The complexity of health care is changing with more frail older people presenting with urgent care needs. As a result, there is a need to improve and streamline urgent care services to meet the needs of frail older people and to provide support for clinical teams to better manage these patients in line with the quality standards set out in the Silver Book¹.

Introduction

The Acute Frailty Network (AFN) was established by NHS England in January 2015 to work with 10 pilot sites to identify those activities which would lead to an improvement in the quality of care received by frail people. The Network launched the fifth cohort of the programme in October 2017.

In addition, the AFN was established to:

- design and deliver a network based model to support the widespread adoption and improvement of Acute Frailty Services in England (AFS)
- develop a bundle of improvement methodologies and approaches to enable local implementation of the acute frailty model
- co-design the emergent programme, tools and guidance with participating teams within cohort one as required
- develop a validated Return On Investment (ROI) model for acute frailty at a system wide level
- develop a number of case study examples of organisations who have successfully implemented an AFS
- develop a robust local model of engagement for acute frailty
- connect with the wider health and social care economy, including third sector
- further develop a measurement for improvement approach for acute frailty implementation
- work in partnership with national experts to ensure a rigorous and comprehensive approach.

It was anticipated that the AFN would also: develop the knowledge to identify and manage frail older people in acute care settings; support practitioners develop their knowledge of tools used to assess frailty and how they can be used in urgent care; understand how to manage frailty better in order to improve patient outcomes as well as service outcomes such as bed-days.

A number of best practice principles have emerged from the pilot sites and subsequent cohorts. These have been incorporated into this toolkit and provide a basis for managers and clinical teams to improve frailty services and the quality of care given to older people. This work continues to evolve, and may lead to further updates in the future.
Principles of managing frail older patients in the acute care setting

There are a number of core principles to be considered when improving the urgent care system for frail older people during their first 72 hours of acute care:

1. Establish a mechanism for early identification of people with frailty
2. Put in place a multi-disciplinary response that initiates comprehensive geriatric assessment (CGA) within the first hour
3. Set up a rapid response system for frail older people in urgent care settings
4. Adopt clinical professional standards to reduce unnecessary variation
5. Develop a measurement mind-set
6. Strengthen links with services both inside and outside hospital
7. Establish appropriate education and training for all staff
8. Identify clinical change champions
9. Patient and public involvement
10. Identify an executive sponsor and underpin with a robust, sustainable, project management structure

Conclusions

Appendices

References, resources and participating sites
Principle 1

Establish a mechanism for early identification of people with frailty
A person with frailty, presenting in an urgent and emergency care context, should be identified at their earliest contact with health and social care professionals. This could be a GP, a first responder such as a paramedic, or acute hospital staff such as emergency physicians or nurses.

The purpose of identifying frailty is to raise awareness of this important prognostic syndrome in emergency and urgent care settings and to influence clinical care. The aim is to deliver a prompt, proportionate and competent clinical response.

**Which frailty tool should I use?**

The AFN recommends using the Rockwood Clinical Frailty Scale (CFS), as this is quick simple and easy to use. It can be used by doctors, nurses, health care assistants and others, taking only 40 seconds to complete. If you decide to use this scale, please ensure that you get permission from the team that originally developed it: Sherri.Fay@nshealth.ca (or if no reply Kenneth.Rockwood@Dal.Ca).

### Clinical Frailty Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Length of Stay</th>
<th>Readmission Rate</th>
<th>Inpatient Mortality</th>
<th>Intervention 1</th>
<th>Intervention 2</th>
<th>Intervention 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very Fit</td>
<td>4</td>
<td>4%</td>
<td>2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Well</td>
<td>5</td>
<td>7%</td>
<td>2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Managing Well</td>
<td>7</td>
<td>11%</td>
<td>2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Vulnerable</td>
<td>8</td>
<td>13%</td>
<td>3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Mildly Frail</td>
<td>10</td>
<td>15%</td>
<td>4%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Moderately Frail</td>
<td>12</td>
<td>15%</td>
<td>6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Severely Frail</td>
<td>13</td>
<td>14%</td>
<td>14%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Very Severely Frail</td>
<td>12</td>
<td>10%</td>
<td>24%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Terminal Frail</td>
<td>10</td>
<td>13%</td>
<td>31%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Clinical Frailty Outcomes**

- Think about AMBER care bundle
- Think about PPC involvement to reduce readmission risk
- Think about EFU or AFU

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1 Establish a mechanism for early identification of people with frailty
1 Establish a mechanism for early identification of people with frailty

Case study
Addenbrooke’s Hospital, Cambridge University Hospitals
NHS Foundation Trust

Our challenge
In April 2013 the Trust Medicine for the Older People care team had been in discussion with the local clinical commissioning group (CCG) as to how care could be improved across the primary/secondary care interface and it was determined that there were a number of strategies that could be implemented in order to identify vulnerable older people and improve their care across the system.

The 5 CQUINS were set by the CCG as follows:
1. Frailty identification for all over 75s attending the emergency department (ED)
2. Restructuring of the in-patient bedbase and reconfiguration of local services
3. Frailty discharge summaries
4. Collateral history across the trust for all over 85s
5. GP communication service to enable improved information sharing between primary and secondary care

The team puzzled over different strategies for the identification of frail older patients, and eventually settled upon the Clinical Frailty Scale (CFS). The reason for utilising this scale was its simplicity, its intuitive nature, the speed at which an assessment could be undertaken in a busy ED and the simple scoring system. Although it had not been utilised in this way before, the team were determined that to see if they could use it and endeavour to assess its validity in this setting as part of the work.

What we did (the process)
Several large scale projects were developed and implemented. Initially, a traditional paper notes and the HISS computer system was used. The appropriate copyright permissions for use of the CFS were obtained and the team then had it reproduced in all of the casualty cards. Staff were trained in its use, and all adults over 75 years old had a CFS completed before leaving ED.

The ED desk staff were trained to code the frailty score into the hospital IT system when the casualty card for each patient was checked out of the ED. This was not a simple task and did require a reconfiguration of the hospital information system in order to allow the CFS to be inserted. The Trust’s IT reporting system (CHEQS) pulls data from the hospital system regarding the scoring and presents it as a graph.

The team configured a viewing screen within which they could view the results on a daily basis in order that progress could be monitored and reported back to the CCG for the purposes of the CQUIN.

If a frailty score was 6 or more, the system would automatically open a second text box, which required junior doctors to document useful frailty factors for the primary care team. Although difficult to implement at times, as individual behaviours tend to determine the quality of discharge summaries, the general response from GPs was that they found the extra information helpful in identifying their vulnerable patients and in informing the development of community based health and social care summaries.
Having just got both systems up and running successfully, in October 2014, the Trust switched on its new Epic electronic clinical record and all other computer systems fell into disuse. This change required a further reconfiguration of the Epic system which met a number of teething problems. However over the past 6 months changes have led to a frailty section in the admission clerking part of the system – for which there is 95% compliance and the frailty score import directly into the discharge summary for patients aged 75 or over, with an optional extra box for additional free text as before.

**Case study**
Addenbrooke's Hospital, Cambridge University Hospitals NHS Foundation Trust

**What we achieved (the outcomes/data)**
Over the course of the year, the CQUIN uptake went very well and an overall target of over 85% compliance was achieved. The frailty scores were used in two ways.

- They have helped to develop a better understanding of the nature of older adults presenting to the Trust and their current disposition. Although not currently in a position to utilise the CFS as a single screening tool to determine who would best benefit from an elderly care bed, the team can now gain an understanding of how CFS, cognitive scores, age and acuity scores can help to identify the most vulnerable patients admitted, and how that may help us better target specialist services. Frailty scoring has helped to re-configure the acute frailty pathway, although this remains a work in progress.

- In a second CQUIN, the Trust eDischarge system was reconfigured to automatically pull frailty scores into the discharge summary, in order to report scores back to GPs.

The frailty scores are now becoming part of standard practice and the team has completed frailty scores on over 20,000 admissions since 2013 and approximately 1500 patients a month are given a frailty score. The data is being used to consider further potential applications such as better triaging of vulnerable adults in the ED, finding the most appropriate patients for different style Department of Medicine for the Elderly (DME) beds (acute/subacute etc), and in terms of feeding back to primary care which patients are vulnerable and require increased community vigilance.
The team is now also changing frailty discharge summaries into full CGA discharge summaries, by configuring the IT system to pull bespoke records from the occupational therapist, physio, mental health, palliative care and pharmacist notes, so that a wealth of multidisciplinary information is potentially available for the primary care teams in the discharge letter, with minimal effort required by the discharging junior doctor.

Learning:
1. Reconfiguring IT systems is not straightforward, and there may be more than one system that needs to have significant changes in order to achieve a simple goal. There may be a significant lead-in time if the change to the IT system is significant.

2. When undertaking CQUINs it is vital that there are very clear goals written into the project plans, and that targets are both measurable and achievable.

3. When undertaking frailty scoring or any other process, I would recommend choosing the simplest process possible if the goal is to get people screened (as clinical staff will simply not do it otherwise).

4. Frailty scoring has been very interesting and it has certainly improved our understanding of our vulnerable population and raised the profile of frailty as a clinical syndrome across the locality.

Key Trust contact
Dr Richard Biram – Clinical Director for Medicine for the Elderly, Addenbrooke's, Cambridge University Hospitals NHS Foundation Trust; richard.biram@addenbrookes.nhs.uk
Principle 2

Put in place a multi-disciplinary response that initiates Comprehensive Geriatric Assessment (CGA) within the first hour.
The identification of frailty should trigger the start of CGA in addition to standard urgent care. All professionals should be able to initiate CGA; this assessment should start within one hour of frailty being identified and completed within two hours (12 hours overnight). The assessment of frail older patients should be multidimensional, including at the very least assessments of:

- Diagnoses (there will usually be multiple active co-morbidities)
- Psychological function (especially confusion and mood)
- Physical function (activities of daily living and falls risk)
- Cognitive function (especially dementia and delirium)
- Environment in which the individual functions
- Social support networks present or required to maintain on-going function.

Whilst all staff should be able to undertake the initial assessment, an interdisciplinary team will usually be involved in assessing each domain in more detail, proportionate to the needs of the individual. The team should work within a flattened hierarchy which facilitates mutual trust and encourages constructive challenge. Examples of the process of CGA are shown in Appendix 2 and a film clip example of a rapid multi-disciplinary meeting (MDT) using the CGA framework in an acute frailty unit setting can be accessed www.acutefrailtynetwork.org.uk/Members/Improvement-Tools

The initial assessment should be summarised as a stratified problem list, with the most urgent and important issues documented first, with other important but less urgent issues flagged for on-going management. Delivering a coordinated and integrated treatment plan requires a mutual understanding of team roles and expertise. This diagnostic process will be iterative, as issues will evolve in terms of urgency and importance. It should be tailored to the individual, not protocol-driven, using the principles of patient-centred care (Appendix 3).

Whether the patient is admitted for on-going care, or can be managed at home, follow-up will usually be required to address the range of issues identified, and to provide on-going case management to try and reduce subsequent harms known to be common in frail older people with urgent care needs (e.g. falls, worsening confusion, high resource use, death).

You will need to consider:

- How are you going to achieve rapid completion of the CGA?
- Where should this be delivered?
- Who is going to initiate the process?
- How are you ensuring it is being completed appropriately? and
- How are you going to communicate it with the patient, their family, carers and other services involved in their ongoing care?

Examples of this in action are explained by clinical teams from Imperial College London and Leicester Royal Infirmary in the following case studies.
Case study
Imperial College Healthcare NHS Trust: Charing Cross site

Our challenge
Vast numbers of frail older people are passing through GP practices, community services and acute hospital trusts every hour of every day and yet a system response to this has been lacking.

The impact of these suboptimal pathways is not only evident in poorer outcomes for patients and their carers/families but in significant financial cost to both primary and secondary care and community and social services.

We need a change in attitude to the frail older people using acute services – away from the idea of an ‘inappropriate admission’ to accepting that acute services are absolutely needed but should be provided in a more streamlined, patient-centric model.

Charing Cross acute frailty services now include:
1. Liaison and support to ED and clinical decision unit (CDU) via regular morning board round/consultant mobile – duty consultant available on-call Monday-Friday 9-5 for the ED, GPs and the rest of the hospital.
2. Older persons’ rapid access clinic (OPRAC) – referrals from GPs, acute med teams, ED, community nurses/virtual ward, community therapists.
3. The frailty unit (4 beds on ward 4S – 1 bay, 1 SR) – admission from home via above sources of referral or from OPRAC/medical admissions unit (MAU/CDU – expanding September 2015 to be sited on CDU and increase overall bed base to 8.
4. Integration with the virtual ward/community in Hammersmith and Fulham.
5. Liaison with OPAL (acute geriatric services for the MAU/5W).

An example of a recent case
An 88 year old lady attended the Emergency Department with several issues:
1. Back pain – lower back, present for 3 years, increasing in severity gradually over the last 6 months.
2. Reduced mobility due to this pain. 3 years before she had a vertebral compression fracture and a period of severe pain and immobility. She was started on Tramadol by her GP but got constipation and drowsiness and so stopped 3 weeks prior to admission.
3. Nausea – 3 weeks, with indigestion and fatigue and decreased appetite, She described weight loss: especially noticeable over the last 2 months.
4. Constipation
5. Cough

She had been attending her GP surgery with increasing frequency over the preceding weeks and in fact had been referred to our OPRAC for the next day but had come in as an admission the night before due to her worsening pain.

She had a history of colorectal cancer having had radiotherapy and laparoscopic resection in May 2014 and was overdue for routine surveillance CT scan. She had twice felt too unwell to attend the CT scan in the preceding weeks and was becoming increasingly concerned. Her daughter too, with whom she lived was also increasingly frustrated by the frequent GP visits and aborted attempts to attend for the CT scan.
What we did (the process)

We admitted her to the frailty unit from CDU (the ED observation ward) on the day of her attendance and arranged an urgent chest x-ray, bloods, liver ultrasound scan. We also booked her CT brain and body for the following day.

We increased her analgesia significantly as she could not even lie still comfortably on arrival, established her on effective anti-nausea medication and enabled her to begin eating again which she had not done for many days. We also effectively managed her constipation. As she reported increased frequency in urine and discomfort, we treated her for a urinary tract infection with antibiotics.

She was seen by our therapy colleagues who were able to help her mobilise again once the pain started to settle and discuss her needs with her for her home environment.

Sadly the ultrasound showed multiple liver metastases. The CT the next day confirmed liver metastases and no other metastases.

We broke this news to her and her daughter the next day having arranged for the oncology teams and palliative care teams to review immediately afterwards. She was therefore seen by the oncologists the same day along with the palliative care team who made recommendations to her analgesia regime and they planned to review her again in the community once discharged. All her usual medications were rationalised.

The physiotherapists and occupational therapists continued to assess her throughout her 2 day stay and recommended some help at home – she initially had a once daily package of care and district nurse input but this would be reassessed and increased if necessary. It was also arranged for equipment to be delivered.

Finally, we spoke to her GP before the patient was discharged, to update with the findings and management plan; the GP arranged to see her at home in the next few days.
What we achieved (the outcomes/data)

This admission managed to put an end to a frustrating period of worry, poor symptom control, and lack of diagnosis (with difficulty accessing imaging) for this patient and her family.

She was seen quickly by a multi-disciplinary team and had rapid access to diagnostic imaging – and a discharge pathway was established and implemented quickly. I am certain that this enabled her to have a 48 hour admission where she would have stayed over a week or more following a routine medical pathway.

She could return to her home quickly and confidently, even in the face of rapidly increasing needs.

This is achieved by having the full MDT at the front door, within a tight-knit team who work together without delay to optimise outcomes for this patient.

Whilst the news was sad for this lady both she and her daughter thanked us for the care she had received and expressed satisfaction in the way the case was handled. They felt they were handled sensitively, the bad news was broken to them kindly and they felt well supported on discharge. We take great efforts to allow sufficient time for these complex discussions and ensure they are handled sensitively and appropriately.

Testimonials from wide of staff groups and patients

“I thank you for my generous care and the help to walk again and healthwise.”
Mrs VS, Frailty Unit patient

“Without exception the care throughout my mother’s stay has been excellent.”
Mr BS, son of HS, Frailty Unit patient

“You have all been so kind even when you had to break bad news – it can’t have been easy for you either but you were lovely.”
Mrs BP, Frailty Unit patient

Key Trust contacts

Dr Sarah Brice – Consultant Geriatrician and Departmental Lead; sarah.brice@imperial.nhs.uk

Dr Claire Solomon – Consultant Geriatrician and Acute Frailty Services; claire.solomon@imperial.nhs.uk

Dr Aglaja Dar – Consultant Geriatrician, OPAL and the Virtual Ward; aglaja.dar@imperial.nhs.uk

Maxine Powell – Service Delivery Manager for Elderly Medicine; maxine.powell@imperial.nhs.uk
Our challenge

In Leicester we wanted to move towards a more focused, urgent care response where the patient is seen by the right people at the right time in the right place. We worked closely with commissioners and partner organisations to develop a range of services aimed at delivering CGA from the earliest point in a frail older person’s urgent care episode (see Figure 1).

- In the pre-hospital phase we offer a single point of access, which allows primary care staff to access a range of community services to support frail older people with urgent care needs; this might include step-up care into community hospitals and/or discussions with the duty geriatrician for advice or guidance.

- We are developing pathways with the paramedics so they can access falls and other services directly, as well as testing geriatrician/emergency physician support for paramedics in-situ (e.g. using video-calls).

- We have strengthened our community services through the use of Advance Nurse Practitioners (ANPs) who run the community hospital wards with the support of geriatricians (typically twice weekly rounds) and the ANPs also support intermediate care at home services; There is an emphasis on collaborative working and knowledge transfer between settings.

- In the ED we have established an emergency frailty unit (EFU), which essentially offers ambulatory care for frail older people (it's just that many of them are not very mobile)².

In addition we work closely with our ED colleagues, supporting them clinically on the ground, and through fellowships in geriatric emergency medicine. We (the geriatricians) are also learning from the ED team about trauma and other issues in older people, which is refreshing!

- In the acute medical unit (AMU) we first tested a liaison or OPAL⁸ type model, but this did not work out brilliantly (in keeping with the broader literature on geriatric liaison⁹¹⁰), so we developed our AFU (similar to the Sheffield model¹¹); this seems more effective.

Figure 1 Urgent care pathways for frail older people – Leicester

EFU – Elderly Frail Unit
FOPAL – Frail Older Person Assessment Liaison
AFU – Acute Frailty Unit

1 Early identification of people with frailty
2 Put in place a multi-disciplinary response that initiates Comprehensive Geriatric Assessment (CGA) within the first hour
3 Rapid Response
4 Clinical professional standards to reduce unnecessary variation
5 Develop a measurement mind-set
6 Strengthen links both inside and outside hospital
7 Education and training for all staff
8 Identify clinical change champions
9 Patient and public involvement
10 Identify executive sponsor with robust structure

Conclusions

Appendices

References, resources and participating sites
What we achieved (the outcomes/data)

Our data shows a reduction in admissions from ED associated with the introduction of the EFU (see below).

Challenges remains – how can we ensure the delivery of CGA for patients not in frailty units with geriatric support? What are the optimal models of pre-hospital care for frail older people?

Testimonials from wide of staff groups and patients

“We have had visits to our service from over 30 other hospitals from the UK, New Zealand and Northern Ireland, as well as bodies such as the Future Hospitals Commission.”

Key Trust contacts

Simon Conroy – geriatrician and honorary professor, University Hospitals of Leicester; spc3@le.ac.uk
Principle 3
Set up a rapid response system for frail older people in urgent care settings
3 Set up a rapid response system for frail older people in urgent care settings

Adopt a ‘Silver phone’ system

Given the high potential morbidity and mortality associated with frailty in the urgent care setting, a response is required similar to that seen for trauma calls, i.e. an immediate response. The initial assessment should involve all team members. Once it is complete, it should become apparent which member (or members) of the team, if any, is required for on-going care.

Picture a service where the frailty team is called using a ‘Silver phone’. Depending upon settings and the volume of frail older people this may well mandate a continuous presence of the frailty team. The Silver phone, or a similar process, should also be accessible pre-hospital to give advice to GPs or to guide pre-hospital first responders as to the most appropriate response. For example, working with paramedics to determine if acute hospital care is required, or if care can be safely delivered by community services.

A service that initiates very early CGA and then case manages patients assertively through the system, should improve outcomes, reduce harm and be more efficient.

Questions to consider are:

- How can you create the immediate response you need for frail patients in an urgent care setting?
- Does this mean a dedicated phone number like dialling 999?
- What are the expectations when that number is called?

In addition to this frail older people should be able to access excellent frailty services in the urgent care settings. These services should be easily identifiable, readily accessible and responsive. Depending upon definitions, the setting and local service configuration, about 5-10% of all ED attendees and about 30% of patients in AMUs will be identified as frail older people; the aim of the frailty service should be to manage the majority of these patients. A typical service will consist of:

- A physician with expertise in the care of frail older people – usually, but not exclusively, a geriatrician.
- Physiotherapists and/or occupational therapists skilled in the care of older adults.
3 Set up a rapid response system for frail older people in urgent care settings

- Nurse specialists that can offer a case management function.
- Advanced nurse practitioners in older people that can offer a rapid clinical assessment, examination and prescribing function.
- Ward and peripatetic teams with skills and expertise in frailty.
- A falls specialist (can be nurse or therapist).
- Administrative staff able to organise complex (and simple) discharge.

Although function is more important than form, there is a strong evidence base supporting the effectiveness of acute geriatric units (also referred to as AFUs – Acute Frailty Units)\textsuperscript{17-21} over more dispersed, liaison-type service. However, whilst such services might be feasible in larger centres, units with less resource or smaller patient volumes may need to focus on trying to embed CGA into the receiving service. In the following case study Poole describes the impact of such a service.

More important than the specific roles is the ability of the team to deliver a proportionate, competent assessment and on-going management. As a frailty service matures, role boundaries will blur, for example with emergency physicians providing the diagnostic element in the emergency department, or single speciality therapists taking responsibility for physical and environmental assessments.

Start by establishing how many patients you are dealing with day to day. This will help you decide whether to go for a physical unit or a virtual one. Once you are agreed, work to make your decision a reality.
Our challenge

• To support the Emergency Department in meeting the 4 hour performance target.
• To reduce readmission rates into Department of Medicine for the Elderly (DME) from 14%.
• To reduce length of stay (LOS) in rapid access consultant evaluation (RACE) (currently 1.4 days).
• To avoid unnecessary admission for acute frail older adults.
• To increase the number of older patients with a zero LOS.

What we did (the process)

We created and introduced a safer flow bundle to assure we optimised each patient's stay in the RACE unit and reduced our length of stay. We also rostered an ANP into our RACE clinic to work 7 days a week.

The aim of the ANP was to improve the flow of frail older patients from ED, and support the ambulatory emergency care of older adults from the ED. We also reviewed the processes in place in the unit for GP-accepted patients, supported the unit by directly receiving patients who were referred by a GP with an urgent care need, and promoted attendance by pre-booking urgent appointments and patient transportation. We then were able to initiate the CGA within 1 hour of the patient admission into the unit and obtain a senior review within 2 hours. During the weekends we were able to directly access the geriatric consultants when required.
What we achieved (the outcomes/data)

• Within the first 3 months of operation 213 patients were cared for in the AEC clinic.
• Increased the flow of older adults through the DME and reduced LOS by assuring reduced ‘hand offs’ for patients.
• The development of inter-professional working between locality community matrons and district nurses as the ANP’s and the locality teams liaise regarding patients who have a long term condition and are frail.
• Work with community staff to develop advanced care plans for those patients who re-attend.

Case study
Poole Hospital
NHS Foundation Trust

Testimonials from wide of staff groups and patients

Patients
“Very welcoming, Polite and helpful to both patients and their families.”
“I wish we had a unit like this in our local hospital its excellent.”
“I was well looked after.”
“I was involved in my assessment and treated well throughout my stay.”

Staff
“It’s a really good service as patients can be seen and treated same day and avoid admission – so completely patient-centred.”
“We see numerous people who otherwise would have to be admitted overnight.”

Key Trust contacts

Valerie Horn – Matron Department of Medicine for the Elderly (DME); Val.Horn@poole.nhs.uk
Louise Jenkins – Senior Sister, Department of Medicine for the Elderly (DME); Louise.Jenkins@poole.nhs.uk
DME Advanced Nurse Practitioner Service – Kerry Porter, Polly May, Jenna Chandler, Samantha Sargent, Sue Greenwood, Julie Tuck
Principle 4

Adopt clinical professional standards to reduce unnecessary variation

Good clinical care is all about teams working together – this means individuals from different backgrounds, with different pressures and perspectives, coordinating their care in order to achieve outcomes that are important to patients. This cannot be driven by policies alone, it is about building a shared common vision and importantly a shared understanding of ‘the way we do things around here’. In the case of frail older people, this means an interdisciplinary team coming together in order to discuss patients and come up with an agreed plan; to do this effectively requires structure – or internal professional standards.

Internal professional standards are a clear, unambiguous description of the values and behaviours expected in an organisation. They are most powerful when they are centred on patient care, are written and agreed by the clinical leaders and overtly supported by the executive team*. Agreeing internal professional standards, and then measuring practice against these is a powerful mechanism to reduce variation, which will improve patient outcomes.

The clinical professional standards to be adopted are:

- The initial CGA outputs should be completed within ONE hour of a frail older patient accessing urgent care.
- The stratified problem list, and competent senior management plan, should be documented within TWO hours from 8am until 10pm, and within 12 hours overnight.

To limit variation in these service standards it is recommended that clinical professional standards are monitored and reported on a weekly basis. This will allow measurement of the quality of the pathway, and an understanding of where there may

* www.fabnhsstuff.net/2016/03/10/way-things-making-internal-professional-standards-work
Worked example of a stratified problem list

**Presenting complaint**
Found on floor: no meaningful history from patient as drowsy and not able to recall event.

**From a residential care home**
Collateral: found on floor at 4am. Last seen at 2am in bed. Found right side and urinary incontinent at that time. Reduced appetite for last 24 hours and reports nausea. Bowels last opened two days ago. Independently mobile. Requires supervision and prompting to feed self and wash and dress. Occasionally urinary incontinent and wears pads overnight. Continent with bowels. Usually disorientated but able to hold a conversation and answer aptly yes/no. But poor memory. Been at home for three years. No issues otherwise.

**Past medical history**
Recurrent UTI/Alzheimer’s dementia/ hypertension/stroke.

**Medications**
Co-codamol 30/500 TT QDS (initiated two months ago following fall and right shoulder injury) Bendroflumethiazide 2.5mg, OD Atenolol 50mg, OD Donepezil 10mg OD, Aspirin 75mg OD, Simvastatin 40mg, OD Trimethoprim 100mg ON.

**Examination**

**Investigations**
Bladder scan: 710 mls (post void residual) U&E: eGFR 24 (baseline 56) Urine dip +ve Previous MSU: resistant to trimethoprim. CK/Bone/LFT/FBC/TSH/Haematins: normal ranges. CT head (fall and confusion): disproportionate hippocampal atrophy and moderate burden of small vessel disease. Mature infarct noted right temporoparietal lobe.

**Problem List**
1. Multifactorial fall
   a. Poor cognition/dementia
   b. Bradycardia (medications: atenolol/donepezil)
   c. Neurological deficit (previous stroke)
   d. Hypotension (medications and fluid depletion due to:
      i. Reduced oral intake due to
      ii. Constipation due to
      iii. Opiates

2. Urinary retention due to constipation/faecal impaction +/- donepezil causing:
   a. Recurrent UTI (multi drug resistance)
   b. Acute (post renal) kidney injury
3. Polypharmacy (opiates/beta blockade/thiazide)
4. Hypoactive delirium secondary to above issues

Multiple issues have been identified as probable contributors to the fall. Now that these have been clearly identified they can be individually addressed: either immediately or over time.
What we did (the process)
Leicester’s Emergency Frailty Unit (EFU) aims to deliver two brief multi-disciplinary team (MDT) meetings per day to aid communication and efficient patient assessment and management. Historically, meeting attendance rates were variable. A quality improvement (QI) project was designed to optimise the frequency and attendance at meetings, aiming to improve communication and reduce variability.

Baseline data collection was continuously monitored during this period and included the number of handovers per day, attendance of MDT members and length of meeting. Two planned interventions occurred:

1. MDT meeting rates and attendance were published and an email was sent to all MDT members explaining the rationale for the project.

2. All team members were encouraged to take shared ownership and initiation of the MDT meetings.
What we achieved (the outcomes/data)

Both interventions resulted in a measurable improvement in the frequency and attendance of MDT meetings.

- Occurrence of an MDT meeting on any given day improved from 25% to 100%
- Proportion of MDT members present improved from 25% to 70%
- Length of meetings decreased from 89 seconds to 79 seconds per patient

This project has shown that setting internal professional standards to support the frequency and composition of rapid MDT meetings can improve the process with no adverse impact on the duration of the meeting or use of additional resource.
Principle 5
Develop a measurement mind-set
Step 1 Define Aim
For frail older people, reduce unnecessary time in urgent care, without effecting readmissions: Without a clear ‘outcome’ based aim, it will be difficult to decide what improvements you need to implement in order to try and meet the aim. Royal Berkshire Hospital developed a short but useful aim of... ‘Safe, timely discharge home for older frail patients’. In the measurement visit we explored what timely and safe are, and ended the session with a clear plan about what to measure in order to see if the project will be a success.

Steps 2 and 3 Choose and Define Measures
Use the measures checklist to define frailty: All sites have been encouraged to use the ‘Measures Checklist’ (available from the interactive PDF – Measurement for Improvement Guide on our website) to ensure they understand how to clearly define the outcome, process and balancing measures that they are going to collect. All sites have created a driver diagram to start to understand that process measures (the right hand side of the diagram) will help achieve the aim (the left hand side of the diagram).

Step 4 Collect Data
PDSA systematising frailty identification at the front door: Chesterfield is a shining example of how to use the PDSA cycle for testing change around how to identify and collect frailty at the front door (8 out of our 10 sites do not routinely collect it). They have been testing out the process for 3 weeks, reviewing the findings and working closely with their information team to try and embed this systematically as a part of their patient administration system.
There are four stages to the PDSA cycle:

- **Plan** – the change to be tested or implemented
- **Do** – carry out the test or change
- **Study** – data before and after the change and reflect on what was learned
- **Act** – plan the next change cycle or full implementation

You may not get the results you expect when making changes to your processes, so it is safer, and more effective to test out improvements on a small scale before full implementing.

Running a series of PDSA cycles has a number of advantages:

- You can learn and adapt after each test.
- It increases the degree of belief in the changes amongst stakeholders.
- It builds a common understanding of what you’re trying to achieve.
- You can evaluate costs and any possible side effects that couldn’t be fully anticipated.
- It reduces the total lead time of full implementation.
- You can test ideas under different conditions.

**What measures might you use?**

You will want to measure the effect of changes you are making at three quite different levels across your health and social care system.

Firstly there is the local or micro-level. This is bespoke measurement to inform local, internal quality improvement initiatives or to inform PDSA cycles. Measurement here needs...
5 Develop a measurement mind-set

To be tailored to the aim of the specific project. This means that your results will almost certainly not be comparable with elsewhere because you will be using different measures or apparently similar measures that are defined subtly differently.

Then there is the service or meso-level. This is assessing the impact of service developments on the urgent care pathway for frail older people. It is at this level that we showed the example of using the 7 steps approach above. As frailty is not currently captured in routinely collected hospital data*, it will usually be necessary to measure the relative impact of service changes at the hospital level using age-bands for historic data. Once you have a reliable frailty identification process in place though, you may be able to place a flag in your hospital system that will enable you to analyse your data at a local level. Be warned that this flag will not transfer with your data automatically outside your Trust. Candidate metrics include:

- attendance and admission rates (summarised as a ‘conversion rate’);
- total bed-days (not averages as this will vary according to the threshold for admission); and
- the ‘stranded patient’ metric (e.g. the number of people aged 75+ still in a hospital bed at 14 days). Age 85+ is a useful measure of relative change, but will not capture the absolute effect, because it lacks sufficient sensitivity and specificity for frailty.

Finally there is the system or macro-level. This is useful for examining patient flows across acute and community pathways, or undertaking benchmarking exercises between different settings. Here standard age-bands (65-74, 75-84, 85+) should be used.

As there is no existing perfect frailty measure, it will be challenging and possibly not hugely informative to spend a lot of time trying to look back at patient flows (retrospective analysis). We would instead emphasise the need to identify frailty and measure prospectively.

The stranded patient metric

The stranded patient metric is based on the LOS. The AFN recommends using a LOS of 10 days or more. A proportion of these people will have a truly catastrophic illness and will need to be in hospital that long. However, a significant proportion have spent 10 or more days in hospital because of unnecessary waits in the system. The majority of these waits are internal including waiting for a decision, a diagnostic test, an intervention, a referral. It is the cumulative waits and the de-conditioning that goes with them that can turn what could have been a simple discharge into a complex one. The hospital based de-conditioning results in a functional decline that is now dependent on external agencies to support the discharge. We must work to eliminate these waits to shorten hospital admissions and reduce the consequences of prolonged admission. If the de-conditioning has been prevented, the patient would have gone straight home.

Patients at risk of increased stay need to be identified on day zero. They are mostly older people with frailty, but not exclusively. They need a zero tolerance of all unnecessary delays to prevent de-conditioning.

* HES based frailty indices should be available in 2016/17
Firstly, an extract from Matt Tite, Measurement Lead, as part of the AFN site visit feedback:

“You have a fabulous approach to measurement for improvement in your organisation. I was delighted to watch the site visit presentation which was full of Statistical Process Control (SPC) charts. You have a brilliant measurement lead in Mark Dennis, and his way of bringing data to life will be of real benefit to your AFN programme of improvement.”

What we did (the process)

Western Sussex have a measurement mind-set. Measurement for improvement should be a way of working, joining together the usually separate steps of (1) making changes and (2) getting the evidence that the change has made a difference. Often analysts are only asked to get proof of success at the end of the project. This is not the case at Western Sussex, where the improvement analyst is seen as a key part of the team from the start of the project. Using established quality improvement tools such as SPC, Pareto analysis and flow analysis, the analyst offers analysis that describes outcome, process and balancing measures. The analyst talks about triangulating data and appreciating the variation in the system, then looks for signals from the noise.

Here is an example of an SPC chart used in Western Sussex to understand, at patient level, a key stage of the frailty pathway.

When you have a holistic measurement mindset, with a focus on continuous improvement you will be better situated to understand when things don’t go as planned (most changes don’t result in an improvement). This puts you in a better position to stop and learn from what didn’t work, try something else and improve it.

Key Trust contacts

Kelly Salter – Project Support and Administration; 01903 205111
Case study
Imperial College Healthcare NHS Trust

What we did (the process)
We wanted to support older people diagnosed with dementia to maintain or increase their dietary intake during their inpatient admission.

Using improvement principles and framework of PDSA cycle dementia lead nurses worked to trial different strategies to increase patients eating and dietary intake both at meal times, and during wider admission. Completed multiple PDSA cycles, learning from each one and narrowing down options/opportunity to support patient experience and dietary intake. Using small sample sizes and not being afraid to try something different, a proactive approach and framework of PDSA supported identifying focused improvements in this area.

Options tested:
- **Music**: tested the hypothesis that patients listening to music would support eating at meal times
- **Carer/Family passport**: Card provided to relatives or carers of patients with dementia to allow them to come and support their significant other during meal times, normalising mealtimes and supporting the social aspect of eating.
- **Snack Boxes**: Tested the hypothesis that providing small amounts of a few snack options would support patients in grazing and increase dietary intake rather than relying on only meal time consumption.

What we achieved (the outcomes/data)
- Developed a care pathway to support maintaining dietary intake for patients with dementia during inpatient admission.
- Baseline data and PDSA learning supported successful application to support funding for snack boxes to be used with all patients with dementia across elderly medicine wards.

Key Trust contacts
**Joanna James** – Lead Dementia Nurse; Joanna.James@imperial.nhs.uk
**Maxine Powell** – Service Delivery Manager; Maxine.Powell@imperial.nhs.uk
Principle 6
Strengthen links with services both inside and outside hospital

Effective management of the frail older person in a hospital environment is very dependent on understanding the Directory of Services they can access inside and outside the hospital. Many urgent care teams work closely with community teams and either have representatives in urgent care or staff that work across the boundary of acute and primary care with the skills to case manage patients and ensure they can access the services they need.

In addition, local social services departments will have social workers or care staff working both in hospitals or in the community providing a range of social care assessment and support for older people in their own homes or in care homes. Third sector agencies such as the Red Cross (www.redcross.org.uk) or Age UK (www.ageuk.co.uk) also now offer services in many areas to transport and resettle patients in their own home following a hospital attendance or admission.

Derbyshire Community Health Services have adopted this approach and describe the benefits in the following case studies.
Our challenge
Older people who come to crisis are more likely to call an ambulance from home, be taken into hospital, and then be more likely to be admitted than younger people.

To prevent unnecessary hospital admission for older frail adults after a fall and assure appropriate follow up and care in the community.

What we did (the process)
Set up a falls partnership service (a collaboration between the Ambulance Trust, Community Hospital NHS Foundation Trust and 2 CCGs) in which a falls ambulance, manned by a paramedic and OT, go out to a person’s home after either a 999 call for a patient who has fallen or after referral by a GP or paramedic at the scene of a patient who has fallen.

We then set up a weekly consultant geriatrician review of all patients seen in the past week as a virtual ward and also enabled the team to directly step up patients into acute care.

What we achieved (the outcomes/data)
From November 2013 to July 16th 2015 a total of 1,014 patients have been visited by the service and 514 have been able to remain at home as a result of our visit.

Key Trust contacts
Hayley Barratt – Occupational Therapist; hayley.barratt@nhs.net
Dawn Booker – Paramedic
Julie Anderson – Team Administrator; julieanderson7@nhs.net

Falls Partnership Service – a partnership between 2 CCGs, Ambulance and Community Hospital Foundation Trust to prevent unnecessary hospital admission for older people who fall.
Our challenge
To support the care of acute frail older patients, reduce emergency admission and support integration of care in the community.

What we did (the process)
As part of the 21st Century Programme Acute Frailty Services Workstream across the acute and community trusts (which aims to develop the draft blueprint for the North Derbyshire frailty services model and patient pathway) we developed a partnership between both the Royal Chesterfield NHS Foundation Trust and Derbyshire Community Health Services NHS Foundation Trust and worked to develop a delirium pathway and create rotational posts across our acute and community services.

What we achieved (the outcomes/data)
Development of a delirium management pathway to be used across primary care, community care and acute hospital services.

The Derbyshire Community Trust works with the AFU in providing nursing and therapy staff who rotate into the community. Equally the Community Trust provides a clinical navigation service in the acute setting to enable rapid response from the community with step down beds and more recently a discharge to assess model Monday to Friday 10am to 6pm in which OTs attend the patients home as early as possible in the admission with the aim to provide early therapy in patient's own home to enable realistic goal setting and prevent unnecessary acute admission.

Key Trust contacts
Dr Kath Shakespeare – Consultant Geriatrician; kath.shakespeare@nhs.net
Dr Bola Owalabi – Lead Clinician and GP; bola.owolabi@nhs.net
Principle 7

Establish appropriate education and training for all staff

Frail older people present to urgent care settings 24 hours per day, seven days per week, and receive care from a diverse range of staff across the acute health and care system. To establish a consistent understanding and approach, it is essential that all staff have the knowledge to best meet frail older people’s needs.

Appropriate education and training can be provided via both formal and informal routes, graded to meet specific staff group needs (i.e. trust wide basic frailty awareness).

Guidelines and toolkits adapted for the local setting can support this and should be readily available throughout the urgent care pathway. Educational activities, including e-learning, face-to-face teaching and induction, should support professionals in their daily work.

Clinical attachments rotating though frailty services should be the norm, and for some this might include a bespoke fellowship for a longer period to develop expertise in frailty. Clinical training in frailty services should reflect the range of services in which CGA can be delivered, in both acute and community settings.

For non-medical colleagues both formal and informal educational routes are available. Formal routes include advanced practice or speciality skill development. Informally, cross professional and pathway observations and sharing, with opportunities for coaching or mentoring when exploring extended or cross skilled roles, should be encouraged.

At Imperial College Healthcare NHS Trust, they have focused on improving care for people with dementia in ED and describe the importance of training in this change.
What we did (the process)

What we wanted to do was to support older people with dementia in the Emergency Department with activity and a meaningful environment.

Using feedback from carers and people with dementia and staff in the Emergency Departments at Imperial, the ED staff and Dementia Care Team developed a series of interventions to support patients with dementia using the EDs.

1. Staff Training Programme
A bespoke training programme was developed for the ED staff. This ran over a 5 week period and was delivered at time suitable for the staff.

2. Development of Activity Packs for Patients using the Department
20 single use packs were made up for the patients andirst contents were tested on patients. After they had been used, feedback was obtained and the contents of the packs were changed. This process was continued through 5 ‘plan, do, study, act’ (PDSA) cycles until the contents met the needs of the patients and were deemed appropriate by the staff. Changes made were as follows:

- Laminated easy read news stories were made, the content was felt by some staff to be inappropriate and was changed.
- Juggling balls were put in the kit to occupy patient's hands during venepuncture – the team fed back that these were breaking when chewed and were therefore replaced by Koosh balls.

- Staff felt that there were too many items in the kits which were not used therefore the items were stored separately to ensure staff could use what they wanted.
- Staff felt there needed to be more items for patients to hold and therefore rings and the number ball was added.

3. Decorating and Equipping of a Dementia Friendly Cubicle in the Emergency Department
A well located side room has been redecorated to support patients with dementia at St Mary's Hospital. This has included using the existing evidence base to provide an environment which is clear and easy to navigate. This area also includes a CD player, music and a TV and DVD player.
What we achieved (the outcomes/data)

- We have raised awareness of the needs of people with dementia in the Emergency Department.
- More than 100 activity packs have been given to patients – illustrating buy in from the staff.
- The Emergency Department Dementia cubicle is operational and the design is being used as a template in other areas of the Trust.
- The use of PDSA cycles to develop the activity kits ensured that they are fit for purpose and that the staff are willing to use them.

Key Trust contacts

Joanna James – Lead Dementia Nurse;
Joanna.James@imperial.nhs.uk

Maxine Powell – Service Delivery Manager;
Maxine.Powell@imperial.nhs.uk
Principle 8

Identify clinical change champions

‘Frailty Champions’ are crucial to the development of a truly great service. Whilst they can come from any part of the service, they need to be respected by their peers, lead by example and praise success. The Frailty Champion should have access to appropriate training and development to support them in this role, such as managing and leading change. It is also important that they have the resources available to help them undertake this crucial role successfully, such as protected time to undertake this work. It is a recognised problem in the NHS that people are not sufficiently trained and supported to lead change. There are a number of ways to develop these skills. Please talk to us for more advice.

The Frailty Champion should be supported by staff with a range of skills such as service improvement and project management.
Principle 9
Patient and public involvement

Involving patients and carers in the design of your frailty service is key to ensuring a good patient experience. Although public perception of a good quality service can differ from the professionals, neither view is wrong. Traditionally, service developments in health care are designed around clinical models or pathways based on best evidence. Working with the public to co-design services is a fairly new approach and clinical teams need to work with this group to harness their feedback, designing services that deliver better experiences for patients, staff and carers.

One approach that works very well is experience based design. The Acute Frailty team worked with pilot sites in cohort one to develop a tool that captures the experiences of those using and delivering frailty services. This involves looking at the care journey and in addition the emotional journey people experience when they use frailty services. Staff work together with patients and carers to firstly understand these experiences and then to improve the service they deliver.
What we did (the process)
Staff at Portsmouth Hospitals NHS Trust used this approach to inform the design of their frailty services. Patient/carer experience was captured in two ways. The first was using semi-structured interviews asking:

Thinking about your arrival at hospital and what your experience was of that and the first three days you were here:
1. What stands out in your mind?
2. What would you have liked us to do more of?
3. What would you have liked us to do less of?
4. What were the three most important things to you and your family during that time?

The interviews were undertaken by a clinician, and recorded. Eight patients were interviewed using this method. The next step of capturing patient experience was to use an EBD questionnaire (see Figure 1 below).

Figure 1
The Experience Based Design (EBD) approach can be broken down into four stages:
Capture
Understand
Measure
Improve

The information collected using this method was analysed to create the emotional map in Figure 2 on the following page.
**Case study**
Portsmouth Hospitals
NHS Trust

**What we achieved (the outcomes/data)**

All of the information captured was then presented to a focus group of staff and patients. At this facilitated event, the group discussed the journey for frail patients and they were asked to write down their feelings about journey stages in the emergency department (ED), Acute Medical Unit (AMU) and in-patient wards.

Dr Claire Spice, a geriatrician, following the event said:

“We found that a facilitator was crucial and I would also recommend a separate note-keeper as I was trying to participate and listen as well as document quotes/feelings during the first part of the event. It was really helpful to map the positive and negative feelings and experiences in stages.

I found it quite intense but it was also liberating to be able to listen without a view to jumping in and offering solutions!”

The focus group ended with a number of actions being agreed. These were:

- Increase involvement of ED and AMU in the project to improve the frailty service
- Undertake some periods of observation to understand how the frailty service is being delivered
- Joint working
- Develop post discharge phone calls to capture patient feedback
- Review the environment and food and drink provision in the ED/AMU
- Work with staff to capture their experience
- Work with patients to understand how to convey frailty to patients and carers

The work undertaken by Portsmouth Hospitals NHS Trust illustrates the power of involving patients and the public in improving services. It also demonstrates that improving the service from a patient perspective need not be costly, as it is often communication, information and basics such as the provision of refreshments that make for a good patient experience.

To find out more about the work undertaken by Dr Claire Spice please email Claire.spice@porthosp.nhs.uk

Information on the EBD approach can be accessed at www.acutefrailtynetwork.org.uk or at www.kingsfund.org.uk/projects/ebcd
Principle 10

Identify an Executive Sponsor for the project and underpin with a project management structure

Improving frailty services needs the support of a wide range of skill sets and resourcing decisions to drive through the improvements. It is therefore vital to have a senior leader at Board level to sponsor the project that can make resourcing decisions as needed, including allowing the team to take the time to participate in the project.

Delivery of the frailty project should be through a robust project management structure. Project management is a proven and effective tool that delivers a number of benefits such as clarifying scope and expectations, delivery timelines, resource allocations, and improves communications between the various stakeholders and the project team. The project team will ideally meet fortnightly, be chaired by a senior manager or clinician, and be attended as a minimum by a frailty project lead, lead clinician for frailty, an analyst and relevant members of the frailty multi-disciplinary team.

The project should be within the overall programme management structure of the organisation to ensure information and support flows through from the project team to the executive team. Within the programme structure will be a requirement for regular reporting and the measurement and evaluation approaches described above will be helpful with this.

In many health care settings, the relevant system-wide Board should have sight of the frailty service improvements and can be instrumental in releasing resources and expertise to turn ideas into reality. They can also manage the interdependency and information of other stakeholders in the system. High quality frailty services will have a significant impact on the safety and resilience of the whole health care system.
Case study
University Hospitals of North Midlands NHS Trust

Our challenge
Our aim in joining the Network was to improve both patient outcomes and experience; to manage patients in the right environment with the right team thereby reducing the need for unnecessary transitions of care; to minimise delays that can lead to deconditioning; and to reduce admissions wherever possible. It was vital to us that patients that could and should be managed in the community were not admitted to hospital.

What we did (the process)
UHNMs Chief Operating Officer, Helen Lingham, became executive sponsor for the Acute Frailty project and took a hands-on approach to improvement work within her own Trust. Helen says “I was able to offer healthy challenge to the team here and unblock things when any blocks appeared. It was a really positive experience. I learned a lot about how we were doing things and how we might be able to make things even better”.

Helen established a monthly frailty project steering group which she chaired personally, and was also attended by the lead geriatrician, project lead, analyst (who routinely reported on weekly data), directorate manager and appropriate members of the MDT. This ensured the project was linked to the Trust’s strategy, had a high profile and buy in across the Trust (including in A&E) that the action plan was on track, addressed any risks and blocks, and ensured the right resources were available to the project.

This group was supported by a smaller more frequent project team meeting which focused on specific tasks such as frailty identification, comprehensive geriatric assessment, workforce development, data development and frailty education and training for all staff involved in looking after frail people.

What we achieved (the outcomes/data)
- Identified frailty comprehensively
- Developed comprehensive geriatric assessment
- Streamlined processes and managed discharge
- Implemented early frailty intervention in the patients pathway
- Reviewed the function of and access to the frailty unit
- Length of stay dropped from 15 to 8 days
- Numbers of stranded patients were reduced from around 250 to below 200
- Reduced bed days led to savings in the region of £700,000
Conclusions

The principles and recommendations set out in this toolkit are not exhaustive; they are intended to provide a checklist of activities to help you redesign your services so that the journey of frail older people during the first 72 hours of their urgent care experience is streamlined and leads to better clinical outcomes.
Appendix 1 Canadian Frailty Scale

The Canadian Frailty Scale is derived from the Rockwood frailty index and has been tested in a number of studies and found to be a moderately accurate predictor of adverse outcomes for older people in the acute care context.\(^5\)\(^2\)\(^2\)\(^3\).

The Cambridge team has been using this tool in their service for identifying a cohort of patients with moderate to severe frailty, at increased risk of death or long stays in acute care.

### Clinical Frailty Scale

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Very Fit</td>
<td>People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.</td>
</tr>
<tr>
<td>2 Well</td>
<td>People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.</td>
</tr>
<tr>
<td>3 Managing Well</td>
<td>People whose medical problems are well controlled, but are not regularly active beyond routine walking.</td>
</tr>
<tr>
<td>4 Vulnerable</td>
<td>While not dependent on others for daily help, often symptoms limit activities. A common complaint is being “slowed up”, and/or being tired during the day.</td>
</tr>
<tr>
<td>5 Mildly Frail</td>
<td>These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.</td>
</tr>
<tr>
<td>6 Moderately Frail</td>
<td>People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.</td>
</tr>
<tr>
<td>7 Severely Frail</td>
<td>Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).</td>
</tr>
<tr>
<td>8 Very Severely Frail</td>
<td>Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.</td>
</tr>
<tr>
<td>9 Terminally Ill</td>
<td>Approaching the end of life. This category applies to people with a life expectancy &lt;6 months, who are not otherwise evidently frail.</td>
</tr>
</tbody>
</table>

### Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common symptoms in mild dementia include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In moderate dementia, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In severe dementia, they cannot do personal care without help.
Comprehensive Geriatric Assessment (CGA) is defined as ‘a multidimensional, interdisciplinary diagnostic process to determine the medical, psychological, and functional capabilities of a frail older person in order to develop a coordinated and integrated plan for treatment and long-term follow-up’\(^2\). Each aspect of the definition is important:

‘Multidimensional’ – this highlights the importance of taking a holistic overview. In this cohort of patients, it is not sufficient to focus simply on one domain or the main problem of the patient. For example, an approach to chest pain that simply states that the troponin is negative and that a coronary angiogram is not required, but fails to test for and identify the cognitive impairment that led to the individual not taking analgesia for arthritis (the true cause of the pain), is doomed to fail. Equally, a purely functional approach to falls that seeks to provide only rehabilitation and not identify the underlying reasons for a fall (of which there are many, including serious disorders such as aortic stenosis) will not succeed. It is the integrated assessment of all of the domains of CGA that allows an accurate problem list to be generated.

‘Interdisciplinary diagnostic process’ – in a mature CGA service, the hierarchy should be flattened such that all staff should feel empowered to constructively challenge within and without of their particular area of expertise. For example, the option to admit for rehabilitation by a therapist concerned about falls at home might be challenged by pointing out that admission often increases the risk of falls, and that home-based rehabilitation may offer substantial benefits. Equally therapists will bring useful information to the diagnostic process – for example, the patient who is ‘fit to return home’ that develops new dyspnoea on mobilisation might prompt a re-evaluation of respiratory function and identify potentially new diagnoses such as pulmonary embolus. That this assessment is a process and not a discrete event is also key; the process should continue in an iterative manner over the course of the acute stay and the diagnostic elements should be sensitive to deviations from the anticipated pathway. For example, if the initial treatment plan for an individual with a fall and hip pain but no fracture was to ‘increase analgesia, reduce anti-hypertensives and aim to return home once able to walk 5 metres unaided using a frame’, yet after 14 hours, pain remains a problem, the diagnosis may need to be re-visited and further imaging considered.

‘Coordinated and integrated plan for treatment’ – reinforces that the team caring for an individual need to know and respect each other’s roles and know and understand what each is doing, and how the medical treatment will impact upon the rehabilitation goals and vice versa. For example, whilst therapists would not need to know the detailed intricacies of the management of acute heart failure, it is important that they know that intravenous diuretics might be required for the first few days that will result in polyuria, and then be able to incorporate continence needs into the rehabilitation plan. Equally, doctors will need to appreciate that just because a patient has grade 5 power on the Medical Research Council (MRC) grading system, that does not necessarily translate into useful functional ability.

‘Follow-up’ – as many older people will have multiple long-term conditions, they will usually require some form of on-going care and support. How this is delivered will vary from country to country, but there is little point in providing excellent acute care if conditions are only going to be allowed to decline because of a lack of on-going support. For example, a two-week admission during which Parkinson’s disease medications are carefully titrated and optimised in conjunction with the multidisciplinary rehabilitation process can easily be reversed if there is no on-going titration of L-Dopa once the patient returns home.

So whilst integrating standard medical diagnostic evaluation, CGA emphasises problem solving, team working and a patient centred approach.

Appendix 2 Comprehensive Geriatric Assessment (CGA) in action
Appendix 3 Person-centred care

Person-centred care (PCC) attempts to respect the person as an individual, with a history (biography), values, preferences, and the right to make choices. This aims to enhance engagement and enjoyment of life, preserve abilities, and avoid or defuse distress.

Consider a frail older person attending an Acute Medical Unit with chest pain. A common approach for people with chest pain is to undertake a rapid assessment, initiate tests that will stratify risk, and then discharge with reassurance that the chest pain is not cardiac. For patients who have attended that were worried they might have a heart conditions, this might be helpful. Protocols can be prepared than can automate much of this process, resulting in a rapid, efficient and possibly effective service, for some.

But such an approach is not so useful for frail older people, in whom the range of conditions that might present with chest pain is broad. It is important to evaluate the pain in the context of the range of issues, which can really only be addressed by undertaking multidimensional assessment. This might then reveal that actually the pain is resulting from shoulder arthritis that has flared up because the person has forgotten to take their pain killers because of worsening, hitherto undiagnosed cognitive impairment. The solution here is not then the reassurance that the pain is not cardiac, but a referral to the memory service and to organise supervision of medication. So this is individualised care, tailored to the person based on an understanding of a range of factors.

PCC also respects individual preferences and choices – so for example, the refusal of on-going investigation for apparently severe conditions as the individual prefers quality to quantity of life.

Put very simply PCC is about treating the person, not simply following a conditions specific protocol.
References


References


Resources

Model for improvement

Useful web-based resources
www.nhsiq.nhs.uk
www.ihi.org/about/Pages/ScienceofImprovement.aspx
www.ihi.org/resources/Pages/Tools/PlanDoStudyActWorksheet.aspx

Useful overview of 7 steps to measurement for improvement
Davidge M, *Measurement for improvement* 10 minute video. www.youtube.com/watch?v=Za1o77jAnbw

The role of an Advanced Nurse Practitioner
www.nursinginpractice.com/article/role-advanced-nurse-practitioners

Driver Diagrams
www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/driver_diagrams.html

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Participating sites

Cohort 1
- Addenbrooke’s Hospital, Cambridge University Hospitals NHS Foundation Trust
- Derbyshire Community Health Services NHS Trust
- Gloucestershire Hospitals NHS Foundation Trust
- Imperial College Healthcare NHS Trust
- Kettering General Hospital NHS Foundation Trust
- Poole Hospital NHS Foundation Trust
- Royal Berkshire NHS Foundation Trust
- The James Cook University Hospital, South Tees Hospitals NHS Foundation Trust
- University Hospitals of North Midlands NHS Trust
- York Teaching Hospital NHS Foundation Trust

Cohort 2
- Chelsea and Westminster Hospital NHS Foundation Trust
- Medway NHS Foundation Trust
- Norfolk and Norwich University Hospitals NHS Foundation Trust
- Northern Devon Healthcare NHS Trust
- Peterborough and Stamford Hospitals NHS Foundation Trust
- Portsmouth Hospitals NHS Trust
- Royal Cornwall Hospitals NHS Trust
- The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust
- The Royal Wolverhampton NHS Trust
- University Hospital of South Manchester NHS Foundation Trust
- Western Sussex Hospitals NHS Foundation Trust
- Wirral University Teaching Hospital NHS Foundation Trust

Cohort 3
- Blackpool Teaching Hospitals NHS Foundation Trust
- Brighton and Sussex University Hospitals NHS Trust
- Calderdale and Huddersfield NHS Foundation Trust
- East Kent Hospitals University NHS Foundation Trust & East Kent Community Health NHS Foundation Trust
- Gateshead Health NHS Foundation Trust
- Hampshire Hospitals NHS Foundation Trust
- Lewisham and Greenwich NHS Trust
- Northumbria Healthcare NHS Foundation Trust
- University Hospital Southampton NHS Foundation Trust
- West Suffolk NHS Foundation Trust
Participating sites

**Cohort 4**
- Barking, Havering and Redbridge University Hospitals NHS Trust
- Colchester Hospital University NHS Foundation Trust
- Frimley Health NHS Foundation Trust
- King’s College Hospital NHS Foundation Trust – Denmark Hill
- King’s College Hospital NHS Foundation Trust – Princess Royal University Hospital
- Mid Cheshire Hospitals NHS Foundation Trust
- Royal Surrey County Hospital NHS Foundation Trust
- St Helens and Knowsley Teaching Hospitals NHS Trust
- The Princess Alexandra Hospital NHS Trust
- University Hospitals Bristol NHS Foundation Trust
- Warrington and Halton Hospitals NHS Foundation Trust
- Wye Valley NHS Trust

**Cohort 5**
- Barnsley Hospital NHS Foundation Trust
- County Durham and Darlington NHS Foundation Trust
- Ireland East Hospital Group
- Isle of Wight NHS Trust
- Mid Essex Hospital Services NHS Trust
- North Bristol NHS Trust
- Nottingham University Hospitals NHS Trust
- Royal Free London NHS Foundation Trust
- The Hillingdon Hospitals NHS Foundation Trust
- The Queen Elizabeth Hospital King’s Lynn NHS Foundation Trust
- The Shrewsbury and Telford Hospital NHS Trust
- Weston Area Health NHS Trust