Editorial

The need for an integrated response to designing and adopting new technologies: proceedings of the International Congress on Telehealth and Telecare, 1–3 March 2011

This conference supplement provides the abstracts from all of the scientific papers presented to the International Congress on Telehealth and Telecare held at The King’s Fund between 1–3 March 2011. The event was attended by a packed audience of 350 delegates with another 1600 from 59 countries watching remotely through a live web-stream. These recorded keynote sessions, plus the powerpoint presentations related to the abstracts, can be found on the hosts’ past events pages.

The star attraction at the conference was the promise of early findings from the Department of Health’s Whole System Demonstrator (WSD) Pilot Programme—the largest cluster randomised control trial (RCT) of telehealth ever conceived involving 6000 patients across three different localities. Whilst early insights into the findings remained limited (due to the time being taken to assess the data collected) the results were reported as ‘encouraging’, including significant reductions in hospital admissions for people with COPD and a positive trend in the overall impact on system cost-effectiveness.

More detailed findings emerged outside the main congress hall. Positive experiences were reported from the three localities in which the field trial was conducted: patients, carers, nurses and family practitioners reported positive experiences in using telehealth in Newham; in Cornwall it was reported that the technology worked safely, protected privacy and had developed good interoperability between the different e-health applications and data sets; in Kent, telehealth was thought to have been particularly beneficial in relieving the burden on carers, with the locality keen to roll-out the approach.

But was such a large-scale evaluation necessary to support the need for telehealth and telecare? International delegates at the congress were somewhat startled at size of the investment in the WSD Pilots—more than £31 million—of which about 12% went on the evaluation itself. Whilst the WSD trial was seen as ground-breaking, doubts were raised as to its overall value and to that of RCTs in general:

- they are expensive and time-consuming;
- they remain contextually-specific and therefore difficult to generalise to other regions and countries, and
- the research evidence produced will soon be out-of-date due to the fast-moving nature of technological innovation.

Over the two days of the conference a variety of innovations and research studies were presented to show that new technologies hold out much promise in supporting the ‘triple aim’ of health systems today: improved patient experiences, better care outcomes, and more cost-effective care. However, it was clear that mainstream adoption in most countries was very rare: too many innovations failed to leave a legacy; consumers remained unaware and undemanding of its potential to support them; managers and clinical professionals often avoided their use; and that changes in the technology itself was running far ahead of the ability of health systems to adapt their care processes to embrace it. Most importantly, funders of new technologies remained risk-averse to investment due to the necessary up-front costs required to support service redesign and the overall lack of robust evidence on the long-term return on investment they might bring.

In a vote that I chaired at the end of the meeting, delegates voted 4:1 in favour of a motion to ‘get on with technology adoption’ as opposed to ‘waiting for the evidence’. This reflected the vested interests of the delegates, but also a frustration that the need for service redesign to support home-based alternatives to institutionalised care is necessary. From a follow-on discussion in plenary it was agreed that the evidence-base was essential to support the effective transition to a new way of working, but its limitations can too often be used as an excuse to do nothing when the time for system redesign is now.

The conclusion I reached at the end of the congress is that research and evaluation needs to be much more closely aligned with innovators and decision-makers to enable them to utilise the best available evidence in ‘real-time’. Traditional research and evaluation studies are not conducted to facilitate such rapid knowledge-transfer and those at the ‘coal-face’ of delivery rarely listen to it when it comes. New methodologies and approaches are needed and this will only come to fruition through better co-operation between scientists, professionals, product developers, and policy-makers.

Next year, on the 6–8 March 2012, a second international congress on telehealth and telecare will be held at The King’s Fund focusing on new innovations and approaches to successful adoption.

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