

An analysis of current guidelines in cystic fibrosis

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Background. A clinical guideline (LG) is a document with the aim of guiding decisions and criteria regarding diagnosis, management, and treatment in specific areas of healthcare; also in the Cystic Fibrosis (CF) world, scientific societies and organizations publish LG to give recommendations; since guidelines may have both methodological problems and conflict of interest our strategy is needed to choose which guidelines should be implemented.

Aims. Evaluate the reliability of every single guideline produced within the CF; identify the accurate documents and to implement its knowledge among the healthcare profession; produce a reasoned synopsis of the existing recommendations.

Methods.

- Search and selection of the LG published in CF
- Production of a database of selected LG
- Methodological analysis of LG (3 independent valuers), using AGREE II instrument; AGREE II is a 23-item tool organized within 6 quality-related domains (aims and target group; stakeholder involvement; rigour of development, clarity of presentation, editorial independence).
- Summary of the main recommendations from LG selected having a high AGREE score
- Production of synoptic tables including clinically significant recommendations with the aim to compare the different LG recommendations.

Results. 110 documents were considered eligible for the analysis (58 and 52 consensus guidelines), then reduced to 40 (LG produced in the last 10 years, covering the most relevant clinical topics in CF field). A deep

analysis of the data results in poor quality of available documents, especially the consensus documents that don't respond to some methodological criteria indicated by Agree II (range of mean score: 26,4%-74,4%). Similarly, LG lack especially in three areas: rigor of development (mean score 47.2%), stakeholder involvement (mean score 52.4%), and applicability (mean score 28%). The latter represents a significant future investment framework, considered the monitoring deficiencies found by CF Registers. We selected 25 documents of relevant questions for practice (pulmonary disease and respiratory therapy), from which we have extracted 788 recommendations.

Spin off for research. Our project graded LG in high, medium, low level of quality; we founded a lot of documents with low level of quality and discrepancies between recommendations; we set up a synoptic table of evidence-based recommendation from valid LG to facilitate the implementation in daily practice.

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