

Despite the best intentions: a reflection on low client numbers for a pilot telemedicine sexual health service

Cameryn C Garrett,¹ Maggie Kirkman²

¹Research Fellow, Centre for Women's Health, Gender and Society, Melbourne School of Population Health, The University of Melbourne, Victoria, Australia
²Senior Research Fellow, The Jean Hailes Research Unit, School of Public Health and Preventive Medicine, Monash University, Clayton, Victoria, Australia and Honorary Research Fellow, Centre for Women's Health, Gender and Society, Melbourne School of Population Health, The University of Melbourne, Victoria, Australia

Correspondence to

Dr Maggie Kirkman,
The Jean Hailes Research Unit,
Locked Bag 29, Monash Medical
Centre, Clayton, VIC 3168,
Australia;
maggie.kirkman@monash.edu

Received 15 March 2012
Accepted 16 July 2012
Published Online First
23 August 2012

To cite: Garrett CC, Kirkman M. *Journal of Family Planning and Reproductive Health Care* 2013;**39**:144–146.

WHY WAS A TELEMEDICINE SERVICE PILOTED?

Young adults in Australia face barriers in accessing sexual health services, including concerns about confidentiality, cost, and limited choice of doctors.^{1–3} The Melbourne Sexual Health Centre (MSHC) therefore initiated a 1-year pilot of free telemedicine (telephone, computer-linked video) consultations for asymptomatic people under the age of 26 years in rural Victoria.

HOW DID THE SERVICE WORK?

Clients contacting the service could choose a video or telephone consultation with a sexual health nurse, then receive a mailed sexually transmitted infection (STI) home-testing kit. Clients posted their sample swabs to the laboratory and telephoned MSHC for their results. Those individuals testing positive for chlamydia were contacted by a dedicated nurse to arrange free treatment.

The service was extensively advertised and high usage was expected. However, during the year-long pilot, there were only 28 clients (aged 14–25 years), none of whom had a video consultation.

Evaluation of clients' views by questionnaire ($n=18$) and interview ($n=4$) found that they reported being satisfied and that most viewed the service as better than an in-person consultation.⁴ Primary reasons reported for not having a video consultation were not owning a webcam, finding video too confronting, and the convenience and familiarity of the telephone. Given the high expectations of the service and client satisfaction, the low usage was puzzling. It was decided to interview key informants with the objective of contributing to the evidence base

on establishing optimum rural sexual health services.

WHAT DID THE KEY INFORMANT INTERVIEWS TELL US?

Eight people designed and implemented the service; all agreed to be interviewed. These key informants were two nurses, two clinicians, two rural health experts, one epidemiologist and one senior policy officer. Informants were asked for their explanations for the limited uptake of the service and why no-one chose a video consultation. Transcripts were analysed using iterative hermeneutic techniques.⁵

WHAT WERE THE PERCEIVED BARRIERS TO IMPLEMENTING AN EFFECTIVE SERVICE?

All eight informants expressed surprise about the low client uptake for a service they thought would succeed based on their clinical experience. Informants nominated four contributing barriers as follows.

- **Lack of consultation with rural youth.** With hindsight, informants thought that the target audience could have provided valuable insights into the service's design and promotion. Two said the omission was simply a mistake, but another argued that discussions with rural youth were "really beyond the scope and funding of this project". This informant and one other acknowledged the urgency imposed by 1-year funding, which impelled early implementation, without background research, to enable reportable results in 12 months. This perceived pressure to produce results, they argued, inhibited proper planning and prevented the project from being more sustainable in the long term.
- **Obstacles to effective promotion.** Informants thought that school nurses were restricted by

the Department of Education in promoting the piloted sexual health service to students, which may have limited the number of young people who were aware of the service.

- **Underestimation of personal risk.** Informants suggested that many young people do not consider themselves to be at risk for an STI and would not seek testing even if they knew about the service.
- **Low acceptability of video consultations.** On reflection, informants noted that clients may have had security concerns about the potential for the consultation to be hacked, or whether the person on the other side of the screen was actually a doctor. Five informants said that clients might perceive video consultations as unnecessary. Informants also wondered whether potential clients may have read the words 'sexual health consultation' and 'webcam' in advertisements for the service and assumed that a genital examination by video camera was required, even though the website stated that there would be no online genital examination. Finally, informants suggested that the technology was before its time, and if videoconferencing were used more frequently for social and health care interactions then people might be "more accepting" of video consultations for sexual health.

WHAT WAS THE EFFECT OF RELYING ON CLINICAL EXPERIENCE?

In addition to informants' explanations, a further reason became evident to us when analysing the transcripts: reliance on clinicians' authority and experience in designing the service, rather than recourse to evidence-based practice. The evidence-based medicine (EBM) movement challenges clinical authority and relies on formal scientific knowledge for clinical decision-making, not on opinions clinicians derive from their experience.⁶ In this investigation of the pilot, it was evident that the clinicians' expert opinions were highly valued and accepted as sufficient for designing and promoting the service. Informants were passionate in their desire to improve sexual health, thought they knew what type of service young people needed, and believed that their approach would succeed. Their confidence was based, in part, on the successful services the informants had already implemented; this constitutes persuasive experience and is a fine demonstration of a moment when experience fails us. One informant said: "The big lesson I've learned is that, despite thinking you're right, you're often not. With this project we needed more advice from what young people thought to have got it right". Basing the service on clinicians' experience and opinions, rather than appropriate evidence, is a potential contributor to the limited success of the service.

Like the EBM movement, the movement to involve potential clients in health care design challenges clinicians' authority; it claims that clients contribute essential insights to service design.⁷ This is paradoxical, in the light of EBM, because it validates clients' experience while rejecting clinicians' experience. Although

discussions with target populations have been described in the literature as improving the quality of health services, systematic reviews find limited supporting evidence, partly because there are few systematic evaluations.^{8,9} Lack of evidence does not necessarily mean that there is no effect.⁸ Discussions with rural youth or other preliminary investigations may or may not have improved the service and increased usage.

WHAT CAN BE LEARNED FROM THIS PILOT STUDY?

Key informants speculated on four barriers to implementing a telemedicine service: failure to involve the target audience in designing the service, obstacles to effective promotion, young people's underestimation of personal risk, and the apparently low acceptability of video consultations. Experience with this service reveals that we are only starting to understand how, when and under what circumstances people are willing to consult their doctor online for sexual health.

Despite accepting evidence-based practice, clinicians may, with the best of intentions, rely inappropriately on their experience to design and implement an innovative service. This failure to practise EBM may have inadvertently produced a poor outcome. The limited success of the service highlights the importance of seeking evidence, possibly including consultation with potential clients, when designing and promoting new services. It is hoped that the lessons learned from the limited success of this service may be useful to others planning similar health services and prompt further research to provide adequate evidence with which to develop effective services in the future.

Acknowledgements The authors thank the key informants for their thoughtful contributions and especially for their generosity in permitting publication of the lessons learned from the piloted service.

Funding Cameryn Garrett was awarded a Melbourne International Research Scholarship, Melbourne International Fee Remission Scholarship, and an Institute for a Broadband-Enabled Society PhD Top-Up Scholarship to undertake her doctoral research, of which this work forms a minor part. The funders exercised no influence on the research.

Competing interests None.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- 1 Quine S, Bernard D, Booth M, *et al.* Health and access issues among Australian adolescents: a rural-urban comparison. *Rural Remote Health* 2003;3: No. 245. http://www.rrh.org.au/publishedarticles/article_print_245.pdf [accessed 4 Jul 2012].

- 2 Stewart FJ, Rosenthal DA. Rural and urban female secondary school students' attitudes towards and use of primary care services. *Aust J Rural Health* 1997;5:126–131. doi: 10.1111/j.1440-1584.1997.tb00253.x
- 3 Warr D, Hillier L. 'That's the problem with living in a small town': privacy and sexual health issues for young rural people. *Aust J Rural Health* 1997;5:132–139. doi: 10.1111/j.1440-1584.1997.tb00254.x
- 4 Garrett CC, Kirkman M, Chen MY, *et al.* Clients' views on a piloted telemedicine sexual health service for rural youth. *Sex Health* 2012;9:192–193. doi: 10.1071/SH11022
- 5 Ezzy D. *Qualitative Analysis: Practice and Innovation*. Crows Nest, NSW: Allen and Unwin, 2002.
- 6 Daly J. *Evidence-based Medicine and the Search for a Science of Clinical Care*. Berkeley, CA: University of California Press, 2005.
- 7 Boote J, Telford R, Cooper C. Consumer involvement in health research: a review and research agenda. *Health Policy* 2002;61:213–236. doi: 10.1016/S0168-8510(01)00214-7
- 8 Crawford MJ, Rutter D, Manley C, *et al.* Systematic review of involving patients in the planning and development of health care. *BMJ* 2002;325:1263–1265. doi: 10.1136/bmj.325.7375.1263
- 9 Nilsen ES, Myrhaug HT, Johansen M, *et al.* Methods of consumer involvement in developing healthcare policy and research, clinical practice guidelines and patient information material. *Cochrane Database Syst Rev* 2006;(3):CD004563. <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD004563.pub2/full>. doi: 10.1002/14651858.CD004563.pub2 [accessed 4 July 2012].