

TELEMEDICINE: - UNPLANNED CARE
VERSUS PLANNED AND CO-ORDINATED CARE



An evaluation & research summary document

Written and researched by D. M. Taylor RGN (Dip)

January 2006

Introduction

Telemedicine is still seen by many as a new concept in healthcare delivery. Although initially thought of as a useful tool for providing communication and technological support in healthcare when distance separated the participants, (Field 1996), more recent and wider use of telemedicine has shown a range of other benefits.

A telemedicine pilot scheme undertaken by Medway Primary Care Trust and Medway Council Social Services began with the purchase of five telemedicine monitors. Three were used by the Rapid Response Team, and one by a General Practitioner (GP) based in a community setting. One was used in a nursing home. The thirty-one clients chosen all had acute unstable medical conditions such as unstable blood pressure and/or pulse rate, known unstable heart conditions or early hospital release. The pilot study commenced in August 2004 and finished in September 2005. The aim of the study was to assess the social and financial benefits of using telemedicine in a community care setting.

Social aspects

An overview of responses received from a client satisfaction survey on use of telemedicine care yielded very positive results. Benefits highlighted included:

- Being able to be treated in their own home, saving travelling time and expense
- Ease of access for family visits
- Clients felt more involved in their own treatment which created peace of mind
- Nearly all believed their condition was monitored more frequently resulting in quicker medical intervention if their condition deteriorated

The government believes that people with long-term conditions need rapid access to expert assessment and diagnosis and are encouraging a more flexible approach to care, as highlighted in a joint working party report by the Royal College of Physicians and Royal College of General Practitioners (2004). There were initial worries regarding ease of use of the technology but nearly all surveyed would use the monitor again. These views mirrored other recent telemedicine pilot studies with other primary Care trusts (Taylor 2004).

Community setting

Telemedicine monitors used in this study, as described were placed in a community care setting to people with multi-morbidity issues. Data from the community study showed:

- A total of 133 hospital bed days saved
- A total of 117 nursing hours saved
- A total of 8 hours and 40 minutes GP time saved .

The study does not take into account practice nurse, community nurse and other practice staff financial savings.

The NHS Confederation briefing (November 2005) approximates that 90% of NHS care is given outside hospitals, predominantly in a primary care and community setting. They estimate a whopping 17.5 million people with long term conditions receive treatment in primary care. With this in mind, of the sixteen clients using the telemedicine monitor in the community, **only four needed a GP visit. Nine had medication altered as a result of the information received via the telemedicine monitor, either by GP or direct liaison via GP to a consultant in secondary care and were stabilised. Three were deemed stable through monitoring** and no intervention was required.

Nursing home

One telemedicine monitor was used in a nursing home to monitor fifteen clients who predominantly presented unstable/irregular blood pressure and pulse rate. The audit started in September 2004 and finished in September 2005. As a result of using telemedicine **ten of the fifteen clients were stabilised with no intervention required.** One client was visited by his own GP at his own home on leaving the nursing home. Four of the fifteen clients were admitted to hospital. **Hospital bed days saved as a result of telemedicine were 127.** Nursing hours saved were 112. The Audit Commission - older people-implementing telecare (2000, 2002, 2004) believes that the many pilot studies and policy guidance around telemedicine make the case for its wider introduction compelling, and states it should now move into a mainstream service to support independence and well being. It does however advocate supported effective planning by means of a wider understanding of costs/benefits, partnership working within health and social services, and improved awareness and knowledge of telecare, including considerations regarding the ethical implications if its care.

A huge notable benefit arising from the nursing home data was that a client with known cardiac problems was proved to be in a stable medical condition from monitoring. Readings from the telemedicine monitor were given via the GP to his hospital consultant. As a result the consultant was able to organise a total hip replacement without the need for lengthy hospital pre operative assessment. This highlights the potential for telemedicine to help the pre assessment process by aiding primary care and decreasing hospital care involvement. Thus there is the potential for providing a quicker, reliable and more cost effective service from the community setting.

Ethics/standards and viewpoints

(Larkin 1997) stated that there is much debate whether telemedicine is a tool to improve delivery of healthcare services or a playing field for commercial technology. She concluded, and is no doubt correct, a little of both. However data compiled from this and other studies in telemedicine does bear evidence that hospital bed days, nursing hours and GP time can be saved by quicker transfer of technological information and direct liaison between healthcare professionals. Some would argue that in this technological and rapid age, we are in danger of forgetting the most important issue - the patient. (Sibson 1999) concludes that rapid delivery of an accurate diagnosis can outweigh the disadvantage of reduced clinical contact. I believe that the telemedicine process in essence does not necessarily mean a reduction in providing good patient care.

Conclusion

Patient perspectives of telemedicine from this study were very positive. All clients involved believed the technology to be beneficial to their condition and life enhancing both medically and socially, mirroring other recent telemedicine study statistics. The main benefit of telemedicine for health professionals surely includes much the same viewpoint as patients, saving time and its convenience of use. More research on their viewpoints regarding telemedicine and its use as a tool in healthcare is needed. Government, care providers and industry have great expectations for its future use. However small but successful projects such as this would appear to be proving that telemedicine can provide an efficient cost effective service.

References

- 1) Audit Commission – Older people – implementing telecare. <http://www.audit-commission.gov.uk/reports/NATIONAL-REPORT>
- 2) Blatt B Telemedicine now. Practice Nursing 1997,vol 8, no 15.
- 3) Field M J ed (1996) Telemedicine. A Guide to Assessing Telecommunications for Health Care. National Academy Press. Washington DC.
- 4) <http://agatha.york.ac.uk>
- 5) Larkin M The Lancet London. Aug 30, 1997 vol 350 iss 9078, pg 641, ipgs.
- 6) Sibson L (1999) A skin cancer screening study using telemedicine. Journal of telemedicine and Telecare 5 (supp 1): 132.
- 7) The need for co-ordinated management programmes. Report of a joint working party of the Royal College of Physicians, the Royal College of General Practitioners and the NHS Alliance, 2004.
- 8) The NHS Confederation. The voice of NHS Leadership Briefing 1November 2005, issue 127.

**For more information on the Medway telemedicine services please contact
Tunstall on 01977 660479.**

www.tunstallgroup.com

© 2005 Tunstall Group Ltd.

Tunstall Group Ltd, Whitley Lodge, Whitley Bridge, Yorkshire DN14 0HR

Tel: 01977 661234 Fax: 01977 662450 Email: enquiries@tunstall.co.uk