

Evidence Brief: Frailty

Contents

Key publications – the big picture	3
Case Studies.....	5
HEE Star	6
Statistics.....	6
HEE National Data Programme.....	6
Published Peer Reviewed Research	6
COVID-19.....	6
Training and Education.....	9
Workforce Planning	11
Supply.....	12
Staff views, perceptions, and experiences.....	12
Primary Care and Community.....	16
Nursing.....	21
Advanced Clinical Practitioners	22
Paramedics	25
Physiotherapists.....	26
Occupational therapists.....	26
Pathways and interventions (acute).....	28
Multi-disciplinary teams and working	29
Integrated care models.....	31
Prescribing	34
New and enhanced roles.....	34
Competency Frameworks	34
eLearning	34
*Help accessing articles of papers	35

Produced by the HEE Knowledge Management team Evidence Briefs offer a quick overview of the published reports, research, and evidence on a workforce-related topic.

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Key publications – the big picture

[Through the visor: Reflecting on member experiences of the COVID-19 first wave](#) March 2021, British Geriatrics Society
This report summarises the findings of a [BGS member survey](#) describing the experiences of working through the first wave of the COVID-19 pandemic. With respondents representing over twenty different professions working in acute, community and primary care, it is believed to be the only survey capturing the full breadth of multidisciplinary health professionals' experiences caring for older people across the four nations.

[Frailty and the NHS Long Term Plan](#) Updated July 2020, AgeUK

The NHS Long Term Plan outlines several important changes to the way the NHS should work to support patients and their carers. Improving care for older people living with frailty or multiple long-term conditions is one of its priorities.

[Position Statement - Frailty: Ensuring the best outcomes for frail older people](#) February 2020, Royal College of Psychiatrists
Old age psychiatrists are trained to adopt a holistic approach, and practise within a biopsychosocial model (RCPsych, 2016); we focus on not only 'what is the matter' but more importantly 'what matters', to the people and families we serve, which is an approach advocated by patients and carer groups (Dementia Carer Voices, 2019). Within older adults mental health services we already have standards for patient and carer/family engagement and involvement (RCPsych, 2016). Whilst it is mainly older people that are frail, there are younger people with serious mental illness who are at risk of becoming frail and it is important that their needs are met in the same holistic way.

[Long Term Plan](#) January 2019, NHS

The NHS Long Term Plan was developed in partnership with those who know the NHS best – frontline health and care staff, patients and their families and other experts.

[Frailty Toolkit](#) June 2019, NHS RightCare
Increasing numbers of people are at risk of developing frailty. People living with frailty are experiencing unwarranted variation in their care. This toolkit will provide you with expert practical advice and guidance on how to commission and provide the best system wide care for people living with frailty.

[Preparing the workforce for frailty in primary and community healthcare](#) January 2019, Chartered Society of Physiotherapy
The Comprehensive Geriatric Assessment (CGA) is a multidisciplinary assessment that identifies the medical, psychosocial, and functional needs of older people. This service evaluation considers the impact of training allied health professionals (AHPs) and community nurses to undertake a CGA assessment in primary and community settings.

[Helping people thrive not just survive: a framework for Frailty in Dorset](#) March 2017, Dorset CCG
The Dorset Framework for Frailty has been developed by Dorset Clinical Commissioning Group (CCG) through multi-sectorial collaboration with health and social care providers, voluntary and third sector organisations, patients and their representatives. It is endorsed by the Dorset Frailty and End of Life Care Reference Group. The development of the framework is a response to the request for a common approach to the early recognition and identification of frailty as a long term condition, promoting early detection through case-finding, appropriate assessment, risk stratification; and backed up by planned and coordinated care and support.

[Integrated care for older people with frailty](#) December 2016, British Geriatrics Society

The British Geriatrics Society and the Royal College of General Practitioners worked together to produce this report. An ageing society and the rising prevalence of frailty are game changers for the health and social care services, and our collaboration is designed to support GPs and geriatricians in responding to these significant new challenges.

[Future of an ageing population](#) 2016, Government Office for Science

The UK population is ageing. In mid-2014, the average age exceeded 40 for the first time. By 2040, nearly one in seven people is projected to be aged over 75. These trends, partially mitigated by migration rates, will have a major effect on the UK. The Office for Budget Responsibility projects total public spending excluding interest payments to increase from 33.6% to 37.8% of GDP between 2019/20 and 2064/65 – equivalent to £79 billion in today's terms – due mainly to the ageing population.

[Fit for Frailty Part 2](#) 2015, British Geriatrics Society

The purpose of Fit for Frailty Part 2 is to provide advice and guidance on the development, commissioning and management of services for people living with frailty in community settings. The audience for this guidance comprises GPs, geriatricians, Health Service managers, Social Service managers and Commissioners of Services. Fit for Frailty Part 2 is a companion report to an earlier BGS publication, Fit for Frailty Part 1 which provided advice and guidance on the care of older people living with frailty in community and outpatient settings (www.bgs.org.uk/index.php/resources-6/bgscampaigns/fit-for-frailty). There are three main sections

[Fit for Frailty Part 1](#) 2014, British Geriatrics Society

This guidance is intended to support health and social care professionals in the community, in outpatient clinics, in community hospitals and other intermediate care settings and in older people's own homes. Guidance for professionals encountering older people with frailty in acute hospitals has been published in the Silver Book¹ and work to develop a checklist to support the management of older people with frailty in acute hospital settings is ongoing.

[Better care for frail older people: working differently to improve care](#) 2014, Deloitte

The National Health Service's (NHS) greatest success has become its most daunting challenge. People are living longer but increasingly with one or more health conditions putting the current health and social care delivery model under unsustainable pressure as demand and costs escalate and quality is compromised. Over the past 30 years life expectancy has risen by 10 per cent and the likelihood of death before the age of 65 has reduced by a third. Older people as a group provide an invaluable economic and social contribution to society in areas such as volunteering, childcare, care of other adults and charitable giving. However, health and social care spending on people aged 65 and over, with at least one long-term condition, is increasing and is currently at least £30 billion a year (£15 billion on those over 75).

[Making our health and care systems fit for an ageing population](#) March 2014, The King's Fund

Our fragmented health and care system is not meeting the needs of older people, who are most likely to suffer problems with co-ordination of care and delays in transitions between services. This report sets out a framework and tools to help local service leaders improve the care they provide for older people across nine key components.

Case Studies

Frailty Care December 2020, Sussex Community NHS Foundation Trust

This innovation involved doctors, nurses and pharmacists working together to develop and test a new method of clinical care for frail inpatients in a community hospital in West Sussex. In addition to the standard medical and medicines management care, additional steps were designed and taken, and the effectiveness evaluated, within a Quality Improvement project.

Older people living with frailty 'virtual ward', West Dorset January 2019, NHS

Hundreds of older people living with frailty are being monitored through a 'virtual ward' which helps keep them out of hospital. Doctors, nurses, social care staff, physios and others in West Dorset discuss patients who are put on a rolling 'virtual' list each week if thought to be at risk of hospital admission.

Case studies 2017, NHS Acute Frailty Network

A series of case studies from the Acute Frailty Network.

Conference Abstract: Frailty flying squad: An emergency department focussed acute care of the elderly service Dr Genevieve Robson, Royal United Hospital NHS foundation trust December 2017, Emergency Medical Journal *Athens log in required**

Introduction The over 75 s make up 20% of our ED attendances. The greatest increase has been in the over 85 s. This very elderly cohort are more likely to be frail and are 10X more likely to require admission than 20-40 year olds and once in hospital have longer stays. There is evidence that multidisciplinary care and early Comprehensive Geriatric Assessment (CGA) improves outcomes for older patients,

reducing readmissions, long term care, greater satisfaction and lower costs. The aim of this project was to improve the acute care provided to our older patients at the Front Door of the hospital. Methodology 3 month pilot project underpinned by Big Room Quality Improvement methodology. The Frailty Big Room meets weekly and includes input from clinicians, QI experts and a data analyst. This project was driven by the following aims:

- *Frailty Flying Squad to see as many older+/-frail patients referred for admission as close to the front door as possible.
- *CGA at the front door with discharge planning from first review
- *MDT approach
- *Expedited discharge or transfer to other services from ED.
- *Review following day to make sure management plans being followed through or discharge without ward teams having to become involved.
- *Frailty Flying Squad Team: 2 Medical Nurse Practitioners Physiotherapist Consultant geriatrician . Key Performance Indicators: Length of Stay *Readmission within 30 days of initial review Results 355 patients were seen. 168 (47%) of patients were over 85 and the median Rockwood frailty score for the whole cohort was 6. 209 patients were ED referrals and 85 were GP referrals for admission. 237 (67%) patients were seen in ED, 49 in MAU and 7 in ED obs. During the pilot period, 97 patients who had been referred for admission were discharged direct from ED. 56 (16%) of patients had zero length of stay. A low number (9.4%) of patients were readmitted within 30 days. Figure 2 Length of stay for the > 85s 2016 and 2017 compared Conclusion A multidisciplinary Acute Care of the Elderly Team predominantly based in the Emergency department can provide effective early Comprehensive Geriatric Assessment; facilitating discharge home from the Emergency Department, reducing length of stay for those admitted and reducing readmission rates within 30 days.

Integrated care for older people with frailty December 2016, British Geriatrics Society

This report contains lots of case studies. The British Geriatrics Society and the Royal College of General Practitioners worked together to produce this report. An ageing society and the rising prevalence of frailty are game changers for the health and social care services, and our collaboration is designed to support GPs and geriatricians in responding to these significant new challenges.

[Developing staff to support frailty](#) n.d., Skills for Care
See part 2 for examples.

HEE Star

More resources and tools are available by searching for “**frailty**” in the [HEE Star](#)

Statistics

You can find relevant statistics on the [Health and Care Statistics Landscape](#)

Age UK also produced a the following statistics factsheet, last updated in May 2019 – [Later Life in the United Kingdom 2019](#) (see section 2.1.4 Frailty)

HEE National Data Programme

HEE staff can look at the [National Data Warehouse \(NDL\)](#) SharePoint site to find out more about datasets and Tableau products.

Published Peer Reviewed Research

COVID-19

[Age and frailty are independently associated with increased COVID-19 mortality and increased care needs in survivors: results of an international multi-centre study](#) May 2021, Age &

Ageing

Introduction: Increased mortality has been demonstrated in older adults with coronavirus disease 2019 (COVID-19), but the effect of frailty has been unclear. Methods: This multi-centre cohort study involved patients aged 18 years and older hospitalised with COVID-19, using routinely collected data. We used Cox regression analysis to assess the impact of age, frailty and delirium on the risk of inpatient mortality, adjusting for sex, illness severity, inflammation and co-morbidities. We used ordinal logistic regression analysis to assess the impact of age, Clinical Frailty Scale (CFS) and delirium on risk of increased care requirements on discharge, adjusting for the same variables. Results: Data from 5,711 patients from 55 hospitals in 12 countries were included (median age 74, interquartile range [IQR] 54–83; 55.2% male). The risk of death increased independently with increasing age (>80 versus 18–49: hazard ratio [HR] 3.57, confidence interval [CI] 2.54–5.02), frailty (CFS 8 versus 1–3: HR 3.03, CI 2.29–4.00) inflammation, renal disease, cardiovascular disease and cancer, but not delirium. Age, frailty (CFS 7 versus 1–3: odds ratio 7.00, CI 5.27–9.32), delirium, dementia and mental health diagnoses were all associated with increased risk of higher care needs on discharge. The likelihood of adverse outcomes increased across all grades of CFS from 4 to 9. Conclusion: Age and frailty are independently associated with adverse outcomes in COVID-19. Risk of increased care needs was also increased in survivors of COVID-19 with frailty or older age.

[The Demography and Characteristic of SARS-CoV-2 Seropositive Residents and Staff of Nursing Homes for Older Adults in the Community of Madrid: the SeroSOS Study](#) May 2021, Age and Ageing

BACKGROUND Nursing homes for older adults have concentrated large numbers of severe cases and deaths for COVID-19. METHODS Point seroprevalence study of nursing homes to describe the demography and characteristic of SARS-CoV-2 IgG-positive residents and staff. RESULTS Clinical information and blood samples were available for 9,332 residents (mean age 86.7 ± 8.1 years, 76.4% women) and 10,614 staff (mean age 45.6 ± 11.5 , 86.2% women). Up to 84.4% of residents had frailty, 84.9% co-morbidity and 69.3% cognitive impairment; 65.2% of workers were health-aides. COVID-19 seroprevalence was 55.4% (95% CI, 54.4-56.4) for older adults and 31.5% (30.6-32.4) for staff. In multivariable analysis frailty of residents was related with seropositivity (OR: 1.19, $p = 0.02$). In the case of staff, age > 50 years (2.10, $p < 0.001$), obesity (1.19, $p = 0.01$), being a health-aide (1.94, $p < 0.001$), working in a center with high seroprevalence in residents (3.49, $p < 0.001$), and contact with external cases of COVID-19 (1.52, $p < 0.001$) were factors associated with seropositivity. Past symptoms of COVID-19 were good predictors of seropositivity for residents (5.41, $p < 0.001$) and staff (2.52, $p < 0.001$). CONCLUSIONS Level of dependency influences risk of COVID-19 among residents. Individual and work factors, and contacts outside the nursing home are associated with COVID-19 exposure in staff members. It is key to strengthen control measures to prevent the introduction of COVID-19 into care facilities from the community.

[How COVID-19 will boost remote exercise-based treatment in Parkinson's disease: a narrative review](#) March 2021, NPJ Parkinson's Disease

The lack of physical exercise during the COVID-19 pandemic-related quarantine measures is challenging, especially for patients with Parkinson's disease (PD). Without regular exercise not only patients, but also nursing staff and physicians soon noticed a deterioration of motor and non-motor symptoms. Reduced functional mobility, increased falls, increased frailty, and decreased quality of life were identified as consequences of increased sedentary behavior. This work overviews the current literature on problems of supplying conventional physiotherapy and the potential of telerehabilitation, allied health services, and patient-initiated exercise for PD patients during the COVID-19 period. We discuss recent studies on approaches that can improve remote provision of exercise to patients, including telerehabilitation, motivational tools, apps, exergaming, and virtual reality (VR) exercise. Additionally, we provide a case report about a 69-year-old PD patient who took part in a 12-week guided climbing course for PD patients prior to the pandemic and found a solution to continue her climbing training independently with an outdoor rope ladder. This case can serve as a best practice example for non-instructed, creative, and patient-initiated exercise in the domestic environment in difficult times, as are the current. Overall, many recent studies on telemedicine, telerehabilitation, and patient-initiated exercises have been published, giving rise to optimism that facilitating remote exercise can help PD patients maintain physical mobility and emotional well-being, even in phases such as the COVID-19 pandemic. The pandemic itself may even boost the need to establish comprehensive and easy-to-do telerehabilitation programs.

[Conference Poster: "Pop-up" specialist end of life ward for covid-19—the Nottingham experience](#) March 2021, Age & Ageing

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.

[The comprehensive frailty assessment at forth valley royal hospital \(FVRH\) digitalised: For COVID-19 and beyond!](#) March 2021, Age & Ageing

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(s):** 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. **Result(s):** 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. **Conclusion(s):** 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.

Establishing a community frailty unit during the COVID19 pandemic March 2021, Age & Ageing

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(s): 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. Result(s): 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; coordination 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 67 k/bed/year this released 5,525 bed days and 16.9

beds with a return on investment of 1,132,300. Conclusion(s): 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.

Training and Education

Conference Abstract: a quality improvement project—physiotherapy caseload management on the older person's unit March 2021, Age & Ageing

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-reliability. 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.

Conference Abstract: Preparing the workforce for frailty, an education intervention for allied health professionals and community nurses in primary and community healthcare
January 2019, Physiotherapy *Abstract only**

Purpose: The Comprehensive Geriatric Assessment (CGA) is a multidisciplinary assessment that identifies the medical, psychosocial, and functional needs of older people. This service evaluation considers the impact of training allied health professionals (AHPs) and community nurses to undertake a CGA assessment in primary and community settings.

Method(s): A group of 30 AHPs and community nurses completed a training module on frailty and the geriatric comprehensive assessment. Ten days of classroom teaching was supplemented by 76 hours of supervised practice. Participants were assessed using an observed structured clinical examination, reflective essay and supervised peer case reviews. Learners' progression was tracked using an electronic geriatric competency framework. A mixed methods approach combined survey and focus group data to evaluate the educational programme. Focus groups with participants discussed the motivation to participate, confidence level,

learning aims and potential barriers to their learning. Students were also asked how they intended to incorporate new skills into their practice. A focus group with AHPs investigated their learning needs and how a CGA approach could be incorporated into their clinical practice. Survey data used Likert scales to evaluate the relevance, depth and potential to change clinical practice after each classroom day. Anonymised free text answers allowed learners to comment on the programme. Result(s): In general, participants were motivated to learn new skills to improve their patient care. Teaching sessions were scored as relevant, in-depth and likely to change their clinical practice. The main barriers to participation was the time pressure involved in balancing training with service provision. The mixed cohort of AHPs and community nurses provided peer learning and support which was highly valued by the participants. Focus group data with AHPs identified four main motivating factors for participation; recognising the deteriorating older patient, assessment skills including history taking and clinical examination, a greater overview of medical conditions and drugs that impact on patient function and improved communication with GPs. The AHPs described their educational needs in comparison to community nurses. These learning needs included interpreting investigations (urinalysis, blood sugar readings, blood pressure measurement and blood test results) and their understanding of the medication review. Practitioners described how they were often asked to see complex older patients at home as part of admission avoidance programmes and described how they planned to use their CGA skills in this setting. Conclusion(s): This evaluation suggests that it is feasible to train AHPs and community nurses to undertake a CGA assessment. Practitioners valued learning these CGA skills and planned to incorporate them into their clinical roles. Implications: Expected patient benefits include the early identification of frailty, production of an individualised care plan and improved patient

satisfaction with the community teams. Outcomes for workforce may include improved team flexibility, resource allocation, and job satisfaction. It is anticipated that the training will improve integration across community teams and communication with general practitioners. Further research is needed to understand the effectiveness (participant attainment, change in clinical practice and cost-benefit analysis) of geriatric competencies education programme for AHPs and community nurses.

Workforce Planning

[Workforce Planning for Community-Based Palliative Care Specialist Teams Using Operations Research](#) May 2021, Journal of Pain and Symptom Management

CONTEXT Many countries have aging populations. Thus, the need for palliative care will increase. However, the methods to estimate optimal staffing for specialist palliative care teams are rudimentary as yet. **OBJECTIVES** To develop a population-need workforce planning model for community-based palliative care specialist teams and to apply the model to forecast the staff needed to care for all patients with terminal illness, organ failure, and frailty during the next 20 years, with and without the expansion of primary palliative care. **METHODS** We used operations research (linear programming) to model the problem. We used the framework of the Canadian Society of Palliative Care Physicians and the Nova Scotia palliative care strategy to apply the model. **RESULTS** To meet the palliative care needs for persons dying across Nova Scotia in 2019, the model generated an estimate of 70.8 nurses, 23.6 physicians, and 11.9 social workers, a total of 106.3 staff. Thereby, the model indicated that a 64% increase in specialist palliative care staff was needed immediately, and a further 13.1% increase would be needed during the next 20 years. Trained primary palliative care providers currently meet 3.7% of need, and with their expansion are expected to meet 20.3%

by 2038. **CONCLUSION** Historical, current, and projected data can be used with operations research to forecast staffing levels for specialist palliative care teams under various scenarios. The forecast can be updated as new data emerge, applied to other populations, and used to test alternative delivery models.

[The association between physician staff numbers and mortality in English hospitals](#) February 2021, EClinicalMedicine

Background Physician medical specialties place specific demands on medical staff. Often patients have multiple comorbidities, frailty is common, and mortality rates are higher than other specialties such as surgery. The key intervention for patients admitted under physician subspecialties is the care provided on the ward. The current evidence base to inform staffing in physician medical specialty wards is limited. The aim of this analysis is to investigate the association between medical staffing levels within physician medical specialties and mortality. **Methods** This study is a cross-sectional analysis of national data, which is aggregated at provider level. Medical beds per senior, middle grade and junior physicians employed in physician medical specialties were calculated from national employment records for acute hospitals in England, in 2017. Outcome measures included unadjusted mortality rate and Summary Hospital-level Mortality Indicator (SHMI) in physician medical specialties. Both Raw mortality and SHMI include deaths during admission or within 30 days following discharge. Linear regression models were constructed for each medical staffing grade for unadjusted mortality, SHMI and SHMI adjusted for local provider factors. **Findings** The mean number of medical beds per senior, middle grade and junior physicians were 7.3(SD 2.5), 19.7(11.5), 10.1(3.1) respectively. Lower bed numbers per medical staff grade were associated with lower than expected mortality by SHMI; senior(Coefficient 0.012(95%CI:0.005-0.018),p = 0.001), middle

grade(0.002(0.0002-0.005), $p = 0.032$) and junior(0.008(0.002-0.015), $p = 0.014$). Hospital providers were more likely to achieve a better than expected mortality (SHMI<1) if beds per physician were lower than; 5.3, 14.6 and 9.0 for senior, middle grade and junior doctors respectively. Interpretation Acute hospital providers with fewer beds per medical staff of all grades are associated with lower than expected mortality. Funding No external funding is associated with this analysis.

[The use of acuity and frailty measures for district nursing workforce plans](#) January 2018, British Journal of Community Nursing *Abstract only**

This article discusses the use of Quest acuity and frailty measures for community nursing interventions to quantify and qualify the contributions of district nursing teams. It describes the use of a suite of acuity and frailty tools tested in 8 UK community service trusts over the past 5 years. In addition, a competency assessment tool was used to gauge both capacity and capability of individual nurses. The consistency of the results obtained from the Quest audits offer significant evidence and potential for realigning community nursing services to offer improvements in efficiency and cost-effectiveness. The National Quality Board (NQB) improvement resource for the district nursing services ([NQB, 2017](#)) recommends a robust method for classifying patient acuity/frailty/dependency. It is contended the Quest tools and their usage articulated here offer a suitable methodology.

Supply

[Attracting, recruiting and retaining nurses and care workers working in care homes: the need for a nuanced understanding informed by evidence and theory](#) January 2021, Age and Ageing *Abstract only**

The care home sector relies on nurses and care workers to deliver care to residents living with frailty and complex needs. However, attracting, recruiting and retaining staff is one of the biggest challenges facing this sector. There is evidence available that describes factors that influence staff decisions to join and/or remain in the care home workforce, for example, individual rewards (such as feeling valued at work or training opportunities), relationships with colleagues and residents, supportive management or working arrangements (including flexible hours). However, it is less clear how different strategies are informed by evidence to improve recruitment and retention. Care homes are heterogeneous in terms of their size, staffing levels and mix, staff age groups, geographical location and working conditions. What matters to different members of the care home workforce will vary across nurses and care workers of different ages and levels of qualification or experience. Recognising this diversity is key: understanding how to attract, recruit and retain staff needs to discriminate and offer solutions that address this diversity. This important area of practice does not lend itself to a 'one-approach-fits-all' solution. This commentary provides a brief overview of known workforce challenges for the care home sector and argues for studies that use empirical evidence to test different theories of what might work for different staff, how and why, and in different circumstances.

Staff views, perceptions, and experiences

[Community care staff attitudes towards delivering a falls prevention exercise intervention to community care clients](#) March 2021, Health & Social Care in the Community *Abstract only**

Millions of older people world-wide receive community care services in their home to assist them to live independently. These services often include personal care, domestic

assistance and social support which are delivered by non-university trained staff, and are frequently long term. Older people receiving community care services fall 50% more often than individuals of similar age not receiving services. Yet, few ongoing community care services include exercise programs to reduce falls in this population. We conducted an earlier study to examine the feasibility of community care staff delivering a falls prevention program. A critical finding was that while some of the assessment and support staff responsible for service delivery delivered the falls prevention exercise program to one or two clients, others delivered to none. Therefore, the aim of this qualitative sub-study was to understand reasons for this variation. Semi-structured interviews were conducted with 25 participating support staff and assessors from 10 community care organisations. Staff who had successfully delivered the intervention to their clients perceived themselves as capable and that it would benefit their clients. Older clients who were positive, motivated and wanted to improve were perceived to be more likely to participate. Staff who had worked at their organisation for at least 5 years were also more likely to deliver the program compared to those that had only worked up to 2 years. Staff that did not deliver the intervention to anyone were more risk averse, did not feel confident enough to deliver the program and perceived their clients as not suitable due to age and frailty. Experienced staff who are confident and have positive ageing attitudes are most likely to deliver falls prevention programs in a home care organisation.

[The benefits and challenges of embedding specialist palliative care teams within homeless hostels to enhance support and learning: Perspectives from palliative care teams and hostel staff](#) March 2021, Palliative Medicine

BACKGROUND People residing in UK homeless hostels experience extremely high rates of multi-morbidity, frailty and

age-related conditions at a young age. However, they seldom receive palliative care with the burden of support falling to hostel staff. AIM To evaluate a model embedding palliative specialists, trained as 'homelessness champions', into hostels for two half-days a month to provide support to staff and residents and facilitate a multidisciplinary approach to care. DESIGN An exploratory qualitative design. SETTING/PARTICIPANTS Four homeless hostels in London, UK, including nine hostel managers/support staff and seven palliative care specialists (five nurses and two social workers). RESULTS Benefits to introducing the model included: developing partnership working between hostel staff and palliative care specialists, developing a holistic palliative ethos within the hostels and improving how hostel staff seek support and connect with local external services. Challenges to implementation included limited time and resources, and barriers related to primary care. CONCLUSION This is the first evaluation of embedding palliative care specialists within homeless hostels. Inequity in health and social care access was highlighted with evidence of benefit of this additional support for both hostel staff and residents. Considering COVID-19, future research should explore remote ways of working including providing in-reach support to homelessness services from a range of services and organisations.

[Preventing frailty in older people: An exploration of primary care professionals' experiences](#) June 2020, International Journal of Older People Nursing *Abstract only**

BACKGROUND An increasing number of the ageing population worldwide is at risk of becoming frail and incapacitated. This has the potential to impact not only on the well-being of individuals but also on the sustainability of healthcare systems. OBJECTIVE The aim of this study was to explore the views and experiences of frailty from the perspective of primary care professionals, including nurses, who work directly with older

people within the community. METHODS A qualitative approach with a descriptive phenomenological methodology was used, which focused on exploration of primary care professionals' current experiences of early detection and prevention of the onset of frailty. Four multi-professional focus groups were held with a total of thirty-three primary care professionals who worked with older people as part of their daily role. Participants included district nurses, general practitioners, home care workers, physiotherapists and social workers. RESULTS Professional views encompassed typical patterns of ageing, loneliness, presence of comorbidity, disability and end of life, with social conditions prevalent in most frailty they encountered. Three main themes emerged: the psychosocial nature of frailty, late detection of frailty and barriers to the feasibility of prevention. Physical frailty was considered a constituent part of ageing, which recognised the presence of a skills gap related to the detection of the early signs of frailty. Present health and social care systems are not designed to prevent frailty, and the competencies required by health and social care professionals are not usually included as part of their training curricula. This may hinder opportunities to intervene to prevent associated decline in ability of older adults. CONCLUSIONS To enhance the early assessment of frailty and the planning of preventive multi-factorial interventions in primary care and community settings, training and effective detection strategies should be incorporated into the role and daily care activities of primary care professionals. IMPLICATIONS FOR PRACTICE Using a multidimensional assessment instrument can help primary care professionals to identify older people who are frail or may become frail. In order to be able to carry out this properly strong inter-professional collaboration is needed. In addition, interventions aimed at preventing frailty or adverse outcomes of frailty should be tailor-made and thus should meet the needs and wishes of an older person.

Community care staff attitudes towards delivering a falls prevention exercise intervention to community care clients July 2020, Health and Social Care in the Community *Abstract only** Millions of older people world-wide receive community care services in their home to assist them to live independently. These services often include personal care, domestic assistance and social support which are delivered by non-university trained staff, and are frequently long term. Older people receiving community care services fall 50% more often than individuals of similar age not receiving services. Yet, few ongoing community care services include exercise programs to reduce falls in this population. We conducted an earlier study to examine the feasibility of community care staff delivering a falls prevention program. A critical finding was that while some of the assessment and support staff responsible for service delivery delivered the falls prevention exercise program to one or two clients, others delivered to none. Therefore, the aim of this qualitative sub-study was to understand reasons for this variation. Semi-structured interviews were conducted with 25 participating support staff and assessors from 10 community care organisations. Staff who had successfully delivered the intervention to their clients perceived themselves as capable and that it would benefit their clients. Older clients who were positive, motivated and wanted to improve were perceived to be more likely to participate. Staff who had worked at their organisation for at least 5 years were also more likely to deliver the program compared to those that had only worked up to 2 years. Staff that did not deliver the intervention to anyone were more risk averse, did not feel confident enough to deliver the program and perceived their clients as not suitable due to age and frailty. Experienced staff who are confident and have positive ageing attitudes are most likely to deliver falls prevention programs in a home care organisation.

Frailty: an in-depth qualitative study exploring the views of community care staff February 2019, BMC Geriatrics

BACKGROUND Frailty is seen across various health and social care settings. However, little is known about how healthcare professionals, particularly those who provide care for older adults living in the community view frailty. There is also a dearth of information about the extent to which a shared understanding of frailty exists across the various disciplines of care. Such an understanding is crucial across care professionals as it ensures consistent assessment of frailty and facilitates interdisciplinary working/collaboration which is a key component in the management of frailty. This study aimed to explore: (i) how community care staff from various specialties viewed frailty; (ii) whether they had a shared understanding; and (iii) how they assessed frailty in everyday practice. **METHODS** Semi-structured interviews were conducted with a purposive sample of 22 community care staff from seven specialties, namely: healthcare assistants, therapy assistants, psychiatric nurses, general nurses, occupational therapists, physiotherapists and social workers, recruited from four neighbourhood teams across Cambridgeshire, England. Interviews were analysed thematically. **RESULTS** There was a shared narrative among participants that frailty is an umbrella term that encompasses interacting physical, mental health and psychological, social, environmental, and economic factors. However, various specialties emphasised the role of specific facets of the frailty umbrella. The assessment and management of frailty was said to require a holistic approach facilitated by interdisciplinary working. Participants voiced a need for interdisciplinary training on frailty, and frailty tools that facilitate peer-learning, a shared understanding of frailty, and consistent assessment of frailty within and across specialties. **CONCLUSIONS** These findings underscore the need to: (i) move beyond biomedical descriptions of frailty; (ii) further explore the interacting nature of the various components of the frailty umbrella, particularly the

role of modifiable factors such as psychological and socioeconomic resilience; (iii) care for frail older adults using holistic, interdisciplinary approaches; and (iv) promote interdisciplinary training around frailty and frailty tools to facilitate a shared understanding and consistent assessment of frailty within and across specialties.

Ambulance clinicians' perceptions, assessment and management of frailty: thematic analysis of focus groups

December 2018, British Paramedic Journal

Introduction More than half of all patients attended by the South Western Ambulance Service NHS Foundation Trust are over the age of 65. In 2017, 62% of older patients who were the subject of a frailty assessment were believed to have at least mild frailty (1/5 of all patients). Frailty is an increasingly relevant concept/diagnosis and ambulance services are well positioned to identify frailty and influence the 'care pathways' through which patients are directed (thereby influencing health outcomes). Throughout the South Western Ambulance Service NHS Foundation Trust, a mandatory training session regarding frailty was delivered to clinical personnel in 2017 and frailty assessment tools are available on the electronic Patient Clinical Record. **Aim** To explore and gain insight into the current knowledge, practice and attitudes of ambulance clinicians regarding frailty and patients with frailty. **Methods** Two focus groups of ambulance clinicians (n = 8; n = 9) recruited from across the South Western Ambulance Service NHS Foundation Trust were held in October 2017. Focus group discussions were analysed thematically. **Results** Knowledge of conceptual models of frailty, appropriate assessment of patients with frailty and appropriate care pathways varied substantially among focus group participants. Completion of the 'Rockwood' Clinical Frailty Scale for relevant patients has become routine. However, conflicting opinions were expressed regarding the context and purpose of this. The Timed-Up-and-Go mobility

assessment tool is also on the electronic Patient Clinical Record, but difficulties regarding its completion were expressed. Patient management strategies ranged from treatment options which the ambulance service can provide, to referrals to primary/community care which can support the management of patients in their homes, and options to refer patients directly to hospital units or specialists with the aim of facilitating appropriate assessment, treatment and discharge. Perceptions of limited availability and geographical variability regarding these referral pathways was a major feature of the discussions, raising questions regarding awareness, capacity, inter-professional relationships and patient choice. Conclusion Knowledge, practice and attitudes of ambulance staff, with regard to frailty, varied widely. This reflected the emerging nature of the condition, both academically and clinically, within the ambulance profession and the wider healthcare system.

[Exploring frailty: Community physical and occupational therapists' perspectives 2011](#), Physical and Occupational Therapy in Geriatrics *Abstract only**

Frailty is prevalent among community-dwelling older adults. Community, physical and occupational therapists provide at-home care to older adults, yet little is known about their ability to identify frailty, specifically the early development (pre-frailty). Objectives: To explore therapists' perspectives on frailty, and develop a definition of how they view and manage frailty in their practice. Eleven therapists (17.3 +/- 12.0 years of experience) completed repertory grid-guided interviews. Principal component analysis identified relationships in data and highlighted themes, and constant comparative analysis built upon emerging themes. Therapists recognized frailty as self-imposed isolation due to reduced motivation, lack of safe judgment, and declining physical fitness resulting in functional dependence. Therapists' image of frailty included deterioration

of physical, mental, and social capacities, leading to an inability to thrive. Therapists recognized that the underlying comorbidities contributed to the unique expression of, frailty within individual clients. Therapists' distinct perspectives of frailty add to current proposed definitions by establishing early identifiers to enable an effective and useable definition of 'what is frail?'

Primary Care and Community

[Creation of a New Frailty Scale in Primary Care: The Zulfiqar Frailty Scale \(ZFS\)](#) April 2021, Medicines (Basel, Switzerland)

Introduction: Very few frailty scales are used by general practitioners as they are time consuming and cumbersome. We designed a new scale for the rapid detection of frailty. Methods: We developed a frailty screening tool for use in primary care, referred to as the Zulfiqar Frailty Scale (ZFS). This scale was tested in a general practitioner's office for six months in Plancoët, France. Only patients over 75 years of age with Activities of Daily Living (ADL) ≥ 4 were included. The objective of this research was to validate the scale, evaluate its performance, and compare this screening tool with other scales such as the Fried Scale, the Gerontopole Frailty Screening Tool (GFST), the modified Short Emergency Geriatric Assessment (mSEGA) Grid A, and the Comprehensive Geriatric Assessment (CGA). Results: A total of 102 patients were included, with a mean age of 82.65 ± 4.79 ; 55 were women and 47 were men. The percentage of frail subjects was 63.7% in our scale, 67.7% in the mSEGA grid A, 75.5% in the GFST, and 60.8% for the Fried criteria. After a comprehensive geriatric assessment, frailty syndrome was found in 57 patients (55.9%). In general, both scales showed solid performance, and differences between them in the sample were minimal. As the CGA showed a prevalence of frailty of 55.9%, a similar

prevalence threshold for the ZFS (i.e., 64% at the threshold ≥ 3 could be assessed). The completion time for our scale was less than two minutes, and staff required no training beforehand. Its sensitivity was 83.9%, and its specificity was 67.5%. Its positive predictive value was 80%, and its negative predictive value was 73%. The Pearson correlations between the geriatric scores were all strong and roughly equivalent to each other.

Conclusions: Our frailty screening scale is simple, relevant, and rapid (taking less than two minutes).

Assessment of the validity and acceptability of the online FRAIL scale in identifying frailty among older people in community settings March 2021, *Maturitas Abstract only**

Objectives: To assess the validity and acceptability of the online FRAIL scale in identifying frailty in community settings.

Methods: Frailty was assessed using the online version of the FRAIL scale (a simple frailty questionnaire). Validity of the scale was examined in a sample of 1882 persons aged 60 years or older (including a pilot sample of 65 persons for assessing the face validity) recruited from 24 elderly centres in Hong Kong. Convergent validity was estimated using correlation coefficients between scores on the FRAIL, SARC-F (a simple questionnaire for assessing sarcopenia) and AMIC (Abbreviated Memory Inventory for the Chinese). Predictive validity was examined by logistic regression using IADL (Instrumental Activities of Daily Living) limitations and hospitalization as outcomes.

Acceptability of the scale was assessed from the perspective of a sub-sample of 205 older persons and 33 centre staff. Results: Following minor revisions, all participants were able to understand and answer the online FRAIL scale. The FRAIL scale correlated with SARC-F ($r = 0.627$, $p < 0.001$) and AMIC ($r = 0.302$, $p < 0.001$). Being pre-frail and frail were associated with incident IADL limitations (OR = 1.58, 95 %CI = 1.11-2.25 and OR = 3.01, 95 %CI = 1.87-4.84, respectively) and incident hospitalization (OR = 1.38, 95 %CI = 1.03-1.85 and OR = 2.79,

95 %CI = 1.89-4.12, respectively) at year 2, after controlling for age, sex, marital status, and educational level. 77.8 % of participants agreed that the scale would enable them to understand their health status. However, only 35.0 % accepted a digital approach for conducting health assessment or accessing assessment results. 90.9 % of centre staff agreed that the scale could be used to identify their members who are potential candidates for frailty intervention. Conclusions: The online FRAIL scale is valid for use in community elderly centres in identifying frailty. Further effort is required to improve the acceptability of the online FRAIL scale among older persons.

Conference Abstract: This is (probably) not the frailty solution you are looking for: Utilisation of a novel stand-alone community-based ambulatory care unit March 2021, Age & Ageing

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 70 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 3 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.

[How can identifying and grading frailty support older people in acute and community settings?](#) 2020, Nursing Older People *Abstract only**

Identifying frailty is essential to support older people living with complex health and social care needs. This article discusses how a Florence Nightingale Foundation travel scholar used her scholarship to explore best practice in identifying frailty in acute and community settings in Scotland with the aim of developing services for people living with frailty locally and regionally in England. As the move to integrated care services develops in England, valuable insights from Scotland will assist in the proactive design of bespoke services around the needs of individuals in the community and, when acutely unwell, in the hospital setting.

[Creating a complex needs team for people with frailty: Michele Pulman reveals how she combines the skills of a frailty nurse](#)

[and a GP to provide holistic care in the community](#) November 2020, Primary Health Care *Abstract only**

In her new role as a complex care and frailty nurse in general practice, Michele Pulman (pictured) is bringing together the skills and experience she has built up over years working in the community.

[Think local, act personal: Lessons from an integrated primary care initiative for frail, older people](#) August 2019, International Journal of Integrated Care

Introduction: An increasing number of older people living at home with complex needs challenges health and social care systems. SUSTAIN or 'Sustainable Tailored Integrated Care for Older People in Europe' is a 4-year project which aims to support and monitor improvements to established integrated care initiatives for older people living at home with multiple health and social care needs. A primary care medical centre in the South East of England was selected as one of 14 case sites delivering integrated care for this population. The 'Over 75 Service' is led by senior practice nurses and delivered by a team of general practitioners, community nurses, social care workers, voluntary sector staff, health trainers and care navigators. This paper presents an evaluation of the implementation of this service and explores explanations for success. A Patient Participation Group (PPG) gave feedback on the service and the evaluation. Methods: SUSTAIN uses a multiple embedded case study design (Yin, 2013) and an implementation science approach. Data was collected from multiple sources including interviews and focus groups with Over 75 Service managers and professionals (n=7), steering group minutes (n=9) and field notes, staff hours data. Data was analysed thematically. Results and Discussion: A key decision, made early on in the design of the service, was to use the Dalhousie frailty screening tool which enabled a shared vision and understanding of frailty. Collaboration and multidisciplinary

teamworking was facilitated by effective multidisciplinary team meetings, which provided a vehicle for establishing personal contacts, sharing information, promoting understanding of individual roles and responsibilities and increasing knowledge of available services. There was a culture of inclusiveness with all agencies valued equally for their contribution. Positive interpersonal relationships were key to the success of the service and direct, personal contact was highly valued. Organisational structures supported the development of close working relationships and collaboration as one individual from each organisation was assigned to the Over 75 Service. The practice matrons were a single point of contact for service users and staff and were able to share information and provide advice and support to the team. Specific challenges were short-term funding contracts, increasing demand and a lack of capacity to deliver some services. There were also challenges around data protection, access to data and unwieldy IT systems hindering information sharing. Conclusions: A highly localised organisational structure, positive interprofessional personal relationships and a shared vision were important ingredients facilitating successful implementation of the Over 75 Service. Lessons Learnt: Relational continuity is an important enabler of integrated care initiatives for older people with complex needs in a primary care setting. However, delivery is dependent on the availability of adequate resources. Limitations: Although results are context-specific, lessons can be learnt about what works in terms of delivering integrated care for frail, older people in this setting. Suggestions for further research: Further research is needed on the scale and spread of integrated care initiatives in primary care.

[Implementing change in primary care practice: lessons from a mixed-methods evaluation of a frailty initiative](#) April 2018, BJGP Open

Background The NHS is facing increasing needs from an aging population, which is acutely visible in the emerging problem of frailty. There is growing evidence describing new models of care for people living with frailty, but a lack of evidence on successful implementation of these complex interventions at the practice level. **Aim** This study aimed to determine what factors enable or prevent implementation of a whole-system, complex intervention for managing frailty (the PACT initiative) in the UK primary care setting. **Design & setting** A mixed-methods evaluation study undertaken within a large clinical commissioning group (CCG). **Design and analysis** was informed by normalisation process theory (NPT). **Method** Data collection from six sites included: observation of delivery, interviews with staff, and an online survey. **NPT-informed analysis** sought to identify enablers and barriers to implementation of change. **Results** Seven themes were identified. PACT was valued by professionals and patients but a lack of clarity on its aims was identified as a barrier to implementation. Successful implementation relied on champions pushing the work forward, and dealing with unanticipated resistance. Contracts focused on delivery of service outcomes, but these were sometimes at odds with professional priorities. Implementation followed evidence-informed rather than evidence-based practice, requiring redesign of the intervention and potentially created a new body of knowledge on managing frailty. **Conclusion** Successful implementation of complex interventions in primary care need inbuilt capacity for flexibility and adaptability, requiring expertise as well as evidence. Professionals need to be supported to translate innovative practice into practice-based evidence.

[Frail older people with multi-morbidities in primary care: a new integrated care clinical pharmacy service](#) February 2018, International Journal of Clinical Pharmacy

Background Older people confined to their own homes due to frailty, multiple longterm conditions and/or complex needs, are known to be at risk of medicines-related problems. Whilst a health and social care team approach to supporting these patients is advocated, there is limited evidence regarding how pharmacists can best contribute. **Objective** To describe a new specialist pharmacy service (called the integrated care clinical pharmacist) in terms of how it works, what it achieves and its policy implications. **Setting** Patients' own homes in Lambeth, London, UK. **Method** Community matrons identified patients who were experiencing medicines related problems. These were referred to the integrated care clinical pharmacist who undertook a full medication review and recorded activities, which were independently analysed anonymously. **Main outcome measure** Medicines-related problems and the associated interventions. **Result** 143 patients were referred to the service over a 15-month period. A total of 376 medicines-related problems were identified: 28 (7%) supply issues, 107 (29%) compliance issues, 241 (64%) clinical issues. A diverse range of interventions were instigated by the pharmacist, requiring the coordination of community pharmacists, primary and secondary health and social care professionals. **Conclusion** This project demonstrated that including an integrated care clinical pharmacy service as part of the health and social care team that visits frail, older people in their own homes has benefits. The service operated as part of a wider inter-professional community team. The service also supported current health policy priorities in medicines optimization by identifying and addressing a wide range of medicines related problems for this vulnerable patient group.

[An evaluation of an integrated primary care approach to improve well-being among frail community-dwelling older people](#) December 2016, International Journal of Integrated Care (IJIC)

Introduction: A major challenge in primary health care is the substantial increase of the proportion of frail older persons with long-term conditions and multiple complex needs. The traditional primary care system in the Netherlands is fragmented and reactive. Consequently, current primary health care is not able to cope effectively with the increasing demands for health and social care, and to improve well-being among frail community-living older people. This calls for a fundamental transformation of current models of primary care by adopting integrated care. Therefore, the aim is to improve quality of primary care and well-being of frail community-living older people by implementing and evaluating an innovative integrated care approach, which is called Finding and Follow-up of the Frail (FFF). **Methods:** The integrated primary care approach FFF The overall aim of the FFF approach is to redesign primary care for frail community-dwelling older people in order to enhance patient outcomes and quality of care. The core elements of the FFF approach are (1) the proactive case finding of frail older people in the community by means of assessing frailty in the physical, psychological and social domain, (2) establishing an integrated primary care system including case management and individualized care plans, (3) realizing effective coordination between health and social sectors and forming multidisciplinary care teams, and (4) engaging older people towards self-care and selfmanagement, and empowering them to coproduce care. The FFF approach has been implemented in several GP practices in the western part of the Province of Brabant in the Netherlands. **Study design:** The ongoing (cost)effectiveness study has a matched quasi-experimental design with a pretest and posttest (12 month follow-up) and is conducted between September 2014 and June 2016. A combination of quantitative and qualitative research methods are employed to evaluate effects, processes and costs of the FFF approach. In total, 356 frail older persons (75 years and older) of 11 GP practices that implemented the FFF

approach are compared with 235 frail older people of 4 GP practices providing care as usual. The primary outcome measure is well-being (Social Production Function Instrument for the Level of well-being [SPF-IL]). Several secondary outcomes are measured, like self-management abilities (Self-Management Ability Scale Short version [SMAS-S]). In addition, data are collected from health care professionals on several outcome measures, for example quality of integrated care (Assessment of Chronic Illness Care Short version [ACIC-S]). The ACIC-S is based on the six areas of system redesign proposed by the Chronic Care Model (CCM). Other measures include functioning of multidisciplinary teams and care coordination. Baseline measures will be compared with the outcomes on the 12 month follow-up by means of multilevel analyses and the (cost)effectiveness of the FFF approach will be determined. Results: At baseline, frail older people (N=589) had a mean age of 83.7 years (SD = 5.2) and 68.4% were women. The mean well-being score within the study population was 2.63 (SD = 0.49, range 1-4 with higher scores indicating greater well-being). With respect to selfmanagement abilities, a mean score of 3.67 (SD = 0.88, range 1-6 with higher scores indicating higher self-management abilities) was reported. Health care professionals involved in the FFF approach (N=52) were (geriatric) nurses or practice nurses (25%), general practitioners (21.2%), physiotherapists (7.7%), elderly care physicians (5.8%) or other professionals (e.g. case managers). The mean ACIC-S score was 6.36 (SD = 1.31, range 0-11), indicating advanced integrated care delivery. Scores on all six CCM dimensions can be improved in order to optimize quality of integrated care for frail community-living older people. Both outcome measures of frail adults and health care professionals will be presented. Preliminary results of the (cost)effectiveness of the FFF approach will be presented at the International Conference on Integrated Care 2016. The effects of the FFF approach compared with care as usual on well-being and

quality of care will be discussed. An extensive description of the FFF approach and its barriers and facilitators will be provided. Furthermore, we will discuss the expected benefits, sustainability and transferability. Discussion and conclusion: The implementation and evaluation of the FFF approach is an important step towards a more integrated care model for frail community-dwelling adults in the Netherlands. This ongoing evaluation study will reveal preliminary insights into the rationale and effectiveness of an integrated primary care approach. The process of integrating care and social services across the continuum of primary care and across professional boundaries is reflected upon. An implication for future research is to extend the follow-up period in order to determine the long-term effects of the integrated care approach.

Nursing

[The role of the registered nurse in supporting frailty in care homes](#) July 2019, British Journal of Nursing

People in nursing and residential homes are more likely to suffer frailty. Registered nurses are a crucial component of the care delivery service and can offer support to patients who have complex care needs and comorbidities and are at risk of unplanned admissions to secondary care. This article explores frailty and the role of the nurse in assessing for frailty. Three aspects of patient care-nutrition status, polypharmacy and exercise and cognitive function-are discussed as areas where nurses can target their interventions in order to support those considered as frail, aiming to reduce the impact of frailty and negative health outcomes.

[Frailty: a term with many meanings and a growing priority for community nurses](#) August 2016, British Journal of Community Nursing *Abstract only**

The question of exactly what frailty is and what that may mean for patients is extremely complex. This is a very conceptual problem requiring a broad and long-term solution. It is not a disease or a condition that can be treated in isolation. Frailty is a collection of contributing factors that culminate in an individual being susceptible to poorer outcomes following health-care interventions and minor illness. The solution to such a complex problem lies in engaging and empowering staff to understand and champion frailty. Once better understood, it will be possible to educate and enable this workforce to recognise the signs of frailty, poor prognosis and patients requiring more specialised palliative care. Informing staff working within a health-care economy of this issue must be the first step in a shift towards managing patients with frailty more appropriately, and streaming their care towards the correct care pathways sooner. This article discusses what frailty is, what it may mean for patients, and attempts to expand on why the construct of frailty is a prevalent issue for community nurses. The link between frailty and mortality is discussed and how targeted appropriate advanced care planning may be used to address this demographic challenge.

[What are community nurses experiences of assessing frailty and assisting in planning subsequent interventions?](#) September 2017, British Journal of Community Nursing *Abstract only**

With an ageing population and increasing focus on community care, this study aimed to explore the experiences of community nurses in assessing frailty and planning interventions around frailty. Six community nurses were recruited for face-to-face semi-structured interviews as part of this qualitative study which was underpinned by a competence framework (Royal College of Nursing, 2009). Thematic analysis was used and frailty was identified as an emerging topic within practice. Participants discussed several aspects associated with frailty; however,

some uncertainty around the concept of frailty and its definition was noted, particularly for staff who had received limited frailty training. Participants had a growing awareness of frailty in practice, but challenges-including time constraints and staffing within some roles, a perception of limited services to support older people, and for some a lack of confidence and training-presented barriers to frailty assessment. The Rockwood frailty scale was used by participants within practice, but evidence suggested it was felt to lack validity within the community setting.

[Frailty and its significance in older people's nursing](#) 2011, Nursing Standard *Athens log in required**

The term frail is commonly used to describe older people, but reports on the care of older adults in hospital highlight that the clinical implications of frailty are not understood fully by all nurses. Frailty can be an indicator of older people's health status and healthcare needs. An understanding of frailty and its mechanisms will help nurses to determine care priorities, particularly the urgency for anticipatory, proactive, preventive and compensatory care to prevent unnecessary mortality and morbidity. This article discusses the significance of frailty in older people's nursing. It highlights the responsibility of registered nurses to recognise deterioration in health as a result of frailty and to implement appropriate interventions.

Advanced Clinical Practitioners

[Conference Abstract: Outcomes of an advanced nurse practitioner-led pops service in a district general hospital](#) March 2021, Age & Ageing

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.

Conference Abstract: Advanced clinical practitioners and their role in delivering cga to streamline the management of patients living with frailty February 2019, Age and Ageing

Topic: Older people living with frailty are at risk of recurrent hospital admissions. CGA is associated with decreased morbidity and better cognition. As older people are susceptible to repeat assessments, frequent moves and treatment delays consequent to poorly integrated services, mechanisms to ensure personalised care plans remain responsive to patient's needs after discharge are not always robust due to lack of clarity within the MDT of roles and responsibilities. Intervention(s): Two newly appointed Advanced Clinical Practitioners (ACP) identified older people with frailty admitted onto the acute medical unit from a defined geographical area. Documentation was on an inter-professional proforma containing elements of the CGA as well as the clinical frailty scale (CFS). Assessments were continued during admission and completed after discharge at the patient's residence. Where appropriate, anticipatory care plans were written by the ACPs in conjunction with the patient. The ACPs remained custodians of the care plans and ensured they remained responsive to the patient's needs over time. Data was collected on admission rate in the last year as well as post implementation of the CGA process. Improvement: Out of 242 patients screened, the ACPs identified 44 patients living with frailty (CFS > 5) and conducted over 100 home visits between May 2017 and January 2018. Data was available for 30 patients. The mean admission rate pre CGA was 2.5 and mean hospital length of stay (LOS) during these admissions was 10.09 days (n = 25). Advanced care plans were completed on 20 (67%) patients. Assessment, proactive care planning and follow up was associated with a mean readmission rate of 1.1 and mean LOS of 6.6 days during the readmission, a decrease of 4.3 days. Six patients died in the study period (CFS 6-8). The mean number of days between initial admission and death of

97.7 days (range 45-209). Discussion(s): Living with moderate to severe frailty is associated with recurrent admissions and higher LOS. We were unable to control for several confounding factors but personalised, proactive care planning and follow up appears to be associated with fewer readmissions and LOS. Investing in dedicated, skilled practitioner workforce who are able to assess and manage patients living with frailty in conjunction with the MDT is likely to lead to substantial cost savings for a trust.

[Conference Abstract: An inter-professional advanced practice approach to Frailty @ the front door; optimising outcomes for patients with frailty through workforce re-design](#) January 2019, Physiotherapy *Abstract only**

Purpose: To respond to the increasing number of frail older adults and the complexities of their presentation (Clegg et al, 2013), a diverse and advancing skill set is required (BGS, 2017). Service redesign was undertaken to transform the workforce to improve patient experience in patients presenting with frailty by providing alternative pathways to acute admission and supporting patients as close to home as possible, using a patient centred approach. The team promptly recognises deterioration of the older adult and ensures appropriate pathways are identified for patients who require acute hospital care. Method(s): Service redesign included extending length of day and remodelling team to work 12.5hour shifts across 7 days to provide a truly sustainable service. Integrating advanced practice into the work force, a physio led interdisciplinary team including frailty advanced nurse practitioners and developing role in frailty advanced physiotherapy practitioners. The team delivers CGA for patients screened as frailty positive at all front door areas to the acute hospital site and aims to prevent admission by promoting independence and supporting with alternative pathways to acute care such as hospital at home or

re-enablement services. The team consists of nurses, physiotherapists, occupational therapists and assistant frailty practitioners who have undergone skill sharing. To strive to provide excellence in care of frailty, set pathways, recognise the deteriorating patient and transfers of care for example to H@H and re-enablement teams. Act as a point of geriatric liaison by providing outreach work on delirium care and falls and taking a specialist team approach to this. Result(s): Improved flow and capacity through front door areas. Significant reduction in length of stay for over 65's within assessment area and medicine for the elderly wards. Rapid early identification of frailty and timely CGA. Conclusion(s): Significant reductions in length of stay have been sustained over a 2 year period for patients over 65 years within both medical assessment and medicine for the elderly wards, from the collaborative approach to service redesign. A patient case study demonstrates the true value of this specialist team, whereby patients clerked by Frailty ANP/APP, then plan in place with consultant review and discharged quickly and efficiently by completion of med rec and discharge letter and ongoing referrals for re-enablement and promoting independence through senior clinical decision making. Implications: The developing model which continues to evolve in response to demand is now sustained by 2 years worth of improvement data and continues to be held in high regard within the local trust and has had recent further investment, integration of advanced practice physiotherapy and nursing in a front door frailty model can be replicated across acute and community teams to further enhance and optimise outcomes for patients with significant frailty and avoid hospital admissions.

Paramedics

Paramedic assessment of frailty: an exploratory study of perceptions of frailty assessment tools 2018, Irish Journal of Paramedicine

Introduction: Frailty is recognised as a significant variable in the health of older adults. Early identification by paramedics of those at risk of frailty may assist in timely entry to an appropriate clinical care pathway. Early referral to such pathways has been shown to improve patient outcomes and quality of life, as well as deliver economic benefits. To date, little research has been completed regarding assessment of frailty by paramedic professionals using validated assessment tools. The objective of this study was to determine paramedicine students' perceptions of screening tools to facilitate assessment and knowledge of frailty of older adults. The Edmonton Frail Scale (EFS) and the Groningen Frailty Index(GFI) were determined suitable for this purpose. Methods: The research adopted a mixed methods approach using a survey tool developed to gather both qualitative and quantitative data from students at the completion of a structured aged care clinical placement. Thematic analysis of the qualitative data identified key features of the tools, while a Likert-type scale was used to measure perspectives about the suitability of the tools for use in paramedic practice. Results: Thirty-seven paramedicine students were invited to participate in the study. Thirteen were able to use both tools to conduct frailty assessments and submitted survey responses. Student perspectives indicated both the EFS and GFI are potentially suitable for paramedicine and as clinical learning tools regarding geriatric assessments. Mean time to administer the tools was 13.46minutes (SD 12.14) for the EFS and 12.19 (SD 9.6) minutes for the GFI. Conclusions: Paramedicine students support a frailty assessment tool to assist clinical decision making regarding older adults. Further appraisal of validated

frailty assessment tools by operational paramedics in a pre-hospital environment is warranted to determine absolute utility for Australian paramedics.

Ambulance clinicians' perceptions, assessment and management of frailty: thematic analysis of focus groups 2018, British Paramedic Journal

Frailty is an increasingly relevant concept/diagnosis and ambulance services are well positioned to identify frailty and influence the 'care pathways' through which patients are directed (thereby influencing health outcomes. Throughout the South Western Ambulance Service NHS Foundation Trust, a mandatory training session regarding frailty was delivered to clinical personnel in 2017 and frailty assessment tools are available on the electronic Patient Clinical Record. Aim: To explore and gain insight into the current knowledge, practice and attitudes of ambulance clinicians regarding frailty and patients with frailty. Methods: Two focus groups of ambulance clinicians (n = 8; n = 9) recruited from across the South Western Ambulance Service NHS Foundation Trust were held in October 2017. Focus group discussions were analysed thematically. Results: Knowledge of conceptual models of frailty, appropriate assessment of patients with frailty and appropriate care pathways varied substantially among focus group participants. Completion of the 'Rockwood' Clinical Frailty Scale for relevant patients has become routine. However, conflicting opinions were expressed regarding the context and purpose of this. The Timed-Up-and-Go mobility assessment tool is also on the electronic Patient Clinical Record, but difficulties regarding its completion were expressed. Patient management strategies ranged from treatment options which the ambulance service can provide, to referrals to primary/community care which can support the management of patients in their homes, and options to refer patients directly to hospital units or specialists with the aim of facilitating

appropriate assessment, treatment and discharge. Perceptions of limited availability and geographical variability regarding these referral pathways was a major feature of the discussions, raising questions regarding awareness, capacity, inter-professional relationships and patient choice. Conclusion: Knowledge, practice and attitudes of ambulance staff, with regard to frailty, varied widely. This reflected the emerging nature of the condition, both academically and clinically, within the ambulance profession and the wider healthcare system.

Physiotherapists

[Specialist physiotherapist leading in the frailty revolution in ambulatory emergency care at the John Radcliffe hospital, Oxford](#) February 2020, Age & Ageing *Abstract only**

Background: The Ambulatory Assessment Unit (AAU) at the John Radcliffe Hospital aims to provide excellent care for complex patients with varying range of medical presentations. It sees over 50% of the acute take in operational hours, with over 40% of AAU patients over the age of 70. Staff feedback consistently identified a suboptimal service provided to the frail group within this patient cohort. A dedicated physiotherapist specialising in older people living with frailty joined the team in October 2018 to address this. Aims: 1. Early identification of patients with frailty attending the unit 2. Improve staff understanding of frailty to enhance patient care 3. Assess patients to either enable a patient to return home safely or support ambulatory pathway 4. Refer to community services that can support the patient and enable them to live well after hospital attendance 5. Review the impact of the specialist physiotherapist's role Methods: 1. Introduction of frailty identification as per frailty team guidance 2. Frailty questionnaire to ascertain baseline understanding and learning needs to develop staff training 3. Assess patients using a Comprehensive Geriatric Assessment 4. Raise staff and patient

awareness of community support services available within the community 5. Data collection to review interventions taken, bed days saved and re-attendance rates Results: • 129 new patients were seen in a 4-month period. • 85% returned home the same day; 64% had their ambulatory pathway supported with therapy intervention and 21% had an acute admission avoided directly due to therapy. 15% were admitted to an acute bed for safety • 60% of patients were referred to community services and 50% were signposted to a range of community and support services • The re-admission rates for therapy related reasons within 7 days and 30 days were 0% and 4% respectively. 38 bed days were saved with a calculated cost saving of £15,162 Future service delivery and conclusions: There is ongoing work to obtain patient experience data for those who had their admission avoided directly due to therapy intervention. A training programme on frailty for all members of the MDT is to be developed. A dedicated therapy service in an ambulatory setting has a role in ensuring that patients' needs are met in the most appropriate place and enhances their quality of life after hospital attendance.

Occupational therapists

[Conference Abstract: Occupational therapists delivering patient and caregiver home safety education in a rehabilitation setting](#) September 2019, Age & Ageing

Background: The patient profile in a 160-bed rehabilitation hospital is evolving with increasing numbers of older adults admitted with falls and frailty. In 2018 a snapshot audit revealed over 60% of patients obtained scores indicative of cognitive impairment. Traditional falls prevention education delivered in a group format relies on attendees having an adequate level of sensory registration and cognitive abilities to comprehend and recall information given. The Occupational Therapists (OTs) proposed greater benefits from caregiver inclusion in such

education to enhance understanding for both patients and caregivers on falls prevention and home environment modifications to facilitate safer home discharges. Method(s): A mixed-methods design was used. Quantitative data was gathered using a pre and post education 10-point Likert scale to assess attendees' perceived knowledge in four domains: Falls risk factors Modifiable environmental factors Managing falls Accessing support/information to reduce risk of falls Qualitative data was gathered through written feedback. Referrals were generated by OTs. Evening sessions facilitated increased caregiver attendance. OTs delivered a 45 minute PowerPoint presentation, demonstrated adaptive equipment and engaged in discussion with attendees. Information packs were provided to caregivers including a Home Safety Assessment Tool to aid with home environment modification. Result(s): Data from April 2018-2019 was analysed using Microsoft Excel. 21 groups were facilitated with 385 attendees overall. Average percentage increase in knowledge in each of the four domains was 30%. Overall knowledge increased by 32%. Conclusion(s): Increased knowledge of modifiable falls risk factors and supporting persons at risk of falls in the home was demonstrated. OTs reported reduced caregiver concerns regarding home environment modification. Home assessments completed after group attendance found caregivers had implemented recommendations made in the presentation. Further data could be collected to measure the degree of environmental modification completed prior to OT home assessments. Additional qualitative data is required to fully assess benefits to both patients and caregivers.

[Conference Abstract: Overcoming frailty: Evaluating the role of an occupational therapist on a frail elderly team](#) September 2017, Age & Ageing

Background: Occupational Therapists can significantly reduce hospital admissions and ensure timely, appropriate and safe discharges home in older adults with frailty (COT, 2016). A Frail Elderly Team was established in an acute hospital in January 2016 to effectively meet the needs of older people with complex needs. The Occupational Therapist, as part of the interdisciplinary team, places an immediate focus on the person's meaningful occupations, enabling participation in daily activities and maximising quality of life. Method(s): A quantitative study was conducted in order to evaluate the efficacy of the Occupational Therapy role on the Frail Elderly Team. Data was collected on all patients referred to the Occupational Therapist from January to December 2016. A review of assessment outcomes, treatment methods, discharge recommendations and day hospital input was carried out using Microsoft Excel. A detailed analysis of the data collected was completed to evaluate the role of the Occupational Therapist. Result(s): The Occupational Therapist received 487 referrals between January and December 2016. Following assessment, 24% of patients were discharged home from the Emergency Department. Of those admitted, 48% continued to be reviewed by the Frail Elderly Team Occupational Therapist until their discharge home. Cognitive screens were administered with 383 patients; assessments of personal and domestic activities of daily living were completed with 308 patients and 40 patients were issued with adaptive equipment. A new interdisciplinary clinic in the day hospital generated 47 referrals for Occupational Therapy. Further input from the Community Occupational Therapist was indicated for 113 patients. Conclusion(s): The role of the Occupational Therapist has been evaluated, demonstrating a commitment to effectively meeting the needs of older people with frailty and promoting independent living.

Pathways and interventions (acute)

[Enabling public, patient and practitioner involvement in co-designing frailty pathways in the acute care setting](#) November 2019, BMC Health Services Research

Background: Although not an inevitable part of ageing, frailty is an increasingly common condition in older people. Frail older patients are particularly vulnerable to the adverse effects of hospitalisation, including deconditioning, immobility and loss of independence (Chong et al, J Am Med Dir Assoc 18:638.e7-638.e11, 2017). The 'Systematic Approach to improving care for Frail older patients' (SAFE) study co-designed, with public and patient representatives, quality improvement initiatives aimed at enhancing the delivery of care to frail older patients within an acute hospital setting. This paper describes quality improvement initiatives which resulted from a co-design process aiming to improve service delivery in the acute setting for frail older people. These improvement initiatives were aligned to five priority areas identified by patients and public representatives. Methods: The co-design work was supported by four pillars of effective and meaningful public and patient representative (PPR) involvement in health research (Bombard et al, Implement Sci 13:98, 2018; Black et al, J Health Serv Res Policy 23:158-67, 2018). These pillars were: research environment and receptive contexts; expectations and role clarity; support for participation and inclusive representation and; commitment to the value of co-learning involving institutional leadership. Results: Five priority areas were identified by the co-design team for targeted quality improvement initiatives: Collaboration along the integrated care continuum; continence care; improved mobility; access to food and hydration and improved patient information. These priority areas and the responding quality improvement initiatives are discussed in relation to patient-centred outcomes for enhanced care delivery for frail older people in an acute hospital setting.

Conclusions: The co-design approach to quality improvement places patient-centred outcomes such as dignity, identity, respectful communication as well as independence as key drivers for implementation. Enhanced inter-personal communication was consistently emphasised by the co-design team and much of the quality improvement initiatives target more effective, respectful and clear communication between healthcare personnel and patients. Measurement and evaluation of these patient-centred outcomes, while challenging, should be prioritised in the implementation of quality improvement initiatives. Adequate resourcing and administrative commitment pose the greatest challenges to the sustainability of the interventions developed along the SAFE pathways. The inclusion of organisational leadership in the co-design and implementation teams is a critical factor in the success of interventions targeting service delivery and quality improvement.

[Conference Abstract: Home first - Outcomes of a frailty intervention and response team in the emergency department of a large acute teaching hospital](#) September 2018, Age & Ageing

Background: Emergency Department (ED) attendance, for an older person is often associated with elevated risks of deleterious outcomes due to a reduction in physiological reserves. A holistic model of care, delivered by interdisciplinary teams embedding geriatric competencies into their service has been recommended (Conroy & Turpin, 2016). Home FIRsT (Frailty Intervention & Response Team), comprising a candidate Advanced Nurse Practitioner, Clinical Specialist Occupational Therapist, Clinical Specialist Physiotherapist and Medical Social Worker was introduced to the ED of large acute hospital in May 2017. Objectives include avoidance of unnecessary admissions among older patients (>70 years, Manchester triage category 3-5). Method(s): Quality Improvement methodology underpinned

the development of care pathways. Tests of change were performed using Plan-Do-Study-Act cycles. The team developed a common assessment form using shared interdisciplinary competencies. Patient demographics and outcomes are collected for the purposes of prospective auditing; Microsoft excel is used for data collection and analysis. Result(s): In the first nine months of service delivery, 1980 ED attendances were recorded. 802 were male (41%) and 1,178 female (59%) with a mean age of 80 years (range 63-104). 60% (n = 1,203) were discharged home from the ED; 21% (n = 257) had onward referral to Medicine for Older Persons ambulatory care services. Compared to the same nine month period the previous year there were approximately 230 fewer admissions among similar patients corresponding to a bed day saving of 4,500 days. In relation to ED re-attendances, 10% of those discharged had an unscheduled admission within a month (hospital re-admission rate for similar patients was 13% over the same period). Conclusion(s): Home FIRsT enabled comprehensive geriatric assessment to begin in the ED and prevented approximately 1 admission a day without raising re-admissions. The bed day saving equates to about 4.5 million, which highlights the efficacy and cost effectiveness of this service.

Multi-disciplinary teams and working

[Conference Abstract: Frailty hot clinics: rapid CGA and speciality diagnostics reduces rates of hospitalisation and re-attendance](#) March 2021, Age & Ageing

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.

[Conference poster: Front door specialist frailty MDT working at MFT NHS trust—the therapy team](#) March 2021, Age & Ageing

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 7 days 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 ≥ 72 hours 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.

[Wessex Acute Frailty Audit: applying quality improvement methodology to design and implement a regional frailty audit using a collaborative, multiprofessional approach](#) January 2020, BMJ Open Quality

Introduction An acute hospital stay increases the risk of negative outcomes for those living with frailty. This paper describes the application of quality improvement methodology to design and implement a regional audit to gain an understanding of care provision. Methods Small scale tests of change (Plan–Do–Study– Act cycles) were used to design the audit structure and questions. Data collectors met face to face with 2–3 multiprofessional clinicians on 58 wards in 10 hospitals across the region, using an electronic tool to gather data. Outcomes were analysed manually in Excel by extracting from the electronic audit tool. Results 58 wards across 10 hospitals participated in the audit, which identified three key themes: lack of awareness and frailty training outside medicine for older people specialties, and significant variability of both frailty identification and comprehensive geriatric assessment. Conclusion Combining quality improvement methodology with a collaborative, regional approach to design and implementation of a frailty audit creates a reliable tool ensuring all stakeholders are considering improvement from the outset. The results have facilitated an agreed regional approach on how best to use local resources to improve and standardise frailty care provision. By highlighting areas of good practice and significant gaps in frailty identification, personalised care planning and hospital wide provision of frailty training, this region of the UK will now be able to drive up standards of care.

Culture trumps everything: The (un)expected truth about building a frailty team across the continuum for a vulnerable population August 2019, International Journal of Integrated Care

Introduction: Hospital Emergency Departments (EDs) experience high presentation rates from older adults residing in Aged Care Facilities (ACFs), yet few intervention studies have addressed the specific care needs of this vulnerable, high-risk population. This paper presents Mater Aged Care in an Emergency (MACIAE), a service dedicated to supporting aged care facility residents, their families, facility carers and GPs, with the goal of providing a seamless care transition in order to ensure the highest and safest standard of care with the upmost compassion and dignity. The program was designed with patients and families/carers, ACFs, local general practices, Primary Health Networks, ambulance services, hospital providers and researchers. Methods: The study was implemented 2013-2016. All older adults presenting from ACFs to the ED of Mater Hospital Brisbane, Australia were included. The evaluation was a pre/post design using retrospective baseline data from hospital records, and prospectively collected post-implementation data. The objectives were to determine whether this intervention significantly impacted on patient outcomes and organisational outcomes. Ethics approval for the study was obtained through the Mater Research Ethics Committee. Results: This study demonstrates the significant improvements can be achieved by a specific aged care service working across the continuum. Participants (n=1130) were from over 200 ACFs. Intervention resulted in 30% drop ward admissions; reduced LOS from 6.5 to 4.0 days (national average 8.0 days); reduced 28-day representation rates from 17.8% to 4.6%; 88% of patients commenced on an End of Life pathway were able to be transferred to their environment of preference; and, there were over 300 Advanced Care Plans implemented. Satisfaction from acute, primary care and ACF

providers was very high. A cost-benefit analysis demonstrated a 10:1 outcome. Discussion: This study demonstrates significant improvements were achieved by integration of an acute frail older person service into an ED, which works with families, primary health and social care to implement strategies to meet the needs of this population. Lessons learnt: Key to implementing and sustaining this model of integrating care are leadership; culture - it makes or breaks it; time - it takes longer than you think; data - speaks louder than words; and, passion - to keep you going through the tough times. Limitations: The present study involved a pre-post implementation study design, therefore we cannot speculate whether or not our results were entirely due to the MACIAE service implementation. Future studies should consider implementation of a Randomised Controlled Trial. We also note that this study was implemented in only one hospital. Suggestions for future research: In January 2018, the Older Person Centred Care Team formed, merging three existing teams, focused on managing frail and older patients and families/carers across the continuum. Current research is focused on rapid assessment of frailty, embedding a case management approach to support care closer to home and involving patients/families/carers in decisions about a model that meets their future needs.

Integrated care models

Developing an integrated comprehensive geriatric unit March 2021, Age & Ageing

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.

[Implementing SAFE™ care: Evaluation of a geriatric model of care for real-world practice](#) January 2021, Geriatric Nursing *Abstract only**

- We report the "hidden" characteristics that influence geriatric model implementation.
- Leadership, planning, and champions are associated with successful implementation.
- Staff turnover, lack of resources, and competing demands are implementation barriers.
- Reported contextual and organizational attributes may guide future implementers.
- Findings highlight complexities of geriatric model uptake, adaptation, and sustainability.

Systems Addressing Frail Elders (SAFETM) Care is a geriatric model of care that identifies high-risk hospitalized older adults, and provides targeted interprofessional interventions for risk factors associated with frailty. This post, mixed methods study sought to evaluate SAFETM Care

implementation retrospectively at one public academic medical center and describe practical "real-world" considerations for implementation using the Consolidated Framework for Implementation Research (CFIR). In addition to barriers and facilitators, hidden characteristics to consider for implementation include initiating conditions, skills and experiences of implementers, interpersonal challenges, unique facilitators and barriers, surprising conditions, and threats to and requirements for sustainability. Implementation of SAFETM Care demonstrated effective adoption and implementation, but faced multiple threats that led to failed sustainability. The public sharing of these successes and failures will help implementers understand and make progress in adapting such important geriatric programs and quality improvement initiatives.

[Conference Abstract: Up-scaling of an integrated care model for frail elderly patients](#) December 2016, International Journal of Integrated Care

Introduction: Population aging and the increased number of chronic diseases push the healthcare systems to design and implement new strategies to improve the quality of services. These strategies require investment in ICT tools, promotion of patient empowerment in the management of their disease and a better integration of health and social care services. CareWell project focuses on the delivery of integrated healthcare to frail elderly patients who have complex health and social care needs, are at high risk of hospital or care home admission and require a range of high-level interventions due to their frailty and multiple chronic diseases. Carewell aims at deploying services supported by ICT which enhance the coordination and communication of healthcare professionals, improves patient's remote follow up and boosts patient (and caregiver) empowerment. The aim of the project is the identification of the impact of implementing an integrated care model for frail elderly patients, according to quality of care, efficiency and both

patients' and professionals' satisfaction. Short description of the intervention: Following the inclusion criteria and based on the population stratification dataset, the GP identifies potential candidates. Then, the GP proceeds to schedule a consultation with the patient to perform a comprehensive assessment, define the therapeutic plan and provide patient with educational material in order increase his/her self-management capability. Then, the GP nurse schedules a face-to-face follow-up plan depending on the patient's needs. During this face-to-face consultation, the GP nurse analyses patient's therapeutic plan and his/her adherence to treatment, reinforces patient's self-management capacity through an educational plan, revises lab tests and performs medical examinations. If no worsening symptoms are detected, the patient is reviewed approximately every three months. However, if any instability sign is identified, the patient is referred to the GP in order to reassess his/her clinical situation. If the patient can benefit from home care, a variety of resources can be activated. If the patient cannot be treated at home, or his/her health status continues to worsen, the patient will be admitted to hospital. During the hospitalisation, the reference internist is in charge of assessing the patient's clinical situation, defining corresponding treatment, managing medical interventions and coordinating specialists. Once the patient is stable, the reference internist will consider if the patient requires additional interventions such as home-hospitalisation, admission to a sub-acute hospital, social care, or special coordination with primary care. At hospital discharge, the reference internist writes the discharge letter and contacts the GP to ensure continuity of care. In addition, the hospital nurse draws up the patient's follow-up plan, and schedules a face-to-face appointment between the patient and the GP nurse. The visit with the GP nurse is the starting point of the integrated care pathway, from where the patient can be referred to periodic follow-up consultations or to hospital, depending on his/her health status. Key findings: The definition of the care

pathway supported by ICTs has been deeply discussed in an inter-organizational and multidisciplinary work group (managers, clinicians nursing of primary care and hospitals, eHealth Centre, Department of Information Systems, Department of Healthcare and Kronikgune), ensuring that all stakeholders' opinions and needs are considered. 200 patients (100 intervention group and 100 control group) have been recruited and the services aforementioned are fully operational. At this moment the enrolment data is being collected and the baseline analysis (quantitative and qualitative indicators) will be performed during December. In addition, predictive modeling approach will be carried out to estimate the use of resources in mid- and long-term after the new service deployment. Highlights and conclusions: Intervention perspective: - Need of a clear methodology to design the intervention (analysis of current model, detection of improvement areas, prioritize actions and define the new care pathway) - Need of resource re-organization and definition of new roles to improve coordination between different healthcare levels (primary and secondary care). - Primary Care is responsible for proactive control of the patients. - Patient and informal caregiver empowerment led by nursing is essential. - Technology is crucial to facilitate coordination between healthcare professionals. Implementation perspective: - Need to align the objectives of the project with the strategic plan of the central organization so the deployment of the service becomes a priority. - Importance of reach consensus among all stakeholders in the definition of the care pathways in order to consider different perspectives (managerial, technical and methodological competences). - Ensure the service is adaptable and flexible enough to be adopted in new contexts. - Distributed leadership is crucial from the implementation process perspective (clinical, managerial and methodological) - Need to share midterm results and collect feedback from front-line professionals to detect improvement areas

Prescribing

[Achieving Royal Pharmaceutical Society competencies: a frailty nurse's perspective](#) January 2019, Journal of Prescribing Practice *Abstract only**

Frailty is related to the ageing process and describes how a person's inbuilt reserve struggles to withstand major changes in health, such as infection, a change to medication or a new environment. The British Geriatric Society (2014) approximate that around 10% of people over the age of 65 years have frailty rising to between a quarter to a half of those aged over 85 years. Patients who are deemed frail are often at risk of adverse outcomes; therefore, it is important to seek out these individuals and care for them appropriately. This includes carrying out regular medication reviews and deprescribing where necessary. This article will discuss prescribing for frail patients using the Royal Pharmaceutical Society's Competency Framework for all Prescribers.

New and enhanced roles

[Literature review: Supporting frailty through new and enhanced roles](#) 2017, Surrey and Sussex Library and Knowledge Services "Frailty is a distinctive health state related to the ageing process in which multiple body systems gradually lose their in-built reserves. Older people with frailty are at risk of unpredictable deterioration in their health resulting from minor stressor events." 1 As life expectancy improves globally there is an increasing population of frail people. The elderly form about half of the medical admissions to hospitals and appointments at GP surgeries. With the continuing pressure on the NHS new models of managing care have been devised with a focus on integrated care.

Competency Frameworks

[The Frailty Framework of Core Capabilities](#) Skills for Health
The Frailty Framework of Core Capabilities was commissioned by [Health Education England](#) and [NHS England](#). Development of the framework was facilitated by Skills for Health, working in partnership with key stakeholders, including: Health Education England, NHS England, [Age UK](#), [British Geriatric Society](#), [Royal College of GPs](#), and housing, local government and voluntary sector organisations.

[Advanced Clinical Practice: Frailty Specific Competencies](#)
August 2019, East Kent Hospital University NHS Foundation Trust

This document works in tandem with the Core competencies for Advanced Clinical Practitioners (ACP's). ACP's should aim to complete the core competency document prior to commencing these specific competencies. This will ensure that basic competencies are achieved and as such do not require re-assessment. However if an assessor or practitioner identifies learning needs in any of the core areas they should be addressed prior to continuing with this part.

eLearning

[Frailty programme](#) May 2021, eLearning for Healthcare (HEE)
The London Clinical Network for Frailty in collaboration with Imperial College Healthcare NHS Trust and Wessex Academic Health Science Network have developed this e-learning programme which aims to standardise training and knowledge of frailty as a complex multi-system, long term condition. This education programme is compliant with the '[Frailty, A framework of core capabilities](#)' (2018) and has been funded

through Health Education England's Urgent and Emergency Care Workforce Collaborative for London. It strives to promote a common language in frailty care and is designed to support enhanced clinical skills and competencies to be embedded within the existing workforce. It will support health and social care staff to meet the needs of individuals living with varying degrees of frailty and to deliver improved health outcomes.

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