

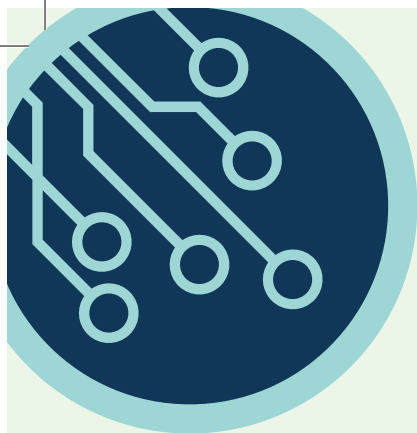


If I knew then what I know now...

A short guide to introducing new technology in adult social care

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Introduction

Technology seems to have the potential to transform the way we design and deliver social care; but so many attempts to introduce new technology seem to over-promise and under-deliver. This could be for many different reasons, including a lack of understanding or fear of technology, unrealistic expectations about what technology can achieve, or underestimating the importance of social and cultural change alongside technological solutions.

Luckily, many organisations have tried to implement technological solutions, and we can learn from their experience. This booklet is for decision makers who are considering using technology in social care. It contains a series of prompts and questions to help you avoid common pitfalls, and think through key issues when selecting, planning for, implementing and evaluating technology.

Although some of the questions seem very simple, our study and other research in this area reveal that they are commonly overlooked. For example, it may be tempting to move to the next page when asked 'what are you hoping to achieve?' However, it is surprisingly common to hold unrealistic expectations about what's possible, and for everyone involved to have a slightly different sense of what they're trying to achieve. We encourage readers to fully engage with each question in this booklet – and to check that you have a shared understanding of the answers within your organisation.

This resource was developed by the BRACE Rapid Evaluation Centre, and is based on findings from a national study funded by the National Institute for Health and Care Research (NIHR) of local authorities

and care providers who implemented 'new and emerging' technology (in this case, home sensors with artificial intelligence or 'AI' capabilities). More information is available in an appendix. We're grateful to Digital Social Care and to social care colleagues in the NHS England Transformation Directorate for jointly badging this guide, and for helping to share these lessons with their networks.

This booklet is organised to allow you to view questions that are relevant to where you are in the process of implementing technology – whether you are just beginning to consider using technology or whether you are nearly ready to roll out a new technology within your organisation. You can print this booklet, or view it as a PDF and use the links to jump to relevant sections.

Ultimately, our study found that organisations introducing technology in social care are often facing the same problems we've known about for years. We hope that this booklet is a small contribution to sharing these common challenges so that others find it easier in the future.





What problem are you trying to solve?

The issue

There is a risk that decision makers look to technology to solve many different problems within social care – without always being clear with themselves or each other exactly what they are trying to achieve. Misunderstandings about the purpose of introducing a technology and how it fits into providing care can happen when discussions occur among senior staff only, without the front-line staff, people who draw on care and support, and carers who will actually be using the technology.

Things to think about



Identifying a problem: The process of selecting a technology should start with a specific problem you are trying to solve, or a specific population you are trying to help, rather than the other way around (starting with the technology and then finding a use for it). What is the issue you are trying to solve?



Broader strategy: What are your broader plans for providing social care locally, and how does this technology fit with this direction of travel? Frustration can occur if a new technology is introduced that doesn't really fit with other things that are happening.



People who draw on care and support, and their carers: If a technology will be installed within the living space of people who draw on care and support, it's important to involve them as early as possible to understand their (and their carers') concerns and how they might be addressed. This might include issues with using technology, internet connection issues, fears about privacy, ethical issues, and the practicalities of having equipment in the house or wearing equipment.



Care staff: In defining the problem you are hoping to solve with the technology, it's important to engage with relevant staff from across the organisation, not just senior managers but those who directly deliver care. Be prepared to discuss any potential changes in job practices, and the implications for people's roles and responsibilities.



Outcomes: Do you all agree what success might look like (and how it can be measured)? What evidence do you have that what you are hoping for may be possible, and are there other people trying to achieve similar things that you could learn from or work with?



Choosing well

The issue

It can be difficult for decision makers to understand and think through what options are available in terms of technological solutions, how to choose who to work with, what might be possible in practice (or not), and what kind of relationship to develop with technology suppliers.

Things to think about



Choosing the best option for you: Ensure your search for the most suitable technology starts broadly and try not to get too focused on one option at the expense of considering other potential solutions. Being systematic and transparent in your search for technology can be helpful, noting positives and negatives associated with each potential technology.



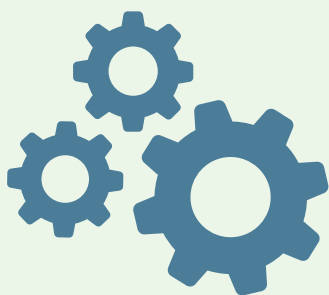
Understanding the risks involved: Does the technology you selected have a proven track-record, or are you working together with a technology provider to develop and test a new way of working? If the technology is new, a pilot to test the technology may be appropriate. Make sure you're clear on who's responsible for what, and how you might share any risks and benefits (including unexpected costs and unanticipated barriers) with the technology provider. Make sure you confirm the level of technical support and training available from the provider to solve issues encountered during installation or implementation.



Equality, diversity and inclusion: How might different groups experience the new technology, and how will you take issues of equality, diversity and inclusion into account?



Assessing readiness: Assess whether the capacity and reliability of your organisation's existing digital infrastructure is sufficient, and be clear what changes might be needed for the technology to work.



Putting into practice

The issue

People often think that implementing new technology is about technical issues – but it's also about cultural issues and new ways of working. Sometimes decisions get made by senior leaders (with the best of intentions) who are quite a long way away from front-line practice, leading to practical and cultural barriers when the new technology is implemented.

Things to think about



People who draw on care and support, and their carers:

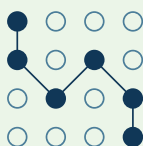
It's important to communicate well with people who draw on care and support (and their carers) about the technology and its implications, including both benefits and challenges. These conversations need to be two-way, and may include concerns over data security and privacy, existing views and opinions of new technology, or the impact of the technology on their lives and homes.



Care staff: You may have begun the process of engaging with staff when defining the issue being addressed. However, if the implementation is to be successful, it's important to engage and consult with the broader workforce – who will likely think of practical issues that might not have been apparent at first. At this stage, it will also be important to discuss concerns that staff may have around new technology.



Training: Ensure you have the right people and skills to implement the new technology on the ground, including project managers, change leaders, and those regularly using the technology. It's important that training and support is provided that accounts for differences in digital literacy within your workforce.



Data: Consider the nature and volume of the data that will be produced. Ensure that all staff are aware of their responsibilities for its management and that appropriate information governance is in place. If new data or insights are going to be generated, who is responsible for acting on these, and are they ready for their new responsibilities? If medical data is going to be collected, are clinical partners engaged to safely use and respond to health data?



Learning what works and doing things differently in future

The issue

If decision makers are clear on what they are trying to achieve through using a technology, then you will be able to evaluate whether a technology has succeeded or failed, and learn from this. Sometimes there is pressure to get a new way of working up and running, and evaluation plans aren't always built in from the start. However, it is important to set up evaluation and learning processes, and share learning with others. If something isn't working, it can be surprising, and so it may be helpful to think through in advance how your organisation might respond to challenges and failures.

Things to think about



Planning an evaluation upfront: It's important to consider how and when you will know that the technology is delivering the expected outcomes as part of an evaluation plan that is established up front. Much of AI-based technology is intended to support preventative care, and so the benefits may take longer to realise. Are you prepared to collect the type of data you'll need to evaluate technology? Are there any early signs that might show you're heading in the right direction, before you'd expect to see longer-term results?



If things don't go as planned: Sometimes technology may not provide the results you were hoping for. In this instance, it's important to understand how you will respond if there are negative experiences or if people become frustrated by what is being implemented. Ultimately, if something is not working and needs to be abandoned, you may want to have a process or criteria in place to support a timely decision.



Planning for the longer term: If you're piloting a new approach, it can be easy to focus only on the pilot. However, if this works (or doesn't work), do you know what you might do next?

Useful links

This guide is just a short series of prompts/questions to help local authorities and care providers think key issues through in advance.

However, here are a lot of organisations providing much more detailed advice, support and further resources. Examples include:

- **ADASS Digital, Communications and Technology** – a community of interest for ADASS members (<http://bit.ly/3YAYuqq>)
- **Carers UK** – information on products and equipment to support carers (<http://bit.ly/3W7hICp>)
- **CIRCLE/Sustainable Care project** – national project looking at the sustainability of social care systems, including the role of technology (with a forthcoming book on international examples) (<http://bit.ly/3G3y5us>)
- **Digital Social Care** – provides advice and support to the sector (<http://bit.ly/3V3SCmF>)
- **Multi-agency advisory service (MAAS) for AI and data-driven technologies** – collaboration between NICE, MHRA, HRA and CQC to support the development and adoption of artificial intelligence and digital technologies in health and social care (<http://bit.ly/3j8BgYB>)
- **NHS Transformation Directorate** – (formerly NHSX) review of adult social care technology and digital skills (<http://bit.ly/3WwdwMi>)
- **The Social Care Institute for Excellence (SCIE)/British Association of Social Workers (BASW)** – collection of resources on digital capabilities for social workers (<http://bit.ly/3W8f5R1>)
- **Skills for Care** – guidance and resources around digital technology in adult social care (<http://bit.ly/3G3Egi7>)
- **TSA** – the industry and advisory body for technology enabled care in the UK (<http://bit.ly/3G4obbQ>)



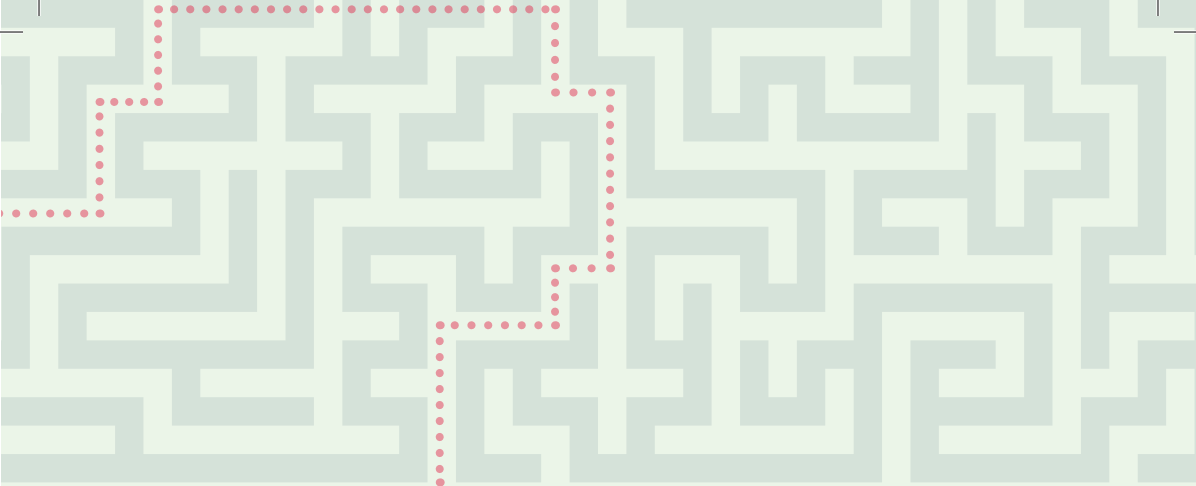


About this study

The **BRACE Rapid Evaluation Centre** (<http://bit.ly/3FLGGAG>) conducted a study on decision making and implementation processes for a particular new and emerging technology (home sensors with AI capabilities) that had been piloted across several social care sites in England. This technology collected data on daily activities from people's homes (e.g. using the kettle, flushing the toilet, getting out of bed, opening the door), using this to understand people's usual routines, and flagging key changes that might be an indication of worsening health or well-being.

The study sought to answer the following questions:

1. How do commissioners and providers decide to adopt new and emerging technology for adult social care? (Decision making)
2. When stakeholders (local authorities and care providers, staff, people who draw on care and support and carers) start to explore the potential of new and emerging technology, what do they hope it will achieve? (Expectations)
3. What is the process for implementing technological innovation? (Implementation)

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4. How is new and emerging technology experienced by people who draw on care and support, carers and care staff? (Early experiences)
 5. What are the broader barriers to and facilitators of the implementation of new and emerging technology in adult social care? (Barriers and facilitators)
 6. How has COVID-19 influenced responses to these questions? (Impact of COVID-19)
 7. How can the process of implementing new technology be improved? (Making improvements)

The study included a rapid review of the literature; interviews with operational leads, decision makers and social care workers across three case study sites; and interviews with technology providers and regulatory bodies.

This study/project is funded by the NIHR Health and Social Care Delivery Research (HSDR) Programme (HSDR16/138/31). The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care.

For more information on this study, please visit:
<https://doi.org/10.3310/hsdr-tr-134314>

