

Citation for published version:

Jennifer K. Lynch, Jon Glasby, and Suzanne Robinson, 'If telecare is the answer, what was the question? Storylines, tensions and the unintended consequences of technology-supported care', *Critical Social Policy*, (2018).

DOI:

<https://doi.org/10.1177/0261018318762737>

Document Version:

This is the Accepted Manuscript version.

The version in the University of Hertfordshire Research Archive may differ from the final published version.

Copyright and Reuse:

© 2018 The Author(s). Published by SAGE Publishing.

Content in the UH Research Archive is made available for personal research, educational, and non-commercial purposes only. Unless otherwise stated, all content is protected by copyright, and in the absence of an open license, permissions for further re-use should be sought from the publisher, the author, or other copyright holder.

Enquiries

If you believe this document infringes copyright, please contact Research & Scholarly Communications at rsc@herts.ac.uk

If telecare is the answer, what was the question? Storylines, tensions and the unintended consequences of technology-supported care

Jennifer K. Lynch¹, Jon Glasby & Suzanne Robinson

¹Corresponding author: j.lynch5@herts.ac.uk

Abstract

Telecare—services employing technology to monitor people’s movement, medication and home environment at a distance—has emerged as a key component of global social care and health policies. The relationship between policies about telecare and the experiences and aspirations of service users has been under-interrogated. This paper draws on findings from an organisational case study involving people living with complex conditions using various telecare devices and employs Hajer’s (1995) concept of argumentative discourse analysis to identify two key storylines arguing that telecare improves people’s quality of life and promotes independence. While these storylines point to seemingly logical and incontestable objectives, uncritical policy and practice fails to recognise and prioritise the aspirations of service users, leading to unintended consequences that can deepen people’s isolation and minimise organisational benefits.

Keywords

Discourse analysis; Health technology; Social care; United Kingdom

Technology for transformation: the policy discourse

Over the past 15 years, telecare—the use of alarms and sensors to monitor people’s movement, medication and the home environment at a distance—has emerged as a key component of global social care and health policies in the context of rising demand on services and unprecedented pressures on budgets (Department of Health, 2005, 2006; Dinesen et al., 2016; Fisk, 2003; Parker and Hawley, 2013; Turner and McGee-Lennon, 2013). UK government policy has consistently advocated widespread adoption of telecare services as part of an overarching transformation agenda for health and social care that has focused on preventative models of care and support, early intervention and enabling older people and people with learning disabilities to live independently. Since the Comprehensive Spending Review 2010, this agenda has been implemented alongside austerity measures that have instigated significant reductions in local authorities’ grant income, resulting in £4.6bn being taken out of English councils’ adult social care budgets between 2010 and 2015 (ADASS, 2017; Yeandle, 2016). This has come at a time when predictions about population ageing, increased prevalence of long-term conditions and multi-morbidity (particularly among deprived populations) point to significant impact on future statutory health and care provision (Barnett et al., 2012); while declining fertility and changes to family formation have seen a reduction in numbers of potential caregivers (AKTIVE Consortium, 2013; Office for National Statistics, 2012). Furthermore, there have been growing concerns about the instability of the domiciliary care market, with evidence that providers are handing back care packages to commissioning local authorities (Holmes, 2016). While local authority spending on social care for older people has fallen since 2010, councils have reported difficulties in making savings in learning disability services and expenditure in this area over the same period has increased (LGA, 2014; National Audit Office, 2017). This has put learning disability services’ spending under increased scrutiny in recent years and led to dedicated programmes seeking efficiency savings in the sector (LGA, 2014).

Telecare has therefore been positioned in government policy as a means of supporting people with a range of needs to live at home and self-manage complex health conditions, whilst also providing a solution to reduced budgets and meeting the deficit in care provision (Department of Health, 2005, 2006, 2009a, 2009b, 2009c, 2012b; HM Government, 2010). In 2011, the Department of Health established the Whole System Demonstrator (WSD) randomised controlled trial of telecare and telehealth (Department of Health, 2011). Initial headline findings from the WSD suggested the telehealth intervention for people with diabetes, chronic obstructive pulmonary disease or heart failure (which was distinguished from telecare as equipment designed specifically for monitoring the fluctuating health of people with long term conditions) could substantially reduce mortality and time spent in hospital (Department of Health, 2011). However, the probability of cost-effectiveness was found to be relatively low and the intervention did not improve quality of life or psychological outcomes for patients (Cartwright et al., 2013; Newman et al., 2014; Steventon et al., 2013). The telecare systems—which included automatic and passive monitoring of a person’s functional status as well as their home environment, for example, through pendant alarms and flood detectors—were deemed not to be a cost-effective alternative to usual care and did not lead to reductions in use of other health and social care services, although it was judged that such benefits may only materialise over time (Newman et al., 2014). The evaluation team reflected that the programme had struggled with shifting organisational priorities and the translation of the telecare and telehealth agenda on the ground as it was seen as misaligned with local policies, care practices and staff working practices (Newman et al., 2014). The WSD’s equivocal results did not prevent the Department of Health establishing two further projects (3millionlives and the DALLAS programme) with the aim of increasing the scale and uptake of telecare and telehealth technology.

In this paper we draw on empirical data to highlight the conflict between a prevailing policy discourse—to the effect that telecare improves outcomes, enabling people to live independently—and the experience of local practitioners and service users. Findings suggest that telecare is promoted as meeting a range of individual and organisational needs but that a core aim of maintaining people’s

independence is conceptualised differently by different stakeholders. The simplified narrative of the benefits of telecare offers clarity of message to health and care providers. Stories from practice and service users suggest, however, that this message disingenuously conflates a number of policy goals, which potentially undermines the aspirations of service users, leading to their increased isolation.

Taking the argumentative turn

International research into telecare has focused principally on providing proof of concept (Bensink et al., 2006; Dang et al., 2009; Pare et al., 2007; Polisen et al., 2010); experimental research, particularly employing randomised controlled trials (Brandt et al., 2011; McLean et al., 2013); and small-scale qualitative studies investigating the service user experience (Aceros et al., 2015; Brittain et al., 2010; Mort et al., 2015; Oudshoorn, 2012; Pols, 2012). Less well explored is the relationship between policies about telecare, the claimed benefits of technology in health and social care, and the experiences and aspirations of service users. This paper asks, 'What are the aspirations of telecare?' 'Who is benefiting from these technological interventions?' and 'How are those benefits being realised?' The aim of the study was not to investigate use of a particular telecare device but rather to reveal key stakeholder experiences of the technological turn in social care.

This qualitative research was designed as a single organisational case study involving one local authority-run telecare service that provided a range of telecare devices, including medication dispensers, pendant alarms, falls detectors, passive infrared sensor (PIR) based lighting and teleconsultation software to connect the individual with their (formal or informal) care support network. During the study, the local authority reported deploying over 2,700 telecare devices to people in a 12 month period, meeting a range of needs relating to frailty, learning disability, physical disability, sensory impairment and mental health. The case study site was located in an ethnically diverse, urban borough with high levels of deprivation and significantly worse adult health than the England average. It was selected based on a previous review of its telecare strategy and its willingness

to collaborate in the partnership arrangement stipulated by the UK research council that funded the study.

The study began with an exploratory phase that involved reviewing government policy and local documents on telecare, and spending time at the participating local authority shadowing and observing officers with strategic responsibilities for telecare services, as well as those involved in commissioning and direct provision of telecare. This familiarisation with how systems and services were commissioned, organised and delivered ensured that the context of care was understood and informed the identification of key stakeholders and the recruitment strategy for the data collection phase.

User participants were recruited through purposive sampling based on their use of telecare services and capacity to consent. They were identified through the local authority records and approached via frontline telecare staff and a local user-led charity supporting disabled and older people. Commercial providers of telecare services and local authority employees were identified and recruited on the basis that they had direct experience of supporting people using telecare services and/or had been involved in commissioning the service. Data collection was completed between March 2013 and April 2014. Ethical approval for the research was granted by the University of Birmingham's Humanities and Social Sciences Ethical Review Committee on 12th February 2013 (ref. ERN_11-0598). Interviews were recorded, transcribed and are reported here in a non-attributable way. Interviews lasted between 15 minutes and 1 hour and 15 minutes.

A narrative approach to data collection was adopted for its emphasis on sense-making, what is deemed important to the narrator, and the way meaning is constructed through the consequential linking of events or ideas (Green and Thorogood, 2009; Riessman, 2008). Analysis was organised using Hajer's (1995) argumentative discourse analysis framework. Argumentative discourse analysis (ADA) has rarely been applied to telecare research and was used in response to recent calls for a 'fourth generation' of telecare research that views these technologies through a recursive and critical lens,

and embraces the complexity of 'the organisational, social, political and policy context in which [they] are developed, introduced, supported and used (or not)' (Greenhalgh et al., 2016: 2).

A theoretically-driven approach, ADA investigates why particular understandings of complex policy problems gain dominance while others are discredited. Using two middle-range concepts: storylines and discourse-coalitions, the complexity and multi-interpretability of issues are brought to the fore.

Storylines work metaphorically with multifaceted debates conveyed through simplified narratives, buzzwords and other reductive discursive devices. By referring to these symbols the storyline as a whole is evoked, overcoming fragmentation in the argument and reducing complexity to achieve discursive closure. As particular storylines become accepted by actors, they are utilised more and gain a sense of permanence, becoming tropes that rationalise specific approaches and make a problem appear coherent and solvable (Hajer 1995). Actors will adhere to particular storylines as a result of 'discursive affinities', so that arguments may vary in origin but still have a similar way of conceptualising the world (Hajer 1995). The power of the storyline, therefore, lies in the idea that essentially 'it sounds right' (Hajer, 2006). A discourse-coalition refers to 'a group of actors that, in the context of an identifiable set of practices, share the usage of a particular set of story-lines over a particular period of time' (Hajer, 2006: 70).

Telecare storylines: Tensions and unintended consequences

Narrative interviews (n=23) were conducted with 11 people using telecare. They were 5 women and 6 men; 2 of whom were from a Black, Asian and Minority Ethnic background with the other 9 from a White British or other White background. Three of these were involved with telecare services as older people, 2 were using equipment to support them with their physical disabilities, and 6 were people with learning disabilities (of various ages) using telecare within a supported living environment. Nine local government officers with various responsibilities for telecare provision; and 3 representatives from the telecare industry were also interviewed.

Through Hajer's ADA lens, the narrative of how telecare works for people and what it achieves can be understood as a discourse-coalition encompassing a number of storylines that may have multiple interpretations but nevertheless achieve a coherent account of what is being discussed. Identification of these storylines shows how the telecare discourse is being interpreted by different actors through (and within) different practices. Data analysis generated two storylines – the better outcomes storyline and the independence storyline.

The Better Outcomes Storyline

Government papers on telecare have frequently made claims that the use of technology will result in better outcomes for individuals, giving them greater control over how they manage their needs; and improving their quality of life (Department of Health, 2005, 2009c, 2010, 2012a, 2013, 2015). There has also been a policy tendency to frame telecare as a panacea for the multifaceted challenges facing health and social care:

Telecare has huge potential to support a diverse range of individuals to live at home. It can also give carers more personal freedom, meet potential shortfalls in the workforce and complement the work of clinicians and social care and housing providers to achieve outcomes that improve the health and well-being of people using services.

(Department of Health, 2005: 4)

In this study, interviews with professionals often drew attention to the contradictory way in which people talked about the aims of the service and what telecare can accomplish for the different actors. Andrea, a senior social worker in the community learning disability team (CLDT), identified a key benefit of telecare as reducing the dependence of service users with learning disabilities on care staff. This could be achieved, she reported, by replacing some contact hours with teleconsultation software, which she believed increased people's self-esteem giving them choice and control over when they contacted staff. In highlighting the importance of making this change in cost savings terms, however,

Andrea seemed uncertain about whether the critical outcome of greater independence was achieved or desirable for service users:

You know, the efficiencies are... beneficial to [the council]. It's not always beneficial to the service user, unless they get irritated by the one to one [support]...but it affects the cost. If it's not needed, why are we paying for it? And that is the issue. Telecare works in both ways. One, it can support to reduce the dependence which has been created with service users. Secondly, it enables efficiencies to be made within the local authority.

(Andrea, CLDT)

Andrea also appeared conflicted in her narrative—later favouring the discourse of person-centred care over the language of efficiency savings:

...Because the service user is key in all of this, you know. And the first thing to target is, you know, we need to look at their needs, their wants. The efficiencies come later. Our priority is always the service user... It very much depends on the individual.

(Andrea, CLDT)

At this point Andrea's response did not present a juxtaposition between what the service user is deemed to 'need' and what they might 'want', they are synonymous and represented as a central service objective. Other professionals saw an alignment between what service users wanted and how telecare (against a backdrop of limited funding) could support them in these desires:

There is less funding to have people physically present with other people the majority of the time. And a lot of people don't want that either; they don't want someone who's there checking up on them all the time.

(Meena, Telecare Assessor)

So if we can keep people at home within their own communities, within their own support networks, it improves their quality of life and level of functioning, and the feedback that we get is that, that's what people want.

(Julie, Senior Manager)

Professionals did not always speak in terms of better outcomes for service users—they also painted a picture of competing considerations that impacted on the provision of telecare. The extracts below demonstrate (underlined) some of those organisational priorities and how telecare was seen as assisting the service in reducing demand both now and in the future:

Instead of trying to think that we've got to get everybody on board with [telecare], we want the customer journey to be through prevention first, so that we make sure that we can do everything we can from a prevention perspective before it hits a formal care management route in the future.

(Julie, Senior Manager)

With the [telecare] we can actually make proper service re-engineering, redesign, in terms of service provision, by using technologies. So I suppose the vision is that obviously we want to be the best.

(Iain, Telecare Service Manager)

The focus on services users' 'wants' noticeably shifted in the discussion towards the professional language of assessed needs and assessments for services. In this context, the needs and wants were no longer synonymous and this led to very different judgements about what social care and health services should be aspiring to. Financial concerns came into play, highlighting the impact of wider funding issues, and seemingly undermining any previous concern for the aspirations of service users:

A review was normally: sit down, cup of tea, 'How are you getting on?' 'Is everything alright?' 'Have you got enough money in your budget?' Now it will be: 'Actually, let's reassess you, let's see what you actually need now, you don't need this or you might need this extra or...' So we have to look at it on a financial basis, where social workers have never really looked at finances before. It's more about needs and you know, people were never critically reviewed, so we didn't know whether they were having more money than they needed.

(Iain, Telecare Manager)

The better outcomes storyline represents a discursive affinity between the arguments of 'telecare improves outcomes for service users' and 'telecare saves the council money'. The assumptions underpinning these two arguments are never fully clarified in the interviews and applying Hajer's ADA framework shows how the complexity of the debate is often reduced to key words or phrases – such as 'maximising choice, control and independence' or 'making efficiencies' – that in reality are abstract or subject to multiple interpretations and emphases. There is an attempt to represent the broader arguments in a coherent way so as to provide discursive closure. One illustrative example is in variations on the phrase 'staying at home', which is often used as a representation of the overarching social care strategy employing a raft of measures and activities to keep people out of formal or institutionalised care. This phrase also has an enthymematic quality, meaning that there is a taken-for-granted assumption that people remaining in their own homes is always the desirable outcome for both the individual concerned and the local authority. Identifying discursive affinities explains how different arguments can be presented as if they belong together. Indeed, participants in this study who referred to the 'telecare improves outcomes for service users' and 'telecare saves the council money' arguments sometimes portrayed them as two sides of the same coin. Iain and Nick's narratives of what telecare achieves demonstrate this:

So our universal offer is this: don't worry, you don't need to pay for [telecare] because we know we're saving money on you by you staying at home and staying away from us, in the nicest possible way...So it's about making sure the solution fits the person and their needs, as part of an overall integrated package. But I suppose there's a financial element which is, it's a lot higher cost to keep people in residential care, and in nursing care... It's all about how we deliver services more effectively and efficiently. And if we can access somebody in the home remotely as well, then we're saving money elsewhere.

(Iain, Telecare Manager)

The way in which the service succeeds is by helping people stay independent for longer...helping them manage their independence, they're able to live safely at home for longer. Therefore, they don't need things like residential care, they need less domiciliary care, they need less carer care from family and friends. And so the knock on impact of having an improved effect on the client is that you're not paying for that additional care.

(Nick, Telecare industry)

The argument that telecare can support local authorities to find financial savings in social care provision at a time of increasing funding crisis is crucial to the discourse. It is seen as compatible with and linked to the argument for better outcomes for service users, and the collapsing of differentiation between these arguments (underlined above) is evident. This sense of coherence is proffered despite the continued presence nationally of uncertainty about claims that telecare can save money (Steventon et al., 2013) and scepticism from frontline staff about such testimony:

I'm not sure necessarily about the figures but I do think it is being drummed into people that telecare can be used to make cost savings.

(Meena, Telecare Assessor)

As a budget holder, I don't see that assistive technology necessarily reduces what a homecare package cost would be.

(Rachel, Social Worker)

There was an evident confusion about whether or not telecare creates efficiencies and the extent to which outcomes for service users are prioritised over other considerations. Yet, the better outcomes storyline remains intact and dominant within the telecare discourse-coalition.

The Independence Storyline

The potential of technology to support independence is enormous. It offers one way to break the downward spiral that all too often leads to dependency, wasted lives and higher public expenditure.

(Audit Commission, 2004: 2)

If the better outcomes storyline represents an amalgamation of different, and sometimes competing, arguments brought together in a reasonable and compelling message about the positive outcomes resulting from telecare, the independence storyline indicates the need to question the aspirational nature of these intended outcomes for service users. How independence as the desired outcome of telecare was understood by study participants varied. Key phrases, such as 'remain at home' and 'feel in control' were employed by interviewees to convey a coherent message about independence, although the details of these arguments were left ambiguous and subject to interpretation. Most people spoke about independence at some point in their interview, but the contexts within which it was referred were subtly different. When discussing 3millionlives – the government-led campaign to increase access to telehealth nationwide – the manager of the telecare service was keen to note its shortcomings:

As far as I'm concerned, 3millionlives is about using technology, or should be, using technology to provide services in a better way, enhance people's experience of those services, allow them to self-manage conditions, to remain safe at home, independent, less reliant on services. That's not the way 3millionlives has panned out.'

(Iain, Telecare Manager)

Iain's linking of independence to self-management, staying at home (and being safe there), and becoming less reliant on services seems consistent with defining independence as the opposite of dependence, and specifically dependency on health and social care services. Telecare can thus be used to reinforce this definition by enabling people to become independent of state support. This view invokes a familiar rhetoric of professional conceptions of disability and impairment that are preoccupied with people's clinically-assessed, functional limitations rather than considering environmental factors that create social oppression and discrimination (Oliver, 1990; White et al., 2010):

[With telecare] you need less actual formal care staff, but that you can still maintain an appropriate response that's less obtrusive, more promoting people's independence and more enabling them to live and function as the rest of us would want to.

(Julie, Senior Manager)

Such an assessment emphasises idealised notions of independent adulthood and contrasts with a social model of disability that argues it is negative social attitudes and infantilising institutional practices that result in disabled people's enforced dependency and segregation from mainstream opportunities (Priestley, 2000). It also raises recurring concerns about the policy trend towards self-management including a level of responsabilisation that presumes the autonomy and empowerment of service users (Schermer, 2009; Struijs and Have, 2013).

Viewed through the lens of Hager's ADA framework, a discursive affinity is apparent between the arguments of 'promoting independence' and 'reducing dependency on the state'. Nowhere in the interviews is this discursive affinity more apparent than in the discussion of people with learning disabilities. By contrast with practice in older people's services, the community learning disability team (CLDT) had introduced telecare into care packages as a direct substitution for care staff hours. Many of the service users had care packages including up to 24 hours of one-to-one time with support workers and the service was trying to reduce its budget deficit in line with other measures to mitigate the central government funding shortfall. There was also a widely-held view that a 'culture of dependency' had developed in CLDT, with risk-averse social workers and influential care providers conspiring to ensure service users were monitored at all times, the result being that individuals were increasingly 'de-skilled':

Particularly in the sphere of learning disabilities, where, over a period of time, a number of clients with learning disabilities have been given these big packages of care, sometimes where there is the potential for them to be independent and then in turn, the person has become dependent on having that level of support. And now in times where cuts are to be made, there's that recognising of maybe that person can do particular tasks independently, and now we're having to sort of intervene and look at where we can use telecare to assist them in performing those tasks safely and independently.

(Meena, Telecare Assessor)

I felt that the culture within [the council] specifically had not enabled service users to reach their full potential, had, in a way, disabled them from, and lost a lot of their skills. And I feel that...because what providers were mainly doing is they'd give us an argument, such as, he's too anxious to be left on his own. So my role was to look at what telecare equipment can meet that anxiety.

(Andrea, CLDT)

The learning disability narrative firmly correlates independence with a reduction in contact time and an increase in time being spent doing things alone. This was exemplified when teleconsultation software was issued to people as a safety net following cuts in support staff hours. The local authority deemed that these service users were capable of carrying out more activities of daily living without support but may require reassurance from time to time. This could be provided virtually by a video call to the community alarm service. In reality, however, 5 of the 6 study participants with learning disabilities were unable to demonstrate to the researcher how they would make such a call. Yet lack of use of the service was interpreted by practitioners as evidence that their clients were managing without one to one contact.

Responses from service users suggested that cuts in contact hours had caused anxiety (which was not being allayed by the telecare) and increased the potential for isolation. One participant with learning disabilities, Harry, was particularly concerned about having an epileptic fit whilst alone:

[The carer] said that I hadn't had a fit since October last year. But at times, as I've told her, I feel as if I've had them but nobody's here to mark them in the book... When I'm like that, I don't think on what to do [to call for help]... I feel confused and everything... tomorrow, I've got no staff on at all. And it makes me feel uneasy to go out.

(Harry)

A recurrent theme from practitioners was one that conflated independence with not needing input from statutory services for specific tasks, for example associating it with the ability to manage medication:

I feel that telecare can be used to promote that independence and enable that person to feel in control again of their own life, they manage their own medication [with an automatic pill

dispenser]. Yes, someone may have to fill a dispenser for them but ultimately, day to day, they are able to manage their own medication without someone having to come in and check, or without them having to be at home for certain periods of time.

(Meena, Telecare Assessor)

A number of older people interviewed spoke about independence in line with the professional perspective by framing it in terms of how they approached the specific challenges of their physical impairments:

[Telecare] makes life a lot easier and a bit more independent, so you haven't got to ask someone to come and open the jar for you.

(Margaret)

I like my independence. My daughter said, can I take your wheelchair? I said, no, thank you, I'll take my frame [laugh].

(Zainub)

I'm independent, that's my trouble... And that's the wife's trouble as well... What we can't do, we don't ask anything. We manage it one way or another. I've never asked anybody for anything in my life, until just recently.

(Gordon)

There was also acknowledgement that their 'independence' was to reduce demand on statutory services and not be a burden:

If people can get out and about, and keep their independence, that's a quality of life and less pressure on the social services and the hospitals, and all that, you know.

(Arthur)

These experiences contrasted with knowing what a fit and healthy early adulthood felt like and, as Gordon stated, they were not in the habit of asking for help. Their physical deterioration, therefore, was at the forefront of their minds when considering their independence. The accounts were of adaptation and managing within limitations. With reference to Hajer's theory of storylines their narratives were framed to fit with the social order. Actors can only interpret discourse based on the narratives available to them and if these respondents had only been exposed to the independence storyline through contact with health and social care professionals. An alternative rights-based conception may be unfamiliar to them but could offer them the 'argumentative ammunition' to empower their position (Hajer, 1995: 64). This was evident when participants articulated a richer conception of independence. One that included pursuing their own interests, taking risks and unimpeded decision-making:

I can't stop going down there in the garden [even though] it wears me out. Because if I stop doing what I normally did all my life, or trying to do it, put it that way, I'd just curl up and die. I've got to have something to keep me going.

(Gordon)

Independence [is] being able to go where I want to go and do what I want to do...being able to carry on doing household things, you know, like cooking a meal. Let me do it. It might take me ten minutes longer to do it and I'm hanging onto the unit like sort of thing...

(Margaret)

I can just watch what I want on telly. And I haven't got to, like...when I'm on my own, I haven't got to worry because I haven't got, like, anybody telling me what to do.

(Suzie)

It is difficult to see, however, what telecare contributes to the pursuit of independence understood like this. Perhaps a more realistic aim would be to embrace the assessment of some telecare users and professionals that technology simply 'makes life a bit easier' (Lloyd).

I've found with the different aids, it makes life a little bit easier. It does... That's it in a nutshell...
Because being a disabled person, it's a hard life. It is.

(Margaret)

I mean, that's the main aim of the game, you know, the reason why the equipment is out there is to make people's lives easier, to hopefully stop them from struggling.

(Vicky, Telecare Assessor)

In his interview, Lloyd – a physically disabled man with multiple co-morbidities – described how telecare equipment could have a positive bearing on his quality of life, for example with a door entry and video system that allowed him to control who entered the house; and remote-controlled lighting, which improved his sleep when night-time carers forgot to switch the lights off as they left. This technology undoubtedly improved Lloyd's experiences and to an extent could be seen to increase his independence but it did not result in the kind of independence and quality of life consistent with other actors' responses or the grand claims of telecare policy.

Analysis of the narratives showed that where the contribution of telecare was articulated as creating independence this was harnessed to ideas of reducing dependence on statutory services. This was most evident in both practitioner accounts and some users. These accounts were intertwined with other narratives that drew on policy and from the users a more pragmatic understanding of what independence using telecare can and should be. The next section discusses the findings' implications for how telecare policy is disseminated and repeated.

Conclusion

The dominant policy discourse has reduced multifarious research findings to a seemingly coherent argument in favour of investment in technology to achieve user independence and cost reductions to cash-strapped services (Department of Health, 2011). Linked to this is the focus of much of the technical and experimental research on telecare attesting to its potential and impact. A focus on storylines exposes the underlying complexity of interpretations of this ostensibly simple and logical message. This study has instead considered how the presentation of telecare and its achievements are interpreted by those who support its implementation and use it. By taking an argumentative discourse approach telecare can be understood as a discourse-coalition looking to assert power and domination in a wider debate on the future of social care and health policy.

The findings from this study are novel and important in two ways. First they underline the difficulties of retaining an uncritical policy discourse that innovations such as telecare will achieve improved outcomes for people with a range of health and social care needs at less cost; and that the goals of service users can remain central during a continuous period of austerity and ongoing reductions in public sector spending. Such a narrative gives clarity and confidence to professionals that they are doing the right thing to support service users and address organisational pressures. The storylines presented here show that while the aspirations of service users are initially at the forefront of professionals' consideration, thinking quickly turns to organisational issues, particularly cost savings. This is not to assert that managing resources efficiently should not be an objective of health and social care providers. Rather it is to make explicit that while cost-saving is a public sector goal it is naive for health and social care providers to assume that policy respects both public and private perspectives simultaneously. These findings therefore extend the telecare debate and the findings of the WSD evaluation team by considering who benefits from this technology. It goes beyond an understanding of 'what works' to 'what are we trying to achieve?' and 'how are those achievements assessed?'

Secondly, the findings point to the unintended consequences for users when policies on telecare fail to take into account that indicators of the benefits of telecare aspirations; of independence, remaining at home, achieving self-management and feeling in control remain unexamined by adherents. These phrases have been invoked as rationalisation for local telecare practice but they are far from benign as they signal a particular understanding of, for example, the responsabilisation involved in self-management and what it means to be independent. In this study, independence was sometimes presented as a matter of institutions delegating tasks—like taking medication—to patients and treating that transfer of responsibilities as a gain in ‘independence’. Yet taking on more responsibilities paradoxically can interfere with independence. Especially if it requires the changing of one’s routine and condition management and relationships with care providers. Nor can an aim to be helped less by the state be automatically seen as the same as the pursuit of independence that sees an older person recovering a previous life – enjoying the same interests, taking risks, not informing others of one’s plans, and so on.

The potential impact of telecare as an agent that can deepen a person’s isolation has been noted by others (Percival and Hanson, 2006; Perry et al., 2009; Sorell and Draper, 2012) and was dramatically illustrated in this study. Using (or not using) telecare for some either led to reduced contact with people or receiving less support. Highlighted in this study was the striking failure to consider a different, equally important and grounded but less dramatic storyline that, for some users, telecare is making life easier. Here telecare is an aid and an enabler in situations of ongoing difficulty. It is not seen as the panacea the policy discourse would insist on and practitioners partially reinforce. Making life easier provides an alternative to the interpretation that striving for independence is morally right and appropriate even when that is difficult, lonely and leads to less quality of life.

While the aspirations of service users are prioritised in policy documents, the findings from this study suggest a troubling discrepancy between this narrative and the narratives of experience at the frontline of service provision. Implicit in the telecare storylines are assumptions about the choice and

control service users could exercise both in response to being offered telecare and as a result of engaging with the technology. The better outcomes storyline draws attention to the number of different priorities considered by telecare stakeholders from a range of standpoints and shows what ultimately dominates in the collective narrative is the reduction of cost and demand. A more nuanced account that recognises the cost implications but also judges effectiveness in terms of what matters to the user is, we suggest more likely to gain traction and encourage perseverance when telecare innovation falters.

The limitations of this study are its size, both in terms of it constituting a small study located in one area of England and in it involving a small group of actors. Future research in this area is needed to consider how telecare as an enabler of independence can be meaningfully operationalised alongside the imperative to make best use of limited resources. This requires a more sophisticated engagement with how service users frame what is important to them and how existing approaches to the co-design of technology (Wherton et al., 2015) can contribute to our understanding of what are meaningful outcomes for different groups of people.

Our argumentative discourse approach has provided a different account to one that solely calls attention to the known and well documented dissonance between policy rhetoric and implementation (Mort et al., 2013; Rogers et al., 2011). This detailed analysis has demonstrated how the different storylines are held in tension and the potential for unintended negative consequences for service users. It argues that unless these competing views of how and why telecare works are critically considered, challenged and modified there is a risk that despite mounting evidence to the contrary (Gibson et al., 2015; Hirani et al., 2014; Newman et al., 2014; Steventon et al., 2013; Sugarhood et al., 2014) neither the organisations that commission telecare nor the users that receive it will benefit.

Acknowledgements

We are grateful to our research participants for their commitment and insights. We would also like to thank Prof Claire Goodman and Prof Tom Sorell for comments on earlier drafts.

Funding

This research was funded by an ESRC CASE doctoral studentship to Jennifer K. Lynch (ref. 1464328).

REFERENCES

- Aceros JC, Pols J and Domènech M (2015) Where is grandma? Home telecare, good aging and the domestication of later life. *Technological Forecasting and Social Change* 93: 102–111.
- ADASS (2017) ADASS representation to HM Treasury ahead of the budget. *The Association of Directors of Adult Social Services*. Available from: <https://www.adass.org.uk/budget-2017-representation-by-the-association-of-directors-of-adult-social-services> (accessed 29 December 2017).
- AKTIVE Consortium (2013) The Role of Telecare in meeting the Care Needs of Older People: themes, debates and perspectives in the literature on ageing and technology. *AKTIVE Research Report 1*. Available from: www.aktive.org.uk/publications.html.
- Audit Commission (2004) *Assistive technology: independence and well-being*. London: Audit Commission.
- Barnett K, Mercer SW, Norbury M, et al. (2012) Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. *The Lancet* 380(9836): 37–43. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S0140673612602402>.
- Bensink M, Hailey D and Wootton R (2006) A systematic review of successes and failures in home telehealth: preliminary results. *Journal of Telemedicine and Telecare* 12(7): 8–16. Available from: <http://jtt.rsmjournals.com/cgi/doi/10.1258/135763306779380174> (accessed 9 June 2014).
- Brandt Å, Samuelsson K, Töytäri O, et al. (2011) Activity and participation, quality of life and user satisfaction outcomes of environmental control systems and smart home technology: a systematic review. *Disability and Rehabilitation: Assistive Technology* 6(3): 189–206. Available from: <http://www.tandfonline.com/doi/full/10.3109/17483107.2010.532286>.

Brittain K, Corner L, Robinson L, et al. (2010) Ageing in place and technologies of place: the lived experience of people with dementia in changing social, physical and technological environments. *Sociology of Health & Illness* 32(2): 272–287. Available from: <http://doi.wiley.com/10.1111/j.1467-9566.2009.01203.x>.

Cartwright M, Hirani SP, Rixon L, et al. (2013) Effect of telehealth on quality of life and psychological outcomes over 12 months (Whole Systems Demonstrator telehealth questionnaire study): nested study of patient reported outcomes in a pragmatic, cluster randomised controlled trial. *BMJ* 346(feb26 2): f653–f653. Available from: <http://www.bmj.com/cgi/doi/10.1136/bmj.f653> (accessed 29 May 2014).

Dang S, Dimmick S and Kelkar G (2009) Evaluating the Evidence Base for the Use of Home Telehealth Remote Monitoring in Elderly with Heart Failure. *Telemedicine and e-Health* 15(8): 783–796. Available from: <http://www.liebertonline.com/doi/abs/10.1089/tmj.2009.0028> (accessed 9 June 2014).

Department of Health (2005) *Building Telecare in England*. London.

Department of Health (2006) *Our health, our care, our say: a new direction for community services (white paper)-briefing*. London. Available from: http://webarchive.nationalarchives.gov.uk/+/dh.gov.uk/en/publicationsandstatistics/publications/publicationspolicyandguidance/dh_4127453.

Department of Health (2009a) *Departmental report 2009*. London: Stationery Office.

Department of Health (2009b) *Shaping the future of care together*. Norwich: TSO.

Department of Health (2009c) *Transforming Adult Social Care*. Crown.

Department of Health (2010) *Building the national care service*. Norwich: Stationery Office.

Department of Health (2011) *Whole System Demonstrator Programme. Headline Findings*. London.

Department of Health (2012a) *Caring for our future: reforming care and support*. London: The Stationery Office.

Department of Health (2012b) Concordat between the Department of Health and the telehealth and telecare industry. Crown.

Department of Health (2013) *The Mandate. A mandate from the Government to the NHS Commissioning Board: April 2013 to March 2015*. London.

Department of Health (2015) *2010 to 2015 government policy: long term health conditions - GOV.UK*. London. Available from: <https://www.gov.uk/government/publications/2010-to-2015-government-policy-long-term-health-conditions/2010-to-2015-government-policy-long-term-health-conditions> (accessed 26 March 2017).

Dinesen B, Nonnecke B, Lindeman D, et al. (2016) Personalized Telehealth in the Future: A Global Research Agenda. *Journal of Medical Internet Research* 18(3): e53. Available from: <http://www.jmir.org/2016/3/e53/>.

Fisk MJ (2003) *Social alarms to telecare: older people's services in transition*. Bristol, UK: Policy Press.

Gibson G, Dickinson C, Brittain K, et al. (2015) The everyday use of assistive technology by people with dementia and their family carers: a qualitative study. *BMC Geriatrics* 15(1): 89. Available from: <http://bmgeriatr.biomedcentral.com/articles/10.1186/s12877-015-0091-3>.

Green J and Thorogood N (2009) *Qualitative methods for health research*. Los Angeles: SAGE.

Greenhalgh T, Shaw S, Wherton J, et al. (2016) SCALS: a fourth-generation study of assisted living technologies in their organisational, social, political and policy context. *BMJ Open* 6(2): e010208. Available from: <http://bmjopen.bmj.com/lookup/doi/10.1136/bmjopen-2015-010208>.

Hajer MA (1995) *The politics of environmental discourse ecological modernization and the policy*

process. Oxford; New York: Clarendon Press ; Oxford University Press. Available from:
<http://site.ebrary.com/id/10274625> (accessed 27 May 2014).

Hajer MA (2006) Doing discourse analysis: coalitions, practices, meaning. In: van den Brink M and Metze T (eds), *Words matter in policy and planning: discourse theory and method in the social sciences*, Netherlands geographical studies, Utrecht: Koninklijk Nederlands Aardrijkskundig Genootschap : Netherlands Graduate School of Urban and Regional Research, pp. 13–20.

Hirani SP, Beynon M, Cartwright M, et al. (2014) The effect of telecare on the quality of life and psychological well-being of elderly recipients of social care over a 12-month period: the Whole Systems Demonstrator cluster randomised trial. *Age and Ageing* 43(3): 334–341. Available from: <http://www.ageing.oxfordjournals.org/cgi/doi/10.1093/ageing/aft185> (accessed 25 April 2015).

HM Government (2010) Building the National Care Service. Crown.

Holmes J (2016) *An Overview of the Domiciliary Care Market in the United Kingdom*. Available from: <https://www.ukhca.co.uk/pdfs/DomiciliaryCareMarketOverview2015.pdf> (accessed 29 December 2017).

LGA (2014) *Learning Disability Services Efficiency Project. Delivering savings in learning disability services*. Available from: <https://www.local.gov.uk/sites/default/files/documents/learning-disability-servi-fcb.pdf> (accessed 29 December 2017).

McLean S, Sheikh A, Cresswell K, et al. (2013) The Impact of Telehealthcare on the Quality and Safety of Care: A Systematic Overview. Lovis C (ed.), *PLoS ONE* 8(8): e71238. Available from: <http://dx.plos.org/10.1371/journal.pone.0071238>.

Mort M, Roberts C and Callén B (2013) Ageing with telecare: care or coercion in austerity?: Ageing with telecare. *Sociology of Health & Illness* 35(6): 799–812. Available from:

<http://doi.wiley.com/10.1111/j.1467-9566.2012.01530.x> (accessed 13 November 2014).

Mort M, Roberts C, Pols J, et al. (2015) Ethical implications of home telecare for older people: a framework derived from a multisited participative study. *Health Expectations* 18(3): 438–449. Available from: <http://doi.wiley.com/10.1111/hex.12109>.

National Audit Office (2017) Local support for people with a learning disability. *Report by the Comptroller and Auditor General*. Available from: <https://www.nao.org.uk/wp-content/uploads/2017/03/Local-support-for-people-with-a-learning-disability.pdf> (accessed 29 December 2017).

Newman SP, Bardsley M, Barlow J, et al. (2014) *The Whole System Demonstrator Evaluation of Telehealth and Telecare. Final Report*. London. Available from: http://www.city.ac.uk/__data/assets/pdf_file/0004/243067/WSD_report_Final_27th_20Aug.PDF (accessed 20 March 2015).

Office for National Statistics (2012) *Population Ageing in the United Kingdom, its Constituent Countries and the European Union*. London. Available from: <http://www.ons.gov.uk/ons/rel/mortality-ageing/focus-on-older-people/population-ageing-in-the-united-kingdom-and-europe/rpt-age-uk-eu.html> (accessed 23 April 2015).

Oliver M (1990) *The Politics of Disablement*. London: Palgrave Macmillan.

Oudshoorn N (2012) How places matter: Telecare technologies and the changing spatial dimensions of healthcare. *Social Studies of Science* 42(1): 121–142. Available from: <http://sss.sagepub.com/cgi/doi/10.1177/0306312711431817> (accessed 29 May 2014).

Pare G, Jaana M and Sicotte C (2007) Systematic Review of Home Telemonitoring for Chronic Diseases: The Evidence Base. *Journal of the American Medical Informatics Association* 14(3): 269–277. Available from: <http://jamia.oxfordjournals.org/cgi/doi/10.1197/jamia.M2270>

(accessed 26 April 2015).

Parker SG and Hawley MS (2013) Telecare for an ageing population? *Age and Ageing* 42(4): 424–425.

Available from: <http://www.ageing.oxfordjournals.org/cgi/doi/10.1093/ageing/aft056>

(accessed 22 April 2015).

Percival J and Hanson J (2006) Big brother or brave new world? Telecare and its implications for older people's independence and social inclusion. *Critical Social Policy* 26(4): 888–909.

Available from: <http://csp.sagepub.com/cgi/doi/10.1177/0261018306068480> (accessed 6 November 2014).

Perry J, Beyer S and Holm S (2009) Assistive technology, telecare and people with intellectual disabilities: ethical considerations. *Journal of Medical Ethics* 35(2): 81–86. Available from:

<http://jme.bmj.com/content/35/2/81.short> (accessed 28 November 2013).

Polisena J, Tran K, Cimon K, et al. (2010) Home telehealth for chronic obstructive pulmonary disease: a systematic review and meta-analysis. *Journal of Telemedicine and Telecare* 16(3): 120–127.

Available from: <http://jtt.rsmjournals.com/cgi/doi/10.1258/jtt.2009.090812> (accessed 9 June 2014).

Pols J (2012) *Care at a distance: on the closeness of technology*. Care & Welfare, Amsterdam:

Amsterdam University Press.

Priestley M (2000) Adults only: Disability, social policy and the life course. *Journal of Social Policy* 29(3): 421–439.

Riessman CK (2008) *Narrative methods for the Human Sciences*. *Narrative methods for the human sciences*, Los Angeles: Sage Publications. Available from:

http://opac.rero.ch/get_bib_record.cgi?db=ne&rero_id=R004646140.

Rogers A, Kirk S, Gately C, et al. (2011) Established users and the making of telecare work in long

term condition management: Implications for health policy. *Social Science & Medicine* 72(7): 1077–1084. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S0277953611000748> (accessed 9 November 2014).

Schermer M (2009) Telecare and self-management: opportunity to change the paradigm? *Journal of Medical Ethics* 35(11): 688–691. Available from: <http://jme.bmj.com/cgi/doi/10.1136/jme.2009.030973> (accessed 6 November 2014).

Sorell T and Draper H (2012) Telecare, Surveillance, and the Welfare State. *The American Journal of Bioethics* 12(9): 36–44. Available from: <http://www.tandfonline.com/doi/abs/10.1080/15265161.2012.699137> (accessed 8 June 2014).

Steventon A, Bardsley M, Billings J, et al. (2013) Effect of telecare on use of health and social care services: findings from the Whole Systems Demonstrator cluster randomised trial. *Age and Ageing* 42(4): 501–508. Available from: <http://ageing.oxfordjournals.org/content/42/4/501.short> (accessed 14 November 2013).

Struijs A and Have M ten (2013) Healthy Aging and Personal Responsibility. In: Schermer M and Pinxten W (eds), Dordrecht: Springer Netherlands, pp. 239–249. Available from: http://www.springerlink.com/index/10.1007/978-94-007-3870-6_18 (accessed 2 February 2015).

Sugarhood P, Wherton J, Procter R, et al. (2014) Technology as system innovation: a key informant interview study of the application of the diffusion of innovation model to telecare. *Disability and Rehabilitation: Assistive Technology* 9(1): 79–87. Available from: <http://www.tandfonline.com/doi/full/10.3109/17483107.2013.823573>.

Turner K and McGee-Lennon M (2013) Advances in telecare over the past 10 years. *Smart Homecare Technology and TeleHealth*: 21. Available from: <http://www.dovepress.com/advances-in-telecare-over-the-past-10-years-peer-reviewed-article-SHTT> (accessed 18 November 2013).

Wherton J, Sugarhood P, Procter R, et al. (2015) Co-production in practice: how people with assisted living needs can help design and evolve technologies and services. *Implement Sci* 10.

White GW, Simpson JL, Gonda C, et al. (2010) Moving From Independence to Interdependence: A Conceptual Model for Better Understanding Community Participation of Centers for Independent Living Consumers. *Journal of Disability Policy Studies*. Available from: <http://dps.sagepub.com/cgi/doi/10.1177/1044207309350561> (accessed 21 February 2015).

Yeandle S (2016) From Provider to Enabler of Care? Reconfiguring Local Authority Support for Older People and Carers in Leeds, 2008 to 2013. *Journal of Social Service Research* 42(2): 218–232. Available from: <http://www.tandfonline.com/action/journalInformation?journalCode=wssr20> (accessed 18 December 2017).

Author biographies

Jennifer K. Lynch is a postdoctoral research fellow at the Centre for Research in Public Health and Community Care, University of Hertfordshire. Her research centres on the use of assistive technology to support older people with complex health conditions. Jennifer's current early career fellowship focuses particularly on support for people living with dementia and their carers. She leads a case study on the Wellcome Trust/NIHR funded Studies in Co-creating Assisted Living Solutions (SCALS) programme looking at organisational barriers to the creative and adaptive use of assisted living technologies by older people with chronic illness and the people who support them.

Jon Glasby is Professor of Health and Social Care and Head of the School of Social Policy at the University of Birmingham. A qualified social worker by background, he specialises in joint work between health and social care, and has provided policy advice to a range of national health and social care bodies. Jon is currently a Non-Executive Director (NED) of Heart of England NHS Foundation Trust and of Birmingham Children's Trust, has previously served as a NED at Birmingham Children's Hospital (2010-2015) and, from 2003 to 2009, was a trustee of the UK Social Care Institute for Excellence (SCIE).

Suzanne Robinson is Professor and Director of the Health Systems and Health Economics group at Curtin University. She leads international research on decision making and priority setting in health, involving in particular the use of health data set to produce an evidence base to inform resource allocation decisions. Suzanne is involved in leading the data analytics work at Curtin University and the NHMRC Centre for Research Excellence in Cardiovascular outcomes improvement, and brings together economics and translational research expertise to this work.