Patient safety in the operating theatre
The world health organisation’s surgical safety checklist in Belgian operating theaters: a content-driven evaluation

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Background & aim
A growing number of organisations, worldwide, are endorsing the widespread use and implementation of the WHO surgical safety checklist. The current guidelines detailing and allowing checklist modifications might lead to the development of a variety of checklists in terms of their content. Some of these modified checklists will be used under the pretense of the WHO label while bearing little or no resemblance to the original checklist. This highlights the importance of knowing what modifications are made by hospitals. As the literature does not provide any data on this, this study aimed to describe the modifications made by hospitals by conducting a content-driven evaluation of the surgical safety checklists used in Belgian hospitals.

Methods
Design and setting
This cross-sectional, web-based survey is part of a broader research project evaluating the implementation of the WHO surgical safety checklist in Flemish hospitals (Dutch speaking part of Belgium). Since January 2013 governmental legislation obliged the use of the WHO surgical safety checklist for all elective surgical procedures.

Sample
All Flemish hospitals with an operating theatre were identified (n=56). The chief executive officer (CEO) and chief medical officer (CMO) of each hospital were sent an invitation letter explaining the purpose of the study and inviting the hospital to participate in a survey.

The survey
A structured online survey was set up, consisting of three parts. The first part contained general questions regarding the hospital and the operating theatre. The second part covered 12 questions about the use of the surgical safety checklist (see table 1). The third part of the survey asked to provide a copy of the checklist used by the hospital. The survey was electronically distributed by sending an e-mail to the hospitals’ contact person.

Checklist evaluation
To verify the content of the received checklists, a panel of healthcare professionals was assembled, consisting of one surgeon (representative from the national association of surgeons), one anaesthesiologist (representative from the national association of anesthesiologists), one perioperative nurse (representative from the national association of perioperative nurses), one hospital’s quality officer, one expert on hospital accreditation, and one patient safety expert. The expert panel was brought together during a consensus meeting where the retrieved checklists were discussed under the guidance of a facilitator and referee. The meeting was lead by a facilitator (JB) who introduced all checklists and mentioned the issues found during preparation. Simultaneously, the relevant checklist was displayed on a screen. This was followed by a discussion among the panel members in order to reach consensus on two questions: 1) are all 22 items included in the checklists as mentioned by the WHO, and 2) in case modifications were made, to assess whether or not these were in accordance with the WHO recommendations. In case no consensus was reached after five minutes following start of the discussion, the referee (DV) intervened and made, based on the arguments formulated by the panel, a final decision. A copy of the WHO’s implementation manual and checklist was provided during the meeting as a reference. This process was repeated for all checklists.

Conclusion
This study shows that modifications made to the WHO surgical checklist vary between hospitals. In contrast to the respondents’ belief of using the WHO checklist, only a small number of hospitals included all 22 WHO items. It can be questioned if the modified checklists will result in an equal decrease in the number of preventable surgery related adverse events as previously demonstrated. Further research and more detailed, clear guidance for the modification of the WHO surgical checklist are required.