‘Telecare’, the use of Information and Communication Technology (ICT) to support health and social care remotely, has been around for many years. Its potential has been recognised in health policy in many countries and there have been numerous pilot projects and technology trials. However, implementation is generally characterised by a failure of pilot projects to develop into sustainable services. This paper argues that this is due to the quality of the evidence base for its benefits, problems in integration with existing care services and responsibilities for payment and reimbursement.

Keywords: Telecare, Telemedicine, Innovation, Implementation, UK

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Acknowledgments

This paper is based on research supported by the Department of Health and the Engineering and Physical Sciences Research Council funded HaCIRIC.
The government views the Whole System Demonstrators as a way of meeting the challenge of providing credible evidence that integrated care, combined with the use of telecare, benefits individuals and delivers improvements. It will also test whether telecare is a cost-effective means of future care delivery.

The availability of evidence certainly plays a part in influencing the uptake of health care innovations. However, in many areas of health and social care, the credibility of evidence is subject to interpretation and negotiation.\(^6\) A number of commentators have argued that RCTs are an inappropriate model for gathering evidence for the benefits of complex service delivery interventions such as telecare.\(^7\) Evidence gathered through an RCT approach may help to convince sceptical physicians, but such evidence alone is unlikely to be equally valued and applied across all the relevant stakeholders involved in the mainstream implementation of telecare. Arguably, the main beneficiaries of telecare are patients and family carers, through the provision of independence, security, confidence, quality of life, and the ability to stay in one’s own home. These benefits are hard to quantify, but RCT measures such as admissions avoidance are unlikely to convince telecare users and their families.

The context into which telecare is implemented will also be different from area to area. Future telecare services may involve unique sets of interventions and users that will not be comparable. The evidence gathered has to fit with these demands. So part of the challenge is not to just produce more evidence, but to produce evidence that convinces different stakeholders across professional boundaries and different familial and organisational contexts.

The professional autonomy of care professionals, especially within the NHS, has proved problematic, especially in relation to general practitioners’ hegemony and difficulties in engaging this group. Physicians need to be persuaded that telecare is useful to both their practice and the health of their patients. In the UK this issue is partly being addressed by the growing role of specialist community nursing, which is being used to underpin some telecare services for patients with long term chronic conditions and help demonstrate that this approach can help physicians manage their case loads more effectively. But even without the problem of an adequate evidence base, there are still enormous challenges which relate to the redesign of care service models to accommodate telecare, and to payment and reimbursement for services.

**Integration with existing services**

Telecare requires different levels of integration between health and social care depending on the type of services being offered. The introduction of mainstream telecare must recognise this complexity, with the development of responsive, flexible service structures that can work equally well across different agencies. Achieving this will not be easy. A review of public sector management by Ferlie and colleagues illustrates the difficulties of achieving fundamental change and cautions against over-optimistic hopes of reform associated with new ways of working in the public sector.\(^8\) The joint activities resulting from increased implementation of telecare are more likely to produce a series of incremental changes than complete system change.

The most important parts of a new telecare service are the models for assessment, installation, monitoring and response. Identification of appropriate clients and assessment of their needs in relation to available telecare technology and services has proved hard due to a lack of awareness by different groups of health and social care professionals and the slowness in introducing a national ‘single assessment process’. Installation is particularly important as it moves telecare from being a purely technical service to becoming part of the care service with installers helping users to understand the system. However, developing suitable supply chain arrangements, involving equipment manufacturers and local authority social or housing services, has not always proved easy. Finally, while there is already an infrastructure for monitoring and response in the form of several hundred local community alarm centres, these are not necessarily equipped or have the expertise to take on health, as opposed to social, monitoring of clients.

To move away from the small pilot projects of the past to mainstream integrated services, health and social care organisations will need to think carefully about the way they plan, commission, procure, deliver and install telecare. The technologies and processes on which telecare are based need to be a catalyst for new levels of collaborative working because of the many stakeholders from health and social care that need to be involved. Identifying all these stakeholders, engaging everyone, aligning their respective agendas towards telecare and maintaining momentum takes time and effort. Similarly, training operational staff and raising awareness amongst other staff is time consuming.

A key challenge for achieving integration is data sharing and the use of statutory standards. The availability of a shared health and social care record keeping service and an electronic single assessment process would make telecare much easier to implement and operate. This was promised in the introduction of the UK National Programme for IT,\(^9\) yet shared patient records remain elusive five years after inception of the programme. With data sharing amongst NHS staff proving this difficult, it is hard to envisage that the added involvement of social and community care services will be any easier, and currently very little progress is being made.

**Payment and reimbursement**

Another challenge in the UK, and in many other countries, is the way health and social care services are currently funded. Telecare demands true partnership working because costs and benefits lie with different stakeholders. ‘Silo thinking’ about budgets and future investment slows down the process of implementation. In the UK most health care services are free to the users, whilst many social care services are means tested. This is particularly problematic for the introduction of telecare, where the boundaries between the ‘health’ and ‘social’ aspects of monitoring may be blurred.

This complexity is combined with the uncertain impact of implementing telecare on costs and benefits. For example, the current policy initiative in England made local authority social services departments primarily responsible for telecare investment costs, having directly received part of the Preventative Technologies Grant. However, exactly how the different organisational elements of the health and social care system benefit from this expenditure, and in what ways, is currently very unclear. This, in turn, makes it hard for commercial suppliers of telecare equipment to develop suitable business or charging models.\(^10\)

**Conclusions**

Despite limited evidence on its benefits, in the UK a combination of central government policy and funding, a belief in its potential by certain ‘champions’ in local social services and health authorities is
slowly pushing telecare forward. Sustaining the current momentum, however, will require constant attention and reinforcement of existing initiatives – it is essential that the current wave of trials and pilot projects do not slip back once government funding ends.

Scaling-up from existing schemes will require care providers to understand how telecare can be integrated into existing and new care pathways. This means that the cultural differences between different care organisations need to be addressed, and the right incentives for innovation are put in place.

While there are examples of telecare schemes in some other countries, the major initiatives in the four countries of the UK, including the Preventative Technologies Grant and the Whole System Demonstrators, represent the most important concerted effort by government to stimulate innovation in this field. The next few years should provide many useful opportunities for learning about the potential and pitfalls of telecare.

REFERENCES
