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Occupational therapists need to be involved in developing and evaluating technological solutions to support remote working

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"Occupational therapists need to be involved in developing and evaluating technological solutions to support remote working"

COVID-19 has led to increased remote working for Occupational Therapists and other health and social care professionals. Despite the rapid move to video consultations during COVID, the impact and implications of remote working still needs consideration. Prior to COVID, digitisation was already recognised as essential, given the demands on health and social care (NHS,2019). The NHS long-term plan pledged to make digitally enabled care mainstream within the next decade (NHS,2019). Technological innovation has the potential to improve care quality and

cost savings across health and social care (Maguire et al.,2018). Allied health professionals (AHPs) have been urged to lead digital health innovations and use new technologies for patient benefit (NHS England,2019). Video consultations had already emerged as a service model, with potential for improved efficiency and patient experiences (Greenhalgh,Shaw,et al.,2018).

In 2016 we embarked on a series of projects to explore the use of a remote working software that could be used to undertake home assessments and consultations. This software allowed staff and service-users to interact via a texted or emailed hyperlink. The link allowed staff to communicate via video, control the service-user's camera (e.g. using the flash, taking videos/photos) and make real-time notes. It did not require any software or apps to be downloaded.

Our experiences of adapting a software to support remote home assessments (Read et al,2020), and then consulting patient and public representatives, local health and social care professionals about its potential uses highlighted the importance of influencing the development of such software to meet the needs of staff and service-users. In March 2020 we embarked on our third project; to evaluate and further develop the same software and explore the data security and information governance implications of its use. Occupational therapy, AHP and medical staff had been ready to use the software with patients in different clinical settings and provide feedback. We then intended to us this feedback to inform the software's design. This most recent project launched in early March 2020. However, the restrictions, demands and rapid pace of change associated with the NHS response to the pandemic led to obstacles we were unable to overcome.

Not surprisingly, given the context of COVID-19, front-line staff were under immense strain, providing and managing services. However, most of the staff involved in the project were keen and able to continue given the pressing need to work remotely. However, when staff began trialling the software technical problems became clear which required input from senior NHS IT information technology (IT) personnel. Understandably, given COVID related pressures, the IT resource was being carefully managed. The project team – which included clinical academic occupational therapists, computer scientists and academics - tried to establish a strong case to support the need to allocate IT time to the project. This included letters of support

from the trust's own clinical and research innovation office and two clinical services. However, convincing IT services of the unique selling points of the software, whilst it was still in development, compared to the mainstream remote video consultation platforms the trust had already approved for use during the pandemic remained necessary. These obstacles proved impossible to resolve within the limited timespan of the project and the software was not deployed.

Given this outcome, we reflected on what we as occupational therapists, and others, could learn from this experience. Often reporting of negative or neutral results from technology studies is limited (Greenhalgh et al.,2017) yet there is crucial learning to be gained from such experiences. We hope sharing key lessons learnt can support others wanting to introduce technological innovations into their occupational therapy practice, health and social care organisations.

Key lessons to consider when launching technological innovations

1. Involving key IT professionals, as well as other stakeholders, early in the process is necessary. We effectively engaged clinicians who regarded the software as offering potential benefit. Hindsight indicates that also including IT professionals from the start may have identified technical issues earlier. 'Buying-out' time for such professionals within project budgets may be necessary.

2. Being able to demonstrate a technology's unique selling point, particularly compared with other technologies already commonly used or approved for use within an organisation is essential to obtain organisational 'buy-in'. For example, is there evidence that service users or staff would prefer the approved technology? Have service users and staff views informed the development of the technology? Could the new technology save costs? Could the new technology be more user-friendly and intuitive than current systems?

3. Technology projects are often abandoned or not scaled-up in services. Using evidence-based frameworks can support evaluation and implementation of technological innovations in practice, identifying potential problems and solutions, for example, the 'Non-adoption, Abandonment, Scale-up, Spread,

and Sustainability (NASSS) framework (Greenhalgh et al.,2017;Greenhalgh, Wherton,et al.,2018).

4. Currently, ability to adapt technology project plans swiftly and understand clinical need is essential; having Occupational Therapists as researchers, with established clinical links can facilitate this.

Conclusion

Current RCOT research priorities (Royal College of Occupational Therapists, 2020) highlight the need to ensure person-centred practice, effective working with family, carers and other professionals and evidence of cost-effectiveness. Examining the impact of remote technologies on these aspects of occupational therapy practice is required. Occupational Therapist's involvement in developing technological solutions to the challenges of remote working is vital to ensure solutions support person centred practice. Researching and evaluating of new technologies help us understand the challenges to deploying technological innovations in health and social care services and the essential ingredients for person-centred practice and sustainability. Remote working is now intrinsic to our current and future work, we need to help shape the technology so it meets the needs of the people who use services and the occupational therapy workforce.

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