TITLE: Prioritization of Emergency Services Dispatch: Guidelines and Best Practice

DATE: 28 June 2011

RESEARCH QUESTIONS

1. What are the evidence-based guidelines and best practice regarding the appropriate priority of dispatch for multiple emergency services in response to 911 or emergency calls?

2. What are the evidence-based guidelines or best practice regarding which agency should be responsible for emergency services dispatch in the community?

KEY MESSAGE

Limited evidence and no guidelines were identified regarding the appropriate priority, or responsible agency, for emergency services dispatch in the community.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2011, Issue 6), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and abbreviated list of major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. Where possible, retrieval was limited to the human population. The search was also limited to English language documents published between January 1, 2006 and June 14, 2011. Internet links were provided, where available.

The summary of findings was prepared from the abstracts of the relevant information. Please note that data contained in abstracts may not always be an accurate reflection of the data contained within the full article.
RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

Four non-randomized studies regarding the appropriate priority of dispatch for multiple emergency services in response to 911 or emergency calls were identified. No relevant health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, or evidence-based guidelines were identified. Additional articles of potential interest are included in the appendix.

OVERALL SUMMARY OF FINDINGS

Four non-randomized studies\textsuperscript{1-4} were identified regarding appropriate dispatch to emergency medical calls. One study\textsuperscript{1} examined the relationship between the time from treatment by basic life support providers to treatment by advanced life support providers after cardiac arrest and patient’s survival to hospital discharge. The prospect of patients surviving to hospital discharge decreased by 4\% for every minute that advanced life support was delayed.

Two before and after studies\textsuperscript{2,3} aimed to determine if emergency medical dispatch protocols to assess patient need and resource requirements were effective for reducing the number of first-responder (fire department) calls. Medical dispatch operators assessed whether the situation warranted both first responder and emergency medical services or emergency medical services alone. The authors concluded that the use of the protocol did reduce the number of calls requiring first-responder intervention and did not appear to have any adverse effects on the patients involved. One study\textsuperscript{4} examined the accuracy of a police operated dispatch system. Based on the dispatch report of heart attack and the subsequent emergency services diagnosis of acute coronary syndrome, the authors determined that the accuracy of the dispatch was moderate and suggested further training of dispatch staff and availability of medical supervision may be required.

No evidence-based guidelines or best practice information was identified regarding which agency should be responsible for emergency services dispatch in the community.
REFERENCES SUMMARIZED

Health technology assessments
No literature identified.

Systematic reviews and meta-analyses
No literature identified.

Randomized controlled trials
No literature identified.

Non-randomized studies


Guidelines and recommendations
No literature identified.

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APPENDIX – FURTHER INFORMATION:

Guidelines – methods not specified


Additional references


