Academic Health Science Network
North East and North Cumbria

Learning from the Well Connected Care Homes Programme

YORKSHIRE & HUMBER
ACADEMIC HEALTH SCIENCE NETWORK

Contents

Context

The purpose of this report is to:

- Summarise results to date on a number of related projects and
- Present the learning from an event held on 26 March 2019 jointly commissioned by the Academic Health Science Network for the North East and North Cumbria who delivered the Well Connected Care Homes Programme and AHSN Yorkshire and Humber who oversaw the Sheffield Test Bed project.

The overall aim of the Well Connected Care Homes project is to identify and enable transformational change that can add value for service users, carers, families, care providers and the wider health and social care system.

This will be achieved by helping care homes to become internally and externally 'well connected' in the digital age, to enhance the quality of care experienced by residents in care homes and significantly improve communication between care homes and the external health environment. Thus, providing improved, more efficient, and more cost effective care.

The programme has two parts:

- To improve record keeping for care home residents by using tablet based Apps to allow electronic recording of aspects of care plans – for example the EPaCCS system for recording patient's wishes about their care and their life and to allow clinical record keeping for individual residents, and particularly by introduction of the NEWS (National Early Warning Scores)
- To promote use of electronic communication of patient (resident) clinical information between care homes and primary care (GP electronic patient records), emergency care, including out of hours and ambulance services, and community services.

Resources

For more information on the Well Connected Care Homes project please:
Email: **dave.belshaw@ahsn-nenc.org.uk**
visit: **http://www.ahsn-nenc.org.uk/what-we-do/improving-population-health/digital-health/well-connected-care-homes**/ where a quick reference guide can also be found
View the full case study at: **http://atlas.ahsnnetwork.com/well-connected-care-homes**/
View information about the event at: **http://www.ahsn-nenc.org.uk/event/implementing-technology-into-the-care-home-sector**/

Why we held the event

This event was held to consider the learning from several projects sites who have introduced a technology solution in the form of a digital tablet and clinical scales, predominantly National Early Warning Scores (NEWS) into the care home sector.

The projects who contributed were:

Digital Care Home: Sheffield Test Bed Case Study

The Digital Care Home was a project delivered as part of the Perfect Patient Pathway NHS England Test Bed in Sheffield. The project tested and evaluated the impact of digital technology combined with integrated working of healthcare professionals and care home teams to provide enhanced clinical interventions to care home residents and reduce and prevent potentially avoidable admissions to hospital through better access to support in the community. The service was designed as an 'early warning system', highlighting changes in health which could otherwise go unnoticed.

The Digital Care Home service enabled carers to monitor a resident's vital signs (National Early Warning Signs (NEWS) observations) and record this information digitally using a tablet app instead of using paper. This information was then able to be shared securely with a team of nurses, located at the Single Point of Access (SPA) at Sheffield Teaching Hospitals NHS Foundation Trust, for assessment and support with clinical decision making; and to access expertise from GPs and nursing teams.

SPA worked in partnership with the care home teams to respond according to the needs of the individual if early deterioration of health was identified and an 'alert' was generated. Examples of potential responses as a result of the intervention included prioritising residents for immediate attention during GP ward rounds or additional GP visits; increased resident monitoring; medication reviews; or community nurse home visits.

The service integrated directly into clinical systems including SystmOne and EMIS Web, meaning that shared information could be uploaded into patient records and accessed by NHS teams following referrals for a joined-up response between local healthcare services.

NHS Sunderland CCG

The evaluation of the NHS Sunderland CCG implementation of NEWS into care homes aimed to identify factors that inhibited and enabled successful implementation and identify ways in which the implementation could be improved. A multi-method design was employed:

a) Descriptive analysis of NEWS recorded over 24 months
b) Survey of care home staff views
c) Qualitative interviews exploring stakeholder's experiences and attitudes towards the intervention.

The evaluation found that, while the intervention showed value and potential to improve communication between care homes and external healthcare services, training lacked a real-world focus and the implementation would have benefited from a co-production model, with greater involvement of care home staff.

NHS Newcastle Gateshead CCG

NHS Newcastle Gateshead CCG used technology to introduce the National Early Warning Score (NEWS) as part of the work they undertook when appointed one of six national Care Home Vanguard Programmes. To become a Vanguard site there had to be a base on which to build and in partnership with care home colleagues an enhanced care home model had been delivered in Newcastle and Gateshead for several years. This had developed an improved understanding of the needs of care home residents which subsequently influenced the approach taken when introducing NEWS. The team knew that the care home residents

were among the most frail in the care community and subsequently had specific needs and considerations. Therefore, one of the first things done was to establish a forum of clinical engagement superstars who knew the challenges of providing optimum care for older people living with severe frailty. Hence, when the team set off on the NEWS journey they knew they wanted to evaluate the project in a different way so as to be able to consider more than the already established associated measures such as avoidable hospital admission. While the team are not finished yet and have an ongoing evaluation, to date the key learning is that care home staff need a point of contact post training when using the equipment and the most successful introduction is where there is a well embedded enhanced care model i.e. link practice, lead GP and aligned community nurse specialist. Of particular interest the team has identified that there is a statistical link not only between NEWS and hospital admission but also between a Barthel functional score measurement and hospital admission. Above all they conclude that when it comes to providing care to older people living with severe frailty, NEWS is only one tool in the box that must be used.

County Durham and Darlington NHS Foundation Trust

County Durham and Darlington has designed and is implementing Health Call Digital Care Home. Health Call Digital Care Home provides care homes the ability to refer and provide real time vital sign readings allowing clinicians to prioritise caseloads and monitor the condition of patients. To date this has resulted in a reduction in hospital admissions and specialist nurse visits when compared to homes that Health Call hasn't been implemented in, with care homes reporting that it has a positive impact on their workloads and the care that they provide to their residents.

"Practice pre Health Call was quite stressful in navigating through telephone systems, relying on messages / information being put through to the DN / ANP service was inconsistent and often problematic. Time was consumed making frequent phone calls between specific hours which were quite regimented and restrictive. This was also more difficult if a resident became unwell or required intervention in the afternoon as requests for that day had already been submitted and they had to wait until the following day."

"I love the system, it has really improved the service provided within the home. Staff who weren't as confident with technology advised that although they were unsure initially, once the Tablet / System process was demonstrated and used a few times, this was easy to use and navigate. It was also raised that the response from the DN / ANP appeared much quicker and was responsive to requests than previously."

North Tees and Hartlepool Education Alliance (NTHEA)

This education programme was developed to provide care home staff in Hartlepool and Stockton-on-Tees with training on various topics to promote the well-being of their residents and empowering staff to make confident and informed decisions around residents' care resulting in a reduction in avoidable admissions and enhancing the residents' and staff experience.

North Tees and Hartlepool NHS Trust collaborated with various teams to deliver training on topics; 'Dementia & Delirium Awareness' (Tees, Esk and Wear Valley NHS Foundation Trust), 'End of Life Care' (Alice House Hospice, Hartlepool), 'Fall Prevention' (Falls Service, Stockton-on-Tees and Hartlepool Borough Council), 'Well-being of the Frail and Elderly – Hydration, Nutrition, UTI Prevention, Tissue Viability' (North Tees and Hartlepool NHS Trust) and implementing digital NEWS into every care home. All training sessions are delivered to the staff in the care home.

Digital NEWS

Benefits:
- Upskilling care home staff – increasing skills, knowledge and confidence.
- Encouraged collaborative working – both within home and multi-agencies.
- Residents have a baseline NEWS and monthly observations as a minimum.
- NEWS is included in the referral to SPA/111.
- Assists Clinical Triage / Matrons with their assessments. Avoids having to ask care home staff if referral is 'urgent' or 'routine'.
- Increased awareness of the signs of deterioration.
- Reduction in admissions to hospital.
- Digital NEWS used as an incentive to improve the IT within the home.

Transforming Care

How we did it...

Agreed Programme → Established Care Home Partnership Group → Engaged Care Home Providers → Stakeholder Mapping → Formed North Tees and Hartlepool Education Alliance

Learning and key themes

Contributors were asked to facilitate a workshop on the pre agreed themes.

The objective was to try and ascertain key 'shared' learning across the 5 projects who have presented and share knowledge and experience to develop some focused guidance for colleagues considering a similar project. Each group considered the following:

- Overview of the topic area, views on the key points and knowledge gained through experience
- What are the key points/issues from the presentations?
- What are the key issues/factors from your own experience?
- What are the 3 key learning points to feed back to colleagues who may be considering a similar project?

What NEWS means to care homes

- *Aids recognition of clinical deterioration*
- *Standardises acute illness assessment in the community care setting*
- *Enables communication to other HCP's using a common language*
- *Informs appropriate clinical response and pre-alert which defines appropriate level of ongoing care required*
- *Decision support tool – 'defensible decisions & actions'*
- *Objective clinical information to support requests for home visits*
- *Family and friends 'confidence'*

There is a statistically significant link between the National Early Warning Score and hospital admissions

Key theme 1: Learning from implementing NEWS

Common points from the presentation

- Involve clinical teams and other stakeholders early – get 'buy in' and support
- Sustaining NEWS is a challenge so think long term about this
- NEWS in care homes is a good thing to do – influences more than what it does
- NEWS helps care home staff to articulate a resident's condition to health care professionals. More of a shared 'common' language
- Ensure quality training but also support post this – work-based learning and support
- We are still learning about the effectiveness of NEWS in care homes
- The process of implementing NEWS results in increased confidence for care home staff and feeling more valued in their role
- NEWS offers an opportunity to meet the digital agenda
- Early implementers are willing to share experience, journey, research and clinical evidence so learn from this. Capture successes and celebrate these.

Key learning from delegate experience

- Have a dedicated TECS / digital support person
- Think about the skill mix in your implementation team
- Gather evidence e.g. qualitative, quantitative, economical. Clinical evidence and research emerging but we are still learning about NEWS
- Take a competency-based approach to introduction (workforce development not just training)
- Record success stories and challenges to ensure these are captured for evaluation
- Consider on costs of digital equipment; annual software and support licences, etc.
- Think about the digital maturity in each care home e.g. Wi-Fi connection
- Structured handover tool for care home staff to use alongside the introduction of NEWS (e.g. SBAR)
- Embed NEWS training in new staff induction
- NEWS works best where there are enhanced models of care wrapping around care homes (link GP, link specialist nurse)
- Know your local services to develop local / bespoke escalation pathways
- NEWS implementation model and training may need to be adapted depending on the needs of your local care home populations
- Don't rely on NEWS alone to make clinical decisions, particularly in older people living with frailty
- Be prepared to change and adapt as the technology develops
- If you are starting out, plan your implementation with NEWS 2 from the outset.

3 Learning points for colleagues to note:

1. Remember NEWS is just one tool within the toolbox required for older person's care, implement NEWS in context and alongside effective training and support regarding your local care home population needs
2. Sustaining NEWS in care homes is challenging, you have to be prepared to go back round with it all continuously / build in sustainability plans. Involve all stakeholders early and share early successes
3. Take a workforce development approach with built in competency assessment, (work-based learning and support vs stand-alone classroom-based training). Harness all available teams (including the use of care home NEWS champions) to support practice development and utilise opportunistic learning to support education and ongoing proficiency for care home staff.

Key theme 2: Learning from using a tablet in a care home

Common points from the presentation

- Interoperability – Care Home IT systems to link to health systems (so no duplication)
- Care Homes don't want multiple systems
- Good to understand challenges elsewhere
- Clinical training best done in Care Home 'on the floor'
- Don't flood the care home with technology, check what is already there and if it fits with their IT strategy.

Key learning from delegate experience

- App/IT systems need to be easy to use/intuitive
- Support needs to be available e.g. password reset, forgotten log-in.

3 Learning points for colleagues to note:

1. Simplicity and reliability
2. No duplication
3. Train care staff.

Key theme 3: Learning from the economics

Common points from the presentation

- There are many challenges with data i.e. using a postcode proxy; data sharing
- Study design is very complex with many variations
- Different models – digital interventions are not in isolation
- Information on costs/tariffs is challenging
- Need to consider information governance carefully and ensure correct permissions are in place
- It is possible to quantify outcomes for care homes e.g. 13% less call outs. Are there others that can be collected?

Key learning from delegate experience

- Considerations around seasonal variance
- How can we follow individuals with NHS number rather than the postcode proxy?
- What about wider benefits e.g. DWP, Primary Care, social care costs? The eco system of the care home
- Things need to be simple and easy to understand. Uniformity and simple language
- Monetising a case study in plain English.

3 Learning points for colleagues to note:

1. There are significant information governance challenges which need to be addressed.
2. We should consider what the economic benefits for the care home owners e.g. 13% less call outs for managers.
3. Health economics in this area are complex, but achievable, spend time on study design prior to project start.

Key theme 4: Learning from education

Common points from the presentation

- Taking the training to the care homes works better. A rolling programme captures more staff
- Developing an Alliance of educators is a good model; less fragmented, collaborative working, one contact person to book in the sessions which enables homes to recognise the training and therefore more willing to book
- Involve all staff not just seniors/managers/providers
- Acknowledged the problem that when managers change or simply are ineffective, has a negative impact on training.

Key learning from delegate experience

- Staff require continuous support. On-going competency assessments are beneficial
- Make training interesting, valuable and relevant and consider different teaching styles
- Break barriers between services. Discourage 'silo' working by delivering the same sessions to a mix of all disciplines, clinical/ non clinical, social/ health workers. This enables them to share experiences
- Difficult to find basic training e.g. basic skills such as hygiene needs etc. There is 'skills for health' or 'Care Certificate' but if staff member has no experience it would be helpful to have some kind of basic training/ e-learning
- Consensus was that e-learning is questionable regarding quality in training and actually being able to evaluate what has been learnt.

3 Learning points for colleagues to note:

1. Take the training to the care home for face-to-face sessions, be flexible and adaptive to the care home's rota etc
2. Have a designated team of educators, however involve Community Clinicians from the beginning to give shared ownership. Vital that they take the journey with you
3. Encourage and assist the care home staff with their career pathways. Consider 'Nurse Associate' roles in care homes. Offer rotational posts for job experiences i.e. Work in GP practice, with DN's, with NEAS etc.

£

Overall decrease in bed days and LOS - cost saving

£179, 425

(Results from 8 care homes over a year)

Key theme 5: Learning from the qualitative appraisal

Common points from the presentation

- Keeping NEWS up to date i.e. may quickly become out of date once implemented
- Wi-Fi and availability of NEWS kit can be problematic for care homes staff
- Internet access often restricted
- Think about what is in it for the care homes e.g. incentives or savings
- Being consistent: standardisation e.g. so, NEWS scores can be compared on a like for like basis
- Professionalism and recognition of care home staff
- NEWS is only one part of the jigsaw. It's not a 'be all/end all'
- Breakdown barriers of what 'should' be care home staff's job e.g. nurse/carer. Is NEWS their job?'

Key learning from delegate experience

- What's the sustainability of having NEWS systems i.e. future funding for NEWS kit, maintenance, services, licence fee etc.?
- Availability of data of NEWS use and impact on service use e.g. hospital admissions
- Important to chase up NEWS scores, monitor NEWS use
- Contact CHS regularly to promote ongoing use and engagement as part of core business
- Evaluation strategy can change. Hospital admissions not the 'be all/end all' – 'softer things' also important including NEWS use
- Lots of variables you could look at to evaluate NEWS. Suggest move away from specific measurements e.g. hospital admission reduction and look at trends of use, broader perspective e.g. care home staff empowerment i.e. the PROCESS not just the OUTCOME.
- Care home nurses have no access to NHS training.

3 Learning points for colleagues to note:

1. All professionals need to be aware of NEWS e.g. all major players such as paramedics, GPs before full implementation / roll out. As part of that, must develop common language.
2. Practical implementation very challenging. So, implementation needs more attention because if it fails, care home staff etc. will be even more reticent to engage in future.
3. Focus on PROCESS rather than only OUTCOME when evaluating NEWS implementation e.g. case vignettes. Need to be careful when judging the health economics. NEWS may change type (appropriateness of different service use).

88%

could see the potential value of intervention

Key theme 6: The right care home environment

Common points from the presentation

- Engagement across all care home levels and wider 'system' e.g. primary care
- A dedicated resource and support to support education
- The support and engagement of each care home manager is critical to success
- Low staff turnover supports implementation and sustainability. Staff turnover
- The workforce ability to stay involved in using digital technology (e.g. other tasks and obligations taking time away)
- Resilience was in relation to overcoming barriers to implementation – finding solutions to the common challenges that each project found in using tech in care homes.

Key learning from delegate experience

- Culture – so the feedback was that working in partnership was essential (co-design) rather than trying to impose use of technology on care homes. Also, the culture within a home encompassed how the leadership engaged with their teams (e.g. delegation of roles; supporting buy-in from team for projects; how information was shared with carers and residents and families) and experiences showed that the culture within a home would influence project impact
- Policies of care home providers
- Shared community of care home managers
- Trust in kit efficiency
- Embedding new tasks in existing processes and systems
- Consenting and data sharing agreements
- Communication forums – doing with and what not to
- CQC rating relevance – homes that were struggling in some areas would then find it difficult to have the capacity and structures to engage in projects even though they were the homes most in need of what the projects were aiming to achieve
- Expectations – refers to understanding of what is involved in a care home technology project and the time implications / change to existing routines. It's vital to understand expectations from outset and manage these as projects progress to keep participants 'bought in'.

3 Learning points for colleagues to note:

1. Getting the culture right – co-design with each care home to ensure fit with their systems and work practices
2. Having a dedicated resource to support the care homes
3. System involvement – 'what's in it for me?' for all stakeholders.

100%

felt that it will become a normal part of their work in the future

Summary

The most obvious message of the day was the extent to which experiences and conclusions were overlapping between the five projects, even though each had approached the problem in different ways.

There had been different approaches to staff training. This could be considered in two ways - training staff to use digital technology and training staff to make clinical recordings necessary to complete the NEWS score, or something similar.

However, best results seem to be achieved if teaching/training involved the following:

- Involvement of a dedicated trainer doing face-to-face training sessions in each care home
- Involvement of Community Matrons/Nurses from the start. They can mentor and take care of the continuing development of the care home staff. This seems to engender better communication between care home and community nursing staff and gives mutual confidence
- The support and involvement of each care home manager. Without their involvement and leadership, it is difficult to start and maintain the routine use of tablets and NEWS scoring
- Encouragement of 'champions' within each care home.

There is support for the idea of a portable record of completion of training and possible qualification upon achieving these objectives.

In terms of use of the tablet NEWS/NEWS2 being widely used, although Durham/Darlington are using SBAR (which contains NEWS2 information but does not provide a score). It is important to state that, by carrying out the clinical observations required in a NEWS score, non-clinically qualified staff must not be regarded as making a clinical decision based upon the score, or a series of scores. It is up to clinicians (nursing or medical staff) receiving the results of the scores and other relevant information to make clinical decisions.

However, experience is showing that communicating scores does give confidence to the 'scorer' and the clinical recipient, thus helping improved decision making. The SBAR provides a wider context alongside the clinical measures and the overall messages above remain the same. This programme should aim at influencing and enthusing other CCG areas and health economies, acute hospital trusts, local authorities, NHS England, Care Home operators, the CQC, other AHSNs and, in each area, GPs. This is a major objective of the Well Connected Care Homes Evaluation Group, which already includes partnerships with those involved in assessment, NEWS experts, colleagues from North East Ambulance Service and the Great North Care Record, local universities, North East Commissioning Service as well as key members of each project group. This work may be increasingly seen in the wider context of work on the frail elderly, particularly the Regional Frailty Community of Practice. To really succeed this must become 'business as usual' for local health economies initially in our region, then more widely. There is emerging health economic research which suggests significant savings for the local health economy can be made. As such, it should come to be regarded as part of the normal process of care for all care home staff and for community nurses/matrons working within care homes. However, decisions at local level will need to be made about the extent to which tablets are used by all staff within care homes, and the amount of information available/recorded for individual residents.

There are a number of issues of information governance which the AHSN can help groups within the overall programme to resolve. The AHSN will continue to support the development of the programme in five key areas:

1. Expanding the coverage of the existing use of digital tablets both within the existing localities and to new localities in the region
2. To increase the connectivity of these digital interventions across the system
3. Expansion of the digital data available i.e. end of life plan
4. Continued quantitative and qualitative research on the impact of these interventions
5. Explore support for a system out of hours response to care homes.

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