

TELENURSING: a revolution?

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Studies in the 1990s had shown that although telephone advice formed a significant part of the workload of US and UK emergency departments it was often inaccurate or inadequate;^{1,2} so when in 1995 Aitken and coworkers phoned thirty NZ public hospital emergency departments and twenty private accident and medical centres, pretending to be the parent of a feverish infant, they cannot have been surprised by the range of responses. In 14 centres the doctor on call was contacted at once; in five the doctor gave advice, in 26 the nurse did, and in five the advisors didn't say who they were. The authors also noted the wide variation in the quality of the advice and judged it to be inadequate in 16 of the 36 centres.³

Such observations, along with the need to save money and reduce after hours calls, led to a desire to improve and standardise urgent telephone advice.

In 1994 Tisdale reported a pilot of a nurse-run telephone advice line in NZ,⁴ and in 1998 Cameron and others reported high levels of satisfaction by those phoning the National Poisons Centre for advice, as well as considerable saving of public money.⁵

In the US during the 1990s private insurance schemes were offering nurse-led, software-supported telephone triage and advice services (largely to free pediatricians from after hours calls), and NHS Direct, a free, 24-hour, nurse-led advice and triage line was being piloted in England: whereas Medline records only one publication on "NHS Direct" in 1997, for 2000 there are 37. If you look up the keyword "telenursing" a similar explosion of research is reported.

"Handmaidens or agents for managed care?" asked Iliffe in a British Medical Journal editorial.⁶ Call centre nurses have certainly been agents for change - today NHS

Direct is providing more clinical services than any other health organisation in the world.

Healthline

Meanwhile the Healthline pilot began in four regions of NZ in 2000.⁷ Four years later it will become a national, state-funded, 24x7, primary health service.

Healthline proved to be popular and reliable. Over seventy percent of its calls seek advice on symptoms, and seventy percent of these are outside normal working hours. It was effective in diverting calls from a city emergency department, where staff were redeployed to direct patient care.⁸ After-hours calls to rural general practitioners were similarly reduced.⁹ In Britain the number of after-hours calls to general practitioners has also fallen substantially, while their daytime appointments with genuinely unwell patients (not just the worried well) have increased.¹⁰⁻¹²

Healthline is used effectively by those who find current health services hard to access. Older people called Healthline as often as they initiated an encounter with their general practitioner, so barriers such as lack of awareness of the service, mistrust of strangers or mistrust of technology seem unlikely.¹³ The “increasing marginalisation of older people from accessing services through ‘new technologies’ such as the telephone” observed in the UK,¹⁴ does not apply to their use of Healthline.

Healthline appears to be an acceptable source of primary health information for Maori, especially those seeking advice on current symptoms: in proportion, Maori callers sought triage of symptoms (as opposed to seeking general health information) more often than nonmaori.¹⁵

The future

“Telephone triage has been transformed in less than a decade from pipe dream to powerhouse” O’Hanley wrote from Canada: “the computer revolution has... been

central to a nursing revolution known as telephone triage.... Soon every Canadian with a telephone will have access to the service".¹⁶ So too will every New Zealander.

The coincidence of sophisticated software and a critical mass of skilled nurses now sets the scene for innovation. In Canada the same triage nurses manage dedicated lines for rabies and West Nile viral encephalitis, and they provided advice on SARS during the Ontario outbreak. In New Zealand Healthline is associated with Mental Health Line; it was contracted to handle SARS advice calls and the meningitis immunisation advice line for the Ministry.

Telenursing has other applications apart from symptom triage. Chronic illness monitoring and management, tagged "telehomecare" is the most rapidly progressing.^{17, 18}

The future

Telenursing should now become a career path for nurses, with its own structures and opportunities, alongside other specialties in nursing. It is not simply another way of providing primary nursing care, nor just a diverting novelty for pioneers; nor is it a refuge for nurses with bad backs or burnout (though it can be all of those). It is a new discipline with its own expertise, research and literature. Nursing undergraduate and postgraduate education will adapt accordingly.

Healthline should be used as a resource for public health surveillance, an issue to be discussed in the second paper in this series.

Critical to an efficient and cooperative primary health care future in New Zealand is Healthline's relationship with other primary health services, notably general practice. *"... it is essential that mechanisms are developed to ensure that high quality telephone based health care delivered by appropriately trained staff is available to all. NHS Direct ... has heralded a much needed shift in culture, and it is now time that mainstream primary and secondary healthcare services followed suit."*¹⁹

Healthline began in spite of the objections of general practitioners and some of their organisations. That suspicion has diminished and in many quarters has given way to

enthusiasm: indeed studies of the effect of telephone triage on general practice have provided only good news to doctors. Now we should work together towards an integrated primary health service, with telephone triage/advice, emergency departments, accident and medical centres, general practice and the other major players devising an effective symbiotic relationship. In after-hours care, that relationship is essential, and should inform the current debate.

Imagine if we were all supported by the same software, and the mother of a feverish child could be sure that, wherever she directed her call, the advice would be as good.

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