

SCDIP Discovery Phase – North Somerset Council

Preventing dehydration in care homes for older people is a pressing concern for the social care sector, as it can lead to unnecessary hospital admissions and functional decline for residents.

Improving hydration for care home residents

The context

In North Somerset, there are currently 77 care homes for older people with 2,641 beds. Given the county's aging population, the number of people living in care homes is set to increase by 88% by 2030. Dehydration can increase the risk of care home residents developing other problems, such as UTIs, pressure sores and confusion. To ensure safe care for residents, the council has been exploring options around hydration monitoring technology.

The challenge

Dehydration is five times more common amongst older people admitted to hospitals from care homes as opposed to admitted from their own home. North Somerset Council are seeking a way to ensure care home residents drink enough – focusing on preventing dehydration, rather than treating the effects of dehydration.

What did the project involve?

Using representatives from health, social care, the private and voluntary sectors, the project team organised a range of activities to gain insight into the meaning of hydration to residents and staff living and working in a 78-bed care home in North Somerset. The discovery phase involved research into good practice, exploring the meaning of hydration and a number of interventions were tested, including drinks boards, personalised cup holders and wall art. This research concluded that the individual's needs, preferences and engagement are at the heart of good hydration practice. This research indicated that a hydration management app would be a viable solution to improving hydration in care homes. This app would include a digitised version of a resident's hydration story, which would be completed when an individual is admitted to the care home and updated at appropriate intervals. This would provide carers with all necessary information to support them in their caring role.

Stakeholder engagement and user research

The project team organised a range of stakeholder engagement activities in a 78-bed care home in North Somerset, including:

- **observation days:** six observations were held in the care home to identify residents' hydration activity
- **reminiscence café:** one focus group to explore residents' ideas of drinking
- **healthcare interviews:** ten interviews with GPs and care professionals
- **craft session to create an engaging hydration trolley:** to explore if this would encourage residents to drink
- **staff interviews:** four interviews with care home staff to explore their understanding of hydration
- **resident interviews with higher functioning residents:** two interviews to explore the importance of hydration
- **group session with lower functioning and more dependent residents:** to understand the importance of personal choice.



Benefits of the proposed solution

The council has identified the following benefits from the discovery phase:

- increased awareness of the importance of hydration in care homes
- an understanding of people's perceived barriers to hydration
- an understanding of the acceptability of technology in making people more independent in care homes
- networking opportunities with other local councils: *"mixing with different teams was invaluable... it helped generate ideas for us and hopefully for other teams"*
- the multidisciplinary team displayed high levels of team work across organisations
- engagement from all stakeholders: *"this has captured the imagination of everyone"*
- focus on improved care and wellbeing of care home residents.

The council has identified the following as potential implementation phase benefits:

- reducing admissions associated with UTIs – every avoided uncomplicated admission has a potential minimum saving of £1,331
- care homes would have access to hydration information, supporting staff in the prevention of dehydration
- the app offers the opportunity for personalised care for residents.

Key strengths of the project

1. This work differs from other hydration innovations on the market because it proactively supports an individual's hydration needs. This means focusing on ensuring dehydration is avoided, rather than treating the effects of dehydration.
2. Engaging Voluntary Action North Somerset to conduct user research in the care home – using those with expertise in engaging older people with impairments led to a better understanding of the issue. It also helped to build relationships.
3. The discovery phase highlighted new learning, positively shaping the app – prototyping indicated new activities and games could be used to encourage care home residents to keep hydrated.
4. Positive relationships with care homes have been established – the care home network (Shaw Homes) can see the value of the project and are engaged with the technology. This offers the potential to scale-up/spread the approach across the care home network. Involving care home staff in the prototyping was invaluable for developing buy-in: “support workers felt very valued, as they're not often seen as professional or academic”.

The potential impact

Measures to indicate success include:

- Reduction in the number of falls, UTIs, antibiotic prescriptions and behaviour change linked to dehydration
- Fewer 999 call outs to care homes
- Increased staff satisfaction, leading to a more sustainable workforce
- Happier, healthier residents due to increased hydration levels
- More sustainable health and care system due to reduced service dependence – if nothing changes in current admission rates, admissions for people aged 75 and over could cost an additional £30m by 2027.

Challenges to delivery and lessons learned

- short timelines were a challenge at the beginning of the project – following the awarding of funding, the team felt that more time was required to recruit staff and organise the project
- a project manager was recruited part-way through the project, which impacted upon delivery
- the team suggested that more time be built into the process to arrange external staff to be recruited, and/or for them to upskill existing staff to take up project management roles.

Next steps, including sustainability and spread

Learning from this project has been shared at a range of conferences (such as the National Hydration Conference) and at local government events. The team are keen to raise the profile of their work and app, to attract care homes to the project. They believe that this is best done via networking and face-to-face meetings – *“as a home owner, you’ve got to see the enthusiasm that we have.”* Given that Shaw Homes has both a local and national presence, the app could be promoted through this network. Feedback from focus groups suggests that this project would be beneficial for care home staff (particularly agency staff who may be unfamiliar with residents) as the app would contain hydration information for all residents.

If successful in the implementation phase, the project would like to develop the app further, to include a hydration monitoring feature, such as a cup. This cup would monitor hydration levels of residents, and convey this data via Bluetooth to the app, eliminating the need for hydration records. Digital records would help to remedy some of the inaccuracies of paper hydration records.



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Link to relevant documents

North Somerset Council's Discovery Phase review report:

<https://www.local.gov.uk/sites/default/files/documents/North%20Somerset%20Discovery%20Phase%20Review.pdf>