

Nurse-led telephone advice

A useful additional service?

AUSTRALIA IS FOLLOWING NORTH AMERICA, the United Kingdom and other developed countries in promoting the use of nurse-led telephone advice services. The core of these services is very similar — nurses follow computer-driven protocols to give advice about a wide range of problems, most of which relate to acute minor illness. In the UK, *NHS Direct* has been introduced by government to improve access to NHS services and *NHS Direct* advice is also available on the Internet.¹ In this issue of the Journal (*page 100*), Turner and colleagues report for the first time the operation of a nurse-led telephone advice service in Australia, *HealthDirect* in Western Australia.² The service has been widely used, with over 300 000 calls being received during the first two years of its operation.

The 10 most frequently used guidelines of the service covered more than half of all calls to *Health Direct*, and more than half of callers were advised to contact their general practitioners. As in other countries, most callers were young adults or parents calling on behalf of children. There is some concern that the increasing use of telephone advice may disadvantage elderly and ethnic people, who find it less easy to use the telephone.

Healthcare planners are clearly interested in whether these new services will reduce the demand for existing healthcare services. Turner and colleagues found that *HealthDirect* has reduced telephone calls to hospital emergency departments. In the UK, a reduction in the number of calls handled by emergency department staff coincided with the introduction of *NHS Direct*,³ but there was no reduction in the numbers actually attending hospital emergency departments or using ambulance services.^{4,5} *NHS Direct* may, however, have stemmed the rise in demand for GP out-of-hours care. The main effect in the UK appears to have been to provide a new service that the public use, and initial evaluation suggests that satisfaction with the service is high.⁶ An ongoing evaluation will determine the relative extent to which *HealthDirect* substitutes for other contacts with health professionals or simply provides a new service.

A key question is whether such services are safe. A report of the UK service identified three cases out of over 280 000 where the advice given might have resulted in an avoidable serious outcome.⁷ A randomised controlled trial of a computer-assisted nurse telephone consultation service found no increase in deaths or serious adverse events resulting from nurse telephone advice.⁸ It seems likely that, in terms of avoiding serious adverse events, nurse-led services are at least as safe as other forms of care. However, US studies of simulated patients have documented substantial variability and incorrect advice,^{9,10} and early evaluation of the computer programs in *NHS Direct* reported similar levels of variability.¹¹ For example, the proportion of callers in the first three *NHS Direct* sites advised to seek immediate GP care varied nearly threefold between sites (from 10% to 29%), and there was agreement on management between sites for only 39% of 119 standardised

evaluation calls. Further studies of safety and consistency of advice are clearly needed. These should include evaluating telephone advice given by both nurses and doctors. Indeed, doctors have expressed concern about safety of the increasing amount of advice which they themselves give over the telephone.¹²

There remains the question about the cost effectiveness of nurse-led telephone advice lines. The actual cost of calls to *NHS Direct* has been estimated at £15 (A\$42.50) per call.⁷ However, as important as the actual cost is the impact of these services on overall demand for care. If the net impact is to provide additional services, we do not know whether this is the best way to spend extra healthcare resources. Further, we do

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not know whether telephone advice would best be given by doctors or nurses. In Denmark, doctors staff telephone advice lines, and are electronically linked to community pharmacies so that they can

prescribe remotely for suitable patients.¹³ If the aim is to reduce demand for existing medical services, then it might be more cost effective to use doctors (who deal with minor illness more rapidly) than nurses in this type of service.

Overall, nurse-led telephone advice lines should be welcomed cautiously. Patients use them, and they are probably safe, but we do not know if they will reduce demand for existing services, or if they will merely provide patients with additional, albeit valued, service.

Martin Roland

Director, National Primary Care Research and Development Centre
University of Manchester, Manchester, UK

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