, J Stevenson2,3, J Minshul4, R Schiff1

Author Provenance: 1 Department of Ageing and Health, Guy's and St Thomas' NHS Foundation Trust 2 Institute of Pharmaceutical Science, King's College London 3 Pharmacy Department, Guy's and St. Thomas' NHS Foundation Trust 4 London Medicines Information Service, NHS Specialist Pharmacy

Title: Medication Compliance Aids and Acute Hospitals

Category: Scientific Presentation (SP)

Sub Category: HSR (Health services research)

Introduction:

An estimated 64 million Medication Compliance Aids (MCAs) are dispensed by pharmacies in England each year as a method of reasonable adjustment to improve medication adherence (NICE 2009) and support medicines administration by carers (RPS 2013). Complexities exist when implementing medication changes for patients using MCAs, particularly at hospital discharge or outpatient appointments, where practices seem to vary. This National Survey is the first to determine the current policy and service provision of MCAs by acute hospitals in England.

Method:

An electronic survey was emailed to Chief Pharmacists via the Regional Medicines Information Services in Spring 2019. Initial non-responders were contacted by email and telephone.

Results:

51% (73/144) of acute hospital trusts in England responded. 77% (56/73) dispensed medication in MCAs at discharge. Of these, 62.5% would initiate MCAs and 61% supplied a different length of MCA vs non-MCA prescription (see table).

Length of prescription on discharge(days)	
MCA *(number of hospitals)*	Non-MCA *(number of hospitals)*
7 *(31)*	14 *(23)*
	28 *(8)*
14 *(3)*	28 *(2)*
	7 *(1)*

41 hospitals had designated staff completing MCAs. The median time to complete an MCA was 59.5 minutes (range 10-200). The median time from prescription receipt in pharmacy to MCA arrival on ward was 144.5 minutes (range 60-1440).

Of the 17 hospitals not providing MCAs, the majority would, upon discharge, contact the community pharmacy that provided the MCA pre-admission to update any medication changes and request the provision of a new supply of medicines.

Conclusion:

Despite the ubiquitous nature of the MCA, there is no standard approach to the supply of these devices from acute hospitals across England. When hospitals do provide MCAs their preparation is time consuming, often requiring additional staff. A national approach to MCAs might help patients and carers, and reduce medication-related problems and costs.

Ref: MC-1909

Author Name: T Larcombe, R A Lisk, K F Yeong

Author Provenance: Orthogeriatric Department, Ashford and St. Peter's Hospitals NHS Foundation Trust

Title: Surviving the epidemic that confronts us - Fracture Liaison Service evaluation data

Category: Clinical Quality

Sub Category: Clinical Effectiveness

Introduction

1 in 2 women and 1 in 5 men over the age of 50 will break a bone and a significant proportion will suffer from osteoporosis .A fragility fracture will double the risk of future fractures. Between 1990 and 2000, there was nearly a 25% increase in hip fractures worldwide. A hip fracture is one of the most devastating, and often terminal, injury for an older person.

Intervention

The Fracture Liaison Service (FLS) captures patients aged 50 and above that present to fracture clinic with possible fragility fractures with the aim to reduce further fracture incidence. Patients are assessed for osteoporosis and recommendations made for treatment.

Results:

Here we present the results of our FLS service evaluation after 6 years in operation, using the rate of hip fractures (number of hip fractures/Emergency Department [ED] attendances over 75's) as a surrogate marker for effectiveness.

Year	No. of patients seen by FLS	Patients admitted with NOF (all ages)	>75's ED attendances	No of NOFs/Attendance (%)
2018-19	860	407	18,242	2.23
2017-18	837	378	18,210	2.07

2016-17	921 * (22/04/16 onwards)	386	17,708	2.17
2015-16	138 * (Until 14/05/15)	425	16,590	2.50
2014-15	700	432	16,087	2.57
2013-14	593	398	14,960	2.66
2012-13	226 (Commenced 12/11/12)	464	14,801	3.13
2011-12	0	409	15,606	2.62
2010-11	Pilot 'postal' FLS (12/04/10- 23/07/10)	424	14,250	2.97

Evaluation Summary:

Trend analysis of our data indicates a reduction in the number of patients attending the Trust with fractured neck of femur (NOF) despite the increase in ED attendances. This is against the trend nationally where fractured NOF numbers are rising (National Hip Fracture Database, accessed online August 2019).

Next steps:

The FLS to attempt to comprehensively capture muscular-skeletal patients and to consider opportunities present to target case finding to high risk cohorts.

Ref: MC-1910 Presidents Round

Author Name: Atul Anand (1,2), Yong Yong Tew (3), Juen Hao Chan (3), Polly Keeling (3), Susan D. Shenkin (2,4), Alasdair MacLullich (2,4), Nicholas Mills (1,4), Martin A. Denvir (1)

Author Provenance: (1) BHF Centre for Cardiovascular Science, University of Edinburgh (2) Geriatric Medicine Research Group, University of Edinburgh (3) University of Edinburgh Medical School (4) Usher Institute, University of Edinburgh

Title: Predicting unplanned readmission and death after hospital discharge: how do frailty tools compare to electronic health record frailty markers?

Category: Scientific Presentation (SP)

Sub Category: HSR (Health services research)

Introduction

Numerous frailty tools and definitions have been described. Amongst hospitalised patients, the validity of face-to-face instruments may be confounded by acute illness. However, patient assessment after recovery at the point of hospital discharge, or recognition of electronic health record (EHR) frailty markers, may overcome this issue.

Methods

In a consented, prospective observational cohort study, we recruited patients ≥70 years old within 24 hours of expected discharge from the cardiology ward of the Royal Infirmary of Edinburgh. Three established frailty instruments were tested: the Fried phenotype, Short Physical Performance Battery and nurse-administered Clinical Frailty Scale (CFS). An unweighted 32-item EHR score was generated using frailty markers (e.g. falls risk, continence, cognition) recorded within mandated admission documentation. Comorbidity was assessed by count of chronic health conditions. Outcomes were a 90-day composite of unplanned readmission or death and 12-month mortality. Adjusted Cox modelling determined the hazard ratio (HR) per standard deviation increase in each frailty score.

Results

186 patients (mean age 79±6 years, 64% male) were included, of whom 55 (30%) had a 90-day composite outcome, and 21 (11%) died within 12 months. All four frailty tools were moderately correlated with age and comorbidity (Pearson's r 0.21 to

0.43, all p<0.05). The Fried phenotype (HR 1.47, 95% CI 1.18–1.81), CFS (HR 1.24, 95% CI 1.01–1.51) and EHR score (HR 1.26, 95% CI 1.03–1.55) independently predicted 90-day readmission or death, after adjustment for age, sex and comorbidity. All frailty instruments were independent predictors of 12-month mortality, with age, sex and comorbidity losing predictive power (p>0.05) once frailty was included in modelling.

Conclusions

At hospital discharge, the Fried phenotype and CFS added to age and comorbidity in risk prediction for future unplanned readmission or death. EHR frailty markers appeared comparable to face-to-face assessment. An automated trigger for high-risk patients using routine EHR data merits prospective evaluation.

Ref: MC-1914

Author Name: Professor Rowan Harwood, Dr Hannah Enguell, Dr Kenichi Sakuda, Dr Eleanor Lunt, Dr Aamer Ali

Author Provenance: RH is Professor of Palliative Care and Geriatric Medicine, HE and KS are Trust Grade Doctors, EL is Clinical Lecturer and AA is Head of Service, all based in the Department of Healthcare of Older People at Queen's Medical Centre, Nottingham.

Title: Using the Gold Standards Framework to Identify Opportunities for Advance Care Planning

Category: Clinical Quality

Sub Category: Patient Centredness

Introduction

Departmental discharge data (January 2017- January 2018) suggested a high number of 'Day 1 Deaths' i.e. an individual who was readmitted 24 hours after discharge, and subsequently died during their readmission. We wondered if this was due to a lack of Advance Care Planning (ACP).

Methods

We undertook a retrospective case note audit of 50 cases from the 'readmissions who died' (total 176/7421) subgroup, to understand whether or not they were predictably within the last days, weeks or months of life and whether there was ACP in place. We reviewed all Day 1 Deaths (16/50), and a random selection of cases across the Day 2-30 (34/50) data set.

We used the Gold Standards Framework (GSF) as a prognostic tool, by use of the intuitive 'surprise question' ("would you be surprised if this person died within the next days, weeks, months?") and the disease-specific Prognostic Indictors (PI).

Results

Using the GSF we (retrospectively) predicted death in 94% of the Day 1 deaths and 63% of the Day 2-30 deaths.

There was evidence of ACP in 32/50 patients (64%), predominantly in the form of a DNAR CPR (61%). There was very little evidence of other forms of ACP.
Readmissions were justified on the basis of a medical condition in 100% of cases; this was infective in 60% (30/50)
There were few interactions with secondary care in the 12 months prior to death (mode was 2 admissions in the month prior to death, 4 in the 12 months prior to death).

Conclusions

We must consider our discharge processes and medical decision making at the front door.
A Prognostic indicator Tool would be useful to focus medical decision making.
We must recognise infections as end stage disease in advanced ill health, including advanced frailty.
We need to consider how we facilitate meaningful involvement of older people in their medical care towards the end of life.

Ref: MC-1915

Author Name: Dr Kishaani Suseeharan and Dr Tarunya Vedutla

Author Provenance: 1. Kishaani Suseeharan 2. Tarunya Vedutla

Title: Improving Handover between Doctors and Nurses on an Elderly Care Ward

Ethical Disclaimer: LREC did not wish to review

Category: Clinical Quality

Sub Category: Improved Access to Service

Background

The Royal College of Physician guidelines (2011) identified handover as a 'high risk step' in patient care, especially in recent times within the NHS where shift patterns lead to more disjointed care with a high reliance on effective handover by all staff members.

Introduction

At Cannock Chase hospital, Fairoak ward is an elderly care rehabilitation ward where there is a large multi-disciplinary team. While working on the ward as doctors we noticed that handover between the MDT was poor. Anecdotal evidence from both doctors and nurses felt that this was a high risk area in need of improvement.

Aim: to improve handover between doctors and nurses on this elderly care ward.

Method

To measure the quality of current handover practice we did a questionnaire. A total of 12 questionnaires were completed which showed that 92% of staff felt that handover on the ward was very poor and 50% preferred both written and verbal handover.

We measured the number of tasks verbally handed over between doctors and nurses over 3 days. On average 65% of the tasks were completed.

We then made the below interventions and re-audited to see if there was any improvement.

Interventions over 3 week period:

1. Post ward round 'huddle' with nurse and doctor

2. On the board nurse allocation to which bay documented

3. Handover sheet on each notes trolley with 'nurses jobs' and 'doctors jobs'

Results

Questionnaire;

- Staff felt that there was an improvement in handover with 58% feeling that handover was still poor compared to 92% previously.

- The most useful intervention was the post ward round huddle that had become well integrated into daily practice.

- The written handover sheet was good but poor utilisation by staff made it less effective.

Measuring task completion after interventions;

- Improvement from an average of 65% of tasks completed to 79% completion

Conclusion

This project has made a positive change qualitatively and quantitatively to the ward handover practice. Staff satisfaction regarding handover has improved and the number of 'handed over' tasks completed daily has significantly improved. The written handover sheet had poor utilisation by staff but in 4 months we are going to re-audit and trial the handover sheet again to further improve service delivery. We hope this improvement will have a positive impact on patient care on this elderly care ward.

Ref: MC-1916 Platform Presentation

Author Name: H Dolphin, A McFeely, S Kennelly, S Mello

Author Provenance: Age Related Healthcare Department, Tallaght University Hospital, Dublin 24, Dublin, Ireland

Title: Fear of Falling in Community Dwelling Ambulatory Older Patients: Associations with Physiological Falls Risk, Cognition and Mood Disorders

Category: Scientific Presentation (SP)

Sub Category: FALLS (Falls, fractures & trauma)

Introduction

Fear of falling (FOF) is associated with a range of adverse health outcomes including increased risk of falls1, and more rapid decline in physical and cognitive function2. We aim to determine the prevalence of FOF amongst ambulatory community dwelling older adults attending an Age-Related Day Hospital, and to describe it's associations with cognition, mood disorders, frailty and mobility measures.

Methods

A retrospective chart review was conducted on 50 patients attending the Day Hospital. Baseline demographics collected include comorbidities, medications, and falls history. Objective mobility measurements include the Timed Up and Go (TUG) test and grip strength. Patients were divided into two groups based on their answer to the question, "Are you afraid of falling?" Differences between groups were compared using chi-squared test.

Results

The average age of Day Hospital attendees was 85 (SD X). 62% were male. Three quarters of patients experienced a recent fall, and half admitted to FOF. Those with FOF were more likely to be dependent in personal care (27% vs 16%, p=0.15) and use a walking aid (69% vs 58%, p=0.02). They were also more likely to be prescribed psychoactive medications (53% vs 45%, p=0.42), and have a diagnosis of anxiety (4% vs 0%, p=0.03).

Conclusions

Both having a falls history and FOF is prevalent in our Day Hospital population. FOF is associated with high physiological risk of falling, increased dependency, and anxiety. Standardization of mobility measures and potential screening for cognitive and mood disorders in patients with FOF will aid in further development of targeted interventions.

Ref: MC-1917

Author Name: J Odone1, R Schiff1

Author Provenance: 1 Department of Ageing and Health, Guy's and St Thomas' NHS Foundation Trust

Title: Community DNACPR forms: opening a can of worms

Category: Clinical Quality

Sub Category: Patient Centredness

Background: There is no national guidance for the transfer of Do Not Attempt Cardio-Pulmonary Resuscitation (DNACPR) decisions between care settings. This issue has been highlighted within our Integrated Care Trust. We reviewed our local process, to improve the transfer of DNACPR decisions between care settings.

Method:

PDSA cycle two	
Plan	Identify patient experience of community DNACPR forms
Do	Patients with an inpatient DNACPR form contacted post discharge to assess the transfer of these paper forms into the community (n=30).
Study	Patients lacked understanding of DNACPR forms.
Act	Provide **intervention** to improve patient understanding.

PDSA cycle one

Plan	Explore community health care professionals' (HCPs) experience with community DNACPR forms.
Do	Questionnaire emailed to HCPs conducting home visits (64 responses).
Study	Reported that community forms were difficult to find and patients often had unanswered questions related to DNACPR forms.
Act	Study patient experience of community DNACPR forms.

A third PDSA cycle was completed to evaluate intervention.

Intervention: Frequently asked questions were added to the reverse side of the DNACPR form to improve patient understanding. All patients discharged home were given this updated form during a pilot study. The impact of the intervention was analysed with a follow-up phone call (n=30) and discussed at a staff focus group.

Results: No improvement in patient understanding was shown post-intervention, however the intervention was overwhelmingly supported by staff. 60% of patients reported receiving a DNACPR form on discharge and 12% recalled being informed that they would be discharged home with a form.

Conclusion: Further work is required on the DNACPR pathway across primary and secondary care. The next cycle will involve ensuring that the community form is highlighted in hospital discussions regarding DNACPR decisions.

Ref: MC-1919

Author Name: Linda Dykes & Cheryl Jones

Author Provenance: Ambulatory Care Unit, Llandudno Hospital, BCUHB, North Wales

Title: This is (probably) not the frailty solution you are looking for: Utilisation of a novel stand-alone community-based Ambulatory Care Unit

Category: Clinical Quality

Sub Category: Improved Access to Service

Introduction/Aim

Our organisation wished to expand its "Care Closer To Home" capability, especially for older and/or frail patients. Our novel Ambulatory Care Unit (ACU) in a community hospital, staffed by GPs & nurses, opened a year ago. The ACU has some Point of Care (POCT) diagnostics, access to plain-film radiography and OT/physio. During the planning of the unit, "acute frailty" was anticipated to be core business. We wished to determine whether this turned out to be the case.

Method: Interrogation of the ACU patient log (spreadsheet collated from Data Collection Forms) Dec 2018-Nov 2019.

Results

- Of the 587 patients seen in the ACU, 277 (47%) were ³70 years old (mean 64.5, median 69).
- 58/587 patients saw a physiotherapist during their ACU visit(s), 51/587 an OT, and 21/587 were referred to community services (half by the ACU therapists).
- Clinical Frailty Scale (Rockwood) was recorded in only 357/587, but of these, 105 (29%) had a CFS of 5-8.
- 35/105 (33.3%) had seen our physio, 26/105 (25%) OT, nine (8.6%) were referred to community services, and nine were admitted as too unwell to manage on an ambulatory basis.

Conclusion/Discussion

Recording of CFS by ACU staff was poor, limiting the validity of our results. Nevertheless, it is obvious that most patients seen in our ACU are not frail, and do not require therapies input. Those that are frail, however, have an acceptable conversion-to-admission rate of 8.6%, comfortably below the national target (20%).

Barriers to greater utilisation of our service for frail patients may include lack of urgent but non-emergency transport options for the less mobile, lack of access to certain commonly-used tests (e.g. CT, troponin) and referrer anticipation of difficulty discharging the frail patient in crisis without a new or boosted care package and/or access to respite beds. These aspects of service planning need to be addressed if the potential utility of community-based units like ours for frail patients is to be maximised.

Ref: MC-1920

Author Name: Debbie Hibbert

Author Provenance: Programme Manager, National Audit of Care at the End of Life, NHS Benchmarking Network

Title: NATIONAL AUDIT OF CARE AT THE END OF LIFE (NACEL) – ROUND TWO FINDINGS

Ethical Disclaimer: LREC did not wish to review

Category: Clinical Quality

Sub Category: Patient Centredness

NACEL is a national comparative audit of the quality and outcomes of care experienced by the dying person and those important to them during the final admission in acute and community hospitals in England and Wales. Mental health inpatient providers participated in the first round but excluded from the second round.

NACEL round two, undertaken during 2019/20, comprised:

- a hospital/site overview covering trusts (in England) and University Health Boards (in Wales),
- a Case Note Review of all deaths in the first two weeks of April and May 2019 (acute providers) or deaths in April and May 2019 (community providers); and
- a Quality Survey completed online, or by telephone, by the bereaved person.

Data was collected between June and October 2019. 175 trusts in England and 8 Welsh organisations took part in at least one element of NACEL (97% of eligible organisations).

Key findings include:

Recognising the possibility of imminent death: The possibility that the patient may die was documented in 88% of cases. The median time from recognition of dying to death was 41 hours (36 hours in the first round).

Individual plan of care: 71% of patients, where it had been recognised that the patient was dying (Category 1 deaths), had an individualised end of life care plan. Of the patients who did not have an individualised plan of care, in 45% of these cases, the time from recognition of dying to death was more than 24 hours.

Families' and others' experience of care: 80% of Quality Survey respondents rated the quality of care delivered to the patient as outstanding/excellent/good and 75% rated the care provided to families/others as outstanding/excellent/good. However, one-fifth of responses reported that the families'/others' needs were not asked about.

Individual plan of care: 80% of Quality Survey respondents believed that hospital was the 'right' place to die; however, 20% reported there was a lack of peace and privacy.

Workforce: Most hospitals (99%) have access to a specialist palliative care service. 36% of hospitals have a face-to-face specialist palliative care service (doctor and/or nurse) available 8 hours a day, 7 days a week.

NACEL round three is will start in 2021.

274. CQ - Clinical Quality - CQ - Patient Safety [Poster]

A quality improvement project on oxygen administration within the geriatrics COVID-19 cohort ward

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Introduction Due to the COVID-19 pandemic, many medical and surgical wards were reassigned as COVID-19 cohort wards to accommodate the number of patients admitted with the virus. Nurses and healthcare assistants (HCAs) from various departments and backgrounds were redeployed to these areas. Within the geriatrics population, patients with severe COVID-19 often have high oxygen requirements and can rapidly deteriorate. Therefore, we conducted a quality improvement project within the geriatrics COVID-19 ward focused on improving patient safety by improving oxygen administration to patients. We also aimed to enhance the knowledge and confidence levels of nurses and HCAs in regards to oxygen administration.

Method From April-July 2020, we compared the oxygen that was administered to COVID-19 patients against the oxygen therapy that was documented on observation charts. This included whether the correct type of device, flow rate and target oxygenation saturations were used. We carried out multiple Plan-Do-Study-Act (PDSA) cycles including a staff education session on oxygen administration, placed an oxygen guidelines poster on each patient's bedside, administered a short quiz and distributed reminder lanyard cards. We also conducted a staff survey comparing knowledge and confidence on oxygen administration before and after an education session.

Results Overall there has been an improvement in oxygen charting and administration after 4 PDSA cycles. There is 100% correct use of oxygen device and correct setting of oxygen flow rate after the 2nd and 3rd PDSA cycles. After the teaching session, all staff reported feeling more confident in oxygen management. Based on the audit data and quiz results, there was an improvement in knowledge of oxygen administration.

Conclusions We have demonstrated that by using simple time-efficient and cost-effective interventions, improvements can be made in oxygen administration and subsequently patient safety. This has the potential to influence prognostic outcomes among the geriatrics population with COVID-19.

355. SP - Scientific Presentation - SP - Psych (Psychiatry & Mental Health) [Poster]

RELATIONSHIP BETWEEN DEPRESSION AND NUTRITIONAL STATUS AMONG THE ELDERLY ATTENDING SELECTED PRIMARY HEALTHCARE CENTERS IN LAGOS

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INTRODUCTION Depression causes and worsens malnutrition. The prevalence of malnutrition in the elderly of the developed world was about 22.6% and about 40% of hospitalized elderly are malnourished while about 4.8% have one major depressive episode in people aged 50 and above. Food rich in omega-3 has antidepressant effect and its low intake is linked with dementia. Decrease dietary folate has been linked with depression. This study was aimed at determining the relationship between depression and nutritional status among the elderly in selected primary healthcare centers (PHC) in Lagos Nigeria.

METHOD A descriptive cross-sectional study was conducted using multi-stage technique to select 219 participants by systematic sampling method from the selected PHC centers. Data was collected using structured interviewer-administered questionnaires. Nutritional status and Depression were assessed using Mini-Nutritional Assessment and Geriatric Depression Scale respectively. Data analysis was carried out using Epi-info 7.1. Associations were tested using Chi-square for categorical variables while t-test and analysis of variance were used for continuous variables. Associations were statistically significant if two-tailed probability was less than 5% (0.05).

RESULTS It was found that 57.9% and 47.1% were malnourished and depressed respectively. There was a statistically significant association between the sex of the participants and the nutritional status (p=0.048). Statistically significant association existed between sex (p=0.024), marital status (p=<0.001), educational qualification and depression. Statistically significant association between monthly income (p=<0.001), living arrangement (p=0.002) and depression was demonstrated. There was a statistically significant association between family support (p=<0.001), nutritional status (p=<0.001) and depression. There was statistically significant difference between the height (p=0.00885), weight (p=0.00052, waist-hip ratio (p=0.036) and the nutritional status. Remarkably, there was statistically significant difference between the waist (p=0.023) and hip circumference (p=0.047) and their level of depression.

CONCLUSION A high prevalence of poor nutritional status and depression existed among the elderly primary healthcare centers.

93. CQ - Clinical Quality - CQ - Patient Safety [Poster]

Assessment and prevention of venous thromboembolism in Orthogeriatrics inpatients

Dr Benjamin Blackburn

East and North Hertfordshire Trust

Introduction: Venous thromboembolism is estimated to cause between 24000 – 32000 deaths annually in hospital inpatients with a proportionally large incidence in the elderly population (approximately 8 per 1000 in the population over the age of 85). Appropriate use of thromboprophylaxis is shown to reduce the incidence of VTE and death from PE. The rationale for its use is both scientifically plausible and evidence based.

Methods: The adherence of VTE assessment and prescribing to Trust guidelines was reviewed over a 2 week period on Orthogeriatrics wards in all inpatients fulfilling the Trust requirements for formal VTE assessment. Data was initially gathered on 71 patients from 18/2/19 – 2/3/19. Following implementation of change data was gathered on 70 patients from 9/10/19 – 24/10/19. Primary outcomes were appropriateness of initial VTE assessment on admission and appropriateness of re-assessment within 24 hours of admission. Changes implemented were a ward round checklist and informational ward posters informing doctors of the indications for VTE assessment and re-assessment.

Results: Data gathered initially from 18/2/19 – 2/3/19 showed 40/71 (56%) of patients received appropriate initial VTE assessment on admission and 2/71 (3%) were correctly re-assessed in 24 hours after admission. Data gathered after the interventions were implemented from 9/10/19 – 24/10/19 showed 41/70 (58.5%) of patients received appropriate initial VTE assessment on admission and 22/70 (31.4%) were correctly re-assessed within 24 hours of admission.

Conclusions: Implementation of ward round checklists and posters resulted in a tenfold increase in proportions of patients being appropriately re-assessed within 24 hours of admission. This improvement following the provision of easily accessible information on the Trust guidelines may reflect a lack of awareness of this particular guideline amongst junior staff. Further improvements may be achieved through implementing a training session for foundation doctors to increase adherence to re-assessment guidance across the Trust.

100. SP - Scientific Presentation - SP - BMR (Bone, Muscle, Rheumatology) [Poster]

The minimal clinically important difference of six-minute walk in Asian older adults

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INTRODUCTION: Rehabilitation interventions promote functional recovery among frail older adults and little is known about the clinical significance of physical outcome measure changes. The purpose of our study is to examine the minimal clinically important difference (MCID) for the 6-minute walk distance (6MWD) among frail Asian older adults.

METHOD: Data from the "Evaluation of the Frails' Fall Efficacy by Comparing Treatments" study were analyzed. Distribution-based and anchor-based methods were used to estimate the MCID of the 6MWD. Participants who completed the trial rated their perceived change of overall health on the Global Rating of Change (GROC) scale. The receiver operating characteristic curve (ROC) was used to analyze the sensitivity and specificity of the cut-off values of 6MWD (in meters) for GROC rating of "a little bit better" (+2), based on feedback from participants.

RESULTS: The mean (SD) change in 6MWD was 37.3(46.2) m among those who perceived a change (GROC ≥ 2), while those who did not was 9.3(18.2) m post-intervention (P = 0.011). From the anchor-based method, the MCID value for the 6MWD was 17.8 m (sensitivity 56.7% and specificity 83.3%) while distribution-based method estimated 12.9 m.

CONCLUSION: The MCID estimate for 6MWD was 17.8 m in the moderately frail Asian older adults with a fear of falling. The results will aid the clinicians in goal setting for this patient population.

101. CQ - Clinical Quality - CQ - Patient Safety [Poster]

Improving documentation of DNAR decisions on the Acute Medical Take

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Introduction: The BMA, Resuscitation Council and Royal College of Nursing have set out clear guidelines on documentation of Resuscitation discussions and decisions.1 On the acute medical take documentation of these discussions and decisions can be unclear despite use of an electronic patient record (EPR). The aim of this audit was to improve documentation of Do Not Attempt Resuscitation (DNAR) decisions in EPR.

Methods: We listed patients admitted on the medical take over 1-week, looking at resuscitation status and the documentation of the DNAR decision. We then implemented a change to the format of the EPR treatment escalation plan (TEP) form. Prior to the change the DNAR form was behind the TEP form which had to be clicked on separately and was not mandatory to complete. After the intervention the DNAR decision was placed in a box on the front page of the TEP form to ensure that it was clear and accessible.

Results: Pre-intervention we reviewed 114 patients notes of which 94 were DNAR. Of these 94 only 17 (18%) had correctly documented DNAR decisions in EPR. Following the intervention we again looked at all admissions to the medical take over a 1-week period, out of 151 patients 75 were DNAR and of these 75 patients 29 had correctly documented DNAR forms. This shows an increase in the percentage of the DNAR decisions filled in from 18% to 39%.

Conclusion: The results show that although there has been an improvement in the number of DNAR decisions being documented there are still a large percentage of patients who do not have this correctly documented. We are designing further interventions to ensure that the DNAR documentation is marked as a mandatory part of the TEP form as well as educating around the importance of this documentation.

103. CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

Integrating a Front Door Frailty Service in the Emergency Department: Results of a Pilot Study

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Croydon University Hopsital

Introduction Increasing old age and frailty is putting pressure on health services with 5-10% of patients attending the emergency department (ED) and 30% of patients in acute medical units classified as older and frail. National Health Service improvement mandates that by 2020 hospital trusts with type one EDs provide at least 70 hours of acute frailty service each week.

Methodology A two-week pilot (Monday-Friday 8am-5pm) was undertaken, with a "Front Door Frailty Team" comprising a consultant, junior doctor, specialist nurse and pharmacist, with therapy input from the existing ED team. They were based in the ED seeing patients on arrival, referrals from the ED team and patients in the ED observation ward – opposed to the usual pathway of referral from the ED team to medical team. Data was captured using "Cerner" electronic healthcare records. A plan, do, study, act methodology was used throughout with daily debrief and huddle sessions.

Results 95 patients were seen over two weeks. In the over 65s, average time to be seen was 50 minutes quicker than the ED team over the same period, with reduced admission rate (25.7% vs 46.5%). The wait between decision to admit and departure was shortened by 119 minutes. Overall, this led to patients spending on average 133 minutes less in the ED. 64 patients were discharged, of which 44 had community follow-up (including 37.5% of 64 referred to acute elderly clinic and 25% to rapid response). 47 medications were stopped across 25 patients.

Conclusion The pilot shows that introduction of an early comprehensive geriatric assessment in the ED can lead to patients being seen sooner, with more timely decisions over their care and reduction in hospital admissions. It allowed for greater provision of acute clinics and community services as well as prompt medication review and real time medication changes.

108. SP - Scientific Presentation - SP - Big Data [Poster]

Person-centred emergency care outcome measurement for older people living with frailty

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Introduction Health outcome goals are the results individuals seek from healthcare. These may incorporate holistic themes including function, mood, and quality of life. People living with frailty have poorer outcomes from even short hospital stays. They benefit from person-centred, goal-directed care over protocol-driven pathway approaches. This could be improved by monitoring attainment of health outcome goals.

Methods A systematic review for older people's health outcome goals in emergency care was conducted using narrative synthesis. A qualitative study based on grounded theory expanded the outcome framework to include people living with frailty. People with cognitive and communication barriers were included in semi-structured interviews. Discussions focussed on the events and outcomes sought from emergency care.

Results Older people's health outcome goals for emergency care were classified as efficient and comprehensive care, sensitivity towards vulnerability, and person-centred informed care. The importance of understanding individual perceptions was explicit. Research generally recruited based on age rather than physiological and functional state, and did not assess for impact of frailty on healthcare perceptions. The interview study was paused due to the COVID-19 pandemic. Initial results showed a predominance of person-centred and holistic care themes among health outcome goals. Participants' most common goal for emergency care was relief of symptoms: people often had pain. Participants mostly had severe frailty and wanted their mobility to be assessed, with goals of recovering their functional baseline. While participants had confidence in healthcare professionals and were generally willing to "do as we are told to feel better", they expected to undergo at least basic tests in order to receive a working diagnosis for their problem. People wanted to understand their illness and for explanations to be communicated to their relatives. Next steps Patient-reported outcome measures (PROMs) for this range of emergency care outcomes are being identified for field-testing in acute settings.

128. SP - Scientific Presentation - SP - Pharm (Pharmacology) [Poster]

A medication self-management intervention to improve medication adherence for older people with multimorbidity: A pilot study

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Introduction: Medication self-management support has been recognised as an essential element in primary health care to promote medication adherence and health outcomes for older people with chronic conditions. A patient-centred intervention empowering patients and supporting medication self-management activities could benefit older people. This pilot study tested a newly developed medication self-management intervention for improving medication adherence among older people with multimorbidity.

Method: This was a two-arm randomised controlled trial. Older people with multimorbidity were recruited from a community healthcare centre in Changsha, China. Participants were randomly allocated to either a control group receiving usual care (n=14), or to an intervention group receiving three face-to-face medication self-management sessions and two follow-up phone calls over six weeks, targeting behavioural determinants of adherence from the Information-Motivation-Behavioural skills model (n=14). Feasibility was assessed through recruitment and retention rates, outcome measures collection, and intervention implementation. Follow-up data were measured at six weeks after baseline using patient-reported outcomes including medication adherence, medication self-management capabilities, treatment experiences, and quality of life. Preliminary effectiveness of the intervention was explored using generalised estimating equations.

Results: Of the 72 approached participants, 28 (38.89%) were eligible for study participation. In the intervention group, 13 participants (92.86%) completed follow-up and 10 (71.42%) completed all intervention sessions. Ten participants (71.42%) in the control group completed follow-up. The intervention was found to be acceptable by participants and the intervention nurse. Comparing with the control group, participants in the intervention group showed significant improvements in medication adherence (β=0.26, 95%CI 0.12, 0.40, P<0.001), medication knowledge (β=4.43, 95%CI 1.11, 7.75, P=0.009), and perceived necessity of medications (β=-2.84, 95%CI -5.67, -0.01, P=0.049) at follow-up.

Conclusions: The nurse-led medication self-management intervention is feasible and acceptable among older people with multimorbidity. Preliminary results showed that the intervention may improve patients' medication knowledge and beliefs and thus lead to improved adherence.

377. SP - Scientific Presentation - SP - Epid (epidemiology) [Poster]

COVID-19 and associations with frailty and multimorbidity: a prospective analysis of UK Biobank participants

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Introduction Frailty and multimorbidity have been suggested as risk factors for severe COVID-19 disease. We therefore investigated whether frailty and multimorbidity were associated with risk of hospitalisation with COVID-19 in the UK Biobank. Method 502,640 participants aged 40-69 years at baseline (54-79 years at COVID-19 testing) were recruited across UK 2006-10. A modified assessment of frailty using Fried's classification was generated from baseline data. COVID-19 test results (England) were available 16/03/2020-01/06/2020, mostly taken in hospital settings. Logistic regression was used to discern associations between frailty, multimorbidity and COVID-19 diagnoses, adjusting for sex, age, BMI, ethnicity, education, smoking and number of comorbidity groupings, comparing COVID-19 positive, COVID-19 negative and non-tested groups.

Results 4,510 participants were tested for COVID-19 (positive=1,326, negative=3,184). 497,996 participants were not tested. Compared to the non-tested group, after adjustment, COVID-19 positive participants were more likely to be frail (OR=1.4 [95%CI=1.1, 1.8]), report slow walking speed (OR=1.3 [1.1, 1.6]), report two or more falls in the past year (OR=1.3 [1.0, 1.5]) and be multimorbid (≥4 comorbidity groupings vs 0-1: OR=1.9 [1.5, 2.3]). However, similar strength of associations were apparent when comparing COVID-19 negative and non-tested groups. Furthermore, frailty and multimorbidity were not associated with COVID-19 diagnoses, when comparing COVID-19 positive and COVID-19 negative participants.

Conclusions Frailty and multimorbidity do not appear to aid risk stratification, in terms of a positive versus negative results of COVID-19 testing. Investigation of the prognostic value of these markers for adverse clinical sequelae following COVID-19 disease is urgently needed.

124. CQ - Clinical Quality - CQ - Patient Safety [Poster]

Improving Rates of Medication Prescription on Admission by the Clerking Doctor in Patients with Neck of Femur Fractures

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Queen Elizabeth Hospital, Woolwich

Introduction Ensuring correct medications are prescribed for all patients admitted with neck of femur fractures is essential for presurgical optimisation, analgesia and perioperative care. This quality improvement project examines patients over the age of 65 who were managed following the orthogeriatric pathway for all neck of femur fractures at Queen Elizabeth Hospital, Woolwich. Guidelines exist that include a list of medications that should be prescribed for all of such patients on admission, including VTE prophylaxis, analgesia, antiemetics, laxatives, IV fluids and preload. The aim is to improve the rate of following this guidance on prescription by clerking doctors on admission.

Method Data was collected retrospectively for all patients admitted to Queen Elizabeth Hospital between 03.12.19 – 15.01.20 with a neck of femur fracture. Interventions were then introduced to improve medication prescriptions and took place at the start of February 2020. This involved tutorial sessions and raising awareness through posters. Data collection for cycle 1 following interventions took place from 03.02.20 – 14.03.20 and can be compared with the original baseline data set.

Results Data was collected from 34 patients for the baseline population and 28 patients in Cycle 1. Baseline data suggests that certain medications, such as preload and TEDs stockings were often missed by the admissions team, with only 8.82% of patients receiving 9pm preload, 17.6% receiving 6am preload and 38.2% prescribed TED stockings. Following interventions, medication prescriptions by the clerking doctors improved in all parameters, with significant improvements seen with VTE prophylaxis.

Conclusion Induction sessions and accessible guidelines are essential to ensure guidelines are followed and patients receive correct medications on admission. Improving medication prescriptions is vital for medical optimisation prior to surgery and to lower rates of perioperative complications. Clerking doctors responsible for this task should receive correct training and support to ensure this is done correctly.

125. CQ - Clinical Quality - CQ - Patient Centredness [Poster]

Reducing inappropriate readmissions from a community hospital - a quality improvement project.

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York Teaching Hospitals NHS Foundation Trust

Introduction Quality person-centred care in those approaching the end of life includes consideration and anticipation of their preferred place of death and ceiling of care (CoC). This QI project to reduce inappropriate readmissions was prompted following the transfer of a palliative patient to the acute trust from a community hospital.

Method Data was collected from the electronic patient record (EPR) at weekly intervals over a six month period, July to December. Electronic documentation of CoC from 507 records from a 24 bed community hospital was reviewed. Data collected included patient age, sex and whether a CoC decision entry had been made on the EPR during the community hospital inpatient stay. The appropriateness of readmissions over the same period was also analy sed. A weekly consultant geriatrician ward round was introduced focusing on advanced care planning with explicit decision making regarding preferred place of care.

Results There were a total of 16 readmissions during the study period. 3 of these were deemed 'inappropriate' following EPR review occurring in August, September and October. Subsequent review of electronic CoC July to October inclusive demonstrated a median completion rate of 20.5%. Following intervention there were no further inappropriate readmissions and the median CoC completion rate was 85%. Qualitatively, the consultant geriatrician managing the community hospital felt there had been a cultural shift where staff felt more comfortable managing complex palliative care.

Conclusions Introduction of a weekly Consultant Geriatrician ward round in the community setting has led to a sustained improvement in CoC decision-making and documentation. As a result of this there have been no further inappropriate readmissions to the acute trust. This reflects the national guidance in patient centred palliative care. Further work including robust, qualitative assessment of staff attitude towards palliative care is needed to emulate this work at other local community hospitals.

406. CQ - Clinical Quality - CQ - Patient Centredness [Poster]

Improving the Delivery of Written Communication to Patients Presenting to the Frailty Assessment Service Following a Fall

Gokulan Suthermaraj

Northumbria Healthcare NHS Foundation Trust

Introduction NICE guidelines recommend for healthcare professionals to give patients both verbal and written information when explaining how to prevent further falls at home, how to cope with falls and where they can seek further advice or assistance. Most of the patients seen by the Frailty Assessment Service (FAS) at Northumbria Specialist Emergency Care Hospital (NSECH) will remain at a high falls risk even on discharge. An emphasis should be made on educating patients about how best they can manage their risks at home to prevent further falls.

Method Over a six month period, data on patients seen by the FAS team was collected by reviewing electronic case notes and the daily patient list to identify presenting complaint and whether a falls leaflet was given on discharge.

Results Following three cycles of intervention, the rate of falls leaflet distribution to patients discharged following a fall increased from an initial 0% to 24%, then to 55% and finally to 72%. Interventions included, in order; educating all frailty nurse practitioners, amending the daily patient list to include a separate column to prompt ticking if a falls leaflet was given, and notifying all frailty consultants to consider including “falls leaflet” as part of their post-take management plans.

Conclusion Having a paper information leaflet can be invaluable to patients as it allows them to go away with concrete bits of information that they can always refer back to. This ensures that elderly patients do not face the risk of forgetting any advice given to them verbally during a consultation and written communication would only help to reinforce this instead. In future, it may be helpful to identify if there are reduced rates of re-admission to hospital in patients discharged with a falls leaflet compared to patients discharged without one.

143. CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

Improving clinical effectiveness at identifying patients requiring Advanced Care Plans

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Our project was conducted in a district general hospital across five acute geriatric wards. Our team included consultants, registrars, and ward matrons. The project focused on improvement of care for geriatric inpatients, with moderate to severe frailty. Advanced care planning (ACP) columns are displayed on white boards. They indicate whether ACPs are required/initiated for each patient. When previously utilised, ACPs were initiated for 78% of appropriate patients[1]. Following a change in staff and reduction in awareness /education, the ACP column use reduced with fewer ACPs established.

Our goals were to ensure completion of the ACP column, encourage junior doctor/nurse involvement and trigger a greater number of appropriate ACPs initiated Improvement in ACP practice was addressed by daily board round review of appropriate patients for ACP, increasing awareness of ACP triggers and education around discussion content. Interventions consisted of: (1) a flow-chart adjacent to white boards prompting 'Do not attempt resuscitation (DNAR)' and ACP processes. This signposted staff to information on ACP triggers and 'how to start a conversation'. (2) Involving registrar 'champions' on each ward. We explained our intervention to all team members to encourage engagement.

Data from the ACP columns were audited prior to intervention, 2 weeks and 6 weeks after intervention. There was a 54% increase in ACP documentation after 6 weeks across the wards.

The improvement in the use of the ACP column correlated with a greater number of ACPs initiated. This facilitated an increase in consideration of patient wishes towards the end of life. Increasing use of a daily ACP prompts on board rounds triggers an increase in ACP implementation for appropriate patients. Sustainability was achieved by recruitment of ward "ACP champions". Junior doctors/matrons were more empowered to discuss ACPs. Results were presented at departmental teaching to reinforce the positive impact of the intervention and

264. CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

Improving Pain Assessment and Management for Patients with Cognitive Impairment on the Care of the Older Person (COOP) Wards.

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Introduction: Patients with cognitive impairment are at risk of underassessment and inadequate management of pain. Self-reporting is unlikely to be a reliable indicator of pain and numerical scales have reduced validity, hence an alternative assessment tool must be used. The Abbey Pain Scale is widely regarded to be user friendly. Regular analgesia should be used for these patients where possible instead of 'as required' (PRN). Using QIP methodology, we aimed to improve the use of the Abbey Pain Scale for assessment of patients with cognitive impairment and better analgesia prescribing.

Methods: Audit of patient records on COOP wards (computer and physical notes, n=48 first cycle, n=32 second cycle) before and after staff training, assessing patients with cognitive impairment for: use of Abbey Pain Scale; use of regular paracetamol; pain assessments documented by different healthcare professionals.

Results: In the first cycle, 16 patients had cognitive impairment: only 1 of these patients (6%) was assessed using the Abbey Pain Scale. Group teaching for the multidisciplinary team on pain assessments was undertaken with practice development nurses. In the re-audit, 13 patients had cognitive impairment and 6 of these (46%) were assessed using the Abbey Pain Scale, showing a clear improvement following staff training. The second cycle showed a 50% increase in the prescription of regular paracetamol for patients with cognitive impairment. There was also a 2.5-fold improvement in therapy staff documenting pain assessments between the two audits.

Conclusions: Staff training in the use of the Abbey Pain Scale led to an almost 8-fold increase in its use for patients with cognitive impairment. Training on the use of the Abbey Pain Scale should be regularly provided to nurses, physiotherapists and doctors on the care of the older person wards.

265. SP - Scientific Presentation - SP - Other (Other medical condition) [Poster]

Socio-demographic and medical factors in a multi-ethnic cohort of COVID deaths

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Introduction Whilst most patients during the COVID pandemic made an uneventful recovery,there was a significant minority in whom the disease was severe and unfortunately fatal. This survey aims to examine and evaluate risk factors for those patients who died of COVID and to identify any markers for improvement in the management of such patients during future COVID surges.

Methods Medical records of all patients who died within a multi-ethnic, inner city acute district general hospital over a 6-week period in 2020 were examined. Data collected included demographic details, medical comorbidities, and type of ward where they received care. Multivariable analysis using stepwise backward logistic regression was conducted to examine independent risk factors for these patients.

Results Of 275 deaths,204 were related to COVID. Compared to non-COVID deaths(n=71), there were no age differences. There were significantly more deaths in males (58%vs39%,P<0.001)) and in Black African and South Asian groups. 18% of COVID deaths were those who were not frail (Frailty Rockwood Scale 1-3) whereas there were no non-COVID deaths in this group(P<0.001). 69% of COVID deaths occurred in general medical wards whereas 19% in critical care units (90% and 7% for non-COVID deaths,p<0.001). COVID patients died more quickly compared to non-COVID patients (length of stay mean, 11vs21,p<0.001). Medical factors prevalent in >20% of COVID deaths included Diabetes, Hypertension, Chronic Heart Disease, Chronic Kidney Disease,and Dementia. Multivariable analyses showed males (OR 1.9), age>70(OR 2.0), frailty (OR 2.3) were independent risk factors for COVID deaths.

Discussion Compared to non-COVID deaths,COVID deaths were more common in previously well individuals,males,Black African and South Asian ethnicity, but multivariable analyses showed males, age>70 and frailty were independent risk factors for COVID deaths. This survey indicates that greater psychological support may be required for healthcare workers on general medical wards who looked after greater proportion of COVID deaths.

269. SP - Scientific Presentation - SP - BMR (Bone, Muscle, Rheumatology) [Poster]

MRS BAD BONES: Impact of COVID-19 on Secondary Prevention of Fragility Fractures

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Introduction Management of osteoporosis is an important consideration for neck of femur fracture patients due to the morbidity and mortality it poses, and the significant financial burden to the NHS. Orthogeriatric teams input is invaluable in coordinating secondary fragility fracture prevention. The COVID-19 pandemic resulted in the rapid restructuring of healthcare teams and led to the redeployment of the orthogeriatricians to assist with the influx of medically unwell patients. This study explored the impact COVID-19 had on secondary fragility fracture prevention.

Method A retrospective audit looking at the prescription of vitamin D/calcium supplements, bone-sparing medications, and DEXA scan requests in consecutive neck of femur fracture patients admitted to a trauma and orthopaedic unit pre- and post-UK lockdown in response to the pandemic. A re-audit was conducted following the implementation of our new mnemonic, 'MRS BAD BONES': Medication Review Rheumatology / Renal Advice Smoking Cessation Blood tests Alcohol limits DEXA scan Bone-sparing medications Orthogeriatric review Nutrition Exercise Supplements

Results Data for 50 patients was available in each phase. The orthogeriatric team reviewed 88% of patients pre-lockdown falling to 0% due to redeployment, before recovering to 38% in the post-intervention period. Upon lockdown there was a significant drop in the prescription of vitamin D/calcium supplements from 81.6% to 58.0% ($p=0.0156$); of bone-sparing medications from 60.7% to 18.2% ($p=0.0037$), and DEXA scan requests from 40.1% to 3.6% ($p= 0.0027$). Following the implementation of our mnemonic, there was a significant increase in the prescription of vitamin D/calcium supplements to 85.7% ($p=0.0034$), bone-sparing medications to 72.4% ($p=0.0002$) and DEXA scan requests to 60% ($p<0.0001$).

Conclusion COVID-19 had a major impact on the secondary prevention of fragility fractures in this population. The 'MRS BAD BONES' mnemonic significantly improved the management and could be considered for use in a wider setting.

272. CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

Clinical frailty scoring is crucial for the COVID-19 era and beyond

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The Royal Free NHS Trust

Introduction The COVID-19 pandemic placed a new focus on provision of clinical resources. With high mortality and limited capacity; appropriate decisions to escalate to critical care were vital for just resource allocation but also to prevent harm where interventions would not change outcomes. NICE guidance highlighted Clinical frailty scoring (CFS) as central to the decision-making process. (1) Despite initial criticism, recent evidence has confirmed increasing CFS as an independent risk factor to inpatient mortality in COVID-19.2 We conducted a quality improvement project with the aim of improving CFS documentation at the Royal Free Hospital.

Methods We reviewed the notes of 71 inpatients over the age of 65 years from 6 wards on 08/05/20-12/05/20 for both a CFS score documentation and clear treatment escalation plan at time points of initial clerking, post-take and following ward admission with an audit standard of 100%. We developed teaching sessions, promoted the CFS mobile application, developed a post-take sticker and an elderly medicine ward admission proforma. We re-audited 66 inpatient notes from the same 6 wards from 25/06/20-07/07/20.

Results Documentation.of CFS improved from 7% to 17% for clerking and post-take and from 13% to 24% on the ward admission. The number of patients with treatment escalation plans was 50%.

Conclusion CFS is crucial for the COVID-19 era and beyond. We have demonstrated that increased awareness improves use of CFS, though it is not yet being widely used in escalation decisions. 1. Covid-19 Rapid guideline: Critical Care in adults. NICE guideline [NG159]: https://www.nice.org.uk/guidance/ng159 Accessed July 2020 2. Hewitt J et al (2020): The effect of frailty on survival in patients with COVID -19 (COPE): a multicentre, European, observational cohort study; The Lancet: https://doi.org/10.1016/ S2468-2667(20)30146-8

275. CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

Does spinal bone mineral density predict an absolute 10 year probability of sustaining a major osteoporotic frac

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Introduction: Spine and hip bone mineral density (BMD) have previously been shown to predict the risk of sustaining future fractures. Although these have been shown in population studies, there is a paucity of trials looking at the relationship between BMD and 10 year probability of major osteoporotic fractures (Using FRAX UK without BMD) in patients with previous fragility fractures.

Aims: To evaluate the correlation between spinal T-score and an absolute 10 year probability of sustaining a major osteoporotic fracture (using FRAX without BMD) in patients with prior fragility fractures. Methods: A retrospective cross-sectional analysis of 202 patients (29 males and 173 females) with prior fragility fractures attending a fracture prevention clinic between January and August 2019 was performed. Patients with pathological and high impact traumatic fractures were excluded. The BMD at the spine was determined using the lowest T-score of the vertebrae from L1 to L4. Using the FRAX (UK) without BMD, the absolute 10 year probability of sustaining a major osteoporotic fracture was calculated for each patient. Statistical analysis was performed using SPSS 26 software.

Results: The mean T-score at the spine was -1.15 (SD +/- 1.90) for all patients, -0.68 (SD +/- 0.45) for males and -1.23 (SD +/- 0.14) for females. The mean FRAX score without BMD for major osteoporotic fracture was 18.5% (SD +/- 8.84) for all patients, 11.41% (SD +/-0.62) and 19.7% (SD +/-0.68) for males and females respectively. Pearson correlation coefficient showed a statistically significant, slightly negative correlation between spinal T- score and the FRAX (UK) without BMD ($r = -0.157$; $p<0.05$). Correlation was not statistically significant when males ($r=0.109$; $p=0.59$) and females ($r=0.148$; $p=0.053$) were considered independently.

Conclusion: In patients with prior fragility fracture spinal BMD has a statistically significant negative correlation with an absolute 10 year probability of sustaining a major osteoporotic fracture.

277. CQ - Clinical Quality - CQ - Improved Access to Service [Poster]

The Comprehensive Frailty Assessment at Forth Valley Royal Hospital (FVRH) DIGITALISED: for COVID-19 and beyond!

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Introduction Comprehensive Geriatric Assessment (CGA) improves outcomes for frail patients; at FVRH this is delivered by the Frailty Intervention Team (FIT) comprising of senior nurses, allied health professionals (AHPs) and doctors. Faced with COVID-19, we took the opportunity to digitalise CGA documentation to preserve these benefits for patients whilst facing greater acuity, staffing and time pressures. An electronic solution was adopted to reduce paper-usage in COVID-receiving areas. Prior to COVID-19, CGA was recorded within case-notes, presenting challenges when patients were readmitted out-of-hours as these were stored off-site and not accessible out-of-hours.

Method Trakcare is the patient-management system in many Scottish hospitals. The Electronic Patient Record (EPR) was used to record pro-forma against admissions which were accessible and updatable for any patient 24-7-365. Patients meeting the Healthcare Improvement Scotland (HIS) Frailty criteria were considered “frailty-positive”, with an e-alert added-reappearing on any re-admission. Providing no HIS-exclusion criteria, an electronic-CGA (e-CGA) was recorded or updated. The pro-forma designed contained information not immediately available to clerking practitioners. This evolved following discussion amongst the FIT to include information such as escalation-status, medication-arrangements and baseline cognition.

Results Over 13 weeks, 116 EPRs were reviewed. During weeks 1-3 (n=8, 12, 7 respectively), e-CGA completion averaged 31%. Following FIT collaboration, this rose to 82% (n=9) by week 12. Qualitative feedback from the MDT indicated that FIT, downstream wards and night-staff felt that having access to previous escalation-plans made immediate-management easier to determine, and discussions with families more productive for patients.

Conclusions Development of the FVRH e-CGA is ongoing, with an electronic frailty-screening tool being implemented to improve frailty-identification on admission to ensure correct streaming of patients to the FIT. We have demonstrated a cost-neutral method for improving access to CGA for patients using existing IT systems whilst protecting staff time, preserving patient care during the COVID-19 pandemic.

278. SP - Scientific Presentation - SP - Cardio (Cardiovascular) [Poster]

Lack of Evidence for Reduced Efficacy of Medical Therapy for Heart Failure in Older Adults

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Introduction: There are almost a million people with heart failure (HF) in the UK; the incidence increases sharply with age. Older adults receive less evidence-based therapy with few trials specifically examining therapeutic efficacy in older age groups representative of a contemporary UK HF population. Concern that efficacy is less in older adults may underlie under-prescription. With important recent advances in HF therapy, we reviewed the contemporary evidence base for any signal of different efficacy in older adults.

Methods: We reviewed recent RCTs of medical therapy for heart failure alongside meta-analyses updated with recent therapies including Angiotensin-Neprilysin inhibitors and SGLT2 inhibitors. For those trials in which effect size was presented for age subgroups we compared the effect size.

Results: Of 68 randomised controlled trials, 10 presented effect sizes for different age groups. The median average cut-off between younger and older age groups was 66 years (IQR 65 to 72.5 years) and the highest cut-off used was 75 years. The median hazard ratio was 0.77 (IQR 0.67 to 0.80) for the younger age group and 0.76 (IQR 0.73 to 0.88) for the older age group. In 8 of the 10 trials, the effect size in the oldest age group was statistically significant on its own including Sacubitril-Valsartan and Dapagliflozin.

Conclusion: When considering the medical therapeutic armamentarium for heart failure as a totality, there is no evidence it is any less effective in older adults than younger adults. The recent Zannad et al cross-trial analysis supported this showing significant additional life years in the patients over 80 years on HF therapy. Whilst there may be practical and frailty-related reasons for not prescribing life-prolonging therapy, the proportional survival benefits of these medications is similar in older adults. This should be utilised where practically possible and discussed with patients when making an informed choice.

281. SP - Scientific Presentation - SP - Stroke (Stroke) [Presidents Round]

Informant-reported decline associates with silent acute stroke lesions and worse small vessel disease in mild stroke patients

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Introduction Small vessel disease (SVD) commonly causes stroke and dementia. Early clinical predictors of disease progression are lacking. We aimed to determine whether informant reports of chronic cognitive/functional decline, prerequisites for dementia diagnosis, are associated with (a)baseline SVD burden, measured by Fazekas scores and (b)SVD change, measured by incident subcortical Diffusion-weighted Imaging (DWI) lesions.

Method: We prospectively recruited patients with mild ischaemic stroke, performed diagnostic MRI, and invited participants to repeat MRI 3- to 6-monthly. Informants completed the Informant Questionnaire for Cognitive Decline in the Elderly (IQCODE) prior to baseline visit, a 16-item questionnaire which assesses patients' cognitive and functional decline in the preceding ten years. Scores range from 1-5: a score above 3.3 has high sensitivity/specificity for dementia post-stroke. We conducted linear regression with IQCODE as the dependent variable, adjusting for age, sex, baseline MoCA, disability (modified Rankin Scale).

Results: We recruited 106 participants (mean age 67 years;range 40-86;33% female). Ninety-three informant questionnaires were returned. IQCODE associated with baseline Fazekas score; Fazekas 6 (β=0.28, p =0.04) vs. Fazekas 3 (β=0.03, p =0.67), R2=0.11, adjusted for age, sex, baseline MoCA, disability.

Incident DWI lesions were common (15/106; 14/15 subcortical; no active embolic sources; median 67 days post-stroke). Four were asymptomatic, two reported stroke-like symptoms and nine had neuropsychiatric/non-focal symptoms. IQCODE was higher in those with a new lesion vs. without (β= 0.21, p=0.02), R2=0.09, while age (β=-0.004, p=0.19), MoCA (β=-0.006, p = 0.56) and disability (β=0.06, p=0.2) were not.

Conclusions: Higher SVD burden and incident, mostly 'silent' stroke lesions associate more strongly with informant concerns of cognitive/functional decline than age or objective cognitive tests. These findings are novel in an ischaemic stroke population and the first to assess IQCODE/SVD progression. Future work should determine whether combining informant reports with imaging features of small vessel disease improves early detection of dementia.

283. SP - Scientific Presentation - SP - Falls (Falls, fracture & trauma) [Poster]

A novel experimental study of using ultrasound to assess bone fragility

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Introduction Fragility fractures can lead to disability, loss of independence and mortality rates of up to 30% for neck of femur fractures. The current gold standard, a Dual-Energy X-ray Absorptiometry scan measurement of bone mineral density (BMD), under-diagnoses patients by 50%. Despite the continued use of BMD, bone structure and geometry also contribute to bone fragility. Ultrasound (US) provides an attractive alternative to evaluate bone fragility using non-ionising radiation. US, combined with full wave inversion (FWI), a sophisticated computational model, can produce imaging data. We evaluated whether bone structure at the neck of femur could be assessed based on transverse US measurement at the proximal femoral diaphysis in ex vivo human femora.

Method Firstly, the variation of bone structure along the proximal femoral diaphysis was investigated using gold standard micro-CT. Secondly, the association of proximal femoral diaphysis to neck of femur bone structure was assessed using micro-CT. The total bone volume fraction, individual cortical (bone volume fraction, porosity, thickness, width and surface area) and trabecular parameters (bone volume fraction, porosity, thickness, spacing and connectivity) were analysed. Thirdly, US measurements of the proximal femoral diaphysis were compared to micro-CT measurements of the proximal femoral diaphysis. Results US, using FWI, captured the periosteal surface but did not capture trabecular structure. Proximal femoral cortical diaphysis measurements between US and micro-CT showed a wide limit of error (range 36-59% difference). The proximal femoral diaphysis did not correlate with the femoral neck (Pearson r -0.54 to 0.55).

Conclusion The femoral neck bone structure could not be assessed via transverse US measurement at the proximal femoral diaphysis. However, US captured periosteal bone. This is the first attempt to combine US and FWI to image the femur. With improvements in the technology and methodology, there is potential application of US in assessing bone fragility.

285. CQ - Clinical Quality - CQ - Patient Centredness [Poster]

Impact of Covid19 Restrictions on Older Patients Attending an Outpatient Service

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Introduction During the Covid19 pandemic older adults (>70 years) in Ireland were advised to stay at home and avoid unnecessary physical contact - termed 'cocooning'. During this time hospital outpatient appointments were conducted virtually (via telephone). This project aimed to assess patients experience of Covid19 cocooning and the virtual outpatient service.

Methods Patients attending an outpatient geriatric medicine service were invited to participate in this project following their routine virtual assessment. A proforma questionnaire was administered to participants contacted virtually within one week of consent. Data was anonymised, imported into excel and analysed using SPSS (chi-squared test).

Results 31 patients were included, median age was 83 years. 52% were male, 25% lived alone and 52% had cognitive impairment. 77% had heard of 'cocooning', of which 79% correctly understood the term. Three-quarters stated that cocooning had negatively impacted their quality of life (QoL); anxiety, loneliness and depression were reported in 49%, 36% and 29% respectively. 39% strongly feared getting Covid19. Cognition and living status did not correlate significantly with the psychological impact of Covid19. 61% did not use modern social media, its use did not impact QoL scores ($p = .075$). 45% experienced a reduction in support services. 87% found the OPD telephone service useful and 77% reported their needs were addressed. Three-quarters favoured future virtual assessments.

Conclusion One third of patients poorly understood 'cocooning'. Necessary Covid19 restrictions impacted negatively psychologically on this older cohort. Novel virtual clinics proved a positive experience and a useful future outpatient resource even amongst our oldest patients with dementia.

291. SP - Scientific Presentation - SP - Epid (epidemiology) [Poster]

Prescribing of hypnosedatives in seniors in ambulatory care in the Czech Republic: INOMED and EUROAGEISM project findings

: Olena Antonenko, MSc., M.D. 1, Karolína Puldová, MSc. 1; Milada Halačová, PharmD, Ph.D. 1; Silvia Grešáková, MSc. 1;Jovana Brkic, MSc1;and Daniela Fialová, PharmD, Ph.D, Assoc. Prof. 1,2

Czech republic

Introduction: Among psychotropic drugs, particularly hypnotics are often used by ambulatory seniors due to high prevalence of insomnia in higher age. This study focused on describing the prevalence of insomnia, prevalence of hypnosedative drug use and inappropriate patterns of their prescribing (nongeriatric doses, nongeriatric lenght of therapy) in ambulatory seniors in the Czech Republic.

Methods: There were 563 ambulatory geriatric patients (≥65 years) included in the study, from 4 geriatric ambulances (regionally different sites) in the Czech Republic. All patients have been assessed using comprehensive geriatric assessment (CGA) using the EUROAGEISM H2020 study protocols. Prevalences of insomnia, hypnosedative drug use and use of drugs that may exacerbate insomnias were documented by descriptive statistics, as well as the prevalence of potentially inappropriate medications in older patients (PIMs, selectively for hypnosedatives, defined by 2019 Beers criteria and 2015 EU(7)-PIM list).

Results: 30.6% (N=172) of ambulatory seniors suffered from insomnias and the majority of patients were treated pharmacologically (24.0%), nonpharmacologic procedures were used rarely (0.5%). Hypnosedatives in the evening or at night (e/n) were mostly prescribed in the age group of patients 84-94 years (42.8%) and most often these were Z-drugs (8.2%), benzodiazepines (BZDs, 7.6%) and from „off-label“ hypnotics antipsychotics (17.8%, !17% of users 6 months) and sedative antidepressants (9.2%). In nongeriatric doses and nongeriatric duration of therapy (>4 weeks) there were most often prescribed Z-drugs (6.0% and 2,7%, respectively) and BZDs (2,7% and 11%).

Conclusion: In ambulatory Czech seniors we documented that one third suffered from insomnias and minimally were applied nonpharmacological treatment strategies. From nongeriatric procedures in hypnosetive drug use were most often described long-term use of antipsychotics e/n, non-geriatric dosing of Z-drugs and long-term use of BZDs e/n. Supported by: InoMed project (reg. No: CZ.02.1.01/0.0/0.0/18_069/0010046, 2019-2022), EUROAGEISM H2020-MCSF-ITN-764632 project, PROGRESS Q42 Faculty of Pharmacy, Charles University, SVV 260417

292. SP - Scientific Presentation - SP - Epid (epidemiology) [Poster]

Rationality of hypnosedative use in seniors in acute care: outputs of the INOMED and EUROAGEISM projects

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Czech republic

Introduction: Insomnia is a frequent problem in acutely hospitalized older adults, particularly in those suffering from polymorbidity and treated by polypharmacy. The aim of our study was to describe the prevalence of insomna and patterns of inappropriately prescribed hypnosedatives in acutely hospitalized older patients in the Czech Republic.

Methods: 438 patients (≥65 yrs) acutely hospitalized at 3 geriatric clinics (Brno, Hradec Králové, Praha) in the Czech Republic underwent a comprehensive geriatric assessment (CGA) using the EUROAGEISM H2020 assessment protocols. Descriptive statistics was used to determine the prevalence of insomnia and use of hypnosedatives. Explicit criteria of potentially inappropriate medications (PIMs), mainly 2019 Beers criteria and 2015 EU(7)-PIM list were applied to determine inappropriate patterns of hypnosedatives use.

Results: 16.9% (N=74) seniors had diagnosed insomnia in their medical records, but 34,6% used hypnosedatives in the evening or at night (e/n). 13.8% reported e/n use of drugs aggravating insomnias (particularly beta-blockers- 6.4%, diuretics-2.5% and theophylline- 2.1%). Most frequent hypnosedatives used were: antipsychotics e/n (18.5%), Z-drugs (16,2%) and benzodiazepines e/n (BZD, 14,2%). Non-geriatric doses were determined in users of Z-drugs (10.5%) and sedative antidepressants e/n (1,8%), longer than recommended geriatric duration of therapy has been described for Z-drugs (5.9 %,>1month), BZDs e/n (5,3%,>1month) and sedative antidepressants e/n (3,3 %, >6 months). In total, 1PIM was prescribed to 7.5% of seniors (N=33), 2PIMs to 2.5% and 3PIMs to 1,1% of seniors. Combination of hypnotics and other sedative drugs was documented in 5.9% of cases.

Conclusion: Inappropriate patterns of hypnosedative use in acutely hospitalized seniors in the Czech Republic at geriatric clinics were found particularly in excessive indication of antipsychotics e/n, inappropriate dosing of Z-drugs and long-term use of BZDs e/n. Supported by: InoMed project (reg. No: CZ.02.1.01/0.0/0.0/18_069/0010046, 2019-2022), EUROAGEISM H2020-MCSF-ITN-764632 project, PROGRESS Q42 Faculty of Pharmacy, Charles University, SVV 260417

293. SP - Scientific Presentation - SP - Other (Other medical condition) [Poster]

Heritability of Temperature and the Effects of Ageing on Temperature Regulation: An Observational Multi-Cohort Study

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Introduction: Ageing affects homeostasis and immunosenescence, resulting in aberrant fever and immune responses to infection in older adults. This study assesses heritability of basal temperature and explores effects of ageing on basal temperature and temperature in response to SARS-CoV-2 infection.

Methods: Observational study using multiple cohorts. Participants: (a) Twin volunteers: 1089 healthy adults enrolled in Twins-UK, mean age 59(17); tympanic temperature measurements; (b) Community-based: 3972 adults using the COVID Symptom Study mobile application, age 43(13); self-reported test-positive for SARS-CoV-2 infection; self-reported temperature measurements; (c) Hospitalised: cohorts of 520 and 757 adult patients with emergency admission to two teaching hospitals between 01/03/2020-04/05/2020, age 62(17) and 68(17) respectively; RT-PCR-confirmed SARS-CoV-2 infection.

Analysis: (a) heritability analysed using saturated and ACE univariate models; linear mixed-effect model for associations between basal temperature and age, sex and BMI. (b&c) multivariable linear regression for associations between temperature and age, sex and BMI; multivariable logistic regression for associations between fever(>/= 37.8°C) and age, sex and BMI.
Results: Basal temperature in twins demonstrated 50% heritability (95%CI[42-57%]). In healthy twin, community-based and hospitalised cohorts, increasing age is associated with lower temperatures, and increasing BMI with higher temperatures: (a) Twins (age:p<0.001; BMI:p=0.002); (b) Community-based (age: p<0.001; BMI: p<0.001); (c) Hospitalised (1st hospital: age: p=0.106; BMI: p=0.033; 2nd hospital: age: p<0.001; BMI: p=0.010). Increasing age was negatively and BMI positively associated with fever (1st hospital: Age: OR= 0.99, p=0.033; BMI: OR= 1.00, p=0.045; 2nd hospital: Age: OR =0.99, p=0.010; BMI: OR 1.02, p=0.038).

Conclusions: Heritability of basal temperature suggests a genetic component to thermoregulation. Associations observed between increasing age and lower temperatures and higher BMI and higher temperatures are important in understanding effects of ageing and obesity on basal temperature and the fever response. In older adults, findings have important implications for defining fever thresholds and diagnosing infections, including SARS-CoV-2.

295. CQ - Clinical Quality - CQ - Improved Access to Service [Poster]

Frailty Hot Clinics: Rapid CGA and speciality diagnostics reduces rates of hospitalisation and re-attendance

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Introduction: Acute hospitalisation is associated with an increased risk of progressive frailty, morbidity and subsequent institutionalisation. North Middlesex University Hospital is an Acute District General Hospital with over 550 attendances to A&E per day. Comprehensive Geriatric Assessment (CGA) is the gold standard approach for a holistic multi-disciplinary assessment (MDT) of frail patients. A rapid access daily hot clinic service for frail patients opened using quality improvement (QI) methodology to deliver rapid CGA focusing on admission avoidance and early supported discharge.

Method: 4 PDSA cycles were conducted. A process map identifying key moments in patient care was derived from time studies of the first 10 patients' journeys. Patients were triaged through the Geriatrician "hotphone" for acute admissions into the Hot Clinic. Dedicated clinic and waiting rooms were placed on the acute frailty unit (Amber) staffed by a dedicated Consultant Geriatrician and Health Care Support Worker working with the Frailty Ward Clerk, Frailty Specialist Nurse, Therapies, specialities in-reach and same-day diagnostics. A shared clerking proforma and subsequent CGA Discharge Summary were completed and emailed to the referrer the same day. Qualitative and Quantitative feedback was gained from referrers, patients and relatives through a structured questionnaire. Metrics were gathered including rate of admissions, re-attendance and use of enhanced community services.

Results: From the first 48 Hot Clinic patients, there was a low 30-day re-attendance rate (17% - for unrelated reasons), low 30-day re-admission rates (4%) and low Did Not Attend rate (6%) for new referrals and high satisfaction scores for recommending the service (9-10/10) from patients, relatives and referrers.

Conclusions: Early rapid MDT can reduce re-attendances and re-admissions to hospital in frail patients. A streamlined patient journey can be delivered by frailty-trained staff and in a suitable environment. QI Methodology enables a structured measurable approach to development of the Acute Frailty Pathway.

296. SP - Scientific Presentation - SP - Other (Other medical condition) [Poster]

Avoiding burnout of the care home workforce during the COVID-19 pandemic and beyond: sharing national learning and local initiat

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Introduction: COVID-19 in care homes has heightened the risk of staff burnout, undermining already problematic staff retention and low morale. There has been an associated proliferation of resources and online initiatives to support frontline workers, however, few of these are directly targeted at the care home workforce. Care home workers are highly skilled in caring for people with complex needs, but have very variable levels of formal training, and just over half of care homes in Scotland include registered nurses. This project will rapidly collate existing resources and identify, direct from care home workers, their best practice, initiatives, and resources used to support resilience and retention during this pandemic and moving forward.

Methods: 1) Rapid review of care home specific evidence and resources (including published research and social media); 2) Online survey of Enabling Research in Care Homes (ENRICH) members across Scotland (n=55); 3) Case studies within six care homes to identify what is working well and what is not in terms of promoting resilience and emotional support.

Results: The rapid review has identified a wide range of resources directed at supporting staff working in care homes; the survey and case studies will provide data on the key learning and resources that have supported staff, and outline the challenges identified. There are many resources available but staff do not access these. The role of the care home manager is key.

Key conclusions: This comprehensive review of resources and initiatives will make a valuable contribution to policy and practice designed to reduce burnout and foster retention not just in care homes but more widely across health and social care.

297. SP - Scientific Presentation - SP - Other (Other medical condition) [Poster]

Online supportive conversations & reflection sessions [OSCaRS] with care home staff following a resident's death: improving coping mechanisms, team cohesion and communication

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University of Edinburgh; Edinburgh Napier University; University of Edinburgh; University of Edinburgh

Introduction: COVID-19 Trauma Guidance suggests opportunities for structured, time-limited discussions about challenging experiences should be offered. It is unknown if such discussions can be effectively delivered online by palliative care specialists to support care home (CH) staff in relation to death/dying. Funded by Scotland's Chief Scientist Office COVID-19 'rapid research' fund, online OSCaRS is being piloted.

Methods: Fortnightly OSCaRS delivered to small groups of CH staff via a secure online platform in three local CHs over 10 weeks. Sessions are digitally recorded. The shortened version of the Chesney coping self-efficacy questionnaire is completed by all staff pre/post. Additional post-study questions asked of OSCaRS participants and in-depth staff interviews will be undertaken (n=10). Thematic analysis of the recorded sessions and interviews will be undertaken and related to the staff questionnaire and context of each CH.

Results: New learning on the feasibility and acceptability of providing OSCaRS to frontline staff. The benefit of OSCaRS to CH staff coping mechanisms, team cohesion and communicaton with relatives during the COVID-19 pandemic will be presented. Initial results show that OSCaRS are feasible, valued by all care home staff and support staff in coping with the challenges of COVID-19/

Key Conclusions: The analysis will inform future practice, and an Implementation Guide for OSCaRS in CHs will be produced. Key learning on the potential for online support in relation to death/dying during the pandemic and beyond will contribute to future education, training and staff wellbeing resources. It will also inform the role of such sessions in developing individual coping mechanisms and team working alongside communication with relatives during lockdown.

298. SP - Scientific Presentation - SP - EET (Eyes, Ear, Teeth) [Poster]

Periodontal Health and Sarcopenia: cross-sectional evidence from a cohort of 2040 twin volunteers

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Introduction: Periodontitis is a chronic inflammatory disease affecting the periodontium, ultimately leading to looseness and/or loss of teeth. Sarcopenia refers to age-related reduction in muscle mass and strength. Similar to periodontitis, chronic low-grade inflammation is thought to play a key role in its development. In addition, both increase in prevalence with advancing age. Despite known associations with other diseases involving a dysregulated inflammatory response, for example rheumatoid arthritis, , the relationship between periodontitis and sarcopenia, and whether they could be driven by similar processes, remains uncertain. The aim of this study was to explore the association between periodontitis and sarcopenia.

Methods: Observational study of 2040 adult volunteers [age 67.18(12.17)] enrolled in the TwinsUK cohort study. Presence of tooth mobility and number of teeth lost were used to assess periodontal health. A binary variable was created to define periodontitis. Measurements of muscle strength, muscle quality/quantity and physical performance were used to assess sarcopenia. A categorical variable was created according to the European Working Group on Sarcopenia in Older People (EWGSOP2) consensus, to define sarcopenia (1: probable; 2: positive; 3: severe). Generalised linear mixed model analysis used on complete cases and age-matched (n = 1288) samples to ascertain associations between periodontitis and sarcopenia.

Results: No significant association was found between periodontitis and sarcopenia in both the complete cases analysis and age-matched analysis. Results were consistent when analysis was adjusted for potential confounders including body mass index, frailty index, Mini Mental State Examination smoking, nutritional status and educational level.

Conclusions: This study found no significant association between periodontitis and sarcopenia in a cohort of 2040 adults. Although both periodontitis and sarcopenia have been linked to a dysregulated immune response and demonstrate an increase in prevalence with increasing age, our work is inconclusive due to the plethora of possible aetiopathogenetic pathways.

299.CQ - Clinical Quality - CQ - Patient Safety [Poster]

Assessing for Delirium in a District General Emergency Department - Why Are We Failing and How Can We Improve?

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Introduction Delirium is among the most common of medical emergencies with a prevalence of 20% in adult acute general medical patients. Despite this delirium is underdiagnosed and treatment is variable. Assessment of delirium is missed or carried out unreliably in EDs.

Methodology Using the Model for Improvement, we developed a driver diagram to plan our project. Assessing whether patients over 65 years old were assessed for delirium during their visit to the ED using a validated tool over a 6-month period. Evaluating the impact of our interventions using annotated run charts. Exclusion criteria - GCS under 13, NEWS2 greater than 5.

Aim - Identify current performance of delirium assessment in over 65s in Weston General Hospital ED and improve to 100% of over 65s screened. Assess whether this has been communicated in the discharge summary.

Results Baseline data showed 22.2% (4/18) of patients meeting inclusion criteria were screened for delirium. We implemented multiple interventions over a 2-month period - discussing at ED handover, hospital wide email, presentation at grand round and displaying a poster in the ED. In the 6 weeks after the interventions were implemented there was increase to 45.4% (15/33) of patients over 65 screened. Delirium/cognitive impairment identified in 42.5% (48/113) of patients screened. This is higher than the national average of hospital admissions therefore it is likely people screen those who display signs of delirium. Cognitive impairment communicated in discharge letter in only 29.4% (33/113) of all patients.

Conclusion There has been a great improvement in delirium screening. However, we did not meet our target of 100% of patients being screened. Interventions currently being implemented – addition of SQID tool to minors clerking document, addition of compulsory tick box delirium question on all discharge summaries. Further data will be collected to assess effectiveness of these interventions.

301. SP - Scientific Presentation - SP - Big Data [Platform Presentation]

Being non-frail and free from cardiovascular disease reduces COVID-19 risk in 269,164 older UK Biobank participants

Jane Masoli; Janice Atkins; Joao Delgado; Luke Pilling; David Melzer

University of Exeter Medical School; Royal Devon and Exeter NHS Trust; Center on Ageing, University of Connecticut

Background Older adults are at increased risk of COVID-19, resulting in public health shielding measures for all adults over 70 in the UK. Frailty has been proposed for risk stratification in COVID-19 with limited evidence. Cardiovascular risk factors hypertension, diabetes and raised BMI have been associated with increased COVID-19 risk. We sought to test if non-frail older adults with low cardiovascular risk had reduced COVID-19, to inform targeted shielding policies.

Methods Fried and Rockwood frailty were ascertained at UK Biobank baseline(2006-2010) and electronic frailty index(eFI) in primary care data to 2017*. A cardiovascular disease risk score(CRS) consisting of smoking status, LDL-cholesterol, blood pressure, BMI, fasting glucose and physical activity was estimated at baseline. Frailty (baseline and eFI; eFI alone) and CRS were tested in logistic models against COVID-19 status and COVID-19 mortality to 14th June 2020 adjusted for demographics and technical covariates.

Results N=269,164 UKB participants aged ≥65 at baseline (≥75years in 2020). 13.9% of COVID-19 positive were non-frail with low baseline CRS versus 41.8% frail with moderate/high CRS. Being non-frail and having low CRS were independently associated with reduced COVID-19. The composite of non-frail with low CRS compared to frail with moderate/high CRS had significantly reduced COVID-19 risk (composite non-frail with low CRS HR 0.61; 95% CI 0.45-0.84; p=0.0023; eFI non-frail with low CRS HR 0.16; 95%CI 0.07-0.36; p value=9.9x10-6) and COVID-19 mortality (composite non-frail HR 0.28; 95% CI 0.10-0.82; pvalue=0.02; eFI non-frail 0.07; 95% CI 0.02-0.28; pvalue=0.00014).

Conclusion These results show that the COVID-19 risk in non-frail older adults with low cardiovascular risk was up to 84% lower than in those who were frail with cardiovascular risk factors. This could contribute to future work on stratification of shielding risk in older adults in future COVID-19 surges. *Planned data updates prior to the conference should enable updates to 2020.

302. CQ - Clinical Quality - CQ - Efficiency and Value for Money [Platform Presentation]

Quality Improvement Project (QIP): A teamwork approach to optimise fluid intake in older inpatients #ButFirstADrink

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Project supervisor of the Older Persons Fellowship at Kings College London (KCL): Kate Grimshaw, RD, PhD, Operational Dietetic Manager, SRFT and Professor Ruth Harris BSc (Hons), MSc, PhD, RN, FEANS, Professor of Health Care for Older Adults, KCL.

The shortfalls of hydration management have been widely exposed since the Frances report in 2013. Age-related changes create challenges for people to drink adequate fluid amounts (Nazarko, 2018), making dehydration prevention in older people an ongoing public health priority (NICE, 2016). Hydration needs of older people are complex and may not be fully understood. A proactive MDT approach to facilitate regular drinking opportunities seems an achievable solution to increase hydration awareness, knowledge and daily fluid intake in older inpatients.

A QI methodology was used, including stakeholder engagement and PDSA learning cycles to influence, engage and educate staff on hydration management. Outcome measures: Fluid intake (ml/day), number of drinks/days based on fluid balance chart recordings. Interventions: Sharing the #ButFirstADrink social media hydration movement, which includes educational posters, flyers and a YouTube video. Face to face drop-in education sessions were implemented using local hydration education resources from Age UK Salford and GM nutrition and hydration programme as teaching tools. SPC charts were used to show a time-series data. In 15 weeks, 461/525 fluid charts were reviewed from 169 patients. Mean age was 84 years and 68% females. Average daily fluid intake increased by 25% (exceeding aim) indicating 176mls more fluid was offered on average/day. Mean number of drinks/days increased from 4.6 to 6 post interventions.

Knowledge and attitude improved in some areas; however fluid output is not routinely recorded. Post intervention, 89% of staff felt that offering a drink at first contact is a suitable hydration promotion campaign. The project scored 58% using the NHS sustainability model (ACT Academy, 2018) suggesting reason for optimism. As it is a behaviour change project, further engagement and momentum is dependent on ongoing enthusiasm to drive the #ButFirstADrink approach. This intervention is free, simple and innovative and stimulates behaviour change, raises drinking awareness and increases hydration.

309. CQ - Clinical Quality - CQ - Efficiency and Value for Money [Poster]

Beyond the bleep: exploring alternate methods of communication in the multidisciplinary team to facilitate efficient discharge

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Introduction: On the surface discharging a patient seems a simple a simple process, but delays due to coordination and communication in preparing medication, transport and discharge summaries are all to common. This results in delayed discharge, which is unfair on patients and their families, adds to the risk of hospital acquired infection and increases NHS expenditure and bed pressures. This quality improvement project investigates alternate systems for coordinating this process to make it more efficient and easier for the relevant stakeholders, with the added advantage of being “bleep free” as is the Health Secretary’s target for 2021.

Method: We started with process mapping and summarising the challenges faced by stakeholders in the current system, which uses bleeps for communication across six older people medical wards and ten medical teams. We progressed to iterative PDSA cycles using Medxnote for one medical team across all wards and then Microsoft Teams on one ward with ten medical teams. New process maps for each were created and circulated to stakeholders to explain the roles and responsibilities of each team.

Results: Both Medxnote and Microsoft teams subjectively made communication easier. However, Medxnote was hampered by the inability to have a three-person conversation and the required use of personal phones. Microsoft teams overcame these obstacles and was able to demonstrate objective improvements with a 42% increase in medication screened before 1pm and 72% increase in medications prepared on the day of discharge, suggesting better prioritisation. Team feedback was that it decreased workload, made team members more accessible and minimised interruptions to working day.

Conclusions: The initial PDSA cycle suggests Microsoft teams is a promising tool for improving the discharge process and aiding bleep free communication amongst members of the multidisciplinary team. The next step will be a trial across all wards with all teams.

314. SP - Scientific Presentation - SP - Cardio (Cardiovascular) [Poster]

A tale of three syncope risk scores – who predicts outcomes best?

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Introduction Syncope is a common cause of attendance and admission to secondary care, and it is important to identify those at highest cardiovascular risk. We wanted to compare the predictive value of the EGSYS, OESIL and Canadian Syncope Score (CSS). A secondary aim was to identify the actual three year mortality for unscheduled care syncope referrals.

Methods Data was retrospectively collected from 170 patients who presented to the QEUH ED with a coded diagnosis of syncope. Data was collected regarding cardiovascular outcomes (including PPM or ILR insertion) and 3-year-mortality. EGSYS, OESIL and CSS scores were calculated for each patient.

Results Average age was 63 years. 55% were female. All 3 scoring systems agreed on the risk stratification category in only 90 cases (53%), of which 73% were low risk. 13.5% patients died (52% female; mean age 82 years). Causes of death included: unknown 30%; respiratory 26%; cancer related 22%; sepsis 9%; cardiology (4%) and other (8%). In these cases, risk stratification across all 3 scores concorded in 26%. Individually, EGSYS predicted 22% were high risk; OESIL 87%; CSS 70%. 3.5% patients required a PPM, all of which were inserted within 3 months. All were alive at the end of 3-year-follow-up (83% female; average age 68 years). Of the scoring systems it would appear that CSS predicted 100% as high risk, whilst EGSYS and OESIL predicted 50% were high risk (different patients).

Conclusions This study has demonstrated that no one score is superior to the other in predicting mortality from syncope. The difficulty with score comparison is that each score uses different parameters to risk stratify patients. We suggest that in the absence of more comparison data that clinicians use one scoring system, rather than using all three interchangeably when considering longer-term syncope mortality.

315. SP - Scientific Presentation - SP - Psych (Psychiatry & Mental Health) [Poster]

A Whole Hospital Delirium Audit with 20 Week Follow-up

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Introduction: Delirium is a common manifestation of acute illness, characterised by fluctuating changes in mental state. Its aetiologies and presentations are diverse. This can lead to underdiagnosis. We screened all adult inpatients at Barnet Hospital for delirium. 20 weeks follow-up data was collected, including mortality and admission to institutional care.

Methods: The 4AT and Clinical Frailty Score (CFS) were recorded for every adult inpatient (n=220) in Barnet Hospital on 13/03/2019. Hospital notes were reviewed to establish whether delirium assessments were performed during admission. Electronic records were used to establish length of stay, discharge destination, mortality and readmission rate over 20 weeks.

Results: 30% (n=65) of inpatients had possible delirium (4AT score ≥ 4). Delirium was more common in older, frailer patients (Table 1). Most patients with delirium were under the care of geriatric (40%) or acute medicine (26%). Only gastroenterology and gynaecology had no patients with delirium. Patients with delirium were 3 times more likely to die during their admission and were twice as likely to be discharged to institutional care (Table 1). 20 week mortality of patients with delirium was 26%.

Conclusion: Delirium is common in hospital inpatients. Delirium has a high morbidity and mortality. Better diagnosis of delirium in hospital may improve outcomes. Table 1 : Mean(SD) unless stated. * p<0.05

Delirium (n=65)	No Delirium (n=155)		
Male: %	46	46	Age*
81(11)	71(20)	Clinical Frailty Score*	5.6(1.7)
3.8(1.8)	Dementia (%)*	53	10
Assisted living: n(%)	o Pre-admission *	18.5	3.2
o Post Admission *	44.6	22.6	Length of stay
33 (25)	30.6 (28)	Mortality (%)	o Hospital *
10.7	3.9	o 20 Weeks *	26.2
14.2	Readmission rate (%)	30.8	31

316. CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

Improving frailty screening and accuracy in the Emergency Department (ED) of a busy District General Hospital

Dr Hannah Dowell; Dr Rebecca Mallinson; RN Debbie Cartmell; Dr Karen Mellstrom; RN Gemma Pettigrew; Dr Claire Spice

Doctor Portsmouth Hospitals NHS Trust;

Background Over 20,000 75+ years attendances annually in ED with frailty screening in introduced in ED in 2016. Early recognition of frailty is recommended. Accurate estimation of frailty level is important as it contributes to clinical pathway and management.

Introduction Screening rates had fallen and there were concerns about the accuracy.. Our aim was increased frequency and accuracy of screening at triage. Method Frailty screening rates for patients aged 75+ years attending the ED (routine measure) reviewed with ED Frailty Lead. Stakeholder engagement with ED staff and Frailty and Interface Team (FIT). Frailty screening tool revised. Data review March 2020 focused on CFS accuracy (CFS at triage v CFS by FIT in routine assessment). Sampling approach to CFS accuracy during June 2020.

Interventions Small group sessions with ED nursing staff (Jan 2020). Revised electronic screening tool introduced (February 2020). Education sessions (x2) for ED nursing staff (June 2020) focused on CFS. Results Frailty screening increased significantly following revised screening tool introduction from 60% to >80%. In March 2020 agreement of CFS at triage and FIT review in 22% (76/341). The CFS reliability for 10 consecutive patients per day was measured in June 2020 before and following 2 education sessions held on CFS. The reliability of CFS was 0.23 prior to teaching in June and rose to an average of 0.31 following the teaching intervention.

Conclusions Frailty screening frequency and the reliability of the CFS improved following teaching interventions but remains low. Work is continuing to focus on improving this further. Although CFS has been found to be reliable between raters in other hospitals we have found this difficult to replicate. It is not known if this is due to local factors or to more common challenges that others may face in CFS estimation by ED staff.

317. CQ - Clinical Quality - CQ - Patient Centredness [Poster]

A multidisciplinary team initiative to end PJ paralysis was successful in achieving cultural change on an acute geriatric ward

Juliet Butler; Thomas Welford

Kingston Hospital NHS Foundation Trust

Introduction Prolonged bedrest amongst the elderly causes deconditioning leading to; increased hospital length of stay, additional social costs and decreased quality of life. An audit on an acute geriatric ward in November 2018, found that over a third of patients medically fit (PMF) to sit out remained in bed all day. Therefore, a service development initiative was undertaken, addressing the misconception that keeping elderly patients in bed is safe, when in fact, unintentional harm results.

Method In a root cause analysis, four main reasons for bedrest were identified: risk aversion, unknown function, widespread 'bed is safe' culture and lack of equipment. The project tasked getting PMF out of bed each day and was audited daily from November 2018 to present, involving all members of the multi-disciplinary team (MDT) and using a 'plan, do, study, act' approach.

Results Initially, the project showed an increase in percentage of PMF sitting out each day, but this subsequently decreased with winter pressures. However, for a whole year (February 2019-February 2020) a sustained and significant improvement was achieved (64.3%-89.7%). The pre-COVID19 period (February-March 2020) saw fluctuations in PMF sitting out. Data collection halted during the COVID19 peak, although observationally most patients remained in bed. Auditing resumed from June 2020 (COVID19 recovery phase) which showed a steady increase in PMF out of bed, with recent figures surpassing pre-COVID19 levels (97.8%).

Conclusion Cultural change takes time to embed and needs persistent reviewing by a dedicated and engaged MDT. Improvements were made through more accessible doctor's advice, better MDT education and communication, daily feedback of data and sourcing additional equipment. Disruption to working patterns over the COVID19 period made this unachievable and the project lost impetus. In the COVID19 recovery phase, the specialized MDT reformed and worked successfully to restore the cultural change as evidenced by audited data.

319. CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

Improving escalation and treatment plans in the Borders General Hospital (BGH) during COVID-19

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Topic Clear escalation and treatment plans created in discussion with patients are crucial to managing patients safely and appropriately. Our goal was to introduce a standardised, easily identifiable document for this purpose, with an aim of 90% of medical inpatients having a clear escalation plan discussed and documented.

Intervention We developed a Treatment Escalation Plan (TEP), raised awareness via different platforms and delivered teaching for staff. For baseline and subsequent data collections following interventions, we reviewed the notes of twenty random medical inpatients for decisions regarding escalation, patient involvement in decision making including capacity and specific interventions considered. We also included time taken to find information; documented patient/family discussions and whether a TEP was present. We collected qualitative feedback from staff.

Improvement After introduction, TEP was present in 35/60 patients (58%). Improvement was demonstrated across all measured domains when a TEP form was present: escalation decision (no TEP 80%, TEP 100%), discussion with patient/relative (no TEP 4%, TEP 85%), capacity decision regarding escalation (no TEP 52%, TEP 91%), decision on specific interventions (no TEP 12%, TEP 94%), mean time taken to find information (no TEP 84 seconds, TEP 34 seconds). Qualitative feedback from staff was positive, particularly the inclusion of specific care decisions beyond 'DNACPR'.

Discussion We felt it was critical to develop a TEP to ensure appropriate decisions are made and clearly documented for medical inpatients, especially in light of COVID-19. In patients with a TEP completed, we observed improvements in all domains, particularly in the involvement of patients/relatives in escalation decisions, which is key to delivering patient-centered care. Implementing a new system in a pandemic had challenges, such as continuity of staffing, however feedback was uniformly positive. This is an ongoing project that will continue to promote TEPs to improve patient care.

CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

321. A single centre study on the thirty-day hospital reattendance and readmission of older patients during the SARS-CoV-2 pandemic

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Introduction: Hospital and social care suffered major alterations during the SARS-CoV-2 pandemic in the UK. Older adults were disproportionally affected by routine care disruption. To our knowledge, no data has been published so far on the impact of service disruption on 30-day readmission.

Methods: We performed a retrospective observational study of all patients admitted to a single east London hospital with laboratory-confirmed or clinical diagnosis of COVID-19 between 16th March and 6th April 2020. Older patients were defined as aged 80 years and over. Readmission was captured within 30 days of discharge. Comparator defined as the same period in 2019. Descriptive statistics were used.

Results: Three hundred and ninety-three patients were included. The majority survived to discharge (69.7%). Positive laboratory testing was similar between older and younger patients (85.7% vs 84.7%, p=NS). Mortality was significantly higher for older patients on index presentation (60.2% vs 20.3%, p<0.001). Length of stay was also significantly longer for these patients (median 9 vs 7 days, p=0.00694). The readmission rate for the 274 individuals discharged after index admission was 11.3% (n=31). Amongst older patients, readmission rate during the study period was slightly higher than the same period in 2019 (17.9% vs 14.8%, p=0.36). The median time interval between discharge and re-attendance was 8 [1-29]days. All re-attending older patients were re-admitted, whereas 54.2% of younger patients were sent home directly from the emergency department. Only 1 of the 31 patients re-attended because of insufficient social care.

Conclusions: Our data shows that readmission rates in the older population of East London during the SARS-CoV-2 pandemic were largely similar to non-pandemic periods. During this period, readmission rates appear to have been driven by clinical rather than social imperatives. This suggests that adapted social care services performed well and should be reinforced for future surges.

CQ - Clinical Quality - CQ - Patient Safety [Poster]

326. TRIPPER: Trying to Reduce Inappropriate Prescribing in Patients who are Elderly and at Risk of falls

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Background: Falls in older adults are common, and a major cause of mortality and morbidity. Polypharmacy is associated with a greater number of falls and is prevalent but preventable. The American Geriatrics Society Beers Criteria for Potentially Inappropriate Medication (PIM) Use in Older Adults are used worldwide. This project focused on Table 3 of the 2019 Beers Criteria which recommends an explicit list of PIMs to be avoided in older adults with a history of falls.

Aims: To increase documented discussion about PIMs on discharge letters for elderly patients at risk of falls over a 6-week period.

Method: A retrospective review was undertaken to define baseline data on falls, PIMs and documented discussion of PIMs on discharge letters. Stickers for Kardexes were introduced to highlight PIMs for review. A table documenting discussion of PIMs was incorporated to discharge letter templates. Data was then collected on falls, PIMs and documented discussion of PIMs on discharge letters over a 6-week period. Results: Of patients discharged over 10 weeks, 44% had a history of falls. Of patients with a history of falls, 73% were taking at least one PIM pre-admission. Following intervention, the median percentage of discharge letters with documented discussion of PIMs increased from 4% to 30%. Following intervention, there was a greater average reduction in prescribed PIMs on discharge in patients with a history of falls.

Discussion: We confirmed a significant burden of falls and PIMs in our patient population. QIP intervention increased documentation of PIM discussion and reduced the volume of PIMs prescribed on discharge. Communicating PIM discussion on discharge letters encourages deprescribing; informs primary care and future admissions; and promotes patient centred decision-making in this important risk area. Further work includes collecting feedback from primary care and introducing a PIMs review table to discharge letter templates throughout the hospital.

SP - Scientific Presentation - SP - Epid (epidemiology) [Poster]

332. Outcomes and Clinical Characteristics of COVID-19 Infection in the Elderly Population of Tayside.

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INTRODUCTION Alongside advancing age, many of our elderly patients require care and possess multiple co-morbidity, all known risk factors for Covid-19 disease1,2. As a result they are some of the highest risk people in our society and it is vitally important that we understand disease presentation, clinical characteristics and outcomes in this group. NHS Tayside (population over 415,000) centralised all hospital care of Covid-19 disease at Ninewells Hospital, Dundee, with elderly patients looked after by a dedicated Medicine for the Elderly (MFE) Covid-19 team. Our team was therefore perfectly positioned to assess both outcomes and characteristics of elderly patients presenting during the first wave of the Covid-19 pandemic.

METHODS Data was collected on all patients cared for by Tayside MFE Covid-19 team from 1st March to 1st June 2020. Data was collected via electronic clinical systems; Clinical Portal, ICE and Cardiology central. Data was collected via Microsoft Excel with Caldicott approval obtained prior to data collection. Data collected included clinical characteristics (age, gender, frailty, residence on admission, medical history, medications, smoking), presenting symptoms, admission blood and x-ray results, time to negative Covid-19 swab, time to discharge from Covid-19 ward, discharge destination, death at any point and cause of death. Data was collected via Microsoft Excel with Caldicott approval obtained prior to data collection.

RESULTS Data was collected for 157 patients, aged 65 to 97 years. 59.8% were male. Mortality rate from all causes (on 1st July) was 42.0%.

CONCLUSIONS This research confirms a high rate of mortality (42%) associated with Covid-19 infection in the elderly. Significantly higher rates of male patients with Covid-19 disease requiring inpatient care was seen, indicating increased rates of symptomatic and severe Covid-19 disease in men.

336. CQ - Clinical Quality - CQ - Patient Safety [Poster]

Improving intravenous fluid therapy to reduce the incidence of acute kidney injury in elderly hip fracture patients

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Background Acute kidney injury (AKI) in hip fracture patients is associated with morbidity, mortality, and increased length of stay. To avoid this our unit policy recommends maintenance crystalloid IV fluids of >62.5mL/Hr for hip fracture patients. However, audits have shown that many patients still receive inadequate IV fluids.

Methods Three prospective audits, each including 100 consecutive acute hip fracture patients aged >55, were completed with interventional measures employed between each cycle. Data collection points included details of IV fluid administration and pre/post-operative presence of AKI. Interventions between cycles included a revised checklist for admissions with a structured ward round tool for post-take ward round and various educational measures for Emergency Department, nursing and admitting team staff with dissemination of infographic posters, respectively.

Results Cycle 1: 64/100 (64%) patients received adequate fluids. No significant difference in developing AKI post operatively was seen in patients given adequate fluids (2/64, 3.1%) compared to inadequate fluids (4/36, 11.1%; p=0.107). More patients with pre-operative AKI demonstrated resolution of AKI with appropriate fluid prescription (5/6, 83.3%, vs 0/4, 0%, p<0.05) Cycle 2: Fewer patients were prescribed adequate fluids (54/100, 54%). There was no significant difference in terms of developing AKI post operatively between patients with adequate fluids (4/54, 7.4%) or inadequate fluids (2/46, 4.3%; p=0.52). Resolution of pre-operative AKI was similar in patients with adequate or inadequate fluid administration (4/6, 67% vs 2/2, 100%). Cycle 3: More patients received adequate fluids (79/100, 79%, p<0.05). Patients prescribed adequate fluids were less likely to develop post-operative AKI than those receiving inadequate fluids (2/79, 2.5% vs 3/21, 14.3%; p<0.05).

Discussion This audit demonstrates the importance of administering appropriate IV fluid in hip fracture patients to avoid AKI. Improving coordination with Emergency Department and ward nursing/medical ward staff was a critical step in improving our unit's adherence to policy.

338.SP - Scientific Presentation - SP - HSR (Health Service Research) [Poster]

Tackling noise pollution in hospitals: A pre-feasibility study

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This study aimed to better understand appropriate interventions aimed at reducing hospital ward noise and the subsequent impact this would have on inpatient experience. Service users consistently reported that noise pollution was the most detrimental factor in their recovery in hospital, principally due to its effects on sleep.

Methods: To aid usability and data collection the Richards- Campbell Sleep Questionnaire (RCSQ) was adapted into an electronic format with a sliding Likert scale using QuestionPro Software3. Qualitative patient interviews, the RCSQ and ward decibel measurements were recorded on Henry and Anne wards at St. Thomas' Hospital, London. 20 patients were interviewed (12F, 8M), with 3 being ultimately discounted due to severe cognitive impairment.

Results were collated and will be presented as part of a pre-feasibility evaluation of the tools to measure patient sleep and experience of ward noise. Results: The mean of the responses from the 17 patients interviewed were calculated and graphically displayed. Of interest, 87.5% found the questionnaire straightforward to understand, but only 18.75% found it easy to complete (due to technological unfamiliarity).

Conclusion and discussion: Patients reported a consistently reported a less than optimal night's sleep on the ward, with light sleep and increased time to fall asleep being key factors. Although visits were restricted to the 'quietest' times on the ward, noise measurements consistently exceeded WHO recommendations of 40dB. Subsequently excessive night-time noise created by other patients as well as staff was cited as the principal causes of poor sleep, with ward lighting being another cause. Results from this study have provided the justification for sound-masking technology to be trialled on inpatient wards, with the view of decreasing unpleasant ward noise and improving patient rest and recovery.

339. CQ - Clinical Quality - CQ - Patient Centredness [Poster]

Multi-disciplinary simulation training on delirium

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Introduction: Delirium is still perceived as a "geriatric medicine competency", despite its high prevalence across most specialties. Collective multi-disciplinary team performance in implementation of multi-component interventions is key. Simulation training incorporates the complex interplay of non-technical factors, specifically, role recognition and empowerment, inter-personal skills and teamwork that are pivotal in delivering effective delirium care.

Methods: Funding was approved by Health Education England. 2 pilot teaching sessions were arranged in the simulation ward. 3 scenarios were developed, each requiring a facilitator, an actor and three participants- a foundation-year doctor, a nurse/healthcare assistant and a therapist. Scenario 1 dealt with a patient with hypoactive delirium with focus on identification and multidisciplinary optimisation. Scenario 2 challenged participants with management of an agitated patient. Scenario 3 involved discharging a patient with resolving delirium and a reluctant relative, with emphasis on mental capacity assessment. Communication, patient risk assessment and challenging perceived role barriers were global themes. Participant feedback was captured using unstructured interviews and pre- and post-session 5-point Likert confidence scale in various learning outcomes.

Results: 16 participants were included- 4 foundation year doctors, 3 therapists, 2 healthcare assistants and 7 nurses. There was an average improvement in Likert confidence scales in all measured learning outcomes. All participants would recommend the course to their colleagues (average Likert scale 4.9). Qualitative feedback appraised the course for demonstration of de-escalation communication strategies, the application of mental capacity and recognition of early discharge planning.

Conclusion: Simulation training targeted at multi-disciplinary groups is an effective way to deliver teaching on delirium. It contextualises synergistic operation of different skills and personal accountability in influencing patient management. The challenge to its potential remains its adoption as mandatory training for various disciplines involved in care of older adults and its implementation at a wider-scale, to assure cost effectiveness.

347. CQ - Clinical Quality - CQ - Patient Centredness [Poster]

Impact of Covid 19 Pandemic on hospital care for people with dementia – feedback from hospital leads and carers

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Introduction The National Audit of Dementia (NAD) is funded by the Healthcare Quality Improvement Partnership to collect data from acute general hospital in England and Wales. In June 2020 NAD circulated optional surveys to leads for dementia in acute hospitals and carers asking about the impact of the pandemic on the organisation and provision of hospital care.

Methods Anonymous survey links were sent to hospital dementia leads directly and circulated to carers of people with dementia via social media and representative organisations. Dementia Leads' questions included whether they and/or their team had been redeployed during the pandemic and whether wards had access to specialist services. Carers' questions included whether patients' needs were discussed, whether they were permitted to visit/how this was communicated, any measures to facilitate communication with their loved ones, and whether they were updated about progress and discharge.

Results 53 dementia hospital leads completed the questionnaire. 32% had been redeployed to other clinical areas during the pandemic, 45% said the same for members of the dementia team. Specialist support for people with dementia on both Covid and Non-Covid wards was significantly compromised. 32 carers completed the questionnaire. 48% were not asked about the needs of the patient they cared for, 90% not allowed to visit, 43% were not given any explanation about visiting and 48% not given support to keep in touch with their loved one.

Conclusions Clinical priorities inevitably meant redeployment of dementia specialist staff, and changes to visiting. However, continuation of specialist support is a requirement for people with dementia admitted to hospital. Liaison with carers/families must be a priority, including facilitating remote support. Hospitals should take note of NHS guidance permitting carer visits to support a person with dementia experiencing distress.

349. CQ - Clinical Quality - CQ - Improved Access to Service [Poster]

Hospital @Home and the AMBER care bundle: introducing the concept of uncertainty of survival to improve advance care planning

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Introduction GSTT@home is a hospital@home providing multi-disciplinary acute care in peoples' homes throughout Lambeth and Southwark. AMBER is an internationally recognised care bundle to improve care for hospital inpatients where survival is uncertain. The bundle prompts recognition of survival uncertainty, communication and advance care planning (ACP)- principles relevant to many hospital@home patients. This quality improvement project aimed to embed these principles into GSTT@home by adapting AMBER to this community setting.

Methods Cycle 1 Plan- Determine whether @home patients might benefit from principles of AMBER. Do and Study- Audit patients >80 years that died within a 3-month period after @home admission (January-June 2018); one in 10 patients died (10.9%), median age 82 and median CFS 8. Act- Inpatient AMBER bundle adapted for @home setting to systemically identify and prompt ACP. Cycle 2 Plan and Do- AMBER@Home bundle formally introduced and piloted with @home, education using posters and lanyard cards.

Study- Audit use of AMBER@Home for patients >80 years who died within three months of discharge from @home (August-October 2019). Act- AMBER@Home incorporated into daily handover document. Cycle 3 Plan and Do- Further education embedded AMBER@Home, increased consultant and GP support. Study- Use of AMBER@Home re-audited as above for November 2019-January 2020.

Conclusions Using AMBER@Home appears to have changed practice without the AMBER bundle being formally used. Throughout 3 audit cycles there was a steady increase in ACP. Future planned interventions include appointing a frailty nurse to @home team to further embed AMBER@Home, distributing lanyard cards more often and using "Coordinate My Care" to improve accessibility to ACP decisions including PEACE

115. CQ - Clinical Quality - CQ - Patient Centredness [Poster]

Non pharmacological interventions in Heart Failure

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Background: Heart failure is a global disease affecting almost 26 million people worldwide and 920,000 people in United Kingdom [1]. Five- year survival rate of patient with heart failure is 48.2% [2]. Patients affected by CHF often have a low quality of life, poor outlook and are often socially isolated. Psychiatric disorders such as depression and anxiety are common in patients with CHF complicating the therapeutic approach by poor compliance and increasing hospitalisations [3].

AIM: To improve the Quality of Life for patients living with heart failure with more holistic approach to patient care.
Method: We developed a comprehensive patient support program, Heart 2 Heart, customised for heart failure patients in northwest London. Monthly interactive sessions are organised which are open to patients and families. The sessions start with socialising, tea, followed by presentation with emphasis on compliance to lifestyle modification. Topics vary from heart diseases to diabetes to nutrition, govt benefits etc. This is followed by customised cardiac rehabilitation exercise session for 15mins. Sessions are conducted by team of doctors and specialist nurses from hospital and community.

Results: Telephonic survey was conducted of patients registered. 42 patients were called, 35 answered; 22 patients were highly satisfied, 6 patients were satisfied, 5 patients felt there is room for improvement and 2 patients were dissatisfied. Some patients felt sessions should be increased to twice a month and interpreters should be made available to tackle language barrier.

Discussion & Conclusion: Heart failure is chronic debilitating condition with high mortality and requires integrated approach comprising of medical, lifestyle modifications, psychological and social interventions for better outcomes. Heart link initiative commenced at Ealing Hospital focuses on the latter with aim of reducing morbidity and improving management of HF; empowering patients and their families.

118.SP - Scientific Presentation - SP - Education / Training [Poster]

"The Elderly LBGTQ* Population"

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Introduction: With an aging population, there will be an aging LBGTQ* population. Little education exists for medical professionals on their specific healthcare needs; the discrimination that still exists towards this group and the barriers they face when accessing healthcare. This project aimed to develop and deliver education sessions for medical professionals on "The Elderly LBGTQ* Population" in NHS Forth Valley, evaluating the quality of these sessions. With clinicians attending these sessions, it could lead to safer, more accessible and improved patient care for elderly LBGTQ* patients.

Methods: "The Elderly LBGTQ* Population" session was developed through research of relevant literature and liaising with local equality and diversity team. Two sessions were delivered in Autumn 2019. Data on quality of session was collected from feedback forms completed by those attending. Comments on feedback forms were used to shape future direction of sessions.

Results: 77% of those attending felt it was of high relevance to them, with 95% rating presentation quality and content quality as 'high'. Comments received included the sessions being "excellent and thought provoking", with many stating this was their first time receiving such teaching and were grateful for highlighting the specific issues facing this population.

Discussion: Following the success of education sessions, the aim is to deliver more locally and expand across Scotland, hopefully with involvement from third sector organisations working with this population. Feedback will again be gathered to allow for continued development of sessions and ensure they remain of high quality and relevance. An e-Learning module is also in development with Association for Elderly Medicine Education, allowing for UK wide access.

119. SP - Scientific Presentation - SP - Epid (epidemiology) [Poster]

A Descriptive Epidemiological Study of Clinical Trials, Comparing Trials Targeted at Older People to Adults of All Ages

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Introduction Fewer clinical trials are carried out in older people. It is unclear how representative and applicable clinical trials carried out exclusively in older people are. We compared clinical trials recruiting older people exclusively 'older trials' to those recruiting adults of all ages 'all age trials', using anti-hypertensives acting on the renin-angiotensin aldosterone system (RAAS drugs) as an exemplar.

Method We searched the US clinical trials register (1) to identify all trials carried out exclusively in those aged over 60. From these we selected trials of RAAS drugs. These were matched in a 2:1 ratio to trials carried out in adults of all ages. Data regarding baseline characteristics, adverse events and eligibility criteria were collected from clinical trial reports and clinicaltrials.gov. Estimated associations were calculated for age, sex and adverse events. Eligibility criteria were described and ICD- 10 coded, as appropriate.

Results 71 clinical trials were carried out exclusively in older people.13 related to RAAS drugs. Participants in 'Older trials' had higher mean age (73.1 and 55.9 respectively), mean difference 16.17 (CI 15.31-17.02). Older trials had fewer male participants. Participants in older trials had lower mean body mass index (BMI). A higher rate of participants in older trials experienced serious adverse events. (2.07, CI 1.55-2.75.) Few older trials had upper age limits (23.1% V 27% all age trials). All trials had exclusion criteria in multiple ICD blocks. Concurrent medications were a more common exclusion criterion in older trials (61.5% v 40.9%).

Conclusions Clinical trials carried out exclusively in older people are representative in terms of age, serious adverse events and eligibility. Although there are multiple exclusion criteria for clinical trial participation in both groups, this is not prohibitive. This supports carrying out more trials exclusively in older people. References 1. NIH, US national library of medicine.ClinicalTrials.gov Available at https://clinicaltrials.gov/

120. CQ - Clinical Quality - CQ - Patient Centredness [Poster]

Improving delirium recognition and management through in-situ simulation

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Introduction: Delirium is a common condition that is often associated with increased morbidity and mortality, longer hospital admission, and discharge to a residential or nursing home. By improving our ability to recognise and manage these patients we can intervene early to help reduce the likelihood of these outcomes.

Method: We organised several in-situ simulation scenarios with junior staff working on the Elderly Care Unit. The research team designed a scenario to re-create a typical delirious patient on the ward. Participants had to recognise the patient was delirious and instigate a management plan. Participants completed a pre and post-intervention questionnaire to ascertain whether they felt the simulation had improved their confidence. Additionally we performed an audit to investigate whether our intervention led to an improvement in the recognition and management of delirium in patients on the ward.

Results: The questionnaires showed an increase in participants' confidence and knowledge when managing a delirious patient on the ward. From reviewing patient notes pre-intervention we identified that 24 patients were delirious during admission,14 of which were accurately diagnosed with delirium. The remaining 10 patients were diagnosed with "Acute Confusion". On reviewing these 10 patients' notes, they were all likely to have a diagnosis of delirium. Post-intervention there were 14 patients identified as delirious during their admission. All these patients were correctly documented as having delirium with no inaccurate use of terminology. The data also showed increasing use of tools such as AMTS and 4AT to diagnose delirium.

Conclusions: From the data gathered, we can see participants are better at recognising and diagnosing delirium. However, our sample sizes are too small to test statistical significance between data points. To improve the project we would include a larger sample size to determine whether the simulation produces a statistically significant improvement in confidence levels.

127. SP - Scientific Presentation - SP - Other (Other medical condition) [Poster]

Mediating factors between caregiver burden and quality of life in caregivers of older patients with newly diagnosed lung cancer

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Introduction: Family caregivers of older patients with newly diagnosed lung cancer become responsible for patients' care, usually without preparation or training in provision of care. Their efforts of care generate caregiving burden, which could deteriorate their quality of life and affect the prognosis of patients. The aims of this study were to examine associations between caregiver burden and quality of life, coping, social support for family caregivers, and to investigate whether coping and social support mediate associations between family caregiver burden and their quality of life.

Methods: A cross-sectional study was performed at two thoracic surgery wards in one tertiary hospital in Changsha, China from November 2019 to May 2020. This study involved 224 family caregivers of patients aged over 50 years and newly diagnosed with lung cancer. Caregivers-reported outcomes were measured by Zarit caregiver burden interview, simplified coping style questionnaire, social support rating scale, and quality of life family version. Structural equation modeling (SEM) was used to test the hypothesized mediation model.

Results: SEM indicated a good fit for the mediation model, which explained 49.7% of the variance of quality of life. Higher level of caregivers' burden was negatively associated with quality of life (r=0.183, P=0.042). Coping partially mediated the effect of caregiver burden on quality of life (indirect effect -0.389, P=0.000). Social support did not mediate the relationship between caregiver burden and quality of life (indirect effect -0.023, P=0.087).

Conclusions: Caregivers' burden of patients with newly diagnosed lung cancer is correlated to quality of life which is partially mediated by coping. Early intervention providing caregivers with positive coping strategies may improve their quality of life.

128. SP - Scientific Presentation - SP - Pharm (Pharmacology) [Poster]

A medication self-management intervention to improve medication adherence for older people with multimorbidity: a pilot trial

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Introduction: Medication self-management support has been recognised as an essential element in primary health care to promote medication adherence and health outcomes for older people with chronic conditions. A patient-centred intervention empowering patients and supporting medication self-management activities could benefit older people. This pilot study tested a newly developed medication self-management intervention for improving medication adherence among older people with multimorbidity.

Method: This was a two-arm randomised controlled trial. Older people with multimorbidity were recruited from a community healthcare centre in Changsha, China. Participants were randomly allocated to either a control group receiving usual care (n=14), or to an intervention group receiving three face-to-face medication self-management sessions and two follow-up phone calls over six weeks, targeting behavioural determinants of adherence from the Information-Motivation-Behavioural skills model (n=14). Feasibility was assessed through recruitment and retention rates, outcome measures collection, and intervention implementation. Follow-up data were measured at six weeks after baseline using patient-reported outcomes including medication adherence, medication self-management capabilities, treatment experiences, and quality of life. Preliminary effectiveness of the intervention was explored using generalised estimating equations.

Results: Of the 72 approached participants, 28 (38.89%) were eligible for study participation. In the intervention group, 13 participants (92.86%) completed follow-up and 10 (71.42%) completed all intervention sessions. Ten participants (71.42%) in the control group completed follow-up. The intervention was found to be acceptable by participants and the intervention nurse. Comparing with the control group, participants in the intervention group showed significant improvements in medication adherence (β=0.26, 95%CI 0.12, 0.40, P<0.001), medication knowledge (β=4.43, 95%CI 1.11, 7.75, P=0.009), and perceived necessity of medications (β=-2.84, 95%CI -5.67, -0.01, P=0.049) at follow-up.

Conclusions: The nurse-led medication self-management intervention is feasible and acceptable among older people with multimorbidity. Preliminary results showed that the intervention may improve patients' medication knowledge and beliefs and thus lead to improved adherence.

129. CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

Quality Improvement Project on completion of ReSPECT FORM in the community at JEAN BISHOP INTEGRATED CARE CENTRE (ICC): an impro

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BACKGROUND ReSPECT (Recommendation Summary Plan for Emergency Care and Treatment) form was designed to communicate a personalized set of recommendations for a patient's clinical care in an emergency situation and priorities over other aspects of future care. AIMS & OBJECTIVE 1)To measure ReSPECT Form completion rates at ICC and proportion of forms uploaded on the system and this compared with the published data (2) to improve performance where possible through QI process 3) Re-auditing after interventions

METHODS All patients who attended the ICC from 1st October 2019 to 21st October 2019 were audited . Altogether 80 patients' notes on system 1 and Lorenzo were reviewed. After initial results, interventions such as displaying the poster of salient results and recommendations in ICC clinic rooms, giving feedback to key team members were performed by the audit team.

RESULTS 9 patients already had ReSPECT forms. From the remaining 71 patients, 57 discussions (80%) were taken place and 29 forms (41%) were completed while 28 were not for definite reasons. ReSPECT discussion was not initiated for recorded reasons in 9 cases and without reason in 5 cases. Out of 29 completed forms, 24(82%) were uploaded on the system. After the interventions, the re-audit cycle with 16 cases in which 13(94%) had ReSPECT discussions and 6 forms were completed.

DISCUSSION In comparison with NHS forth valley ReSPECT report, we had a better figure in completion forms (41% Vs 39%) and the number uploaded on system (82% vs 79%). After interventions, 81% had either ReSPECT forms completed or discussion which is much improved.

CONCLUSION From this study, the overall improvement in performance was seen with simple interventions but further spot check QIPs and regular training sessions to team member will be essential for sustainability.

135. SP - Scientific Presentation - SP - Falls (Falls, fracture & trauma) [Platform Presentation]

Frailty and The Rate of Fractures in Patients Initiated on Antihypertensive Medication

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Introduction: There is concern regarding adverse effects of antihypertensive treatment, including falls and subsequent fractures, especially hip fractures. As frailty is increasingly recognised as an important risk factor for adverse outcomes, we examined its relationship to fracture rates in older patients after starting antihypertensives.

Methods: Using the Clinical Practice Research Datalink (CPRD), we identified participants over 65-years old starting a first-line antihypertensive medication. Using deficits identified in CPRD we classified patient-level frailty as 'Fit', 'Mild', 'Moderate' or 'Severe' using the Electronic Frailty Index. We calculated the rate of fractures by frailty level and fracture site, and determined the rate ratio (RR) of first fracture by frailty level, adjusting for confounding, using multivariable poisson regression. We conducted sensitivity analyses to additionally adjust for ethnicity, deprivation, and bisphosphonate use.

Results: 44% of participants were classified as mildly frail or greater , but frail participants experienced 58% of all fractures, and 63% of hip fractures. The whole cohort showed a crude rate of 14.1 fractures/1000 person-years , with 4.5 hip fractures/1000 person-years. In severe frailty, this rises to 51.0 fractures/1000 person-years, and 17.7 hip fractures/1000 person-years. After adjustment for confounding, increasing frailty was associated with greater rate of any fracture, reaching RR 2.85 (95% confidence interval 2.43-3.33) for severe frailty versus fit. Results were unchanged in sensitivity analyses.

Conclusions: Frailty and fracture are both common in older participants who start antihypertensive medications. Increasing frailty was positively associated with increased rates of fracture. Clinicians need awareness of this relationship to consider fracture risk assessment and prevention in these patients.

138. SP - Scientific Presentation - SP - Education / Training [Poster]

Perceived quality of end-of-life communication provided by healthcare professionals among frail older Chinese patients

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Introduction Better communications among the patient, their family, and healthcare providers can enable a shared understanding on patient's end-of-life (EOL) care preferences. Discussion about death-related issue however has been thought to be taboo among Chinese people. This study aims to explore perceived quality of EOL communication provided by healthcare professionals (HCPs) among frail older Chinese patients.

Method: Frail older patients were recruited from a medical ward of a public hospital for a randomized controlled trial of the effectiveness of a nurse-led advance care planning. Participants completed a baseline questionnaire including the 7-item Quality of Communication (QOC) Questionnaire which measures perceived quality of EOL communication provided by HCPs (0 'The worst or none happened' to 10 'The best'). Bivariate analyses examined associated factors of QOC.

Results: Between December 2018 and January 2020, 105 participants were recruited and have completed the QOC. Their mean age was 80 years old (SD=7.1), and 74% (n=78) reported had received some formal education. A total of 95 participants (91%) responded '0' to all the 7 items in QOC (poor QOC group). For individual QOC item, all participants scored '0' in 4 items, 99 scored '0' in Item 1 "Talking about details if you got sicker", 104 scored '0' in Item 2 "Talking about how long you might have to live", and 101 scored '0' in Item 7 "Respecting your spiritual or religious beliefs". Participants with '0' score in QOC reported a significant lower mean level in certainty regarding decision-making in EOL preferences (1.2±1.6 vs. 2.3±1.8, p=0.039).

Conclusion: Occurrence of talking about EOL care with frail older Chinese patients by HCPs was rare, and the quality of EOL communication associated with decision-making certainty regarding EOL preferences. Training of initiation of EOL discussions and improve communication skills for HCPs is essential. Funding: RGC, HKSAR, China (PolyU14162617H).

139. SP - Scientific Presentation - SP - Other (Other medical condition) [Platform Presentation]

Caregiving burden and unmet support needs in Chinese caregivers and cancer patients

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Introduction Cancer burden continues to rise globally and locally. Due to the shift of the cancer care from the hospital to the community, many cancer patients requiring needs in palliative care from their informal caregivers. Many caregivers often taking up the important roles and responsibilities but their own needs are largely neglected, and hence may induce caregiving burden. This study aims to explore the relationships of caregiving burden with unmet support needs in both cancer patients and their caregivers.

Method A convenience sample of 280 patient-caregiver dyads was recruited from the oncology outpatient clinic of two hospitals in Hong Kong between April and June 2018. Among them, 258 (92.1%) patient-caregiver dyads provided complete information on unmet supportive care needs (Patient: the 34-item SCNS-SF34-C, Caregivers: the 26-item SPUNS-SF), and caregiving burden (Caregiver Strain Index).

Results Among the patients, their mean age was 60.8 (SD=13.6) and 66% were female. Among the caregivers, their mean age was 49.3 (SD=14.6), 67.2% were female, and 38.2% were children of the patient. Mean level caregiving burden in caregivers was 4.87 (SD=3.75) out of a range 0-13. Regression analysis showed that higher caregiving burden was associated significantly with higher caregiver's unmet support in personal and emotional needs (βstd=0.348) and future concerns (βstd=0.204), and patient's unmet support in physical and daily living needs (βstd=0.201), but lower caregiver's unmet support in information needs (βstd= -0.233) after controlling for age, gender, and education level of both patients and caregivers.

Conclusions The findings shed lights in designing interventions aim at reducing caregiving burden by targeting caregiver's unmet support in personal and emotional need and those caregivers are taking care of cancer patients with unmet support in physical and daily living needs. However, the finding on caregiver's unmet support in information needs was a protective factor of caregiving burden warrants further exploration.

144. SP - Scientific Presentation - SP - Gastro (Gastroenterology) [Poster]

A case of mistaken identity: An obsolete anti-reflux device in an older patient with variable gastrointestinal symptoms

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Background: A frail 93-year-old lady presented with delirium and hypoxia, on a background of heart failure, constipation, cerebrovascular disease, and osteoporosis. A CTPA on admission revealed an unusual appearance of the left hypochondrium, leading to subsequent CT abdomen. This unexpectedly reported the presence of a gastric band. We therefore considered a possible misidentification as this procedure seemed unlikely in someone of her age. Her GP records revealed that she underwent surgical insertion of an Angelchik prosthesis in 1984. It transpired that our patient had experienced several longstanding symptoms, including reflux, bloating and constipation, which have all been observed in patients with Angelchik prostheses in situ.

Discussion: The Angelchik prosthesis is an anti-reflux device for patients with chronic reflux disease with or without hiatus hernia, introduced in 1979. It comprised of an elastomer shell ring filled with silicone gel, that was sited at the lower oesophagus and secured with DACRON tapes. It was initially lauded for its replicable insertion technique and promising early results with around 30,000 being inserted in mainly British and American Hospitals. However, over time it became apparent that a significant proportion of patients reported ongoing gastrointestinal symptoms due to device failure.

Serious complications such as gastric perforations were also recognised. Surgical removal was noted to be technically complex, providing further challenges. The Angelchik prosthesis therefore fell from favour after a period of use of only fifteen years, and is now rarely encountered. We discovered that our patient had experienced multiple long-standing gastrointestinal complaints potentially linked to her prosthesis, though this association had not previously been considered. Whilst her frailty meant that removal would not be pragmatic, it is uncertain if this could have been a possible consideration in the past. This device is relevant to geriatricians as many recipients are now elderly, and may report ongoing symptoms.

145. SP - Scientific Presentation - SP - Cardio (Cardiovascular) [Poster]

A student pilot for a feasibility study of the theoretical 3S Trial (SPFT3S): GP and Ethics Committee Members questionnaire

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IRAS: 263993 Introduction Emerging research suggests that statin use for primary prevention in people without diabetes aged 75 and older has no benefit. This study aims to determine the feasibility of the theoretical Stop Statin Study (3S), a double-blind randomised controlled trial carried out in general practice, which would test this hypothesis. 50% of trial patients would stop taking statins for 5 years in an event driven study. The questionnaires aim to identify the attitudes of general practitioners (GPs) and ethics committee members (ECMs) regarding stopping statins for 5 years in patients aged 75 and older without diabetes or history of cardiovascular disease and their willingness to allow patients to participate in the 3S study.

Method Questionnaires comprised of 6 questions were designed. 4 students distributed the questionnaire and it was completed by 19 GPs based at 8 practices in the North-East of England. 31 ECMs (12 expert and 19 lay) responded by email.

Results 95% of GPs who completed the survey would agree to their patients participating in the theoretical study with 47% of GPs indicating that their willingness to participate in the study is patient dependent. 95% of GPs would also consider stopping statins in this population group if sufficient research had been carried out or if the guidelines were changed. 42% of GPs have a negative attitude to prescribing statins in this population group. All the ECMs would approve the study, citing over-prescribing and polypharmacy as their reason.

Conclusions The majority of GPs will participate in the theoretical 3S study, if their patients are willing to participate. There is already a negative perception amongst GPs towards the use of statins in elderly people without disease. The 3S study appears to be feasible from the GP and ethics perspective but would require a larger feasibility study.

146. SP - Scientific Presentation - SP - Cardio (Cardiovascular) [Poster]

A student pilot for a feasibility study of the theoretical 3S Trial (SPFT3S): patient questionnaire and demographics

R Foster1 ; M Dodd1; L Brown1; K Awonaya1; T McCormack2

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Introduction There is conflicting evidence on the benefit of statins for primary prevention of cardiovascular disease (CVD) in non-diabetics over 75. Emerging evidence shows they may be ineffective, yet current guidance supports their use in those up to 85. The objectives of this study were to assess patients' understanding of statins, willingness to participate in a theoretical randomised controlled trial (RCT), where they would be randomised to stop their statin and to compare the trial population with national data.

Methods The survey took place in 8 GP practices with 4 students involved in questionnaire distribution. A patient search identified those over 75 and on a statin. Patients were excluded if they had a history of CVD or diabetes. 36 patients were identified and completed questionnaires, 5 were removed because they reported exclusion criteria. Demographic data was compared to the UK population from the 2011 census.

Results Of 31 participants, 71% understood why they took statins, most were unconcerned about side effects and only 1 patient stopped statins due to the media. Opinions on the theoretical 'stopping statins trial' were varied. 35% of people responded positively. 29% would not want to take part and 36% of people were unsure. Comparison of our trial population against the national population shows that 903,505 people would be eligible for a UK trial.

Conclusions The purpose of this exercise was to see if patients would be willing to participate in a trial where 50% stopped taking their statin. Approximately a third said yes and only a third said no. As there are nearly a million people in this population, it suggests a fully funded, larger-scale feasibility study of this theoretical randomised control trial is warranted.

148. SP - Scientific Presentation - SP - HSR (Health Service Research) [Poster]

Prevalence of Older People Presenting Acutely to a Regional Spine Unit

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Background With ageing demographics, the number of older people is expected to rise exponentially over the next decade. With increasing numbers, the numbers of patients presenting to hospital will also increase. These patients have significant underlying comorbidities and thus further surgical interventions are more challenging.

Objective To investigate the incidence of all in-patient referrals to the Nottingham Regional Spinal unit for patients aged 70 years and above over a 30-month period.

Methods A retrospective 30-month review (Jan 2017-Aug 2019) of the clinical records of all in-patients' referrals to the regional spinal unit (catchment population 4.5 million) for patients aged 70 years and above was undertaken. Patient demographics, co-morbidities, cause of referral, treatment modality (conservative vs. surgical), length of hospital stay, discharge destination (home vs. rehab) and mortality rates were collected and analysed.

Results A total of 677 (Male: 335, Female: 342) in-patients' referrals for patients aged 70 years and above were received. The mean age at presentation was 82.3 (±7.48) years. Trauma (low & high energy) was the most common cause of inpatient referrals (n=448; 66.2%). Low energy trauma (insufficiency) fractures contributed to more than half of the total referrals (n=256). Spondylodiscitis was the least common cause of referral (n=34; 5%). Five-hundred forty-five patients were treated conservatively (80.5%). Average length of hospital stay was 16.7 days (range:1-282 days). Eighty-one of the discharged patients (13.5%) were transferred to rehabilitation after discharge, and the over-all 30-day mortality rate was 11.5% (n=78).

Conclusion Frail older people represent a significant workload to the regional spine unit. Adapting an ortho-geriatric model of care as with hip fracture care may be the optimal model of service delivery to improve outcomes for this patients group.

151. CQ - Clinical Quality - CQ - Improved Access to Service [Poste]

"POP-UP" SPECIALIST END of LIFE WARD FOR COVID-19 - THE NOTTINGHAM EXPERIENCE

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Nottingham University Hospitals NHS Trust

Background Our hospital trust anticipated an increased need for palliation and end of life care (EoLC) in patients with Covid-19 who were not appropriate for escalation and mechanical ventilation.

Intervention A dedicated ward was opened as part of the trust-wide Covid-19 admissions pathway, led by geriatricians with palliative care input and staffed by relocated nursing and auxiliary personnel. Retrospective data was collected for consecutive patients admitted to the ward between 3rd April and 26th May 2020 and qualitative data regarding staff experience using a questionnaire.

Result Of the 168 patients (55% male) admitted, 31.5% came directly from Emergency Department, 17.3% from admission areas and the remainder from inpatient wards. Time spent on the ward ranged from 10 minutes to 17 days (median length of stay 43 hours). 75% had Clinical Frailty Scale score of 6 or more. 150 died with 75% naming Covid-19 as primary cause or contributing factor. Ward staff, who were not palliative care specialists, reported increased confidence in many aspects of palliation including assessing comfort, relieving symptoms, prescribing and administering anticipatory medications and in supporting and communicating with relatives. Staff apprehension about working on a Covid ward eased once the ward was established. Qualitative themes emerging from staff feedback included: professional competency, communication, prioritisation, team work, emotional response, care and consistency in a time of change.

Discussion The pathway and referral system ensured that our ward cared for appropriate older patients living with frailty. The formation of a specialist unit over a short period of time created a series of logistical and management challenges. The emotional burden felt by staff was also prominent in feedback. These challenges were outweighed by the personal and professional development of staff coupled with the strong sense of teamwork, pride and enthusiasm felt in providing high quality care.

152. SP - Scientific Presentation - SP - BMR (Bone, Muscle, Rheumatology) [Presidents Round]

Physical activity, muscle strength and quantity: preliminary findings from the MASS_Lifecourse cohort

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Introduction We established the MASS_Lifecourse study to investigate changes in skeletal muscle between ages 45-85. Reduced physical activity (PA) is a key factor linked to the development of sarcopenia. Our aim was the describe the amount and patterns of PA and sedentary behaviour (SB), and relationships with muscle strength and quantity, among MASS_Lifecourse participants.

Method Participants wore a triaxial accelerometer on their dominant wrist for seven days. Recordings were analysed to calculate time in moderate-vigorous PA (MVPA) with time not in MVPA classified as SB based on wrist position. Muscle strength was measured with a Jamar grip dynamometer and the 5 chair-stand test. Muscle quantity was assessed using appendicular lean muscle mass from dual-energy X-ray absorptiometry. Physical performance was assessed by gait speed.

Results 68 participants (31 male) aged 47-84 (mean 65) participated in the present study. Median daily MVPA was 19.1 (IQR 7.1, 36.6) minutes and was lower with age. The mean sedentary time per day was 767.1 minutes per day and increased with age. The pattern of MVPA across the day changed with age: the oldest group (75-84 years) achieved a lower morning activity peak followed by an earlier decline whilst the younger groups were more consistently active throughout the day. Participants were more active than population reference data from the Active Lives Survey. Time spent in MVPA was positively associated with muscle strength and physical performance, whereas SB was negatively associated. Muscle quantity was not associated with PA or SB.

Conclusions Participants in the MASS_Lifecourse study are more active than the general population but still show age-related declines in physical activity and strength. Future work in the cohort aims to elucidate mechanisms underlying the age-related loss of muscle strength and quantity.

154. CQ - Clinical Quality - CQ - Patient Safety [Poster]

Improving Documentation of Bowel Movement on Geriatric wards

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Sheffield Teaching Hospitals

Introduction Constipation is a widely prevalent issue in older adults that may result in complications such as urinary retention, delirium and bowel obstruction. Previous studies have indicated that while stool charts are well completed by nursing staff, they are infrequently monitored by doctors. This project aimed to improve the documentation of bowel movement by doctors on ward rounds to 85%, by the end of a 3-month period.

Methods Formulation of the project was achieved using group work and a fishbone diagram which focussed on how doctors can improve on documenting bowel movements. Baseline data were collected from inpatient notes on weekdays over a three-week period on a geriatric ward in Northern General Hospital, Sheffield. Interventions of posters and stickers of the poo emoji were placed on walls and in inpatient notes respectively as a reminder. Post-intervention data were collected on weekdays over two weeks, and then repeated a month later to assess for a sustained change.

Results The data on bowel activity documentation were collected from 28 patients. The baseline data showed that bowel activity was monitored daily on the ward 56.25% of the time. There was a significant increase in documentation of 85.75% following the interventions. The sustainability study showed that bowel activity was documented on the ward 59.09% of the time.

Conclusions This study shows how a strong effect on behavioural change can be accomplished through simple interventions such as stickers and posters. As most wards currently still use paper notes, this is a generalisable model that other wards can trial. However, this study also shows the difficulty in maintaining behavioural change over extended periods of time. Further PDSA cycles should examine the reasons behind the difficulty sustaining the change and implement new changes that aim to overcome them.

155. CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

Developing An Integrated Comprehensive Geriatric Unit

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Surrey Downs Health and Care

Introduction: Surrey Downs Health and Care (SDHC) is an innovative partnership consisting of the acute trust, community provider, three local GP federations and local authority. Together they deliver integrated health and care services for the Surrey Downs population. In April 2019, SDHC formally took over the management of an acute escalation ward at Epsom General Hospital. The aim was to redesign the model of care to offer a more integrated approach towards the management of patients with frailty.

Method: A change in leadership with interface frailty consultants developing an integrated multidisciplinary team (MDT) with reassignment of community staff. All members of the MDT had an equal voice and this helped develop the one team ethos. There were many developments along the way, but key changes included the agreement that a patients' time is the most valuable currency and that we should be changing conversations from "what is the matter with you?" to "what matters most to you?".

Results: 1. A 100% increase in average daily discharges 2. An increase to 70% being discharged to their own home, versus 20% previously 3. A reduction from an average length of stay of 40 days to 13 days compared to the same time last year 4. Reduced 30-day readmissions at 15% versus previous average of 25%.

Conclusion: By blurring boundaries between the acute and community, allowed a frictionless pathway for patients. This has led to improvement in patient care and outcomes for the patient and system as a whole.

156. SP - Scientific Presentation - SP - Epid (epidemiology) [Presidents Round]

Quantifying the prevalence of frailty in drug trials and the relationship with serious adverse events

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Introduction Frailty is common in clinical practice, but trials rarely report on participant frailty. Consequently, clinicians and guideline-developers assume frailty is largely absent from trials and have questioned the relevance of trial findings to frail people. Therefore, we examined frailty in phase 3/4 industry-sponsored clinical trials of pharmacological interventions for three exemplar conditions: type 2 diabetes mellitus (T2DM), rheumatoid arthritis (RA), and chronic obstructive pulmonary disease (COPD).

Methods We constructed a 40-item frailty index (FI) in 19 clinical trials (7 T2DM, 8 RA, 4 COPD, mean age 42-65 years) using individual-level participant data. Participants with a FI >0.24 were considered 'frail'. Baseline disease severity was assessed using HbA1c for T2DM, Disease Activity Score-28 (DAS28) for RA, and % predicted FEV1 for COPD. Using generalised gamma regression, we modelled FI on age, sex and disease severity. In negative binomial regression we modelled serious adverse event rates on FI, and combined results for each index condition in a random-effects meta-analysis.

Results All trials included frail participants: prevalence 7-21% in T2DM trials, 33-73% in RA trials, and 15-22% in COPD trials. Increased disease severity and female sex were associated with higher FI in all trials. Frailty was associated with age in T2DM and RA trials, but not in COPD. Across all trials, and after adjusting for age, sex, and disease severity, higher FI predicted increased risk of serious adverse events; the pooled incidence rate ratios (per 0.1-point increase in FI scale) were 1.46 (95% CI 1.21-1.75), 1.45 (1.13-1.87) and 1.99 (1.43-2.76) for T2DM, RA and COPD, respectively.

Conclusion Frailty is identifiable and prevalent among middle aged and older participants in phase 3/4 drug trials and has clinically important safety implications. Trial data may be harnessed to better understand chronic disease management in people living with frailty.

157. SP - Scientific Presentation - SP - Diab (Diabetes) [Platform Presentation]

A Systematic Review of the Prevalence and Implications of Frailty in Diabetes Mellitus

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Background Frailty, an age-related state of vulnerability to adverse health outcomes, is an important factor in the management of diabetes. This systematic review aims to summarise the observational data on prevalence of frailty in diabetes and the association between frailty and generic (e.g. mortality) and diabetes specific (e.g. hypoglycaemia) outcomes.

Methods We searched three electronic databases for observational studies assessing frailty in adults (≥18 years) with diabetes (type 1, type 2, or unspecified). Eligible studies quantified the prevalence or incidence of frailty or the association between frailty and clinical outcomes in the context of diabetes.

Results 118 studies included, using 18 different frailty measures. Frailty phenotype was the most used (n=69) followed by frailty index (n=16) and the FRAIL scale (n=10). Studies were highly heterogenous in terms of setting (88 community, 18 outpatient, 10 inpatient, 2 residential care), population demographics, and inclusion criteria. The median frailty prevalence in community-based studies using the frailty phenotype was 13% (interquartile range 7-18%). Frailty was identified in 'middle-aged' (<65 years) as well as older people with diabetes. Diabetes was consistently associated with incident frailty. Frailty was associated with higher mortality, hospital admission, incident disability. Frailty was associated with hypoglycemic events in 1/1 study. Frailty was also associated cross-sectionally with micro- and macro-vascular complications, lower quality of life, and cognitive impairment. Frailty was not associated with difference in mean HbA1c, however people with frailty were more likely to have high (>9%) or low (<6.5%) HbA1c.

Conclusions Frailty in diabetes is common but inconsistently measured. Frailty is associated with a range of adverse outcomes. Research gaps include the relationship between frailty and glycaemia (particularly hypoglycaemia and the relationship between HbA1c and outcomes in the context of frailty), and the impact of frailty in specific groups such as middle-aged people and in low and low-middle income countries.

158. SP - Scientific Presentation - SP - Other (Other medical condition) [Presidents Round]

DISCHARGE AFTER HIP FRACTURE SURGERY BY MOBILISATION TIMING: SECONDARY ANALYSIS OF THE UK NATIONAL HIP FRACTURE DATABASE

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Background: To maximise the benefits of hip fracture surgery the National Institute for Health and Care Excellence Clinical Guideline recommends mobilisation on the day after hip fracture surgery based a low to moderate quality trial with a small sample size. There is a need to generate additional evidence to support early mobilisation as a new UK Best Practice Tariff (BPT).

Objective: To determine whether mobilisation timing was associated with the cumulative incidence of hospital discharge by 30-days after hip fracture surgery, accounting for potential confounders and the competing risk of in-hospital death.

Method: We examined data for 135,105 patients 60 years or older who underwent surgery for nonpathological first hip fracture between January 2014 and December 2016 in any hospital in England or Wales. We tested whether the cumulative incidences of discharge differed between those mobilised early (within 36 hours of surgery) and those mobilised late accounting for potential confounders and the competing risk of in-hospital death.

Results: 106,722 (79%) of patients first mobilised early. The average rate of discharge was 60.1 (95% CI 59.8-60.5) per 1000 patient days, varying from 65.2 (95% CI 64.8-65.6) among those who mobilised early to 44.5 (95% CI 43.9-45.1) among those who mobilised late, accounting for the competing risk of death. By 30-days postoperatively, the crude and adjusted odds ratios of discharge were 2.26 (95% CI 2.2-2.32) and 1.93 (95% CI 1.86-1.99) respectively among those who first mobilised early compared to those who mobilised late, accounting for the competing risk of death.

Conclusion: Early mobilisation led to a near two fold increase in the adjusted odds of discharge by 30-days postoperatively. We recommend inclusion of mobilisation within 36 hours of surgery as a new UK BPT to help reduce delays to mobilisation currently experienced by one-fifth of patients surgically treated for hip fracture.

162. CQ - Clinical Quality - CQ - Patient Centredness [Poster]

Physical function comparison of acutely unwell COVID-negative Older Adults pre-pandemic and through-pandemic; "COVID-protected"-

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Introduction: The risk of severe morbidity after COVID-19 infection is high in older adults (Lithander et al, 2020). Subsequent responsive UK Government guidance for older adults included self-isolation during the pandemic. It is therefore hypothesised that during the pandemic older adults are inadvertently deconditioned due to iatrogenic factors such as inactivity, social isolation, hospital-avoidance and malnutrition, and present with reduced resilience to illness and lower levels of function. The OPU continued to admit COVID-negative, or recently termed "COVID-protected", patients throughout the pandemic. Data captured prior to, and during the COVID-19 pandemic has been compared to explore the implications on older adults, and elicit whether they are protected from the consequences of the pandemic?

Method: Demographic and physical function data (average 6m gait-speed, Elderly Mobility Scale) were captured pre- and through-pandemic for all patients admitted to a COVID-negative OPU ward over a one month period. Ethical review was provided through local Trust governance process.

Results: Pre-pandemic 2019 (n=67, mean(±SD) age 82.7(±8.2) years, 61%, hospital length-of-stay (LOS) 7.9(±7.3) days, hospital mortality-rate 7.2%) and through-pandemic 2020 (n=73, 83.1(±8.3) years, 59%, LOS 9.0(±9.1) days, hospital mortality-rate 7.5%) data were captured during July 2019 and May 2020 respectively. There were no between-group differences in age [t(-.313)=138, p=0.755], gender [χ2, 1 df, p=.782], LOS [t(0.78)= 134, p=0.44], or hospital mortality-rate [χ2 1 df, p=0.96]. Through-pandemic patients had a significantly slower 6m gait-speed (0.11(±0.05) m.s-1) than pre-pandemic (0.16(±0.24) m.s-1); [t(2.74)=93, p=0.007] and lower median (IQR) Elderly Mobility Scale (4(6 IQR) vs 9 (12 IQR) [u=866, p=0.015]).

Conclusion: Our data indicates this relatively short period of self-isolation might have significant implications on the physical function of older adults. The likely mechanism is iatrogenic deconditioning. Critical Public Health and policy responses are required to mitigate these unforeseen risks by deploying prehabilitative counter-measures and accurately targeted hospital and community rehabilitation.

163. SP - Scientific Presentation - SP - Stroke (Stroke) [Poster]

Incidence of imaging confirmed stroke and thrombotic events in older adults with severe COVID-19 infection.

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Barnet General Hospital

During the initial phase of the response to COVID-19, concern was raised regarding a potential link with increased risk of stroke. We aimed to explore the incidence of stroke and thrombotic events within our local population with COVID-19 infection who required admission to the Intensive Care Unit (ICU).

Methods: Retrospective analysis of 57 consecutive patients with a diagnosis of COVID-19 infection admitted to Barnet General Hospital ICU between 6th March and 26th April 2020. Cases were reviewed to establish whether there had been imaging (CT or MRI) confirmed ischaemic stroke, intra-cerebral haemorrhage (ICH), venous sinus thrombosis (VST) or other thrombotic event, including pulmonary embolism (PE). Data was collected on baseline characteristics and blood tests including D-Dimer levels. Statistical analysis was performed using two-tailed t-test and Fischer's exact test (FET). Findings: Nineteen patients (33%) were age 65 years or older (mean age 69, range 65 to 74 years) and of these 2 patients (10.5%) had imaging confirmed acute ischaemic stroke. In those under 65 (mean age 54, range 29-64 years) there was one confirmed ICH and one VST. The incidence of PE was 21% in both groups. Survival was significantly lower in the age 65 or older group (26.3% versus 63.2%, p= 0.0119 (FET)). Peak recorded D-Dimer levels also appeared to be significantly higher in the age 65 or older group (p= 0.0003, 95% CI 13068.89 to 39858.68).

Conclusions and limitations: These findings highlight the importance of awareness of risk of thrombotic events, including acute stroke, in older adults with severe Covid-19 infection. It is possible that the incidence of stroke was underestimated, including due to challenges identifying clinical signs of acute stroke and safely obtaining imaging in this population. Further, ideally prospective, studies are required to more clearly elucidate the degree of association between COVID-19 infection and stroke and VST.

164. CQ - Clinical Quality - CQ - Efficiency and Value for Money [Poster]

A Quality Improvement Project – Physiotherapy caseload management on the Older Person's Unit

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Guy's and St Thomas' NHS foundation Trust; Guy's and St Thomas' NHS foundation Trust; King's College London University; Guy's and St Thomas' NHS foundation Trust

Introduction: Complex health issues, co-morbidities and the number of patients living with frailty are critical concerns associated with the ageing population (Kojima et al, 2019). In this wider context, there is an emphasis on targeting resources efficaciously within the NHS. A consequence of capacity constraints, inpatient physiotherapy teams across the OPU at a large urban teaching hospital, prioritise their patient caseload, but lack evidence-based guidance on dosage and frequency of physiotherapy intervention, to inform the process. The aim of the quality improvement project was to design and deliver a staff education and training package to facilitate implementation of a newly-developed, evidence-based prioritisation resource.

Method: Plan-Do-Study-Act cycles and the Com-B model to influence behaviour changes were employed between October 2019 and March 2020. Stakeholders were engaged throughout the design process. Training to all 11 physiotherapists consisted of familiarisation with the resource through content discussion and 'mock-use' training sessions to ensure intra/inter-rater-reliabilty. Physiotherapist staff knowledge and confidence of prioritisation was evaluated by questionnaire. Accuracy of use of the prioritisation tool was determined by comparison of staff prioritisation decision with expert opinion.

Results: From the 11 questionnaire responses, pre to post intervention physiotherapy knowledge of the prioritisation categories increased (43% to 100%), physiotherapist rated confidence using the prioritisation tool increased (mean score, 6.9 to 8.2/10) and accuracy of prioritisation of patients improved (mean 42.1% to 92.3%).

Conclusion: The education and training package developed to support implementation of the prioritisation tool resulted in improved staff knowledge and confidence of patient prioritisation and increased the accuracy of OPU physiotherapy targeting. This project has highlighted the importance of staff training in resource allocation to ensure that decisions regarding which patients receive physiotherapy intervention are efficacious. This has increased relevance in a department with a large number of rotational staff.

167. SP - Scientific Presentation - SP - Other (Other medical condition) [Poster]

The presenting features of COVID-19 in elderly patients

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Introduction Coronavirus disease (COVID-19) typically presents with respiratory symptoms and fever. However, as elderly patients often develop atypical symptoms with any disease, this project aimed to characterise the presenting features of COVID-19 in the elderly.

Methods The clinical records of 95 patients with COVID-19 patients, admitted to a Care of the Elderly department of a UK Teaching Hospital were retrospectively reviewed. The primary presenting complaints, admission symptoms, biochemical and radiographic abnormalities were identified in each case.

Results The median patient age was 82 years and 86% had a clinical frailty score of 6 or greater. 76% had positive COVID-19 throat swabs. The remainder were diagnosed clinically by their attending physician. The common primary presenting complaints were dyspnoea (32%), confusion (28%), falls (23%), fever (15%), cough (12%) and gastrointestinal upset (11%). The commonly recorded symptoms during admission clerking were dyspnoea (47%), hypoxia (43%), cough (37%) and fever (35%). 21% had no respiratory symptoms at admission. Delirium was diagnosed in 46% of cases. 52% of patients had a lymphopaenia, 40% a CRP greater than 100mg/L, 26% had acute kidney injury and 18% thrombocytopaenia. Bilateral interstitial changes (29%) and focal consolidation (21%) were the most frequent chest x-ray changes. 12% revealed bilateral ground glass changes. 21% of patients had no radiographic abnormalities on admission.

Conclusion While the majority of elderly patients presented with typical COVID-19 respiratory symptoms, other less characteristic symptoms and signs were also frequently identified. Clinicians must be mindful of atypical presentations to recognise COVID-19 in elderly patients.

168. CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

A Quality Improvement Project Aimed To Reduce The Number Of Patients On Bournville Ward Suffering With Constipation

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Introduction Constipation is exceedingly common on geriatric wards, with 20-50% prevalence. It is associated with complications; including pain, delirium and obstruction. Laxatives, often considered the solution, introduce their own side effects and increase polypharmacy especially in elderly populations. Queen Elizabeth Hospital Birmingham guidelines advocate use of conservative measures, including adequate fluid and fibre intake and increasing exercise, to prevent and treat constipation prior to use of laxatives. However, we had observed that these methods were frequently underutilised, and cause of constipation was rarely considered. We aimed to reduce the prevalence of inpatient constipation and associated complications through the introduction of teaching sessions and multidisciplinary team (MDT) discussions, focusing on staff and patient education on the recognition and conservative managements of constipation.

Method We audited notes weekly for the recognition of constipation, appropriate bowel examination, use of conservative management including patient education and any complications. Baseline data was collected from Bournville Ward over 4 weeks (n=44), after which, teaching sessions for all regular ward staff and weekly MDT discussion for patients recognised as constipated were introduced. Patients having not opened bowels for >2 days were targeted for early simple non-laxative interventions. A further 4-week cycle of data was collected (n=43).

Results Constipation was recognised in 57% of patients studied, of which 64% developed constipation during inpatient stay and 20% experienced associated complications. The introduction of teaching session and MDT reviews increased patient education, cause recognition and non-laxative methods use by 19%, 27% and 30% respectively. Constipation developed during inpatient stay and associated complications decreased by 6% and 4% respectively.

Conclusion Despite increased patient education, cause recognition and utilisation of conservative non-laxative approaches, only a small impact was made in reducing inpatient constipation prevalence and associated complications occurring.

170. SP - Scientific Presentation - SP - Other (Other medical condition) [Poster]

Readmissions to hospital following a decision to eat and drink with acknowledged risk with support from the FORWARD care bundle

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INTRODUCTION: The FORWARD care bundle (Feeding via the Oral Route With Acknowledged Risk of Deterioration) is used to support patients with dysphagia eating and drinking with acknowledged risk (EDAR) at our Trust. Key aims of FORWARD include improving advanced care planning (ACP) and avoiding unnecessary readmissions. This study aimed to determine the incidence of EDAR related readmissions (RR-EDAR) after FORWARD, and the effects of ACP and discharge location.

METHODS: Retrospective review of all patients supported by FORWARD during admissions between January 2018 and December 2019. Data were collected on number and reasons for in-Trust hospital readmissions 6 months post-discharge, preferred place of care ACPs in event of EDAR related deterioration and discharge destination. Readmission reasons were classified as RR-EDAR (e.g. chest infection, reduced oral intake) and no relation to EDAR. Means (SD) and percentages are presented with comparisons using Fishers Exact Test.

RESULTS: 316 patients were included; mean (SD) age 81(12). 64% (n=202) of patients were discharged alive, 36% (n=114) were alive at 6 months. 38% of live discharges (n=75) were readmitted and 52% (n=39) of these patients were RR-EDAR. Mean (SD) RR-EDAR number was 1(1) and 18% (n=7) of patients had RR-EDAR >1 (range 1-5). RR-EDAR was only 7% (n=4) in patients wishing to remain at home vs 25% (n=33) in those without a documented place of care ($p<0.01$). RR-EDAR was 23% (n=29) in patients discharged to a private home vs 10% (n=6) discharged to nursing/care homes ($p<0.05$).

CONCLUSIONS: The majority of FORWARD patients are not readmitted. RR-EDAR comprises half of all readmitted patients and some have multiple admissions. Fewer patients with ACPs were RR-EDAR suggesting these are effective. Most patients RR-EDAR were from private homes, suggesting residential care may provide more support. Further work includes increasing ACPs, supporting patients with multiple RR-EDAR and those discharged to private homes.

171. CQ - Clinical Quality - CQ - Patient Safety [Poster]

Specialist Medication Review as part of the Comprehensive Geriatric Assessment in the Day Hospital Setting

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Introduction Medication use in older people is complex. Consequently, regular medication reviews as an integral part of healthcare provision for older people are necessary. Patients attending consultant-led, multidisciplinary, day hospital clinics have specialist medication reviews undertaken by our senior clinical pharmacist. 'Pharmacy Interventions' (PIs) are suggested and typed prior to physician-led patient review.

Method Data collected by our senior clinical pharmacist were reviewed including patient demographics, clinical characteristics, types of prescribed drugs and PIs. Clinical severity of PIs was assessed using the NCC MERP Medication error index and American Journal Health-Syst Pharm Medication error index. Scores, ranging in clinical severity from A-I (A= capacity to cause error, I= may have contributed to death) and 0-10 (0 = no potential effect, 10 = death) were assigned by the pharmacist and two physicians.

Results 100 patients were included, mean age 82y (range 65-99y). 62% were female and 63% were first time attenders. Mean number of regularly prescribed medications was 7.2 (range 1-16), 10% reported compliance issues. The most commonly prescribed drugs belonged to the 'Alimentary tract and metabolism' class (24%), including PPIs, laxatives and blood-glucose lowering medications. 16% and 15% were on regularly prescribed neuroactive and psychoactive medications, respectively. Of suggested PIs, 46% were acted upon during physician review, a further 4% were acknowledged in clinical notes. PIs covered many prescribing issues including drug-drug interactions, incorrect dosing, drug monitoring and administration timing. The average PI scores assigned by the pharmacist, physicians 1 and 2 differed, at 6.4, 3.2 and 4.8, respectively.

Conclusion PIs suggested at senior pharmacy level are an important component of the comprehensive geriatric assessment, highlighting multiple complex prescribing issues. Clinical severity of PIs was scored lower by physicians, perhaps indicating an underestimation of prescribing errors. Senior pharmacy involvement in the care of frail older outpatients is an invaluable resource.

177. CQ - Clinical Quality - CQ - Patient Safety [Poster]

We tried this at home – Safety Analysis and Outcome of Community Resource Services

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1. Gwent Frailty Service, Aneurin Bevan University Health Board; 2. Business and Performance, Primary care and community division, Aneurin Bevan University Health Board.

Introduction There are several data sets published for acute frailty services in hospital but there is a lack of supporting data in the emerging field of Intermediate Care. Gwent has well-established Community Resource Teams (CRT) that were set up as "Hospital at Home" services. The objective being to treat frail, acute or sub-acute medically ill patients in their own environment by a consultant-led hospital-like team using a Comprehensive Geriatric Assessment. Although 'Hospital at Home' services are often preferred by the patient and are in-line with Health board strategies "Care Closer to home" and "Clinical Futures"; it is important to ask ourselves whether we are able to deliver clinical care in the community safely?

Method One year of data from 2018 was extracted from the CRT Portal, analysed and then validated by the health board's performance teams. From the established data set, origin of referrals and discharge outcomes were identified. Finally, at 28 days of discharge from Gwent CRTs mortality and hospital admission rates were examined.

Results 4,308 out of 5,395 referrals (85%) were accepted to Gwent CRTs of which 59.60% (2,863) referrals were from primary care and 33.54% (1,445) were from secondary care. Our admission rates to secondary care services were 15.27% (658) whilst mortality rate was 3.92% (169). After successful medical management from Gwent CRTs of 3,481 patients in their own place of residence, 28 day hospital admission rate was 13.84% (482) whilst 28 day mortality rate (expected and unexpected) was 6.89% (240).

Conclusion Although no equivalent data is currently available for comparison, a significant number of patients can be medically managed in their own place of residence. More than 80% of patients did not require hospital admission whilst mortality rates were encouraging. Further future re-evaluation of our service performance and its value is required.

181. CQ - Clinical Quality - CQ - Improved Access to Service [Poster]

What are the barriers and facilitators to effective advance care planning (ACP) in residential care settings for older people?

Karen Chumbley

St Helena Hospice

Introduction ACP is recommended for all people approaching the end of life but there is an inequality in access to ACP for care home residents. In North East Essex there has been an Electronic Palliative Care Coordination system (EPaCCS) in place for 6 years, currently without care home staff access capability. The aim of this study was to investigate ACP within care homes within this context.

Method A qualitative study, with semi-structured interviews with fourteen senior care home staff from ten care homes across North East Essex. The interview transcripts underwent thematic analysis regarding facilitators and inhibitors to effective ACP.

Results Four overarching themes were identified. These were relationships, communication, healthcare systems and attitudes. Care home staff considered ACP to be part of their role but perceived their work in this area to be separate from that performed by other health care professionals. The care home staff awareness of ACP done by other health care professionals was limited. Care home staff were aware of the EPaCCS, but only a minority perceived it to impact on residents care. All interviewees were keen to have access to the EPaCCS. Many of the facilitators and barriers to effective ACP in this locality are consistent with those found in prior literature. Having an EPaCCS within the area did not alleviate a perceived barrier of poor communication. Relationships between staff, residents, families and health care professionals remain the most common facilitators to ACP, with continuity of care from primary care, specialist palliative care and paperwork tools remaining important.

Conclusion To overcome the inequity of access to ACP for residents in care homes interventions could be commissioned to address current barriers. These could include communication skills training, aligned primary care and community services as well as technological support for communication with family and access to EPaCCS.

182. CQ - Clinical Quality - CQ - Patient Centredness [Poster]

Lessons from the front line: Communication is key.

Pyrke, B; Abdalla, B; Cartwright, G; Figg, K; Murphy, E; Tuck, A; White, H

All University Hospital of Llandough, Cardiff, Wales

Introduction As junior doctors, we very rarely receive formal teaching on communication after medical school, with telephone encounters and difficult conversations over technology being a vital yet missing part of our education. The COVID-19 pandemic has required us to adapt how we communicate with patients' families due to hospital visiting restrictions. In an era where tragically deterioration and death have been much more commonplace, we looked to identify areas where junior doctors felt their communication skills could be improved, and implemented a teaching programme to deliver this.

Methods Pre-teaching questionnaires were distributed to a range of grades of junior doctors working in University Hospital of Llandough, Cardiff. The questionnaires were distributed at the beginning of June 2020, after 3 months of working in pandemic conditions. A teaching session on telephone and video communication skills was delivered by a local palliative care consultant. Post-teaching, a repeat questionnaire was undertaken to assess response and identify key learning points.

Results Pre-teaching, 100% of the 22 respondents had had to participate in difficult conversations over the phone, 82% had had no formal phone based communication skills training and 81.82% felt some form of formal teaching would be helpful. Post-teaching, 12 junior doctors provided feedback with an average 37% increase in confidence to undertake difficult conversations. Key learning points from the session highlighted the importance of preparation, regularly updating the family to build trust and rapport, and integrating family updates via tele-communication into daily ward life.

Conclusions Education around telephone communication skills is critical to enable us to adapt our skills in accordance with the demands of the pandemic, to continue to support relatives and to engage with technology with confidence. Increased preparation is required to navigate difficult conversations via technology, and successful communication requires clinicians to take responsibility for initiating regular family updates.

183. CQ - Clinical Quality - CQ - Patient Centredness [Poster]

'Face time' for the first time: patients, families and junior doctors.

White, H; Tuck, A; Pyrke, B; Murphy, E; Figg, K; Cartwright, G; Abdalla, B

All University Hospital of Llandough, Wales

Introduction Over the course of the COVID-19 pandemic, supporting effective communication between patients and their families has been a recognised challenge in the healthcare environment. Virtual communication via telecommunication and video-calling is more important than ever, but with minimal clinician education, preparation and relevant technological infrastructure available in the context of a global pandemic, we have recognised communication as an area for improvement as junior doctors working on a COVID-19 ward.

Methods We interviewed via telephone 22 nominated next of kin relatives of patients admitted to a COVID-19 ward in the University Hospital of Llandough during May 2020 using a pre-prepared survey. We then provided relatives with the opportunity to engage with video-call updates from a doctor (with the patient's permission). In appropriate scenarios, we used video calling to break bad news and to facilitate difficult communications with family members. These video calls were provided via Accurx, an NHS approved video communication system.

Results Initial survey results showed an average understanding score of their relative's current clinical plan of 5.5/10, with 63% of respondents saying they did not feel well informed. Nearly a quarter of respondents (22%) had received difficult news over the phone during the COVID-19 pandemic, and 86% said they would find video communication useful. Post-intervention survey results suggested a unanimous improvement in relative satisfaction, with relatives reporting an increased understanding around the admission, reassurance around the quality of care being given and less isolation from the patient.

Conclusions The COVID-19 pandemic has provided novel communication challenges to physicians, promoting flexibility and adaptation to some of the core inter-personal skills we develop throughout training. Technology plays a huge role in this, and the use of video calling in particular can preserve non-verbal communication within the doctor-relative relationship and improve emotional connection between patients and their loved ones.

184. SP - Scientific Presentation - SP - Other (Other medical condition) [Platform Presentation]

What influences loss of appetite in older people? A Qualitative Study.

Natalie J Cox; Kinda Ibrahim; Leanne Morrison; Sian M Robinson; Helen C Roberts

NJC, KI, HCR- Academic Geriatric Medicine, Faculty of Medicine, University of Southampton, UK; NJC, HCR-NIHR Southampton Biomedical Research Centre; LM- Primary Care and Population Sciences, Faculty of Medicine, University of Southampton, SMR- AGE Research Group, Translational and Clinical Research Institute, Newcastle University, UK &. NIHR Newcastle Biomedical Research Centre.

Introduction: Appetite loss in older people is common and associated with malnutrition, sarcopenia and frailty. Management of appetite loss may prevent these health burdens but currently no effective clinical interventions exist. This is partly due to lack of knowledge about influences on appetite perceived by older individuals. These views may provide novel avenues for intervention on appetite loss. Aim: To understand older individual's perceptions of influences on appetite loss.

Method: Semi-structured qualitative interviews with men and women aged ≥65 years, living in their own home, were audio-recorded and transcribed. Reflexive thematic analysis, with inductive coding, generated themes with data examples.

Results: 13 individuals (8/13 female, 4/13 living alone) were recruited. Accounts of influences on appetite were grouped into three themes: physical, psychological and external factors. The physical theme related to a physical state of ageing, using energy and being active, and physical symptoms, illness and treatment. The psychological theme explained the influence of mood or wellbeing, the appeal of food, and reward in the activity of cooking. External factors related to influences of other people, coping with life experiences and transitions, and perceptions of health. Influences were perceived to impact on appetite loss in distinct ways, via a physical feeling of fullness (physical theme), or creating a negative experience with food and eating (psychological and external themes). Individuals tended to have either a physical or psychological focus. Importantly, illness and its treatment impacted on both appetite loss narratives.

Conclusions: A number of influences on appetite are described by older individuals, relating to their physical and psychological self, and social and environmental factors. These seem to impact on appetite loss in distinct ways, by precipitating either a physical feeling of fullness, or a negative experience with food and eating. Identifying factors affecting an individual's appetite could facilitate person-centred approaches to management.

191. SP - Scientific Presentation - SP - PD (Parkinson's Disease) [Platform Presentation]

Pharmacological Interventions for Sialorrhoea in Parkinson's Disease: A Systematic Review

Reid A; Smyth C; Reid J; Bailey M

Queen Elizabeth University Hospital, Glasgow

Introduction: We looked at patients with Idiopathic Parkinson's disease and reviewed articles that used any pharmacological therapy to attempt to reduce the volume or burden of sialorrhoea. The control was patients on placebo or receiving usual best care. The primary outcome was symptom burden of sialorrhoea.

Method: The review was registered on Prospero (CRD42016042470.) 7 electronic databases (MEDLINE, EMBASE, CINAHL, PsycINFO, Cochrane Central Register of Controlled Trials (CENTRAL), LILACS) were searched until April 2019 using search terms for sialorrhoea and Parkinson's disease. We additional searched through the last 6 years of abstracts from the International Movement Disorder Conference, Movement Disorder Society International Congress and World Parkinson's Congress. Hand searching was performed of published journals from the Movement Disorder Journal of the Movement Disorder Society and Neurology. Inclusion criteria included patients aged over 18; patients with a diagnosis of Idiopathic Parkinson's disease; patients with the complication of sialorrhoea and any pharmacological therapy aimed at reducing sialorrhoea. All articles were assessed for risk of bias independently by two assessors using the Cochrane risk of bias tool.

Results: 7 articles were included from the 1015 screened citations. 3 studies used Botox B as an intervention with clear objective measures and low risk of bias. These studies did show a significant reduction in sialorrhoea however the largest study showed some reporting bias and the others had small numbers and a short follow up period. 1 study looked at Botox A which showed significant improvement in sialorrhoea but had short follow-up.

Conclusion: Most studies have very small numbers and were followed up for only 1 month. There was significant heterogeneity in outcome measures but little evidence of significant harm from from the treatments studied. Overall, more robust evidence is required in order to achieve a gold standard in the treatment of sialorrhoea.

194. CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

Improving functional outcomes during COVID-19 for both COVID-19 and non COVID-19 positive older adults through the introduction

Francesca Roberts; Kirsty Birmingham; Leah Darlison, Kathryn Hertzberg; Kate Chapman; Jakob Krampikowski; Danielle Bunden; Lauren King; Elin Tebbutt, Emily Potter

King's College Hospital

Purpose: To improve the functional outcomes of older adults presenting to the Health and Ageing wards during the COVID-19 pandemic through a focussed rehabilitation list. The intended benefits to the older adult and service were for: 1. Daily rehabilitation input for older adults. 2. Older adults to spend less time immobile. 3. Ongoing rehabilitation intervention while awaiting medical clearance for discharge. 4. Increased staff satisfaction 5. Better outcomes on discharge. 6. Rehabilitation ethos on the Health and Ageing wards

Methods: The quality improvement project was carried out using the Plan, Do, Study, Act (PDSA) cycle. Three iterative PDSA cycles were carried out over the course of the project to deliver proactive interventions as a result of analysis of baseline data and stakeholder involvement. These interventions were aimed at developing communication around the rehabilitation list within the team and sustainability of this list.

Results: The project resulted in better functional outcomes for older adults and increased staff morale. Between May 2020- June 2020, a total of 56 patients were seen on the rehabilitation list, with 84% of these patients seeing improvements in their Elderly Mobility Scores (EMS). 27% of patients on the rehabilitation list saw a change to their initial discharge plan, either needing reduced packages of care or reduced need for ongoing rehabilitation in an external setting.

Conclusions: The quality improvement project found that with focussed rehabilitation older adult inpatients with or without COVID-19 can make significant functional gains. These gains have wider effects on their outcomes on discharge and also for the service through increased morale and job satisfaction. Due to demand and capacity issues in the acute setting, older adults who would often benefit from ongoing input are not always reviewed regularly. This project demonstrates that with focussed rehabilitation older adults can improve and achieve better functional outcomes.

195.SP - Scientific Presentation - SP - Education / Training [Poster]

Barriers and facilitators of General Practice in the Care Home setting- a qualitative study to inform training of GPs.

Sarah Ruaux; Neil Chadborn

University of Nottingham

Introduction: Care home (CH) residents receive varying quality and availability of healthcare. GPs are tasked with the responsibility of providing effective care to this growing demographic. The study aimed to gain an insight into the experiences of GPs carrying out CH work, in order to produce training recommendations.

Method: Two trainees, one trainer and twelve senior GPs were recruited informally through professional networks. Each completed a semi-structured interview about their work within CHs. Transcriptions were made and then analysed using thematic analysis.

Results: The two trainee participants had different experiences of CH work, but neither had received any specific training. The trainer GP acknowledged that multiple existing trainee competencies were relevant to CHs, but that inconsistencies in CH exposure were present and that specific training would be beneficial. The senior GP participants did not recall having received CH-specific training. Many factors contributed to the delivery of care within the CHs and made it distinct from the work within the GP surgery. Participants reported a variety of approaches to care, these related to different multidisciplinary teams, the involvement of CH staff, and the complex nature of the care of residents. Advance care planning was a beneficial approach used by some of the GPs that required particular attention and skills.

Conclusion: A tension was present between the care GPs wanted to provide and the complexities that inhibited them from doing so. The challenges relate to the need for multidisciplinary care teams to address complex needs of individual residents, and an acknowledgement of the importance of the relationship with the CH staff in supporting continuity of care. Overall, the complex nature of CH work, and the current inconsistencies in trainee's exposure, justify the need for a new approach to provide all trainee GPs with experience of working within the CH setting.

197. SP - Scientific Presentation - SP - Epid (epidemiology) [Presidents Round]

Social Contact Mode and 15-Year Episodic Memory Trajectories in Older Adults With and Without Hearing Loss: The ELSA Study

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Introduction: Frequent social contact benefits cognition in later life although evidence is lacking on the potential importance of the modes chosen by older adults for interacting with others in their social network.

Method: 11,513 participants in the English Longitudinal Study of Ageing (ELSA) provided baseline information on hearing status and social contact mode and frequency of use. Multilevel growth curve models compared episodic memory (immediate and delayed recall) at baseline and long-term in participants who interacted frequently (offline only or offline and online combined), compared to infrequently, with others in their social network.

Results: Frequent offline (β=0.29; $p<0.05$) and combined offline and online (β=0.76; $p<0.001$) social interactions predicted better episodic memory after adjustment for multiple confounding factors. We observed positive long-term influences of combined offline and online interactions on memory in participants without hearing loss (β=0.48, p=0.001) but not of strictly offline interactions (β=0.00, p=0.970). In those with impaired hearing, long-term memory was positively influenced by both modes of engagement (offline only: β=0.93, $p<0.001$; combined online and offline: β=1.47, $p<0.001$). Sensitivity analyses confirmed the robustness of these findings.

Conclusion: Supplementing conventional social interactions with online communication modes may help older adults, especially those living with hearing loss, sustain, and benefit cognitively from, personal relationships.

201. SP - Scientific Presentation - SP - Other (Other medical condition) [Poster]

Probable Delirium is a presenting symptom of COVID-19 in frail, older adults: a study of hospitalised and community-based cohorts

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Introduction: COVID-19 exhibits a more severe disease course in older adults with frailty. Awareness of atypical presentations is critical to facilitate early disease identification. This study aimed to assess how frailty affects presenting symptoms of COVID-19 in older adults.

Methods: Observational study of two distinct cohorts: (i) Hospitalised patients aged 65 and over; unscheduled admission to a large London teaching hospital between March 1st, 2020-May 5th, 2020; COVID-19 confirmed by RT-PCR of nasopharyngeal swab (n=322); (ii) Community-based adults aged 65 and over enrolled in the COVID Symptom Study mobile application between March 24th (application launch)-May 8th, 2020; self-report or report-by-proxy data; reported test-positive for COVID-19 (n=535). Multivariable logistic regression analysis performed on age-matched samples of both cohorts to determine associations between frailty and symptoms of COVID-19 including delirium, fever and cough.

Results: Hospital cohort: there was a significantly higher prevalence of delirium amongst the frail sample, with no difference in fever or cough. Of those presenting with delirium, 10/53 (18.9%) presented with delirium as the only documented symptom. Community-based cohort: there was a significantly higher prevalence of probable delirium in the frail sample, and also of fatigue and shortness of breath. Of those reporting probable delirium, 28/84 (33%) did not report fever or cough.

Conclusions: This study demonstrates a higher prevalence of delirium as a presenting symptom of COVID-19 infection in older adults with frailty compared to their age-matched non-frail counterparts. Clinicians should suspect COVID-19 in frail older adults presenting with delirium. Early detection facilitates infection control measures to mitigate against catastrophic spread and preventable hospitalisations and deaths amongst this population. Our findings emphasise the need for systematic frailty assessment for all acutely ill older patients in both hospital and community settings, as well as systematic evaluation of any change in mental status.

202. CQ - Clinical Quality - CQ - Patient Centredness [Poster]

Improvement of Bowel monitoring in the Acute Stroke Unit.

SY Yip

First Author

Introduction: Constipation can lead to complications such as pain, acute kidney injury and delirium. This problem is more apparent in patients who are aphasic or frail, such as those suffering from stroke or have cognitive impairments. However, early recognition and timely prescription of laxatives can help prevent these complications and prevent unnecessary Per-rectal examination and exposure from radiation with abdominal X-rays.

Methods: This is a Quality Improvement Project that was carried out in the Acute Stroke Unit in Aberdeen Royal infirmary looking at the effectiveness of bowel monitoring and suggesting methods for improvement with the addition of an end-of-bed stool chart. The aims of the stool charts were to aid junior doctors in timely laxative prescription and to guide fluid management. The project was carried out from April to July 2020 using the PDSA cycle and presented to MDT in the ASU. Results show a 100% improvement in bowel monitoring with 67% compliance rate of the new stool charts.

A survey was carried out and results show that 90% of the nursing team preferred the new stool chart. In conclusion, I think that the new stool chart serves its purpose in improving patient management amongst junior doctors. It should be implemented as standard care protocol in the acute stroke unit and definitely can be applicable in other wards.

203. CQ - Clinical Quality - CQ - Patient Safety [Poster]

Improving Outcomes in Aspiration Pneumonia: a Collaborative Approach

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The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust

Introduction Aspiration pneumonia is a major cause of morbidity and mortality especially in older adults. Our Trust recorded higher than expected mortality ratios in this group of patients. Aim To investigate reasons behind higher than expected mortality and improve outcomes. Intervention We developed a collaborative approach of investigating mortality in aspiration pneumonia with joint input from Speech and Language (SALT) specialists.

Method We conducted structured retrospective review of annual mortality in aspiration pneumonia in 3 PDSA (plan, do, study, and act) cycles in 2015/18/20. We collected data on clinical care, diagnostic accuracy, SALT referral/input, feeding at risk discussion, communication with primary care. We monitored mortality ratios on national systems.

Results We improved clinical and nursing care by auditing mouth care, bed elevation and safe feeding. We also developed electronic-SALT referral form to improve timings for the reviews (first PDSA cycle). SALT team developed 'feeding at risk proforma' to formalise risk feeding where safe swallow plan was not possible (second PDSA cycle). We modified discharge summaries and made this a multidisciplinary document in the Trust so that SALT can communicate feeding plans to primary care (third PDSA cycle). Mortality ratios improved significantly in this period from Relative risk of 152 (higher than expected range) in 14/15 to 86 (within expected range) in 19/20.

Conclusion We have demonstrated significant improvement in hospital mortality ratios from aspiration pneumonia and therefore improved care by collaboratively working with SALT team and bringing changes in stepwise manner. Multidisciplinary mortality reviews are key to improving outcomes for our patients.

205. CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

Improving Urine Specimen Collection in Elderly Medical Inpatients - A Quality Improvement Project

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Introduction The National Institute for Health Research reported in 2012 that urinary tract infections are a significant cause of mortality especially among the elderly population with 4835 deaths in England and Wales. During an elderly care rotation, it was noted that a number of elderly inpatients were being treated for UTIs without urine samples for culture and sensitivity being collected. They were treated with antibiotics largely on the basis of positive urine dipsticks and/or clinical signs and symptoms. Despite local policy reflecting current national guidance on the diagnosis of UTIs in the elderly population, compliance remained poor.

Method A quality improvement project using both quantitative and qualitative methodology was designed to determine the number of elderly medical inpatients (≥ 65 years) who have had urine sampling done within 48 hours of presentation as well as to seek to improve this aspect of patient care by determining limiting factors which could prove a hindrance to urine sampling in this age cohort. Quality improvement methods were used to improve and optimise urine sampling rates.

Results The percentage of elderly medical inpatients having a urine sample taken on admission during the project period increased from 35% to just under 100%. Quality improvement methods have successfully identified and improved this aspect of the elderly care service leading to better patient care.

Conclusion It was identified that lack of awareness and communication from both sides of the medical and care teams contributed to untimely urine sampling at our hospital. Education and personal discussion represents a sustainable intervention which could easily be replicated in other Trusts. Further work is underway with the development of a teaching session to support nurses and clinical support workers obtaining urine samples from incontinent patients undertaken by one of our community continence clinical nurse specialists.

206.SP - Scientific Presentation - SP - Stroke (Stroke) [Poster]

Lipid targeting post-stroke - Targeting who?

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University Hospital Monklands; University Hospital Monklands; University Hospital Monklands

Introduction Frailer patients are at high risk of complications from drugs like statins. Other less frail patients may be undertreated. The Treat Stroke to Target trial showed that high risk patients with atherosclerosis and/or ischaemic heart disease (IHD) who were treated to an LDL level of less than 1.8mmol/L had a 22% relative risk reduction in major cardiovascular events compared to those with a higher target. In our Quality Improvement

Project we estimated the numbers of post-stroke cases who might safely benefit from a targeted, pharmacist led intensive lipid management program.

Methods 500 consecutive ischaemic stroke cases with a modified Rankin score (mRS) of 0-3 were identified from the Scottish Stroke Care Audit Database. Those discharged to long term care or dead at the time of data collection were excluded. Data collected was age, evidence of atherosclerosis on vascular imaging, co-morbid IHD, LDL at index admission and between 1 month to 1 year post-stroke, anti-lipid treatment at discharge and up to 1 year post-stroke. Atrial fibrillation patients were included if other risk criteria were met.

Results The mean age of the 500 cases was 70. From this group, 297 (60%) met the entry criteria for 'Treat to Stroke Target'. 190 (64%) cases had LDL checked post-discharge. 87 cases failed to reach the RCP Stroke Guidance of a 40% reduction in LDL Cholesterol. 66 (22%) of cases had LDL >1.8mmol/L on most recent check and potentially should have been treated to target. Of the 83 cases excluded due to mRS >3 or significant dependency, 70 cases (84%) were discharged on a statin and importantly 34 (48%) of these died within 1 year of their stroke.

Conclusions Based on annual stroke admissions in our health board, around 86 – 117 high risk patients could benefit from a virtual lipid treatment intensification clinic.

208. SP - Scientific Presentation - SP - Falls (Falls, fracture & trauma) [Poster]

Non-pharmacological Treatment of Bone Health in Fallers

Emma Moran

Huddersfield Royal Infirmary

Introduction: 1 in 2 women and 1 in 5 men will suffer a fragility fracture. Research into calcium and vitamin D supplements has found no consistent evidence to suggest that they reduce the risk of osteoporotic fractures. There has been little research to suggest that dietary calcium is effective at reducing the risk osteoporotic fractures, but supplements have been linked to increased risk of cardiovascular disease and urinary stones. Bisphosphonates have been shown to reduce the risk of osteoporotic fractures and are usually taken in combination with calcium and vitamin D supplements given that deficiencies must be corrected prior to starting. This study set out to assess the dietary calcium intake of patients who attend the falls clinic and explore their attitudes towards dietary change, as an alternative or adjunct to a calcium and vitamin D tablet.

Methods: Data was collected during private interviews conducted with patients who attended the falls clinic. The Edinburgh University Centre for Genomic and Experimental research (CGEM) food frequency calculator was used to calculate dietary calcium intake. Microsoft Excel was used to collate and analyse the data.

Results: No association was found between dietary calcium intake, age and sex. We did find that mean dietary calcium intake was significantly less than the recommended daily amount for adults with osteoporosis, with 80% not getting their recommended daily intake ($p < 0.05$). We identified patients who don't receive a calcium and vitamin D supplement as an at-risk group who would benefit from advice on sources of dietary calcium and 83% of patients said that they would be interested in a leaflet on sources of dietary calcium.

Conclusion: This study has identified a group of patients who will hopefully benefit from a leaflet on sources of dietary calcium and as result improve their bone health.

210. SP - Scientific Presentation - SP - Education / Training [Platform Presentation]

Conversations on living and dying: facilitating advance care planning for older people living with frailty. A qualitative study.

Sarah Combes; Professor Caroline Nicholson; Dr Karen Gillett; Professor Christine Norton

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

Introduction: Advance care planning (ACP) is a process that supports people to articulate their future care preferences. This process is a priority for older people living with frailty due to their vulnerability to sudden deterioration, something that has been highlighted during the current pandemic. However, ACP is uncommon for older people living with frailty, hindering choice and person-centred end-of-life care. This study aimed to identify the barriers, facilitators and behaviours required to support cognitively-able, community-dwelling older people living with frailty to engage with ACP. Findings will inform the development an ACP intervention underpinned by behavioural change theory.

Methods: Semi-structured interviews with community-dwelling older people living with frailty (Clinical Frailty Score 6 or 7) and family members were audio-recorded, filmed and transcribed verbatim. A thematic analysis framework was developed using a recent systematic review, and expanded to reflect new themes.

Results: Ten older people living with frailty and eight family members were interviewed. The older people's median age was 85 and seven were female. Family members were spouses (n=4) and children (n=4). The key findings were that: the meaning of ACP could be unclear and at times confusing; many of the older people believed ACP was not relevant to them; relationships and relational autonomy were of greater relevance to older people than autonomous decision-making; older people were more interested in living well now than in planning for the future.

Conclusions: Older people living with frailty need to be engaged with ACP in a way that helps them to understand what ACP is and why it is relevant for them. Professionals need to develop their skills in assessing readiness and facilitating ACP conversations with this population at the older person's pace. Reframing ACP to include living well now alongside encouraging family inclusion would also relate better to this populations' lives.

219. SP - Scientific Presentation - SP - Cardio (Cardiovascular) [Poster]

The association between increasing frailty and greater co-morbidity and surviving cardio pulmonary resuscitation

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Introduction Population ageing is a triumph of public health and medical advancement but it can equally lead to burdensome and futile interventions at the end of natural life. This is especially relevant when offering treatments such as cardiopulmonary resuscitation (CPR) that can carry a significant burden of harm. The aim of this study was to investigate the association between increasing frailty and greater co-morbidity and surviving CPR.

Method A retrospective analysis of prospectively collected data from contemporaneous patient notes and electronic patient records of all patients that suffered an in-hospital cardiac arrest between 1st April 2017 and March 31st 2018 in a tertiary hospital (that includes tertiary cardiology) in South Wales was undertaken.

Results A total of 113 patient records were assessed. Average patient age was 74. Patient frailty was assessed based on calculation of Rockwood score (RS) and co-morbidity assessment based on Charlson index (CI). We identified a strong linear correlation between increasing CI and poor survival and rates of ROSC. No patient with a Charlson index of above 6 survived one year. Similarly, patients with a RS between 1-3 had a survival to discharge, 30 day and 1 year survival rate of 45.7%. Only 10.3% of those with a RS between 5-9 survived 1 year post cardiac arrest. No patient with a RS above 6 survived one year. No association between duration of CPR and patient frailty was identified. Increasing age was also found to be linearly associated with reduced likelihood of survival. This association was much less significant than the association with increasing RS or CI.

Conclusion It is clear from our findings that both increasing patient frailty and level of co-morbidity significantly adversely affect survival from CPR. Accurate individualised assessment of both of these factors is therefore imperative when assessing the appropriateness of undertaking CPR.

221. SP - Scientific Presentation - SP - HSR (Health Service Research) [Platform Presentation]

Socio-demographic associations of COVID antibody in multi-ethnic healthcare workers

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Introduction Healthcare workers are particularly susceptible to developing COVID-19 owing to close and frequent contact with COVID-19 patients. This study aimed to describe prevalence of SARS-COV-2 antibodies amongst healthcare workers within a hospital trust and examine factors associated with increased prevalence of this antibody.

Methods Data was obtained over a 4-week period in 2020 from a cross-sectional prospective survey of healthcare workers serving a multi-ethnic inner-city population who had IgG SARS-COV-2 antibody. Multiple, overlapping sources of notification were implemented to promote the availability of the test. Anonymised socio-demographic data about staff members were cross referenced with data of the antibody tests.

Results Of 7013,6212 (89%) staff undertook the antibody test during the study period. The overall detection rate of IgG SARS COV-2 antibody was 26%(1584/6212). Univariate analyses reveal that there were no differences in the prevalence rates in terms of gender or age. Compared to white staff members (18%),prevalence of the antibody was significantly greater in Black(38%) and Asian(27%) staff members. The combined prevalence for all BAME staff members was 32%. The prevalence rates of staff in general wards (43%) were significantly higher other areas of the trust. For staff in emergency medicine, intensive care and anaesthetics, prevalence was 23%,whereas for other clinical teams it was 21%. In terms of professional groups, prevalence rates were highest amongst nursing and allied clinical services (28%),followed by doctors (23%),whereas, it was lower for non-clinical staff(19%).

Discussion This large multi-ethnic hospital-based study has described the prevalence of recent exposure to SARS-COV-2 infection amongst healthcare workers and determined socio-demographic associations of this prevalence including ethnicity, professional healthcare groups, and geographical areas of work in healthcare settings. The study provides information that may be useful in future COVID studies examining the role of antibody testing both in general populations as well as in healthcare settings.

224. CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

Optimising bone health on Sheffield frailty unit through quality improvement.

Orton CM1, Sinson NE1, Blythe R1, Hogan J1, Vethanayagam NA1, Peel N2.

1. Geriatric and Stroke Department, Northern General Hospital, Sheffield. 2. Metabolic Bone Centre, Northern General Hospital, Sheffield.

Introduction: NICE and the National Osteoporosis Guidance Group (NOGG) advise on evaluation of fracture risk and osteoporosis treatment1,2, with evidence suggesting that screening and treatment reduces the risk of fragility fractures 3,4,5. However, it is often overlooked in the management of older patients within secondary care. Audit data from Sheffield Frailty Unit (SFU) in 2018 showed that national guidance was not routinely followed. Fracture Risk Assessment Tool (FRAX®) scores were not calculated and bone health was poorly managed. Therefore, we undertook a quality improvement project aiming to optimise bone health in patients presenting to SFU.

Method & Intervention: In January 2019 we collaborated with Sheffield Metabolic Bone Centre (MBC) to develop a pathway aiming to improve bone health assessment and management in patients presenting to SFU with a fall or fragility fracture. This included a user-friendly flow chart with accompanying guidelines, alongside education for staff. Performance was re-evaluated in May 2019, following which a tick box prompt was added to post take ward round documentation. A re-audit was performed in March 2020.

Results: In March 2018 0% of patients presenting with a fall had a FRAX® score calculated and only 40% of those with a new fragility fracture were managed according to guidelines. In May 2019, this had improved to 18% and 100% respectively. In March 2020 86% of patients had a FRAX® score calculated appropriately and 100% of fragility fractures were managed according to guidelines. In both re-audits 100% of FRAX® scores were acted on appropriately.

Conclusions: There has been a significant increase in the number of patients who have their bone health appropriately assessed and managed after presenting to SFU. However, achieving optimum care is under constant review with the aim to deliver more treatment on SFU, thereby reducing the need for repeat visits to the MBC.

225. SP - Scientific Presentation - SP - BMR (Bone, Muscle, Rheumatology) [Poster]

The relationship between 25(OH) Vitamin D and Bone mineral density (BMD) in patients 65 years and older with prior fragility fra

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Introduction: 25(OH) vitamin D [25(OH) D] levels are known to influence skeletal health as well as muscle function. Some studies suggest a positive association between 25(OH) D levels and BMD at various skeletal sites in men but not in women. These findings were mostly observed in younger (less than 50 year old) cohorts. Evidence for this association in older patients with prior fragility fractures is lacking. Aim: To assess the correlation of 25(OH) D levels with T-scores at the neck of femur, hip and spine in patients 65 years and older with prior fragility fractures and the effect of gender on the correlation.

Methods: A retrospective, cross-sectional analysis of patients 65 and older with previous fragility fractures in patients attending a fracture prevention service. Data was extracted from the electronic records. SPSS 26 statistical software was used for statistical analysis. Pearson correlation coefficient was used to calculate correlation and regression coefficient for gender.

Results: 151 patients were included; 26 males and 126 females. Mean age was 76.2 and 74.1 years respectively. In the males there was good positive, statistically significant correlation between the 25(OH) D and T-scores at the neck of femur ($r=0.415$; $p < 0.05$) and hip ($r=0.413$; $p<0.05$), but correlation with T-score of the spine was not statistically significant ($r=0.349$; $p = 0.103$). In the females there was no statistically significant correlation between 25(OH) D and T-scores at the neck of femur, hip or spine ($r=0.163$; $p= 0.077$), ($r=0.096$; $p = 0.299$) and ($r=0.114$; $p = 0.217$) respectively.

Conclusion: In males, 65 years and older, with prior fragility fracture, there is a positive significant correlation between 25(OH) D and BMD at the neck of femur and hip whereas there is no significant correlation in females.

226. CQ - Clinical Quality - CQ - Efficiency and Value for Money [Platform Presentation]

Integrated falls prevention pathways; the benefits of organisational collaboration

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Introduction: There is continuous increased demand on the NHS, while resources are finite. Developing pathways with Integration and streamlining of services is crucial to achieve good outcome and better use of resources. Falls service is a good example. In Dudley, three separate services existed for managing falls: a local authority team, a NHS therapy team and a Consultant-led Falls & Syncope clinic. We collaborated and reorganised the services to improve patient care and achieve better outcome.

Methods: We integrated services into one pathway, where patients are triaged to the relevant service based on clinical need via a Single Point of Access. One multifactorial assessment- based on NICE guideline CG161 and Quality Standard QS86- was developed, which is completed by all services (streams). This allows their assessment to be transferred to another stream if clinically indicated, saving repetition/duplication. An extensive training programme was delivered to up-skill staff across the pathway in completing areas of best practice (e.g. postural BP measurement, balance/mobility assessments, cognitive assessment, FRAX score, medication issues). Additionally we established a Falls MDT meeting with representation from all streams, to discuss complex cases, and developed a shared, electronic database to track patient journeys and monitor service outcomes.

Results: Falls admission rate decreased by 29.4% for patients 65 y and over and 25.2% for 80+. This equates to 433 fewer falls compared to peak rate; saving an estimated £3.4million. Also, hip fracture admission rate decreased by 19.2% for patients 65 y and over and 23.5% for 80+. This equates to 91 fewer hip fractures compared to peak rate; saving an estimated £1.3million. Much improved service collaboration and resource sharing.

Conclusion: A collaborative approach between organisations, utilising existing resources in a system that places patients at the heart of the service, improves patient experience and outcomes, alongside significant financial savings.

227. SP - Scientific Presentation - SP - Resp (Respiratory) [Poster]

Age and the extent of chest radiographic findings in hospitalized patients with COVID 19

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Introduction: Since the emergence of COVID 19 in December 2019, its clinical and radiological features are still being discovered and their prognostic implications evaluated. Chest X-ray (CXR) typically shows patchy or diffuse asymmetric airspace opacities. Regardless of the different classifications of radiological findings that have been used, it is becoming clear that multi-lobar changes in the lungs are associated with poorer outcomes than single lobar involvement or minimal/no radiological abnormalities.
Aim: To assess the correlation of age with the extent of CXR findings in hospitalized COVID 19 patients

Methods: A retrospective, cross-sectional analysis was carried out on inpatients with RT-PCR confirmed COVID 19. Chest X-ray findings were classified as minimal/no radiological changes, single lobar opacification and multi-lobar changes (involving 2 or more lobes and/or ARDS changes). SPSS 26 software was used for statistical analysis. Spearman's correlation and linear regression were used to assess correlation.

Results: 211 patients were included in the analysis; 124 males and 87 females. Mean age of the patients was 72.4 years; SD +/- 16.15. There was significant positive correlation between age and degree and extent of radiological changes in all patients ($r= 0.367$; $p<0.01$). This correlation persisted even when broken down by gender ($r=0.448$; $p<0.01$) for males and ($r=0.322$; $p < 0.01$) for females. Discussion: Older age has been repeatedly reported as a risk factor for poor prognosis in COVID 19. The main findings of COVID-19 on CXR are those of atypical or organizing pneumonia. Older people tend to have more extensive involvement of the lungs. There could be many explanations for the CXR correlation with age including the diminished cardiovascular reserve with ageing, the accumulation of comorbidities and decreased or abnormal immune response.

Conclusion: Age significantly correlate with the extent of chest radiographic findings in inpatients with COVID 19

228. SP - Scientific Presentation - SP - Falls (Falls, fracture & trauma) [Platform Presentation]

Comparison of six frailty screening tools in patients aged 65+ with an arm fragility fracture

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Introduction: Frailty is associated with an increased risk of falling and fracture, but not routinely assessed in fracture clinic. Early identification and management of frailty among older people with arm fragility fracture could help avoid further falls and fractures, especially of the hip. We evaluated the feasibility of assessing frailty in a busy fracture clinic.

Methods: People aged 65+ years with an arm fracture in one acute trust were recruited. Frailty was assessed in fracture clinics using six tools: Fried Frailty Phenotype (FFP), FRAIL scale, PRISMA-7, electronic Frailty Index (e-FI), Clinical Frailty Score (CFS), and Study of Osteoporotic Fracture (SOF). The sensitivity and specificity of each tool was compared against FFP as a reference. Participants identified as frail by 2+ tools were referred for Comprehensive Geriatric Assessment (CGA).

Results: 100 patients (mean age 75 years± 7.2; 20 men) were recruited. Frailty prevalence was 9% (FRAIL scale), 13% (SOF), 14% (CFS>6), 15% (FFP; e-FI>0.25), and 25% (PRISMA-7). Men were more likely to be frail than women. Data were complete for all assessments and completion time ranged from one minute (PRISMA-7; CFS) to six minutes for the FFP which required most equipment. Comparing with FFP, the most accurate instrument for stratifying frail from non-frail was the PRISMA-7 (sensitivity=93%, specificity=87%) while the remaining tools had good specificity (range 93%-100%) but average sensitivity (range 40%-60%). Twenty patients were eligible for CGA. Five had recently had CGA and 11/15 referred were assessed. CGA led to 3-6 interventions per participant including medication changes, life-style advice, investigations, and onward referrals.

Conclusion: It was feasible to assess frailty in fracture clinic and to identify patients who benefitted from CGA. Frailty prevalence was 9% - 25% depending on the tool used and was higher among men. PRISMA-7 could be a practical tool for routine use in fracture clinics.

229. SP - Scientific Presentation - SP - Falls (Falls, fracture & trauma) [Poster]

The feasibility of assessing sarcopenia among older people with arm fracture using different criteria

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Introduction: Osteoporosis and sarcopenia often co-exist (osteo-sarcopenia) and both are associated with increased risk of falls and fractures. Early identification and treatment of sarcopenia among older people with fragility arm fractures could prevent further fractures. This study evaluated the feasibility of assessing sarcopenia in a fracture clinic.

Methods: People aged 65+ years with arm fracture attending fracture clinics in one acute trust were recruited. Sarcopenia was assessed using gait speed, grip strength with unfractured arm (hand dynamometer using appropriate cut off adjusted for age and gender), skeletal muscle mass index SMI (Bioimpedance BIA), SARC-F questionnaire, the European Working Group on Sarcopenia in Older People (EWGSOP) I and II criteria. The sensitivity and specificity of each measure was calculated against the EWGSOP II criteria as the standard reference.

Results: 100 patients (Mean age 75 years± 7.2; 80 female) were recruited. Sarcopenia was identified among 4% (EWGSOP I), 5% (SMI), 13% (EWGSOP II), 16% (gait speed test), 18% (SARC-F) and 39% (grip strength) and was more prevalent among men. SARC-F had the best sensitivity and specificity (100% and 96% respectively) when compared to the EWGSOP II criteria. Sensitivity and specificity for the remaining measures were respectively (100%, 71%) for grip strength, (75%, 94%) for gait speed, (25%, 97%) with SMI and (25%, 99%) for EWGSOP I. Time needed to complete the assessments was 1-2 minutes for gait speed, grip strength and SARC-F; five minutes for BIA test, and nine minutes when EWGSOP I and II criteria were applied. Data were complete for grip strength and SARC-F. Missing data was reported among 2% for gait speed, 8% for BIA test, 8% for EWGSOP II and 10% for EWGSOP I.

Conclusion: It was feasible to assess sarcopenia in fracture clinics and SARC-F was a quick, simple and sensitive tool suitable for routine use.

230. SP - Scientific Presentation - SP - BMR (Bone, Muscle, Rheumatology) [Presidents Round]

Feasibility of resistance exercise to failure at different loads in frail and healthy older adults?

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Introduction: Resistance training (RT) is the most effective way to increase muscle mass and function in older adults both with/without sarcopenia/frailty. In younger adults, when RT is performed to muscle failure the load lifted does not mediate the magnitude of response, but there are no studies in older adults. We aimed to determine the feasibility of recruitment to a RT intervention working to muscle failure at different loads in frail and healthy older adults

Methods: We performed an 8-week randomised feasibility trial of lower limb RT to volitional muscular failure, at high and low load. Participants were recruited via hospital outpatient clinics and newspaper advertisements. Outcomes included: frailty assessment (Fried criteria); muscle strength (maximum voluntary contraction/one-repetition maximum); functional abilities (Short Physical Performance Battery); safety/adverse events were recorded via a log, and patient experiences from focus groups.

Results: 110 people were assessed for eligibility, and 58 randomised (frail n=6, prefrail n=20, robust n=32) to either high (n=30) or low load (n=28) groups. Mean age of participants was 72 years (range 65–93), 36 were female, 22 male. Session attendance was 95% (high load) and 90.4% (low load). Most participants were recruited via advertisements. All participants reported feeling safe and reassured in the RT sessions. Two participants had a serious adverse event, one related to RT (hypotension) and several had adverse events (three intervention-related). Pain was reported at both loads (high n=9, low n=8) yet all completed. There were no differences ($P>0.05$) in effects of RT outcome variables between low and high load groups.

Conclusion: In this feasibility trial the recruitment of frail patients via clinics was limited. Performing supervised RT to muscle failure in older adults was safe/acceptable and the load at which RT was performed did not influence its efficacy. Future research into the effectiveness of such RT is warranted.

231. CQ - Clinical Quality - CQ - Clinical Effectiveness [Poster]

Establishing a Community Frailty Unit During the Covid19 Pandemic

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Introduction In response to the Covid19 pandemic a community Hospital was transformed in to a Community Frailty Unit (CFU). The aims were to meet the needs of patients living with frailty including medical instability and end of life care outside the acute setting, to improve patient flow and to improve integration of acute and community frailty services.

Method Existing community teams were integrated with an acute based multidisciplinary team including a frailty practitioner and pharmacist. Supported by programme managers they rapidly transformed (within 3 weeks) processes to align these with the acute site including paperwork, assessments, use of a flow board, board rounds and discharge to assess. Technology was used to organise transfers via the NHS Digital approved App Pando. Point of care testing and oxygen concentrators were put in place.

Results Median and mean length of stay (LOS) in the acute site reduced by 59% (14.5 to 6 days) and 56% (18 to 8 days) respectively. Median and mean LOS in the community site reduced by 38% (16 to 10 days) and 39% (18 to 11 days) respectively. Readmissions fell from 10% to 2%. 85% of staff rated the following better or much better: the capability of the service to manage every aspect of the patient's care; integration; co-ordination of transfers. 83% of staff rated patient experience better or much better and 79% rated discharge co-ordination better or much better. At 85% bed occupancy at a cost of £67k/bed/year this released 5,525 bed days and 16.9 beds with a return on investment of £1,132,300.

Conclusion It is possible to rapidly integrate community and acute services and to establish acute frailty unit care in a community setting. A CFU can lead to improved integration, patient flow, patient and staff experience at reduced system wide cost.

238. SP - Scientific Presentation - SP - Epid (epidemiology) [Poster]

Potentially inappropriate cardiovascular medications in Czech older adults in acute care: InoMed and EUROAGEISM H2020 project

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Introduction: Cardiovascular disorders (CVS) belong to the most frequent causes of deaths and cardiovascular medications among the most common drugs. Older patients are vulnerable to drug risks due to presence of pharmacological changes, polymorbidity, polypharmacy and geriatric syndromes. Thus, the effort to reduce prescribing of potentially inappropriate medications (PIMs) represents a substantial prevention strategy in this population.

Methods: This was a prospective, cross-sectional study conducted in 288 patients (65+) admitted to acute care geriatric wards in the Czech Republic from Aug 2018 to Jan 2019. We aimed to investigate prevalence of CVS PIMs using relevant parts of STOPP/START 2015 criteria, the EU(7) PIM 2015 list and the Beers criteria 2019. Only patients with stable health conditions were included in our study. Results: Overall prevalence of CVS PIMs was 77.6%. Undertreatment of CVS problems, identified by START criteria, was found in 63.2% patients. Prevalence of CVS PIMs according to different criteria was 16.1%, 23.6% and 30.9%, using the Beers criteria 2012, STOPP criteria and the EU (7)-PIM list; respectively. The most prevalent problem of undertreatment was the absence of statins with documented history of coronary, cerebral and peripheral vascular disease (excluding patients at the end-of-life or at the age of >85 years) (27.3%). According to the EU (7)-PIM list, the most common CVS PIMs were the use of amiodarone in maintenance doses of >200 mg/48 hours and use of spironolactone in doses of >25mg/day (9.0% and 5.6%; respectively).

Conclusions: This study confirmed high prevalence of CVS PIMs in older adults admitted to acute care hospitals in the Czech Republic. Detecting and identifying CVS PIMs is of high importance in order to prevent serious adverse drug events, higher mortality and increased frailty in vulnerable older population. Grant support: InoMed project (reg. No: CZ.02.1.01/0.0/0.0/18_069/0010046, 2019-2022), H2020-MCSF-ITN-764632, PROGRESS Q42 FoP, Charles University, SVV 260417.

240. SP - Scientific Presentation - SP - Epid (epidemiology) [Poster]

Prevalence and patterns of drug-disease interactions in long-term residents in nursing home facilities in the Czech Republic

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Introduction: Prescription of potentially inappropriate medications, non-geriatric doses and drug-disease interactions contribute to high prevalence of adverse drug events, geriatric syndromes and symptoms, and increased frailty in older adults. Despite serious health and socio-economic consequences, a very few studies have been published on phenomenon of prescribing of drug-disease interactions (DDI) in older patients in Central and Eastern Europe.

Methods: This study aimed to investigate the prevalence of DDI and differences across nursing home (NH) facilities applying relevant parts of Beers 2012 criteria, Czech national consensus 2012 (CNC), and STOPP/START criteria vers.1. This is a retrospective cross-sectional study that analysed semi-implicitly InterRAI-LTC assessment protocols of 490 NH residents from 10 Czech NH facilities (N=490, 65+) participating in the EU SHELTER project. Retrospective analyses were conducted in 2019 year.

Results: Prevalence of potentially inappropriate DDI ranged from 44.5% to 62.3% identified by STOPP criteria and CNC, respectively. The most common DDIs were long-term use of benzodiazepines in depressive residents (7.8%) and use of opioids in residents with chronic constipation without osmotic laxative treatment (7.4%). The prevalence of undertreatment identified by START criteria was 52.9%, mainly due to absence of statins in NH residents with diabetes mellitus and cardiovascular risk factors (9.8%) and the absence of anticoagulation therapy in patients with atrial fibrillation (7.1%).

Conclusions: Potentially inappropriate DDI were highly prevalent in Czech long-term NH residents with significant differences across NH facilities. Using method of semi-implicit medication reviews, we cannot judge the real quality of drug treatment, but there is a necessity to reduce the high prevalence of DDI in NHs in order to prevent potential adverse drug events. Grant support: InoMed project (reg. No: CZ.02.1.01/0.0/0.0/18_069/0010046, 2019-2022), H2020-MCSF-ITN-764632, PROGRESS Q42 FoP, Charles University, FP7-HEALTH-F4-2008-201917, SVV 260417.

241.SP - Scientific Presentation - SP - HSR (Health Service Research) [Presidents Round]

Factors influencing mealtime care for people with dementia living in care homes: An ethnographic study

James Faraday; Clare Abley; Catherine Exley; Joanne Patterson

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Introduction More and more people with dementia are living in care homes. Often they depend on care home staff for help with eating and drinking. It is essential that care home staff are able to provide good care at mealtimes. This study used ethnography to identify factors influencing mealtime care for this population.

Method Over twenty-five hours of mealtime observations were conducted in two UK care homes with diverse characteristics. Observations focused on interactions between care home staff and residents living with dementia. Twenty-two semi-structured interviews were carried out with care home staff, family carers, and visiting health and social care professionals, to explore mealtime care from their perspectives. The study used a constant comparison approach, so that data from early observations and interviews were explored in more depth subsequently.

Results Five factors were identified which influenced mealtime care for people with dementia living in care homes. These were: environment (such as background music and building layout); kitchen and food (including connectivity between kitchen staff and others); staffing (for example: staff ratios and allocation); knowledge and support (including training, resources and supportive culture); and relationship with wider care team (such as family involvement, and the role of visiting health and social care professionals).

Conclusions This study is part of a bigger project which will develop a staff training intervention to improve mealtime care for people with dementia living in care homes. The intervention will be informed by these findings, and by complementary evidence on good practice in mealtime care (from primary and secondary studies). It is anticipated that good mealtime care may improve quality of life for care home residents, and reduce hospital admissions.

242. SP - Scientific Presentation - SP - Cardio (Cardiovascular) [Poster]

Management of Atrial Fibrillation in patients with Cerebral Amyloid Angiopathy: Multidisciplinary Neuro-cardiology approach

Madiha Arslan Hashmi ; Ambreen Ali Sheikh

AHA Guidelines management of AF American College of cardiology 2014;Non Pharmacological Management of AF Neurology Boston July 2017;Journal of American Cardiology Cerebral Amyloid Angiopathy July 2017

We present two cases that highlight the clinical challenge of anti coagulation in patients with intracerebral haemorrhage (ICH) due to Cerebral Amyloid Angiopathy (CAA) and co-existent non-valvular Atrial Fibrillation (AF).

Case 1: 78 -Years right-handed functionally independent gentleman presented with right parietal intracerebral haemorrhage (ICH) on Dabigatran that required reversal. He had a background history of hypertension, persistent AF and a previous ICH on warfarin. Post atrial septal defect repair, he had multiple unsuccessful cardioversions for AF, and a failed catheter ablation after the first stroke. Magnetic Resonance Imaging (MRI) brain showed Cerebral Amyloid Angiopathy (CAA), the cause of his recurrent bleeds. Anticoagulation was not started due to severe CAA on imaging and recurrent bleeds. He was referred for left atrial closure device.

Case 2: 79-Years female presented with left parietal haemorrhage and new onset atrial fibrillation. Work up for ICH showed normal BP readings and clotting profile. Her MRI brain showed a large lobar bleed with mild small vessel disease and evidence of no other imaging features suggestive of CAA. As optimal timing to start anticoagulation after ICH is unknown, she was suggested to take part in a clinical trial. Her family declined the offer of clinical trial and also anti coagulation due to few falls. Her CHAD-VaSc and HAS-BLED score were 4 and 2 respectively. She was then referred to tertiary centre for left atrial appendage closure device.

Conclusion: Safety and timing to initiate DOAC for AF in this group is not established yet, understanding hemorrhagic risk using Boston Criteria for CAA diagnosis should be considered in addition to HAS-BLED score. Shared decision making and comprehensive discussions with cardiologist are of paramount importance. Non pharmacological intervention studies WATCHMAN and PREVAIL have proven procedural efficacy, however, in elderly population, decision making is complex due to frailty, dementia and co-morbidities.

243. SP - Scientific Presentation - SP - Big Data [Presidents Round]

Dementia, ApoE and COVID-19 severity

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Introduction During the COVID-19 pandemic, pre-existing dementia was associated with a 3x increase in risk of hospitalisation and (25.6%) of COVID-19 related deaths had dementia. However, it is unclear whether people living with dementia are at higher risk of COVID-19 due to dementia or whether there may be a biologically plausible link between dementia and COVID-19. The ApoE e4 allele is highly associated with dementia. We aimed to test the COVID-19 risk associated with dementia and the association between ApoE e4e4 allele and COVID-19 with the aim of clarifying biological vulnerability.

Methods UK Biobank (England) participants baseline (2006 to 2010), plus secondary care data to 2017. Separate analysis tested dementia and ApoE genotype association with COVID-19 status (16th March-31st May 2020) or mortality (to March 31, 2020, plus incomplete deaths from April, 2020) in logistic models, adjusted for demographics and technical covariates.

Results: In 269,070 participants aged 65+, including 507(0.2%) hospitalized COVID-19 patients, those with pre-existing dementia were at increased risk of being hospitalized for COVID-19 (OR=3.50 95% CI 1.93 to 6.34) and also for COVID-19 and death (OR=7.30 95% CI 3.28–16.21). In 375,689 European-ancestry UKB participants, ApoE e4e4 homozygotes were more likely to be COVID-19 test positives (reaching genome-wide significance: OR=2.24, 95% CI:1.72–2.93, p=3.24 × 10–9) and of mortality with test-confirmed COVID-19 (OR=4.29, 95% CI: 2.38–7.72, p=1.22 × 10–6), compared to e3e3s homozygotes. The associations were little changed in subsets of participants who were free of diseases associated with ApoE e4 and COVID-19 severity.

Conclusion Dementia was found to be disproportionally common in older adults who develop severe COVID-19. We have shown a plausible genetic pathway of increased COVID-19 risk with dementia, therefore suggesting that the positive association between dementia and COVID-19 is not just the result of high cases of COVID-19 in care homes.

244. SP - Scientific Presentation - SP - HSR (Health Service Research) [Platform Presentation]

Realist Review of General Practitioners' Role in Advancing Practice in Care Homes (GRAPE study)

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Introduction Many care home residents have high levels of complex needs and their medical care is the responsibility of the general practitioner (GP) in UK. GPs have multiple roles, including gatekeeper for access to other healthcare services and often play a leadership role in the healthcare team. Our aim is to develop realist programme theories for how GPs interact with care homes to facilitate improvements in care of residents.

Method Using realist review we aimed to describe 'what works' for GPs to be involved in improvements in care of residents. Firstly we carried out a scoping review of UK literature and interviewed GP leaders in order to build programme theory. Secondly iterative literature searches were performed in Medline, Embase, CINAHL, PsycInfo, ASSIA, Scopus and many grey literature databases. This international literature is being used to test and refine programme theories and to explore the range of contexts.

Results A scoping search identified a small number (n=5) of recent UK articles (2010-19) that described GP input into quality improvement. To gain insight into context, observational studies (n=4 in UK and Ireland) were identified which described concerns about workload and resource constraints. To develop initial programme theories, we conducted interviews with 6 GP leaders, where themes of risk and specialism were identified. We are developing the following mechanisms within programme theory: where GP profession have an ownership of the agenda, this encourages GP involvement. In other initiatives, the mechanism may be a trusting relationship between GP and another practitioner, eg pharmacist.

Conclusion Many reported projects which aim to improve care quality in care homes do not describe how the initiative relates to GP practice. We have identified mechanisms which, when present, may cause GPs to contribute leadership and medical expertise, and thus lead to successful outcomes for residents.

245. CQ - Clinical Quality - CQ - Patient Safety [Poster]

Antibiotic Omissions: A missed dose means a missed chance to save a life! Is E-Prescribing the answer?

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Omissions and delay in antimicrobial therapy are common in acute hospitals with an untowrds impact on patient outcomes resulting in harm and prolong stay. We carried out a Quality Improvement Project (QIP) assessing 2 interventions in PDSA cycles to improve situation. This QIP was done in 3 stages and involved about 80 patients over 7 months. We collected data regarding antibiotic omissions on 3 random separate days which gave baseline omission rate. This was 8.5% and quite higher than the national average (5.3%). The reason for the omissions was not documented on the drug kardexes on most occasions. Initial intervention included staff education, verbally and through posters. Post intervention data was collected again on 3 separate days. This showed improvement and the omission rate fell from 8.5% to 5.6%. The percentage of omissions with no code written reduced from 56.25% to 18.18%. The second intervention included participation in EPMA (Electronic prescribing and medicines administration) pilot on the ward. Post EPMA, the omission rate reduced to 4.59 %. All omissions had now a code written. The phenomenon of Antibiotic Omissions is an open challenge and its consequences are serious. We can conclude from our study that educational measures though effective are likely to be short-lived.Therefore, it can be asserted that Electronic prescribing is appropriate solution for antibiotic omissions and it also opens up new horizons for patient safety.

255. SP - Scientific Presentation - SP - Other (Other medical condition) [Poster]

The Effect of Frailty and COVID-19 Infection on Clinical Outcomes in Older Adults – A Single Centre Retrospective Study

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Introduction It was anticipated that the COVID-19 pandemic would put a strain on our healthcare system, disproportionately affecting older people. NICE guidance recommended using frailty scoring to support decision making around escalation of care. This study aimed to assess frailty, demographics and COVID-19 infection and to investigate how these related to outcomes of patients aged over 65 years admitted to hospital.

Methods A single centre retrospective cohort study was carried out by reviewing the electronic health records of all admissions over 65 years. Data points collected included length of stay (LOS), frailty score using the Rockwood Clinical Frailty Scale (CFS) and mortality. Patients were stratified into COVID and non-COVID based on health records and into non-frail (CFS 1-4) and frail (CFS 5-9).

Results A total of 257 patients admitted between 30th March and 30th April 2020 were included in the study (mean age 79 years, 43% female). 141 (54.9%) of patients were diagnosed with COVID-19 infection. 120 patients had CFS 1-4 and 136 has CFS 5-9. 1 patient did not have a frailty score due to insufficient information. 68 (26.8%) of all patients died during the admission. The relative risk (RR) of mortality of patients with coronavirus was 6.3 (95% CI 3.1-12.6, $p<0.0001$). The RR of mortality for frail patients compared to the non-frail was 2.1 (95% CI 1.3-3.2, $p = 0.002$). The median LOS for patients with COVID-19 was 5 days, compared to 4 days for patients who did not have coronavirus. Frailty did not predict longer admission, with median LOS of 5 days for both non-frail and frail patients.

Conclusion The results demonstrated in this study show that COVID-19 infection and frailty were significantly associated with increased mortality in older patients. This validates the continued use of frailty scoring of older patients on admission to support care planning.

256. SP - Scientific Presentation - SP - PD (Parkinson's Disease) [Presidents Round]

The experiences of treatment burden among people with Parkinson's disease and their caregivers: A systematic review

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Introduction Treatment burden is the 'workload of healthcare and its impact on patient functioning and well-being'. High treatment burden may lead to non-adherence to treatment regimens, poor health outcomes, poor quality of life and wasted healthcare resources. Treatment burden among people with Parkinson's (PwP) and their caregivers has not been previously explored.

Methods Using five electronic databases (MEDLINE, Embase, CINAHL, Scopus and PsychInfo), we conducted a systematic review of studies published since 2006 when the first National Institute for Clinical Excellence (NICE) Clinical Guideline for Parkinson's Disease was published. This allows an understanding of the impact of current healthcare systems on treatment burden. We included qualitative and mixed-method studies with a qualitative component that reported data from PwP and/or caregivers. Quantitative studies, qualitative data from clinical trials not related to usual care and grey literature were excluded. Two reviewers independently screened articles and extracted data. Data analysis was conducted using framework analysis.

Results 1757 articles were screened, and 39 included in this review. Understanding treatment burden among PwP and their caregivers was not the primary aim in any of the included studies. They described the experiences of those living at home and during hospital or care home admissions. Issues with medications (adherence to advice, effectiveness, side-effects and timing), obtaining appropriate levels of information and healthcare provision (lack of integrated care, care coordination and person-centred approach) were among factors that exacerbate treatment burden experienced by PwP and caregivers. Both reported the impact of Parkinson's on their daily lives, physical and mental exhaustion of self-care and limitations on their role and social activities.

Conclusion This review describes considerable treatment burden experienced by PwP and their caregivers and its major influences including aspects of current healthcare provision. Future research should focus on patient-centred care with service redesign to improve this treatment burden.

259. SP - Scientific Presentation - SP - BMR (Bone, Muscle, Rheumatology) [Poster]

Does the weather contribute to admissions of neck of femur fractures?

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Introduction: The effects of weather on overall mortality are well documented. Anecdotally, icy conditions are perceived to result in more falls and admissions for neck of femur (NOF) fractures. The aim of this unfunded pilot study was to determine whether relationships could be extracted or at least not ruled out by analysing a small dataset, and so give impetus to a larger project.

Methods: Seven trauma units across north west London were identified and NOF fracture data extracted for five years. Visual inspection of the time series, consideration of the weather on specific days and correlation analysis were used to assess causal links between fracture numbers and a variety of weather parameters (temperature, rainfall, wind and ice risk).

Results: Overall, 10929 individuals with hip fractures were admitted over the five-year period. The highest number of admissions in a day was 14. No clear association was found between a weather parameter and daily admissions. However, when accumulated to a weekly timescale, a negative relationship with maximum temperature was found. No seasonal cycle was detected.

Conclusion: The lack of a daily relationship and presence of a weekly relationship points to a possible delayed response to weather or insufficient daily data to extract a signal. The inconclusive results also indicate that more socioeconomic data will need to be used in future studies, requiring a larger data sample. In addition, even in cold weather an urban environment may not create icy conditions, being ameliorated by the heat island effect and gritting.

261. SP - Scientific Presentation - SP - Psych (Psychiatry & Mental Health) [Presidents Round]

Diagnostic Test Accuracy of the 4AT for Delirium Detection: Systematic Review and Meta-Analysis

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INTRODUCTION: Detection of delirium in hospitalised older adults is recommended in national and international guidelines. The 4 'A's Test (4AT; www.the4AT.com) is a short (<2 min) instrument for delirium detection that is used internationally as a standard tool in clinical practice. We performed a systematic review and meta-analysis of diagnostic test accuracy of the 4AT for delirium detection.

METHODS: We searched the following electronic databases through Ovid: MEDLINE, Embase, and PsycINFO. Additional databases were searched: CINAHL (EBSCOhost), clinicaltrials.gov and Cochrane Central Register of Controlled Trials from 2011 (4AT publication) until 21 December 2019. Inclusion criteria: older adults (≥65) across any setting of care except critical care; validation study of the 4AT against a delirium reference standard (standard diagnostic criteria or validated tool). Two reviewers independently screened abstracts and papers and performed the data extraction. Pooled estimates of sensitivity and specificity were generated from a bivariate random effects model.

RESULTS: 17 studies (n = 3701 observations) were included. Various settings including acute medicine, surgery, stroke wards and the emergency department were represented. The overall prevalence of delirium was 24.2% (95% CI 17.8-32.1%; range 10.5-61.9%). The pooled sensitivity was 0.88 (95% CI 0.80-0.93) and the pooled specificity was 0.88 (95% CI 0.82-0.92). The methodological quality of studies was mostly good.

CONCLUSIONS: The 4AT is now supported by a substantial evidence base comparable to other well-studied tools such as the Confusion Assessment Method (CAM). The strong pooled sensitivity and specificity findings for the 4AT in this meta-analysis along with its brevity and lack of need for specific training provide support for its use as an effective assessment tool for delirium.

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AbstractTitle: Relationship between NT pro BNP Levels and Heart Failure in Patients > 85 years of Age.

Category: Scientific Presentation (SP)

Sub Category: CARDIO (Cardiovascular)

Introduction
Around 920,000 people in the UK have been Diagnosed with Heart Failure with a median age of diagnosis been 77 years. The most commonly used test used to diagnose and measure prognosis in HF is BNP levels.
B - Type Natriuretic Peptide is a hormone which is released in response to pressure changes in the ventricles. It causes Natriuresis which means removing sodium (salt) and water from the body thereby reducing the strain on the heart. It has a high negative predictive value to exclude heart failure with the following cut-off values.
High levels – NTproBNP > 2000 pg/ml
Raised levels – NTproBNP 400–2000 pg/ml
Normal levels – NTproBNP < 400 pg/ml
The Aim of the study was to see if the cut off values of NT pro BNP Levels, which is the non-active pro hormone released from the same molecule that produces BNP are accurate in the elderly to diagnose Heart Failure.

Method
A retrospective study was carried out using 50 patients, age > 85 years with a diagnosis of heart failure. A comparison was made to look at NT pro BNP values and Ejection fraction (EF)[1] of these patients. A cut off of 50 % EF was taken as diagnosing Heart Failure.

Results
Out of 50 patients, only 39 were suitable for the study as the rest did not have either a BNP value or an TransThoracic ECHO to assess Ejection Fraction. Age group taken was 85 - 97 years.
22.5 % patients with a NT pro BNP level > 400 had an ejection fraction > 50 %.

Conclusion
Although we could only involve 39 patients, the data above shows that in patients aged > 85 years with NT pro BNP values > 400 around 25 % have a normal ejection fraction. This suggest that increasing the cut off values for NT pro BNP to 750 in the elderly should be considered to diagnose Heart Failure , hence reducing cost and getting a high positive predictive value. Although more work is needed on the same.

[1] EF - in simple terms is amount of blood the heart is pumping into the body.