



Title	Telephone Triage Services: Systematic Review and a Survey of Canadian Call Center Programs
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Aim

- To evaluate the clinical impact of teletriage services through their effects on health service use, safety, self-care and informal care, satisfaction, health-related quality of life, and access to other resources.
- To examine the economic impact (costs, cost effectiveness) of teletriage services.
- To summarize the characteristics and evaluation of Canadian teletriage programs.

Conclusions and results

Clinical Review: Ten studies met the inclusion criteria; six were randomized controlled trials, and all were from the US or UK. Various delivery models were compared. Despite differences in interventions, the studies indicated that teletriage decreased immediate practitioner visits without increasing adverse outcomes, eg, subsequent hospitalizations, emergency department visits, or deaths. About half of the calls were managed by telephone alone. Caller satisfaction ranged from 55% to 90% for registered nurse (RN) triage, and about 70% for medical doctor triage.

Economic Review: No published Canadian economic studies were found. Three Canadian jurisdictions that have undertaken economic analysis for their call center programs estimate that the cost per triage call ranges from C \$10 to C \$27, based on the number of staff employed and the population served. Three cost studies for RN teletriage – one UK study and one US study – were examined. Two of the studies demonstrated statistically significant cost savings for after-hours teletriage, mainly due to reductions in emergency department and physician visits.

Program Survey: Response rate was 100%. Seven Canadian jurisdictions have province-wide teletriage programs (British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec, and New Brunswick) and the other six have identified a need.

Recommendations

Not applicable.

Methods

To address the first two objectives, the research literature was systematically reviewed. Using a standard tool, two reviewers screened all citations to identify teletriage services evaluated using comparative study designs. Two independent reviewers extracted data, evaluated methodological quality, and analyzed the data. To gather data on teletriage in Canada, all provincially and territorially funded programs and key contacts were identified, and jurisdictional representatives were surveyed by written questionnaire.

Further research/reviews required

Comparative research – both international and in Canada – is needed to determine the “best” model for teletriage services.