Implementing remote care in the UK: an update of progress

Jane Hendy, James Barlow and Theopisti Chrysanthaki

Summary: In 2009 we reported in Eurohealth on the challenges of implementing ‘remote care’, the use of information and communication technology (ICT) to support health and social care remotely. We discussed the potential of these technologies both in the United Kingdom and elsewhere to transform the lives of the elderly and those with long-term chronic conditions. In this article, we report on recent UK developments, presenting findings from our research and examining implementation progress.

Keywords: Remote care, long-term conditions, ICT, telecare, United Kingdom

Due to a rapidly ageing population and the increased spread of chronic diseases, current care systems are increasingly seen as untenable. Linked to these concerns is the recognised value of preserving people’s independence, including enabling older people to remain in their homes. One potential solution is to use technological innovation to support people remotely in their own home or the wider community. Commonly called telecare or telehealthcare, remote care systems have been around for over a decade, with 8,000 published studies reporting on their impact. Despite the technology appearing to work and positive user feedback, health and care services have been slow to show that remote care implementation can result in a significant shift in care services from hospital to home. In the United Kingdom, we estimate that between 300,000 and 350,000 people use some form of remote care (not including traditional pendant alarms).

Remote care services can be split into two main types. Telecare is used for the monitoring of changes in an individual’s condition or lifestyle, including emergencies, in order to manage the risks of independent living. Examples include...
movement sensors, falls sensors, and bed/chair occupancy sensors. These technologies are generally provided to patients with social care needs. Telehealth is the remote exchange of data between a patient and health care professional to assist in the diagnosis and management of a health care condition. Examples include blood pressure monitoring and blood glucose monitoring. These technologies are generally provided to patients with long-term health conditions such as diabetes. However, growth for all these technologies has been slow and the potential market size in the United Kingdom could be at least 1.4 million.²

In terms of changing this position, the United Kingdom has taken a strong lead. While there are examples of remote care schemes in other countries, major UK initiatives such as the Preventative Technologies Grant and the Whole System Demonstrators Programme (WSD)³ represent the most important concerted effort by a national government to stimulate this innovation. Over the next few years these initiatives should provide many opportunities for learning about the potential benefits and pitfalls of remote care.

Research
We have been conducting research into the progress of these initiatives since their inception. We followed five cases attempting to implement remote care during the timeframe of the Preventative Technologies Grant (April 2006 – April 2008). This funding was positioned as a catalyst for change, giving local service providers in England the push they needed to trial remote services.

However, the funding was not ring-fenced, leading to huge discrepancies in levels of remote care spending and activity, with some organisations progressing well but others making little progress. The focus then shifted away from providing cash to generating evidence of effectiveness. The government sponsored reportedly the largest randomised controlled trials of remote care services (the WSD). ⁴ This period (2006 – 2011) saw a shift from providing cash to additional support (see Table 1). During this period, we conducted over 200 interviews, and made over 300 hours of observations, with data collection continuing.

Findings
Findings from this large body of work are still emerging but it is appropriate to consider progress made, and implications for the United Kingdom and other governments wishing to stimulate the uptake of remote care. Because remote care is cross-sectoral (involving health and social care professionals, user communities and public-private partnerships) and ranges across multiple policy frameworks and spending constituencies, scaling-up existing pilot schemes has proved challenging. Embedding remote care in mainstream care services requires spanning multiple complex networks and organisational contexts, across which these new technologies and their associated systems of practice are located and operationalised. For success, contextual and cultural differences between different care organisations need to be addressed, with the right incentives for innovation adoption put in place across the care system.

### Building engagement and a shared language
Overall, we found that practical operational tasks such as training staff on how to do referrals and use the technology is not enough to build the necessary shared language and vision to push large scale implementation forward. Engaging staff and ‘selling’ remote care beyond the realm of enthusiasts to an organisation-wide audience requires huge amounts of energy and continuous commitment, leadership and top level support.

Prior to the new funding, all our cases had developed small remote care projects without additional support. These projects highlighted the local nuances and practicalities of referral, assessment, monitoring and response processes. However, a project-based approach can also create problems with wider engagement. Despite our cases having a history of ‘joined up’ working, the creation of small pockets of activity and excellence were divisive, serving to create issues of ownership that pushed people apart rather than together.⁵

Rapidly changing organisational priorities and a constantly moving workforce means implementation is often an uncertain, non-linear process. During the course of our research many key staff left, taking their knowledge and commitment to remote care with them. Developing joint working is particularly labour intensive because if left unattended, people quickly revert to

### Table 1: Case study sites

<table>
<thead>
<tr>
<th>Funded initiative</th>
<th>Preventative Technology Grant</th>
<th>Department of Health WSD</th>
<th>King’s Fund WSD</th>
<th>WSD AN Non WSD-related sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of case study sites</td>
<td>5</td>
<td>3</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

* The authors’ study of the Preventative Technologies Grant extended one year after the grant ended.

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1. EU Research Framework programme.
2. King’s Fund Whole System Demonstration Action Network (WSD AN).
3. The last three sites we examined had no implementation forw ard. Engaging staff and ‘selling’ remote care beyond the realm of enthusiasts to an organisation-wide audience requires huge amounts of energy and continuous commitment, leadership and top level support.
4. Building engagement and a shared language
5. Prior to the new funding, all our cases had developed small remote care projects without additional support. These projects highlighted the local nuances and practicalities of referral, assessment, monitoring and response processes. However, a project-based approach can also create problems with wider engagement. Despite our cases having a history of ‘joined up’ working, the creation of small pockets of activity and excellence were divisive, serving to create issues of ownership that pushed people apart rather than together.
6. Rapidly changing organisational priorities and a constantly moving workforce means implementation is often an uncertain, non-linear process. During the course of our research many key staff left, taking their knowledge and commitment to remote care with them. Developing joint working is particularly labour intensive because if left unattended, people quickly revert to
and needs to engage with. Constant and sustained attention needs to be paid to the job of winning hearts and minds and maintaining commitment and momentum. This is easier if a cogent and ‘joined-up’ approach to remote care is developed from inception.

Many hurdles to delivering this new model of care delivery were embedded at a systemic level. For example, budgetary silos meant that the costs of implementation were often situated in one sector (social care) whilst perceived cost-benefits were achieved across another (acute care). This meant that there were built disincentives to invest resources in remote care. More broadly, achieving the strategic redesign of systems and services was felt to require organisations involved in care services to be open to change and to embrace a culture that was prepared to experiment, allow for mistakes and collectively learn from them. Across our cases this culture was more likely to occur when top level management actively supported new and risky ideas, allocated a range of permanent staff and actively encouraged them to engage in cross-sectoral change initiatives.

Conclusion
Together, the Preventative Technologies Grant, WSD and other initiatives around the United Kingdom represent the largest single investment in home monitoring systems in any country. These offer significant research opportunities, providing important lessons on the implementation, integration and sustainability of these new services. Gold standard evidence from the WSD will certainly help care providers make more informed investment decisions. However, the mixed picture that our case studies presents, with many still struggling to move beyond small trials five years on, suggests more help is needed if we are going to address the organisational challenges of scaling up remote care.

Our work suggests that organisations need to be clear about these challenges. The reality of organisational and professional divisions needs to be recognised and negotiated. This should partly involve ‘selling’ remote care to local stakeholders by collecting evidence that increases their receptiveness, and identifies and mitigates potential risks from the outset. Open communication about the limitations of remote care services and active management of expectations and organisational differences also results in less animosity and more shared understanding of what remote care can realistically achieve.

Focusing attention on how to stimulate uptake by using existing levers within the systems for payment and reimbursement, and service commissioning also would be useful. A central government policy shift from the current situation where remote care services are optional to one where they are an integral part of a care package, unless there is good reason for exclusion, would also do a great deal to smooth the way forward.

REFERENCES

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