Systematic analysis of clinical practice guidelines for decisions in health care: a success story

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Background
International clinical practice guidelines (CPGs) can often not be applied to decision-making in health care because of their methodological uncertainty, complexity or sheer number. A systematic, sound analysis of CPGs could help.

Aims
Using the report type for “disease management programme (DMP) updating”, we present IQWiG’s methods for developing systematic CPG analyses and show how the reports are used to assist in health policy decisions.

Methods
CPG analysis is based on a systematic search for evidence-based CPGs. Their methodological quality is assessed and recommendations extracted using a standardized procedure. By comparing recommendations, health care standards are identified and summarized. To determine whether DMPs needed updating, the identified health care standards were compared with the recommendations in the DMPs (see Figure 1).

Results
It was possible to systematically identify aspects of the DMPs that were in need of updating or supplementation. The health policy decision-makers will discuss the recommended changes and decide whether they will adopt them (see Figure 2).

V12-01: Systematic guideline search and appraisal, as well as extraction of new and relevant recommendations, for the DMP COPD

Systematic search
14 evidence-based asthma CPGs were included (Germany [n = 2], Europe [n = 4], USA [n = 3], Australia [n = 1], Canada [n = 4]).

Appraisal with AGREE
Many CPGs showed methodological deficiencies.

Unpublished data
4 CPGs provided information on the use of unpublished data.

Different aspects were identified for which there was a potential need for updating of the DMP:
- Specification of the goals and the content of training for patients with COPD
- Issuing of a negative recommendation on the use of oral corticosteroids in long-term treatment
- When to recommend invasive/non-invasive ventilation in patients with exacerbations and/or respiratory infections
- When to recommend rehabilitation measures in patients with moderate COPD
- Use of combination therapy (pharmaceuticals + psychosocial support) in patients who wish to stop smoking
- Different aspects of pharmaceutical therapy

Figure 2: Example of a systematic CPG analysis

Limitations
Methodological challenges exist, for instance, regarding the transferability of international CPG recommendations and the appraisal of content quality of CPG recommendations.

Conclusion
CPG analyses are a viable way of assisting health policy decision-makers. Already when developing CPGs, authors should consider that these documents are also used to support health policy decisions.