New care models

New Care Models
All Together Better Sunderland Multi-Speciality Community Provider Case Study

Our values:
clinical engagement, patient involvement,
local ownership, national support

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This vanguard is led by NHS Sunderland Clinical Commissioning Group (CCG) and Sunderland City Council, in collaboration with local providers including Sunderland Care and Support Service, South Tyneside NHS Foundation Trust (providing community services in Sunderland), Sunderland City Hospitals NHS Foundation Trust. It also includes the city's two GP Federations (Sunderland GP Alliance and Washington Community Healthcare), Sunderland Carers Centre, Sunderland Age UK, and Northumberland and Tyne and Wear NHS Foundation Trust.

This vanguard covers a population of 284,000 people.

AIM

The vanguard has an ambitious vision to transform care out of hospital through increased integration of community services to provide person centred coordinated care.

OUTLINE

The vanguard is working to provide an enhanced citywide recovery at home service to offer rapid response at home or in community beds to prevent emergency admissions to hospital and support patients after they are discharged from hospital.

Another key area is integration of community nursing, social workers, GPs and voluntary staff in five locality teams, wrapped around GP practices providing planned and proactive care.

The integrated locality teams will ensure care is better coordinated, planned and more proactive, particularly for patients most at risk of avoidable emergency admissions. Based in one location in each locality but working closely with clusters of practices, the teams will be supported by the recovery at home service.

GP practices will be supported to work more collaboratively through the two federations, with the aim of providing enhanced care to patients with long term conditions.

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CONTEXT

The number of care home residents who are referred to A&E places huge strains on the NHS. As the demography of the population ages, this will worsen. Sunderland CCG programme seeks to address this using a developed telehealth tablet and cloud data platform. This programme has a number of new innovations including NEWS (National Early Warning Score), an almost universal measure understood by GPs, ambulance and hospitals, used to identify early exacerbation. By augmenting the NEWS feature with nutrition algorithms and pain scores the programme delivers a holistic solution which could become the benchmark in the future for care homes.

PROJECT OVERVIEW

As a result of increased admissions and ambulance response to care homes a piece of work was undertaken to determine the appropriateness of admission to A&E. It was identified that many residents transported to A&E could be safely managed at home with the right tools, training and infrastructure, ensuring the most efficient use of resources within the NHS.

A project was undertaken to introduce paper based NEWS into care homes. Initial scoping involved meeting the Director of the North East Critical Care Network who discussed the project with the Royal College of Physicians seeking permission for NEWS to be added to the Sunderland care home digital tablet. This work was then connected to the developing digital strategy for Sunderland and opportunities to explore NEWS as a digital tool for care homes was undertaken.

A stakeholder analysis was undertaken followed by engagement with all healthcare providers. Agreement was gained by all healthcare providers across Sunderland to adopt NEWS as their early warning scoring system. A project group was developed to ensure the product met the needs of all stakeholders. This included the system developer, Solcom Ltd, who were instrumental in designing a bespoke digital tool to be used in care homes using their tried, tested and secure Telehealth Platform which is in wide use in the NHS.

PRINCE methodology was used to develop project planning and timescales as well as using the North East Transformational methodology to understand potential benefits of the project. A benefits realisation plan was developed. A leaflet was produced to share with colleagues, family and friends as well as a reference folder for care homes and community nursing teams. Support from Sunderland University and the National Vanguard team to support the evaluation of the project.

Essential continuous training is provided to care homes staff by the reform team and community nursing team which consists of sessions on the NEWS, physiological

measurements, the Malnutrition Screening Tool and the digital tablet and supporting data system.

Funding was secured from the Sunderland CCG under service reform as well as Sunderland's Multi Specialist Provider Vanguard, developing new models of care.

The digital tablet was piloted across 7 care homes as a proof of concept intervention with full roll out mid-2016. Proof of concept allowed learning opportunities and on-going improvements to the digital tablet, training and supporting clinical response

CHALLENGES

Challenges were identified during the development stage which included:

- A varying use of early warning scores by different health care providers in Sunderland. In order to make the project fully effective all providers had to adopt the same tools. Engagement with the Nursing Director of community services was essential to overcome different working practices to support the direction of travel.
- A number of products available did not meet the requirements of the project in respect of design and cost. We wanted the best value for money for the NHS! An SME with a foothold in the telehealth market were engaged to deliver a bespoke product. The outcome being a product developed that fully met the needs of the project as well as being the most cost effective multi-user tablet on the market and the only one to develop NEWS.
- Interoperability – The present development (Integrates with the NHS Florence System) and as a part of this programme plans are in place to integrate data sharing with primary and community care systems.
- Care Homes – One of the main challenges within the care home was to gain agreement with care home managers to release staff for training due to operational pressures.
- Wi-Fi was required for data transmission. 80% of care home had Wi-Fi and arrangements have been made for others to be provided with a 3G enabled tablet. The Wi-Fi number was significantly higher than we anticipated which reduced overall costs.

DESIRED OUTCOMES

- To provide a much needed common language between Healthcare professionals in Sunderland to assist in safe and effective handover. As part of the project all healthcare providers in Sunderland have moved to using the National Early Warning Score (NEWS) and the Malnutrition Universal

Screening Tool. In addition to the care homes being trained and upskilled to use the same tool.

- Reduce frequent hospitalisations and prevent care home staff being reactive. This is being achieved by using NEWS to monitor a resident's physiological status. The NEWS clinical risk score helps to determine the most appropriate clinical response to meet the resident's clinical needs and can enable safe and effective care in the community as well as identifying when a resident requires a high level clinical response.
- To identify acutely unwell residents who have the potential to deteriorate. NEWS is used as a monitoring tool against the resident's baseline NEWS to quickly identify any deterioration, e.g. when residents are receiving treatment for an infection. This will trigger additional NEWS recordings in order to quickly detect risk of sepsis.
- To provide assurance to residents and their families that they are receiving the best care possible.

SUCCESSES

- It was undetermined how well care homes would engage with the project considering it involved the introduction of technology and additional responsibility. We were overwhelmed to find that the response was significantly positive and even those who were not involved in the original proof of concept were asking for support to implement a paper based system prior to full digital roll out.
- Primary Care General Practitioners have engaged well with the project and have identified further benefits such as using care home staff to undertake blood pressure reviews.
- Patients and their families are impressed with the approach and see the benefits to their loved ones to provide a better quality of life.
- An additional clinical benefit involves training staff to identify new irregular pulse which forms part of NICE guidance for stroke prevention. Care home staff report new irregular pulses to the resident GP.
- Care home staff are requesting NEWS score on discharge from hospital as part of their discharge assessment in order to identify any change in care needs.
- This has been an exciting project to lead on working with provider and partners across Sunderland to deliver safe and better care for proportion of our elderly population who reside in care homes. It's pulled together and developed positive relationships and engaged group of professionals working towards a common goal.

BENEFITS

A number of benefits have been identified with the project:

- Reduction of emergency hospital admissions
- Reduction of emergency 999 callouts to the care homes
- Reduction in the need for care home staff to leave the home and chaperone residents on emergency attendance to hospital
- Reduction in visits to A&E
- Reduction in calls to the 111 service
- Potential for staff to identify and report irregular pulse rates to the GP
- Increased capacity for general practice as care homes will now be monitoring BP's
- Reduction in the amount of time taken for staff to calculate and complete paper based process for the NEWS and MUST tools
- Reduction on consumption costs of fortified nutritional drinks through the implementation of the electronic version of the MUST tool
- Improved level of satisfaction due to increased care provider empowerment and ownership to support decision making
- Improved patient/carer satisfaction levels due to improved patient outcomes
- Improved levels of satisfaction for wider clinical services that are supporting the residents in the care home

KEY LEARNING

Throughout the life of the project lessons have been captured.

- Working with the right provider has been key to the success for the project to support changes in development along the way.
- Sticking to original scope and not letting the project creep outside of this scope despite several other ideas. This has been important to ensure that we start somewhere with further versions of the system at review stages.
- We underestimated how much time it would take to undertake the stakeholder engagement plan. A great deal of time has been spent dedicated to this with differencing methods of communication and this is ongoing.
- Care home manager turnover has also been problematic. We are addressing this ongoing by engaging with the senior carers as well as the managers as they tend to be more static.
- Development of interoperability is ongoing and complex and needed to be priority earlier in the project.

NEXT STEPS

To ensure the sustainability of the work, the digital tablet now forms part of the CCG and local authority joint quality audits. In addition local champions have been identified and are in place across the care homes to ensure new staff are trained and supported.

The North East has recently been successful in achieving Urgent and Emergency Vanguard status. As a result of the work undertaken in Sunderland the digital tablet will form part of the regional project. Newcastle and Gateshead CCG have also expressed in interest in the digital tool as part of their Care Home Vanguard project. This digital solution is the first of its kind.

As the Glasgow Conscious Scale (GCS) is to the consciousness of a patient, the NEWS Score could become the benchmark measure for operating in a universally understood way. The developed tool is a proactive preventative way to achieve this within UK care homes.

A short video about the project is available on you tube:
https://youtu.be/7TV0V7QCTAQ

For further information about the project please contact:

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Digital NEWS tablet is at the heart of *Better Health and Care* for care home residents in Sunderland

NHS
Sunderland
Clinical Commissioning Group

Why are we introducing technology into care homes?

- Complex healthcare needs, multiple long term conditions
- Skills within residential care homes not necessarily sufficient
- Communication challenges between providers
- Residents currently do not have equitable access to healthcare which can lead to hospital admissions
- The need to improve early detection of acute illness in residents
- Provides care closer to home to improve patient experience

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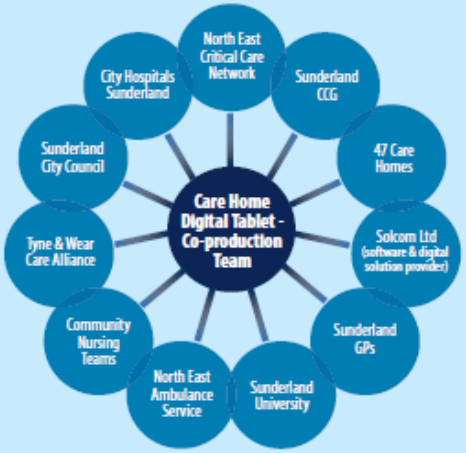
Who has been involved?



OUTCOMES

- Reduction in 111 and 999 calls
- Reduction in A&E visits and emergency admissions
- Improved early detection of acutely unwell residents
- Sharing of clinical information across all providers
- Promotes collaborative working with providers
- Improved safety and quality of information on handover

"Care home staff now have the knowledge and skills to carry out clinical observations which help us prioritise our work." Specialist nurse

Better health for Sunderland