

Safer care for frail people

Summary of evidence about effective initiatives

IDENTIFYING EVIDENCE OF EFFECTIVENESS

The NHS strives to provide safe, high-quality care for all. There are special challenges associated with caring for frail older people. Older people are more likely to use health services and more likely to experience healthcare-associated harm. Frailty refers to having decreased reserve and resistance to stressors. UK research suggests that about 14% of people aged over 60 may be frail and about 65% of those aged over 90 may be frail. Improving the safety of care for frail older people may be of particular importance, given that even small incidents can have significant impacts on these people's physical and psychological health.

The Eastern Academic Health Science Network is supporting a quality improvement collaborative to enhance the safety of care for frail older people. The collaborative is focusing on improving medicines safety, improving transfers of care and identifying and responding to deterioration.

To support the collaborative, 20 bibliographical databases were searched for published and grey literature about these three topics. In total 5,722 potentially relevant articles were read and 131 empirical studies were identified and summarised. Table 1 summarises the interventions that have been tested.

OVERARCHING SUCCESS FACTORS

Regardless of the exact initiatives used, there were some key principles that contributed to success. These included:

- **working across sectors**, spanning primary and secondary care, social services and care homes
- working with **multidisciplinary teams**, including pharmacists, GPs, practice nurses, hospital doctors and nurses, healthcare assistants, therapists and social workers
- providing **very specific information** to clinicians and teams about the improvements needed
- **including frail people and their carers** as integral components of the care and improvement team
- ensuring **leadership buy-in** and engagement across participating organisations
- using a **structured approach** to change management
- **sharing successes** and developing learning across networks
- recognising that **change takes time** and allowing initiatives time to embed rather than expecting immediate improvements in outcomes
- **combining interventions** into simple 'bundles' of changes that target at the level of patients, professionals, organisations and health and care systems

Table 1: research evidence available about safer care for frail older people

	Medicines safety	Transfers of care	Deterioration
Interventions targeting patients and carers	<ul style="list-style-type: none"> ● Mobile phone apps ● Volunteer coaches ● Patient education ● Behavioural interventions ● One dose medication package 	<ul style="list-style-type: none"> ● Patient and carer education ● Discharge support ● Advance directives ● Home visits prior to discharge ● Automated follow-up calls after discharge 	<ul style="list-style-type: none"> ● Comprehensive geriatric assessment and screening ● Early warning scores ● Nurse home visits and follow-up ● Link worker ● Exercise programmes ● Telehealth monitoring ● Personalised interventions
Interventions targeting professionals	<ul style="list-style-type: none"> ● Involving pharmacists ● Education and training ● Audit and feedback ● Computerised decision support ● Checklists and guides ● Criteria for identifying inappropriate medications ● Clinicians in care homes ● Medication review clinics 	<ul style="list-style-type: none"> ● Education and training ● Geriatrician in A&E ● Discharge planners / flow managers ● Daily discharge briefing 	<ul style="list-style-type: none"> ● Education and training ● Multiprofessional teams ● Geriatrician clinics ● Involving pharmacists ● Case managers ● Specialist nurses in A&E ● Volunteers
Interventions targeting organisations		<ul style="list-style-type: none"> ● Discharge planning ● Electronic tools ● Medication reconciliation ● Elderly care wards 	<ul style="list-style-type: none"> ● Framework to identify areas of risk ● Preventive protocols ● Elderly care wards ● Multi-bedded wards
Interventions targeting systems		<ul style="list-style-type: none"> ● Direct admission to elderly care wards ● Discharge protocols and checklists ● Standardised discharge letters ● Intermediate care 	<ul style="list-style-type: none"> ● Quality indicators ● Incident identification tools and reporting systems

Note: Interventions in bold have medium quality evidence of effectiveness.

WAYS TO IMPROVE MEDICINES SAFETY

Table 2 summarises the interventions where there is most research evidence of effectiveness.

Twenty-four studies were identified about initiatives to improve medicines safety for frail older people. The three initiatives where there was most evidence of effectiveness were:

- **Checklists, dashboards or guides** to look for potentially inappropriate medications or to reconcile medicines. Such checklists have been tested in primary care and hospital. They are often developed in partnership with pharmacists and may take the form of electronic or paper tools.
- **Alerts for prescribers.** These have been tested in primary care and hospital. They are usually delivered using computerised decision support tools and implemented by doctors and pharmacists. Alert systems are not always tailored towards the needs of frail older people.
- Integrating **pharmacists** as part of the care team. This has been tested in primary care and hospital. Pharmacists and pharmacy technicians have been found to help with medication reconciliation and can identify potentially inappropriate medications and drug interactions.

WAYS TO IMPROVE THE SAFETY OF CARE TRANSFERS

Seventeen studies were identified about initiatives to improve the safety of care transfers for frail older people. The three initiatives where there was most evidence of effectiveness were:

- **Standardised transfer forms and tools.** These have been used when transferring to and from hospital and have been implemented in primary care, care homes and hospitals. They are usually used by nurses and doctors.
- **Specialist hospital wards** for frail and elderly people. These wards include care by specialist nurses and geriatricians. Some studies have tested allowing direct transfers to such wards rather than admission via A&E. These wards have been found to smooth transfers when there is a specific focus on communication and person-centred transfer.
- Written or group **education for professionals.** This has been tested in primary care, care in the community, care homes and hospitals. Often it involves multiprofessional learning, though uniprofessional education has also been found to be effective.

WAYS TO IDENTIFY AND RESPOND TO DETERIORATION

Ninety studies were identified about initiatives to prevent, identify and respond to deterioration in frail older people. The three initiatives where there was most evidence of effectiveness were:

- **Comprehensive geriatric assessment** and other tools for identifying risk and potential deterioration. These have been tested in people's homes, in primary care, in the community, in care homes and in hospital. Usually such risk identification is undertaken by a nurse or junior doctor.
- Ongoing **monitoring**, including via telehealth and nurse home visits. This has been tested in people's own homes and in care homes. Usually telemonitoring data are reviewed and followed-up by nurses.
- **Exercise therapy programmes.** These have been tested in people's homes, in the community, in care homes and in hospital. Usually they are facilitated by occupational therapists or physical therapists, though sometimes nurses take the lead. They have been found to improve strength and reduce the risk of falls.

It is important to remember that a lack of evidence about other initiatives does not mean that they are not effective, only that little research is available about their use specifically with frail older people.

Table 2: improving medicines safety, care transfers and deterioration

Approach	Description	Settings tested	Staffing	Evidence level
Top three initiatives to support medicines safety				
Checklists	Checklists or guides to reduce potentially inappropriate medications, may be used in conjunction with audit and feedback	Primary care Hospital	Doctors Pharmacists	Limited quality and quantity
Alerts	Alerts or reminders for prescribers issued via computerised decision support systems	Primary care Hospital	Doctors Pharmacists	Medium quality and quantity
Pharmacists	Involving pharmacists or pharmacy technicians as part of the care team to support medication reconciliation	Primary care Hospital	Pharmacists Pharmacy technicians	Medium quality and quantity
Top three initiatives to support safer care transfers				
Standardised forms	Standardised checklists, protocols and guides to support transfer to and from care settings and ensure information is available to professionals	Primary care Care homes Hospital	GPs Care home staff Hospital nurses Hospital doctors	Limited quality and quantity
Elderly care wards	Specialist hospital wards for frail and elderly people, with a focus on improved quality of care and care transitions	Hospital	Hospital nurses Geriatricians	Limited quality and quantity
Education	Written information and group training sessions for professionals focused on improving care transfers	Primary care Care in the community Care homes Hospital	Multiprofessional learning	Medium quality and quantity
Top three initiatives to support identifying and responding to deterioration				
Risk identification tools	Tools for identifying risk, deterioration and needs including comprehensive geriatric assessment	People's homes Primary care Care in the community Care homes Hospital	Nurses Junior doctors	Medium quality, large quantity
Ongoing monitoring	Monitoring of vital signs and deterioration, including using telehealth and nurse visits	People's homes Care homes	Primary care, community and hospital nurses	Medium quality, large quantity
Exercise therapy	Exercise and nutritional therapy programmes to promote strength and reduce frailty, particularly focused on falls prevention	People's homes Care in the community Care homes Hospital	Occupational therapists Physical therapists	Medium quality, large quantity