Improving the Practice of Updating Guidelines

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Background

Guidelines require regular updating to ensure that they reflect current research. Due to time and resource constraints, developers often use an abridged process to update guidelines instead of following the original guideline development process. There is a need to ensure that best practices are considered during guideline development, and subsequently, both followed and appropriately documented in guideline updates.

Objectives

To evaluate current practices in guideline development update processes, and provide insight into how developers can improve practice.

Methods

The Centre for Effective Practice was engaged by the Canadian Partnership Against Cancer to assist in the redevelopment of its SAGE directory, a publically available directory of English language cancer control clinical practice guidelines. Part of this project entailed the identification, review, and evaluation of all CPGs addressing the cancer care continuum published since mid-2012.

To date, over 706 guideline appraisals have been completed by our team using the AGREE II Instrument [1].

This project presented a unique opportunity to evaluate current practicesin guideline update processes and provide insight into how developers can improve their practice.

For purposes of the larger SAGE project all guidelines were first evaluated by applying all items of the Rigour of Development domain (RoD) as an initial quality threshold. Those scoring over 60% in the RoD domain were then evaluated using the full AGREE II Instrument.

To ensure accuracy and reliability of scoring and concordance among reviewers a rigorous evaluation process was established, with reviewers participating in intensive advanced training (50-70 hours total) on the AGREE II.

Between March 2014 - August 2016 565 guidelines were reviewed using the RoD domain. Of those, 355 guidelines scored > 60% in the RoD and received full AGREE Reviews.

Results

In order to evaluate the quality of updating practices in the guidelines reviews, Item #14 from the RoD domain was examined for all guidelines, and additionally considered according to guideline quality.
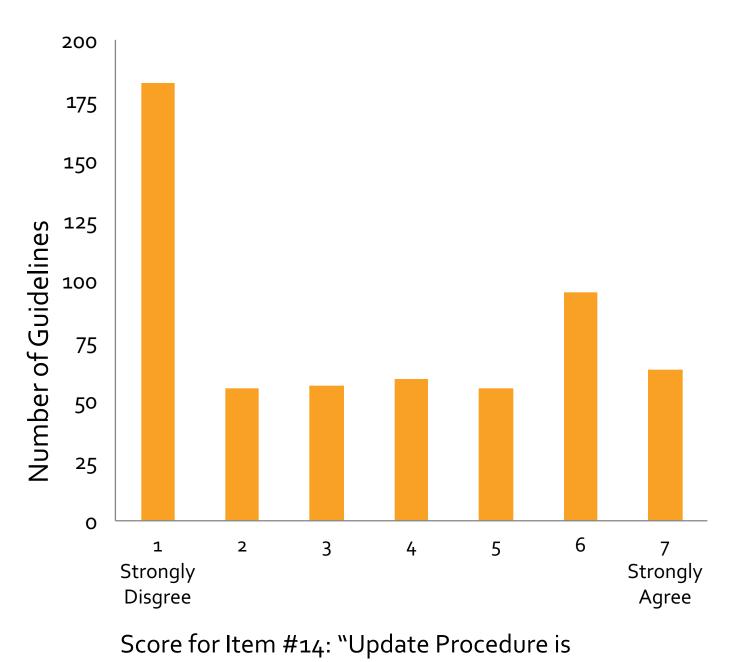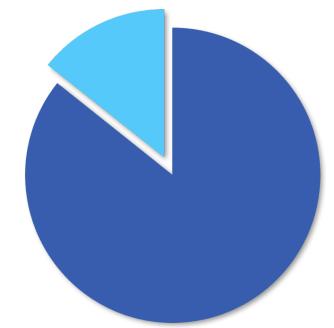

Figure 2. AGREE II Scores for Item #14 'A procedure for updating the guideline is provided' for all guidelines reviewed

Figure 2 shows the range of reviewer scores for Item #14 on the AGREE II: 'A procedure for updating the guideline is provided' for each guideline, from 1-7 with 1 being 'strongly disagree' and 7 being 'strongly agree'. Of 565 guidelines, 32% scored a 1 (n=182), while 11% (n=63) scored a 7. Overall, 62% received a score of ≤ 4 (n=352).
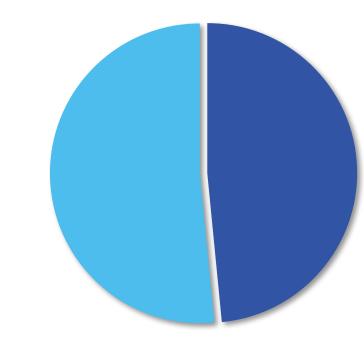
Unsurprisingly, of those guidelines that did not pass the 60% RoD threshold (n=210), the majority scored very poorly in the update section, with 86% scoring ≤4, (Figure 3), and 64% (n=134) scoring 1.

Figure 3. AGREE II Scores of ≤ or > 4 on Item #14 'A procedure for updating the guideline is provided', for guidelines scoring <60% on RoD.

Scores for guidelines that were deemed higher quality given their ≥ 60% score in the RoD (n=172) were more surprising. Of these guidelines, almost half (48%) still scored 4 or less on item #14 (n=83).

Figure 4. AGREE II Scores of ≤ or > 4 on Item #14 'A procedure for updating the guideline is provided', for guidelines > 60% RoD threshold.

Discussion

An appropriate procedure for updating a guideline should be considered at the original guideline development stage, but this information is rarely included, as shown by the results of the AGREE II Item scores.

After reviewing AGREE II Item 14 on over 550 guidelines some trends emerged regarding best practices. Guidelines that achieved a full 7 on this item included the following elements:

1) Specific date when guideline will be updated or reviewed

"All active NCCN Guidelines are reviewed and updated at least annually." [2]

"At three year intervals, there will be a full search of the literature from the date of the last search to identify any new evidence which would change a recommendation." [3]

2) If guideline states that a review will be conducted to determine if an update is necessary, full details of the review process must be provided including:

a) Who will be participating in the review, a description of their roles, and who will ultimately be responsible for establishing that an update needs to be made; and

b) Specific criteria for determining whether the guideline remains current or requires an update

"The original GDG members will be surveyed to get their opinions on the relevance of the existing guideline, recent developments in the topic area and their knowledge of any new important evidence since publication of the guideline."[4]

"The literature search will begin for each guideline topic three years after publication to identify new research […] An expert workgroup will convene to determine the need for new and revised recommendations [based on search results]."[5]

"[…] the chairman, or a designate, will take clinical responsibility for maintaining the guideline. GDG members will be asked to notify the chairman at any time, if new evidence makes any aspect of the Guideline unsafe."[3]

3) Details of the procedure for updating the guideline, including who will be involved in the update of the guideline content and the process for updating or reaffirming recommendations

"For any section of the Guideline which needs updating, the members of that subgroup will meet to review the evidence and agree changes. The re-drafted sections of the Guideline will be sent to the full GDG for agreement before publication." [3]

"[…] Panel meetings are held as live, in-person meetings, by telephone conference, or by telephone conference with web conferencing. [..] each response or comment gathered from the Institutional Review is reviewed and discussed by the Panel." [2]

"The NCC recruits a new GDG to undertake the work [to update the guideline], using the usual recruitment process[…]" [6]

Other Considerations: Best Practices for Updating Guidelines

In addition to adequately describing update procedures during original development, it is important to ensure best practices are followed during guideline updates and clearly detailed in the updated guideline. Figure 5 shows the elements that should be included in the updated guideline to ensure that the original and updated portions of the text are distinguishable and that the update process is clearly and sufficiently documented.

Best Practices for Updated Guidelines

- Provide explicit details on original guideline development methodology including original search strategy
- Describe update procedure (including updated literature search and results) in a way that is easily distinguishable from original guideline development
- Ensure new recommendations or changes to previous recommendations are easily identifiable and that all recommendations (new and original) are clearly linked to evidence (or explicitly stated if based on expert opinion)
- Clearly present the update panel with indication of those members who were part of original guideline panel

Figure 5. Best Practices for Reporting on Methodology in Updated Guidelines

Conclusion

It is important that updated guidelines follow the same rigorous process as newly developed guidelines, but this isn't always the case, or isn't always appropriately described. It is paramount that guideline developers consider and include a clear description of the future update process when developing a new guideline, and that this process is appropriately applied and transparently described during a guideline's update.

References

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