Smarter social housing: User perspectives on technology adoption for healthy homes

The Smartline Project

The central aim of the project is to explore the role of digital technology in improving health, wellbeing and social connectedness in social housing tenants living in low socioeconomic status communities in Cornwall (Figure 1).

Factors influencing adoption and engagement

To explore the following in relation to the home environment monitoring system:

- The central aim of the project is to explore the role of digital technology in improving health, wellbeing and social connectedness in social housing tenants living in low socioeconomic status communities in Cornwall (Figure 1).

The Sensing the Home study

A post home environment is a significant contributor to public health problems; issues include characteristics of the housing stock, the impact of occupant behaviour, and external factors such as climate and ambient air pollution (Sharpe et al. 2018).

Methods

Mixed methods sequential design involving:

- Qualitative interviews with a purposive sample of social housing tenants (n = 20, including high and low dashboard users) and HA staff (n = 7, including operational and executive staff) were used to understand factors influencing technology adoption and user perspectives on feasibility and acceptability.

Conclusions

- High potential for home environment monitoring systems to identify at-risk properties and enable early intervention.
- Generally seen as more useful by the HA rather than tenants (although tenants were happy for data to be collected).
- Co-design with tenants was effective in improving usability.
- Perceived benefits included:
  - Earlier detection of issues (e.g., high humidity, low temperature) and recognising problems before they become crises.
  - Enabling intervention including for vulnerable tenants.
  - Having more information for planning and decision-making, allowing more efficient use of resources.
  - Helping to improve tenant health, wellbeing and quality of life.
- Staff wellbeing benefits – reduced stress and complexity of work.
- Use by other HA was recommended.
- Scalability, integration with existing systems and processes, and cost-effectiveness analysis were seen as important next steps.

References


The Smartline project (SSR/458002) has received £3,740,920 and the Smartline Extension project (SSR/18P02819) is receiving up to £1.3 million from the England European Regional Development Fund as part of the European Structural and Investment Funds Growth Programme 2014-2020. With additional funding of £25k from the Southwest Academic Health Science Network and £200k from Cornwall Council.