Original Scientific Paper

How well does a telephone triage service meet the needs of older people?

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ABSTRACT

Background

A New Zealand pilot telephone triage service, Healthline, is similar to NHS Direct in the UK, where underuse by older people has been suggested.

Aim

To examine the use of Healthline by people aged over 65 years, and to compare with their use of general practice services.

Design of study

Retrospective record review.

Setting

Telenursing call centre.

Methods

We examined call data for different age groups and compared them with published New Zealand general practice encounter data.

Results

Older people called Healthline less often than other age groups, and called less often than they attended their general practitioner, even when figures were corrected for population. The difference from general practice disappeared when doctor-initiated encounters were extracted from the general practice data.

Conclusions

If there are barriers to older people calling Healthline, they are no greater than they are for initiating an encounter with their general practitioner in New Zealand. Notions that telephone triage services fail to meet the needs of older people may be wrong.

Key words

Telenursing, triage, aged, health services needs and demand

(NZFP 2005; 32:94–97)

Introduction

Telephone triage services seem to be underused by older people, an observation first remarked of NHS Direct in the United Kingdom.

For instance, the Medical Care Research Unit at the University of Sheffield reported in July 2001, *'...use of NHS Direct...among older adults is lower than we might expect. Although this may reflect the greater experience and knowledge of older people in dealing with health and health care, it is possible that it represents an increasing marginalisation of older people from accessing services through "new technologies" such as the telephone, the web, email or digital TV. If health care policymakers continue to develop the role of such technologies in accessing the health service...then an understanding of how this will impact on older users of services is urgent.'*[1]

Furthermore, the Report of the Comptroller and Auditor General suggested in January 2002 NHS Direct should *'target effort at both a national and local level to reach those groups with lower than average awareness and/or usage'* – including older people.[2]

The House of Commons Committee of Public Accounts noted that some groups, including people over 65, were either less aware of NHS Direct or used it less, but had an equal or greater need of the service as others.[3]

George wrote provocatively, *'(NHS Direct)...is underused by older people, ethnic minorities, and other disadvantaged groups. Rather than reach people who are currently failed by the health system NHS Direct may*

have discovered previously unexpressed demand among the worried and well middle classes."[4]

A group of medical students questioned patients in London general practice waiting rooms and found that, whereas younger people who had not used NHS Direct said they had not needed to, older people said (as might be expected of this sample) they would rather see their general practitioner.[5]

Healthline, a free, nurse-run telephone triage service comparable to NHS Direct, has been available since 1 September 2000 in four pilot areas in New Zealand: Gisborne and East Coast North Island, Northland, West Coast, and Canterbury. We have described its characteristics elsewhere.[6-12] Our records suggested, as in Britain, prima facie under-use by older people.[6,7]

Methods

We retrospectively reviewed Healthline's electronic records for callers seeking symptom triage or health information. We defined the 'caller' as the patient if the call was symptomatic (the person calling is not always the one with symptoms). We derived population age distributions for the pilot regions from Northland, Tairawhiti, Canterbury and West Coast District Health Board (DHB) data (2003). We examined:

- the trend in use by those aged 65+ and <65, by plotting the number of calls in each quarter of the pilot (1 September 2000 to 31 August 2003).
- the number of calls to Healthline by different age groups compared with population distributions in a sample two months (January and February 2003).
- the number of calls to Healthline by different age groups in those two months, compared with New Zealand published patient encounter data in general medical practice (GP) from the Waikato Medical Care (WaiMedCa) survey.[13]

Figure 1. Number of calls per quarter for three year pilot

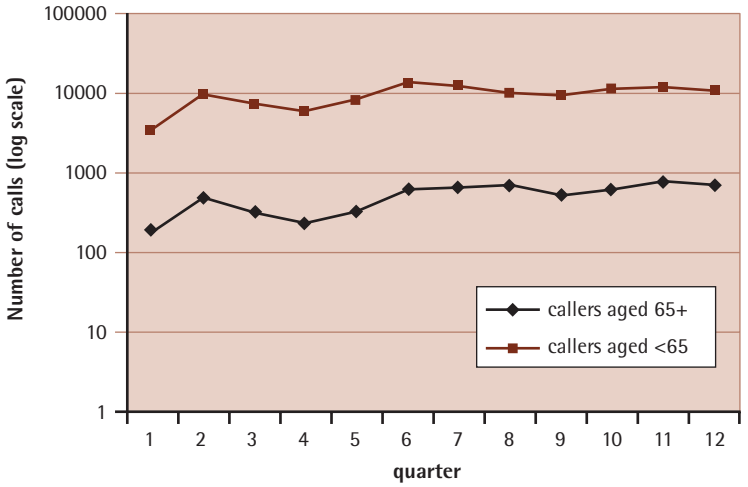
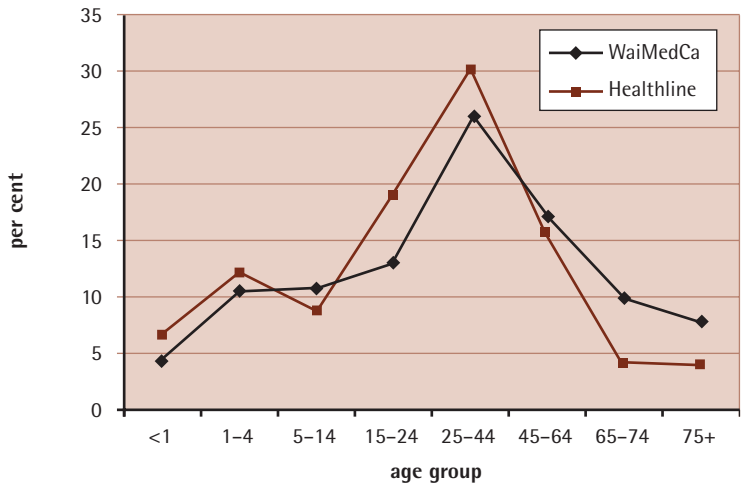


Figure 2. Distribution of GP encounters (WaiMedCa[13]) and calls (Healthline) by age group



(WaiMedCa was a survey of 11 888 consultations in general practice in the Waikato in 1991 and 1992. The resulting data have been widely used by health planners, as a reliable source of detailed information on general practice in New Zealand. The recently published 'NatMedCa' study does not contain data on doctor and patient-initiated visits.)

Encounters with Healthline are always initiated by the caller. The WaiMedCa study reported that about half of the encounters for those 65+ were for follow-ups initiated by the doctor (51.2% of men 65–74 and 49% of men 75+; 49.9% of women 65–74 and 53.4% women 75+).[13] To calculate patient-initiated encounters, the total number of WaiMedCa patient encounters for each of those age groups was reduced by those percentages.

Results

The number of callers to Healthline aged 65+ gradually increased over three years, along with the number of other callers (Figure 1).

Figure 2 shows the distribution of all Healthline callers by age group, compared with the distribution of all GP patient encounters by age group.

Figure 3 shows the distribution of Healthline callers by age group,

compared with the distribution of patient-initiated GP encounters by age group – i.e. the follow-up encounters initiated by the general practitioners have been taken out of the GP data.

Figure 4 shows the ratios of the distributions (per cent of all Healthline calls) of Healthline callers and GP encounters (per cent of all GP encounters) by age group, to their respective populations by region and age group.

In Figure 5 the follow-up encounters initiated by the general practitioners have again been taken out, and the figure shows the ratios of the distributions of Healthline callers and patient-initiated GP encounters by age group, to their respective populations by region and age group.

Discussion

Summary of main findings

People aged 65+ were quick to begin using the service and continued to do so.

Figure 2 shows a GP patient encounter per cent double that of Healthline calls for 65–74 and 75+ age groups – but that comparative under-use of Healthline can be explained entirely by taking out GP patient encounters initiated by the doctor. After correction for doctor-initiated encounters, the use of general practice by older people was very similar to that of Healthline.

Similarly, when doctor-initiated GP encounters were removed, the usual U-shaped curve of the ratio of encounters to population disappeared, and a downward slope showed for both groups.

Limitations

We acknowledge the potential effect of seasonal and other variation in demand in a retrospective comparison of different times and different places. We were unable to take repeat calls to Healthline into account. We could not make a more detailed comparison of the >65 Healthline

Figure 3. Distribution of patient-initiated GP encounters (WaiMedCa[13]) and calls (Healthline) by age group

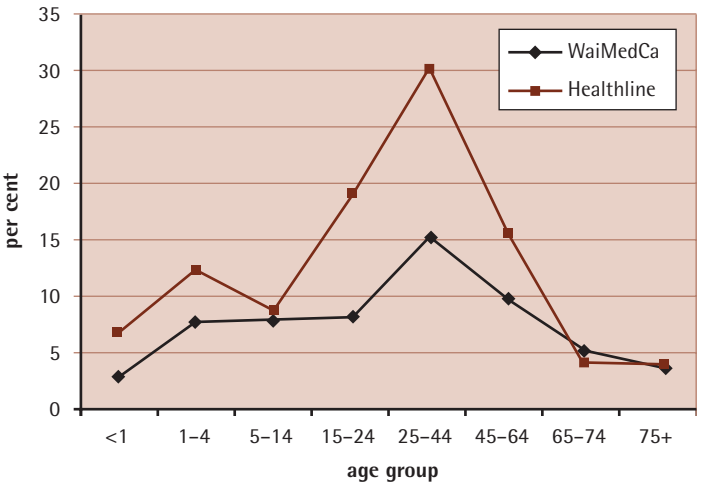


Figure 4. Ratio of the distribution of encounters to population (WaiMedCa[13]); and ratio of the distribution of callers to population (Healthline); by age group

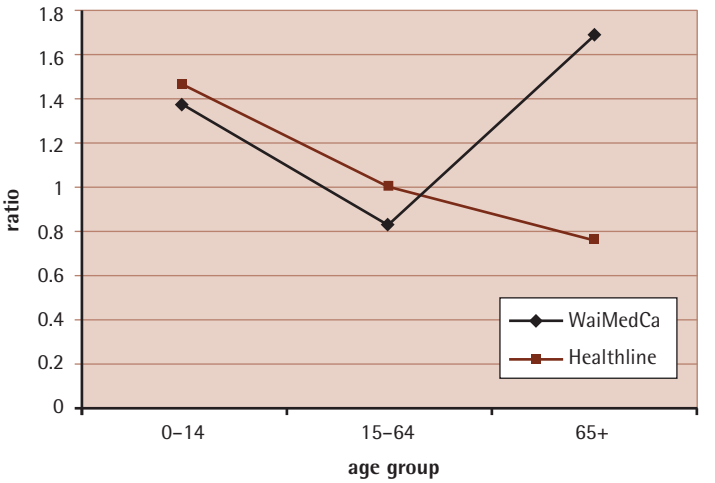
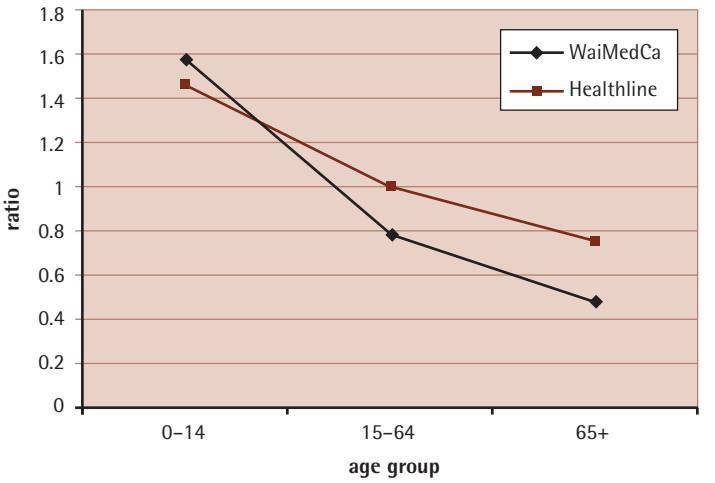


Figure 5. Ratio of the distribution of patient-initiated encounters to population (WaiMedCa[13]); and ratio of the distribution of callers to population (Healthline); by age group



callers with GP users (by age, gender and reason for the call), but that may have yielded useful data. Possibly there are particular social factors in Britain (but not in New Zealand) that deter older people from making calls to NHS Direct, but we think it unlikely.

What this study adds

In New Zealand the barriers for older people to use telephone triage appear to be no greater than those to initiate an encounter with their general practitioner. Thus the hypothesis that there is *'increasing marginalisation of older people from accessing services through "new technologies" such as the telephone'*,[1] is not supported here. Putative barriers such as lack of awareness of the service, mistrust of strangers or mistrust of technology seem similarly unlikely.

The perception that older people have *'an equal or greater need of the service'*[3] may be wrong, and the suggestion a telephone triage service should *'target efforts'*[2] to meet that perceived need may be premature.

On the other hand Figure 3 does show higher use of Healthline and general practice by almost every age group than by the two oldest groups. Have older people been *'failed by the health system'*[4] in accessing both services?

Implications for further study

Demand for medical services is driven not only by morbidity, but also by perceived need, patient preference, and nonhealth motives.[14] Apparent under use of some services by older people may reflect perceptions and preferences, rather than barriers. Stoicism in the face of symptoms, or a familiarity with managing symptoms – a greater confidence from their own experience that minor symptoms will settle – may diminish need.

A qualitative study of drivers of telephone triage utilisation would be useful before resources are spent on efforts to increase their use by older people.

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'Why is it that some doctors work hard, have busy practices, and yet seem to be unable to convert their labours into the wealth that the community so often expects of them. The community holds doctors in high regard, not just for the noble nature of their vocation, dedication, and ethics, but also for their income earning ability. The skill that commonly prevents practitioners from capitalizing on this superior income earning ability so as to generate wealth is, for lack of a better term, housekeeping. Many practitioners work long hours at their practice generating gross fees, but the cost structure of their administration systems prevents a high level of transfer into net profits...

A general practice is ultimately a business: services are provided for financial return. The objects of the practice are expected to include operating the practice for a net gain (the profit element). The most noble of intents, a non-profit practice needs to generate sufficient surpluses to meet both ongoing and future costs to be sustainable in the long term.'

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