NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Guideline

Crohn's disease: management

Draft for consultation, December 2018

This guideline covers management of Crohn's disease in children, young people and adults. It aims to reduce people's symptoms and maintain or improve their quality of life. The 2019 update makes new recommendations on maintaining remission after surgery.

Who is it for?

- Healthcare professionals
- Commissioners and providers
- People with Crohn's disease, their families and carers

This guideline will update NICE guideline CG152 (published October 2012, last updated May 2016).

We have reviewed the evidence on maintaining remission after surgery. You are invited to comment on the new and updated recommendations. These are marked as **[2019]**.

We have not reviewed the evidence for the recommendations shaded in grey, and cannot accept comments on them. In some cases, we have made minor wording changes for clarification.

See update information for a full explanation of what is being updated.

This draft guideline contains:

- the draft recommendations

- recommendations for research
- rationale and impact sections that explain why the committee made the 2019 recommendations and how they might affect practice
- the guideline context.

Full details of the evidence and the committee's discussion on the 2019 recommendations are in the evidence reviews. Evidence for the 2010 and 2016 recommendations is in the full version and addendum to the 2012 guideline.

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Contents

Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in your care.

Making decisions using NICE guidelines explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

1.1 Providing information and support

1.1.1 Ensure that information and advice about Crohn's disease:

- is age appropriate
- is of the appropriate cognitive and literacy level
- meets the cultural and linguistic needs of the local community. **[2012]**

1.1.2 Discuss treatment options and monitoring with the person with Crohn's disease, with their family members or carers (as appropriate), and within the multidisciplinary team. Apply the principles in the NICE guideline on patient experience in adult NHS services. **[2012]**

1.1.3 Discuss the possible nature, frequency and severity of side effects of drug treatment[1] with people with Crohn's disease and their family members or carers (as appropriate). **[2012]**

1.1.4 Give all people with Crohn's disease and their family members or carers (as appropriate) information, advice and support in line with published NICE guidance on:

- smoking cessation
- patient experience
- medicines adherence

[1] Appendices L and M of the full guideline contain observational data on adverse events associated with aminosalicylate treatment and immunosuppressives.

- fertility. **[2012]**

1.1.5 Give people with Crohn's disease and their family members or carers additional information on the following when appropriate:

- possible delay of growth and puberty in children and young people
- diet and nutrition
- fertility and sexual relationships
- prognosis
- side effects of their treatment
- cancer risk
- surgery
- transition between paediatric and adult services
- contact details for support groups. **[2012]**

1.1.6 Offer people with Crohn's disease and their family members or carers (as appropriate) age-appropriate multidisciplinary support to deal with any concerns about the disease and its treatment, including concerns about body image, living with a chronic illness, and attending school and higher education. **[2012]**

1.2 Inducing remission in Crohn's disease

Monotherapy

1.2.1 Offer monotherapy with a conventional glucocorticosteroid (prednisolone, methylprednisolone or intravenous hydrocortisone) to induce remission in people with a first presentation or a single inflammatory exacerbation of Crohn's disease in a 12-month period. **[2012]**

1.2.2 Consider enteral nutrition as an alternative to a conventional glucocorticosteroid to induce remission for:

- children in whom there is concern about growth or side effects **and**
- young people in whom there is concern about growth. **[2012]**

1.2.3 Consider budesonide[2] for a first presentation or a single inflammatory exacerbation in a 12-month period for people:

- who have one or more of distal ileal, ileocaecal or right-sided colonic disease[3] **and**
- if conventional glucocorticosteroids are contraindicated, or if the person declines or cannot tolerate them.

Explain that budesonide is less effective than a conventional glucocorticosteroid, but may have fewer side effects. **[2012]**

1.2.4 Consider 5-aminosalicylate (5-ASA) treatment[4] for a first presentation or a single inflammatory exacerbation in a 12-month period if conventional glucocorticosteroids are contraindicated, or if the person declines or cannot tolerate them. Explain that 5-ASA is less effective than a conventional glucocorticosteroid or budesonide but may have fewer side effects than a conventional glucocorticosteroid. **[2012]**

1.2.5 Do not offer budesonide or 5-ASA treatment for severe presentations or exacerbations. **[2012]**

1.2.6 Do not offer azathioprine, mercaptopurine or methotrexate as monotherapy to induce remission. **[2012]**

[2] Although use is common in UK clinical practice, at the time of consultation (December 2018), budesonide did not have a UK marketing authorisation specifically for children and young people. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

[3] See recommendations 1.5.1 and 1.5.2 for when to consider surgery early in the course of the disease for people whose disease is limited to the distal ileum

[4] Although use is common in UK clinical practice, at the time of consultation (December 2018) mesalazine, olsalazine and balsalazide did not have a UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

Add-on treatment

1.2.7 Consider adding azathioprine or mercaptopurine[5] to a conventional glucocorticosteroid or budesonide[2] to induce remission of Crohn's disease if:

- there are 2 or more inflammatory exacerbations in a 12-month period **or**
- the glucocorticosteroid dose cannot be tapered. **[2012]**

1.2.8 Assess thiopurine methyltransferase (TPMT) activity before offering azathioprine or mercaptopurine. Do not offer azathioprine or mercaptopurine if TPMT activity is deficient (very low or absent). Consider azathioprine or mercaptopurine[5] at a lower dose if TPMT activity is below normal but not deficient (according to local laboratory reference values). **[2012]**

1.2.9 Consider adding methotrexate[6,7] to a conventional glucocorticosteroid or budesonide[2] to induce remission in people who cannot tolerate azathioprine or mercaptopurine, or in whom TPMT activity is deficient, if:

- there are 2 or more inflammatory exacerbations in a 12-month period **or**
- the glucocorticosteroid dose cannot be tapered. **[2012]**

1.2.10 Monitor the effects of azathioprine, mercaptopurine[8] and methotrexate[6,7] as advised in the current online version of the British national formulary

[5] Although use is common in UK clinical practice, at the time of consultation (December 2018) mercaptopurine and most preparations of azathioprine did not have a UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

[6] Although use is common in UK clinical practice, at the time of consultation (December 2018) not all formulations of methotrexate have a UK marketing authorisation for this indication, and the licensed formulations only have a UK marketing authorisation for adults. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

[7] Follow BNF/BNFC cautions on prescribing methotrexate.

[8] Although use is common in UK clinical practice, at the time of consultation (December 2018) mercaptopurine and most preparations of azathioprine did not have a UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility

(BNF) or British national formulary for children (BNFC)[9]. Monitor for neutropenia in people taking azathioprine or mercaptopurine even if they have normal TPMT activity. **[2012]**

1.2.11 Ensure that there are documented local safety monitoring policies and procedures (including audit) for people receiving treatment that needs monitoring. Nominate a member of staff to act on abnormal results and communicate with GPs, people with Crohn's disease and their family members or carers (as appropriate). **[2012]**

Infliximab and adalimumab

The recommendations in the following section (1.2.12, 1.2.15, 1.2.17 and 1.2.20) are from the NICE technology appraisal guidance on infliximab and adalimumab for the treatment of Crohn's disease.

1.2.12 Infliximab and adalimumab, within their licensed indications, are recommended as treatment options for adults with severe active Crohn's disease (see 1.2.18) whose disease has not responded to conventional therapy (including immunosuppressive and/or corticosteroid treatments), or who are intolerant of or have contraindications to conventional therapy. Infliximab or adalimumab should be given as a planned course of treatment until treatment failure (including the need for surgery), or until 12 months after the start of treatment, whichever is shorter. People should then have their disease reassessed (see 1.2.16) to determine whether ongoing treatment is still clinically appropriate. **[2010]**

1.2.13 Treatment as described in 1.2.12 should normally be started with the less expensive drug (taking into account drug administration costs, required dose and product price per dose). This may need to be varied for individuals because of differences in the method of administration and treatment schedules. **[2010]**

for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

[9] Advice on monitoring of immunosuppressives can be found in the BNF/BNFC. The monographs for individual drugs should be consulted

1.2.14 When a person with Crohn's disease is starting infliximab or adalimumab (in line with recommendations 1.2.13, 1.2.16, 1.2.18 and 1.2.21), discuss options of:

- monotherapy with one of these drugs **or**
- combined therapy (either infliximab or adalimumab, combined with an immunosuppressant).

Tell the person there is uncertainty about the comparative effectiveness and long-term adverse effects of monotherapy and combined therapy. **[2016]**

1.2.15 Infliximab, within its licensed indication, is recommended as a treatment option for people with active fistulising Crohn's disease whose disease has not responded to conventional therapy (including antibiotics, drainage and immunosuppressive treatments), or who are intolerant of or have contraindications to conventional therapy. Infliximab should be given as a planned course of treatment until treatment failure (including the need for surgery) or until 12 months after the start of treatment, whichever is shorter. People should then have their disease reassessed (see 1.2.16) to determine whether ongoing treatment is still clinically appropriate. **[2010]**

1.2.16 Treatment with infliximab or adalimumab (see 1.2.12 and 1.2.15) should only be continued if there is clear evidence of ongoing active disease as determined by clinical symptoms, biological markers and investigation, including endoscopy if necessary. Specialists should discuss the risks and benefits of continued treatment with patients and consider a trial withdrawal from treatment for all patients who are in stable clinical remission. People who continue treatment with infliximab or adalimumab should have their disease reassessed at least every 12 months to determine whether ongoing treatment is still clinically appropriate. People whose disease relapses after treatment is stopped should have the option to start treatment again. **[2010]**

1.2.17 Infliximab, within its licensed indication, is recommended for the treatment of people aged 6 to 17 years with severe active Crohn's disease whose

disease has not responded to conventional therapy (including corticosteroids, immunomodulators and primary nutrition therapy), or who are intolerant of or have contraindications to conventional therapy. The need to continue treatment should be reviewed at least every 12 months. **[2010]**

1.2.18 For the purposes of this guidance, severe active Crohn's disease is defined as very poor general health and one or more symptoms such as weight loss, fever, severe abdominal pain and usually frequent (3 to 4 or more) diarrhoeal stools daily. People with severe active Crohn's disease may or may not develop new fistulae or have extra-intestinal manifestations of the disease. This clinical definition normally, but not exclusively, corresponds to a Crohn's Disease Activity Index (CDAI) score of 300 or more, or a Harvey-Bradshaw score of 8 to 9 or above. **[2010]**

1.2.19 When using the CDAI and Harvey-Bradshaw Index, healthcare professionals should take into account any physical, sensory or learning disabilities, or communication difficulties that could affect the scores and make any adjustments they consider appropriate. **[2010]**

1.2.20 Treatment with infliximab or adalimumab should only be started and reviewed by clinicians with experience of TNF inhibitors and of managing Crohn's disease. **[2010]**

Ustekinumab and vedolizumab

1.2.21 For guidance on using ustekinumab, see the NICE technology appraisal guidance on ustekinumab for moderately to severely active Crohn's disease after previous treatment. **[2019]**

1.2.22 For guidance on using vedolizumab, see the NICE technology appraisal guidance on vedolizumab for treating moderately to severely active Crohn's disease after prior therapy. **[2019]**

1.3 Maintaining remission in Crohn's disease

1.3.1 Discuss with people with Crohn's disease and their family members or carers (as appropriate) options for managing their disease when they are

in remission, including both no treatment and treatment. The discussion should include the risk of inflammatory exacerbations (with and without drug treatment) and the potential side effects of drug treatment. Record the person's views in their notes. **[2012]**

1.3.2 Offer colonoscopic surveillance in line with the NICE guideline on colorectal cancer prevention: colonoscopic surveillance in adults with ulcerative colitis, Crohn's disease or adenomas. **[2012]**

Follow-up during remission for people who choose not to have maintenance treatment

1.3.3 When people choose not to receive maintenance treatment:

- discuss and agree with them and their family members or carers (as appropriate) plans for follow-up, including the frequency of follow-up and who they should see
- ensure they know which symptoms may suggest a relapse and should prompt a consultation with their healthcare professional (most frequently, unintended weight loss, abdominal pain, diarrhoea, general ill-health)
- ensure they know how to access the healthcare system if they experience a relapse
- discuss the importance of not smoking. **[2012]**

Maintenance treatment for people who choose this option

1.3.4 Offer azathioprine or mercaptopurine[10] as monotherapy to maintain remission when previously used with a conventional glucocorticosteroid or budesonide to induce remission. **[2012]**

1.3.5 Consider azathioprine or mercaptopurine[10] to maintain remission in people who have not previously received these drugs (particularly people

[10] Although use is common in UK clinical practice, at the time of consultation (December 2018) mercaptopurine and most preparations of azathioprine did not have a UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

with adverse prognostic factors such as early age of onset, perianal disease, glucocorticosteroid use at presentation and severe presentations). **[2012]**

1.3.6 Consider methotrexate[7,11] to maintain remission only in people who:

- needed methotrexate to induce remission **or**
- have tried but did not tolerate azathioprine or mercaptopurine for maintenance **or**
- have contraindications to azathioprine or mercaptopurine (for example, deficient TPMT activity or previous episodes of pancreatitis). **[2012]**

1.3.7 Do not offer a conventional glucocorticosteroid or budesonide to maintain remission. **[2012]**

See recommendations 1.2.10 and 1.2.11 for guidance on monitoring the effects of azathioprine, mercaptopurine and methotrexate.

See recommendation 1.2.16 for when to continue infliximab or adalimumab during remission.

1.4 Maintaining remission in Crohn's disease after surgery

1.4.1 To maintain remission in people with ileocolonic Crohn's disease who have had complete macroscopic resection within the last 3 months, consider azathioprine[12] in combination with up to 3 months' postoperative metronidazole[13]. **[2019]**

[11] Although use is common in UK clinical practice, at the time of consultation (December 2018) not all formulations of methotrexate have a UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

[12] At the time of consultation (December 2018), not all preparations of azathioprine have a UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

[13] At the time of consultation (December 2018), the combination of azathioprine and metronidazole did not have a UK marketing authorisation for this indication. The prescriber should follow relevant professional guidance, taking full responsibility for the decision. Informed consent should be obtained and documented. See the General Medical Council's Prescribing guidance: prescribing unlicensed medicines for further information.

1.4.2 Consider azathioprine alone for people who cannot tolerate metronidazole. **[2019]**

1.4.3 Do not offer biologics to maintain remission after complete macroscopic resection of ileocolonic Crohn's disease. **[2019]**

1.4.4 People who have had surgery and started taking biologics before this guideline was published (April 2019) can continue with their current treatment until both they and their NHS healthcare professional agree it is appropriate to change. **[2019]**

1.4.5 Do not offer budesonide to maintain remission in people with ileocolonic Crohn's disease who have had complete macroscopic resection. **[2019]**

To find out why the committee made the 2019 recommendations on maintaining remission after surgery and how they might affect practice, see rationale and impact.

1.5 Surgery

Crohn's disease limited to the distal ileum

1.5.1 Consider surgery as an alternative to medical treatment early in the course of the disease for people whose disease is limited to the distal ileum, taking into account the following:

- benefits and risks of medical treatment and surgery
- risk of recurrence after surgery[14]
- individual preferences and any personal or cultural considerations.

Record the person's views in their notes. **[2012]**

[14] Appendix N of the full guideline contains observational data on recurrence rates after surgery.

1.5.2 Consider surgery early in the course of the disease, or before or early in puberty, for children and young people whose disease is limited to the distal ileum and who have:

- growth impairment despite optimal medical treatment **and/or**
- refractory disease.

Discuss treatment options with the child or young person and their family members or carers (as appropriate), and within the multidisciplinary team. **[2012]**

Managing strictures

1.5.3 Consider balloon dilation, particularly for people with a single stricture that is short, straight and accessible by colonoscopy. **[2012]**

1.5.4 Discuss the benefits and risks of balloon dilation and surgical interventions for managing strictures[15] with:

- the person with Crohn's disease and their family members or carers (as appropriate) **and**
- a surgeon **and**
- a gastroenterologist. **[2012]**

1.5.5 Take into account the following factors when assessing options for managing a stricture:

- whether medical treatment has been optimised
- the number and extent of previous resections
- the rapidity of past recurrence (if appropriate)
- the potential for further resections
- the consequence of short bowel syndrome
- the person’s preference, and how their lifestyle and cultural background might affect management. **[2012]**

[15] Appendix O of the full guideline contains observational data on efficacy, safety, quality of life and time to recurrence for balloon dilation and surgery for stricture.

1.5.6 Ensure that abdominal surgery is available for managing complications or failure of balloon dilation. **[2012]**

1.6 Monitoring for osteopenia and assessing fracture risk

Refer to the NICE guideline on osteoporosis: assessing the risk of fragility fracture for recommendations on assessing the risk of fragility fracture in adults. Crohn's disease is a cause of secondary osteoporosis.

1.6.1 Do not routinely monitor for changes in bone mineral density in children and young people. **[2012]**

1.6.2 Consider monitoring for changes in bone mineral density in children and young people with risk factors, such as low body mass index (BMI), low trauma fracture or continued or repeated glucocorticosteroid use. **[2012]**

1.7 Conception and pregnancy

1.7.1 Give information about the possible effects of Crohn's disease on pregnancy, including the potential risks and benefits of medical treatment and the possible effects of Crohn's disease on fertility. **[2012]**

1.7.2 Ensure effective communication and information-sharing across specialties (for example, primary care, obstetrics and gastroenterology) in the care of pregnant women with Crohn's disease. **[2012]**

Terms used in this guideline

Complete macroscopic resection

The surgical removal of the section of bowel with visible (rather than microscopic) disease.

Recommendations for research

As part of the 2019 update, the guideline committee made an additional research recommendation on Crohn's disease.

Key recommendation for research

1 Enteral nutrition after surgery

What are the benefits, risk and cost effectiveness of enteral nutrition in maintaining remission in the post-surgical period of Crohn's disease?

To find out why the committee made the research recommendation on enteral nutrition after surgery see rationale and impact.

Rationale and impact

This section briefly explains why the committee made the recommendations and how they might affect practice. It links to details of the evidence and a full description of the committee's discussion.

Maintaining remission in Crohn's disease after surgery

Recommendations 1.4.1 to 1.4.4

Why the committee made the recommendations

The committee specified who the recommendations cover based on the populations in the studies they reviewed.

The evidence showed that azathioprine in combination with up to 3 months' metronidazole was effective in maintaining endoscopic remission. While there was some evidence of clinical benefit with azathioprine on its own, the effect was less certain. However, the committee included it as an option because some people have trouble tolerating metronidazole. The committee did not recommend metronidazole alone because, based on the evidence and their clinical experience, the potential benefits did not outweigh the potential harms (or adverse effects). Azathioprine can also be difficult to tolerate and can cause adverse effects, so the committee looked at mercaptopurine as an alternative. However, mercaptopurine is not cost effective for maintaining remission because it has a high cost relative to the limited benefits it provides. The committee also did not recommend mesalazine because there is not enough evidence that it is effective for maintaining remission. This matches the experience of the committee. This lack of strong evidence meant that the 2012 recommendation for aminosalicylates (such as mesalazine) was removed.

There was limited evidence available for biologics, and a lot of uncertainty around how much benefit they provide. Biologics are also expensive, and all these factors together mean that they are not cost effective when compared with the other options for maintaining remission. To avoid unnecessarily changing treatments for people who started taking biologics before this guideline was published, the committee made a recommendation to cover this group.

The committee made a recommendation against offering budesonide because evidence shows that it is not beneficial in maintaining remission after surgery.

None of the included studies looked specifically at maintaining remission for children and young people after surgery, so the committee did not make separate recommendations for this population. In their experience children and young people are offered the same post-surgery treatment as adults.

There was no randomised controlled trial evidence on enteral nutrition. The committee recommended further research on this because it is sometimes used alone or with other maintenance therapy for maintaining remission after surgery.

How the recommendations might affect practice

The committee noted that the recommendations made are in line with current practice. There is variation across the UK in whether people receive 3 months of metronidazole after surgery.

The committee believe that the recommendation to not start biologics after surgery could potentially result in cost savings and maintain consistency in clinical practice.

Full details of the evidence and the committee's discussion are in the evidence review: Crohn's disease management – post surgical maintenance of remission.

Return to recommendations

Context

Crohn's disease is a chronic inflammatory disease that mainly affects the gastrointestinal tract. The disease may be progressive in some people, and a proportion may develop extra-intestinal manifestations. Crohn's & Colitis UK

estimate there are at least 115,000 people in the UK with Crohn's disease. The causes of Crohn's disease are widely debated. Smoking and genetic predisposition are 2 important factors that are likely to play a role.

Typically people with Crohn's disease have recurrent attacks, with acute exacerbations interspersed with periods of remission or less active disease. Whether a relapse refers to a recurrence of symptoms or the appearance of mucosal abnormalities before the development of symptoms remains the subject of dispute. Treatment is largely directed at symptom relief rather than cure, and active treatment of acute disease (inducing remission) should be distinguished from preventing relapse (maintaining remission).

Management options for Crohn's disease include drug therapy, attention to nutrition, smoking cessation and, in severe or chronic active disease, surgery.

The aims of drug treatment are to reduce symptoms, promote mucosal healing, and maintain or improve quality of life, while minimising toxicity related to drugs over both the short- and long-term. Glucocorticosteroid treatment, 5-aminosalicylate (5-ASA) treatment, antibiotics, immunosuppressants and tumour necrosis factor (TNF)-alfa inhibitors are currently considered to be options for treating Crohn's disease. Enteral nutrition has also been used widely as first-line therapy in children and young people to facilitate growth and development, but its use in adults is less common. Between 50 and 80% of people with Crohn's disease will eventually need surgery for strictures causing symptoms of obstruction, other complications such as fistula formation, perforation or failure of medical therapy.

The 2015 routine surveillance review of CG152 highlighted evidence on the combined use of TNF-alpha inhibitor and immunosuppressant medications for inducing remission in people with severe active Crohn's disease. The recommendations were updated in May 2016, to provide guidance on the combined use of TNF-alpha inhibitor biologics (infliximab or adalimumab) together with an immunosuppressant medication, compared with biologic medication given alone. An update in April 2019 made new recommendations on maintaining remission after surgery.

Finding more information and resources

To find out what NICE has said on topics related to this guideline, see our web page on inflammatory bowel disease.

Update information

May 2019

This guideline is an update of NICE guideline CG152 (published October 2012, last updated May 2016) and will replace it.

We have reviewed the evidence on maintaining remission in Crohn's disease after surgery.

Recommendations are marked **[2019]** if the evidence has been reviewed.

May **2016**

A new recommendation has been added on inducing remission in people with Crohn's disease. This is marked as **[2016]**.

Recommendations that have been deleted or changed

We propose to delete some recommendations from the 2012 guideline. Table 1 sets out these recommendations and includes details of replacement recommendations. If there is no replacement recommendation, an explanation for the proposed deletion is given.

In recommendations shaded in grey and ending **[2010], [2012]** or **[2016]** we have not reviewed the evidence. In some cases minor changes have been made – for example, to update links, or bring the language and style up to date – without changing the intent of the recommendation. Minor changes are listed in table 2.

See also the previous NICE guideline and supporting documents.

Table 1 Recommendations that have been deleted

Recommendation 2016 guideline	Comment
1.4.1 Consider azathioprine or mercaptopurine to maintain remission after surgery in people with adverse prognostic factors such as: • more than one resection **or** • previously complicated or debilitating disease (for example, abscess, involvement of adjacent structures, fistulising or penetrating disease). **[2012]**	Replaced by: To maintain remission in people with ileocolonic Crohn's disease who have had complete macroscopic resection within the last 3 months, consider azathioprine in combination with up to 3 months' postoperative metronidazole.
1.4.2 Consider 5 ASA treatment to maintain remission after surgery. [2012]	This recommendation has been deleted because the committee agreed the newer evidence favoured azathioprine
1.4.3 Do not offer budesonide or enteral nutrition to maintain remission after surgery. **[2012]**	This recommendation has been amended because, based on the lack of conclusive evidence, the committee have recommended further research on enteral nutrition.

Table 2 Minor changes to recommendation wording (no change to intent)

Recommendation numbers in current guideline	Comment
All recommendations except those labelled [2019]	Recommendations have been edited into the direct style (in line with current NICE style for recommendations in guidelines) where possible.
1.2.3 Consider budesonide for a first presentation or a single inflammatory exacerbation in a 12-month period for people: • who have one or more of distal ileal, ileocaecal or right-sided colonic disease and • if conventional glucocorticosteroids are contraindicated, or if the person declines or cannot tolerate them	The recommendation has been rewritten to make it easier to follow. However, no change in meaning is intended.