Conditions for acceptability of technology in telecare

D.G. BOUWHUIS. ***Conditions for acceptability of technology in telecare: And the demise of acceptance.*** *Gerontechnology 2014;13(2):171;* doi:10.4017/gt.2014.13.02.423.00 **Purpose** What motivates older people accept telecare? In recent years, acceptance models, such as TAM[1] and UTAUT[2] with many variations, have been widely employed to uncover these factors. Nevertheless, it also appears that an un-parsimonious number of factors might be operating[3], that the predictions of telecare acceptance and use were only reasonable but never good, and that the associated attitudes were unstable. In fact, it has become much clearer which factors cause people to reject telecare, rather than accept it. This discussion has largely ignored the fact that the end users acceptance of telecare is only one aspect of the opinions of many stakeholders related to the process of implementing telecare. Currently, telecare is a multi-sectoral issue, in which representatives of very different (economic) sectors have to cooperate, which enforces a range of often non-intuitive acceptances, rather than just one. Another issue is that the composition and operation of a telecare system is not stable over time, but is subject to increasingly rapid and changing technological developments. The question becomes, “How will the processes of acceptance of telecare, and the opinions of stakeholders change as a result of technological progress?” **Method** A literature survey was conducted to determine the number of sizeable telecare applications currently available, (such as WSD[4] and Veteran Administration Hospital’s CCHT) and their properties, problems and progress over time. In addition, a number of clients involved in a telecare program were followed[5] over a two-year period, covering installation to long-term use. **Results** In all cases studied, only a fraction of all eligible clients actually used telecare devices, reductions in cost of care were modest or absent, while investment and equipment costs would mostly be offset by savings from the costs of traditional care. While it is clear that an effective telecare business model is almost always lacking; the multi-sectoral nature of telecare makes significant cost savings all but impossible. Some observers have stated that the high investment cost of telecare medical devices can only be reduced by a transition from professional systems to consumer products. In quite a number of cases this has already materialized, e.g., in the use of webcams and wireless IP networking. Considering the professional nature of many telecare components, such as the costs of installation, the needs for a network and devices, and the interconnection and interoperability of various parts of the systems, solutions that can forego their associated problems would significantly reduce telecare costs. One such solution has been the introduction of IP and Bluetooth networks that have eclipsed the far more expensive conventional home networking systems. Another promising development is the use of tablets that feature an intuitive control interface; this method also appeals strongly to older people. Many telecare functions could be implemented as apps, while the tablet is connected with very inexpensive remote sensors, and provides immediate and understandable feedback to the client and to a remote care provider. The client considers the tablet as his or her property and in that sense does not need to accept it, such as no one accepts a TV set, but wants to have and use it. Such a method of implementation will change the telecare system and stakeholder’s role beyond recognition. The client, then, would have the telecare system in his own hands, literally and figuratively. Finally, it appears that in all acceptance models related to telecare, as well as in innovation and diffusion theory, a hidden assumption of unchanging and established technology is widely and erroneously accepted making predicted acceptance continually lag behind the actual developments.

References

1. Davis, F. MIS Quarterly 1989;13(3):319-339; doi:10.2307/249008
2. Venkatesh V, Morris MG, Davis FD, Davis GB. MIS Quarterly 2003;27(3):425-478
3. Bouwhuis DG, Sponselee AM, and Meesters L. Gerontechnology 2012;11(2):96; doi:10.4017/gt.2012.11.02.075.00
4. Steventon A, Bardsley M, Billings J, Dixon J, Doll H, Hirani S, Cartwright M, Rixon L, Knapp M, Henderson C, Rogers A, Fitzpatrick R, Hendy J, Newman S. British Medical Journal 2012;344:e3874 doi:10.1136/bmj.e3874
5. Sponselee, AM. Acceptance and effectiveness of telecare services from the end-user perspective. doctoral thesis submitted to the University of technology Eindhoven, June 20, 2013

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Address: Eindhoven University of Technology, Netherlands. *E*: d.g.bouwhuis@tue.nl