

## ShowCase

### Health on Tap

**Topic:**

Falls reduction

**Organisation:**

Anglian Water Services Ltd; Lamerton Swales

**Location:**

East Anglia (East of England)

**Dates:**

2006 to 2008

**Budget:**

£5,000 (excluding design and print costs)

**Website:**

[www.anglianwater.co.uk/community/education/water-for-health/care-homes](http://www.anglianwater.co.uk/community/education/water-for-health/care-homes)

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### Overview

Health on Tap was a 2-stage programme lasting over 18 months, including a 7-week trial with a group of care home residents. The programme aimed to increase water intake in older people in residential care, thus reducing falls. It was targeted at people working with or caring for older people in the UK. Health on Tap encouraged care providers to sign up to the Good Hydration Charter, a voluntary code of practice, which supports:

- Staff training on importance of good hydration
- Fresh tap water to be constantly available, easily accessible and presented attractively
- Establishing a drinking water routine

In return, care providers received: a certificate endorsed by Anglian Water, Water UK and the National Association of Care Caterers; promotional items to help promote drinking more water; and a subsidised mains-fed water cooler offer.

### Results:

- Pilot participants recorded health improvements, including better sleep patterns and reduced bladder problems
- Anecdotal evidence of a 50 per cent reduction in recorded falls
- By 2011, 188 Care Homes had signed up to the Good Hydration Charter in the Anglia Water region



Good hydration in older people can assist in the management of diabetes and help prevent pressure ulcers, constipation, urinary infections and incontinence, kidney stones, heart disease, low blood pressure, cognitive impairment, poor oral health, skin conditions and many other illnesses. Furthermore, dehydration has been shown to increase by two-fold the mortality of patients admitted to hospital with a stroke, and to increase the length of hospital stay for patients with community-acquired pneumonia. In particular, poor hydration can cause dizziness and lead to potentially fatal falls for older people.

Falls are the leading cause of injuries that lead to death in people over 75. Half of those who fracture their hips are never functional walkers again, and treating osteoporotic fractures costs the NHS around £1.8 billion each year in the UK.

Older people have very similar hydration requirements to that of younger people. Unfortunately, many older people do not drink adequate amounts of water. A conservative estimate for adults is that daily intake of fluids should not be less than 1.6 litres per day. A survey in 2003 on the water provision in UK care homes for older people, carried out by the Royal Society for the Promotion of Health, found that at best most residents only consumed 2 to 4 glasses (480ml to 960ml) a day.

Anglian Water Ltd, the water company operating in the East of England, has a track record of Water for Health projects, including primary and secondary school drinking water initiatives. The Health on Tap study was funded by Anglian Water to attempt to address the problem of poor hydration in care homes.

A stakeholder mapping exercise was conducted, and key stakeholders who would be interested in and could have an influence on this issue were contacted and invited to form a steering group. The steering group included representatives from:

- Water UK
- English Community Care Association
- Commission for Social Care Inspection (CSCI)
- Royal Institute of Public Health
- National Association of Care Caterers
- Norfolk County Council
- Suffolk And Regional Falls Prevention Team
- MIW Water Coolers

Five care homes were also approached to become involved in the Health on Tap pilot and to join the steering group:

- The Martins (MHA)
- Heathfield (Norfolk County Council)
- Kingfisher House (Fourseasons Healthcare)
- Aliwall Manor (Excelcare)
- The Orwell (Craegmoor)





Health on Tap aimed to identify the most effective methods to encourage older people in residential care to drink more water. A 2-stage research process over 18 months was commissioned, including a 7-week trial with a group of care home residents.

### Stage One: Qualitative research

This research stage aimed to understand the role of staff and carers in understanding, promoting and enabling good hydration.

Qualitative research was conducted, including in-depth interviews with staff and managers from four care homes in East Anglia, as well as registered nursing staff and staff with NVQs. The aim of this research was to understand current provision and practice around hydration and identify potential barriers to good hydration.

### Insights

Research identified that elderly people are more susceptible to dehydration due to impaired feelings of thirst, medications that increase water loss and raised room temperatures in care settings.

### Motivations

Good hydration can reduce falls, injuries, sleepiness, constipation and urinary tract infections.

### Barriers

Residents and staff may not understand the importance of good hydration to elderly people's health.

#### Staff:

- Lack of knowledge and training about hydration; hydration is not part of staff

training and induction and is missing from nutritional training

- Over half of care staff did not have English as a first language, so for some there were communication barriers
- Staff often relied on peer-to-peer learning, rather than formal training

#### Residents:

- Residents' fear increased toilet trips as a result of increased water intake and do not want to be a burden by asking for water or help
- Residents easily forget to drink water: *"I know that I should drink more but keep forgetting"*
- The plastic drinking cups are often difficult to hold, especially for those with arthritic hands
- Limited mobility prevents many elderly people from accessing water and water is not made easily available



### Competition

Tea and coffee were identified as the main source of competition for care home residents and staff to drink more water. Tea and coffee

are popular beverages in care homes, but can actually cause dehydration as both are diuretic. However, as research shows these alternatives are often preferred to water: 'An overwhelming 90 per cent of care homes note that residents prefer tea, coffee, juices and other drinks to water. Providers would rather their clients consume some fluids than nothing at all. It appears that there is some confusion between the consumption of water versus fluids. Tea and coffee are diuretics, making urination more frequent and concentrated.' (*Water Provision in Care Homes For Older People: A survey by the Royal Society for the Promotion of Health, in cooperation with the Water for Health Alliance, October 2003*)

### Stage Two: Research pilot

This stage aimed to understand the benefits of good hydration to elderly care home residents. Based on Stage One's findings, a six-month pilot study was conducted with participating homes.

### Segmentation

There were two separate target audiences for the pilot, each of which required a different response and support package.

Primary target audience:

- Care home staff
- Care home management

Secondary target audience:

- Care home residents
- Relatives and visitors

### Behavioural goals

For residents to:

- Increase their water consumption, by drinking up to eight additional glasses of water a day
- Maintain increased water intake and sustain the drinking behaviour by establishing a daily routine

For care home staff to:

- Encourage increased water consumption and improved accessibility to water by:
  - Implementing a daily routine for residents
  - Placing a jug of water in rooms and monitoring its consumption
  - Helping residents who cannot drink unaided to increase their water intake
- Increase their own water intake to set a good example for residents and appreciate the benefits to their own health

For care home management to:

- Install mains-fed water coolers or ensure appetising, fresh water is always available to residents
- Include hydration in staff induction and training
- Involve relatives, visitors and other organisations in the Health on Tap initiative

Mains-fed water coolers were installed and residents were asked to increase their water consumption from an extra 2 to 8 glasses per day (1 glass is approximately 250ml).

In addition, 15 residents from 2 homes agreed to take part in an in-depth 7-week research pilot. They completed a Drinking Water Diary each week for seven weeks, recording every instance of fluid intake and output (such as number and frequency of toilet trips). They also answered a number of questions on the impact of increased drinking on overall health, sleep, continence, concentration, energy levels and balance. In addition, they attended focus groups around water consumption.

A number of other care homes also began implementing the seven-day research pilot, but lack of staff buy-in meant they were unable to complete its implementation. This highlighted the importance of getting staff on board for a care home water routine to work in practice.

“We would have liked to have seen more care homes complete the pilot. We did struggle to get staff to buy in to the programme in some care homes. A consequence of the early stages of increased water consumption is increased toilet trips; some staff perceived this as potentially adding to their busy work load. It was also a tough challenge for staff, we recognised that. If you’re going to encourage older people to do something they might not want to do, you do have to do the incentivising, so there’s a lot of work involved, and for a lot of care staff it was asking too much beyond the day job.” (Louise Pinkney, Lamerton Swales)

It became clear that availability, visibility and reminders were some of the key factors to drinking more water, and that introducing a drinking water regime as part of the daily routine was a key factor for success.

The insights from the pilot informed the policy recommendations made for the roll-out of the Health on Tap programme. The programme aimed to have 100 homes signed up to the Good Hydration Charter within 1 year of Health on Tap’s launch, and for 50 per cent of UK care home providers to be signed up to the Good Hydration Charter by 2010.



Health on Tap developed the following methods mix:

#### Care homes

- Appetising, fresh water to be constantly available, accessible and promoted
- Installation of mains-fed water coolers as an option to ensure availability of fresh water
- Establishing a drinking water routine in the care home

- Promotional materials for staff, residents and residents’ families as reminders to increase their water consumption
- ‘10 Essential Elements to Good Hydration’ chart

#### Staff

- Training DVD ([www.anglianwater.co.uk/Health on Tap DVD.aspx](http://www.anglianwater.co.uk/Health%20on%20Tap/DVD.aspx)) and hands-on training were introduced by care home managers
- Health on Tap champion badges



#### Residents

- Visual prompts to drink more and regularly, in the form of posters, bookmarks, placemats and coasters
- Improved access to cooled and attractively presented water, and professional support to encourage increased drinking
- Good Hydration Charter Certificate – This is awarded to care homes who commit to the Good Hydration)
- Drinking water clubs – Weekly meetings to discuss feelings, support each other and receive the promotional materials

“We set up drinking water clubs and it was a chance for the care home residents to come

together and it was something they really looked forward to. They felt valued and that they had a positive role to play. We made them the star of the show. That is a huge incentive for them, because they have people to listen to them. All too often they are plonked in the corner in front of the television, without being consulted or asked to comment.” (Wendy Harvey, Care Home Manager, Methodist Homes for the Aged)

## Media

- Political lobbying to raise the profile of the problem of dehydration in older people and the positive role good hydration policies in care homes could play
- Media coverage on regional and national channels

Based on the barriers and motivations to drinking more water, which were identified in the scoping phase, the Health on Tap programme developed these interventions so that an exchange could be offered on two levels: professional and personal.

## Professional exchange

Staff identified barriers that were prohibiting them from promoting water consumption. These included lack of knowledge and training about hydration; communication barriers where English was not the first language; and reliance on peer-to-peer learning, rather than formal training, to influence their working habits.

In return for signing up to the Good Hydration Charter, care homes received a range of training resources and goodies to help staff encourage residents to keep properly hydrated. These were mainly pictorial to overcome potential language barriers.

In addition, the effort required of staff to follow the hydration code was rewarded by residents who were easier to care for, including less trips to the toilet in the long term (once the bladder has adjusted); less work during the night as residents sleep through; greater degree of

mobility; and a decrease in invasive procedures.

## Personal exchange

Many older people may not realise that keeping hydrated can help prevent urinary infections, ease or prevent constipation and the indignity that accompanies it, and combat the dizziness that may cause potentially fatal falls.

A number of barriers to drinking more water were identified through research with residents, which the Health on Tap pilot sought to address:

- **Fear of increased toilet trips** – Keeping hydrated helps prevent urinary infections, which means fewer trips to the toilet and therefore sleeping throughout the night, instead of sleep broken by trips to the toilet
- **Inadequate access to water** – Match the drinking water regime to each and every ability of those in care settings
- **Forgetting to drink water** – Sufficient water intake increases alertness and memory. Constant reminders through use of posters and other materials by water jugs and water coolers help develop a routine of drinking water
- **Mobility problems** – Although water cannot perform miracles, people experiencing mild problems find their mobility and balance improve with good hydration, which results in fewer falls and GP call-outs

To compete successfully with the preferred, established behaviour of drinking tea and coffee, programme planners had to:

1. Educate staff and residents about the need for good hydration, the value of water as a beverage and the potential diuretic effects of drinking too much tea or coffee
2. Make water an attractive competitive drink – In many care homes, water was sitting around gathering dust and going stale in unappetising plastic jugs. Health on Tap

aimed to raise the appeal of drinking water through simple measures, such as installing mains-fed water coolers to ensure the drink arrives fresh and chilled and introducing slices of lemon and ice cubes to jugs to keep it fresh and appealing



### Bespoke drinking cups

Following the insight that the plastic cups that come with water coolers can often shatter when residents with arthritic hands try to use them, contact was made with several organisations to see if a new receptacle could be designed, which was not patronising and which arthritic residents could hold easily and safely. A south-west company worked to design a new receptacle, but these were found to be too expensive for the programme's small budget and meant that unfortunately the receptacles could not be developed.

“That is my one regret. We didn't have enough money to develop bespoke drinking vessels. We did have quite a few meetings about it and even to this day I get emails from people who say they've invented a great new drinking cup, but they're so expensive to bring to market, that none were developed.” (Louise Pinkney, Lamerton Swales)



Following the successful pilots, the programme was formally launched in June 2008 to coincide with Falls Prevention Week and was promoted to all East Anglian care homes. Participating homes received: a certificate endorsed by Anglian Water, Water UK and NACC; promotional materials; a training DVD; and mains-fed water coolers. In return, they signed up to the Good Hydration Charter, which required three simple commitments:

1. A drinking water regime to be established as daily routine and matched to the ability of every care resident
2. Fresh tap water to be constantly available, accessible and palatable
3. Good hydration to be part of staff induction and training, and to be promoted to residents and visitors

At this time Baroness Greengross raised a written question in the House of Lords, asking if the Government believed the current voluntary arrangements for hydration policies in the care sector were adequate. She wanted them to consider whether the Health on Tap pilot study indicated the need for hydration policies that should form part of national minimum standards for all care homes for older people.

“The lobbying and PR activities were very successful. It not only raised the profile of a regional project onto a national level, but also raised awareness of the issue of dehydration itself and Anglian Water's role in tackling this.” (Andrew Mackintosh, Director of Communications, Anglian Water Ltd)

The programme received broad media coverage, including:

- National BBC TV coverage on lunchtime news, interviewing The Martins Care Home

residents about their experience and response to the programme

- Lead item on BBC Radio 4's Today programme
- Press coverage, including in the Mail on Sunday, Medical News Today and Barchester Healthcare
- Regional BBC and network channel TV, radio and press coverage

Following its success, a number of partners who were not on the steering group agreed to support the programme publicly, including:

- National Care Association
- Suffolk County Council
- National Patient Safety Association
- Elderworld

Health on Tap had hoped to get more private care homes on board and also offered the programme to other regional water companies. However, because of the regional nature of water companies, each company wanted to develop its own programme.

*"It would have been good to see some private care groups come on board. We got a lot of individual homes in the Anglian region coming on board. It would have been encouraging to see a few more care home groups embrace it nationally."* (Louise Pinkney, Lamerton Swales)



Evaluation of the programme's success was based on two factors: improved health outcomes through care residents and staff increasing their hydration levels; and the number of subsequent care homes signing up to the Good Hydration Charter (and thus voluntarily adopting the policy and practice

alterations recommended as a result of the pilot scheme).

Evaluation of improved resident health due to better hydration was based on the drinking water diaries completed by 15 residents in 2 care homes during the pilot phase. These residents were asked to increase their water consumption from an extra two to eight glasses per day, and to complete a Drinking Water Diary each week for seven weeks. This diary recorded every instance of fluid intake and output (such as number and frequency of toilet trips), as well as the impact of increased drinking on overall health, sleep, continence, concentration, energy levels and balance.

This was not a perfect data collection method, as diaries did contain gaps and were subject to self-reporting. However, benefits reported by residents included:

- Generally feeling better
- More energy during the day
- Ability to sleep throughout the night
- Less dizziness
- Noticeable easing of bladder problems
- Being steadier on their feet (less falls)

In one care home a combination of anecdotal feedback from Drinking Water Diaries and the care home's records led staff to estimate a 50 per cent reduction in falls, more than 50 per cent reduction in the number of residents taking laxatives, and a decrease in GP call-outs and urinary infections.

In addition, care staff who increased their own water intake reported the following improvements:

- Improved energy levels
- Reduced headaches
- Increased motivation to lose weight

The programme achieved its target to recruit 100 new care homes to sign up to the Good Hydration Charter within the first year, with 139



care homes signed up by June 2009. This number has continued to grow, and by 2011, 188 care homes had signed up to the Charter in the Anglian Water region.

In addition, Anglian Water has had 73 enquiries from a range of organisations outside of its region (including care homes, hospitals, health centres and Primary Care Trusts) about the Charter. All were sent an information pack and referred to the website. This offers strong potential for the Charter to become a standard requirement for all care homes in the future.



A formal letter outlining the results of the Health on Tap programme was sent to all members of the steering group following completion of the programme. A party was thrown for residents at the Martins Care Home in Bury St Edmunds to celebrate and thank residents and staff for all their hard work. This was also followed by a formal 'thank you' letter from the Director of Communications at Anglian Water.

Presentations about the Health on Tap programme have been made to the Water for Health Alliance, a subsidiary group of Water UK (the representative organisation that brings together all of the UK's water and wastewater utilities). Water for Health Alliance is made up

of over 35 diverse organisations, including: Action for Elder Abuse; Dementia Service Development Centre; Hospital Caterers Association; National Care Association; and the Royal College of Nursing.

Steering group members were also requested to disseminate information and results from the programme to their own organisations through annual general meetings, newsletters and similar.

In January 2009, Baroness Greengross set up a forum in the House of Lords to champion the benefits of healthy hydration for the elderly and her work to promote this issue continues.

### Lessons learned

#### **Programmes that want to make an impact take years**

Behaviour change does not happen overnight. Putting in the time early on to engage with stakeholders and conduct thorough scoping research can be vital to the later success of the programme. This programme spanned almost three years and built in mechanisms such as the Good Hydration Charter to make sure the work was sustainable and the legacy would continue.

#### **Do not be deterred by setbacks or obstacles**

Programmes have to operate in the real world, so all will encounter setbacks and obstacles at some point. A personal belief in the cause can conquer most things, if it is remembered, even when the work is challenging.

#### **Partnership working is crucial**

Partnerships provide credibility, expertise, networks and finance or resources, which is vital when working on tight budgets. However, to get partnerships to function well requires hard work and sustained effort from the core team, especially when working with senior level figures who have busy schedules. Senior level buy-in is nevertheless often essential, as they

can provide the authority and decision making abilities needed to take a programme forward.

“Some practical advice I’d give to others is, when you’re working with a large steering group of senior people, expect them to guide and advise, but don’t expect them to operationalise the project. Be prepared to roll your sleeves up, get out there and make it happen. Bring solutions, progress and results to steering group meetings, so people can see they’re having an impact and it’s a good use of their time ” (Louise Pinkney, Lamerton Swales)

Also remember to thank your partners and key stakeholders. A party was thrown at the end of this programme to show partners and stakeholders how thankful the team were for all the effort they had put in.

**It is often individuals, not organisations, who make programmes work**

Ensuring you have a key contact within an organisation who is enthusiastic and driven about the programme and its cause can be key to moving the work forward.