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EDITORIAL

How do we choose the most appropriate clinical guidelines?

¿Cómo escogemos la guía clínica más adecuada?

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Noise becomes data when it has a cognitive pattern. Data becomes information when assembled into a coherent whole, which can be related to other information. Information becomes knowledge when integrated with other information in a form useful for making decisions and determining actions. Knowledge becomes understanding when related to other knowledge in a manner useful in anticipation, judging and acting. Understanding becomes wisdom when informed by purpose, ethics, principles, memory and projection.

George Santayana, The Life of Reason, 1905

When the quotation with which we begin this editorial was written, the constant bombardment of inputs that we experience today could not even have been imagined, yet it has lost none of its relevance. In the field of medicine, in 1979 David Durack[1] weighed the *Index Medicus*, the analogue equivalent of today's PubMed that only baby boomers will remember, and found that it had increased exponentially since the 1950s. With the advent of the Internet, the number of indexed medical journals has increased meteorically and access to material is no longer a problem. Paradoxically, nowadays, finding the most relevant knowledge for clinical decision-making has become a real odyssey for professionals. It is therefore essential to have tools to bring data together and transform them into knowledge that supports clinical decision-making processes. Clinical practice guidelines (CPG) have been part of our professional lives for several decades with this objective in mind.

According to the Institute of Medicine, CPG are systematically developed documents to assist healthcare professionals and patients in making decisions about health issues in specific clinical situations[2] or a convenient way of packaging evidence and presenting recommendations.[3] The process of establishing recommendations is complex, as they must be based on evidence but also on the quality of evidence, patient values and preferences, and factors such as feasibility, equity and sustainability.[3] When rigorously developed, CPG help in the decision-making process, contribute to improving health outcomes, reduce variability in clinical practice and help to define efficient health policies by promoting activities of proven utility and eliminating those that do not add value.[4] However, if the evidence is limited, if CPG are not developed with adequate methodological rigour, or if corporate interests intervene, recommendations may end up being made on the basis of biased and in some cases self-serving evidence which can lead to harmful care decisions and suboptimal, ineffective or inefficient health policies.[4] Despite the acknowledged difficulty of producing rigorous CPG, recommendation documents have seen a remarkable proliferation in recent years. A simple search in PubMed restricted to the last five years identifies a total of 6127 CPG, to which must be added a range of other documents

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sponsored by scientific societies and/or various health institutions. Moreover, it is not uncommon for recommendations to diverge even on the basis of the same evidence. A well-known example of this is recommendations concerning blood glucose control targets in type 2 diabetes mellitus.[5]

How can we know if CPG are reliable? As for any other document, there are quality standards that apply to the drafting of CPG[6,7] which stipulate transparency in their development, the composition of the group and funding with description and resolution of conflicts of interest, that recommendations are based on systematic reviews which meet Institute of Medicine standards, that the quality of evidence and recommendations are reported, that recommended actions are explained, that they are subject to external review and that they are updated regularly.

The Appraisal of Guidelines Research & Evaluation (AGREE) initiative, accessible at <https://www.agreetrust.org/>, was launched 20 years ago with the aim of ässessing the quality of guidelines, providing a methodological strategy for developing these documents and establishing formal aspects of guideline presentation. The AGREE-II questionnaire (https://www.agreetrust.org/wp-content/uploads/2013/06/AGREE_II_Spanish.pdf), developed by this group, is a comprehensive tool consisting of 23 items scored on a Likert scale, corresponding to six domains: ''Scope and Purpose'', ''Stakeholder Involvement'', ''Rigour of Development'', ''Clarity of Presentation'', ''Applicability'' and ''Editorial Independence''. Although AGREE-II is the reference instrument for assessing the quality of CPG, its applicability in daily practice by healthcare professionals is limited, as it requires specific training, a solid methodological basis and ideally should be completed by peers.

Unfortunately, far from what would be desirable, successive assessments of the quality of CPG using AGREE-II are disheartening, as they reveal significant deficiencies.[8] The field of endocrinology is no stranger to these negative assessments.[9,10] This highlights the need for healthcare professionals to have valid and easy-to-use tools to select the most reliable CPG or, if there are no alternatives, to be aware of the limitations of those they are using and to what extent they can or cannot trust their recommendations.

As optimal is the enemy of good, in order to facilitate a simple evaluation of CPG by their end-users, a group of experts has recently developed an easy-to-use instrument, the Guideline Trustworthiness, Relevance and Utility Scoring Tool (G-Trust), which has been validated against the AGREE-II instrument and detects 90% of poor-quality CPG.[11] This questionnaire[12] consists of a short checklist of eight items that the reader scores as ''yes'', ''no'' or ''can't tell'', organised into three domains or categories:

1 *Relevance and utility*. This section focuses on the following points in terms of recommendations:
   a) They should focus on improving patient-important outcomes beyond intermediate indicators (surrogate markers: biochemical parameters or risk factors).
   b) They should be clear and explicit, sufficient for shared decision-making.
   c) They should be applicable at the level of one's own practice.

The message to the reader is that only those recommendations which focus on relevant outcomes and are applicable in their field of action will have an impact on improving health outcomes for their patients. Recommendations which cannot be implemented because they do not correspond to one's own reality are of no use.

2 *Reliability or rigour*. This includes different aspects, such as:
   a) Recommendations should be based on systematic reviews of the literature.
   b) They should use robust grading of evidence and evidence quality, such as those provided by the Grading of Recommendations, Assessment, Development and Evaluation (GRADE), Scottish Intercollegiate Guidelines Network (SIGN) or the US Preventive Service Task Force.
   c) The inclusion of an independent methodologist in the working group or review by an external independent expert group is considered critical.

A simple glance at the requirements for determining the application of the GRADE criteria and the GRADEpro clinical practice recommendation development tool, accessible at <https://www.gradeworkinggroup.org/> and <https://www.gradepro.org/> respectively, makes it clear that training and a robust methodological basis are required to ensure rigour in categorising strength of recommendations and quality of evidence.

3 *Interpretation*. This last domain refers to determinants such as:
   a) The independence of the working group: that the chair of the working group and the majority of the members of the group have no conflicts of interest and that the funding of the group is also independent.
   b) The inclusion in the working group of all professional groups and stakeholders, such as patient associations, insurers and health institutions. This condition is directly linked to ensuring that the objectives of the document are patient-centric, feasible and achievable in the care setting, specifically in the healthcare organisation in which the professional works.

This tool proposes three critical items, the absence of which makes it highly unlikely that the CPG meet the minimum requirements to be considered useful: lack of focus on patient-important outcomes, recommendations not supported by systematic reviews, and lack of robust grading of evidence and evidence quality. After this first filter, if only one shortcoming is detected in the remaining five items, the CPG are considered useful, two shortcomings do not guarantee the utility of the document, and between three and five shortcomings cast serious doubts on the utility of the document.

This pragmatic instrument is simple to use, does not require great methodological knowledge and allows professionals to carry out a systematic review of critical items in order to evaluate which of the CPG on a specific topic are most likely to meet the requirements of quality and reliability in their recommendations. Who has now been inspired to

perform this healthy exercise of critical reading with their favourite CPG?

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