

Care homes: Data and digital readiness

Lucy Johnston, Senior Research Fellow from Edinburgh Napier University, sets out how care home residents could benefit from data-driven innovative approaches to care

How best to use data and digital technologies in the design and delivery of services to improve the well-being and care of people in Scotland is set out in the [Digital Health & Care Strategy](#). It was published in October 2021, and the [Delivery Plan](#) was a year later in November 2022.

The care home sector has great potential to benefit from this strategy. Care home residents, their families, and the staff caring for them would benefit greatly from the widespread adoption of collaboratively developed digital health and social care technologies and the co-design of innovative approaches to support their well-being and care delivery. Better use of data and digital solutions will not only serve to enhance care services but can also derive economic benefits, reduce staff burden and enable better communication and closer working between health and care professionals (1,2,3).

The COVID-19 pandemic exposed variability in digital capabilities and longstanding data challenges within the care home sector. Paradoxically, it also increased the use of digital tools, data analytics and services to support residents and staff.

The hoped-for data and digital transformation of care homes aimed for within the strategy will stand, or fall, on the extent to which it is buttressed and supported by what happens 'at ground level.'

The scale of data and digital transformation envisioned in the strategy relies on care homes having basic levels of data and digital readiness. The foundations include internet connectivity, electronic data capture and data repurposing for research and innovation.

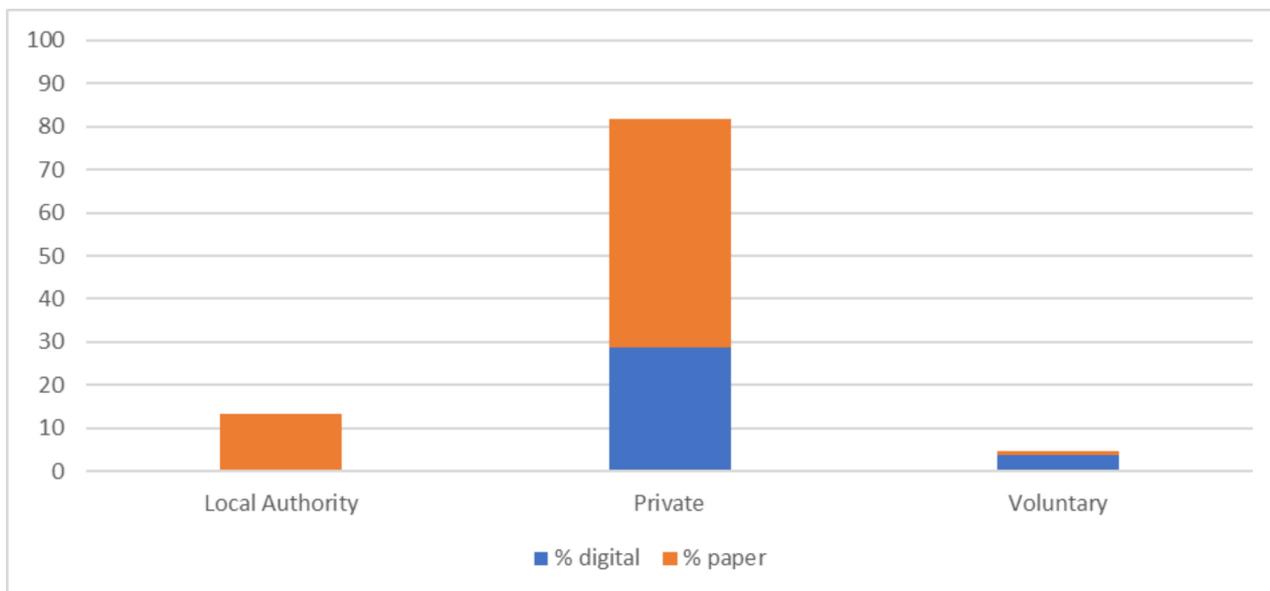


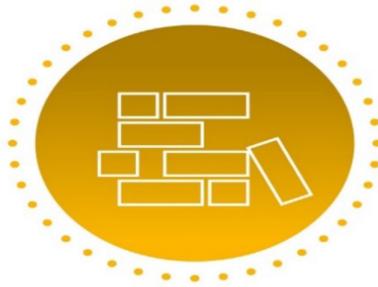
Figure 1: Paper based and digital data collection by sector – 2021

Care homes collect extensive data about their residents, and their care, in multiple ways, for multiple purposes. It is important that there is a balance in what data are collected to support individual resident care and satisfy regulatory requirements while minimising intrusiveness and respecting privacy with appropriate ethical and governance standards. Strong foundations for the collection of individual-level resident data, must consider the rationale for collecting data (which may be to support person-centred care, share information, manage workforce and budget, or) provide evidence to statutory bodies) and the reality of collecting data, including data accuracy and understanding data in context. (4)

Most care homes have less than an optimal internet connection. Poor connectivity and regular service interruptions are experienced by 18%, and a further 40% report service is interrupted at times and long loading times (5). The majority of care homes continue to rely on paper-based systems for capturing and managing information about their individual residents.

For the digital health and care strategy to be of value to care homes and the people who live in them, there is an urgent need first to address the uneven and unstable data and digital foundations.

This profile is based on insights gained from studies undertaken by Lucy Johnston (a member of the [Healthcare Technologies Research Group](#) within the School of Health and Social Care, Edinburgh Napier University) in partnership with Dr Susan D Shenkin of the University of Edinburgh, and with ENRICH Scotland, Care Home Innovation Partnership Lothian and Health Innovation South East Scotland. While our studies have focused on the Scottish context, the issues identified are relevant to digital health and care in care homes across the UK and other countries.



References

1. Hall, A.; Wilson, C.B.; Stanmore, E.; Todd, C. Implementing monitoring technologies in care homes for people with dementia: A qualitative exploration using normalization process theory. *Int. J. Nurs. Stud.* 2017, 72, 60–70.
2. Atherton, I.M.; Lynch, E.; Williams, A.J.; Witham, M.D. Barriers and Solutions to Linking and Using Health and Social Care Data. *Br. J. Soc. Work* 2015, 45, 1614–1622.
3. Care Quality Commission. Enabling Innovation and Adoption in Health and Social Care: Developing a Shared View. February 2021. Available online: https://www.cqc.org.uk/sites/default/files/20210208_InnovationPrinciples_report.pdf (accessed on 9 March 2022).
4. Shenkin, S. D., Johnston, L., Hockley, J., & Henderson, D. A. (in press). Developing a Care Home Data Platform in Scotland: a mixed methods study of data routinely collected in care homes. *Age and Ageing*
5. Johnston, L., Koikkalainen, H., Anderson, L., Lapok, P., Lawson, A., & Shenkin, S. D. (2022). Foundation level barriers to the widespread adoption of digital solutions by care homes: Insights from three Scottish studies. *International Journal of Environmental Research and Public Health*, 19(12), Article 7407. <https://doi.org/10.3390/ijerph19127407>

Please Note: This is a Commercial Profile



This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).