Challenges in developing recommendations about medical tests: in-depth interviews with guideline developers

Gowri Gopalakrishna, Mariska Leeflang, Kirsten McCaffery, Rob Scholten, Patrick Bossuyt, Miranda Langendam

Background

The extent to which patients experience benefit and harm from testing is an essential element of the evaluation of medical tests. Such direct evidence is however rare. This makes guideline development of medical tests challenging.

Objective

To identify and better understand issues and challenges in medical test guideline development.

Methods

In-depth interviews with guideline developers, in various fields of medical testing (e.g. imaging, biomarkers, mental health) were conducted either face to face where possible or via telephone. Interviews were recorded and transcripts analyzed using the "Framework analysis" approach, a matrix-based method of thematic analysis.

Results

We interviewed 17 guideline developers from 14 different institutions in 7 countries. The main challenges faced by guideline developers of medical tests were about developing key questions and linking accuracy evidence to patient outcomes. Other challenges were lack of understanding of the methods and results from diagnostic research in guideline development groups. Interviewees pointed out that solutions for these challenges are often limited by resource constraints.

Discussion

Accuracy is often used as main outcome, however guideline developers feel this is not sufficient to make patient-centered recommendations. Training resources to improve the understanding of the link between test accuracy and patient outcome among guideline panels can make an important difference.

Implications for guideline developers

Results of this study provide an in-depth understanding of the specific challenges faced by guidelines developers in medical test development and outline areas that need more research and support by the guideline development community.

Word count 250 (this is also the word limit)