



**Wessex**  
Academic Health  
Science Network



# Independent Evaluation of Hydration at Home e-learning Module



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## DISCLAIMER

This report presents the findings of an independent evaluation of the Hydration at Home e-learning Module.

The findings of this independent evaluation are those of the author and do not necessarily represent the views of the Hydration at Home project team.

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## ACKNOWLEDGEMENTS

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## CONTENTS

Contents .....	2
1. Background and overview .....	3
2. Evaluation questions .....	3
3. Methodology .....	4
4. Satisfaction with the e-learning module .....	4
5. Impact on knowledge and confidence .....	6
6. Changes to individual practice .....	7
7. Changes at organisational level .....	9
8. Conclusions .....	9
9. Recommendations for future evaluation .....	10



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## 1. BACKGROUND AND OVERVIEW

Dehydration is a concern in older people due to the potential adverse effects on function and clinical outcome. Common complications include constipation, pressure ulcers, urinary tract infections, and dizziness leading to falls and fractures.

Hydration in older people is a complex problem for a number of reasons. Physiological age-related changes in the body systems will naturally leave an older person more susceptible to dehydration (e.g. reduced thirst mechanism; reduced kidney function). In addition, it is not uncommon for individuals to suffer with health issues or to take medications which restrict the ability or desire to drink fluids. There may be social and psychological components which can reduce motivation to drink, through loneliness or fear over continence issues. Finally, some older people will find it physically difficult to access their drinks (e.g. mobility issues affecting the ability to make and get drinks or dexterity issues affecting ability to pick up drinks and cups).

As the majority of cases of dehydration in older people are caused by prolonged inadequate oral fluid intake, hydration projects at Wessex Academic Health Science Network (WAHSN) have aimed to raise awareness of good hydration to improve health and wellbeing in those who are being cared for in the community.

The hydration e-learning module has been developed by the Healthy Ageing Team at WAHSN in collaboration with Hampshire County Council (HCC) in order to educate healthcare professionals about the importance of hydration. It is available nationally via the Health Education England (HEE) website <https://www.e-lfh.org.uk/e-learning-for-community-carers-hydration-in-older-people/> and locally via the HCC training portal for completion by staff in the 17 care homes they operate.

72 staff from HCC completed the training via their training portal between the module's launch in September 2020 and the end of February 2021. All came from one residential/nursing service located in Eastleigh. A further 488 people have completed the training via the HEE website over the same period. Most came from the South East of England (where location was specified) but a small number also came from other parts of England, Scotland and Wales.

The Healthy Ageing Team approached the Innovation Insight Team (WAHSN) in July 2020 requesting advice and analysis for an evaluation of the e-learning module. The evaluation was based on a questionnaire of training participants, feedback reports available via the HEE website, pledges made as part of the training module and a 10-minute telephone interview with one participant. Full details on methodology can be found in chapter 3.

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## 2. EVALUATION QUESTIONS

This evaluation assessed the effectiveness of the e-learning module as a training tool and its impact on participants' knowledge and confidence in assessing and advising on hydration.

Evaluation questions were defined as follows:

**Q1.** To what extent were participants satisfied with the quality of the training module? (In terms of content, presentation, interactivity etc.)

**Q2.** To what extent did the e-learning module impact on participants'

- a. knowledge around hydration
- b. confidence around assessing and advising on hydration

**Q3.** What changes (if any) have participants made to their own practice as a result of completing the e-learning module? (e.g. new hydration policy, offering alternative drinks, changing language)



**Q4.** What changes (if any) has the organisation they work for made as a result of completing the e-learning module?

The scope of this evaluation was to answer the above questions relating to the effectiveness and impact of the training module only. Recommendations for further evaluation, including a wider range of data sources can be found in chapter 9.

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### 3. METHODOLOGY

Reports on general satisfaction with the module and participant feedback were available via an admin account on the HEE website and have been utilised as part of this evaluation. 84 people provided feedback via HEE which constituted 17% of those who had undertaken the training via this platform.

In February 2021, participants were also invited to complete a follow-up questionnaire, designed by the Healthy Ageing Team at WAHSN and based on Kirkpatrick's Four Level Training Evaluation model<sup>1</sup>, which measured their satisfaction with the e-learning material, knowledge and confidence gained as a result of their participation and the residual impact of the training i.e. whether it prompted any practical changes in the months following completion.

This was administered via two routes;

- Hosted on the HCC training portal
- As an online questionnaire distributed by Wessex AHSN to those who had completed the training either via HCC portal or HEE website and gave their permission for us to contact them

The questionnaire was completed by 27 individuals and responses were scored and analysed quantitatively. This represented 5% of everyone who undertook the training and 20% of those who agreed to be contacted for follow-up.

Respondents to the follow-up questionnaire were also given the option to consent to being contacted for a follow-up telephone interview to gain deeper insights into the issues above. Four individuals consented to interview although it was only possible to arrange an interview with one of them. The others did not respond to the request for a telephone interview and a decision was taken not to put extra pressure on carers during the Covid-19 pandemic by pursuing further follow up.

As part of the e-learning, all learners were asked to complete two 'hydration pledges' – pledges on how they had planned to incorporate what they learnt in the training into their practice. 315 pledges were made between the training launch in September 2020 and February 2021. This part of the training was thematically analysed.

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### 4. SATISFACTION WITH THE E-LEARNING MODULE

Those who completed the e-learning module via the HEE website were given the opportunity to rate the training in terms of its content, presentation and interactivity. All domains scored highly, indicating a high level of satisfaction with the training. See Table 1 below.

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<sup>1</sup> <https://www.kirkpatrickpartners.com/Our-Philosophy/The-Kirkpatrick-Model>

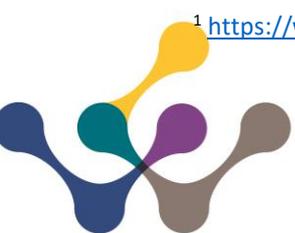


Table 1. Participant ratings received via HEE reports

Rating	Avg. score (1= poor and 5 =excellent)
Content rating	4.6
Presentation rating	4.5
Interactivity rating	4.3
<b>Overall rating (n=84)</b>	<b>4.4</b>

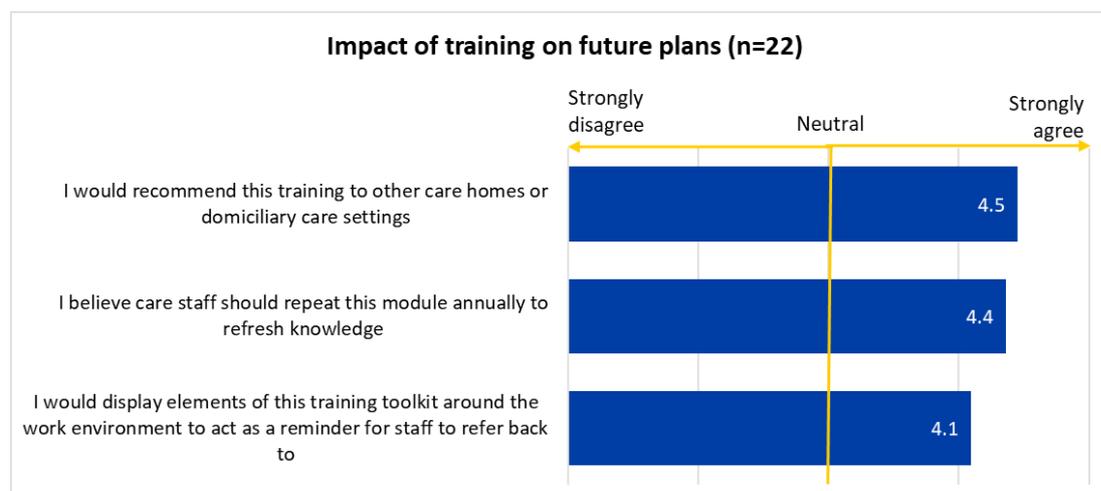
The comments below were also received as part of the feedback submitted via the HEE website which were mainly positive in nature but also contained some suggestions for improvement.

Table 2. HEE participant comments

Comments
EXCELLENT LEARNING UNIT.
Great
Very useful activity
Very well-constructed
Very easy to follow
Interesting information about increasing fluid intake by diet changes
It does not cover severe dehydration in acute hospitals. which is a very major problem. It's a reasonable community resource. Although severe dehydration also occurs there.
Could they look at a version that scales up for acute care professionals
I have tried numerous times to do the care home assessment and it just won't bring up the questions

The final section of the WAHSN follow-up questionnaire asked respondents whether they would recommend the training to others and display elements of it around their workplace. Respondents also answered very positively to this set of questions (see Figure 1 below).

Figure 1. WAHSN follow-up questionnaire responses on whether they would recommend the training to others



## 5. IMPACT ON KNOWLEDGE AND CONFIDENCE

Respondents to the follow-up questionnaire answered questions about the knowledge and confidence gained through their participation in the training. Similarly, high scores were seen across both of these question sets. See figures 2 and 3 below.

Figure 2. WAHSN follow-up questionnaire responses on the impact of the training on hydration knowledge

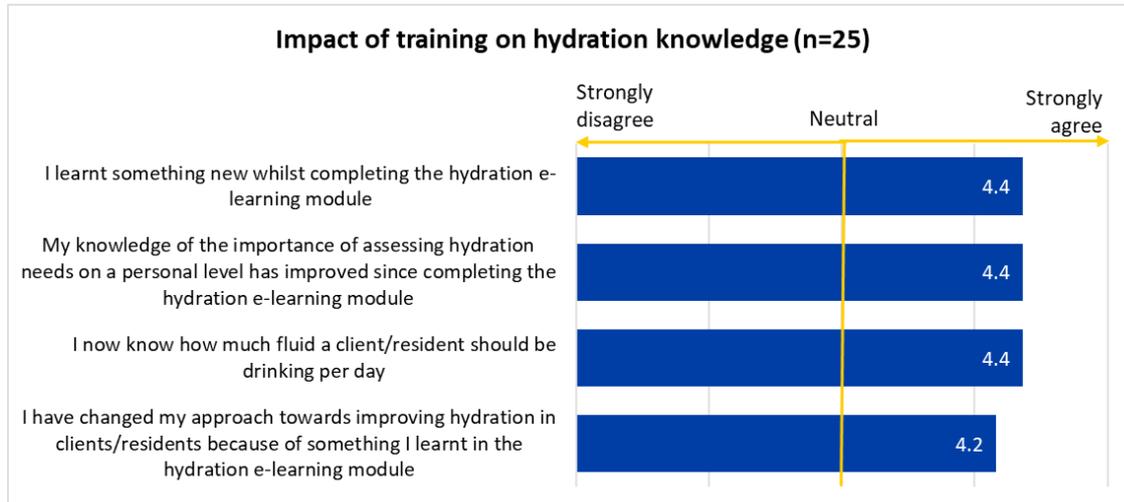
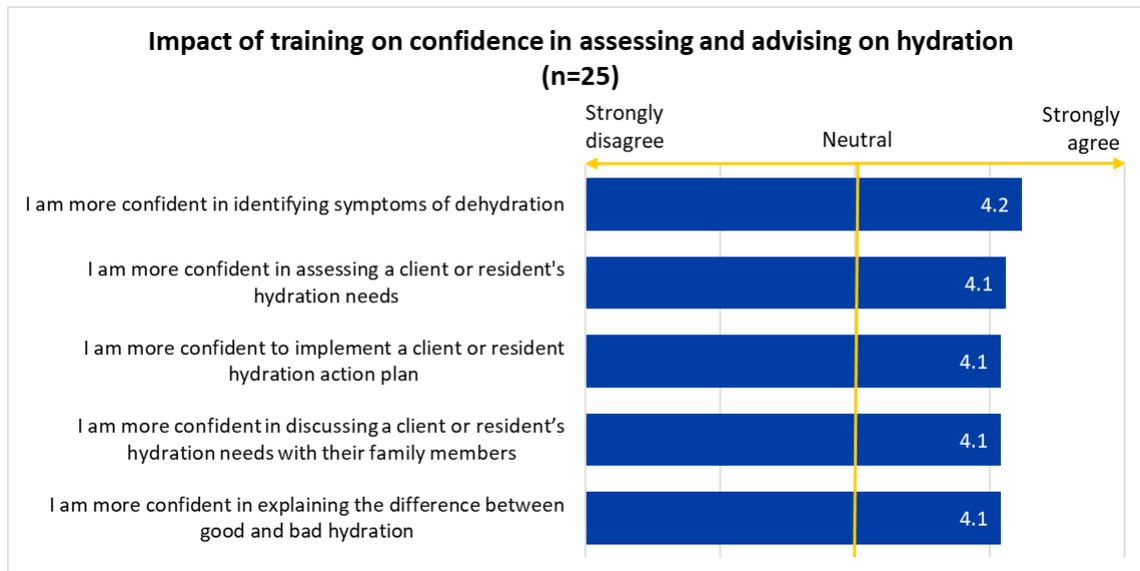


Figure 3. WAHSN follow-up questionnaire responses on the impact of the training on confidence in assessing and advising on hydration



The telephone interview respondent also spoke of the increase in their knowledge of hydration as a result of participating in the e-learning module.

*"I did not realise how many litres you could possibly need, 2.7 L for women and 3.7 L for men, which includes in all drinks"*

*"Also, how it effects your body if you don't drink enough, lowers your energy levels and you can get really tired"*



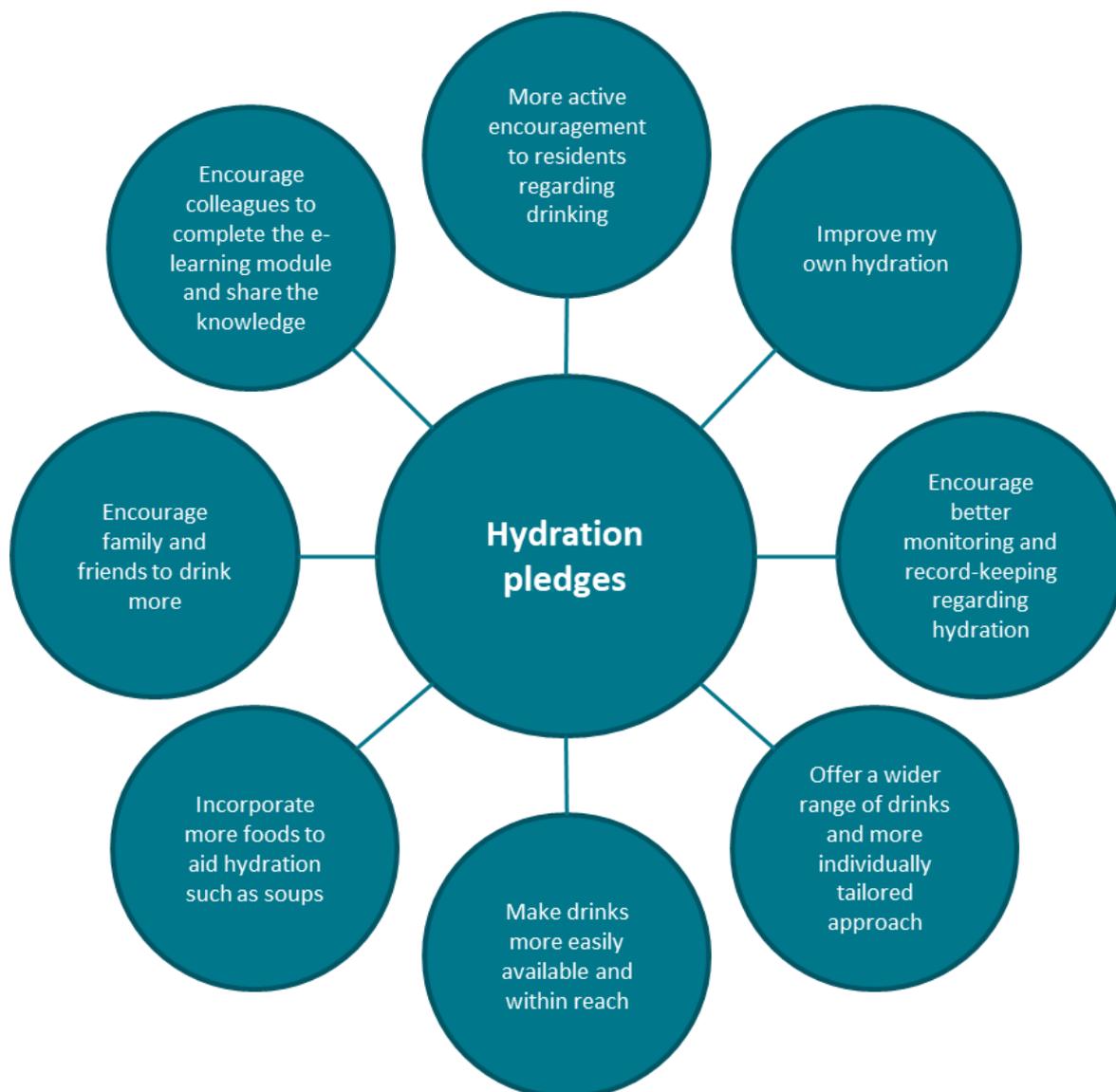
## 6. CHANGES TO INDIVIDUAL PRACTICE

Following completion of the e-learning module, participants were asked to make 'Hydration pledges' – pledges on how they had planned to incorporate what they learnt in the training into their practice. While the pledges relate to *planned* change rather an *actual* change, they are an indicator of people's intentions following completion of the module.

Figure 4 (below) displays the themes from these hydration pledges. The most common themes were:

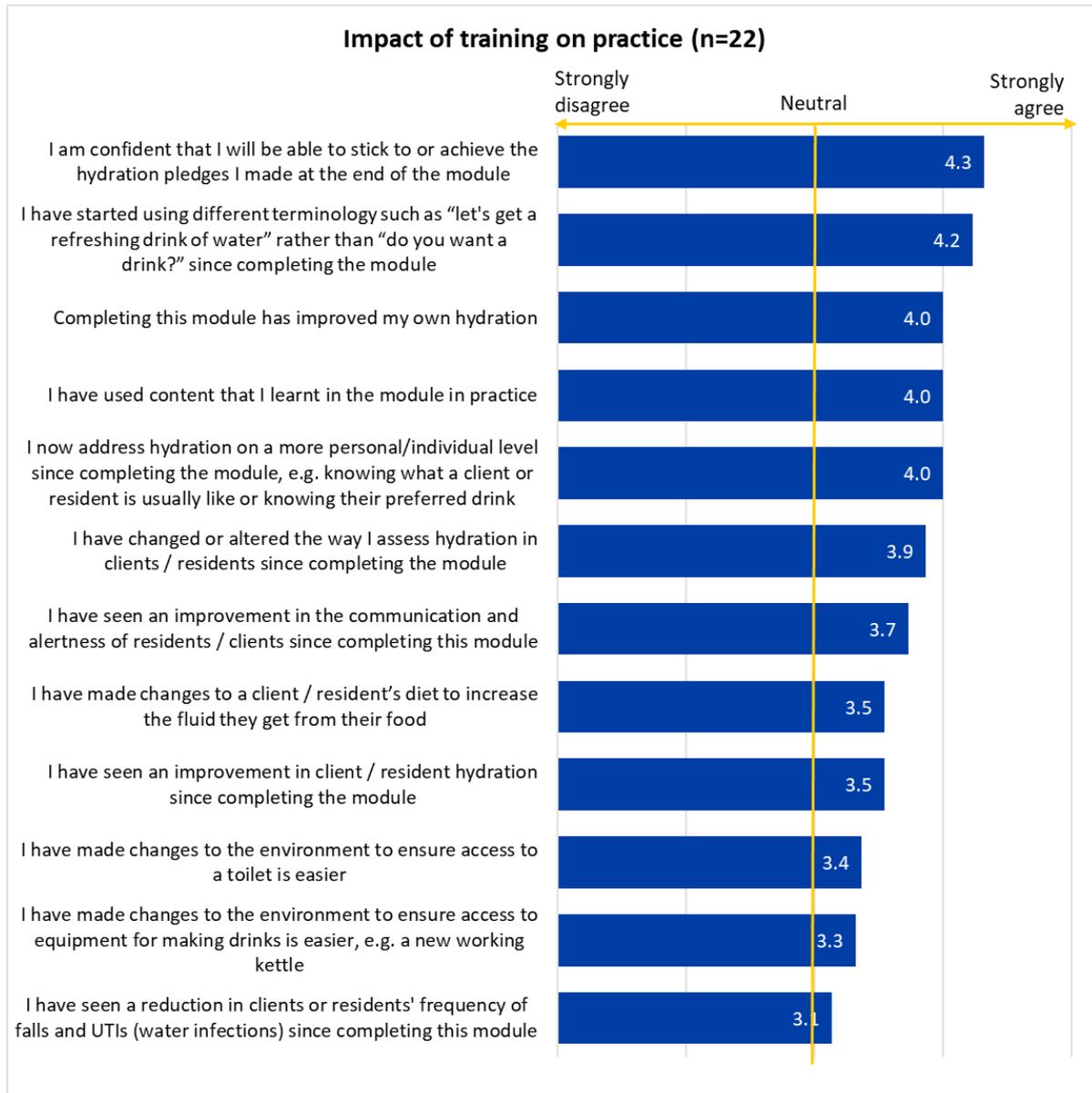
- More active encouragement to residents (**121** pledges, **38%** of total)
- Improving my own hydration (**74** pledges, **23%** of total)
- Encouraging better monitoring and record-keeping regarding hydration (**51** pledges, **16%** of total).

Figure 4. Themes from participants' 'hydration pledges'



Respondents to the follow-up survey were also asked about the changes they had made to their own practice since completing the training. This tells us about actual self-reported change among participants. Figure 5 (below) shows responses to these questions.

Figure 5. WAHSN follow-up questionnaire responses on the impact of the training on individual practice



Responses to this part of the survey were largely positive but some variation in scores was observed across the individual questions.

Respondents were confident that they would stick to their pledges and reported that they had utilised the content from the module. They also felt that the module had improved their own hydration and that of their friends/family, a finding that is supported by the 'hydration pledges' and the telephone interview.



*“It made a lot of difference. Even though I already knew and had been taught, it made me more aware when I am doing my job, fluid intake, much more aware of it.”*

*“I have put this knowledge into my own family and my own job”*

The lower scoring questions tended to be those that asked whether there has been observable change in residents’ hydration, alertness or a reduction in falls or UTIs, perhaps due to the difficulty in being able to measure this and complexity of attributing any change to the training. Respondents also scored lower on questions relating to changes in the environment such as easier access to toilet and kitchen facilities.

## 7. CHANGES AT ORGANISATIONAL LEVEL

Respondents to the follow up survey answered questions about changes to their wider organisation following completion of the training. Overall, responses to these questions were more neutral than other parts of the survey, although some did feel that organisational changes had taken place.

Figure 6. WAHSN follow-up questionnaire responses on the impact of the training module on organisational practice



Findings from the telephone interview indicated mixed views on whether there had been any change at an organisational level.

*“I did not discuss it with my work colleagues”*

*“People are more aware of it within my organisation”*

## 8. CONCLUSIONS

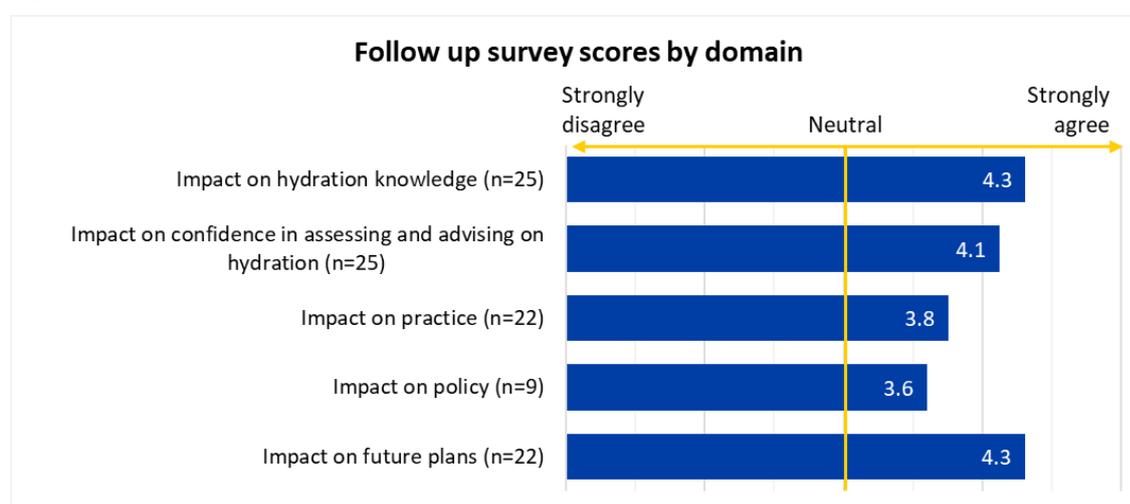
Participants rated the training highly, especially in the areas of hydration knowledge, confidence in advising and assessing hydration and their future plans around hydration, suggesting that the training was high quality and well-received. Impact on individual and organisational practice was more measured than other categories, although still positive overall.



Participants did feel that they had implemented changes to their own practice in several ways but also indicated that it was difficult to say whether this had translated into measurable changes in the people they care for.

Responses relating to behavioural change at an organisational level scored lower than other question sets (see Figure 7), suggesting that translating any improvement in individual knowledge and confidence into organisational change may be more challenging. While this evaluation did not seek to explore potential barriers, it would be valuable to examine what factors, both related to the training and separate to it, might be impeding change at an organisational level. It is possible, for example, that the training was sufficient to prompt organisational change but there were external factors at play that limited its potential impact e.g. staff not having the capacity to implement changes as they would like. It should also be noted that the sample size for this part of the questionnaire was small compared to other sections (n=9) because these questions were posed only to respondents who had management responsibilities as part of their job. Further studies would be needed to understand to what extent the training influenced individual and organisational practices in the management of hydration.

Figure 7. WAHSN follow-up questionnaire responses by domain



## 9. RECOMMENDATIONS FOR FUTURE EVALUATION

Based on the findings of this evaluation, the following recommendations for future evaluation are suggested:

- To survey participants over a longer period of time following completion of the training to assess how any behaviour change has been sustained over time – for this study we asked participants once whether they had implemented any behaviour changes and therefore were not able to make any comparisons over time
- To interview a larger sample of training participants (this study only included one)
- To use other sources of data to confirm the presence or absence of behaviour change e.g. observational studies, case note review etc.
- To take a systematic approach towards when to ask for feedback from participants, e.g. at 3 month, 6 month, 9 month, 12 month intervals – in this case, it is possible that some respondents to our follow-up questionnaire had only completed the training in the previous days/weeks and therefore time to implement any behaviour changes would be limited.





- To include qualitative work to explore the potential barriers to implementing individual or organisational change in hydration management practices. For example, asking participants at the end of the training what support they might need in order to apply what they have learnt and then asking on follow-up whether they had received that support.

