



Evidence translation and the content of evidence summaries – is there a risk of distortion in guideline implementation?

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Background

The level of evidence for each recommendation is graded on a scale from A to D depending on the quality of the original studies (Table I). It is suggested that the stronger the level of evidence, the easier implementation becomes. Current Care has gathered information systematically about the distribution of the level of evidence for the last 15 years.

Purpose

The aim of this study was therefore to analyze how the level of evidence is distributed within the guidelines, and if there was any change in this during the two year period under review.

Methods

All published Finnish Current Care guidelines and the related evidence summaries were studied from the Current Care guideline database in February 2007 (n = 72) and June 2009 (n = 93). Evidence summaries were categorized by topic according to eight structured guideline subtitles (Epidemiology, Prevention, Diagnosis, Other treatment, Pharmacotherapy, Rehabilitation, Follow up and Treatment level in health care). The number of evidence summaries in each subtitle category and the proportion of level A to D evidence within these categories were calculated.

Results

In February 2007 a total of 2 886 and in 2009 3 687 evidence summaries were related to the guidelines. These evidence summaries were focused around treatment (60% in 2007 and 63.8% in 2009) divided into subtitles 'Pharmacotherapy' and 'Other treatment' (Fig. 1). The largest increase was seen in 'Other treatment' (2.6% and 1.2%, respectively). The total distribution of the level of evidence in the guidelines did not change between 2007 and 2009 (Fig. 2). Both 'Pharmacotherapy' and 'Other treatment' fell mostly into high level evidence (A and B). A-level evidence had decreased 1.7% in 'Pharmacotherapy' but D-level evidence increased by 4.3%.

Table I. Rules for grading evidence in Current Care guidelines.

Level A	Strong research-based evidence (multiple, relevant, high-quality studies with homogenous results, e.g. two or more randomized controlled trials, or a systematic review with clearly positive results).
Level B	Moderate evidence (e.g. one randomized controlled trial, or multiple adequate studies)
Level C	Limited research-based evidence (e.g. controlled prospective studies)
Level D	No evidence (e.g. retrospective studies, or a consensus reached in the absence of high quality evidence)

Discussion

It is important for a guideline organization to evaluate the evidence behind the recommendations and to analyze if the level of evidence is in balance in comparison to former trends of subtitle evidence. Contrary to what was previously believed, almost half of the evidence behind treatment concerns other treatment than pharmacotherapy.

The possibilities of using RCT's as a research frame in pharmacotherapy are good. In this respect it seems surprising, that D-level evidence has increased in pharmacotherapy despite working groups are encouraged to use D-level evidence, whenever high level evidence is not available.

Figure 1. Proportion of subtitles (%) in evidence summaries.

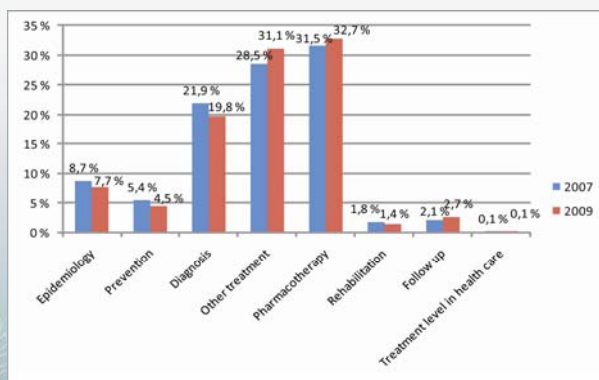


Figure 2. Distribution of level of evidence (A to D) in evidence summaries in 2007 and 2009.

