



## Editorial

# Practical guidelines and apps for improvement of guideline implementation



## S U M M A R Y

The European Society for Clinical Nutrition and Metabolism (ESPEN) presents a new series of “practical guidelines” based on previously published scientific guidelines. A first example of such a Practical Guideline has been completed and published recently (ESPEN practical guideline: Clinical Nutrition in inflammatory bowel disease), other will follow soon. The practical guidelines are generated by shortening and restructuring of the Scientific guidelines and by presenting the content using flow charts for a fast navigation through the content. The practical guidelines serve as templates for IT-based versions for the smartphone, tablet and PC, for lay versions and for translations into different languages. These efforts are part of a new guideline dissemination and implementation program ESPEN launched in 2018 also with support by the United European Gastroenterology society. First results are presented.

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Many societies including ESPEN spend major effort to develop high-quality guidelines that follow the strict and complex rules for scientific guidelines published by NICE, GRADE, international societies, national authorities such as the AWMF, or other institutions [1–4]. Because of such methodologies, guidelines become longer and more detailed and finally no more easy to use in clinical practice. For example, the average length of actual ESPEN guidelines is 20,000 words, with 320 references and 64 recommendations [5–14]. This is a major cause of a generally restricted implementation of clinical guidelines into practice.

Already 20 years ago, a systematic review identified reasons for a limited adherence to guidelines and found that the mere length of the guidelines was responsible for the lack of adherence [15]. Because of the great volume of information and the time needed to get and stay informed, there is a lack of familiarity of guidelines. In everyday life, there is a lack of time and resources to work one's way through a guideline. Thus, shorter guidelines and easily accessible information should foster the knowledge of guideline content. However, real efforts to change the guidelines to this direction are missing. Apart from the time aspect, there is also a lack of awareness of guidelines [15]. In the cancer care context, the effectiveness of guideline dissemination and implementation strategies was assessed, however, due to the variety of strategies and combinations thereof, it was not possible to identify the one generally valid implementation strategy [16].

In 2018, ESPEN decided to improve guideline dissemination and implementation and to launch a new program to this aim. As a first step, the original guideline versions (scientific guidelines) are shortened and transformed to practical guidelines. The evidence- and consensus-based recommendations of the original scientific

guideline remain untouched, but the commentaries are shortened to a maximum of 200 words, and the citations are limited to those on which the evidence relies to (usually up to 5 citations per recommendation). The transformation includes also the creation of flow allowing quick navigation through the whole guideline text. These practical guidelines are supposed to be the starting point for subsequent dissemination actions. They are provided to national parenteral and enteral nutrition (PEN) and other societies for translation into national languages to reach especially non-English speaking clinicians, dieticians, and nutritionists. The practical guidelines are also templates for lay versions developed by patient representatives and respective organizations such as the European Patient Forum (EPF). Most importantly, the practical guidelines are transformed into IT versions offered as web-based version for PC's or as apps for smartphones and tablets using either the Android or the iOS operating system, respectively.

The flow-charts generated during the transformation process allow a largely graphical presentation of the guideline, a quick navigation through the numerous recommendations, and targeted interactions depending on the clinical questions to be addressed. This graphical approach helps to answer questions quickly and easily in clinical practice. The dissemination project was also successfully proposed to the United European Gastroenterology (UEG) society, in the context of an ongoing fruitful collaboration. Resulting from participation of UEG, the first ESPEN guidelines to be transformed into the new formats are those on gastrointestinal diseases, namely Inflammatory Bowel Disease, Liver Disease, Surgery, Chronic Intestinal Failure, and Cancer. Step by step, other ESPEN guidelines will follow, e. g. Intensive Care Unit, Geriatrics, Neurology, Home enteral and Home parenteral nutrition.

First results of the ESPEN guideline dissemination and implementation plan have now become available. In March 2020, the first ESPEN Practical Guideline was published [17]. In June 2020, the first ESPEN app went online (iOS: <https://itunes.apple.com/us/app/espren-guidelines/id1493499398?ls=1&mt=8>; Android: <https://play.google.com/store/apps/details?id=org.espen.guidelines&hl=en>). In July 2020, the first version of an web-based interactive guideline has been presented (<https://www.guidelines.espen.org/>).

ESPEN's efforts in guideline dissemination comprise of all the most common measures in this field. Various medical societies offer their guidelines as an app version, but so far only few of them use not only text-based versions but also graphically enhanced flow charts and decision trees, e. g. the American Gastroenterological Association (AGA), American Heart Association (AHA), Endocrine Society, European Society of Cardiology (ESC), and German Diabetes Society (DDG). Especially in the field of cancer, guidelines dedicated to patients and/or lay readers are common, but patient guidelines should be an emerging topic in all medical areas. Translation of guidelines into national languages are of interest especially in European societies, and some of them offer translations in various European and even North African and Near East languages, e. g. ESC and the European Society for Medical Oncology (ESMO). Some societies offer different dissemination methods, e. g. slide sets or podcasts. With its widespread and unique dissemination actions in the field of nutrition, ESPEN steps up to the big medical societies and starts to overtake them.

In conclusion, ESPEN presents a novel and innovative approach to present shortened guidelines as flow charts on smartphones, tablets and PCs for use in clinical practice. The important cooperation with UEG will further enhance dissemination particularly in the field of nutrition in GI diseases. These practical guidelines will allow national translations, lay versions and other activities to foster dissemination and implementation.

## Conflict of interest

None declared.

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