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Appraisal of current surgical guidelines for Inflammatory Bowel Disease (IBD) using the AGREE-S instrument: a scoping review

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[Keywords: IBD, guidelines, AGREE-S](#)

Abstract

Background: Guidelines play a crucial role in improving patient care by providing clinicians with up-to-date evidence-based recommendations. A vast number of guidelines exist on the surgical management of inflammatory bowel disease (IBD).

Objective: This scoping review aimed to identify current surgical IBD guidelines, assess their quality, and identify areas of variation between the existing guidelines.

Methods: A systematic search of literature from January 2008 to September 2023 was conducted. After identifying eligible guidelines, they were assessed for quality using the AGREE-S instrument. Data was extracted on descriptive guideline characteristics and recommendations.

Results: Fifteen guidelines were identified globally. Most guidelines were published between 2011 and 2023, with six focusing solely on Crohn's disease, five on ulcerative colitis, and four on both. Six guidelines focused exclusively on surgical management, while nine contained both medical and surgical recommendations. The overall mean AGREE-S score was 59%, with more recent guidelines scoring higher..

Conclusions: The quality of IBD surgical guidelines varies considerably. High-quality, collaborative, international guidelines are needed to reduce duplication and ensure consistent, evidence-based surgical care for IBD patients worldwide. Future guideline development should adhere to the AGREE-S criteria to enhance methodological rigor and transparency.

What does this paper add to the literature?

This scoping review highlights that the abundance of literature existing on the surgical management of inflammatory bowel disease in the form of guidelines, can vary in quality.

48 Introduction

49 In recent years, there has been a notable surge in research activity focused on inflammatory bowel
50 disease (IBD). Comprising of Ulcerative Colitis (UC) and Crohn's Disease (CD), nearly 5 million cases
51 were reported worldwide in 2019¹. Both occur as a result of chronic inflammation of the
52 gastrointestinal tract, have a genetic predisposition increasing risk of developing the disease, and have
53 no known cure, resulting in substantial morbidity and mortality ². Management of IBD includes both
54 medical and surgical modalities. As imagined for diseases of such prevalence, the abundance of
55 literature is enormous with 91,648 publications generated when searching the term "inflammatory
56 bowel disease" in PubMed (accessed 22/09/23), highlighting the need for guidelines to disseminate
57 high quality and reliable evidence.

58 In the rapidly advancing field of health research, novel and innovative treatments are constantly
59 emerging requiring refinement of existing practice. Guidelines exist as a set of recommendations
60 designed to aid decision making and best advise optimal patient care. Guidelines therefore play a key
61 role in improving patient care and health outcomes by allowing clinicians to make evidence based
62 decisions in a timely manner³. In addition to improving quality of care, guidelines can influence health
63 policy, lead to the development of disease performance measures, promote health equality, and
64 improve consistency of care and patient empowerment^{4, 5}.

65 Recommendations made by guidelines should be informed by systematic review to assess the quality
66 of the research evidence⁶. As well as review, guidelines require transparent development, involvement
67 of key stakeholders and consideration of the benefits and harms of alternate treatment⁷. Guidelines
68 require continual update to take into account new research findings, with reports in the literature that
69 1 in 5 guidelines become out of date 3 years after being published⁸. Furthermore, inconsistency in
70 reliability and trustworthiness of guidelines has been reported with over 50% of guidelines not
71 complying with current Institute of Medicine standards⁹. Tools exist to evaluate this variability in
72 quality of guidelines, such as the AGREE-II (Appraisal of Guidelines, Research and Evaluation II)

73 reporting checklist¹⁰. More specifically, the AGREE-S reporting checklist was created to improve the
74 comprehensiveness, completeness and transparency of reporting in surgical guidelines¹¹.

75 Guidelines for the medical treatment of IBD have previously been appraised for their quality and
76 robustness in 2022¹², however to date there have been no attempts to conduct an appraisal of surgical
77 guidelines. Therefore, the aim of this review was to identify current surgical guidelines for the
78 treatment of IBD, critically appraise the quality of these guidelines using the AGREE-S instrument and
79 identify areas of variation between the existing guidelines.

80

81 *Methods*

82 A protocol for this scoping review was developed a priori but has not been published or registered.

83 *Eligibility criteria*

84 Eligibility criteria included articles published between January 2008 – September 2023 that were
85 guidelines as defined by the Institute of Medicine, focussing on the surgical management of IBD
86 (Crohn's and Ulcerative Colitis) in adults⁷. Only the most up to date version of the guideline was
87 included. We excluded guidelines that were not in English and those that did not solely focus on IBD
88 but mentioned IBD as a precursor to another condition. Similarly, guidelines focussing on a specific
89 aspect of the disease, for example perianal Crohn's disease, were excluded. Expert reviews, consensus
90 statements and quality indicators were also excluded. This ensured that the guidelines assessed were
91 comparable in scope allowing authors to make better comparisons between guidelines.

92 *Search strategy*

93 We conducted a search of the electronic databases EMBASE and MEDLINE. The search strategy
94 included keywords and terms related to IBD, clinical standards, quality indicators and guidelines
95 tailored to each database. Please see S1 for exact syntax searches. Additionally, we conducted a search
96 of guideline networks and repositories, including Guidelines International Network, CPG InfoBase, The
97 Scottish Intercollegiate Guideline Network and Google Scholar of which the first 80 pages were
98 searched¹³. No additional sources beyond the electronic databases were searched.

99 *Study selection process*

100 After identifying potentially eligible guidelines, two reviewers (AES and ZK) independently screened
101 the full texts for inclusion. Disagreements were resolved through discussion with a third reviewer (SB).
102 The selection process was guided by the eligibility criteria outlines above.

103 *Data extraction*

Descriptive data was extracted by two reviewers (ZK and AES) and included information on organisation, country, clinical area (Crohn's disease or Ulcerative Colitis) and recommendations.

Guideline appraisal

The quality of the eligible guidelines was assessed using the Appraisal of Guidelines for Research and Evaluation for Surgical interventions (AGREE-S) instrument, which appraises the quality of guidance in the domains of scope and purpose, stakeholders, evidence synthesis, development of recommendations, editorial independence, and implementation and update¹⁴. Scope and purpose explored whether the guideline was developed according to a protocol, with specific objectives and health questions. The stakeholder domain scores the guideline on its development and target audience. Evidence synthesis reviews the search, selection and quality of evidence included. Development of recommendations scores the guideline on the formulation and implication of the recommendations. Editorial independence examines any potential conflicts of interest. Lastly, the domain of implementation and update considers the barriers to application of the recommendations, as well as procedures for updating and auditing.

Five reviewers (AES, ZK, CB, DS, GT) independently charted data from the included guidelines using a standardised charting form. The form was pilot tested on a sample of included guidelines and revised accordingly. Any disagreements in data charting were resolved through discussion. **In cases of significant scoring discrepancies (defined as individual scores differing by more than 2 points on the 7-point scale for any AGREE-S item), the reviewers discussed their rationale and re-examined the relevant guideline sections together to reach consensus. The final score was determined by averaging the individual scores after discrepancies were resolved.** The data charting form included items on guideline characteristics (year of publication, country of publication, focus on UC/CD, surgical/mixed/medical management) and specific recommendations made on surgical interventions.

Five reviewers (AES, ZK, SB, MJL, SD) independently applied the AGREE-S instrument to each guideline to assess quality. Following submission of scores using the data charting form, the reviewers met to

129 discuss the results where there was significant discrepancy in scores and presented information that
130 may have been overlooked by others.

131 The scores were scaled to a percentage of maximum score by domain (maximum of seven points per
132 domain). Recommendation of use was determined as a median of the reviewer's scores for use,
133 whereby "Yes", "Yes – with modifications", and "No" equated to a score of 3, 2 and 1 respectively.

134 *Synthesis of results*

135 The data was not synthesised using a framework, as recommendations were not compatible with the
136 structure of a framework.

137

138

139

Results

Study Selection

The searches of bibliographic databases generated 1673 articles. Once duplicates were removed, 1492 articles were screened by title and abstract for inclusion of which 35 full text articles were retrieved. Ten of these articles were deemed satisfactory for inclusion. Screening of grey literature resulted in 20 articles being retrieved, of which 5 guidelines were included. Figure 1 shows a PRISMA diagram for study inclusion.

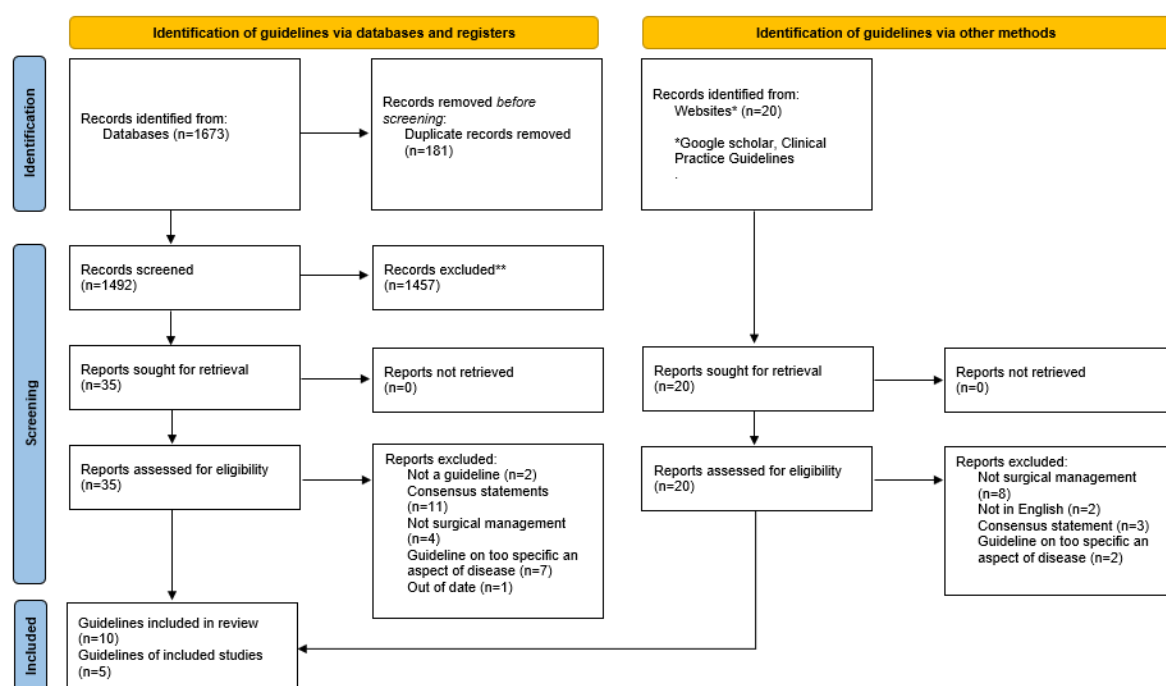


Figure 1. PRISMA flow diagram

Study characteristics

Table 1 displays characteristics of the guidelines included. The included guidelines were published between 2011 and 2023. Of the fifteen guidelines, six focused solely on Crohn's disease (CD), 5 focussed solely on Ulcerative Colitis (UC) and the remaining four focused on the management of inflammatory bowel disease including both UC and CD. A total of six guidelines focussed solely on

155 surgical management. The remaining nine guidelines contained aspects of both medical and surgical
156 management.

Year of publication	Author	Title	Organisation	Publication	Country	Disease	Surgical or mixed medical and surgical management
2020	Adamina et al. ¹⁵	ECCO Guidelines on Therapeutics in Crohn's Disease: Surgical Treatment	European Crohn's and Colitis Organisation	Journal of Crohn's & colitis	Europe	Crohn's Disease	Surgical
2015	Bernstein et al. ¹⁶	World gastroenterology organisation global guidelines inflammatory bowel disease: update August 2015	World Gastroenterology Organisation	Journal of clinical gastroenterology	Global	IBD	Mixed
2018	Brown et al. ¹⁷	The Association of Coloproctology of Great Britain and Ireland consensus guidelines in surgery for inflammatory bowel disease	Association of Coloproctology of Great Britain and Ireland	Colorectal disease	UK	IBD	Surgical
2023	Eder et al. ¹⁸	Guidelines for the management of ulcerative colitis.	Polish Society of Gastroenterology	Przegląd Gastroenterologiczny	Poland	Ulcerative Colitis	Mixed
2015	Eliadou et al. ¹⁹	New Zealand Society of gastroenterology guidelines for the management of refractory ulcerative colitis	New Zealand Society of Gastroenterology	New Zealand Medical Journal	New Zealand	Ulcerative Colitis	Mixed
2021	Holubar et al. ²⁰	The American Society of Colon and Rectal Surgeons Clinical Practice Guidelines for the Surgical Management of Ulcerative Colitis	American Society of Colon and Rectal Surgeons	Diseases of the Colon & Rectum	USA	Ulcerative Colitis	Surgical
2019	Kucharzik et al. ²¹	Updated S3-Guideline Ulcerative Colitis	German Society for Digestive and Metabolic Diseases	Aktualisierte S3-Leitlinie Colitis ulcerosa der Deutschen Gesellschaft für Gastroenterologie, Verdauungs- und Stoffwechselkrankheiten	Germany	Ulcerative Colitis	Mixed

2020	Lightner et al. ²²	The American Society of Colon and Rectal Surgeons clinical practice guidelines for the surgical management of Crohn's disease	American Society of Colon and Rectal Surgeons	Diseases of the Colon & Rectum	USA	Crohn's Disease	Surgical
2021	Lodyga et al. ²³	Guidelines for the management of patients with Crohn's disease. Recommendations of the Polish Society of Gastroenterology and the Polish National Consultant in Gastroenterology	Polish Society of Gastroenterology	Przegląd Gastroenterologiczny	Poland	Crohn's Disease	Mixed
2018	Matsuoka et al. ²⁴	Evidence-based clinical practice guidelines for inflammatory bowel disease	Japanese Society of Gastroenterology	Journal of gastroenterology	Japan	IBD	Mixed
2011	Mowat et al. ²⁵	Guidelines for the management of inflammatory bowel disease in adults	British Society of Gastroenterology	Gut	UK	IBD	Mixed
2017	Park et al. ²⁶	Second Korean guidelines for the management of Crohn's disease	Korean Association for the Study of Intestinal Diseases	Intestinal research	South Korea	Crohn's Disease	Mixed
2022	Spinelli et al. ²⁷	ECCO Guidelines on Therapeutics in Ulcerative Colitis: Surgical Treatment	European Crohn's and Colitis Organisation	Journal of Crohn's & colitis	Europe	Ulcerative Colitis	Surgical
2015	Strong et al. ²⁸	Clinical Practice Guideline for the Surgical Management of Crohn's Disease	American Society of Colon and Rectal Surgeons	Diseases of the colon and rectum	America	Crohn's Disease	Surgical
2013	Ueno et al. ²⁹	Evidence-based clinical practice guidelines for Crohn's disease, integrated with formal consensus of experts in Japan	Japanese Society of Gastroenterology	Journal of gastroenterology	Japan	Crohn's Disease	Mixed

158 *Table 1. Guidelines characteristics*

160 Table 2 displays a summary of the characteristics being assessed in the included guidelines based upon
161 the AGREE-S instrument. Of the guidelines reviewed, two were recommended for use, nine were
162 recommended for use with modifications, and four were not recommended for use. The mean overall
163 score of all the guidelines reviewed was 59% (n=15). For the nine guidelines recommended for use
164 with modifications, the most common reasons were insufficient details on guideline development
165 methodology, lack of clarity on how recommendations were formulated, and limited information on
166 implementation and updating procedures. Modifications in these areas would improve adherence to
167 AGREE-S criteria.

168 The domain where papers scored the lowest when averaged out across all the guidelines reviewed
169 was “Implementation and Update” (45%). This was attributed to an absence of describing facilitators
170 and barriers to guideline applications. The low scores in the implementation and update domain
171 reflect several common issues identified across the appraised guidelines. Firstly the lack of specific
172 tools or resources provided to aid implementation (e.g., summary documents, algorithms, online
173 resources), insufficient guidance on monitoring/auditing criteria to assess guideline implementation
174 and impact, and lastly vague or missing information on update methodology and timelines. For
175 example, the Eder et al. and Lodyga et al. guidelines, which received some of the lowest scores in this
176 domain, did not provide any information on implementation support, auditing plans, or future
177 updating procedures.

178 The highest scoring domain when averaged out across all reviewed guidelines was “Editorial
179 independence” (70%), which was attributed to the fact that most guidelines would have undergone
180 external peer review to be published. Higher scoring articles appraised their evidence with the Grading
181 of Recommendations, Assessment, Development, and Evaluations (GRADE) tool or the Oxford Centre
182 for Evidence Based Medicine (CEBM) tool, which was clearly presented within the guideline^{30, 31}. They
183 also presented clear methods of evidence searches and recommendation formulation using the

Population, Intervention, Comparison, and Outcome (PICO) format³². The highest scoring guidelines were the ECCO guidelines on the surgical treatment of Ulcerative Colitis (76%) and the Ulcerative Colitis guidelines produced by the German Society for metabolic diseases (76%)^{21, 27}.

Papers published from 2020 onwards tended to score higher with a mean overall score of 64% (n=6) versus those published prior to 2020 with a mean overall score of 52% (n=9).

To examine variability in individual appraisals, we calculated the standard deviation of scores for each AGREE-S item within each guideline. The items with the highest average variability across guidelines were Item 5 in Domain 2 (mean SD 1.6, range 0.8-2.2) and Item 3 in Domain 3 (mean SD 1.5, range 0.5-2.1), highlighting potential challenges in assessing stakeholder involvement and evidence search/selection methods. Conversely, Item 1 in Domain 1 (mean SD 0.5, range 0-1.1) and Item 3 in Domain 6 (mean SD 0.6, range 0-1.2) had the lowest variability, suggesting more consistent evaluation of guideline scope and updating procedures.

Year of publication	Author	Scope and purpose	Stakeholder involvement	Evidence synthesis	Development of recommendations	Editorial independence	Implementation and update	Overall score	Recommended for use
2020	Adamina et al. ¹⁵	74	73	93	72	86	46	73	Yes
2015	Bernstein et al. ¹⁶	14	15	14	33	37	28	18	No
2018	Brown et al. ¹⁷	69	71	51	77	64	44	67	Yes – with modifications
2023	Eder et al. ¹⁸	76	37	57	58	68	33	53	Yes – with modifications
2015	Eliadou et al. ¹⁹	35	19	18	28	61	29	29	No
2021	Holubar et al. ²⁰	64	63	84	61	87	51	65	Yes – with modifications
2019	Kucharzik et al. ²¹	70	88	62	76	85	57	76	Yes
2020	Lightner et al. ²²	58	64	84	64	90	47	65	Yes – with modifications
2021	Lodyga et al. ²³	67	41	55	61	51	33	49	No
2018	Matsuoka et al. ²⁴	65	63	61	57	69	51	63	Yes – with modifications
2011	Mowat et al. ²⁵	64	88	52	62	77	71	73	Yes – with modifications
2017	Park et al. ²⁶	68	69	76	60	64	46	59	Yes – with modifications
2022	Spinelli et al. ²⁷	82	64	76	73	77	44	76	Yes – with modifications
2015	Strong et al. ²⁸	56	55	65	60	44	36	49	No
2013	Ueno et al. ²⁹	73	80	71	65	97	57	71	Yes – with modifications
Average per domain		62	59	61	60	70	45	59	

196 *Table 2. Summary of assessed characteristics*

Surgical management – Ulcerative Colitis vs Crohn's Disease

Of the 15 guidelines reviewed, 6 focussed solely on the management of Crohn's disease, 5 focussed solely on Ulcerative Colitis management, and 4 made recommendations on both. Guidelines on surgical management alone of IBD (n=6) scored more highly with a mean score of 66%, compared to those making mixed recommendations on medical and surgical management which had a mean score of 55% (n=9), although the difference in scores was not significant. There was negligible difference in mean scores by the region that the guideline was developed in. There was also negligible difference in mean scores for guidelines specifically making recommendations on Crohn's disease (n=6, 61%), Ulcerative Colitis (n=5, 60%) and mixed IBD studies (n =4, 55%).

Discussion

Over the 13-year period, a total of 15 unique guidelines on IBD surgery were published in English and included in this appraisal. Of these 15, only two are recommended for use without modifications, following appraisal with the AGREE-S appraisal tool. Four guidelines were deemed to be not recommended for use following appraisal, whilst the other nine guidelines were felt acceptable for use, but only after modification to improve quality. Despite the two highest rated guidelines both scoring 76%, the ECCO guideline on Ulcerative Colitis was only recommended for use with modifications, whereas the guideline by Kurcharik et al. was recommended for use with no modifications. We hypothesise that this is due to the perceived distribution of scores across domains, with Kurcharik et al. scoring from 55% to 88%, compared to Spinelli et al. scoring less consistently with a range from 44% to 82%.

When analysing the mean scores by region, there was no significant difference in quality. It was noted however, that those guidelines published post-2020 were of a higher quality compared to those published pre-2020. In recent years, a steady improvement in guideline quality has been observed, attributed to the use of appraisal tools like AGREE-S³⁴. The AGREE-S tool assists journal editors in ensuring that published guidelines meet the high quality expected of such highly citable work, which

plays an integral role in supporting best medical practice and guiding current healthcare policy³⁵. It is perhaps the implementation of this tool, which has led to a decrease in the publication of poor quality guidelines in recent years, as noted within this review.

Our findings suggest that IBD guidelines focused solely on surgical management tended to have higher quality scores than those combining medical and surgical aspects, although the difference was not significant. This suggests that authors should consider a move away from large, all-encompassing guidelines towards a more focused guideline, completed to a high standard to help with improved usability. More targeted research is needed to determine if narrower scope consistently leads to higher quality and utility. Factors such as guideline length, depth of topic coverage, and end-user preferences should be considered to inform optimal guideline design.

The guidelines were developed within multiple regions around the world, with three being international and the remaining 12 being developed within single countries. Despite good quality guidelines on the surgical management of Crohn's Disease being produced from the European Crohn's and Colitis Organisation (ECCO) in 2020, a single country guideline of poor quality was produced the following year within Europe on the same topic. This was replicated in the 2022 ECCO guidelines on Ulcerative Colitis, again with the production of a low-quality guideline on the same topic by the same European country. This does raise the question: should there be better way of registering guidelines to reduce unnecessary replication, for example with the Guideline International Network?³⁶ Or, is the issue that some countries do not believe international guidelines are representative of their patient populations or take into account differing healthcare economies? Whilst guideline developers should take into account facilitators and barriers to a guideline's implementation, to account for this, unfortunately it is not always the case.

The poorest scoring domain for all guidelines was "implementation and update." While providing a timeline for planned guideline updates is straightforward, identifying potential facilitators or barriers to guideline implementation, such as cost-effectiveness or changes to organizational culture, is

significantly more challenging, particularly when developing international guidelines. This difficulty has previously been used as an explanation for the replication of guidelines when high-quality international guidelines already exist. However, this study debunked that theory for IBD guidelines, as single-country guidelines still scored poorly within this domain.

Since AGREE-S was developed recently as an extension of AGREE-II for surgical guidelines, we examined whether the three new/modified items influenced appraisal results. The items unique to AGREE-S (Item 3 in Domain 3, Item 5 in Domain 3, Item 4 in Domain 4) had slightly higher variability compared to other items, suggesting some challenges in interpreting expectations for surgical guideline evidence evaluation and recommendation development. However, this did not substantially impact overall domain or guideline scores. Further user experiences with AGREE-S will help refine its specific utility for surgical guideline appraisal.

The use of GRADE (Grading of Recommendations, Assessment, Development and Evaluations) has become the gold-standard methodological approach for the transparent development of clinical practice guidelines, and is used by major healthcare organisations, such as the Cochrane Collaboration and the World Health Organisation^{37–39}. The quality of surgical research is a hotly debated topic, with data on outcomes following surgical intervention being scarce and widely considered poor quality, especially when compared to research on medical interventions⁴⁰. This issue was highlighted in both ECCO guidelines, which stated that GRADE methodology could not be used as the basis for their surgical recommendations due to the poor quality of evidence available. Instead, they used the Oxford Centre for Evidence-Based Medicine tool, one of six grading systems evaluated by the GRADE working group when developing GRADE methodology to address the shortcomings of existing systems used to grade levels of evidence and strength of recommendations^{41, 42}.

The use of alternative methodology to GRADE does give rise to an important question. If the data is considered not to be of sufficient quality to support the use of GRADE methodology, should it serve as the basis for guideline recommendations, which can significantly impact the delivery of patient care?

The AGREE-S tool does not directly comment on the use of the correct methodology or that the methodology has been clearly described. It does however score for whether there has been an explicit link between the synthesis of the evidence and the formulated recommendation, which is therefore where the non-GRADE guidelines would score poorly.

For topics where there is little to no good quality evidence, usually expert opinion is sought to allow the formulation of recommendations to help guide decision and policy making. It is this lack of good quality evidence and the need for expert opinion, which may have led to the differing recommendations between the guidelines, especially those recommendations surrounding operative techniques.

Recommendations based on expert opinion are usually best coordinated by formal consensus methods⁴³. Consensus methods can help to overcome the challenges of gathering opinions from a small group and the use of formal consensus methodology is recognised as being more reliable than individual expert opinions^{43–46}. It is notable that 11 of the 35 papers initially identified were consensus statements rather than true guidelines, possibly indicating a paucity of high-quality evidence in this field. The high proportion of expert consensus highlights the importance of using rigorous methodology, such as formal techniques like Delphi, to optimize the validity of recommendations in the absence of robust scientific evidence.

With the development of the ACCORD (ACcurate Consensus Reporting Document) tool in early 2024, the quality of consensus based reporting can now be appraised, with the rigor of the consensus methods used to guide recommendations being transparent and clear for readers⁴³. Similar to the improvements in guideline quality brought about by development of the AGREE tool, there may be a similar improvement in the quality of surgical consensus statements, thus positively influencing the perception of recommendations developed using this methodology. With the ACCORD tool offering a checklist to improve the reporting and quality of consensus statements, high-quality consensus

statements should be developed for clinical research questions where recommendations cannot be made using GRADE methodology due to the poor quality of available evidence.

Limitations

A limitation of this study is the subjectivity of the AGREE-S tool, which is acknowledged by other studies reviewing guidelines in different medical and surgical conditions⁴⁷. Various factors contribute to the subjectivity of the tool, including the varying experience of reviewers, and the direct comparison of papers with one another (as most reviewers appraised multiple papers in the same sitting). Those developing guidelines should ensure that appropriate methodology has been followed as well as the journals publishing the guidelines through the involvement of methodologists in the peer-review process. In this way, less responsibility would fall upon the reader to fully understand guideline methodology and carry out rigorous appraisal.

One guideline was appraised by four reviewers rather than the five reviewers that other guidelines were subject to; this was due to the fifth reviewer being the primary author of the guideline in question, and therefore they did not score their own work to avoid conflict of interest.

Within guidelines themselves, we note that guideline development was often poorly or confusingly documented, with some information only available in supplement documents that were not easily found. This may have made it challenging for reviewers to provide a representative score of the true quality of the guideline methodology.

It's important to note that while AGREE-S is a valuable tool for assessing guideline quality, it does not directly account for country-specific factors such as healthcare system structure or medication availability that can influence local implementability. Guideline users should consider these factors when deciding how to apply recommendations in their specific context.

Lastly, this scoping review only included English language guidelines.

Conclusion

This review demonstrates the breadth of available guidelines for the surgical management of IBD in adults. When scored according to the AGREE-S, there is great variability in the quality of published guidelines. It is therefore essential to encourage the use of the AGREE-S checklist to future development committees when formulating new guidelines, to ensure that they are clear, user-friendly and methodologically robust. We also highlight the need for high-quality, collaborative, international guidelines that can be adopted by the healthcare systems of many countries, rather than the replication of de novo guidelines by individual countries ³⁵.

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