

## 1.1. Systematic use of risk prediction tools to identify frail older people

### Descriptor

**Health and social care staff identify older people who are frail and at greatest risk of emergency admission to hospital or to institutional care.**

### Rationale

Scottish Patients At Risk of Readmission and Admission (SPARRA), predicts risk of future hospitalisation for people who have had an emergency admission in the previous 3 years. The tool uses demographic data, SIMD deciles for deprivation and disease coding from SMR 01 returns. Each quarter, ISD disseminates details of people at medium to high risk of emergency admission over the next year. Most have a long term condition but not all are frail. We need to further stratify the SPARRA population to more effectively identify those who will benefit from interventions for frail older people. We also need an anticipatory approach to 'get people on the radar' earlier before they have an emergency admission.

Ravaglia et al (*Age Ageing (2008) 37:161–66*) developed a frailty score that includes 9 independent predictors of frailty and subsequent risk of fracture, disability, death or admission to hospital. These predictors can be used in the community to target people for Comprehensive Geriatric Assessment :

- Age>80
- Male gender
- Low physical activity
- 3 + medications
- Co-morbidities
- Sensory deficits (blindness, deafness)
- Calf circumference <31 cms
- ADL disability
- Gait and balance Tinetti test of <24

### Experience in practice

Risk prediction tools are now being used across Scotland to identify people with complex or frequently changing needs who will benefit from proactive, planned and co-ordinated care management. Here is a typical case study:

SPARRA data identified a 72% risk of readmission for Mrs A who had multiple long term conditions including dementia, took multiple medicines and lived alone with support from family, home care, community alarm, CPN and lunch club. She had been in hospital 12 times. The quarterly SPARRA data alerted the district nurse that Mrs A had unmet needs. The nurse assessed health and social care needs and co-ordinated the actions required to better support Mrs A. When her health needs stabilised, the social worker took over the role of care manager. Mrs A had no further hospital admissions over the following six months.

## **Implications for workforce, learning and practice development**

Primary and community care teams need to be supported with electronic records, data sharing, decision support tools and education to effectively use their SPARRA data and related community based risk prediction tools.

## **Blocks and Barriers to implementation**

- The current national risk prediction tools are retrospective and don't include primary and community care data.
- Risk prediction tools are not a joint priority for data sharing partnerships
- Some local primary care teams are not empowered to access patient identifiable information from GP disease registers and prescribing records.
- Poor case ascertainment of falls in community / A&E and they are often masked as SMR 01 'symptoms, signs and ill defined conditions'

## **Levers and enablers to support implementation**

- ISD has a programme of work for 2010 to develop an enhanced risk prediction algorithm that incorporates local primary and community care data. This tool will be provided to Boards/CHPs with the capability to populate the model locally.
- Work with CHP falls leads, Emergency Access Delivery Team and ISD to include falls as a core data item in the revised A&E dataset
- Work with JIT Telecare programme to share data from out of hours providers on users of telecare / assistive technology
- Early interest from NHS 24 to develop a telephone triage tool for frailty to trigger an appropriate system response for unscheduled care contacts.
- Support from LTC Collaborative and LTC Action Plan. 'SPARRA Made Easy' guidance note offers practical support to teams
- Review existing enhanced services (SESP) and realign these as strategic bundles to support the CH(C)Ps primary and community care teams to implement Pathway recommendations 1.1 - 1.3

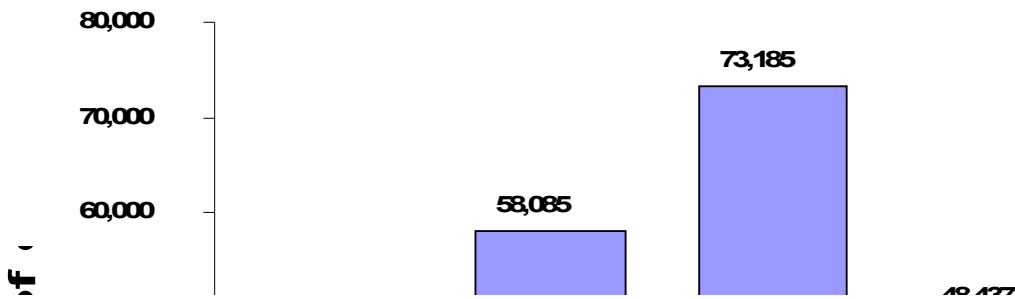
## **Potential quality indicators**

Proportion of patients with SPARRA risk > 50% discussed at locality multi-agency team meetings each quarter.

## Impact on HEAT, CCOF emergency bed days and institutional care

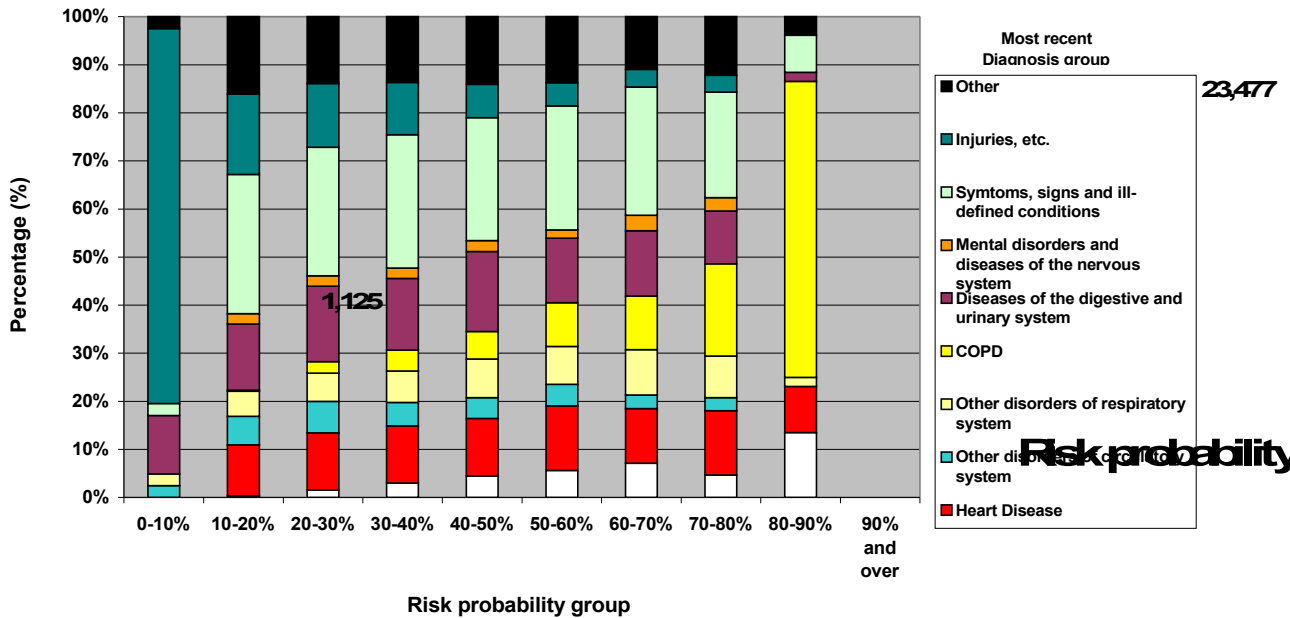
Risk prediction tools support the T6, T8, T10, and T12 targets. Used in isolation, risk prediction tools won't directly reduce emergency bed days and risk of institutional care. However, used as part of a complex multidimensional intervention, risk prediction tools target comprehensive geriatric assessment, care management and anticipatory care planning that collectively lead to better outcomes, including reduced bed days and less institutional care.

### SPARRA Over 65s. Distribution of Pred



### Make up of SPARRA risk categories by most recent diagnosis group

S03000029 - North Lanarkshire Community Health Partnership



## **1.2. Proactive integrated care management approach for those at greatest risk of admission to hospital or to institutional care**

### **Descriptor**

**CH(C)P health and social care teams deliver a proactive integrated care management approach that targets frail older people with complex needs at greatest risk of emergency admission to hospital or institutional care**

### **Rationale**

Better Outcomes for Older People (Scottish Executive 2005) defined care management as *“a process whereby an individual's needs are assessed and evaluated, eligibility for service is determined, care plans are drafted and implemented, services are provided and needs are monitored and re-assessed. The individual will usually have complex or frequently or rapidly changing needs”*.

Delivering continuous, supportive care through a single point of assessment and co-ordination improves patient and carer experience, supports care at home and prevents avoidable admissions. Instead of reactive or crisis care, people and their carers receive a proactive comprehensive assessment and care planning approach. Comprehensive Geriatric Assessment (CGA) is a multi-dimensional assessment for frail older people with complex needs. It encompasses assessment of physical, social, psychological, economic, functional and environmental needs.

### **Experience in practice**

A Kings Fund review in 2004 concluded that there was some evidence that case / care management was effective across a range of outcomes, including reducing hospital admission and improving functional status. However the review found that context and infrastructure were critical.

Two Lancet systematic reviews ( Stuck et al 1993 and Beswick et al 2008 ) of complex interventions to improve function and maintain independent living in elderly people concluded that CGA programmes that link geriatric assessment with proactive long-term management in the community improve survival and function and reduce institutional care.

Emerging experience of care management in Scotland suggests regular structured multi-disciplinary team meetings within GP practices and with social work, community nursing and mental health locality teams enable health and social care practitioners to assess and review individual care plans and address any gaps in a collaborative way. This proactive and integrated approach makes more effective use of the local extended primary and community care team and specialist services. There is growing evidence of tangible improvements in quality and continuity of care and in patient and staff experience.

### **Implications for workforce, learning and practice development**

For spread and scale there is a need to grow the capability of mainstream services to deliver care management through enhanced skill mix and role development of community nursing, allied health profession and social care staff with support from local specialists.

### **Blocks and Barriers to implementation**

- Community nursing team skill mix and capability for health role in SSA not fully developed
- Community nurses, social care and mental health teams not aligned
- Limited technical infrastructure and confidence to support data sharing across teams, sectors and with independent and voluntary providers

### **Opportunities : Levers and Enablers**

- Better align community teams (nursing, mental health and social care ) to enhance co-ordination and communication at a locality level
- Empower care managers to have rapid access to a menu of services – eg community rehab / falls services, rapid assessment / diagnostics, intermediate care, homecare, telehealthcare, specialist services
- Focus of ongoing work led by RCN on review of nursing in the community.
- Releasing Time to Care ( productive community ) and LEAN approaches support teams to redesign and develop required capability and skill mix.
- Support for health and social care practitioners through
  - Roll out of NMIS for Assessment, Care Planning and Review.
  - Talking Points: A Personalised Outcomes approach
  - Long Term Conditions Collaborative guidance note and support
- Review existing enhanced services (SESP) and realign these as strategic bundles to support the CH(C)Ps primary and community care teams to implement Pathway recommendations 1.1 - 1.3

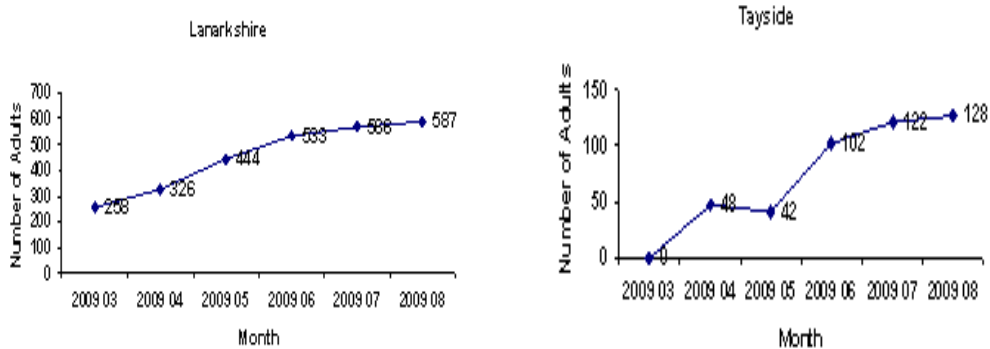
### **Potential quality indicators**

Proportion of high risk SPARRA patients that live at home and have an identified care manager

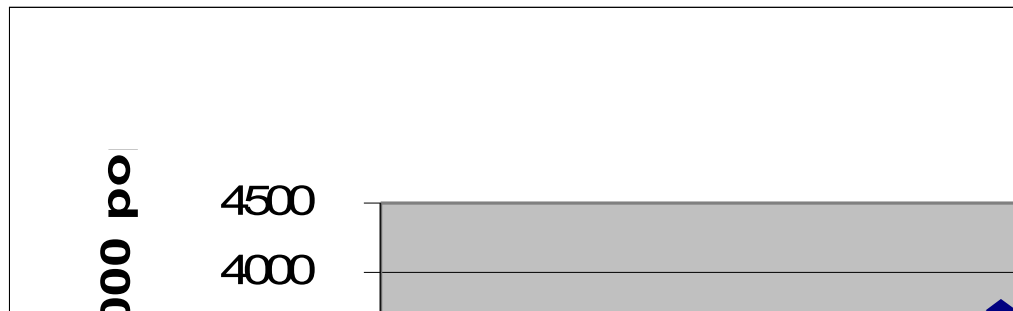
Evaluation of experience of care and CCOF indicators using Talking Points  
**Impact on HEAT, CCOF emergency bed days and institutional care**

CGA and care management indirectly contribute to T6, T8, T10, and T12 targets.

The LTC Collaborative supports teams to develop an integrated care management approach applied to a range of care groups across Scotland. LTCC reporting between March and Aug 09 highlights a steady increase in the adoption of the model. This is illustrated for two early adopter boards.



The impact of care management on emergency admissions reflects the interdependencies of interventions delivered in a complex system. It requires the appropriate infrastructure and partnership context for maximum impact. However there is emerging evidence that an identified care manager contributes to shorter hospital stays through a 'pull' system back to community. This applies both to frail older people being care managed and to a cohort being case managed for specific conditions such as COPD or heart failure which increase with ageing and are key predictors for emergency admission to hospital and institutional care. Following introduction of case management for COPD in N Ayrshire, emergency admissions for COPD fell from 41 ( 310 bed days ) to 12 ( 164 bed days ) at the level of an individual practice. The challenge is to scale this impact across all practices and all CHPs for a common condition that has a high bed day rate.



### 1.3. Widespread use and sharing of anticipatory care plans

## **Descriptor**

**Care providers in CH(C)Ps support the use and sharing of Anticipatory Care Plans (ACPs): a summary or shared record of the preferred actions, interventions and responses that care providers should make following a clinical deterioration or a crisis in the person's care or support.**

## **Rationale**

An anticipatory or 'Thinking Ahead' approach encourages people to have more control and to make positive choices for what they should do themselves, and from whom they should seek support, at times of anticipated flare up or deterioration in their condition, or in the event of a carer crisis. The ACP is a dynamic record that should be developed over time and through an evolving conversation. It should be reviewed and updated as the condition or the personal circumstances change.

As the needs and dependency of the person increase, it is usually appropriate to discuss end of life preferences, preferred place of care, and views about the 'ceiling' for the hierarchy of possible interventions and treatments, and whether cardiopulmonary resuscitation would be welcomed. This type of information is currently recorded for some people as a Palliative Care Summary. A Palliative Care summary is a specific example of an Anticipatory Care Plan for someone who has palliative or end of life care needs.

ACPs need to be shared with the full range of care providers involved, including NHS 24 and Out of Hours Services, so that all are aware and can respond to the expressed wishes.

## **Experience in practice**

Ayrshire and Arran introduced an enhanced service for COPD that includes self management and anticipatory care plans that are notified to out of hours service.

The Nairn Anticipatory Care Project provides anticipatory and immediate health and social care support and information to vulnerable or 'at risk' Lodgehill Clinic patients within Nairn. The service provides an opportunity for people to be involved in the creation of their ACP and to be assisted to remain at home or return home from hospital as quickly as possible.

NHS Lothian's enhanced service for anticipatory care has a focus on care homes. The service bundle requires systematic planned attendance at the care home, completion of an ACP, record of resuscitation status, assessment prior to urgent referral to hospital and a level 3 medication review.

## **Implications for workforce, learning and practice development**

Learning needs for staff working with frail older people and in care homes :

- general awareness raising about the principles of ACPs
- recognising triggers for conversations about ACPs and when to defer these
- developing confidence to initiate these conversations
- communication, consultation and assessment skills

### **Blocks and Barriers to implementation**

- Current system relies on a confusing array of 'special notes' faxes and emails from GPs to Out of Hours providers, A&E and admissions units.
- Care homes do not have a linked IT infrastructure
- Staff lack confidence in discussing end of life care needs and preferences

### **Opportunities : Levers and Enablers**

- Review existing enhanced services (SESP) and realign these as strategic bundles to support the CH(C)Ps primary and community care teams to implement the suite of Pathway recommendations 1.1 - 1.3
- The Ehealth team are adapting the core Emergency Care Summary (ECS) data set to support electronic sharing of an ACP that will be detailed enough to be clinically helpful, yet concise enough to be used in a variety of clinical situations.
- NES Living and Dying Well and LTC programmes are supporting a range of projects in 2010 to enhance communications and consultations skills.
- LTC Collaborative and Living and Dying Well have produced a joint guidance note to support teams in taking forward Anticipatory Care Plans.

### **Potential quality indicators**

Proportion of adults resident in care homes who have an ACP in place

Number of ACPs shared with and accessed by Out of Hours service

Number of people admitted as emergency from a care home

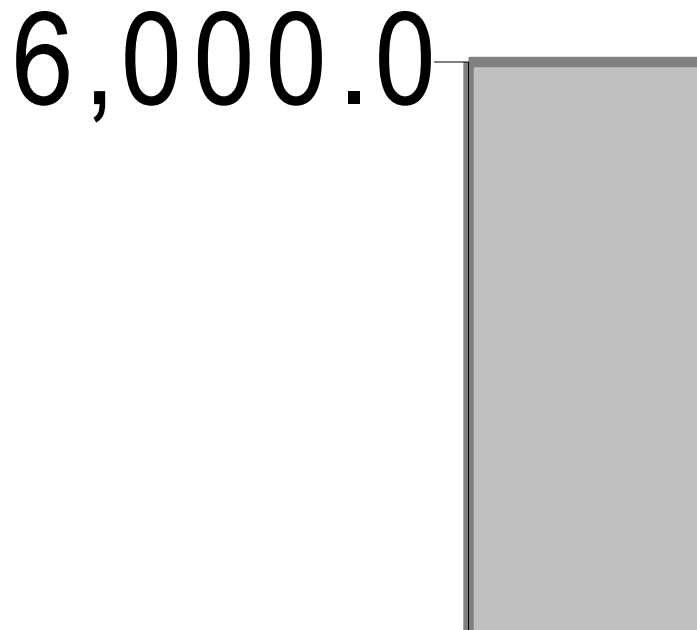
Proportion of people with telehealthcare in place or with complex care needs cared for at home who are admitted as an emergency

### **Impact on HEAT, CCOF emergency bed days and institutional care**

Anticipatory Care Plans indirectly contribute to T6, T8, T10, and T12 targets

The ACP is one component of a complex multidimensional intervention. Experience from Nairn demonstrates Anticipatory Care used with risk prediction tools, care management and intermediate care is associated with reduced acute bed days and improved experience of care.

### Change in Bed Day Rates in Raigmore 2005-2008



Many partnerships have initially targeted their care home residents for ACPs, often through introduction of a local enhanced service (LES). Evaluation of the Lothian LES suggests a 75% reduction in unscheduled admissions for care home residents supported by the service.

#### Lothian Emergency Admissions, 65+ where admission is specified as 'Care Home'

Q2 & Q3 of each FYE			
	2006/07	2007/08	2008/09
TOTAL	204	133	51

### 2.1 Community based assessment, rehabilitation and intermediate care

## **Descriptor**

**The CH(C)P provides a range of Intermediate care services that act as a bridge at key points of transition in the journey from home to hospital and back home again, and from illness to recovery. These services include rapid access to safe and effective alternatives to hospital admission.**

## **Rationale**

Intermediate care is a range of integrated services to promote faster recovery from illness, prevent unnecessary acute hospital admission and premature admission to long-term residential care, support timely discharge from hospital and maximise independent living. Services can be provided in:

- Individuals' own homes, sheltered and very sheltered housing complexes
- Designated beds in care homes or in community hospitals

Telehealthcare can facilitate equitable and timely access to rehabilitation support.

A Meta-analysis showed no significant difference in mortality at 3 months but significantly lower mortality at 6 months for patients aged 70-80 years receiving co-ordinated multidisciplinary hospital at home. Hospital at home was associated with greater satisfaction and lower costs. A RCT of almost 500 patients needing rehabilitation after an acute illness (Young et al, 2007) compared community hospital with acute hospital care. The former was associated with a higher level of independence and a small, non-significant improvement in quality-adjusted life years at similar level of resource use.

A Meta-analysis of 11 trials of Early Supported Discharge from hospital for selected stroke patients (median 41%) showed reduced death or dependency equivalent to six (95% CI one to ten) fewer adverse outcomes for every 100 patients treated. Hospital stay was 8 days shorter and extended activities of daily living, odds of living at home and satisfaction with services were improved.

A study of 7 RCTs of people with COPD treated at home by visiting respiratory nurses compared to hospital care, showed no significant difference in death or readmission rates. Patients and their carers preferred treatment at home but only one in four patients were considered to be suitable for hospital at home.

## **Experience in practice**

The Joint Improvement Team (JIT) website: [www.jitscotland.org.uk](http://www.jitscotland.org.uk) has examples, local contacts and reports from Intermediate care learning network events in Scotland.

**Intermediate Care – Halfway Home: DoH updated Guidance for the NHS and Local Authorities** contains a range of case studies and contacts  
**Implications for workforce, learning and practice development**

Community teams require a balance of skill mix, professional supervision and blended learning across physical, functional, psychological and telehealthcare domains. Psychological wellbeing is central to supported self-management, rehabilitation, enablement and maximising independence for older people. Recognition of, and appropriate intervention to address psychological distress, is intrinsic to the success of other health and social care interventions. This requires training and support for generalist healthcare staff to enable them to provide basic psychological care as well as rehabilitation, falls prevention and care that meets the needs of frail older people.

### **Blocks and Barriers to implementation**

- Lack of community sessions for geriatricians and AHPs to provide specialist support to intermediate care teams
- Limited confidence of teams to manage people with psychological distress
- Limited access to specialist evidence-based psychological assessment and intervention
- Limited shift in resources from acute sector as bed numbers reduce
- Limited staff awareness of potential opportunities for telehealthcare

### **Opportunities : Levers and Enablers**

- Integrated Resource Framework can support CH(C)Ps to shift resources
- Review existing enhanced services (SESP) and realign these as strategic bundles to support the CH(C)Ps primary and community care teams to implement the suite of Pathway recommendations 2.1 and 2.2
- Complements re-ablement homecare approaches and role of rehabilitation co-ordinators working across sectors.
- Surplus care home capacity
- NES Multi-agency Capability Framework for Intermediate Care developed
- Telehealthcare support for discharge and prevention of admission

### **Potential quality indicators**

Length of stay and discharge destinations from acute and intermediate care

Rates of new long term institutional care and proportion from acute care

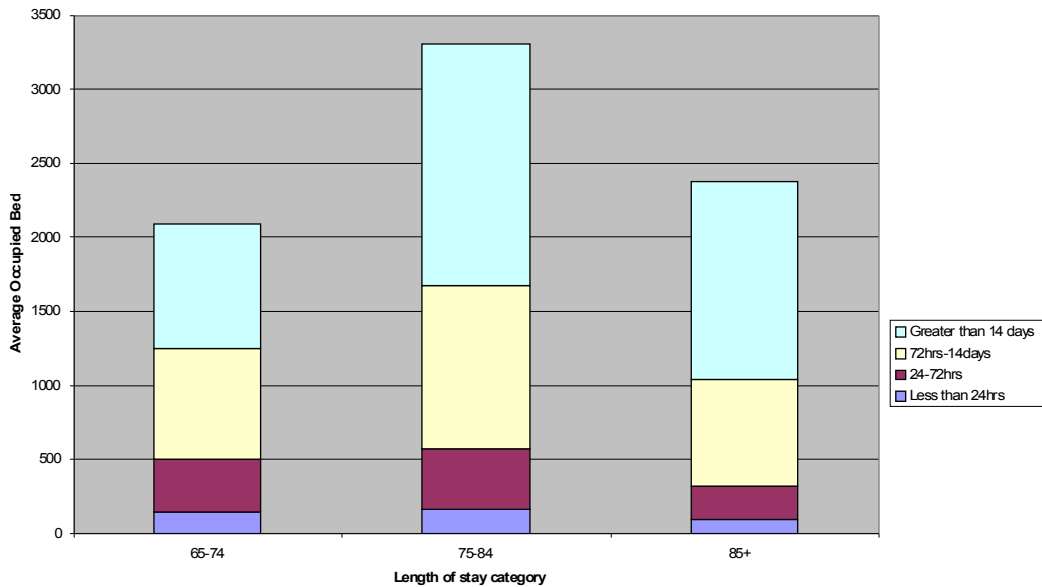
Extended ADL and homecare support before and after intervention

**Impact on emergency bed days and institutional care**

Intermediate care indirectly contributes to T6, T8, T10, and T12 targets.

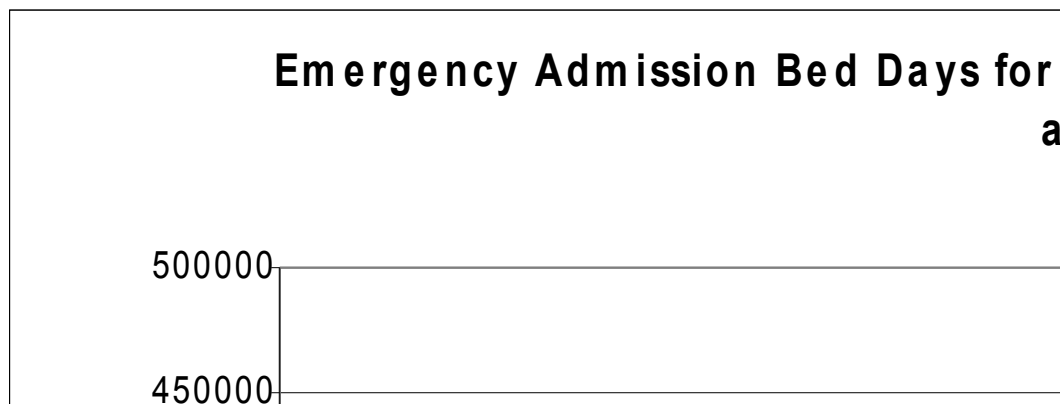
Most studies demonstrate reduced emergency bed days. Some trials indicate delayed entry to institutional care. Frail older people have longer lengths of stay with considerable scope to shift their postacute care to community settings.

Figure 7 - Average number of 'SMR01' beds occupied in 2007/8 by stage of episode



Partnerships that have developed comprehensive intermediate care services now show significant reductions in standardised emergency bed days.

Appendix shows the current variance in age, sex and deprivation adjusted emergency bed days per CHP and the potential for reinvestment to develop or enhance community based intermediate care services.



## 2.2 Triage / rapid assessment of older emergency admissions / A&E attenders

### Descriptor

**Pathways through A&E and admissions wards are configured to identify frail older people with physical, functional and cognitive impairments and stream them to geriatric assessment within 24 hours of admission.**

### Rationale

Most older people undergoing emergency admissions are functionally and cognitively independent and have acute reversible problems that are best treated in medical specialty wards. However frail older people frequently experience acute disability and cognitive impairment and often present in atypical ways. They have longer lengths of stay and require evidence based multidimensional approaches described as Comprehensive geriatric assessment (CGA). CGA organised in specialist wards reduces death, institutionalisation and increases the proportion of older people returning home. These results are not replicated on general medical wards, even where experienced multi-disciplinary teams input into care

To make effective use of specialist resources and deliver best outcomes for frail older people it is vital to identify those individuals most likely to benefit from CGA and to stream their flow to Geriatric Wards. This is best done as early as possible in the admission process to minimise the number of ward moves and reduce the risk of delirium. Triage / rapid assessment within the first 24 hours of admission initiates CGA and clarifies the illness trajectory in the light of initial diagnostics. Those who do not require further acute care may be identified and discharged directly home or to community based intermediate care and support. Those who need early transfer for specialist care in geriatric wards can be prioritised.

### Experience in Practice

The 'OPAL' ( older persons' assessment and liaison team ) study published in Age & Ageing 2007; 36(6): 670-5 demonstrated reduced acute hospital length of stay and reduced delays to specialty admission.

NHS Lanarkshire and NHS Fife have introduced Acute Care for the Elderly nurses who review older emergency admissions daily to identify and assess patients with acute functional decline, immobility, falls, delirium and geriatric syndromes. The nurse practitioners liaise with relevant members of the multidisciplinary team and with families and home carers to glean additional background and communicate healthcare information. This model facilitates earlier decision-making about the need for admission to a geriatric specialty bed and the potential for safe and supported discharge from acute care.

## **Implications for workforce, learning and practice development**

Triage and initial assessment of older emergency admissions can be undertaken by a nurse, AHP or doctor according to the local context. It requires specialist geriatric medical experience and skills, effective discharge planning and understanding of the local intermediate care services.

## **Blocks and Barriers to implementation**

- Failure to match bed capacity for frail older people with demand
- Reactive bed management and boarding of older patients
- Limited access to AHPs at weekends
- Poor flow to acute sector of information from shared assessments

## **Levers and enablers to support implementation**

- Emergency Access Delivery Team work programme
- LEAN work on demand and capacity
- Delayed discharge learning network
- Development of Intermediate Care services
- Telehealthcare can facilitate out of hours and offsite specialist assessment

## **Potential quality indicators**

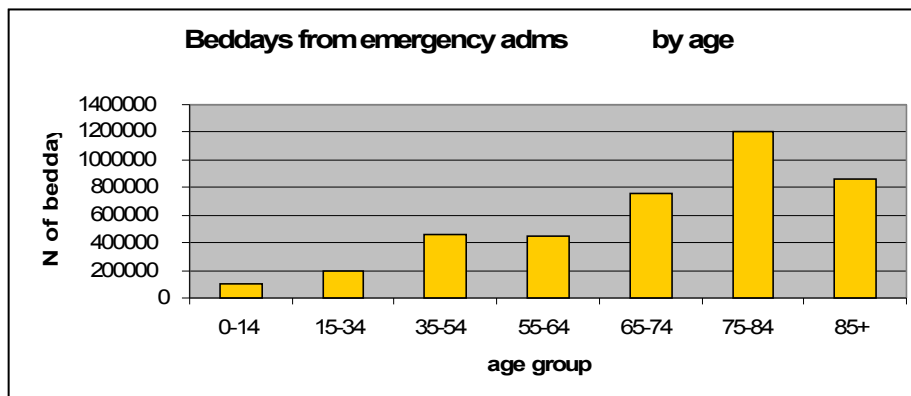
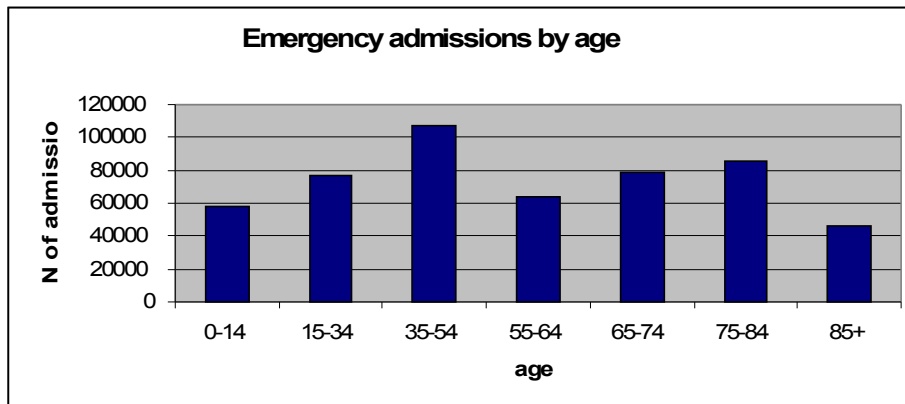
- Percentage of frail older people reviewed by a Geriatrician or multidisciplinary team
- Percentage of frail older people who are admitted to a geriatric ward

- Percentage of frail older people discharged home within 72 hours
- Percentage of frail older people offered a telehealthcare package
- Referrals from A&E or admissions ward to community falls team or Intermediate care service

### Impact on HEAT, CCOF emergency bed days and institutional care

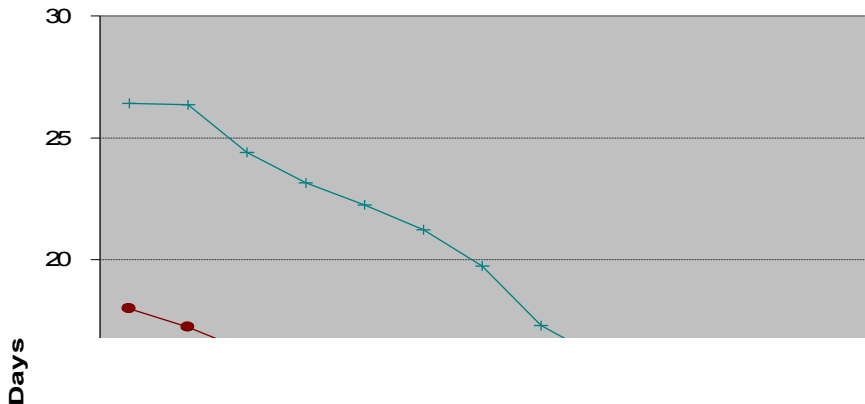
Recent prospective audit of 65+ emergency admissions, applying simple nurse administered triage tools, showed around 1 in 3 have criteria for frailty. Configuring the system to deliver effective interventions to a cohort of this size would have a significant impact on lengths of stay and on acute bed capacity.

### Emergency admissions / bed days - Scottish hospitals 2007/08



Consider the system change and acute capacity released in the last two decades through transformed pathways and processes for elective care.

**Figure 13 Trends for Elective**



## 2.3 Pharmaceutical care for older people

### Descriptor

**The CH(C)P, working with local GPs and community pharmacists, ensures regular review and reconciliation of medicines prescribed for frail older people and development of personalised pharmaceutical care plans that support them to take their medication safely.**

### Rationale

Frail older people have multiple long term conditions and are prescribed multiple drugs, many of which have high risk of adverse events. Up to 50% of medicines are not taken as prescribed and adverse reactions to medicines are implicated in 5-17% of hospital admissions. Polypharmacy is a major risk factor for falls.

Problems with medicines can be prevented by

- Identifying those at risk
- Providing proactive medication reviews
- Ensuring accurate medication reconciliation at times of transition
- Monitoring the effects of long-term medication
- Modifying the medication where necessary
- Provision of tailored supports for compliance and safety.
- Education for staff, patients and carers about issues of polypharmacy

Pharmacists play a key role in supporting the National Health Information Support Service as NHS Scotland's primary source of information for patients. Community pharmacists in particular are in repeated contact with hard to reach patients including the housebound, those in areas of deprivation and those with language or cultural barriers where the burden of frailty is greater.

## **Experience in practice**

There are many examples of intermediate care, care management and community older people teams across Scotland that include pharmacists in their team to deliver comprehensive and co-ordinated packages of pharmaceutical care for frail older people. They provide education about a person's condition and medication, help identify key issues, offer encouragement and support for the person or their carer to participate in decisions and monitor their own therapy. A number of boards provide guidelines, training packages and support for home care workers and others assisting people to manage their medicines.

Frail older people who fall should be offered a full medication review with reduction, or withdrawal, of medicines that may cause falls. Community Pharmacy staff are ideally placed to ask people if they have fallen, refer fallers for multidisciplinary assessment and make interventions.

## **Implications for workforce, learning and practice development**

Multi-agency teams need to be aware of the importance of polypharmacy and have strategies to optimise concordance and safety. The use of independent and supplementary prescribing by the wider multidisciplinary team, where appropriate, makes medicines more accessible to older people. NHS Education for Scotland (NES) and the Royal Pharmaceutical Society of Great Britain have a role in the development and roll-out of training programmes to ensure pharmacists can deliver the appropriate level of care to older people.

## **Blocks and Barriers to implementation**

- Limited roll out of supplementary prescribing.
- Lack of training for homecare staff in supervision of medication
- Limited sharing of medicines information with wider multiprofessional team
- Acute, primary and community pharmacy IT infrastructure don't connect
- Limited experience in range of compliance supports

## **Opportunities : Levers and Enablers**

- QOF medication reviews support pharmaceutical care for older people.
- The Chronic Medication service (eCMS) of the Community Pharmacy contract

- Opportunity to link electronic pharmaceutical care plans used in eCMS to the development of multi-agency anticipatory care plans.
- The Directors of Pharmacy Care of the Elderly Special Interest Group work with NES to develop resources to support multiprofessional education and practice in pharmaceutical care and medication reviews.
- Scottish Patient Safety programme
- National heart failure audit
- Electronic medication managers with reminder and alarm functions.

### **Potential quality indicators**

Evidence of medication reconciliation at times of transition

Proportion of 75+ who have a completed pharmaceutical care plan

**Impact on HEAT, CCOF emergency bed days and institutional care**

Indirectly contribute to T6, T8, T10, and T12 targets and to patient safety

Drug related adverse events are implicated in emergency admissions.

Potential for cost savings from prescribing of inappropriate medication

### 3.1 Comprehensive geriatric assessment and rehabilitation in hospital

#### Descriptor

**Frail older people admitted to hospital receive co-ordinated multi-professional Comprehensive Geriatric Assessment and rehabilitation.**

#### Rationale

Meta-analysis of randomised controlled trials of CGA for frail older people show that organised care in Geriatric Wards reduces length of stay, death and institutional care and increases the proportion who return home. Where age only criteria (i.e. “all patients over 75”) are applied, the number of patients needed to treat with CGA to prevent one unnecessary death or nursing home admission is 25. Early data from the Cochrane review of CGA suggests that units that target patients with functional impairments, classical geriatric syndromes or existing disability demonstrate greater effectiveness than units with age related admission criteria. **For every 6 frail older people who are managed in a geriatric ward in contrast to a general medical ward, there would be 1 less death or nursing home admission.**

	DEATH OR INSTITUTIONALIZATION AT UP TO 6 MONTHS	SIGNIFICANCE
“Needs” Wards	OR 0.49 (95% CI 0.32 – 0.73)	p=0.0005
“Age Only” Wards	OR 0.83 (95% CI 0.72 – 0.96)	p=0.009
“Needs” Teams	OR 1.41 (95% CI 0.75 – 2.63)	p=0.29
“Age Only” Teams	OR 1.07 (95% CI 0.65 – 1.76)	p=0.8
Overall CGA	OR 0.81 (95% CI 0.71 – 0.91)	p=0.0005

There is no evidence of benefit from inreach of experienced multi-disciplinary teams into general medical wards. Suboptimal outcomes in general medical wards are generally due to delays in mobilisation, late detection and treatment of delirium and differing attitudes to risk in discharge planning. Hospital costs for CGA in geriatric wards are comparable to care in general medical wards but system costs are reduced due to lower rates of new institutional care.

### **Experience in Practice**

There is a range of different models for geriatric wards :

- Acute Care for Elders units that admit directly from A&E
- Acute Geriatric Assessment Units that admit after 24 hours
- Post acute care rehabilitation units which admit after 1-2 weeks

However there was significant variance ( 41 - 95 % in one health board ) in the proportion of frail older people who accessed acute geriatric assessment units within 48 hrs of emergency admission.

### **Implications for workforce, learning and practice development**

The elements that appear to be crucial for effective CGA include

- Co-ordinated care within a specialist unit by a multidisciplinary team
- Multidisciplinary team (doctors, nurses, AHPs) with specialist skills
- Regular team meetings, co-ordinated rehabilitation and proactive discharge planning
- Assessment of psychiatric, social, physical and functional domains using a range of assessment tools

Specialist CGA skills are crucial for improved outcomes. There is a potential role for national skills frameworks to support MDT as for other specialties such as Stroke care. Benefits would include better patient experience and outcomes as well as improved staff recruitment, retention, professional development and career progression.

### **Blocks and Barriers to implementation**

- Geriatric ward bed capacity not matched to demand
- Impact of Delayed discharge on patient flow
- Lack of formal educational framework for MDT
- Lack of research on optimal staff to patient ratios
- MMC & European working time directive and implications for confidence of medical trainees around discharge

### **Levers and enablers to support implementation**

- LEAN work on demand and capacity

- Work to tackle delayed discharge
- Development of Intermediate Care services improving flow
- Charge nurse Clinical quality Indicators
- Utilisation of telehealthcare to support managing risk around discharge

## Potential quality indicators

### Outcomes

- Inpatient mortality rates
- Inpatient falls rates
- Proportion of 75 + emergency admissions that return home

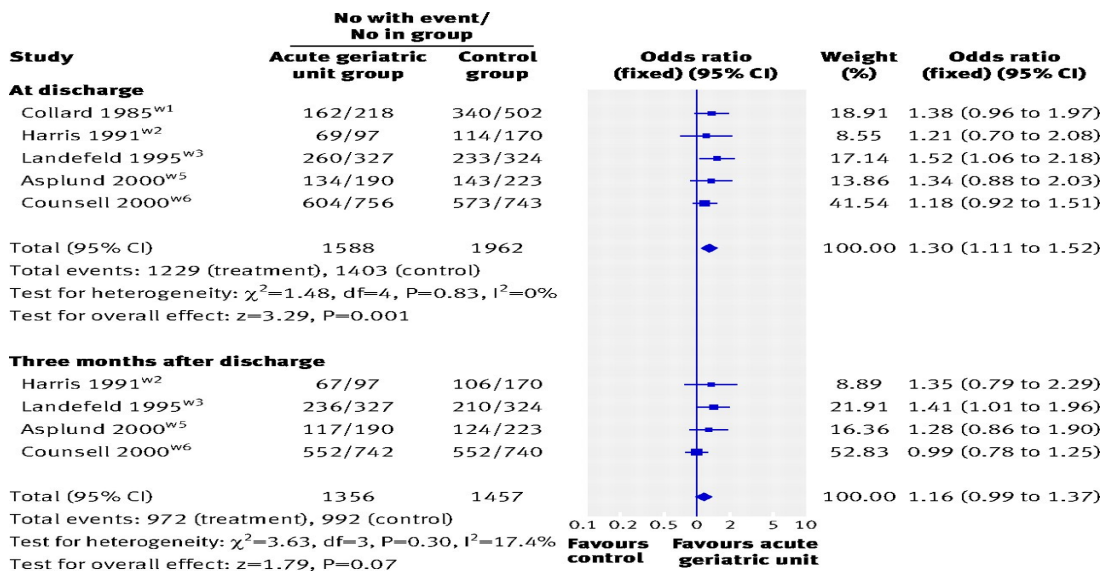
### Processes

- Evidence of co-ordinated discharge planning, MDT meetings and use of standardised assessment tools
- Proportion of 75+ admissions with acute LOS < 14 days

## Impact on HEAT, CCOF emergency bed days and institutional care

Failure to deliver organised inpatient services for frail older people increases disability and institutional care costs

## Living at home at discharge from hospital and three months after discharge in RCT comparing acute geriatric units with conventional hospital care



The resource required to deliver effective CGA can largely be provided through reconfiguration of existing inpatient wards to better match capacity to the profile of emergency admissions and their length of stay. A reasonable planning assumption is that 1 in 3 emergency admissions over 65 will benefit from CGA. Greater flow and additional capacity in acute geriatric wards can be created by

reducing delayed discharge and through greater use of community based intermediate care and by shifting more postacute care and rehabilitation outwith acute hospitals.

**CHPs with 75+ emergency bed day rates > average  
Potential impact of moving to average rate**

Rockwood K, Fox RA  
people: an evolving co  
Rockwood K, Stolee  
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### **3.2 Early identification and effective management of delirium**

#### **Descriptor**

**Pathways through acute hospitals are configured to deliver bundles of care that prevent, detect and effectively manage delirium.**

#### **Rationale**

Delirium affects 1 in 6 older acute hospital inpatients and is distressing for patients and carers [Breitbart et al, 2002; O'Malley et al, 2008]. It indicates severe acute brain dysfunction and, in older people, may be the first clinical sign of acute, severe illness [Inouye, 2006]. Delirium is generally multifactorial. Predisposing risk factors play a major role [Inouye, 2006] and common acute precipitants include drugs, infections and other acute illnesses. Delirium is associated with increased length of stay, higher rates of institutionalisation, permanent cognitive decrements and increased mortality [McCusker et al 2002 and 2003]. Patients with hyperactive delirium pose significant care challenges in fast paced clinical settings and their behaviour disturbs other patients. Patients with delirium are at increased risk of falls [Oliver et al., 2007; Lakatos et al., 2009]. Early identification of delirium allows for a detailed management plan, access to expert care and follow up and to interventions that can reduce these adverse outcomes [Kakuma et al., 2003]. .

Some cases of delirium can persist for weeks or months but then resolve. Delirium is often misdiagnosed as dementia, or less precisely, "confusion". Persistent hypoactive delirium may also be misdiagnosed as depression. These

misdiagnoses can have enormous human and system costs, including drug treatments which worsen outcomes and lead to avoidable delayed discharge and institutionalisation. Around two-thirds of patients with delirium also have dementia [MacLulich et al., 2009]. Even patients without established dementia frequently have persistent cognitive impairment or new onset dementia following delirium. Patients who have recovered from delirium are often left with long-term psychiatric complications [Davydow, 2008 and 2009]. All older patients with delirium should have follow-up with cognitive screening.

### **Experience in practice**

Improving standards of delirium care is challenging [Young and George, 2003]. Simply providing education is not effective. Audits and staff training sessions can increase the numbers of patients who have cognitive screening in acute hospitals, cognitive assessments in geriatric medicine wards and can increase the recoding of 'delirium'. At their 2009 Leeds conference, the European Delirium Association recommended a comprehensive package of implementation support including standard setting, clinical and managerial leadership, training of all levels of staff in different disciplines, and systematic feedback of data from regular audits.

### **Implications for workforce, learning and practice development**

The diagnosis of delirium has to be a responsibility for all acute hospital teams and not solely the domain of those working in geriatric medicine or old age psychiatry. The whole multidisciplinary team requires training, albeit some staff will require to have more specialist expertise in the management of delirium. Simple changes in practice make a difference - , eg. using precise terms 'delirium' and 'dementia' in discharge letters rather than the inadequate terms 'confusion' or 'cognitive impairment'

### **Blocks and Barriers to implementation**

- Limited awareness of how common, serious, and costly delirium is.
- Limited specialist interest among geriatricians working in acute care
- Limited expertise in delirium amongst multi-professional team
- Lack of standards and documentation across Scottish hospitals
- Lack of clear follow-up arrangements for people with delirium

### **Opportunities : Levers and Enablers**

- Multiple training resources including web based packages are available and can be cascaded through hospital intranets and practice development centres
- Current focus on dementia through the Mental Health Collaborative and the Dementia Strategy

- Leading Better Care and work on clinical quality indicators for charge nurses
- Releasing Time to Care programme

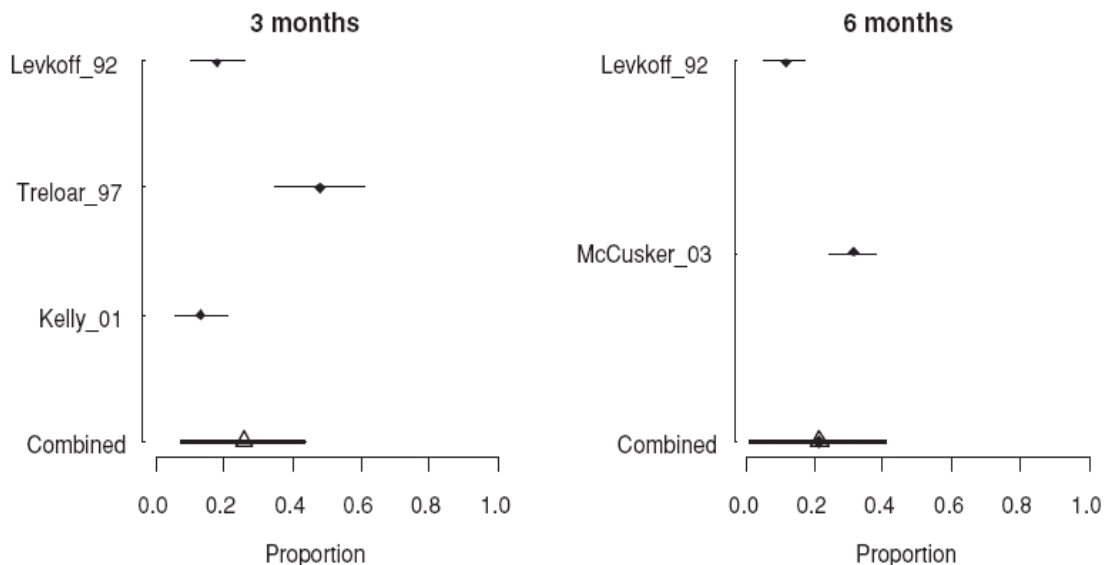
### Potential quality indicators

- Numbers of discharge letters that include 'delirium'
- Rates of referral to mental health team for follow up
- Audits of rates of cognitive screening in older acute hospital patients
- Audits of rates of delirium screening in older acute hospital patients
- Evidence of use of guidelines / protocols and systematic audits
- Rates of new dementia diagnosis– linked to increase in rate of people with new diagnosis of dementia on QOF registers

### Impact on HEAT, CCOF emergency bed days and institutional care

Effective management of delirium indirectly contributes to T8 and T12 targets and to maintaining the zero delayed discharge standard.

Delirium has a high mortality rate. In those who survive an episode it can take months to resolve.



If decisions about future care are made prematurely while delirium persists there is a significant risk of death in the following months. Equally there is a risk that the syndrome may resolve over time and leave the person misplaced in the care

home. This highlights the importance of adequate time for rehabilitation and recovery in a homely and enabling environment before making decisions about future long term care.

The economic impact of delirium is staggering: a recent study estimated the annual economic burden due to delirium in the USA was \$38 - \$152BN. [Leslie et al., 2008]. Enhanced packages of delirium prevention and care reduce lengths of stay, rates of new institutionalisation, and costs. [Marcantonio et al., 2001; Inouye et al., 1999; Rahkonen et al., 2001].

About 50% of dementia is currently undiagnosed. Systematic identification of delirium would be an important marker for the many thousands of older people with undiagnosed dementia being admitted to acute hospitals across Scotland.

Older patients without dementia who have had an episode of delirium are at higher risk of dementia and could be placed on an at-risk list by their GP, for increased frequency of monitoring and early identification of emerging dementia.

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O'Malley G, Leonard M, Meagher D, O'Keeffe ST (2008) The delirium experience: A review. *Journal of Psychosomatic Research* **65**: 223-228

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Young LJ, George J (2003) Do guidelines improve the process and outcomes of care in delirium? *Age Ageing* **32**: 525-528

### **3.3 Proactive discharge planning involving all partners**

#### **Descriptor**

**Health, social care and independent providers together eradicate delayed discharges, including delays in short stay specialty beds**

#### **Rationale**

Discharge from hospital is normally a straight-forward process involving a discussion between the clinical team and the patient and their family. However, for some people – most often older people – it is necessary to arrange some form of home support or community care before a patient can be discharged. Delayed discharges occur when the patient ready for discharge cannot leave hospital because the necessary care, support or accommodation is not available. Delayed discharge is a barometer for the whole health and social care system, and delays often point to a more general challenge around the processes, pathways and relationships within the partnership.

For a frail older person, a hospital admission often becomes a critical life event that is compounded by complications, poor recovery and subsequent transfer to long term institutional care. The human costs of complications such as healthcare-acquired infections, delirium, pressure sores, malnutrition, dehydration and side effects of medication are potentially preventable and treatable.

For people with complex needs, readiness for discharge should be determined through multi-agency discussion and have afforded individuals an appropriate time for rehabilitation. There is a balance to be struck around the length of postacute rehabilitation and the best place for that to be delivered to optimise recovery and feasibility of return home. System costs can be reduced and quality of care enhanced through effective interventions such as Intermediate care to reduce length of stay, prevent complications and premature admission to care home.

### **Experience in Practice**

In October 2001 there were 2,162 patients delayed across Scotland for longer than 6 weeks. In April 2009, for the second year running, there were none. Enormous progress has been made but monthly delayed discharge figures have been steadily rising. Several partnerships have sustained zero delays which proves these standards are both achievable and sustainable.

The Joint Improvement Team (JIT) can offer targeted improvement support to Partnerships around their delayed discharge performance. The approach is to support Partnerships to identify their local challenges, opportunities and action areas for improvement.

### **Implications for workforce, learning and practice development**

Some older people need weeks and months to recover their health and confidence following acute illness. This is particularly relevant for people with dementia and delirium. Health practitioners, particularly those working solely in the acute sector, too readily inform patients and their families that their needs would be best served in permanent care, thereby substantially closing down options around supporting a person in their own home. Older people and their families should not have to make life changing decisions about long term care from acute wards. This has implications for training staff in discharge planning, designing the right pathways through acute care and tackling issues around discharge for Adults with Incapacity.

### **Blocks and Barriers to implementation**

- Reactive bed management and boarding of older patients to wards where staff are not skilled in discharge planning and management of risk
- Resource pressures on packages for people with complex care needs
- Premature decision making in acute care settings
- Bolocks in progressing AWIA process

### **Levers and enablers to support implementation**

- Enablement approach to homecare to create capacity
- Delayed Discharge learning network and resources
- Development of Intermediate Care services improving flow
- Utilisation of telehealthcare to support managing risk around discharge
- Roll out of Anticipatory Care Plans and welfare guardianship

### Potential quality indicators

Delayed discharge standards reporting

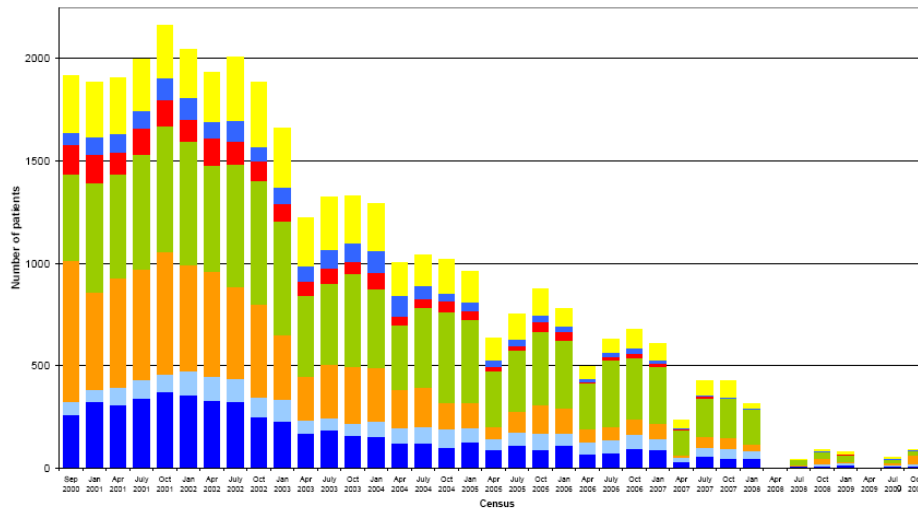
Length of stay and discharge destinations from acute care

Rates of new long term institutional care

Proportion admitted to permanent institutional care from acute care

**Impact on HEAT, CCOF emergency bed days and institutional care**

### NHS Delayed Discharges outwith the 6 week planning period to Oct 09



### Complex Needs Delays and Delays due to AWIA

NHS Board area of treatment	All Complex Needs Cases		Number of patients delayed with complex needs excluding those delayed due to Adults with Incapacity Act <sup>1</sup>		Number of patients delayed due to the Adults with Incapacity Act	
	Total <sup>2</sup>	Number outwith the six week discharge planning period <sup>3</sup>	Total	Number outwith the six week discharge planning period <sup>3</sup>	Total	Number outwith the six week discharge planning period <sup>3</sup>
Scotland	311	243	121	101	190	142
Ayrshire & Arran	10	9	2	2	8	7
Borders	5	5	4	4	1	1
Dumfries & Galloway	1	-	-	-	1	-
Fife	26	21	9	9	17	12
Forth Valley	13	12	8	7	5	5
Grampian	15	10	9	6	6	4
Greater Glasgow & Clyde	107	81	8	7	99	74
Highland	24	19	8	8	16	11
Lanarkshire	29	22	8	5	21	17
Lothian	31	26	22	19	9	7
Orkney	4	1	4	1	-	-
Shetland	17	15	17	15	-	-
Tayside	17	10	11	7	6	3
Western Isles	12	12	11	11	1	1
National Waiting Times Centre Board	-	-	-	-	-	-