Improving safety in care homes

A summary of Academic Health Science Network projects and innovations
Foreword

Care homes are a crucial part of our national health and care system infrastructure and the safety and wellbeing of residents, who are among those with the greatest care needs, is no less important than in any other setting. The breadth, depth and quality of information in this report therefore creates a valuable resource to anyone invested in improving care quality and safety for care home residents across the country.

Why is this so important right now? 21st century health care must transform from a 20th century disease and condition-based model, to one which refocuses to include functional ability, personalisation and wellbeing. This means doing three key things differently. Firstly, reframing ageing as something we can positively influence, not simply viewing getting older as an inevitable accumulation of losses. This means addressing prevention through active ageing across the later life course from middle years onwards.

Secondly, we must now develop sustainable health and care systems and importantly a capable workforce to engage in proactive and systematic needs identification followed by effective interventions to optimise the care we provide.

Thirdly, these approaches necessitate an upgrade of existing community services to support more people to recover at home following acute illness and to receive consistent high-quality holistic and personalised healthcare in their own homes and communities.

In 2019 NHS England and Improvement published four important and aligned frameworks setting out how we will do this over the next five years. The NHS Long Term Plan1, GP Contractual Framework2, Interim People Plan3 and Long Term Plan Implementation Framework4 all set out the importance of primary and community services, the workforce required to achieve these commitments, the accompanying contractual

21st century health care must transform from a 20th century disease and condition-based model, to one which refocuses to include functional ability, personalisation and wellbeing.
arrangements and the new NHS funding commitments to undertake this.

As a key part of this work the new National Ageing Well programme builds on progress already made in many local areas – we are not reinventing the wheel. The programme has three key interlinked strands for community, primary care, social care and the voluntary sector to pursue in partnership:

• **Urgent Community Response** increases the capacity of intermediate care services to consistently deliver a two-hour response to those in crisis at home and a two-day response for those needing rehabilitation to avoid, or following, a hospital admission.

• **The Anticipatory Care model** implements a proactive population health approach for people with complex needs including older people with moderate frailty, supporting early identification and avoidable hospital admissions.

• **Enhanced Health in Care Homes (EHCH)** will fully roll out this already tested approach to improve the provision and quality of NHS healthcare across all residential and nursing care home beds in England.

As a clinician with many years of accumulated experience and practice working in care homes, I am particularly encouraged to see this shift in policy focus towards improving quality and consistency of enhanced NHS health support to the care home sector. It is therefore timely that the recently published NHS Patient Safety Strategy1 emphasises the need for us to focus on quality and safety in care homes.

Pivotal to the success of this is the work of the Academic Health Science Networks in building a body of research evidence which sheds new light on how to optimise care quality and safety in care homes.

Welcome to our summary of patient safety improvement work within the AHSN Network.

Approximately 410,000 people live in care homes in the UK, according to a study in 2017 by Government (www.gov.uk/cma-cases/care-homes-market-study). This is four per cent of the population aged 65 years and over, rising to 16 per cent of those aged 85 or more. Around 5,500 different providers operate 11,300 care homes for the elderly, leading to considerable scope for variation in their training and improvement practices.

Many residents have complex healthcare needs, reflecting multiple long-term conditions, significant disability and advanced frailty. All these factors make caring for residents an incredibly difficult job for care homes and their staff.

Given this operating landscape, there are some fantastic examples of care, safety and quality improvement in care homes. The aim of this summary is to share good practice supported by The AHSN Network, and act as a practical guide to what’s going on in your area, as well as great ideas happening elsewhere in the country.

Some of the examples you will read have been underway for a long time, others are projects to test an idea or are only just starting. Where we present data on the project’s outcomes, we recognise this is no guarantee of similar results elsewhere, but we hope it gives an indication of the potential that could be achieved by spreading these ideas further.

This report is also aimed at policy makers to show what can be achieved in non-acute settings and to encourage scaling-up activity in this sector. As well as being a partner in the delivery of the NHS patient safety strategy (improvement.nhs.uk/resources/patient-safety-strategy), we have developed an AHSN strategy in response, setting out how much more we can achieve in partnership.

We actively encourage you to get in touch with the people who have shared their work for this report and would welcome discussions about how we can have even greater impact on patient safety and improvement in care homes.

---


---

**Professor Martin J Vernon**  
National Clinical Director for Older People and Person-Centred Integrated Care  
NHS England and Improvement

**Dr Cheryl Crocker**  
AHSN Network Patient Safety Director  
07772 353064  
cheryl.crocker@nottingham.ac.uk
A joined-up approach

This report includes improvement projects being carried out across England by Academic Health Science Networks (AHSNs) and Patient Safety Collaboratives (PSCs), which are part of the National Patient Safety Improvement Programme.

England’s 15 AHSNs were set up by NHS England in 2013 and were relicensed from April 2018 to operate as the key innovation arm of the NHS. A connected ‘network of networks’, AHSNs’ mission is to spread healthcare innovation at pace and scale. We do this by acting as a ‘trusted broker’ connecting regional networks of NHS and academic organisations, local authorities, the third sector, industry and citizens, with the aim of improving health, driving down the cost of care and stimulating economic growth.

The National Patient Safety Improvement Programme

This programme, commissioned by NHS Improvement and supported by the regional Patient Safety Collaboratives, is the largest safety initiative in the history of the NHS. Since its inception, the programme has been addressing local patient safety issues through a variety of improvement approaches, working with patients, carers, clinicians, managers and safety experts. Each of the 15 Patient Safety Collaboratives is hosted by an AHSN, supporting continuous learning and improvement, adoption and spread of evidence-based interventions, and encouraging a culture of safety across the health and care system.

Find details for your regional AHSN at www.ahsnnetwork.com
For case studies on innovations supported by the AHSNs visit our Atlas of Solutions in Healthcare at atlas.ahsnnetwork.com

info@ahsnnetwork.com  @AHSNNetwork  The AHSN Network
The NHS Long Term Plan sets a direction of travel for ever closer working between health and care through local Integrated Care Systems, while the long-awaited green paper on social care is expected to include proposals to bring together health and social care budgets. These are indicators of the shift towards thinking about health and social care in joined-up ways.

Healthcare for care home residents was a specific focus of six Enhanced Health in Care Home Vanguards across England, set up in response to the previous NHS Five Year Forward View. The insights from these initiatives have resulted in the NHS Framework for Enhanced Health in Care Homes (www.england.nhs.uk/publication/the-framework-for-enhanced-health-in-care-homes/) which provides core recommendations to NHS commissioners about how to structure healthcare to care homes.

It is now recognised across the NHS that providing healthcare to care home residents is core business. The Optimal study, 2018 (Optimal healthcare delivery to care homes in the UK: a realist evaluation of what supports effective working to improve healthcare outcomes, Age and Ageing, 47(4): 595-603), conducted on behalf of the NHS National Institute of Health Research, suggested that healthcare to care home residents was more effective when the NHS allocated staff time to specific work in care homes, NHS and care home staff identified common goals for the care of residents and built working relationships over time.

The projects summarised in this report are evidence of the growing emphasis on care home work within the NHS and exemplify working together to build relationships between health and social staff around shared goals emphasising residents’ priorities.

We welcome the new NHS patient safety strategy (improvement.nhs.uk/resources/patient-safety-strategy) and have developed our own plan in response to demonstrate The AHSN Network’s commitment to patient safety and our unique position within the national and regional landscape.

Patient safety issues such as falls, pressure damage, infections and problems related to nutrition and hydration affect older people more than any other population group. Specific safety initiatives to address the complex factors behind these issues are an important and enduring feature of the NHS’s work and you will find many examples in this report.

Some of our planned initiatives include:

• Offering providers bespoke support that targets the issues highlighted in the national falls audit. Alongside this, the national falls practitioner network will facilitate the sharing of best practice.

• Wider work on proactive management of older people with frailty – as signaled in the NHS Long Term Plan – including spreading the use of the electronic frailty index and routine frailty identification by GPs, together with direct multidisciplinary assessment in Primary Care Networks.

• Considering the value of creating an acute frailty bundle, focusing on the management of patients presenting to hospital with acute frailty syndromes, similar to our work on deterioration and sepsis.

By bringing the work of AHSNs and the Patient Safety Collaboratives closer together, we know we can achieve more. The AHSN Network is the only system partner that brings together NHS providers and commissioners with academic and industry sector partners – all with an interest and desire to improve quality, safety and reduce harm.

We can maximise the opportunities and benefits to incorporate innovation, work across sectors to develop and test new safety solutions, and identify successful initiatives for future scaling up.

Context
Contents

1. Improving the quality of care

PROSPER – promoting safer provision of care for elderly residents in Essex (13)
UCL Partners: Testing whether quality improvement methods could reduce the number of harmful events in Essex.
LP2 (14)
East Midlands: Establishing a common mechanism to benchmark care quality.
Urgent call communication checklist (16)
Eastern: Reducing avoidable unplanned admissions to hospital in East Anglia.
Improving hydration in Hampshire care homes (17)
Wessex: A project to improve hydration amongst care home residents in Hampshire.
Reducing Catheter Associated Urinary Tract Infection (CAUTI) (18)
Health Innovation Network: A care pack encouraging catheter independence, by empowering individuals to self-care.
Reducing urinary tract infections (19)
Oxford: Improving hydration for residents to reduce antibiotic use and hospital admission.
Older People’s Essential Nutrition (OPEN) toolkit (20)
Wessex: A toolkit to support organisations to provide good nutritional care for older people.
SAFER (Safety and Autonomy For Every Resident) care homes collaborative (21)
West of England: Safety and Autonomy For Every Resident care homes collaborative including CCGs, local authorities, GPs and public representation.
Falls reduction tool (22)
Eastern: A simple assessment tool and pathway to prevent, respond to and review falls.
Safe Steps (23)
Health Innovation Manchester: Secure, digital falls risk assessment tool, enabling a standardised and effective approach to falls management.
Falls huddles (24)
Yorkshire and Humber: Support and coaching on huddles for front-line teams.
Implementing the red bag scheme (25)
Eastern: Implementing a pathway to support the safe transfer of residents who need to go to hospital in an emergency.
South West Care Collaborative (26)
South West: A scalable peer network for care home professionals to support faster spread of innovation and best practice to improve quality.

2. Medicines optimisation

National Polypharmacy Prescribing Comparators (29)
Wessex and North East and North Cumbria: Development of the first national data set for multiple medicines prescribing.
Polypharmacy pilot – medication reviews (30)
Kent Surrey Sussex: A seven-month pilot to examine the benefits of level three medication reviews.
Reducing inappropriate polypharmacy (31)
Health Innovation Network: HIN employed a Darzi Fellow to look into ways of reducing the use of inappropriate polypharmacy.

3. Dementia

DeAR-GP (33)
Health Innovation Network: A simple paper-based tool for care workers to identify signs of dementia.
Barbara’s story (33)
Health Innovation Network: An innovative dementia awareness training resource.
Best practice network for care home in-reach teams (34)
Oxford: A network and forum to develop and evaluate good practice in working with dementia.

4. Monitoring and screening

PINCH (36)
Promoting Implementation of NEWS2 in Care Homes (PINCH) Project
NEWS – National Early Warning Score (36)
West of England: Supporting the use of NEWS2 in care homes.
RESTOREZ (38)
Wessex: A physical deterioration and escalation tool, specifically designed for care and nursing homes.
Significant 7 (40)
UCLPartners: An early warning tool and associated training for care home staff to manage deteriorating patients.
Anticipatory Care Calendar (41)
Innovation Agency North West Coast: Establishing a baseline for residents to help identify deterioration earlier.
Well Connected Care Homes (42)
North East and North Cumbria: A ‘digital care home’ project for clinical monitoring and shared patient records.

5. Workforce development

Care Home System Leadership training (47)
Health Innovation Manchester: AQuA (Advancing Quality Alliance) provides practical support and coaching to develop system leaders from CCGs and social care.
SPACE (Safer Provision and Caring Excellence) (48)
West Midlands: Safer Provision and Caring Excellence is a large-scale improvement programme to strengthen safety culture.
Deteriorating patient project (50)
West Midlands: A quality improvement initiative in Walsall and Wolverhampton focusing on early recognition and response.
Human factors training (51)
West of England: An intervention tool to support human factors training in patient safety.
Safer culture (52)
Yorkshire and Humber: Improving communication and promoting a safer culture through tools such as safety huddles and SBAR.
The Pioneer Programme (53)
Health Innovation Network: A free leadership support and professional development programme for care home managers.
Haelo Safer Salford Care Home Programme (54)
Health Innovation Manchester: Encouraging care home participation in an improvement collaborative.
What: PROSPER was a groundbreaking initiative to test whether quality improvement methods could be implemented in the care home context. It involved working with residential and nursing homes across Essex to reduce the number of harmful events (e.g. falls) and improve the safety culture of teams.

Why: Many of England’s 400,000 care home residents have complex care needs. Care home teams suffer from very high turnover rates and limited investment in developing skills. Systematic approaches to improving care are commonplace in the NHS and other sectors but are virtually unknown in care homes.

How: UCLPartners supported a team of QI facilitators based at Essex County Council to provide staff across 90 care homes with training on QI methods, tools to track changes over time, and signposting to resources and other training.

Impact: An evaluation by University College London found two-thirds of care homes reported improvements in safety culture, including a greater focus on proactive prevention and monitoring of safety incidents. The team developed a new safety culture assessment tool specifically for the care home context.

One project, ‘Pimp my Zimmer’, supported residents to personalise their walking frames, leading to a reduction of falls by up to 60 per cent in some homes. The county council has provided additional funding for the programme.

Five more cohorts of care homes have since been recruited with over 160 homes now involved. It has also been spread to care homes for adults with learning disabilities, autism and physical sensory impairments, with a further three cohorts. In total, 174 homes have had the QI methodology and we have 12 cohorts in total across OP and LD services.

Resources
- Marshal M et al. What we know about designing an effective improvement intervention (but too often fail to put into practice), BMJ Quality & Safety, qualitysafety.bmj.com/content/qhc/early/2016/12/16/bmjqs-2016-006143.full.pdf
- Website: www.livingwellessex.org/quality/quality-innovation/prosper

Further information
Lesley Cruickshank, Quality Innovation Manager, Essex County Council
lesley.cruickshank@essex.gov.uk
LPZ – improving quality and safety in care homes

**What:** Establish a mechanism for measuring, recording, analysing and sharing the prevalence of common care problems across six domains at an individual care home level across the East Midlands:
- Pressure ulcers
- Continence
- Falls
- Pain
- Nutrition
- Restraint

**Why:** Care homes providers use different benchmarks for care quality. Data is collected in different ways, particularly in large chains, making cross-sector comparisons difficult. System wide improvement in this area is difficult to attain as there are currently no reliable measures for benchmarking the prevalence of common care problems. It is known that residents are at risk of various problems including pressure ulcers, incontinence, falls and polypharmacy. There are no reliable, nationally agreed benchmarking tools, so it is impossible to know their true incidence or prevalence. This means it is also difficult to have robust conversations about what good care looks like and which elements of care practice have improved safety and should be spread and adopted.

**How:** East Midlands AHSN and PSC are working with care homes to improve their capacity and capability to recognise, prevent and manage care problems through the introduction of measurement tools and techniques supported with quality improvement interventions. Landelijke Prevalentiemeting Zorgkwaliteit or LPZ (National Prevalence Measurement of Quality of Care) is an internationally renowned annual independent audit for the measurement of care quality and has been chosen for this work.

**Impact:** Resources have been designed and produced to support care homes deliver evidence-based care in medicines management, nutrition, pressure ulcers, preventing and managing falls, preventing delirium, promoting continence and reacting to moisture. We are now beginning to see improvements across the six domains at an individual home level and across our cohort of homes in the East Midlands.

- **Prevalence of pressure ulcers in 2015 was 8.4 per cent and in 2017 and 2018 was 7 per cent.**
- **Prevalence of falls in the last 12 months had dropped from 39 per cent in 2016 to 37 per cent in 2017, and 33 per cent in 2018.**

**Resources:**
- EMAHSN care home project website pages: www.emahsn.org.uk/lpzproject
- ‘React to’ resources, designed specifically for care homes: www.reactto.co.uk
- LPZ: www.lpz-um.eu/en
- Film – ‘What LPZ means to Care Homes’: vimeo.com/314753437

**Further information:** Laura Hailes, Senior Improvement Lead, Patient Safety Collaborative East Midlands Academic Health Science Network
laura.hailes@nottingham.ac.uk

This collaborative project demonstrated innovation, a clear project process and fantastic outcomes which are clearly seen by the patients. The judges specifically liked the fact this project was driven through a bottom-up approach.

**HSJ Patient Safety Awards**
Urgent call communication checklist

**What:** Eastern PSC has been working with local Clinical Commissioning Groups (CCGs) to reduce avoidable unplanned admission to hospital from care homes and variation in accessing help in urgent situations. The PSC carried out an audit and recognised that standard communication tools and frameworks for clinical assessment were well embedded into acute settings, but that care home staff were not using these tools.

**Why:** Care home residents in hospital rapidly deteriorate and it can be difficult for them to return to their previous level of health and function. An unplanned, or inappropriate admission to acute care can be distressing for the resident and their family. Carers report they do not always feel confident in deciding who to call in an urgent situation or what information they need to provide. Many felt scared and anxious when making an urgent call.

**How:** Eastern assisted the CCGs with training in the use of SBAR (situation, background, assessment, recommendation) and ABCDE (airway, breathing, circulation, disability, exposure) assessment in a simplified form, not using equipment.

This was accompanied by a simple document to provide accurate information, evidence and a timeline for the urgent situation, call and decisions made as a result of the call for help: the urgent call communication checklist.

The checklist is an A4 document for care home staff, developed to complete before making the call. This has been endorsed by the three central Norfolk CCGs and by the ambulance and 111 providers.

**Impact:** Unplanned emergency admissions reduced by 22 per cent in South Norfolk CCG; this reduction is reflected in the other two CCGs but at a slightly lesser rate. This is encouraging but should be viewed within the broader context of other admission avoidance work ongoing within the three CCGs.

Domiciliary care providers asked to use the checklist and Eastern delivered a ‘train the trainer’ session to enable one provider to roll out the checklist to its staff. Negotiations are underway to replicate this model with another domiciliary provider.

Resources
- SBAR: bit.ly/2JJskT
- ABCDE: bit.ly/2J6bYk
- Further information: improvement@eahsn.org

Unplanned emergency admissions reduced by up to **22%** in participating CCGs

---

Improving hydration in Hampshire Care Homes

**What:** Wessex AHSN has been working in partnership with Hampshire County Council to develop and run a six-month project to improve hydration for residents of 17 council-owned care homes. The project aimed to collect data to understand whether there was a difference in health and wellbeing indicators following the training of care home staff as Champions in hydration.

**Why:** Hampshire County Council wanted to implement an approach to improve hydration and approached Wessex AHSN to support them on this project. It is known that dehydration can lead to increased falls, UTIs and poorer health outcomes and wellbeing.

**How:** The project involved establishing and training ‘hydration champions’ and managers from each care home. Following training, homes were encouraged and supported to implement changes which focussed around making hydration fun, as well as improving the availability and types of drinks offered.

Care homes implemented a variety of changes, such as introducing themed days, regular hydration assessments using the ‘Reliance On Carer (ROC) to drink tool’. Data on falls and injuries was observed.

**Impact:**
- Residents at risk of becoming dehydrated could be easily identified and supported using an assessment tool and associated care pathway.
- A small (although not statistically significant) reduction in slips, trips and falls (two per cent reduction) and falls-related injuries (eleven per cent reduction) was observed.
- 18 resident case studies were received highlighting the positive impact the project has had on residents’ health and wellbeing.
- As a result of the project, Wessex AHSN and Hampshire County Council are now working on developing a new hydration e-learning package which can be spread to other care homes, and also to care workers working in domiciliary care settings.

Resources:
- Website: wessexahsn.org.uk/projects/204/improving-hydration-in-care-homes
- ROC to drink tool: www.hydrationcareconsultancy.co.uk

Further information:
- Annemarie Aburrow, Hydration Project Lead, Wessex AHSN annemarie.aburrow@wessexahsn.net
- Cheryl Davies, Healthy Ageing Programme Manager, Wessex AHSN cheryl.davies@wessexahsn.net
Reducing Catheter Associated Urinary Tract Infection (CAUTI)

Spread of catheter care packs to care homes in Sutton

What: Encouraging catheter independence, empowering individuals to self-care and enhancing overall catheter knowledge. The care pack contains two booklets. The first booklet, 'Catheter care and you' is an information and advice booklet designed specifically for older service users to meet their needs and priorities.

The second booklet, 'Catheter care preventing infection: patient record' is aimed at healthcare professionals to provide key information about the catheter, reason for catheterisation and when the catheter is due to be removed or changed. The patient record encourages healthcare professionals to record any problems and subsequent follow-ups with their patient. It also aims to improve communication across healthcare boundaries i.e. from community care to the emergency department or to outpatient clinics or wards.

Why: This work was part of a Health Innovation Network (HIN) South London project which aimed to improve patient outcomes and reduce harm from catheterisation, especially catheter associated urinary tract infections (CAUTIs).

It is estimated that healthcare associated infections cost the NHS more than £1bn per year with £56m of this being in the out-of-hospital-setting (NICE 2012). UTIs are the most common and impact negatively on patient outcomes whilst costing the NHS £17.2m per year (Loveday et al 2014).

How: HIN assisted with the roll-out of catheter care materials within Sutton care homes. This was in conjunction with the roll-out of this material in primary and secondary care settings in south London.

The catheter care packs were spread to 26 care homes across Sutton. All staff had training, in the form of a presentation and Q&A session, and the care home managers, or designated contact, received a communications toolkit. Each care home was asked to nominate a catheter care champion who would be responsible for overseeing the catheter care pack distribution and ensuring that all new starters were able to access the communications toolkit.

Impact: Surveys were sent to healthcare professionals in Sutton and Croydon to understand their knowledge, attitude and practice (KAP) of catheter care. KAP surveys, tailored to service users, were also sent to older people living with a catheter to get an understanding of their experience and knowledge of care practices.

Initial surveys were used to inform interventions and education initiatives around catheter care. From the small sample (n=8) of data collected it was acknowledged that those residents with catheters within the Sutton care homes had catheters that were appropriately placed and catheter related issues were managed through the correct channels. Informal qualitative feedback also suggested that catheter-related issues rarely resulted in emergency department attendance.

Further information: hin.southlondon@nhs.net

Reducing urinary tract infections

What: The aim of the Good Hydration! initiative was to reduce the number of urinary tract infections (UTIs) that required antibiotics or hospital admission by improving hydration in care home residents. This work was undertaken in collaboration with East Berkshire CCG and Oxford PSC.

Why: Care home residents are more at risk of dehydration due to multiple factors, including a reduced sensation of thirst, poor swallowing mechanisms and dexterity issues. Dehydration can lead to an increase in falls, confusion and UTIs. The project was designed by care homes to offer and encourage residents to drink more fluids.

How: This quality improvement initiative focused on improving care home staff’s knowledge of the benefits of hydration, the risks of dehydration and the signs and symptoms of a UTI. This was achieved through face-to-face training sessions and specially commissioned animated videos funded by Health Education England. The care home staff then introduced structured drinks rounds seven days a week ensuring that residents were offered multiple choices of hot and cold drinks at set times. The trolleys were bright, inviting and often themed around topical events and festivals.

Impact: The initiative has received national recognition, winning the following awards:

- NICE – Shared Learning award (2018)
- PrescrIPPP – Patient Safety, Best Interface and Overall Best Innovation (2017)

The pilot achieved the following impacts:

- UTI hospital admissions reduced by 36 per cent in the four pilot care homes (150 residents)
- UTIs requiring antibiotics reduced by 58 per cent
- The gap between UTIs increased from an average of nine days in the baseline period to 80 days in the implementation and sustainability phase
- One residential home was UTI-free for 243 consecutive days!
- Similar outcomes noted in pilot two care homes (215 residents)

This initiative has now been rolled out to multiple care homes through ‘train the trainer’ sessions throughout the Oxford AHSN region and beyond. A toolkit and other resources have been created for any CCG, local authority or NHS hospital wanting to run the initiative locally.

Resources:
Website: bit.ly/good-hydration

Lean K et al. Reducing urinary tract infections in care homes by improving hydration, BMJ Open Quality, bmjopenquality.bmj.com/content/8/3/e000563

Further information:
Katie Lean, Patient Safety Manager, Oxford PSC
katie.lean@oxfordahsn.org

The panel were unanimous in their decision that this apparently simple project has such a positive impact on patient outcome and is an impressive example of how a simple idea could have a huge impact beyond what the team hoped to initially achieve.
Older People’s Essential Nutrition (OPEN) toolkit

What: Our OPEN (Older People’s Essential Nutrition) toolkit supports organisations to provide good nutritional care for older people using a collaborative and joined-up approach. It is freely available from our website.

The toolkit has been split into four main sections:

• Training materials for health, social care, care home staff and the voluntary sector with a community setting focus. These include session plans, PowerPoint presentations, case studies, and videos on both general undernutrition awareness and how to screen using the ‘Malnutrition Universal Screening Tool’ (MUST).

• Awareness materials and leaflets suitable for the general public. These include our more general OPEN undernutrition leaflet, along with a version for people with COPD and dementia, and a series of posters.

• Generic under-nutrition care pathways, which can be adapted for each locality; localisation of the care pathways is required to ensure local flavour and adoption.

• Evaluation framework.

Why: To raise awareness of undernutrition, which is a major cause of deterioration in older people living in care. The toolkit also helps to address the issues around lack of nutrition screening and appropriate care planning that exists in the community (the reasons for this are complex, including lack of time, lack of training, organisational pressures). Improving early identification and treatment of undernutrition will have a positive impact on health and clinical outcomes.

How: Utilises best practice in under-nutrition screening and providing good nutritional care across all settings, following key NICE guidance. A multidisciplinary approach has supported the development of the toolkit and the toolkit has been endorsed by the British Dietetic Association.

SAFER (Safety and Autonomy For Every Resident) care homes collaborative

What: A collaborative, formed of colleagues from CCGs and local authorities, GPs and public representation, whose primary aim is to improve the quality of care homes for residents. The collaborative is particularly focussed on building capability to promote early recognition of, and response to, physical deterioration in care homes.

Why: Early recognition and response to deterioration helps to keep residents safe and reduce unnecessary conveyance to hospital. The collaborative is keen to align with the aims of the NHS England and Improvement’s Enhanced Health in Care Homes framework, to avoid duplication and ensure that care homes receive clear and aligned messages. The collaborative is also working closely with the West of England AHSN Medicines Safety programme, so that it is primed to support the forthcoming aim to reduce medication errors in care homes.

How: To increase use of NEWS2, ReSPECT and structured communication tools in care homes. The RESTORE2 (Recognise Early Soft-signs, Take Observations, Respond, Escalate) tool is being recommended as a vehicle for this, as it encourages use of soft signs as a prompt for taking observations, avoiding the over-medicalisation of care homes.

Resources:
- ReSPECT: www.respectprocess.org.uk
- RESTORE2: www.westhampshireccg.nhs.uk/restore-2
- King’s Fund Enhanced Health in Care Homes paper: www.kingsfund.org.uk/publications/enhanced-health-care-homes-experiences

Further information:
- Hannah Little, Patient Safety Improvement Lead, West of England AHSN hannah.little@weahsn.net

Resources:
- Website: wessexahsn.org.uk/OPEN-toolkit
- OPEN undernutrition leaflet: wessexahsn.org.uk/open-leaflet.pdf
- Further information: healthyageing@wessexahsn.net
Care homes falls reduction tool

**What:** Eastern PSC set out to reduce patient harm through prevention of falls. NICE has reported over 400 risk factors associated with falling (NICE 2017; www.nice.org.uk/guidance/qs86).

**Why:** Awareness and training of care homes staff related to falls could be improved. Eastern identified the potential to reduce falls by utilising small changes.

**How:** Eastern AHSN adopted the Falls Assessment Tool for Care Homes (adapted from a tool by Lynn Flannigan, NHS Lanarkshire). It is a simple and easy assessment tool with a clear pathway to prevent, respond and review. Specific falls awareness talks in care homes were delivered.

The AHSN is working closely with the South Norfolk and Norwich CCGs directly supporting the project using the Model for Improvement and QI techniques. The Life QI system (www.uk.lifeqisystem.com) is integral to the development and support for the project.

**Impact:** 34 homes and supported living schemes across Norfolk are currently taking part. 82 managers from 25 of the homes/schemes, deputies and team leaders attended training sessions. These have evaluated brilliantly with over 80 per cent of attendees feeling that they understood the risk of falls and could assess them in a systematic way.

One supported living scheme demonstrated a 40 per cent reduction in falls for the first three months. Training has been delivered to another 92 staff members across 35 homes in Norfolk and a fall champions network will be developed.

**Further information:** improvement@eahsn.org

Safe Steps

**What:** Safe Steps is a digital falls risk assessment tool which provides a standardised and effective approach for falls management across a range of care settings. Built to NHS standards and aligned with NICE guidance, the tool allows carers to measure 12 key risk factors to enable early identification of high risk citizens, and create a personalised action plan based on 50+ evidence-based interventions. Commissioner dashboards allow real-time evaluation and usage tracking, providing data and insights for improved decision making and planning.

**Why:** For the 11.6 million older people living in the UK, falls represent a major problem with six people falling over every single minute. Forty per cent of people who suffer from a fall are left with a moderate or extensive injury. However, the impact of falls often goes beyond the physical, with over one fifth of people losing their confidence and being more at risk of falling again.

Safe Steps is being supported by Health Innovation Manchester and through the Greater Manchester Digital Health Accelerator Programme. The company was selected from a wide range of applicants as the platform has the potential to align well with existing patient safety initiatives and assist with the drive to reduce falls in the region. Introducing a digital platform that enables carers to undertake a standardised approach to falls risk assessment will assist Health Innovation Manchester in the drive to embrace digital solutions that can help improve the lives of Greater Manchester citizens and reduce the economic impact of falls on the Greater Manchester health and care system.

**Impact:** Safe Steps is now live in nearly 100 Care Homes with early evidence indicating a 28 per cent reduction in the number of falls. Over 1,000 residents are now regularly screened using the Safe Steps tool, thereby assisting with the requirement for the routine assessment of patients. Initial cost modelling and health evaluation data suggests a 5:1 return on investment (e.g. cost of software versus cost savings through reduced, non-elective spend via reduced A&E conveyances).

**Resources:**
- Website: www.safesteps.tech
- www.weareHiM.com

**Further information:**
- Kevin Moreton, Digital Navigator for Safe Steps, kevin.moreton@healthinnovationmanchester.com
- Kevin Moreton, Digital Navigator for Safe Steps, kevin.moreton@healthinnovationmanchester.com
Falls huddles

What: The Yorkshire and Humber Improvement Academy in partnership with Yorkshire and Humber AHSN supported and coached frontline teams as part of a huddles programme. This included safety culture surveys, visual data and celebrating successes.

Why: Falls contribute to residents’ loss of confidence and independence, increased distress, pain, injury, increased risk of hospital admissions and in a significant number of cases, death.

The financial cost of a fall can be significant. In summary:

• According to NICE, older people living in care homes are three times more likely to fall than those living in the community, and a quarter are likely to suffer serious injuries and be admitted to hospital following the accident.
• The number of hospital admissions due to an older person falling is set to rise to nearly 1,000 a day by the end of the decade.
• Falls are said to cost the NHS more than £2bn a year.
• About 30 per cent of people aged 65 or older have a fall each year, increasing to 50 per cent of people aged 80 years or older.

Yorkshire and Humber are working with 11 care homes across the region focusing on falls reduction.

Impact:
• Significant reductions to the number of patient falls and costs.
• Measurable improvements in staff morale, with teams choosing to extend their remit to include reducing pressure area injury, deteriorating patients and delayed discharge.
• Two teams to date have achieved a significant reduction in falls, evidenced by at least one step-change reduction in run charts plotting ‘falls per week’.
• Sustained periods of time without any falls.

The programme has been extended to include pressure ulcers, care of deteriorating patients, nutrition and hydration.

Further information:
Melanie Johnson, Patient Safety Lead, Yorkshire and Humber AHSN melanie.johnson@yhahsn.nhs.uk

Implementing the red bag scheme

What: The red bag scheme is an innovative example of a pathway redesign to make sure residents living in care homes receive safe and effective treatment, should they need to go into hospital in an emergency. It supports the safe transfer of care home residents, e.g. to hospital emergency departments and back.

Why: The pathway is designed to support care homes, the ambulance service and the local hospital to meet the requirements of the NICE guidance [NG27] on transition between inpatient hospital settings and community or care home settings for adults with social care needs. It ensures residents’ care plan information and belongings accompany them, preventing delayed discharge and assuring continuity of excellent care.

How: This project was developed in Sutton, as part of their Care Homes Vanguard programme, and the Health Innovation Network, South London supported the spread of this initiative to 10 other south London boroughs.

Eastern PSC has taken the learning and best practice from this project to implement it in their region using quality improvement methodology.

Impact: By putting the NICE guidance into practice within the red bag pathway, significant improvements have been made in the communication and relationships between the hospital and care homes. 150 bags have been distributed to 66 care homes, with a total capacity of 3,428 residents (in the first three months).

Ambulance crew and staff have provided positive feedback, including how transfers of care are much smoother due to having all the information.

150 bags were distributed to 66 care homes in three months

Health Innovation Network carried out an evaluation in South London of the red bag pathway in three CCG areas, measuring improvements to communication between care homes, ambulance paramedics and hospital clinicians. Two-thirds of respondents believed communication had improved as a result of the red bag scheme, supporting clinical decision making and patient dignity.

Further information:
improvement@eahsn.org

Yorkshire and Humber are working with 11 care homes across the region
What: The South West AHSN is working in partnership with the South West Care Collaborative (SW CC), formerly Devon Care Kite Mark (DCKM), to grow and spread the collaborative across the South West region. DCKM was created in 2012 and is a peer-led network that supports people working in residential care and nursing homes to deliver high-quality care through sharing best practice and innovation.

Why: The South West has an aged and ageing demographic, with 941 residential care and nursing homes in the region. Beyond the impact of the regulator, there are few systemic mechanisms to spread learning across a competitive market where most providers own only one home. The care home market is fragmented with many small, independent providers competing. This makes systemic improvement more difficult.

How: The South West AHSN is supporting the SW CC to:

- Review homes considered to be ‘bright spots’ (rated ‘good’ and ‘outstanding’ by the Care Quality Commission) within the collaborative, to identify positive elements that can be spread to homes that may require more support
- Introduce and test proven innovations
- Host training workshops
- Deliver networking and sharing events
- Raise the profile of the SW CC to grow the network across the South West region

Impact: There are currently approximately 50 care and nursing home members engaged and supported by the SW CC in Devon – seven are rated as ‘outstanding’ and 30 are rated ‘good’ by the Care Quality Commission. Membership is growing to include homes in Cornwall and Somerset.

From 2012 to date:

- 42 themed training/learning sessions have been held, involving over 600 care home professionals.
- 50 peer support visits have been conducted.
- Six masterclasses have been held, involving over 120 care home managers and leaders.
- Five annual conferences have been held, attracting over 500 attendees.

All quotes are from SW CC / DCKM members

“The [collaborative] is not a competitive environment. It is supportive. Inspiring.”

“Peer visits are an excellent idea. They work as an early warning system.”

“Resources:

- Population projections for local authorities: Table 2, Office for National Statistics, 9 April 2019: www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandtable2
- Care Homes Market Study, Update Paper, Competition and Markets Authority, 14 June 2017, p7: www.gov.uk/cma-cases/care-homes-market-study
- Website: devoncarekitemark.co.uk
- @devoncarekitemark

Further information: info@devoncarekitemark.co.uk

It’s been massively worthwhile for us. We wouldn’t have got outstanding, if wasn’t because of the [collaborative].”

“The CQC inspector recommended the [collaborative] to me.”
2. Medicines optimisation

National Polypharmacy Prescribing Comparators

**What:** Wessex and North East North Cumbria AHSNs, on behalf of The AHSN Network, worked with the NHS Business Service Authority (NHS BSA) and the Royal Pharmaceutical Society (RPS) to develop the first national data set for polypharmacy, or multiple medicines prescribing, now known as the National Polypharmacy Prescribing Comparators.

The data set is available to all GP practices and CCGs. The tool enables GP practices to identify how their prescribing compares with local and national prescribing and also supports them in identifying the patients deemed to be at greatest risk of harm from polypharmacy.

**Why:** There are over 410,000 people resident in around 11,300 care homes in England. Conducting a medication review with every resident would be impossible given the current pressure on primary care. Until the development of this tool, published in June 2017, there was no national system available to help prioritise patients at risk from problematic polypharmacy. Now, every GP practice can assess their areas of concern and use the NHS BSA tool to identify patients deemed to be at greatest risk of harm from polypharmacy.

**How:** The National Polypharmacy Prescribing Comparators show practices and CCGs where their prescribing practice differs from the rest of the country and how they can identify areas to address. The tool enables them to contact the NHS BSA directly and receive the NHS numbers of their patients deemed to be at risk from harm from polypharmacy, in order to prioritise those patients for a medication review. This means that a practice can identify those patients in care homes that should be reviewed first, as a priority, as they are deemed to be at greater risk from harm. It also supports pharmacists working in care homes on medicines optimisation to prioritise their workload effectively.

**Impact:** Nationally, 49 per cent of GP practices have decreased the percentage of patients prescribed two or more medicines that are likely to cause kidney injury.

CCGs such as North East Hampshire and Farnham have used the National Polypharmacy Prescribing Comparators to support their care homes medication reviews, by identifying patients who may be at risk of harm from polypharmacy. This enabled a full-time Care Homes Pharmacist (CHP) to undertake face-to-face medication reviews with residents, in conjunction with GPs. The CHP often accompanies the GPs on their visits to homes. Since April 2017, the CHP has undertaken over 250 reviews and made over 800 interventions. As a result:

- The average number of medicines per patient has reduced from 9.4 to 7.6
- The average anticholinergic burden score has reduced from 1.39 to 1.0

**Resources:**
Website: wessexahsn.org.uk/projects/55/polypharmacy
Further Information: Wessex AHSN Medicines Optimisation Team medicines.optimisation@wessexahsn.net
Polypharmacy pilot – medication reviews

What: Clinical Commissioning Groups (CCGs) have identified funding and resources as barriers to making sustainable improvements to problematic polypharmacy or overuse of multiple medicines. Kent Surrey Sussex AHSN supported a project to examine the benefits of level 3 medication reviews through a seven-month pilot with Brighton and Hove CCG.

Why: More people are being diagnosed with multiple long-term health conditions. This can lead to being prescribed multiple medicines to address each illness, but not necessarily with consideration to how the drugs work with each other. This can lead to them cancelling each other out – losing their beneficial effects – or the patient reacting poorly to the combination of drugs, causing further health issues.

Coupled with the fact that it can be very confusing to understand how much to take of each drug and how often, the medicines are often taken incorrectly or not at all, leading to worse patient outcomes and wasting NHS resources. The average older person is admitted to hospital taking 13 medicines and adherence is poor, resulting in significant waste.

How: Holistic, level 3 ‘gold standard’ face-to-face medication reviews were carried out with residents and patients in care homes and other care settings, with a focus on listening and shared decision making. The reviews were carried out by an experienced pharmacist and pharmacy technician, working closely with GPs, hospital colleagues and Age UK. The aim was to improve patient outcomes and improved quality of life.

Impact: Patient and relative feedback was overwhelmingly positive, with many valuing the time taken to listen and learn about their situation. Health professionals also reported that detailed holistic reviews enabled them to influence positive change. Highlights included:

- 86 patients were referred to the service and 59 reviews were completed (13 patients refused to take part).
- 115 recommendations were made to GPs, 77 were accepted.
- Savings generated included £112.54 per review (rising to £172.06 if all recommendations were actioned) and an average of £21.19 per review was saved from the potential hospital admissions avoided.
- Medicines removed from patients’ homes were costed at £21.77.

Resources:
Website: bit.ly/KSSPolypharmacy
Further Information: Lisa James, Senior Programme Manager, Medicine Optimisation lisa.james14@nhs.net

Reducing inappropriate polypharmacy in care homes

What: Health Innovation Network employed a Darzi Fellow to look into ways of reducing the use of inappropriate polypharmacy in nursing and residential care homes.

Why: Polypharmacy is the third patient safety challenge from the World Health Organisation and there is an aim to reduce severe avoidable medication-related harm by 50 per cent by 2022.

How: Long-term use of anticholinergic medicines have been identified as causing cognitive decline and thus are particularly harmful for people with dementia. Anticholinergics also directly block the beneficial effects of dementia medicines. Care home staff were provided training on anticholinergic medicines and given a list of medicines with high anticholinergic activity so that they could be highlighted to the GP/pharmacist for review.

A poster with the side-effects of anticholinergics was also provided.

A leaflet detailing the importance of regular medication reviews has been designed for residents/relatives including some questions they might like to discuss with their healthcare professional.

Impact: Three care homes participated in highlighting anticholinergic medicines. A questionnaire was given to care home staff before and after a short presentation on anticholinergics. After the presentation, three times as many carers were totally confident in highlighting anticholinergics for review than before. Across a total of 20 residents with dementia, 23 medicines were highlighted for review. So far, 20 medicines have been reviewed by GPs and from these, 11 were stopped, two were switched to medicines with less or no anticholinergic activity and seven were unchanged. Care home staff and relatives have also commented on the clarity and ease of using the leaflet.

Resources:
Project web page: healthinnovationnetwork.com/clinical-themes/healthy-ageing
Further Information: hin.southlondon@nhs.net

Anticholinergics: spot side effects & review regularly

It is likely that the people you treat or care for are taking at least one anticholinergic medicine.

Savings of at least £112.54 per medicine review
3. Dementia

DeAR-GP: improving dementia diagnosis rates in care homes

What: DeAR–GP is a simple paper-based case-finding tool for use by care workers to identify people showing signs of dementia.

Why: It acts as a communication between care workers and health professionals, providing the results of a brief cognitive test. Once completed by a care worker, DeAR–GP is reviewed by a clinician who can assess the resident further.

How: Three care homes trialled the tool identifying 23 residents with significant signs of memory loss or confusion who did not previously have a diagnosis.

Impact: The pilot study showed clinicians found 87 per cent were either: diagnosed with dementia; referred to the memory service; or found to have a previous diagnosis unbeknown to the care home.

It has been endorsed by the National Clinical Director for Dementia and has been supported by the Alzheimer’s Society. The tool is being used in London, Kent, Surrey and Sussex, Wessex and Yorkshire and Humber.

Resources:
Website: www.dear-gp.org
Further information: hin.southlondon@nhs.net

Dementia awareness training in care homes using Barbara’s story

What: Barbara’s story focuses on a person living with dementia. It’s an innovative dementia awareness training resource developed at Guy’s and St Thomas’ NHS Foundation Trust.

Why: The project aim was to determine whether ‘Barbara’s story’ was suitable for use in care homes.

How: 29 homes in three boroughs in south London – Richmond, Bexley and Greenwich – participated in the feasibility study. 15 care home staff were taught to deliver Barbara’s Story in south London care homes, with a further 541 care home staff successfully trained. This training covered more than 25 per cent of the competencies in the Care Certificate.

Impact: Based on the success of the feasibility study, the AHSN has secured Health Education England funding to spread Barbara’s Story to a further 40 care homes in South London. Further funding has been secured from the London Dementia Strategic Clinical Network to provide the training to care homes in London.

Further information: hin.southlondon@nhs.net
Best practice network for care home in-reach teams

What: Oxford AHSN has established a sustainable practice forum for reflecting on, developing and evaluating good practice. The forum supports the use of evidence-based approaches and is open to health teams that in-reach into care homes, working with people with dementia. In the past, in-reach teams from different geographical areas have worked largely in isolation from each other, with several different models of team.

Why: Approximately 70 per cent of people living in care homes have dementia, and they may also have co-existing mental and physical health needs. Recognition of this full range of complex needs can be difficult for the care home staff. This network facilitates a person-centred care approach to improve quality of life of people with dementia living in care homes.

How: The network focuses on how services are delivered effectively, measured and maintained, and supports a proactive approach from health in-reach teams rather than one where the teams are only responding reactively on a patient-by-patient basis.

The AHSN has run CPD events in which teams have been encouraged to identify projects to work on and to share their work on these.

Impact: The teams have worked together to establish a system where pain in people with dementia is routinely assessed. Further projects include training and supporting dementia champions in care homes and improving oral care for residents in care homes. Two workshops have also been held for care home staff to share the work being undertaken.

Resources: Website: bit.ly/2Jpy2fW

For information: Fran Butler, Programme Manager – Mental Health, Oxford AHSN fran.butler@oxfordahsn.org

4. Monitoring and screening
**NEWS – National Early Warning Score**

**What:** Since 2015, all organisations within the West of England Patient Safety Collaborative have been involved in a major programme to introduce and standardise the use of the National Early Warning Score (NEWS) at all handovers of patient care – primary care, ambulance, hospital, community and mental health.

The Royal College of Physicians (RCP) introduced NEWS to standardise the approach to deterioration across England.

**Why:** The NEWS has been shown to be a highly effective system for detecting patients at risk of clinical deterioration or death, prompting a timelier clinical response. However, many organisations have been slow to adopt the NEWS and still use regional or non-standardised versions.

In 2015, approximately seven per cent of patient safety incidents reported to the National Reporting and Learning System as death or severe harm were related to a failure to recognise or act on deterioration. Sepsis kills around 44,000 people per year in the UK and NEWS has been recommended by National Confidential Enquiry into Patient Outcome and Death as a tool to enable early detection and treatment of sepsis.

The West of England PSC wanted to show that NEWS could be successfully used to identify sick patients, both inside and outside of secondary care settings.

**How:** By agreeing escalation triggers, the aim was to facilitate early recognition of acute illness including sepsis. Using NEWS at each handover of care as a standardised communication tool enables the sickest patients to be seen at the right time, in the right place, by the right grade of clinician.

The Institute for Healthcare Improvement’s Breakthrough Collaborative Model was used. It is designed to close the gap between what is known and what is done by creating a structure in which organisations can easily learn from each other and from recognised experts in topic areas where they want to make improvements.

Teams from across the healthcare system met every six months at collaborative events. Health community task groups met more frequently to lead the work where teams met under existing NHS structures. This was supported by the introduction of an emergency department collaborative and a primary care collaborative.

**Impact:** This was a very large project with some examples of work specific to care homes.

**Bristol area structured teaching programme for care homes:**

- Focused on NEWS but included hydration, nutrition and skin care.
- 28 out of 34 care homes had NEWS training. In one third of homes (11) 100 per cent of staff were trained and in the remaining 17 homes, 83 members of staff were trained.

**Gloucestershire Care Services – Rapid Response Team:**

- One community rapid response team based in Gloucestershire introduced NEWS to care homes to prevent avoidable admissions.
- Three nursing homes with a high admission rate were identified to participate in a pilot. Nursing home staff were trained to use NEWS and to escalate using structured communication tool to enable early recognition of deterioration.
- Patients with a NEWS score greater than five were treated in the community based on existing treatment escalation plans. 26 admissions were avoided, meaning patients received treatment or end-of-life care in their preferred environment rather than in hospital.
- The project improved clinical competencies for healthcare staff working in the nursing home setting. Patients received more timely treatment particularly in sepsis and acute kidney injury management through early recognition.

- There was positive feedback from staff and patient families due to improved patient experience by being treated in right place at right time in accordance with their wishes.
- Based on an average admission of 4.8 inpatient bed days, approximately 124.8 bed days were saved in this pilot in three care homes. If the average cost of an acute admission is £2,500 based on a 4.8 day average length of stay, this equates to £65,000 saved from 26 avoidable admissions. Instead, these patients had two rapid response visits per day for three days at £208 per visit, totalling £10,816. The total savings in three months were therefore £54,184.

**Resources:**

- The Royal College of Physicians: www.rcplondon.ac.uk/projects/outputs/national-early-warning-score-news
- The UK Sepsis Trust: www.sepsistrust.org

**Further information:**

- Hannah Little, Patient Safety Improvement Lead, West of England AHSN
  hannah.little@weahsn.net

**GLOUCESTERSHIRE CARE SERVICES – RAPID RESPONSE TEAM**

- One community rapid response team based in Gloucestershire introduced NEWS to care homes to prevent avoidable admissions.
- Three nursing homes with a high admission rate were identified to participate in a pilot. Nursing home staff were trained to use NEWS and to escalate using structured communication tool to enable early recognition of deterioration.
- Patients with a NEWS score greater than five were treated in the community based on existing treatment escalation plans. 26 admissions were avoided, meaning patients received treatment or end-of-life care in their preferred environment rather than in hospital.
- The project improved clinical competencies for healthcare staff working in the nursing home setting. Patients received more timely treatment particularly in sepsis and acute kidney injury management through early recognition.

- There was positive feedback from staff and patient families due to improved patient experience by being treated in right place at right time in accordance with their wishes.
- Based on an average admission of 4.8 inpatient bed days, approximately 124.8 bed days were saved in this pilot in three care homes. If the average cost of an acute admission is £2,500 based on a 4.8 day average length of stay, this equates to £65,000 saved from 26 avoidable admissions. Instead, these patients had two rapid response visits per day for three days at £208 per visit, totalling £10,816. The total savings in three months were therefore £54,184.

**Resources:**

- The Royal College of Physicians: www.rcplondon.ac.uk/projects/outputs/national-early-warning-score-news
- The UK Sepsis Trust: www.sepsistrust.org

**Further information:**

- Hannah Little, Patient Safety Improvement Lead, West of England AHSN
  hannah.little@weahsn.net
RESTORE2

What: RESTORE2 is a physical deterioration and escalation tool for care homes, combining local innovation around early recognition (soft signs) and nationally recognised methodologies, including the National Early Warning Score (NEWS2) and structured communications (SBARD). RESTORE2 was co-produced by West Hampshire CCG and Wessex Patient Safety Collaborative.

Why: Wessex PSC is working to implement a standardised common language for managing deterioration across all healthcare settings including the care home sector and this work aligns with the NHS Enhanced Health in Care Homes initiative.

How: RESTORE2 is a physical deterioration and escalation tool, designed to support homes and health professionals to:

• Recognise when a resident may be deteriorating or at risk of physical deterioration
• Act appropriately according to the resident’s care plan to protect and manage the resident
• Obtain a complete set of physical observations to inform escalation and conversations with health professionals
• Speak with the most appropriate health professional in a timely way to get the right support
• Provide a concise escalation history to health professionals to support their professional decision making.

Impact: A feedback survey on RESTORE2 showed:

• 100 per cent of respondents said that the tool had helped them achieve earlier escalation of their concerns.
• 100 per cent of respondents said that the tool had helped to achieve earlier intervention from GPs, out-of-hours services or the ambulance service.
• 25 per cent of staff who escalated residents using the tool would not have done so without it.

RESTORE2 is shown to reduce 999 calls and conveyances by 16% compared with care homes with no deterioration tool.

RESTORE2 won a prestigious ‘Excellence in Primary Care’ Parliamentary Award in 2019.

Resources:

Websites:


Further information:
Geoff Cooper, Programme Manager, Wessex Academic Health Science Network, geoff.cooper@wessexahsn.net

RESTORE2 is a wonderful example of what a region can accomplish when it works together. The Wessex quality improvement programme networking and discussions across organisational boundaries enabled the creation of a tool that improves the recognition, communication and response to acutely unwell patients in care facilities – a very vulnerable group of people.

Matt Inada-Kim, consultant acute physician, Hampshire Hospitals NHS Foundation Trust
Significant 7

**What:** Significant 7 is an early warning tool and associated training designed for care home staff. It uses fun and engaging training for better outcomes for patients by:

- Improving systematic identification of early signs in residents.
- Empowering care homes staff to manage deteriorating residents.
- Reducing avoidable deterioration of residents in care homes.
- Improving communication between staff within and outside the home.
- Increasing carers’ confidence in their role.
- Assisting with pressure ulcer and falls prevention.

**Why:** The Significant 7 programme was designed by North East London NHS Foundation Trust (NELFT) and the Barking, Havering and Redbridge Clinical Commissioning Groups in response to A&E audit findings (alongside research with care homes, hospital doctors and local authorities) which identified that the proportion of care home admissions to the acute hospital setting in the region was high, and that this did not represent the best pathway of care for frail older people.

An intensive review of care home staff was also undertaken which highlighted gaps in education/training of care home workers:

- Research identified that 87 per cent of training for care home staff was too academically focussed and was not providing carers with the type of training that they needed, particularly as the average reading age of this group of staff was seven years old.
- Care home staff themselves articulated that a tool to support identification of deterioration would be beneficial.

**How:** The Significant 7 training package contains:

- A handheld tool to prompt enquiries into a resident’s change in wellbeing, focusing on signs such as confusion and mood.
- Decision trees prompting care home workers to manage the changes they have identified.
- An interactive training session.
- A handover sheet to summarise the findings for each patient to improve handovers.
- An SBAR tool to facilitate better communication.
- Creation of a local algorithm to indicate who to call when deterioration occurs.
- A better understanding of frailty in care home.

**Impact:** The results have been very encouraging, with a marked reduction in accident and emergency admissions and an increased confidence in staff who use the tool daily. UCLPartners is working in partnership with NELFT and Healthy London Partnership to roll out Significant 7 across in care homes across Outer East London.

- 30 per cent reduction in A&E admissions
- 17 per cent reduction in falls
- 23 per cent reduction in pressure ulcers
- 95 per cent increased confidence in care home staff

**Further information:** Geraldine Rodgers, Deputy Chief Nurse and Nurse Fellow for Older People, NHS Basildon and Brentwood CCG
geraldine.rogers@nelft.nhs.uk

**Anticipatory Care Calendar**

**What:** The Anticipatory Care Calendar (ACC) is a method of assessing care home residents holistically to establish a baseline and hence identify deterioration at the earliest opportunity. It is currently paper-based and has been adopted by several care homes across the country. It’s a free resource for use in any social care setting supporting people with learning disabilities and dementia, and would work well with patients and people who are likely to have reduced capacity and/or communication difficulties, such as frail elderly or those who have suffered with stroke or degenerative conditions.

**Why:** It provides an improved way of recording health issues and can offer solutions to communicate these issues to the appropriate health professionals. It should also facilitate access to health services more quickly. The ACC is a simple tool to improve the daily surveillance of health. It overcomes some of the barriers that can prevent people accessing health services effectively.

**How:** It provides an innovative approach to assessing health daily and is designed to alert staff to changes in a person’s health status and provides clear directions about accessing care. A traffic light system triggers the need to respond to changes to the person’s health through observation. A key benefit is that it supports and empowers social care staff to develop a high standard of health record keeping, monitoring health and ensuring people access other important NHS resources such as cancer screening programmes, where appropriate.

**Impact:** A final evaluation will be undertaken to identify recommendations for its future use. It is anticipated that the tool will require some updating and modernising, which may include the development of an app or web-based version of the tool. A case study will also be developed to share learning.

**Resources:**
- Website: www.innovationagencywnc.org
- Further information: Andrew Cooper, Associate Director – Patient Safety Collaborative, Innovation Agency andrew.cooper@innovationagencywnc.nhs.uk
What: AHSN NENC worked with four CCG areas to support the implementation of digital interventions into care home settings. Sunderland, Newcastle Gateshead, Durham & Darlington, and Hartlepool and Stockton localities have all implemented digital systems to collect NEWS scores on residents both as a baseline and also at times of clinical concern.

How: Clinical monitoring for ongoing care: care home residents are monitored by qualified and unqualified staff across a range of clinical domains, with the information recorded directly onto tablets and uploaded to a secure cloud-based storage system. Using standardised protocols, care home staff are guided as to the appropriate response to changes in a resident’s profile. The data can be accessed by the staff, community nursing teams and GPs. In Durham & Darlington this information is collected on an SBAR structured e-referral form and transmitted directly to their Single Point of Access for triage and response.

Impact: An evaluation of the Sunderland locality project showed the following:

- The qualitative impact of introducing technology and clinical monitoring into the care home setting conducted by the research team at Newcastle University demonstrated improvement in confidence when making onwards referrals and strong support from the care home staff for the intervention. It also demonstrated learning regarding connectivity with the local community nursing structure and ongoing training and support.
- The analysis of approximately 23,000 NEWS scores to consider patterns or learning to be derived from either the NEWS score or its component physiological measures is underway. Early indications are that the use of NEWS in a care home setting is at least comparable to research of its use in other settings.
- Health Economics analysis of the impact on the wider system demonstrated small reductions in emergency department attendances and non-elective admissions, but a larger increase in non-elective bed days. When using time series regression analysis this would create a saving of around £180,000 for the system over a single year from the eight care homes in the study.

Outputs from the regional learning event:

- One-page summary of key learning:
- Full report:

Further information:
Rachael Forbister, Sunderland CCG, Project Lead, North East North Cumbria AHSN
rachael.forbister@nhs.net
Dave Belshaw, Well Connected Care Homes Programme Lead, North East North Cumbria AHSN
dave.belshaw@ahsn-nenc.org.uk

Potential system saving of £180,000 over a single year from eight care homes in the study compared to eight non-participating
Coordinate My Care: digital urgent care plans data sharing

What: Coordinate My Care (CMC) is an electronic urgent care record that includes patients’ care wishes and is accessible by all NHS urgent care providers supporting decision making in emergency situations or at the end of life.

CMC is for people who:
• Are identified as being at the end of their lives
• Are living with long-term conditions
• Use the NHS urgent care services frequently
• Have mental health conditions including dementia

Why: The average length of stay in a care home is reported to be 26 months, with approximately 50 per cent of residents dying within 14 months of admission. The length of stay for those in a nursing home bed is also between 8 and 25 per cent shorter than for those in a residential bed. Care home residents therefore fall among those who would benefit from having an electronic urgent care record and a voice on how and where they wish to be cared for.

How: The Health Innovation Network (HIN), the Academic Health Science Network for South London, in partnership with Coordinate My Care, are exploring approaches to introducing Coordinate My Care (CMC) as a way of sharing urgent care plans for residents in care homes.

Impact: HIN are planning to implement CMC planning in 10 care homes in South London. To date, implementation of CMC planning in two care homes has highlighted the following learning:
• The care home needs to have reached ‘standards met’ on NHS Digital Data Security & Protection Toolkit (DSPT) to use the CMC system.
• Working digitally is a significant culture change for care homes.
• Care homes may need more robust IT infrastructure (e.g. consistent WiFi coverage and seamless access to computers when needed).
• They currently work in a paper culture and introducing digital ways of working requires a behaviour change which can cause some tension and conflict with other planning and reporting demands.
• Limited staffing capacity and a changing workforce creates barriers to the adoption of this new way of working.
• Care home staff benefited from additional advanced care planning and end-of-life care support to increase their confidence to have the end-of-life care discussions with residents and relatives needed for CMC planning.

• Residents and relatives tended to value the opportunity to have the end-of-life discussions needed for CMC planning.
• Buy-in from the care home GPs is critical, not only if they are publishing CMC plans created by care home nurses (making them available to urgent healthcare providers) but as a CMC champion, supporting and driving this change in care homes.

Further information: hin.southlondon@nhs.net

Nursing and Residential Home Triage (NaRT) tool

What: A triage tool developed by the North West Ambulance Service NHS Trust to support nursing and residential home staff in avoiding inappropriate conveyance to hospital for the frail or elderly.

Why: Patients in care and residential homes are often much more comfortable being treated where they are without the need to be admitted into hospital. It was identified that 6.8 per cent of all 999 emergencies in the North West were callouts to nursing and residential homes, and of these, 19 per cent did not require hospital treatment.

How: The tool works by allowing carers, who have prior knowledge of the patient’s health needs, to look at the symptoms being presented and use the tool to find the most appropriate care based on the Manchester Triage Tool. Care home staff are initially trained on how to use the tool by an NWAS professional and are then able to refer to the tool to help decide on the most appropriate care based on the symptoms being presented by the patient.

Impact: The tool has been implemented in over 50 care homes across the North West. Using the tool has proven successful in trials and has reduced 999 calls to nursing and residential homes by over 50 per cent in some cases.


Forder J & Fernandez J. Length of Stay in Care Homes. Bupa (2011)
5. Workforce development

Care Home System Leadership training

What: The Care Home System Leadership training package provided by AQuA (Advancing Quality Alliance) provides practical support and coaching to develop system leaders from CCGs and social care who wish to improve safety and quality outcomes in care homes and domiciliary care settings.

Why: Working collectively and across the system becomes vital for leaders to challenge practices, to build on strengths and improve safety and quality outcomes in the care home setting.

How: The programme will run twice during 2019/20 with care home leaders expected to be recruited by their system leader. Participants are required to work in collaboration with a care home leader, and they will support this individual and thus start to create a sustainable model. Participants in the programme will be supported by expert improvement advisors to help gain the high-level skills required to provide well-led services across health and social care organisations.

Impact: The Care Home System Leadership programme has previously been run in Stockport and Tameside.

Further information: www.aquanw.nhs.uk/events/care-home-system-leadership/80223
What: The SPACE programme (Safer Provision and Caring Excellence) was a large-scale care home improvement programme being undertaken in the West Midlands, which aimed to strengthen safety culture and reduce the incidence of adverse safety events.

Why: The care home sector is characterised by frequent policy and regulatory changes, heavy workloads, high turnover and difficulty recruiting and retaining staff. These factors make it challenging for positive safety practices to be cascaded to staff and to become embedded within care home organisational culture.

How: By up-skilling care home staff in quality improvement techniques and providing facilitation to enable care homes to implement changes to practice.

There were two main elements to the SPACE programme to help achieve the aims of the initiative:

1. Training events and workshops, which help care home staff and managers develop relevant skills and enhance their understanding of safety-related service improvement. Training explores clinical and human risk factors related to safety, alongside techniques for designing and implementing quality improvements. Appreciative inquiry has been one of the key methodologies used by the care homes and has shown some outstanding culture turnarounds in staff who underwent training.

2. Facilitated sessions delivered in participating care homes support staff to implement changes to practice relating to specific safety concerns such as falls prevention and pressure ulcer management.

Impact: An inspection report published by the Care Quality Commission (CQC) highlighted the input of the West Midlands Academic Health Science Network Patient Safety Collaborative (WM PSC) in Walsall’s community services, gaining a good rating. Pressure ulcer incidence within the homes had decreased, and increased numbers of people were able to die within their care home where they had staff who knew them, rather than in a hospital setting. A visitor guide was jointly designed by all care homes to be given out to residents’ families to help keep their loved ones safe and communicate in a uniform way across the borough.

The programme has been independently evaluated with the NIHR West Midlands CLAHRC to assess its effectiveness and the extent to which safety climate in care homes can be improved. The incidence of adverse events reduced, including significant reductions in the following:

- Falls: from a rate of 10.5 incidents per hundred beds to 8.4
- Grade 4 pressure ulcers: a drop from 0.31 to 0.16 per hundred beds
- UTIs: fell from 0.59 to 0.29 per hundred beds
- Overall, incidents per hundred beds fell from 13.00 to 11.04

Over 1,000 staff received skills and QI training, and there was widespread evidence that the learning from training was used directly to make improvements to multiple areas of safety. Staff also reported improved teamwork, communication and sharing of good practice.

The evaluation measured safety culture by using the Safety Attitudes Questionnaire (SAQ). Pre-SPACE baseline data proved that there was already a higher safety culture climate than benchmarking would suggest. It was therefore our aim to maintain that level for the two years the project ran. By the end of year two, safety climate scores increased by 1.4 points from baseline to the conclusion of SPACE (Damery S, et al 2019).

Resources:

For more information or to see how the West Midlands are working alongside My Home Life and are now spreading this initiative across six STPs: meridian.wmahsn.org/subdomain/invitation-to-space/end/ideas

SPACE QI programme – ingredients for success film: vimeo.com/344979849


Further information: Helen Hunt, Assistant Programme Manager, West Midlands PSC AHSN helen.hunt@wmahsn.org
Deteriorating patient project

What: A jointly funded project with NHS England which aims to lead and devise a quality improvement training initiative focusing on early recognition and response to the deteriorating resident within care homes across Walsall and Wolverhampton Care Homes.

Why: After-death analyses conducted via the SPACE programme identified a key theme in relation to effective recognition and response to the deteriorating resident within care homes across Walsall and Wolverhampton. This nine-month bespoke programme responded to this finding, whilst also complementing the national commission of the deteriorating patient and the roll-out of NEWS2 across all healthcare settings.

How: An innovative quality improvement training initiative has been devised focusing on early recognition and response to the deteriorating resident within care homes across Walsall and Wolverhampton. This nine-month bespoke programme responded to this finding, whilst also complementing the national commission of the deteriorating patient and the roll-out of NEWS2 across all healthcare settings.

- NEWS2 implementation and agreement on appropriate escalation pathway.
- Devising and delivering system-wide, outcome-based training with focus on collaborative team working and human factors.
- Enhanced focus on frailty recognition and end-of-life planning, with the development of a booklet for nursing homes to guide practice in these areas, which became an additional outcome to the project.
- The FREED (Frailty, Recognising End of Life and Escalating Deterioration) booklet including frailty assessment, end of life recognition and care planning, recognition of soft signs of deterioration and NEWS2.

Impact: There has been agreement from all nursing homes to conduct frailty assessments on admission and also to repeat the assessment upon deterioration. All baseline observations are now recorded on admission and a baseline NEWS2 score calculated.

In total, 158 healthcare staff have been trained using NEWS2 and ‘Stop and Watch’. Staff reported the FREED booklet has improved their skills and confidence in relation to recognition of and management of expected and unexpected deterioration, including frailty and end of life planning. It has been perceived as a ‘grab and go’ booklet when escalating residents across services. It also prompts discussion and decision making around observation taking and the appropriateness for individuals.

The training has led to improved recording and monitoring of clinical observations and escalation of residents’ conditions, while empowering staff to communicate care planning with the residents and their families.

Further information: Helen Hunt, Assistant Programme Manager, West Midlands PSC AHSN helen.hunt@wmahsn.org

158 healthcare staff were trained in NEWS2 and ‘Stop and Watch’.

Human factors training

What: West of England AHSN has developed an intervention tool to support human factors training in patient safety for Bands 1-4 staff working in community health settings.

One in ten people is affected by a medical error, although not all errors lead to harm, and not all harm is due to error. There are three common factors in many adverse events; medical complexity, system factors and human factors. Common human factors that can increase risk include mental workload, distractions, physical environmental and demands, device/product design, teamwork, and process design.

The human factors programme is about developing non-technical skills to support safer ways of working, including teamwork, communication, leadership and an awareness of human factors when designing systems and processes.

Why: Eighty per cent of incidents are because of human factors. An appreciation of the principles of human factors has been implemented into acute care services in recent years, but training packages and resources are less applicable to the community health and social care context and non-registered staff.

How: WEAHSN secured funding from Health Education England South West to develop an intervention using the SBAR (situation, background, assessment, recommendation) tool to support training in community health settings in the West of England, in partnership with Sirona Health & Care and North Bristol NHS Trust.

Factors considered when designing the intervention included:

- Language for working in a mixed health and social care setting.
- Social enterprise settings.
- Needs of adult learners with a variety of education backgrounds and qualifications.

A toolkit was developed with specific guidance on quality improvement, measurement, public involvement and evaluation, based on the evaluation of an initial pilot. These tools include qualitative surveys of staff and patients to understanding the impact of the intervention.

The toolkit is supported by face-to-face train the trainer sessions, along with quality improvement coaching every step of the way and hosting collaborative events for shared learning and problem-solving.

Impact: 425 staff from community organisations have received human factors training. The toolkit will support five member organisations to train a further 2,500 staff. Up to 45 facilitators are being trained across the region to create a faculty with specialist knowledge and experience in human factors training for community services.

Further information: Hannah Little, Patient Safety Improvement Lead, West of England AHSN hannah.little@weahsn.net

The toolkit will support five member organisations to train a further 2,500 staff.
Safer culture

**What:** Yorkshire and Humber PSC is working with care home staff to improve communication, teamwork and safety culture, to help enable carers and residents to look out for early signs of deterioration and to feel empowered to take action so problems can be addressed quickly.

Working to improve communication and promote a safe culture in the care home through tools such as culture surveys, safety huddles, the ‘Stop and Watch’ shader signs tool and communication tools – SBAR (situation, background, assessment, recommendation) – helping responders assess the situation and take appropriate, timely action.

**Why:** Working in care homes provides a great opportunity to understand the cultural barriers and enablers to recognition of deterioration, response and clear communication focusing on the needs of residents and the staff caring for them. Working across the pathway of care this work has the potential to improve quality, reduce harm and reduce avoidable hospital admissions.

- New Care Quality Commission (CQC) figures indicate emergency hospital admissions from care homes have risen sharply since 2010, representing an increase of 62 per cent.
- Older people living in a care home postcode had 40-50 per cent more emergency admissions and A&E attendances than the general population of the same age, but significantly fewer planned admissions and outpatient appointments.
- The health problems recorded on admission to hospital were different for patients who were living in a care home. Pneumonia, dementia and epilepsy being three times more common compared to the general population aged 75 or over. Other more common reasons for admission from care home residents include sepsis, head injuries and hip fracture.
- Unplanned admissions to hospital have negative impacts on residents as they are often disruptive and upsetting and are a drain on staff time in the home.
- The average cost per visit to hospital is £523 so there is a significant opportunity for savings. Effective communication is vital in providing high-quality care.

**Impact:** Yorkshire and Humber AHSN are working with 14 care homes across the region in partnership with three CCGs (Vale of York, Bradford and Sheffield), focusing on deterioration. These are a mix of care home types, sizes and locations to better test and refine the tools in practice and understand some of the barriers faced.

A regional event was held focusing on deterioration in care homes, which generated a lot of interest (fully subscribed within two days of being advertised) and outputs will include an informal network for homes interested in adopting the work once it has been tested and refined in practice.

Further information: melanie.johnson@yhahsn.nhs.uk

The Pioneer Programme

**What:** Health Innovation Network and My Home Life have joined forces to offer south London care home managers a free leadership support and professional development programme to advance their skills, facilitate personal growth and enable them to effectively manage the complex everyday issues that impact on the quality of their service.

The Pioneer Programme is open to care home managers and runs over an eleven-month period, guided and supported by professional coaches and facilitators from the Health Innovation Network and My Home Life.

The first cohort included 16 care home managers and ran from January to November 2018. A second cohort of 23 is underway which began in January 2019 and will finish in December. The second cohort also includes registered nurses and previous cohort managers providing support as facilitators.

**Why:** The programme offers support to care home managers to:
- Increase resilience, and reduce burn-out
- Provide advancement of skills and strategies
- Drive forward transformational change
- Embrace a calmer more relational environment to live and work
- Improve staff morale
- Improve relationships with external agencies
- Improve relationships with residents
- Understand the cultural barriers
- Improve relationships with safety culture
- To help enable

**How:**
- The Care Home Pioneer Programme begins with three days of workshops providing skills and tools to take back to the workplace. This is followed by seven action learning sessions which involve experiential learning through a continuous process of action learning and reflection, supported by colleagues. The programme is closed with a graduation event which provides a chance to reflect on the programme and celebrate the pioneers’ achievements.

**Impact:**
- Across the two cohorts, each of the 12 boroughs in south London have participants on the programme. The participants manage homes of varying size from 20 up to 200 bed homes with a mix of residential and nursing.
- Thirteen people from cohort one completed a pre and post questionnaire to measure their perceptions of workplace improvement over time. Managers reported improvements in knowledge on leadership and development of leadership skills. There were many positive comments about how the programme had increased the manager’s confidence as well as the value in having time to share with other managers. Many of the managers were using the tools that were provided by the programme in their care homes.

A mid-point reflection from the second cohort showed that before starting the programme many of the pioneers were not taking breaks and struggling with the stresses of the job. Comments from several of the pioneers showed they are now better supporting their staff to find their own solutions and taking the time to reflect and take necessary breaks.

**Resources:**
- Website: healthinnovationnetwork.com/projects/care-home-pioneer-programme
- My Home Life: myhomefse.org.uk
- Further information: hin.southlondon@nhs.net
Haelo Safer Salford Care Home Programme

What: Care homes in Salford were invited to participate in the Salford Care Homes Excellence Programme. This programme brings together care home staff and health and care services from across Salford in a supportive community of practice, with priorities set by care home managers.

Why: At any given time, approximately 1,400 residents live in residential, nursing, specialist and mental health care homes across Salford. These homes support residents to live fulfilling lives whilst interacting with multiple services within our health and social care system. The shared goal is to provide quality for residents in care homes in Salford, working collaboratively to develop improvements.

How: Care home participation in an improvement collaborative to reduce harm using the Breakthrough Series Collaborative Model.

Impact: Between 2016 and 2018, nine care homes participated in an improvement collaborative to reduce harm. Using the Breakthrough Series Collaborative model to support improvement, care homes share learning at peer site visits, built understanding of safety culture and developed improvement capability of staff, focusing specifically on reducing falls, medication safety and pressure ulcer prevention.

Further information: saferfalford.org/home/safer-care-homes-resources

Conclusion

The care home sector is under pressure, as is much of social care. Improving safety in care homes can impact positively not only on residents, but also on the whole NHS through reducing admissions and keeping people well or providing the best care for them when they need it most.

The AHSN Network and Patient Safety Collaboratives are undertaking many programmes of work in care homes, which are spreading outside of their regions for the benefit of residents and their families.

Improving patient safety is critical to the ongoing sustainability of care homes and often small changes can make huge a huge impact, like improving hydration, structured communication about the condition of patients, and training.

Reducing or avoiding harm isn’t restricted to the hospital setting, it is a priority for providers and commissioners throughout the social care system.

AHSNs are supporting multiple care homes to improve quality and safety, through collaboration and by connecting networks together to make large-scale changes.

There is always more work to do, but we believe that our projects and programmes demonstrate what can happen when organisations and sectors work together.