An independent jury-based consensus conference model for the development of recommendations in medico-surgical practice

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Background. *There is an increasing demand for standardization in the choice of treatments for specific conditions, so-called personalized medicine. The task is far from trivial, because the perspectives from many stakeholders must be respected, including patients and health care providers, as well as payers or governments to better control costs while optimizing quality of care. One approach to provide widely accepted therapies is the consensus conference.*

Methods. *We describe a novel methodology to achieve consensus in controversial areas with the main goal to minimize biases.*

Results. *The principle of this approach relies on a clear distinction between those who provide the evidence (experts) and those who draw the final recommendations (the jury). The jury consists of individuals with sufficient background knowledge to cover the perspectives of all stakeholders' without being involved directly in the topic under evaluation. The organizing committee, the experts, and the jury interact within 3 phases: Preparation, the actual consensus conference, and deliberations. Each question is addressed by a panel of experts, leading to the proposition of recommendations at the conference meeting, which are challenged by the jury and the audience. Based on all available information, the jury finalizes the consensus recommendations, which are eventually published and made available to all.*

Conclusion. *This novel model of consensus conference allows the construction of consensual, evidence-based, explicit recommendations for therapies in a process that may also identify issues for further research, eventually fostering progress in the field. (Surgery 2014;155:390-7.)*

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THE GROWING COMPLEXITY of medical care and its accompanying increase in cost are worldwide concerns. In addition, there still exist substantial variations in practice, even in situations where there are established clinical guidelines. Practice guidelines have been developed for clinical situations in which large, randomized, controlled trials are available. In most situations, however, the best available evidence comes from less rigorous and smaller studies with a risk of bias and low precision.

In the current era of economic pressure, stakeholders, such as health insurance companies, hospital leadership, and government health ministries, expect physicians to decrease unnecessary practice variability and to promote effective and cost-conscious care. In doing so, many participants also insist on including the patient perspective in decision making. Achieving these aims cannot be based on evidence from scientific studies only, but requires multiple judgments, no matter how strong the research is. Outcome measures for trials have to be identified, and their relevance must be ranked. Threats to the validity of studies have to be included in statements about the corresponding effects. Benefits of interventions have to be

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weighed against harms and resources used. In these processes, a consensus conference can be an appealing approach.

A consensus conference is a method by which a defined community of purported experts comes to an agreement about a controversial topic.[1] It does not mean that all the participants ultimately agree on the final recommendations, but it does mean that, in coming to those decisions, no one believes that her or his opinion on the matter was misunderstood or that it was not given a proper hearing and that the majority of the participants were prepared to follow the recommendations of the conference.

We were introduced to the format of consensus conference when faced with the need to identify the group of patients with liver cancer (hepatocellular carcinoma [HCC]), who may benefit from liver transplantation (LT).[2] This issue has come up in almost every meeting dealing with LT or HCC for >2 decades with sometimes quite different and supported pro and con debates among opinion leaders. Transplantation decisions are particularly challenging owing to the shortage of liver grafts, and the inherent risk of penalizing patients on the waiting list. These considerations require stringent selection criteria. There are also clinical situations that do not lend themselves easily to randomized, controlled trials.

Our group felt that a consensus conference would be the most appropriate method to arrive at widely accepted guidelines. We reviewed extensively various formats of consensus conference and selected the Danish model as the most appropriate methodology for our purposes.[3] Herein, we have reported the 3 phase process of developing the methodology for this consensus conference (Fig) and propose a critical analysis, suggesting that this type of format may be suitable for other surgical or medical topics.

PHASE 1: PREPARATION

The first step was to identify a group of leaders in the field of study to secure adequate coverage of the topics and involvement of key experts worldwide. We also wanted to involve influential scientific societies in the fields of liver disease and transplantation, to obtain broad coverage and possibly better acceptance of the resulting consensus statements. We convinced 9 international societies and a foundation not only to endorse the conference, but also to provide financial support. We believe this initial move was among the most important factors for the success and credibility of the consensus exercise. To persuade those often competitive societies to participate actively, we prepared a short document describing the rationale for such consensus conference, as well as the concept of the Danish model, which is described more in detail herein. Our aim was to propose a methodology that would lead to meaningful and unbiased statements and recommendations. We then suggested including 1 member of their respective councils in the organizing committee.

The Danish model. The concept of consensus conferences emerged in the United States in the 1970s as a tool to assess new and expansive medical technology.[4] Many of these "consensus development conferences" were organized and sponsored by the US National Institutes of Health. Several European countries adopted this model for similar purposes, with adjustments to better suit different institutional and cultural policies. In this context, the Danish Board of Technology, the parliamentary office of technology assessment, developed a method in the mid 1980s to explore emerging topics dealing with "gene technology in industry and agriculture." The novel element compared with previous consensus efforts was the introduction of a panel of nonexperts, consisting of citizens from various backgrounds. This "lay panel" was invited to produce the final recommendations based on the information produced by the experts. This approach aimed at including the views, concerns, and arguments of the lay public in the final recommendations. The goal was to secure a societal perspective in the consensus process and in some cases to allow for lay perspectives to influence regulation and political decision making.

The Danish format has been used in other occasions, mostly to address topics addressing the social, political, and environmental repercussions of research, science, and technology. The LOKA institute (www.loka.org), a nonprofit research and advocacy organization, lists 76 Danish, citizen-based deliberative, consensus conferences held between 1987 and 2012. Of these, 22 were held in Denmark and 54 in 20 different countries around the world.

Amendments of the Danish model for the purpose of medical questions. The organizing committee of the consensus conference on the role of LT for HCC selected the Danish model for the consensus conference, attracted by the use of a panel of nonexperts. We felt that recommendations generated by experts only would fail to promote a consensus because of biased opinions. Supporting this fear was the observation that previous consensus attempts organized by single