

Adapt and adopt? The non-evidence-based implementation of evidence-based guidelines.

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Guidelines and their revisions are usually based on an extensive amount of literature. It takes a lot of time, effort, and typically a large team of experts to formulate practical clinical advice from an abundance of data. The aim is to organize and provide the best available evidence to support clinical decision making to improve quality, patient outcomes, and cost effectiveness. It is interesting that compared to the vast amount of data new guidelines are based on, relatively little research goes into optimising dissemination, implementation, practical adherence, and monitoring of clinical results for guideline updates.

The process that takes place after a new guideline has been released is a research field of its own. At the moment, the most effective way to implement a new guideline is unclear and there is little evidence for tools to support implementation.^{1,2} The most effective strategy may even differ per guideline, as the barriers to effective implementation can be personal/physician-related, guideline-related, or external.^{3,4} Personal/physician-related factors comprise aspects such as lack of awareness, lack of motivation, lack of agreement, etc. These factors could be tackled by dissemination of guideline information and education of physicians. For medical guidelines, this is one of the most common strategies, where education meetings and conferences are held to update knowledge and also to explain the background and supporting evidence for the recommendations. Guideline-related factors can comprise the complexity of the guideline, its accessibility, and its layout. Most guidelines today aim for a clear set-up with intermediate outlines of the recommendations. Finally, external factors may include a lack of resources (financial or in terms of workforce) or organisational aspects.

In this edition of the *Netherlands Journal of Medicine*, Mol et al. have reviewed the implementation of an updated Dutch national guideline on peri-operative bridging of anticoagulant therapy in their hospital.⁵ The study shows that the implementation of this guideline update has been successful and even took place before the local hospital

protocol was updated, resulting in a large percentage of non-adherence to the local hospital protocol during the transition period. Rightly so, the authors question the usefulness of local protocols in addition to national guidelines based on these findings.

Unfortunately, this encouraging study is merely descriptive and does not discuss why this implementation has been so successful, what the implementation strategy was, and whether this success was only local or also national and international. Taking the previously presented information into account, one may speculate that this guideline update may have had few barriers in this particular hospital. Physicians may have been aware and been convinced by the evidence of the randomised controlled trial that changed the guideline. The change in the guideline was not complex and a local systematic approach to peri-operative anticoagulant therapy was already in place, posing few guideline or external barriers. This reminds me of Bram Stoker's *Dracula* statement, 'We learn from failure, not from success',⁶ as there was potential for this study to teach us more about effective implementation strategies.

REFERENCES

1. Flodgren G, Hall AM, Goulding L, et al. Tools developed and disseminated by guideline producers to promote the uptake of their guidelines. *Cochrane Database Syst Rev.* 2016(8):CD010669.
2. Gagliardi AR, Alhabib S, members of Guidelines International Network Implementation Working G. Trends in guideline implementation: a scoping systematic review. *Implement Sci.* 2015;10:54.
3. Fischer F, Lange K, Klose K, Greiner W, Kraemer A. Barriers and Strategies in Guideline Implementation-A Scoping Review. *Healthcare (Basel).* 2016;4(3).
4. Cabana MD, Rand CS, Powe NR, et al. Why don't physicians follow clinical practice guidelines? A framework for improvement. *JAMA.* 1999;282:1458-65.
5. Mol GCM, Büller HR, Sinnige HAM, Péquériau NCV, Coppens M. Perioperative bridging of anticoagulation: towards a more reserved approach. *Neth J Med.* 2019;77:[in vullen].
6. Stoker A. *Dracula*. London: Constable & Co.; 1897.