



Literature review – Identification of barriers and enablers to the effective use of current inflammatory bowel diseases (IBD) management guidelines and relevant gaps in information

Developed by Australian General Practice Accreditation
Limited (AGPAL) on behalf of Crohn's & Colitis Australia
for the Commonwealth-funded GP Aware project

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1. Abbreviations

AGA: American Gastroenterology Association

CCA: Crohn's & Colitis Australia

CD: Crohn's disease

ECCO: European Crohn's and Colitis Organisation

GESA: Gastroenterology Society of Australia

GP: General practitioner

IBD: Inflammatory bowel disease

UC: Ulcerative colitis

2. Background

Crohn's disease (CD) and ulcerative colitis (UC) are chronic diseases comprising periods of remission, flares and relapses which, if not well managed, have significant impact on a person's quality of life.¹ These two diseases are often collectively known as inflammatory bowel diseases (IBD). IBD is suspected to affect between 75,000 and 91,000 Australians.² Unfortunately, due to the challenge of integrating multidisciplinary IBD care across a variety of healthcare sectors, IBD management is often insufficient and lacks continuity.³

The Australian Government Department of Health reports there were 773 gastroenterology and hepatology specialists across the nation registered in 2016, including seven administrators, 730 clinicians, 11 educators, 20 researchers and five classified as other.⁴ Statistics released in December 2019 about the number of Australian GPs indicate that in 2018 there were a total of 36,938 GPs nationally (i.e., 25,149 FSE) distributed across metropolitan, regional, rural and remote areas.⁵ Optimal care typically needs to involve other specialists and allied health professionals in coordinated team-based and shared care arrangements to ensure patients achieve best health outcomes. These other specialists and allied health professionals may include paediatricians, obstetricians, physiotherapists, dietitians, psychologists, IBD nurses and health coaches. Access to GPs, allied health and specialist services diminishes as geographical remoteness increases.

Runciman et al. (2012) suggest that, generically, appropriate care (i.e., care in line with evidence-based or consensus-based guidelines) is received in 57 per cent of healthcare encounters, whether they be in hospital or community-based settings. They identified that while 'there were pockets of excellence and some aspects of care were well managed across health care providers' (i.e., transitions of care) there was room for improvement.⁶

In recognising the need to strengthen evidence-based care, the Gastroenterology Society of Australia (GESA) released a clinical update for GPs and physicians in 2018 which had a diverse range of IBD referral and management guidelines.⁷ Crohn's & Colitis Australia (CCA) performed a literature review highlighting matters within IBD care that were inadequate and required improvement.⁸ Issues identified in the CCA review were a lack of clear GP referral guidelines and protocols, and that GP IBD knowledge was subpar

as a result of the difficulty in IBD diagnosis, lack of clear guidelines, guideline adherence, and poor referral quality.⁸

CCA's 2018 Stocktake of Inflammatory Bowel Disease Health Improvement Activities⁹ identified guidelines, protocols and improvement related actions across numerous organisations within Australia, including:

- guidelines by the Australian IBD Consensus Working Group through Concord Hospital NSW with CD and UC specific consensus statements published in 2015
- a Clinical Prioritisation Criteria decision support tool (<https://cpc.health.qld.gov.au/>) for the whole of Queensland, developed and published by Queensland Health
- a Queensland Health-initiated General Practitioner with a Special Interest (GPwSI) program, which was to be rolled out across the state
- CCA assessment of quality of care from a patient perspective
- a Queensland Health-initiated state-wide IBD specific HealthPathways online manual for primary and specialist services
- face-to-face and e-learning that involved IBD, initiated by the Royal Australian College of General Practitioners (RACGP)
- local protocols for managing UC and information pamphlets for patients to improve their overall IBD management, published by Lyell McEwin Hospital in Northern Adelaide
- clear GP referral protocols and guidelines by Royal Adelaide Hospital/Central Adelaide Local Health Network (LHN) in conjunction with GESA's sponsored e-tool IBS4GPs. This tool was also to be launched at Australian Gastroenterology Week in Brisbane 2018.

While Australia has tried to improve IBD referral guidelines and management, it's questionable whether these initiatives have solidified within primary healthcare. A significant issue in IBD management and best care revolves around:

- how practitioners and the public engage with the current clinical guidelines
- how these guidelines are interpreted to individual needs
- whether these guidelines are commonly known about, utilised and accessed
- whether these guidelines are applied and performed accordingly by practitioners or whether practitioners deviate from the management protocols as they see fit.⁸

3. Methods

The purposes of a scoping review are to rapidly identify knowledge gaps and to inform current work or future research on a given topic or study.¹⁰ This literature review firstly investigates the current protocols and management guidelines of IBD and, secondly, determines their access and utilisation. Australian General Practice Accreditation Limited (AGPAL), in partnership with CCA and GESA, will use the information gathered to help co-design and develop tailored education and training resources on IBD management protocols. The goal will be to enhance the provision of quality care to all patients, regardless of setting—right care, at the right time, in the right place, provided by the right person, at the right cost—and in doing so, promote value-based healthcare: optimal health outcomes and experience of care, supportive and skilled workforce, and best value care.

3.1. Aims and objectives

The overall aim of this review had two parts (Table 1). The first part was a scan of all the key peak body web sites and grey literature involving IBD referral and management protocols, access and utilisation. This became the foundation of a comprehensive review of peer-reviewed black literature that either utilises or refers to current guidelines and referral barriers and compliances. The first component involved contacting key stakeholders including departments of health, hospitals, GPs and so on to find any other relevant IBD management protocols (including speciality protocols such as IBD and children, IBD and pregnancy etc.) and to identify relevant gaps in information.

Aim	Objective	Output
Identification of barriers and enablers to the effective use of current IBD management protocols and relevant gaps in information	Undertake scan of existing Australian IBD management and referral protocols	Summary report. Comprehensive list of all identified protocols
	Explore measurement of utilisation of existing IBD management protocols	Baseline measures included in the summary report (above) and ongoing measurement completed throughout project

Table 1: IBD project aims and objectives.

Source: Developed by AGPAL on behalf of CCA.

While in this literature review we intended to focus solely on Australian IBD management and referral protocols, both the grey and black literature searches identified international equivalents and learnings on the utilisation of these resources. Therefore, we refer to these findings to complement and strengthen the results.

3.2. Sources

The literature sources collected for IBD guideline review were in two sets: grey literature and black literature. The first set of sources—the grey literature—involves guidelines and protocols available in countries that have a specific gastroenterology organisation. This includes GESA, American Gastroenterology Association (AGA), British Society of Gastroenterology (BSG), European Crohn’s and Colitis Organisation (ECCO), New Zealand Society of Gastroenterology (NZSG), World Gastroenterology

Organisation (WGO), Canadian Association of Gastroenterology (CAG), and others identified to ensure inclusion of generic IBD guidelines as well as subpopulations and co-morbidity guidelines such as those from National Institute for Health and Care Excellence (NICE, UK).

In addition, we reviewed the bibliographies of all identified relevant reports, web sites, databases, tools and resources to identify any additional materials for inclusion. This created a ‘snowballing’ effect. Findings from these became the foundation for keyword searches and identifying IBD guideline knowledge gaps during our literature search of peer-reviewed scholarly publications.

We sourced the second set of sources—the black literature, which includes peer-reviewed articles—from Scopus, PubMed, Google Scholar and Cochrane Reviews. We limited publications included in the literature review to the years 2010 to 2020. Using the decision tree and keywords outlined next (section 2.3), we assessed articles based on relevance to IBD management, protocols and referrals, and utilisation, based on publication title, abstract and keyword criteria. Once we deemed an article relevant, we read the publication in full, and categorised it in relation to IBD management protocols/guidelines and their utilisation.

3.3. Search terms and inclusion criteria

In October 2020, we completed a search of grey and black literature resources as part of the scoping review. From the review and critical analysis we performed on the most recent 2018 Australian IBD Guidelines,⁷ the IBD National Action Plan Literature Review⁸, and other sources identified in the grey literature search, we collated a list of keywords which we used to ensure we captured a breadth of relevant knowledge in the black literature. This keyword list is in **Appendix A**.

A single reviewer, Dr Tamiaka Fraser, screened and evaluated all resources identified in the grey and black literature. Dr Fraser reviewed both types of literature for inclusion, by the following criteria:

- specific guidelines and protocols for the management of IBD
- tailored for GPs or subspecialties such as gastroenterology, paediatrics and obstetrics
- co-morbidity, across the 10-year review period.

For each of the peer-reviewed publications, Dr Fraser screened the title and abstract against the inclusion criteria before reading the publication in full.

4. Results and discussion

This section summarises the results of the scoping review, addressing two questions:

- What are the current IBD guidelines available to Australian health professionals and how are they used? *A review of grey literature, feedback from stakeholders and illustrative case studies*
- What peer-reviewed IBD guidelines and protocols are available? *A review of black literature.*

4.1. What are the current IBD guidelines available to Australian health professionals and how are they used? *A review of grey literature*

Table 2 gives an overview of the IBD related guidelines and protocols, tools and resources identified in the scoping exercise (n=62). These include GESA guidelines and the IBS4GPs – Diagnostic Online Tool for GPs, state and territory related guidance, and professional body guidance and protocols. In addition, we included international equivalents, identified through the black literature scoping review. We recognise that this is not an exhaustive list but rather what we captured and deemed relevant within the time and resource parameters of the review.

Document title	Author	Year	Type	Link
GESA: Clinical update for general practitioners and physicians – inflammatory bowel disease 2018	Gastroenterological Society of Australia	2018	IBD	https://www.gesa.org.au/public/13/files/Professional/2018 IBD Clinical Update May update.pdf
Gastroenterologist fact sheet: pregnancy, fertility and inflammatory bowel disease	Gastroenterological Society of Australia	2018	IBD	https://www.gesa.org.au/public/13/files/Professional/IBD Pregnancy Fertility Gastroenterologist Factsheet.pdf
GESA fact sheet: diet in inflammatory bowel disease (IBD)	Gastroenterological Society of Australia	2018	IBD	https://www.gesa.org.au/public/13/files/Consumer%20Information/Diet in IBD Final 2018.pdf
IBS4GPs – Diagnostic Online Tool for GPs	Gastroenterological Society of Australia	2018	IBD	http://www.ibs4gps.com/
Inflammatory bowel disease	Queensland Health	2020	IBD	https://cpc.health.qld.gov.au/Condition/83/inflammatory-bowel-disease
Inflammatory bowel disease: Refer your patient	Queensland Government Metro South	2020	IBD	https://metrosouth.health.qld.gov.au/referrals/gastroenterology/inflammatory-bowel-disease

Inflammatory bowel disease	Metro North Hospital and Health Service	ND	IBD	https://metronorth.health.qld.gov.au/specialist_service/refer-your-patient/gastroenterology/inflammatory-bowel-disease
Inflammatory bowel disease clinic	Eastern Health Vic	ND	IBD	https://www.easternhealth.org.au/services/item/275-inflammatory-bowel-disease-clinic
Gastroenterology	St Vincent's Hospital	2020	IBD	https://www.svhs.org.au/our-services/list-of-services/gastroenterology
Inflammatory bowel disease	Sydney Gut Clinic	ND	IBD	http://sydneygutclinic.com/inflammatory-bowel-disease/
Nutrition therapy in IBD*	Dietitians Australia	2020	IBD	https://member.dietitiansaustralia.org.au/ItemDetail?iProductCode=2006GASTIG&Category=WEBINARS&Web siteKey=03ff812d-ea2b-487f-936a-969228cc2690
Gastroenterology referral recommendations	Government of Western Australia Department of Health	2014	IBD	http://www.gp.health.wa.gov.au/CPAC/specialty/guidelines/Gastro%20Enterology%20CPAC%20Referral%20Recommendations.pdf
Paediatric gastroenterology referral guidelines	Government of Western Australia Department of Health	2014	IBD	http://www.gp.health.wa.gov.au/CPAC/specialty/guidelines/Paediatric%20Gastroenterology%20CPAC%20Referral%20Recommendations.pdf
Gastroenterology and hepatology outpatient services in CALHN	Government of South Australia SA Health	ND	IBD	https://www.sahealth.sa.gov.au/wps/wcm/connect/public+content/sa+health+internet/services/hospitals/outpatient+services/outpatient+clinics/central+adelaide+lhn+specialist+and+outpatient+clinics/gastroenterology+and+hepatology+outpatient+services+in+calhn
Established inflammatory bowel disease (IBD)	Outpatient Clinics Tasmania Health Services	ND	CD UC	http://outpatients.tas.gov.au/clinics/gastroenterology/established_inflammatory_bowel_disease_ibd
Nutrition and IBD for dietitians*	Gut Smart	2020	IBD	https://gutsmart.com.au/courses/nutrition-and-ibd-for-dietitians/
IBD assessment and management*	SpotOnHealth HealthPathways	ND	IBD	https://spotonhealth.communityhealthpathways.org/LoginFiles/Logon.aspx?ReturnUrl=%2findex.htm%3f40631.htm&40631.htm

Inflammatory bowel disease in adolescents	The Royal Australian College of General Practitioners (RACGP) – Australian Family Physician journal - Zubin Grover, Angela De Nardi, Peter J Lewindon	2017	IBD	https://www.racgp.org.au/afp/2017/august/inflammatory-bowel-disease-in-adolescents/
Clinical update: iron deficiency	Gastroenterological Society of Australia	2015	CD UC	https://www.gesa.org.au/public/13/files/Clinical%20Updates%20and%20Guidelines/Iron_Deficiency_2015.pdf
Updates in the management of inflammatory bowel disease during pregnancy	The Medical Journal of Australia Sally J Bell and Emma K Flanagan ¹¹	2019	IBD	https://www.mja.com.au/system/files/issues/210_06/mja250062.pdf
Diagnosing and managing inflammatory bowel disease	The Medical Republic – Dr Farzan F Bahin and Dr Simmi Zahid	2018	IBD CD UC	http://medicalrepublic.com.au/diagnosing-managing-inflammatory-bowel-disease/18294
Acute severe colitis (ASC) pathway: Guide to daily inpatient management decisions	New Zealand Society of Gastroenterology	2019	UC	https://nzsg.org.nz/resources/
Paediatric Gastroenterology Clinical Network – Management of Inflammatory Bowel Disease in Children and Adolescents in New Zealand – A Clinical Guideline	Paediatric Society New Zealand	2015	IBD	https://www.starship.org.nz/guidelines/inflammatory-bowel-disease/
World Gastroenterology Organisation global guidelines IBD: A global perspective	World Gastroenterology Organisation	2015	IBD	https://www.worldgastroenterology.org/guidelines/global-guidelines/inflammatory-bowel-disease-ibd/inflammatory-bowel-disease-ibd-english
2018 management of paediatric ulcerative colitis –Part 1 and 2	ESPGHAN	2018	UC	https://www.espghan.org/knowledge-center/publications/Gastroenterology/2018_Management_of_Paediatric_Ulcerative_Colitis_Part-2

South West London Inflammatory Bowel Disease Pathway	SWL IBD Medicines Optimisation Clinical Network	2020	IBD	http://www.swlmcg.nhs.uk/Clinical/Gastroenterology/SWL%20IBD%20Pathway%20v4.1%20(26%2003%202020).pdf
British Society of Gastroenterology consensus guidelines on the management of inflammatory bowel disease in adults	British Society of Gastroenterology	2019	IBD UC CD Other	https://gut.bmj.com/content/68/Suppl_3/s1
FSRH clinical guideline: sexual and reproductive health for individuals with IBD	The Faculty of Sexual Health & Reproductive Healthcare of the Royal College of Obstetricians & Gynaecologists, UK	2016	IBD	https://www.fsrh.org/standards-and-guidance/documents/ceu-clinical-guidance-srh-ibd/
New standards for IBD aim to improve patient experience and outcomes	Guidelines in Practice Dr Kevin Barrett, Jackie Glatter	2019	IBD	https://www.guidelinesinpractice.co.uk/gastrointestinal/new-standards-for-ibd-aim-to-improve-patient-experience-and-outcomes/454831.article
IBD Standards Core Statements	IBD UK	2019	IBD	https://ibduk.org/ibd-standards
Inflammatory bowel disease toolkit	Royal College of General Practitioners	ND	IBD	https://www.rcgp.org.uk/ibd
IBD acute ulcerative colitis medical management v.2.0	Seattle Children's	2015	UC	https://www.seattlechildrens.org/globalassets/documents/healthcare-professionals/clinical-standard-work/ibd-ulcerative-colitis-medical-management-pathway.pdf
Which IBD patients should you refer to a specialist? *	Medscape	2013	IBD	https://www.medscape.com/viewarticle/777529
Inflammatory bowel disease*	Medscape William A Rowe, MD; Chief Editor: BS	2020	IBD	https://emedicine.medscape.com/article/179037-overview
ACG clinical guideline: management of Crohn's disease in adults	American College of Gastroenterology	2018	CD	https://acgcdn.gi.org/wp-content/uploads/2018/04/ACG-Crohns-Guideline-Summary.pdf

IBD and bowel disorders guidelines	American Gastroenterological Association	ND	IBD	https://gastro.org/guidelines/ibd-and-bowel-disorders/
Clinical manifestations, diagnosis, and prognosis of ulcerative colitis in adults*	UpToDate; Peppercorn M.A and Kane S.V	2020	UC	https://www.uptodate.com/contents/clinical-manifestations-diagnosis-and-prognosis-of-ulcerative-colitis-in-adults?search=IBD&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1#H2775500788
Clinical presentation and diagnosis of inflammatory bowel disease in children*	UpToDate; Higuchi L.M and Bousvaros A	2020	IBD	https://www.uptodate.com/contents/clinical-presentation-and-diagnosis-of-inflammatory-bowel-disease-in-children?search=IBD&source=search_result&selectedTitle=2~150&usage_type=default&display_rank=2
Definitions, epidemiology, and risk factors for inflammatory bowel disease in adults*	UpToDate; Peppercorn M.A and Cheiftz A.S	2020	IBD	https://www.uptodate.com/contents/definitions-epidemiology-and-risk-factors-for-inflammatory-bowel-disease-in-adults?search=IBD&source=search_result&selectedTitle=3~150&usage_type=default&display_rank=3
Clinical manifestations, diagnosis, and prognosis of Crohn disease in adults*	UpToDate; Peppercorn M.A and Kane S.V	2020	IBD	https://www.uptodate.com/contents/clinical-manifestations-diagnosis-and-prognosis-of-crohn-disease-in-adults?search=IBD&source=search_result&selectedTitle=5~150&usage_type=default&display_rank=5
Overview of the management of Crohn disease in children and adolescents*	UpToDate: Zitomersky N and Bousvaros A	2020	CD	https://www.uptodate.com/contents/overview-of-the-management-of-crohn-disease-in-children-and-adolescents?search=IBD&source=search_result&selectedTitle=10~150&usage_type=default&display_rank=10
Nutrition and dietary management for adults with inflammatory bowel disease*	UpToDate: DeLegge M.H	2020	IBD	https://www.uptodate.com/contents/nutrition-and-dietary-management-for-adults-with-inflammatory-bowel-disease?search=IBD&source=search_result&selectedTitle=25~150&usage_type=default&display_rank=25
All IBD results on UpToDate #	UpToDate	2020	IBD UC CD	https://www.uptodate.com/contents/search?search=IBD&sp=0&searchType=PLAIN_TEXT&source=USER_INPUT&searchControl=TOP_PULLDOWN&searchOffset=1&autocomplete=false&I

				anguage=&max=0&index=&autoCompleteTerm=
Inflammatory bowel disease (IBD): check list for the prevention of infections	ECCO	2014	IBD	http://www.e-guide.ecco-ibd.eu/
ECCO IBD curriculum	ECCO	2020	IBD	https://e-learning.ecco-ibd.eu/course/view.php?id=61
CD algorithms: new presentation, fistulating perianal disease, colonic CD, quiescent or mild, moderate or severe disease, ileocecal CD, extensive small bowel disease, structuring CD, penetrating CD, anti-TNF therapy, medically-induced remission, surgically-induced remission, pregnancy and IBD and, CD in children and adolescents #	ECCO	2020	CD	http://www.e-guide.ecco-ibd.eu/algorithms
UC algorithms: new presentation, proctitis, left-sided colitis, steroid thiopurine refractory UC, acute severe colitis, extensive colitis, maintenance therapy in UC, pouchitis and surgery in UC #	ECCO	2020	UC	http://www.e-guide.ecco-ibd.eu/algorithms
Consensus guidelines of ECCO/ESPGHAN on the medical management of paediatric CD	ECCO: Rummele et al	2014	CD	https://academic.oup.com/ecco-jcc/article/8/10/1179/2392263
ECCO guidelines on therapeutics in CD: surgical treatment	ECCO: Adamina et al	2019	CD	https://academic.oup.com/ecco-jcc/article/14/2/155/5631809

ECCO guidelines on therapeutics in CD: medical treatment	ECCO: Torres et al	2019	CD	https://academic.oup.com/ecco-icc/article/14/1/4/5620479
ECCO-ESGAR guideline for diagnostic assessment in IBD part 2: IBD scores and general principles and technical aspects	ECCO: Sturm et al	2018	IBD	https://academic.oup.com/ecco-icc/article/13/3/273/5078200
ECCO-ESGAR guideline for diagnostic assessment in IBD part 1: initial diagnosis, monitoring of known IBD, detection of complications	ECCO: Maaser et al	2018	IBD	https://academic.oup.com/ecco-icc/article/13/2/144/5078195
Second N-ECCO consensus statements on the European nursing roles in caring for patients with CD or UC	ECCO: Kemp et al	2018	CD UC	https://academic.oup.com/ecco-icc/article/12/7/760/4917790
ECCO-ESCP consensus on surgery for CD	ECCO: Bemelman et al	2018	CD	https://academic.oup.com/ecco-icc/article/12/1/1/3813784
3rd European evidence-based consensus on the diagnosis and management of CD 2016: part 2: surgical management and special situations	ECCO: Gionchetti et al	2016	CD	https://academic.oup.com/ecco-icc/article/11/2/135/2456548
3rd European evidence-based consensus on the diagnosis and management of CD 2016: part 1: diagnosis and medical management	ECCO: Gomollon et al	2016	CD	https://academic.oup.com/ecco-icc/article/11/1/3/2456546
The first European evidence-based consensus on extra-intestinal manifestations in IBD	ECCO: Harbord et al	2015	IBD	https://academic.oup.com/ecco-icc/article/10/3/239/2462512

European consensus on the diagnosis and management of iron deficiency and anaemia in IBD	ECCO: Dignass et al	2015	IBD	https://academic.oup.com/ecco-icc/article/9/3/211/361529
The second European evidenced-based consensus on reproduction and pregnancy in IBD	ECCO: van der Woude et al	2015	IBD	https://academic.oup.com/ecco-icc/article/9/2/107/439011
European evidence based consensus on surgery for UC	ECCO: Oresland et al	2014	UC	https://academic.oup.com/ecco-icc/article/9/1/4/485667
DynaMed: Gastroenterology, disorders of the large intestine/colon, IBD	DynaMed	2020	IBD	https://www.dynamed.com/browse/gastroenterology
eTG: Gastrointestinal- IBD	Therapeutic Guidelines	2016	IBD	https://tgldcdp.tg.org.au/guideLine?guidelinePage=Gastrointestinal&frompage=etgcomplete

Table 2: General guidelines for IBD, UC and CD identified in the grey literature.

Source: Developed by AGPAL on behalf of CCA.

* Not readily available with an associated cost for viewing.

Several guidelines available on a single webpage

We selected, and contacted on 13 November 2020, a total of 20 stakeholders across Australia for any IBD web page utilisation data. We contacted all stakeholders twice over two weeks via email or phone, reminding them about data delivery by 30 November. We were able to collect data from nine stakeholders (45 per cent) as detailed below. We expect a further one or two stakeholders will share their utilisation data by the end of November and we will update the report accordingly. We captured data from 1 January 2019 to 14 October 2020, unless specified otherwise. Each stakeholder demonstrated varying levels of data collection.

4.1.1. Streamliners HealthPathways

HealthPathways is an online manual that clinicians use to help assess, manage and make specialist request decisions for more than 550 conditions. Each pathway is co-designed between primary healthcare and specialist services within an agreed jurisdiction and consolidates agreement on how particular conditions will be managed in a local context. The target audience for HealthPathways is the GP, those responsible for managing patients in the community and initiating requests for diagnostic, specialist assistance and hospital services.¹²

Utilisation data collected for HealthPathways were a significant attainment since this platform has, to date, been rolled out across 30 of the 31 PHNs in Australia. HealthPathways is often considered the primary conduit to clinical protocols and management guidelines for a variety of ailments and conditions, including IBD, for all healthcare providers (i.e., GPs and specialists).

Table 3 indicates the launch dates since 2012 for each PHN region using HealthPathways. To date, only a single PHN (Gold Coast PHN) does not use this platform but is expected to go live by early 2021.

Region	Launch date
Hunter New England	1/04/2012
Western Victoria	1/08/2013
Central Coast	1/09/2013
Western Sydney	1/11/2013
Mid & North Coast	1/04/2014
Sydney	1/05/2014
Melbourne	1/07/2014
Townsville	1/09/2014
Tasmania	1/10/2014
ACT and SNSW	1/04/2015
Mackay	1/06/2015
South Western Sydney	1/07/2015
Illawarra Shoalhaven	1/10/2015
Western Australia	1/10/2015
Murray	1/10/2016
Sunshine Coast	1/12/2016
Far North Queensland	1/03/2017
Gippsland	1/03/2017
Brisbane North	1/05/2017
Sydney North	1/05/2017
Central Queensland	1/06/2017
Wide Bay	1/06/2017
Brisbane South	1/09/2017
Nepean Blue Mountains	1/11/2017
Murrumbidgee	1/04/2018
South Australia	1/04/2018
Darling Downs	1/06/2018
HNE HHP	1/06/2018
Northern Territory	1/06/2018
South Eastern Sydney	1/09/2018
West Moreton	1/04/2019
Western Queensland	25/03/2020
Western NSW	14/10/2020
Gold Coast	Anticipated 20/04/2021

Table 3: Launch date for Streamliners HealthPathways across Australia.

Source: Developed by AGPAL on behalf of CCA.

There are typically three pathways involving IBD within HealthPathways:

- (i) 'Inflammatory bowel disease (IBD)', which provides an overview of the condition, assessment, management, red flags, referral routes and processes, clinical guidelines and resources and associated links (e.g. to GESA and CCA) and patient information

- (ii) 'Inflammatory bowel disease assessment', which contains IBD related symptoms, physical examination and investigations (e.g. laboratory test, faecal testing including Calprotein, endoscopy and imaging)
- (iii) 'Medications for inflammatory bowel disease', which encompasses the use of 5-Aminosalicylates (5-ASA), corticosteroids, immunomodulators and biologics.

Collectively across Australia, during the selected time period for this review, each of the three IBD pathways pages were accessed a total of 8,390, 20, and 1,349 times respectively. Page views per month can be seen in Table 4.

Year	Month	IBD	IBD assessment	IBD medications
2019	January	238	0	50
2019	February	343	0	102
2019	March	379	0	65
2019	April	312	1	36
2019	May	328	2	52
2019	June	287	0	52
2019	July	354	4	80
2019	August	335	2	57
2019	September	304	1	35
2019	October	389	0	43
2019	November	261	0	61
2019	December	203	1	48
2020	January	361	2	58
2020	February	380	0	50
2020	March	368	1	48
2020	April	306	4	55
2020	May	437	1	49
2020	June	521	1	92
2020	July	541	0	73
2020	August	509	0	64
2020	September	579	0	65
2020	October	655	0	114
Total		8,390	20	1,349

Table 4: HealthPathways IBD related page views.

Source: Developed by AGPAL on behalf of CCA.

The HealthPathways platform promotes a tailored approach where the condition related pages are localised to represent evidence-informed clinical management and associated referral pathways within the region, encompassing community-based, public and/or private specialist and hospital services. Those HealthPathways that have not yet been localised routinely contain generic information developed by Streamlines HealthPathways, New Zealand. Table 5 gives an overview of the development of localised IBD related pathways within the HealthPathways platform across the same period as this review. This

demonstrates increasing localisation of the IBD introductory pathway, yet limited utilisation/localisation of the specific IBD medications and IBD assessment pages. (Note: information on medications and assessment is covered in the introductory IBD pathway).

Year	Month	IBD		IBD medications		IBD assessment		Live regions
		Localised	Not localised	Localised	Not localised	Localised	Not localised	
2019	Jan	14	16	1	3	1	1	30
2019	Feb	14	16	1	3	1	1	30
2019	Mar	14	16	1	3	1	1	30
2019	Apr	14	17	1	3	1	1	31
2019	May	15	16	1	3	1	1	31
2019	Jun	15	16	1	3	1	1	31
2019	Jul	15	16	1	3	1	1	31
2019	Aug	16	15	1	3	1	1	31
2019	Sep	16	15	1	3	1	1	31
2019	Oct	16	15	1	3	1	1	31
2019	Nov	16	15	1	3	1	1	31
2019	Dec	16	15	1	3	1	1	31
2020	Jan	19	12	1	3	1	1	31
2020	Feb	19	12	1	3	1	1	31
2020	Mar	19	13	1	3	1	1	32
2020	Apr	19	13	1	4	1	1	32
2020	May	19	13	1	4	1	1	32
2020	Jun	20	12	1	4	1	1	32
2020	Jul	20	12	1	4	2	0	32
2020	Aug	21	11	2	3	2	0	32
2020	Sep	21	11	2	3	2	0	32
2020	Oct	22	11	3	3	2	0	33

Table 5: Number of Australian PHN regions that have IBD related pathways localised or not localised with the total amount of live regions.
Source: Developed by AGPAL on behalf of CCA.

Some links are typically included within localised HealthPathways IBD pages (Table 6). The New Zealand and UK links are routinely included in non-localised HealthPathways.

Resource number	Organisation	Web page description	Number of times accessed	Link
1	GESA	Short description of IBD with a link to the GESA 2013 information document (resource number 10)	17	www.gesa.org.au/resources/patients/inflammatory-bowel-disease/
2	GESA	Short description of IBD and explanation of the clinical guidelines. Link to the 2018 guidelines	21	www.gesa.org.au/resources/clinical-guidelines-and-updates/inflammatory-bowel-disease/
3	CCA	2016 Australian IBD Standards: Standards of healthcare for people with inflammatory bowel disease in Australia	5	www.crohnsandcolitis.com.au/site/wp-content/uploads/IBD-Standards-Final.pdf
4	CCA	Flow chart for differentiating between IBS and IBD	15	www.crohnsandcolitis.com.au/site/wp-content/uploads/Differentiating-Between-IBS-and-IBD.pdf
5	CCA	Web page that contains three management tools: Differentiating between IBS and IBD (resource number 4), Clinicians' guide to UC management (resource number 11), and My Gut Feeling – patient guide for UC	25	www.crohnsandcolitis.com.au/find-support/clinical-insights-tools/
6	CCA	Description of IBD and fertility with general recommendations. A link to the members only section is available with recommendations to view 'The inside story: A toolkit for living well with IBD'.	5	www.crohnsandcolitis.com.au/about-crohns-colitis/living-with-inflammatory-bowel-disease/ibd-fertility/
7	CCA	Home page for Crohn's & Colitis Australia	16	www.crohnsandcolitis.com.au/
8	Crohn's & Colitis New Zealand	Home page for Crohn's & Colitis New Zealand	4	https://crohnsandcolitis.org.nz/
9	CCA	Web page about Crohn's and colitis containing general information about: causes, symptoms, treatment, IBS is not IBD, Crohn's disease, UC,	2	www.crohnsandcolitis.com.au/about-crohns-colitis/

		diagnosis, medications, maintaining treatment, and surgery		
10	GESA	The 2013 information document about inflammatory bowel disease (IBD), Crohn's disease and ulcerative colitis	3	https://cart.gesa.org.au/embes/files/Consumer%20Information/IBD%20-%20Crohns%20Colitis.pdf
11	CCA	Clinicians' guide to UC management	2	www.crohnsandcolitis.com.au/site/wp-content/uploads/Clinicians-Guide-to-UC-Management.pdf
12	Crohn's & Colitis UK	Home page for Crohn's & Colitis UK	1	www.crohnsandcolitis.org.uk/about-inflammatory-bowel-disease
13	Crohn's & Colitis UK	Patient information about azathioprine and/or mercaptopurine treatment	1	www.crohnsandcolitis.org.uk/about-inflammatory-bowel-disease/publications/azathioprine-mercaptopurine
14	Crohn's & Colitis UK	Patient information about infliximab treatment	1	www.crohnsandcolitis.org.uk/about-inflammatory-bowel-disease/publications/infliximab
15	Crohn's & Colitis UK	Patient information about methotrexate treatment	1	www.crohnsandcolitis.org.uk/about-inflammatory-bowel-disease/publications/methotrexate
16	GESA	Fact sheet for patients on inflammatory bowel disease (IBD), Crohn's disease and ulcerative colitis (2018)	1	www.gesa.org.au/public/13/files/Consumer%20Information/IBD_Crohns_Colitis_Factsheet.pdf
17	GESA	Principles for clinicians caring for patients with IBD during the COVID-19 pandemic (2020). Additional links can be found	1	www.gesa.org.au/public/13/files/COVID-19/GESA_IBD_Clinician_Recommendations_%20COVID19_26032020_FINAL.pdf

Table 6: External links within IBD related HealthPathways web pages.

Source: Developed by AGPAL on behalf of CCA.

4.1.2. Crohn's & Colitis Australia

We collected data between 28 December 2019 and 14 October 2020. Table 7 represents the number of visits to each web page or the level of utilisation of the respective links to both internal and external resources from CCA web pages.

Web page description	Downloads/ accessed	Link
Gut Smart	No data available	https://gutsmart.com.au/ This is a new site launched September 2020
Differentiating between IBS and IBD	1,158	https://www.crohnsandcolitis.com.au/find-support/clinical-insights-tools/
Clinicians' guide to UC management	698	https://www.crohnsandcolitis.com.au/find-support/clinical-insights-tools/
My Gut Feeling – UC patient guide	821	https://www.crohnsandcolitis.com.au/find-support/clinical-insights-tools/
IBD audit final report	86	https://www.crohnsandcolitis.com.au/ibd/qoc/ibd-audit-report/
Australian Standards 2016	213	https://www.crohnsandcolitis.com.au/ibd/qoc/australian-ibd-standards/
IBD national action plan	266	https://www.crohnsandcolitis.com.au/ibd/qoc/ibd-national-action-plan/
IBD toolkit	42 impressions; 28 reads; average read time 13:55 minutes	https://www.crohnsandcolitis.com.au/member/login/?restricted=1&redirect_to=https%3A%2F%2Fwww.crohnsandcolitis.com.au%2Fmembers-only%2Fibd-toolkit%2F%3FframeUrl%3D <i>(NB: access data only available for the last 30 days of usage 28 Sept 2020 – 27 Oct 2020)</i>
GESA	18	https://www.crohnsandcolitis.com.au/about-crohns-colitis/useful-links/
CCA iconnect	41	https://www.crohnsandcolitis.com.au/about-crohns-colitis/useful-links/
IBD Support Australia	29	https://www.crohnsandcolitis.com.au/about-crohns-colitis/useful-links/
Monash Low FODMAP Diet	21	https://www.crohnsandcolitis.com.au/about-crohns-colitis/useful-links/
Centrelink	14	https://www.crohnsandcolitis.com.au/about-crohns-colitis/useful-links/
Crohn's & Colitis New Zealand	12	https://www.crohnsandcolitis.com.au/about-crohns-colitis/useful-links/
Dietitians Australia	10	https://www.crohnsandcolitis.com.au/about-crohns-colitis/useful-links/
Australian Medicines Handbook	6	https://www.crohnsandcolitis.com.au/about-crohns-colitis/useful-links/

European Federation of Crohn's & Ulcerative Colitis Associations	5	https://www.crohnsandcolitis.com.au/about-crohns-colitis/useful-links/
Gastroenterological Nurses College of Australia	4	https://www.crohnsandcolitis.com.au/about-crohns-colitis/useful-links/

Table 7: Crohn's & Colitis Australia.

Source: Developed by AGPAL on behalf of CCA.

4.1.3. Gastroenterology Society of Australia (GESA)

Data collected within the review period demonstrate access to and utilisation of GESA related web content and resources and links to external web sites and resources.

Figure 1 provides a high-level overview of the page views per month for all GESA web pages over the designated review period, demonstrating around 450 page views in January 2019 and peaking with 1,000 page views in March and September 2020.

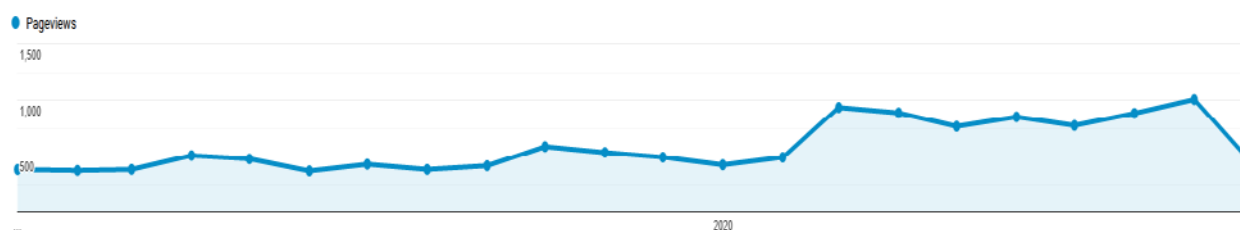


Figure 1: GESA web page views.

Source: Developed by AGPAL on behalf of CCA.

Table 8 gives data on the utilisation of links to relevant guidelines and IBD related resources, and clarifies the number of times accessed or downloaded in the review period.

Web page description	Downloaded/accessed	Link
General page for all guidelines available	11,350	https://www.gesa.org.au/resources/inflammatory-bowel-disease-ibd/
Australian Guidelines for General Practitioners and Physicians – Inflammatory Bowel Disease 4th Edition (updated 2018)	15,174	https://www.gesa.org.au/resources/clinical-guidelines-and-updates/inflammatory-bowel-disease/
IBD National Action Plan launched and funding announced. Has a link to CCA National Plan	259	https://www.gesa.org.au/news-item/2230/ibd-national-action-plan-launched-and-funding-announced
Recommendations for patients with inflammatory bowel disease (IBD) during the COVID-19 pandemic	170	https://www.gesa.org.au/news-item/4273/recommendations-for-patients-with-inflammatory-bowel-disease-ibd-during-the-covid-19-pandemic

Principles for clinicians caring for patients with IBD during the COVID-19 pandemic	114	https://www.gesa.org.au/news-item/4264/principles-for-clinicians-caring-for-patients-with-ibd-during-the-covid-19-pandemic
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Table 8: GESA resources.

Source: Developed by AGPAL on behalf of CCA.

4.1.4. Dietitians Australia

A free webinar titled 'Nutrition therapy in IBD', which took place on 18 June 2020, had 255 registrations and the recording has been viewed an additional 118 times on Vimeo. Dietitians Australia's target audience is dietitians but often webinars are available to non-members. Approximately 90 per cent of webinar registrations are members.

4.1.5. Metro South Queensland Health

Metro South Queensland Health has a dedicated IBD page:

<https://metrosouth.health.qld.gov.au/referrals/gastroenterology/inflammatory-bowel-disease>.

Inflammatory bowel disease

Find assessment and management information at SpotOnHealth HealthPathways under:

- [Inflammatory_Bowel_Disease_\(IBD\)](#)

Useful management information +

Minimum referral criteria Does your patient meet the minimum criteria? +

Standard referral information To be included in all referrals +

Essential referral information for Inflammatory bowel disease referrals

- ▶ ELFT, FBC, iron studies results
- ▶ ESR results
- ▶ Vitamin B12 results
- ▶ Stool M/C/S and PCR including Clostridium difficile (Category 1 referrals only)
- ▶ Relevant imaging reports

If a specific test result is unable to be obtained due to access, financial, religious, cultural or consent reasons a Clinical Override may be requested. This reason must be clearly articulated in the body of the referral.

Additional referral information for Inflammatory bowel disease referrals +

Figure 2: Metro South Queensland Health dedicated IBD page.

Source: Metro South Queensland Health [Online].

There were 93 visits to IBD and related pages over the timeframe of this review, with a total of 36 clicks on IBD content. Additionally, Streamliners HealthPathways was accessed 36 times from this web page, in particular across February, July and August 2020.

IBD related site/document downloads for Metro South Queensland Health are as follows:

- Refer your patient to Metro South Health using Secure Messaging: 12
 - [secure-messaging-gp-factsheet.pdf](#)

- PHN Brisbane South forms and referrals: 32
 - <https://bsphn.org.au/support/for-your-practice/forms-and-referrals/>
- Metro South Health – Refer Your Patient: 60
 - <https://metrosouth.health.qld.gov.au/referrals>

4.1.6. Metro North Queensland Health

Similarly, Metro North Queensland Health has a dedicated IBD related web page:

[https://metronorth.health.qld.gov.au/specialist_service/refer-your-patient/gastroenterology/inflammatory-bowel-disease.](https://metronorth.health.qld.gov.au/specialist_service/refer-your-patient/gastroenterology/inflammatory-bowel-disease)

This page was accessed a total of 564 times access over the review period. Table 9 shows access by month.

Month index	Page views
Jan-19	38
Feb-19	38
Mar-19	47
Apr-19	24
May-19	29
Jun-19	24
Jul-19	26
Aug-19	29
Sep-19	23
Oct-19	20
Nov-19	23
Dec-19	11
Jan-20	19
Feb-20	21
Mar-20	30
Apr-20	17
May-20	22
Jun-20	34
Jul-20	22
Aug-20	28
Sep-20	19
Oct-20	20
Total	564

Table 9: Metro North Queensland Health IBD page views.

Source: Developed by AGPAL on behalf of CCA.

The IBD web page includes a link to HealthPathways, but no data were available on the number of times this link was utilised from the Metro North Queensland Health site.

4.1.7. Health Direct

Health Direct is a consumer-facing web portal that provides advice to consumers on health topics and how to use the Australian health system. It includes a symptom checker and details on local health services, searchable by location.

Related pages include UC (<https://www.healthdirect.gov.au/ulcerative-colitis>) and CD (<https://www.healthdirect.gov.au/crohns-disease>), with links to other information pages including abdominal pain, diarrhoea, constipation and bowel cancer.

Condition related pages typically include information on differences (e.g. between CD and UC), symptoms, diagnosis, treatment, lifestyle factors, complications and where to get help.

Table 10 shows data on the number of visits to the UC and CD web pages across the review period:

Month	UC	CD
Jan-19	2,208	774
Feb-19	1,912	1,195
Mar-19	4,368	1,908
Apr-19	4,477	2,585
May-19	3,741	2,513
Jun-19	2,507	1,308
Jul-19	2,327	1,113
Aug-19	2,409	1,117
Sep-19	2,345	918
Oct-19	2,921	1,416
Nov-19	2,942	1,624
Dec-19	2,177	1,180
Jan-20	1,970	1,203
Feb-20	1,508	1,089
Mar-20	1,459	1,242
Apr-20	1,355	1,266
May-20	2,338	1,634
Jun-20	2,192	1,459
Jul-20	1,839	1,450
Aug-20	2,351	1,528
Sep-20	1,856	1,500
Oct-20	1,071	1,023
Total	52,273	31,045

Table 10: Health Direct.

Source: Developed by AGPAL on behalf of CCA.

4.1.10. Case studies

The following illustrative case studies demonstrate how the quality varies in information that is provided to clinicians and consumers about the assessment and management and associated referral pathways for IBD. These case studies were selected randomly and include:

- Case study 1 – Eastern Health, Melbourne’s largest metropolitan public health service
- Case study 2 – ACT Health, the jurisdiction-wide health department
- Case study 3 – Tasmania Health Services outpatient clinics
- Case study 4 – South Australia and Royal Adelaide Hospital.

Unfortunately, utilisation data were not forthcoming on all these, except for partial data provided for South Australia Health (see section 3.1.8).

Case study 1: Eastern Health, Melbourne

Eastern Health, Melbourne’s largest metropolitan public health service provider, gives links to both HealthPathways and GESA for additional IBD guidelines and management processes. It also provides several links on where to refer patients and what tests are required for the referral, and a direct link to HealthPathways.

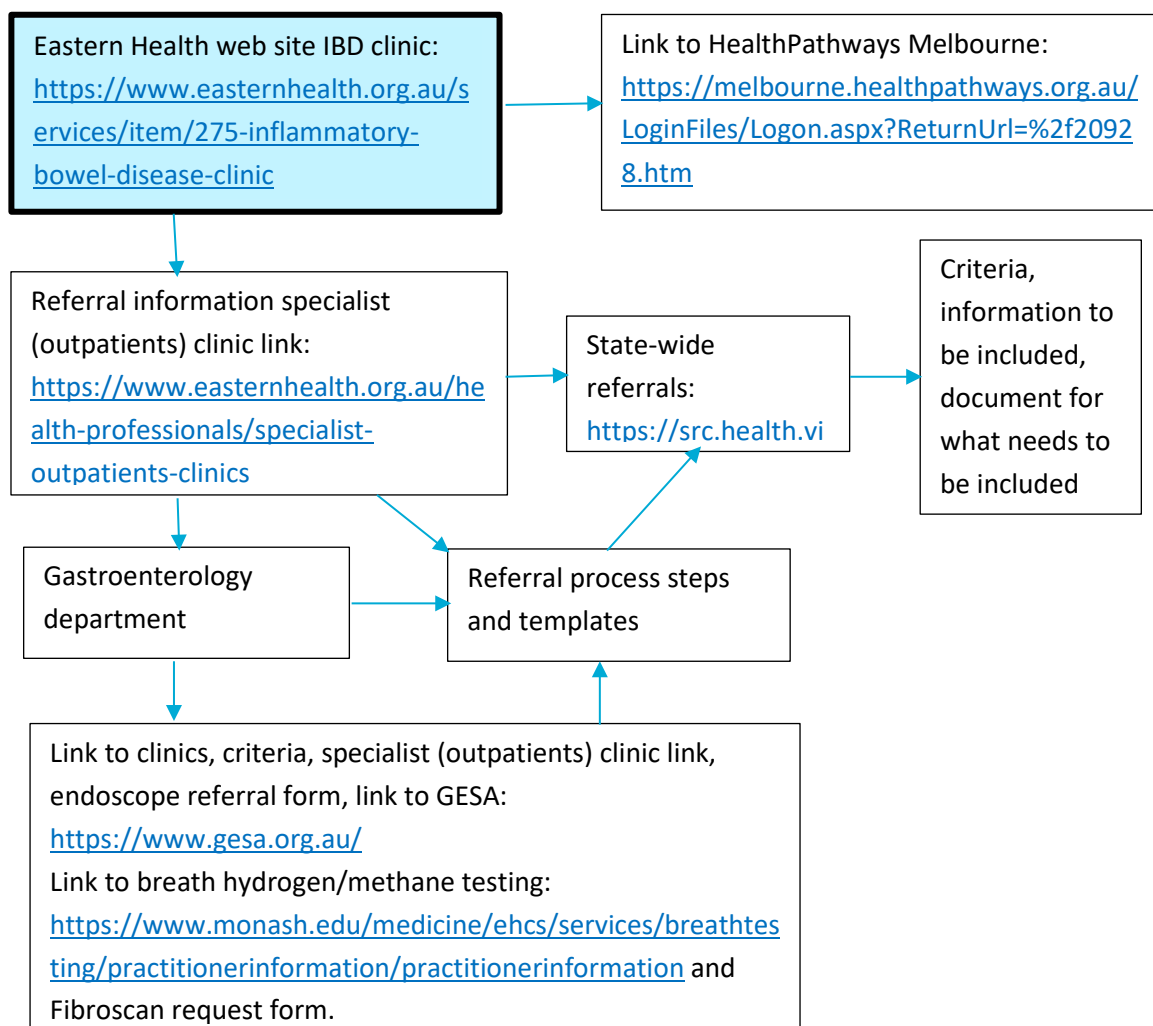


Figure 4: Eastern Health.
Source: Information from Eastern Health [Online] adapted by AGPAL on behalf of CCA.

Case study 2: ACT Health

The ACT Health web site serves both the ACT Health Directorate and the main public hospital and health service provider, Canberra Health Services. ACT Health's web site illustrates that some health departments/services provide limited information to GPs, clinicians and consumers on clinical conditions (in this respect, IBD). ACT Health's web site is generic in nature, simply referring to information on gastroenterology and hepatology services and associated contact details. There are no internal or external links relating to IBD assessment and management, information and referral recommendations.

As the main tertiary provider for ACT and the surrounding region, ACT Health partners with ACT PHN, Southern NSW LHD and South Eastern NSW PHN in developing and providing HealthPathways, recognising local referral pathways to specialist services. Interestingly, neither the gastroenterology and hepatology web page nor the health professionals web page refer to HealthPathways, although we recognise that the ACT and Southern NSW HealthPathways platform contains comprehensive IBD, IBD medication and IBD assessment content. Similarly, ACT Health's web page does not include links to GESA or CCA, although we recognise these links sit in the HealthPathways IBD and related pages.

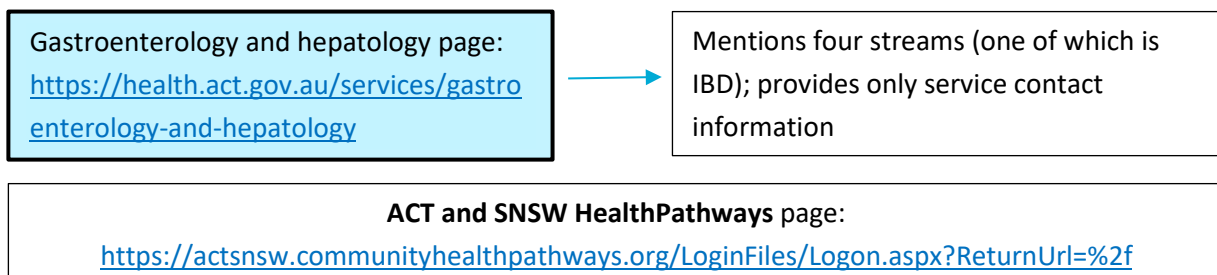


Figure 5: ACT Health.

Source: Information from ACT Health [Online], adapted by AGPAL on behalf of CCA.

Case study 3: Outpatient clinics – Tasmania Health Services

An 'IBD' search of Tasmania Health Services' web site sends the visitor to the outpatient gastroenterology web page, which contains generic information about state referral processes and pathways. In the menu is a link to a specific 'Established inflammatory bowel disease (IBD)' web page, which provides information on pre-work required to support a referral and links to both GESA sites and the state-wide HealthPathways platform. We do not know whether Tasmania HealthPathways has localised or non-localised IBD related pathway pages.

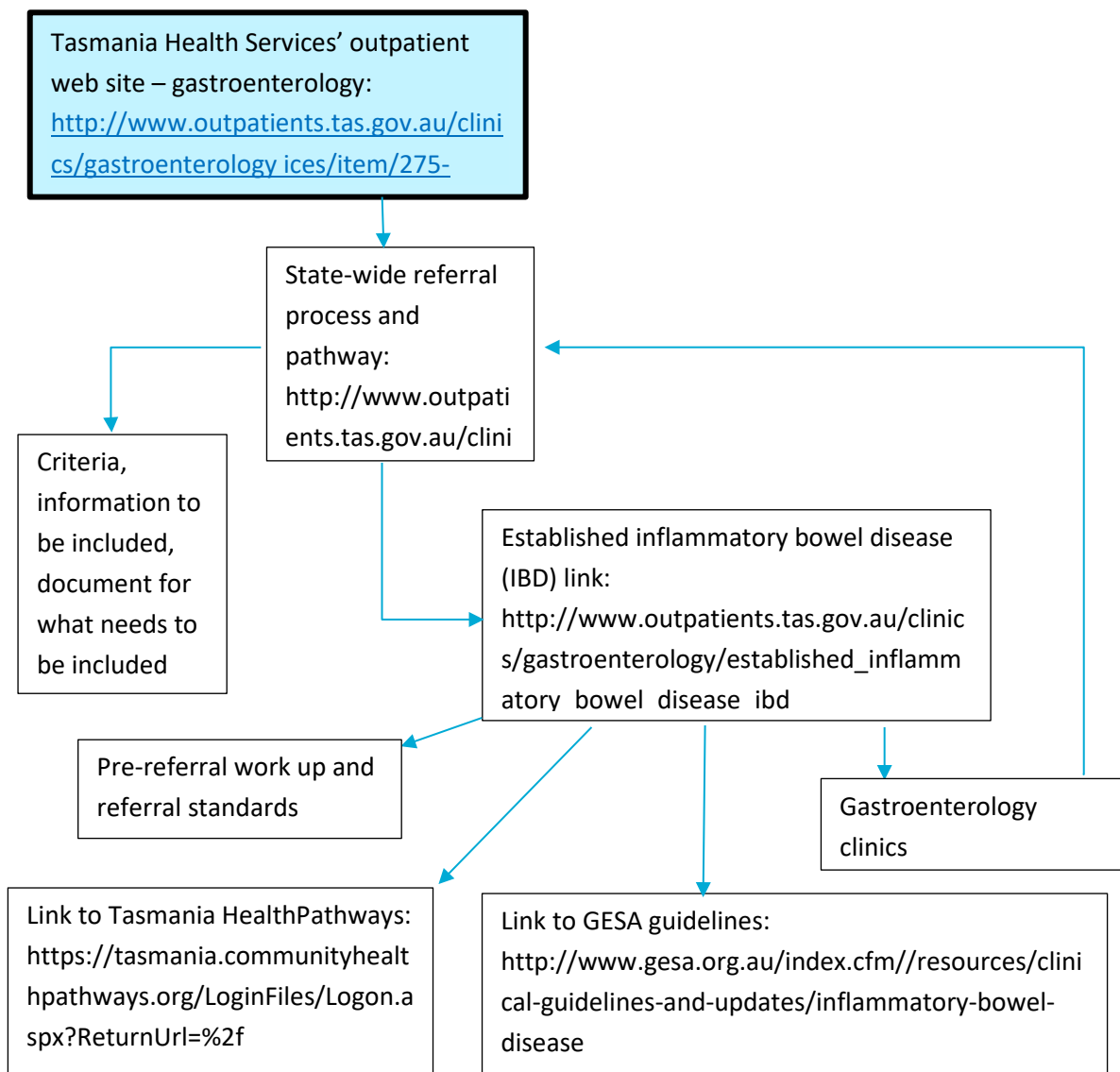


Figure 6: Tasmania Health Services.

Source: Tasmania Health Services [Online], adapted by AGPAL on behalf of CCA.

Case study 4: South Australia Health

South Australia Health publishes details on outpatient services across the Central Adelaide (CA), North Adelaide (NA), and South Adelaide (SA) LHN regions, together with information on referral routes to the Women’s and Children’s Hospital (WCH) LHN, each of which provides specialist and outpatient services. The South Australia Health CA LHN gastroenterology and hepatology outpatient services page on the CA LHN web site provides information on general gastroenterology and liver disease, outlines referral processes and alternative care options. It provides links to GESA for additional guidelines and management processes of IBD and to the Department of Gastroenterology and Hepatology at the Royal Adelaide Hospital (RAH). There appears to be no reference to HealthPathways on the web pages visited.

The RAH web page provides:

- details for referrers and patients
- information on specialist IBD services
- an IBD helpline
- IBD nurse specialists
- leads IBD and gastroenterology clinical trials and hospitals with a range of IBD related resources.

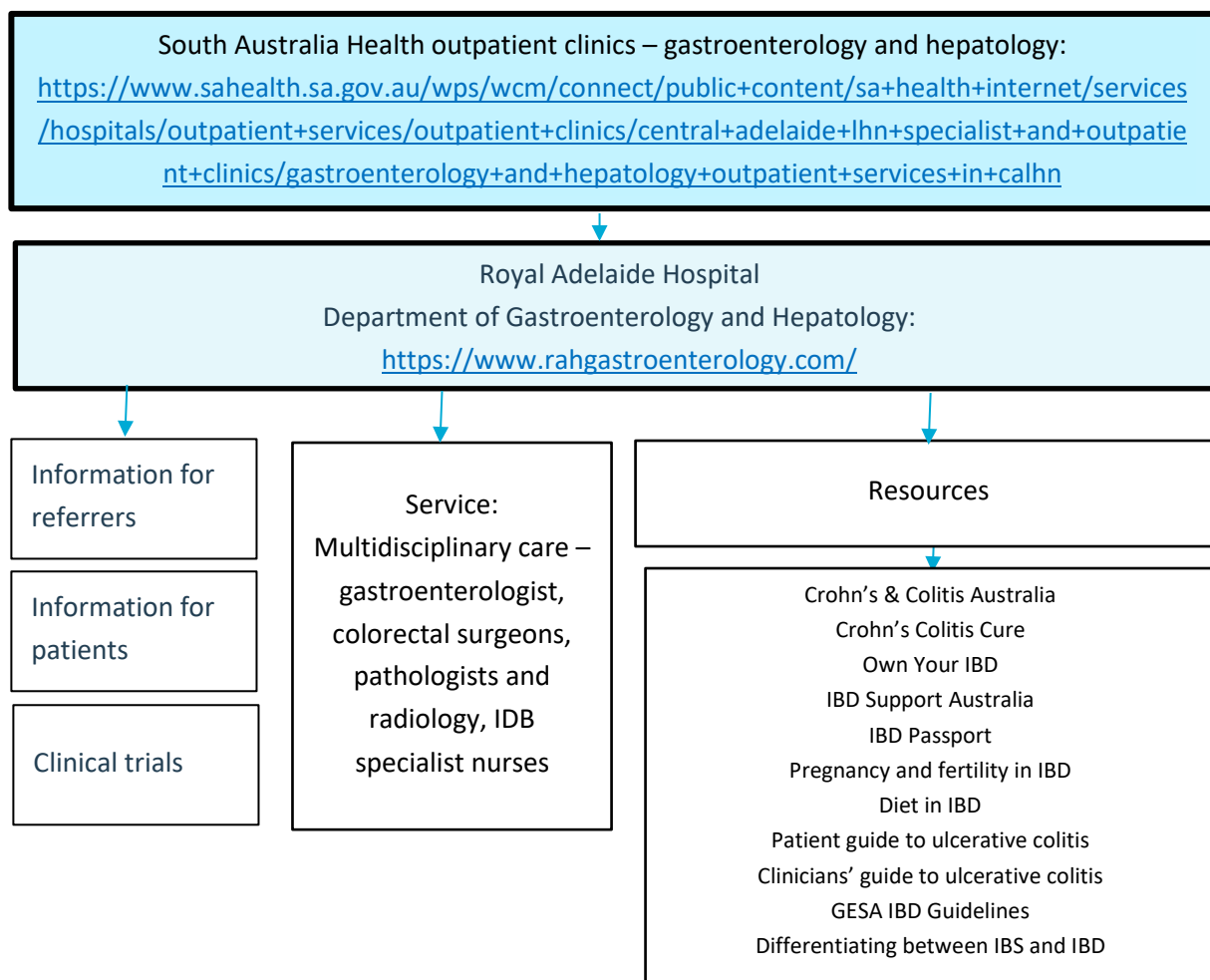


Figure 7: Adelaide Health Services

Source: South Australia Health [Online] adapted by AGPAL on behalf of CCA.

4.2. What peer-reviewed IBD guidelines and protocols are available? *A review of black literature*

The number of articles we found varied starkly depending on which search engine or database we used. For all keyword searches, we found a total of 260,073 articles via Google, 35,745 articles via Google Scholar, 7,101 articles via Scopus, 533 articles via PubMed, and 75 articles via Cochrane. For the purpose of this review, we only further assessed articles for inclusion that we found on Scopus.

Figure 7 presents the Scopus search results using Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA). We imported all 7,101 articles found via Scopus into an Excel file where we identified and removed duplications. We also removed any article that did not have an abstract. We assessed the remaining 398 articles for relevance using their title and abstract content, which resulted in a final list of 169 articles. Dr Fraser read in full the articles on this list.

This approach had some limitations, including:

- We could only include black literature with full versions available. There were some management resources and guidelines that may have been relevant but could not be included because we could not access them via Scopus. Examples of these are:
 - ‘Updates in the management of inflammatory bowel disease during pregnancy’,¹¹ which has been online since 25 March 2019 and has had 682 page views since that date
 - ‘Management of inflammatory bowel disease’,¹⁵ which has been online since 1 October 2018 and has had 1,991 page views since that date.
- GESA and CCA guidelines were not captured in the black literature review and some of the guidelines identified in the grey literature were not found in the black literature.
- Collection was limited, given the short timeframe for the review and the pressures of COVID-19 on the health system. We extend our appreciation to those providers who were able to provide data.
- Many gastroenterology and hepatology web pages and IBD service provider web pages do not include publication dates.

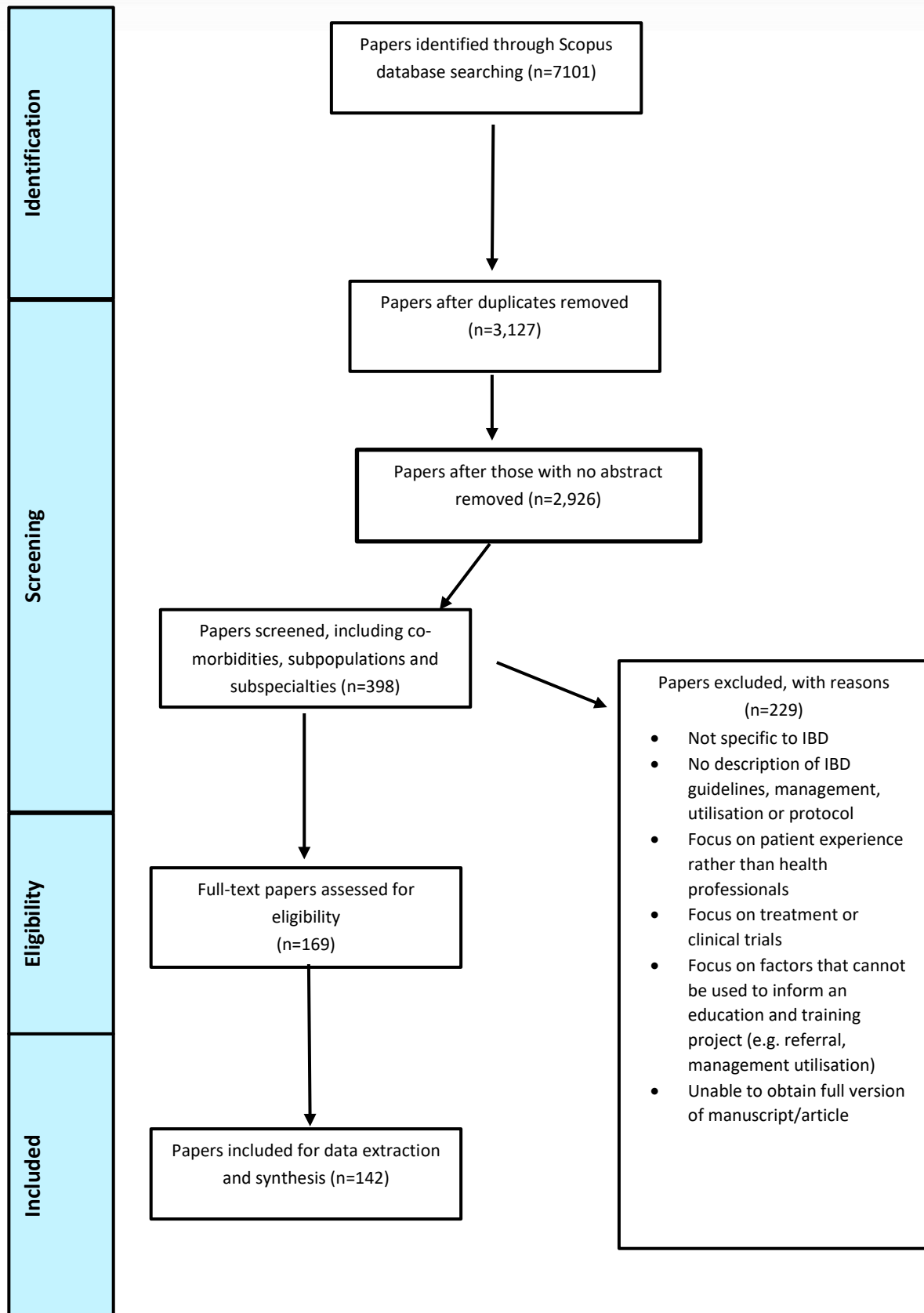


Figure 8: PRISMA flow diagram for paper selection.
 Source: Developed by AGPAL on behalf of CCA.

4.2.1. Management

We reviewed 142 articles that met the criteria outlined above. Considered by category, the review findings are detailed here:

4.2.1.1. Guidelines

The black literature search of peer-reviewed publications across a 10-year period via Scopus identified a variety of guidelines, protocols, recommendations, reviews and suggestions for IBD. In this search, we identified 22 general guidelines that provide management of IBD (Table 11). Of these, all but one guideline was published during or after 2015, with half of the total published in the same year or after the 2018 GESA guideline update. Seven guidelines were specific to UC, six specifically targeted CD, and nine were for IBD. Interestingly, GESA and CCA guidelines from 2018 were not captured in this search.

Reference	Year	Type	Summary
Annese ¹⁶	2019	UC	Provides an update on UC management
Bernasko and Coviello ¹⁷	2019	IBD	Particular guidelines for ambulatory settings and remarks on provider compliance in adult IBD
Brown, Fearnhead et al. ¹⁸	2018	IBD	Great Britain and Ireland consensus guidelines in IBD surgery
Clarke and Feuerstein ¹⁹	2019	IBD	Practice guidelines for colorectal cancer in IBD
Davis, Robinson et al. ²⁰	2018	UC	Information on UC management
Deepak and Bruining ²¹	2015	CD	Update on CD management
Dillon and Crimaldi ²²	2020	IBD	Pathway management of IBD
Enns, Hookey et al. ²³	2017	IBD	Guidelines for video capsule endoscope
Farraye, Melmed et al. ²⁴	2017	IBD	ACG guidelines for preventative care IBD
Feuerstein and Cheifetz ²⁵	2017	CD	Diagnosis and management of CD
Feuerstein, Moss et al. ²⁶	2019	UC	Guidelines for UC
Kammermeier, Morris et al. ²⁷	2016	CD	ACG CD management
Kornbluth and Sachar ²⁸	2010	UC	ACG guideline for UC
Lewin and Velayos ²⁹	2020	IBD	Day-to-day inpatient management for moderate to severe IBD
Lichtenstein, Loftus et al. ³⁰	2018	CD	ACG guidelines for management of CD
Maconi, Nylund et al. ³¹	2018	IBD	European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB) guidelines for intestinal ultrasounds in IBD
Matsuoka, Kobayashi et al. ³²	2018	IBD	Japanese Society of Gastroenterology (JSG) clinical practise guidelines for IBD
Park, Yang et al. ³³	2017	CD	Korean guidelines for CD
Pennazio, Spada et al. ³⁴	2015	CD	European Society of Gastrointestinal Endoscopy (ESGE), endorsed by the BSG for small bowel capsule endoscope with recommendations for CD
Rubin, Ananthkrishnan et al. ³⁵	2019	UC	ACG guideline for UC
Stenke and Hussey ³⁶	2014	UC	NICE guideline for UC management
Tun, Harris et al. ³⁷	2017	UC	Concise guideline of UC management

Table 11: General guidelines for IBD, UC and CD.

Source: Developed by AGPAL on behalf of CCA.

4.2.1.2. Recommendations and reviews

Following guidelines, statement recommendations and reviews of guidelines typically establishes general understanding and guides future research and directions. We obtained 22 peer-reviewed publications in the black literature search (Table 12). Approximately 45 per cent of articles identified were published during or after 2018. Almost half of the recommendations relate to IBD (n=10), seven are specifically for UC, and five are for CD.

Reference	Year	Type	Summary
Cohen-Mekelburg, Schneider et al. ³⁸	2017	IBD	Advances in diagnosis and management of dysplasia in IBD
Jain, Ahuja et al. ³⁹	2019	UC	Review on the optimal management of acute severe UC
Jansen, Vavricka et al. ^{39,40}	2020	IBD	Review on clinical management for IBD with particular focus on joints, skin and eyes
Johnson, Linzay et al. ⁴¹	2019	UC	Review the recommendations on treatment guidelines
Lewis ⁴²	2018	IBD	Exert recommendations for optimising quality of care in IBD units
Mir and Kane ⁴³	2018	IBD	Review on the evidence in health maintenance for IBD
Nguyen, Boland et al. ⁴⁴	2017	IBD	Modified process for 'Choosing wisely' recommendation campaign
Nguyen, Devlin et al. ⁴⁵	2014	IBD	IBD best practice management using quality indicators
Pellino, Keller et al. ⁴⁶	2020	CD	SICCR recommendations and statements about surgical treatment of CD
Pellino, Keller et al. ⁴⁷	2020	IBD	SICCR statements on general principles of IBD management
Pellino, Keller et al. ⁴⁸	2020	UC	SICCR statements on UC management
Pola, Patel et al. ⁴⁹	2012	UC	Strategies of care for hospitalised adults with active UC
Queiroz, Barros et al. ⁵⁰	2020	IBD	Review current literature for IBD during COVID-19
Ran, Wu et al. ⁵¹	2020	IBD	Asian Organization for Crohn's & Colitis and Asia Pacific Association of Gastroenterology recommendations for IBD management in Asia
Roda, Chien Ng et al. ⁵²	2020	CD	Review of CD
Seah and De Cruz ⁵³	2016	UC	Review on the practical management of UC
Singh, Allegretti et al. ⁵⁴	2020	UC	AGA technical review on moderate to severe UC management
Singh, Feuerstein et al. ⁵⁵	2019	UC	AGA technical review on mild to moderate UC management
Whaley and Rosen ⁵⁶	2019	CD	Contemporary medical management of acute severe UC
Yamamoto, Lightner et al. ⁵⁷	2020	CD	Review on the perioperative management of ileocecal CD
Zittan, Gralnek et al. ⁵⁸	2020	CD	Review of the new approaches and precision medicine in CD
Zullow and Farraye ⁵⁹	2019	IBD	Review of the vaccination schedule for IBD

Table 12: Recommendations and reviews.

Source: Developed by AGPAL on behalf of CCA.

4.2.1.3. Tools

A number of tools were published to help healthcare professionals manage IBD. Bennett, Munkholm et al. (2015)⁶⁰ assessed the treatment guides that existed prior to 2015, and determined that while the non-expert IBD management tools or guidelines available were supportive, their use in primary care settings

was limited due to poor design. This spurred development of a '5C Concept and 5S principle' in IBD management⁶¹ to help healthcare providers more effectively collaborate and provide guidance for best practice strategies. Two types of algorithms have since been established for detecting and treating CD^{62,63} to support physician decision making.

4.2.1.4. Consensus and adherence

Discussion on guideline and management consensus and adherence was evident in 11 peer-reviewed publications around evidence-based statements and differences in IBD management practice. Chen, Andrews et al. (2016),⁶⁴ Kapasi, Glatter et al. (2020),⁶⁵ Panaccione, Steinhart et al. (2019),⁶⁶ Peyrin-Biroulet, Bouhnik et al. (2017)⁶⁷ and Wei, Chang et al. (2017)⁶⁸ conducted systematic reviews on evidence-based consensus statements. These publications collectively produced consensus statements and recommendations, based on current guidelines or expert opinions, with the focus on improving management, quality and referrals. Bonnaud, Bouhnik et al. (2020)⁶⁹ developed a consensus statement and easy-to-follow guidelines for gastroenterologists in France, advocating that optimal treatment regimes would help reduce the burden of disease. They did, however, identify that differences exist between present guidelines and consensus statements.⁶⁶

IBD management variation is described in three peer-reviewed publications. Buruiana, Angelescu et al. (2013)⁷⁰ identified differences in IBD management between the United Kingdom and Romania health practitioners. Both Lee, Brown et al. (2018)⁷¹ and Sebastian, Lisle et al. (2020)⁷² identified practice variations between and among practitioners. Improvement of health professionals' adherence to current IBD guidelines was highlighted in two peer-reviewed publications. Jackson, Con et al. (2017)⁷³ examined Australian clinicians' adherence to guidelines and found neglect of preventative care of chronic disease management, little improvement in guideline adherence, and management variability globally. Kredel, Schneiderei et al. (2019)⁷⁴ identified that while current recommendations in Germany were being followed, drug treatment guidelines were not.

4.2.1.5. Anaemia

Anaemia is the most common co-morbidity for people with IBD and has a severe impact on quality of life. The black literature search identified three peer-reviewed publications on anaemia that addressed gaps of care and current literature. Martin, Radeke et al. (2017)⁷⁵ reviewed current literature surrounding the aetiology, diagnosis and therapy of anaemia in IBD and presented current evidence for developing flow charts for diagnosis and treatment. Qureshi, Peter Nguyen et al. (2019)⁷⁶ described and tested a new care pathway, despite pre-existing anaemia management guidelines, and reported a significant improvement for patients. They also stated that practitioners' awareness of IBD anaemia guidelines does not result in practice compliance.⁷⁶ Hou, Gasche et al. (2017)⁷⁷ examined gaps in anaemia care pathways and identified that despite the development and publication of guidelines, their ability to influence practitioners may not be as fruitful.

4.2.1.6. Other co-morbidities and complications

There are many complications and co-morbidities related to IBD, but guidelines and protocols often neglect them. Abraham (2015)⁷⁸ performed a literature review on the symptom management of IBD, using other guidelines to support the review, and summarised that all symptoms should be addressed promptly in order to reduce cascading consequences. Beaugerie, Rahier et al. (2020)⁷⁹ summarised treatment related complications and their management and used other guidelines as points of reference. Garber and Regueiro (2019),⁸⁰ Ibraheim, Dhillon et al. (2018),⁸¹ and Velayos (2012)⁸² respectively reviewed the surveillance management of extraintestinal manifestations, colorectal cancer and neoplasia, and all authors used available guidelines to inform their review.

Fatigue is a common co-morbidity of IBD and severely impacts the patient's quality of life. Remarkably, there are limited guidelines for managing fatigue. Two peer-reviewed publications reviewed the literature and tools around fatigue in IBD, and both suggested management recommendations and approaches.^{83,84}

4.2.1.7. Elderly

Most of the IBD guidelines focus on adult manifestations, but the content surrounding management in the elderly is minimal. The black literature search identified six peer-reviewed publications encompassing the challenges and considerations for IBD management in the elderly. Ruel, Ha et al. (2013)⁸⁵ discussed the uncertainties of IBD therapeutic strategies in the elderly and summarised that management is often less aggressive in the elderly than in the younger population. Ahmed and Nguyen (2016)⁸⁶ highlighted when to consider surgical referral, pitfalls and management for clinicians, and emphasised that a single guideline for practitioners for elderly IBD management was available. Tran, Limketkai et al. (2019)⁸⁷ suggested there were no consensus guidelines involving co-existing and co-morbidities in elderly IBD and that a more personalised approach was necessary. However, Hruz, Juillerat et al. (2020),⁸⁸ Kim and Taleban (2019),⁸⁹ and Shrestha and Taleban (2019)⁹⁰ respectively developed three highly comprehensive guidelines for IBD, CD and UC, and all give a general summary and protocols for managing IBD in the elderly. Further, they observed that while there were differences between adult and elderly disease onset, this was not reflected in the current guidelines and that decisions on management are often based on practitioner opinion.^{89,90}

4.2.1.8. Multidiscipline

The need for multidiscipline care of IBD patients is becoming a well-known concept, but its utilisation among healthcare professionals is often limited and adherence to guidelines regularly differs. Hernández-Sampelayo, Seoane et al. (2010)⁹¹ evaluated the contribution of nurses to IBD care, and provided useful information for designing standards of structure and processes for IBD nurses. Hinojosa, Gisbert et al. (2012)⁹² summarised that while IBD-specialised gastroenterologists and general gastroenterologists in Spain adhered to therapeutic guidelines, there was variability in diagnostic techniques and follow-up procedures. Asthana, Friedman et al. (2015)⁹³ further established that gastroenterologists in Asia-Pacific failed to apply intestinal ultrasounds and indicated a lack of experience owing to few established training centres. Bennett, Ha et al. (2015)⁹⁴ highlighted the need for comprehensive coordinated care as well as a requirement for structured handoffs. They assessed the

management of IBD with co-existing ailments and recommended 22 statements around shared therapeutic strategies.⁹⁵ Deepak, Park et al. (2017)⁹⁶ performed a 2017 review of the role of radiologists, encompassing their involvement in diagnosis and assessment of CD. Ferman, Lim et al. (2018)⁹⁷ identified that a multidisciplinary team is more effective in assisting complex decision-making in IBD for both processes and clinical outcomes. Felice, Leccese et al. (2019)⁹⁸ established that gastroenterologists and rheumatologists are required for optimal management of patients with IBD and associated spondyloarthritis.

4.2.1.9. Nutrition

We reviewed 11 articles on nutrition: six of these were published across 2019–2020. Eight related to IBD and nutrition, three were for CD and nutrition, and none related to UC and nutrition. Ashton, Gavin et al. (2019)⁹⁹ report that using exclusive enteral nutrition for CD is more routine in Australia than in other health systems. Related articles are shown in Table 13.

Reference	Year	Type	Summary
Ashton, Gavin et al. ⁹⁹	2019	CD	Exclusive enteral nutrition for CD
Balestrieri, Ribolsi et al. ¹⁰⁰	2020	IBD	Nutritional aspects in IBD
Di Caro, Fragkos et al. ¹⁰¹	2019	CD	Enteral nutrition in CD
Goens and Micic ¹⁰²	2020	CD	Role of diet in developing and managing CD
Haskey and Gibson ¹⁰³	2017	IBD	Review on the examination of diet for remission maintenance of IBD
Inns and Emmanuel ¹⁰⁴	2013	IBD	Survey on UK and NZ gastro practice on diet and food exclusion; recommendations
Lomer ¹⁰⁵	2011	IBD	Diet and nutrition considerations IBD
Massironi, Rossi et al. ¹⁰⁶	2013	IBD	Review on nutritional deficiencies in IBD
Nazarenkov, Seeger et al. ¹⁰⁷	2019	IBD	Implementing dietary modifications and adequacies in IBD
O'Sullivan and Raftery ¹⁰⁸	2014	IBD	IBD diet management
Kodama, Tanaka et al. ¹⁰⁹	2020	IBD	Zinc guidelines

Table 13: Nutrition.

Source: Developed by AGPAL on behalf of CCA.

4.2.1.10. Paediatrics

Twenty-four articles focused on the assessment and management of IBD in children; 14 of these were published since 2017 (Table 14). Grover and Alex (2019)¹¹⁰ outline conventional approaches and treatment options in the Australian health system. Articles cover co-morbidity and associated management protocols and the importance of a comprehensive approach. Sebastian, Jenkins et al. (2012)¹¹¹ consider the requirements of successful transfer of adolescents to adult gastroenterology services.

Reference	Year	Type	Summary
Aloi, Nuti et al. ¹¹²	2014	IBD	Advances in IBD medical management
Amil-Dias, Kolacek et al. ¹¹³	2017	CD	ESPGHAN CD surgical management guidelines
Baldwin and Kaplan ¹¹⁴	2017	IBD	Medical management of IBD
Carman, Mack et al. ¹¹⁵	2019	IBD	Reviews highlight of key elements and anticipatory care for primary care providers
Grover and Alex ¹¹⁰	2019	IBD	Outlines conventional approaches, in particular treatment options available in Australia, for individualised management
Kapoor, Bhatia et al. ¹¹⁶	2019	IBD	Review on paediatric IBD
Lamparyk, Debeljak et al. ¹¹⁷	2019	IBD	Integrated care and its utilisation of psychology in paediatric gastroenterology clinics
Miele, Shamir et al. ¹¹⁸	2018	IBD	Recommendations and practical guide for nutrition in paediatric IBD
Miller and Suskind ¹¹⁹	2018	IBD	Review on enteral nutrition in paediatric IBD
Oliva, Thomson et al. ¹²⁰	2018	IBD	ESPGHAN guideline for endoscopy in paediatric IBD
Pappa, Thayu et al. ¹²¹	2011	IBD	Report and recommendations on skeletal health for children and adolescents with IBD
Patel and Gurram ¹²²	2019	IBD	Recent advances in paediatric IBD management
Regan and Bousvaros ¹²³	2014	UC	Practical guide to UC management
Rufo, Denson et al. ¹²⁴	2012	IBD	NASPGHAN recommendations for health supervision of children and adolescence with IBD
Russell and Turner ¹²⁵	2011	UC	Management of severe UC in paediatrics
Sebastian, Jenkins et al. ¹¹¹	2012	IBD	Requirements for successful transfer of adolescents in adult gastroenterologists
Siow, Bhatt et al. ¹²⁶	2017	UC	Management of acute severe UC in children
Sun, Vesely et al. ¹²⁷	2107	CD	Paediatric Crohn disease clinical outcome assessments and biomarkers: current state and path forward for global collaboration
Turner and Griffiths ¹²⁸	2011	UC	Review: Acute severe UC in children
Turner, Levine et al. ¹²⁹	2012	UC	ECCO and ESPGHAN consensus guidelines for paediatric UC management
Turner, Ruemmele et al. ¹³⁰	2018	UC	Part 1: ECCO and ESPGHAN evidence-based guideline for ambulatory care in paediatric UC
Turner, Ruemmele et al. ¹³¹	2018	UC	Part 2: ECCO and ESPGHAN evidence-based guideline for acute severe colitis
Turner, Travis et al. ¹³²	2011	UC	ECCO and ESPGHAN consensus for acute severe UC in children
Vernon-Roberts, Lopez et al. ¹³³	2019	IBD	Symptom self-report tool for children with IBD

Table 14: Paediatrics.

Source: Developed by AGPAL on behalf of CCA.

4.2.1.11. Pain

Pain associated with IBD is a common complaint and has serious effects on patient quality of life. Only two peer-reviewed publications around the management of pain in IBD were flagged in this black literature search. Docherty, Jones III et al. (2011)¹³⁴ reviewed the benefits and limitations of common treatment and management of pain in IBD. No reference to other guidelines was present, but they did suggest an algorithm for treatment and guidance.¹³⁴ Zielińska, Sałaga et al. (2019)¹³⁵ reviewed the current and future management possibilities for IBD chronic pain and included a flow of treatment recommendations and suggestions for further development.

4.2.1.12. Women and pregnancy

Healthcare professionals are increasingly discussing guidelines for IBD management for women and pregnancy. Our search of black literature identified four peer-reviewed publications of interest since 2018, three of which were published in 2019. Gomes, Sousa et al. (2018)¹³⁶ performed a review on general topics and information that gastroenterologists should know during pregnancy, and recommended that both the physician and obstetrician must follow the patient closely since obstetricians may have limited knowledge of IBD medication. Afzali (2019)¹³⁷ evaluated and reviewed the management of IBD disease flares in pregnancy and suggested that IBD therapies can generally continue throughout pregnancy and that only active IBD can increase the risk of pregnancy complications. Walker and Gaidos (2019)¹³⁸ reviewed IBD in women, outside of pregnancy, using current guidelines at the time for their report. Mahadevan, Robinson et al. (2019)¹³⁹ published an official American Gastroenterological Association (AGA) clinical care pathway with suggestions and guidelines for a care coordination team, pre-conception, nine-month plan, delivery, post-delivery, vaccinations and medication.

4.2.1.13. Psychology

A matter commonly underappreciated in IBD management is the importance of psychological support. We identified only two peer-reviewed publications in the black literature search. The first was by Tarricone, Regazzi et al. (2017)¹⁴⁰ who reviewed evidence on utilisation and effectiveness of IBD psychiatric treatment and suggested that this service should be routinely implemented in IBD care. More recently, Mackner, Whitaker et al. (2020)¹⁴¹ published recommendations and a toolkit for screening depression in paediatric IBD by assessing established guidelines in outpatient centres.

4.2.2. Quality

Increasing emphasis is being given to the concept of quality in the management of IBD. Effective transitions of care are considered critical given the multidisciplinary approach required to optimise health outcomes. Alongside this sits the importance of multidisciplinary education and training of staff on the application of IBD guidelines, shared care and the management of patients.

4.2.2.1. Quality of care

IBD quality of care, and the guidelines surrounding it, has been a significant matter of interest over the years. The search in black literature identified eight peer-reviewed publications that captured variation in quality over the past six years. The first publication was distributed in 2014, reviewing proposed changes required to improve quality of care and suggested that a multidisciplinary approach founded on current

guidelines was necessary.¹⁴² Ahmed, Siegel et al. (2015)¹⁴³ assessed the implementation of IBD quality measures, revealed a number of variations to IBD management, and suggested this was a consequence of poor quality. They also developed measures to provide measurable standards in IBD care, and in doing so highlighted that implementation may depend on care settings.¹⁴³

According to Lee, Pola et al. (2016)¹⁴⁴ the quality of care in hospitals varied, particularly around pain management and follow-up. Three peer-reviewed articles were published in 2018 summarising IBD quality of care and their indicators.¹⁴⁵⁻¹⁴⁷ These reviewed the indicators for IBD quality of care and touched on the ongoing gaps and amendment efforts. Berry and Melmed (2018)¹⁴⁵ identified that significant variation in quality of care across North America, Europe and Asia was the result of poor quality of care. A 2019 review provided general recommendations for standards of care in IBD, summarising three domains of relevance: structure, process and outcomes.¹⁴⁸ We identified only a single quality of care publication for UC. Shah-Khan, Cumberland et al. (2019)¹⁴⁹ evaluated the management and efforts of targeted care and practice patterns of hospitalised UC and identified significant variability.

4.2.2.2. Transfer and referrals

Efficient and correct referrals and transfers between specialties is a significant management principle that's becoming more notable. Klag, Stange et al. (2015)¹⁵⁰ investigated whether CD guidelines were being transferred into clinical practice and, while specific to Germany, found an overall occurrence. More recently, Ahmad, Ayubi et al. (2020)¹⁵¹ performed a UK multicentre audit of transfer quality of care between health providers by assessing the quality of referrals. They highlighted that primary care was leading most referrals and suggested that gastroenterologists need to take more responsibility in order to provide smoother and more robust transfer of care.

The transfer of care between paediatric and adult gastroenterology was a key topic of investigation. We identified four peer-reviewed publications in our black literature search. In 2011, Leung, Heyman et al. (2011)¹⁵² and Goodhand, Hedin et al. (2011)¹⁵³ provided recommendations for transitioning adolescents with IBD into adult gastroenterologist care and highlighted the importance of structured care. Goodhand, Hedin et al. (2011)¹⁵³ also suggested that no single model of care has been widely adopted, despite guidelines being published in Europe and the USA, and described consequences of this. Subsequently, two peer-reviewed publications have been released providing recommendations and a model of care for the transition from paediatric to adult gastroenterologists.^{154,155} The most recent publication, by Bert, Camussi et al. (2020),¹⁵⁴ proposed a model that emphasised the importance of a multidisciplinary approach to involve all specialists of both paediatric and adult teams.

4.2.2.3. Training

A single peer-reviewed publication identified in this search captured the topic of healthcare training on IBD guidelines and management. Malter, Israel et al. (2019)¹⁵⁶ summarised the current educational programs in IBD for USA gastroenterologist fellows and proposed that the curriculum requirements be updated to reflect constant changes to IBD management and treatment.

5. Conclusions

This scoping review confirms that, internationally, a multitude of clinical guidelines, together with associated decision supports tools and dedicated patient-focused or clinician-focused information, are covering the assessment and management of IBD. Here in Australia, there appears to be consensus on the use of GESA's IBD guidelines and the IBS4GPs, evidenced by the number of links to these resources from hospital, health service, consumer and professional body web pages.

A review of online web sites suggests variability in the quality of state- and territory-based and health service provider IBD related information. Awareness among GPs and community-based primary healthcare services is typically promoted through health department or service web pages (to greater or lesser success) and HealthPathways (which covers all PHN regions with effect from January 2021), although not all IBD pathways are yet localised (where they are not, reference is typically provided to the New Zealand guidelines).

Despite the prevalence of IBD within the Australian population, plus the number of GPs, generalist gastroenterologists, other related specialists and allied health professionals engaged in assessing, diagnosing and managing IBD, there appears to be limited awareness and/or utilisation of IBD guidelines and resources. GESA guidelines were not revealed in the black literature search, which may corroborate the findings of Runciman et. al.⁶ that a high proportion of patients receive suboptimal care. This reinforces the need to provide to GPs and generalist gastroenterologists—the gatekeepers of specialist IBD care—some targeted awareness-raising activities, education and training about high quality evidence-based care and adopting a multidisciplinary team-based approach founded on the principles of person-centred and value-based care.

6. Next steps

This scoping review will inform the ongoing development of the GP Aware project, specifically helping to:

- design and implement a campaign promoting existing health practitioner guidelines for IBD management
- develop IBD-specific continuing professional development for GPs and generalist gastroenterologists
- develop and promote the use of individual care plans for IBD management in primary and specialist care settings.

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8. References

- 1 Crohn's and Colitis Australia. Australian IBD Standards: Standards of healthcare for people with inflammatory bowel disease in Australia. 2016.
- 2 Massuger W, Moore GT, Andrews JM, et al. Crohn's and Colitis Australia inflammatory bowel disease audit: measuring the quality of care in Australia. *Internal Medicine Journal*. 2019;49(7):859-66. Available from: https://api.research-repository.uwa.edu.au/files/48496371/Massuger_et_al._2018_The_Crohn_s_and_Colitis_Australia_Inflammatory_Bowel_Disease_Audit_Measuring_the_quality_of_care_in_Australia.pdf.
- 3 Regueiro MD, McAnallen SE, Greer JB, et al. The inflammatory bowel disease specialty medical home: a new model of patient-centered care. *Inflammatory Bowel Diseases*. 2016;22(8):1971-80. Available from: <https://pubmed.ncbi.nlm.nih.gov/27135486/>.
- 4 Department of Health. Gastroenterology and hepatology – 2016 factsheet. Canberra: Australian Government 2016. Available from: <https://hwd.health.gov.au/webapi/customer/documents/factsheets/2016/Gastroenterology%20&%20hepatology.pdf>.
- 5 Australian Medical Association. General practice facts. 2019. Available from: <https://ama.com.au/article/general-practice-facts>.
- 6 Runciman WB, Hunt TD, Hannaford NA, et al. CareTrack: assessing the appropriateness of health care delivery in Australia. *Medical Journal of Australia*. 2012;197(2):100-5.
- 7 Gastroenterological Society of Australia. Clinical update for general practitioners and physicians: inflammatory bowel disease updated 2018. 2018.
- 8 Crohn's and Colitis Australia. Inflammatory Bowel Disease National Action Plan: Literature Review 2018. 2018.
- 9 Crohn's and Colitis Australia. Stocktake of inflammatory bowel disease healthcare improvement activities: a background document for the IBD National Action Plan October 2018. 2018. Available from: <https://www.crohnsandcolitis.com.au/site/wp-content/uploads/Stocktake-IBD-Activities.pdf>.
- 10 Arksey H, O'Malley L. Scoping studies: towards a methodological framework *International Journal of Social Research Methodology*. 2005;8:19-32.
- 11 Bell SJ, Flanagan EK. Updates in the management of inflammatory bowel disease during pregnancy. *Medical Journal of Australia*. 2019;210(6):276-80. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.5694/mja2.50062>.
- 12 McGeoch G, Anderson I, Gibson J, et al. Consensus pathways: evidence into practice. *NZ Medical Journal*. 2015;128(1408):86-96.
- 13 Grover Z, De Nardi A, Lewindon PJ. Inflammatory bowel disease in adolescents. *Australian Family Physician*. 2017;46(8):565.
- 14 Lyons A. Crohn's and colitis: the invisible diseases. RACGP 2019.

15 Wright EK, Ding NS, Niewiadomski O. Management of inflammatory bowel disease. *Medical Journal of Australia*. 2018;209(7):318-23. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.5694/mja17.01001?sid=nlm%3Apubmed>.

16 Annese V. An update on treatment of ulcerative colitis. *Expert Opinion on Orphan Drugs*. 2019;7(6):295-304.

17 Bernasko NE, Coviello JS. Improving provider compliance with adult inflammatory bowel disease patient care guidelines in the ambulatory setting through the use of electronic health records. *Gastroenterology Nursing*. 2019;42(6):470-7.

18 Brown S, Fearnhead N, Faiz O, et al. The Association of Coloproctology of Great Britain and Ireland consensus guidelines in surgery for inflammatory bowel disease. *Colorectal Disease*. 2018;20:3-117.

19 Clarke WT, Feuerstein JD. Colorectal cancer surveillance in inflammatory bowel disease: practice guidelines and recent developments. *World Journal of Gastroenterology*. 2019;25(30):4148.

20 Davis SC, Robinson BL, Vess J, et al. Primary care management of ulcerative colitis. *The Nurse Practitioner*. 2018;43(1):11-9.

21 Deepak P, Bruining DH. Update on the medical management of Crohn's disease. *Current Gastroenterology Reports*. 2015;17(11):41.

22 Dillon DL, Crimaldi JE. Pathway-driven management of inflammatory bowel disease. *The Journal for Nurse Practitioners*. 2020;16(7):493-7.

23 Enns RA, Hookey L, Armstrong D, et al. Clinical practice guidelines for the use of video capsule endoscopy. *Gastroenterology*. 2017;152(3):497-514. Available from: [https://www.gastrojournal.org/article/S0016-5085\(16\)35560-3/pdf](https://www.gastrojournal.org/article/S0016-5085(16)35560-3/pdf).

24 Farraye FA, Melmed GY, Lichtenstein GR, et al. ACG clinical guideline: preventive care in inflammatory bowel disease. *American Journal of Gastroenterology*. 2017;112(2):241-58.

25 Feuerstein JD, Cheifetz AS, editors. *Crohn disease: epidemiology, diagnosis, and management*. Mayo Clinic Proceedings; 2017: Elsevier.

26 Feuerstein JD, Moss AC, Farraye FA. Ulcerative colitis. *Mayo Clinic Proceedings*. 2019. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85067396801&doi=10.1016%2fj.mayocp.2019.01.018&partnerID=40&md5=c0ce4713d9e41bacf41d0e3d61e69909>.

27 Kammermeier J, Morris M-A, Garrick V, et al. Management of Crohn's disease. *Archives of Disease in Childhood*. 2016;101(5):475-80. Available from: <https://adc.bmj.com/content/archdischild/101/5/475.full.pdf>.

28 Kornbluth A, Sachar D. Practice Parameters Committee of the American College of Gastroenterology. Ulcerative colitis practice guidelines in adults. *American Journal of Gastroenterology*. 2010;105(3):501-23.

29 Lewin S, Velayos FS. Day-by-day management of the inpatient with moderate to severe inflammatory bowel disease. *Gastroenterology and Hepatology*. 2020;16(9):449.

30 Lichtenstein GR, Loftus EV, Isaacs KL, et al. ACG Clinical Guideline: Management of Crohn's disease in adults. *American Journal of Gastroenterology*. 2018;113(4):481-517.

31 Maconi G, Nylund K, Ripolles T, et al. EFSUMB Recommendations and clinical guidelines for intestinal ultrasound (GIUS) in inflammatory bowel diseases (EFSUMB-Empfehlungen und klinische Leitlinien für den gastrointestinalen Ultraschall (GIUS) chronisch). *Ultraschall in der Medizin*. 2018;39(3):304-17.

32 Matsuoka K, Kobayashi T, Ueno F, et al. Evidence-based clinical practice guidelines for inflammatory bowel disease. *Journal of Gastroenterology*. 2018;53(3):305-53. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5847182/pdf/535_2018_Article_1439.pdf.

33 Park JJ, Yang SK, Ye BD, et al. Second Korean guidelines for the management of Crohn's disease. *Intestinal Research*. 2017. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85012951194&doi=10.5217%2fir.2017.15.1.38&partnerID=40&md5=a2e6a103bdb27491abc6e8fb57dd4c57>.

34 Pennazio M, Spada C, Eliakim R, et al. Small-bowel capsule endoscopy and device-assisted enteroscopy for diagnosis and treatment of small-bowel disorders: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline. *Endoscopy*. 2015;47(4):352-76. Available from: <https://www.thieme-connect.com/products/ejournals/pdf/10.1055/s-0034-1391855.pdf>.

35 Rubin DT, Ananthakrishnan AN, Siegel CA, et al. ACG clinical guideline: ulcerative colitis in adults. *American Journal of Gastroenterology*. 2019. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85062607224&doi=10.14309%2fajg.000000000000152&partnerID=40&md5=ed8b39897f512bb9f55c0b6783ba0445>.

36 Stenke E, Hussey S. Ulcerative colitis: management in adults, children and young people (NICE Clinical Guideline CG166). *Archives of Disease in Childhood-Education and Practice*. 2014;99(5):194-7. Available from: <https://ep.bmj.com/content/99/5/194.long>.

37 Tun GS, Harris A, Lobo AJ. Ulcerative colitis: management in adults, children and young people—concise guidance. *Clinical Medicine*. 2017;17(5):429. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6301924/pdf/clinmed-17-5-429.pdf>.

38 Cohen-Mekelburg S, Schneider Y, Gold S, et al. Advances in the diagnosis and management of colonic dysplasia in patients with inflammatory bowel disease. *Gastroenterology and Hepatology*. 2017. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85020788342&partnerID=40&md5=1f077db548328ba471f05604829e1c99>.

39 Jain S, Ahuja V, Limdi JK. Optimal management of acute severe ulcerative colitis. *Postgraduate Medical Journal*. 2019;95(1119):32-40. Available from: <https://pmj.bmj.com/content/postgradmedj/95/1119/32.full.pdf>.

40 Jansen FM, Vavricka SR, den Broeder AA, et al. Clinical management of the most common extra-intestinal manifestations in patients with inflammatory bowel disease focused on the joints, skin and eyes. *United European Gastroenterology Journal*. 2020:2050640620958902.

41 Johnson CM, Linzay CD, Dassopoulos T. Maneuvering clinical pathways for ulcerative colitis. *Current Gastroenterology Reports*. 2019;21(10):52. Available from: <https://link.springer.com/article/10.1007/s11894-019-0716-3>.

- 42 Lewis JD. Inflammatory bowel disease care: what to do when there is a breach of contract between the patient and physician? *Inflammatory Bowel Diseases*. 2018. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85054263761&doi=10.1093%2fibd%2fzy172&partnerID=40&md5=1dc8f495ce55fcb3b34e004c0cb795f0>.
- 43 Mir FA, Kane SV. Health maintenance in inflammatory bowel disease. *Current Gastroenterology Reports*. 2018;20(5):23.
- 44 Nguyen GC, Boland K, Afif W, et al. Modified Delphi process for the development of choosing wisely for inflammatory bowel disease. *Inflammatory Bowel Diseases*. 2017;23(6):858-65. Available from: <https://pubmed.ncbi.nlm.nih.gov/28509817/>.
- 45 Nguyen GC, Devlin SM, Afif W, et al. Defining quality indicators for best-practice management of inflammatory bowel disease in Canada. *Canadian Journal of Gastroenterology and Hepatology*. 2014;28.
- 46 Pellino G, Keller DS, Sampietro GM, et al. Inflammatory bowel disease position statement of the Italian Society of Colorectal Surgery (SICCR): Crohn's disease. *Techniques in Coloproctology*. 2020. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85081366345&doi=10.1007%2fs10151-020-02183-z&partnerID=40&md5=1534eba88290dccb5f3aa15be3de885d>.
- 47 Pellino G, Keller DS, Sampietro GM, et al. Inflammatory bowel disease (IBD) position statement of the Italian Society of Colorectal Surgery (SICCR): general principles of IBD management. *Techniques in Coloproctology*. 2020. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85078185436&doi=10.1007%2fs10151-019-02145-0&partnerID=40&md5=22caa5f653810384ae38f36c99b66ff0>.
- 48 Pellino G, Keller DS, Sampietro GM, et al. Inflammatory bowel disease position statement of the Italian Society of Colorectal Surgery (SICCR): ulcerative colitis. *Techniques in Coloproctology*. 2020. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85081371012&doi=10.1007%2fs10151-020-02175-z&partnerID=40&md5=f4563738cc86a0ee9651550f60281390>.
- 49 Pola S, Patel D, Ramamoorthy S, et al. Strategies for the care of adults hospitalized for active ulcerative colitis. *Clinical Gastroenterology and Hepatology*. 2012;10(12):1315-25. e4. Available from: [https://www.cghjournal.org/article/S1542-3565\(12\)00832-4/pdf](https://www.cghjournal.org/article/S1542-3565(12)00832-4/pdf).
- 50 Queiroz NSF, Barros LL, Azevedo MFCd, et al. Management of inflammatory bowel disease patients in the COVID-19 pandemic era: a Brazilian tertiary referral center guidance. *Clinics*. 2020;75.
- 51 Ran Z, Wu K, Matsuoka K, et al. Asian Organization for Crohn's and Colitis and Asia Pacific Association of Gastroenterology practice recommendations for medical management and monitoring of inflammatory bowel disease in Asia. *Journal of Gastroenterology and Hepatology*. 2020.
- 52 Roda G, Chien Ng S, Kotze PG, et al. Crohn's disease. *Nature Reviews Disease Primers*. 2020. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85082951446&doi=10.1038%2fs41572-020-0156-2&partnerID=40&md5=77ec92c95daaa276bbc0204462ccf8c4>.
- 53 Seah D, De Cruz P. Review article: the practical management of acute severe ulcerative colitis. *Alimentary Pharmacology and Therapeutics*. 2016;43(4):482-513.

54 Singh S, Allegretti JR, Siddique SM, et al. AGA technical review on the management of moderate to severe ulcerative colitis. *Gastroenterology*. 2020.

55 Singh S, Feuerstein JD, Binion DG, et al. AGA technical review on the management of mild-to-moderate ulcerative colitis. *Gastroenterology*. 2019;156(3):769-808. e29. Available from: [https://www.gastrojournal.org/article/S0016-5085\(18\)35406-4/pdf](https://www.gastrojournal.org/article/S0016-5085(18)35406-4/pdf).

56 Whaley KG, Rosen MJ. Contemporary medical management of acute severe ulcerative colitis. *Inflammatory Bowel Diseases*. 2019;25(1):56-66. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6290785/pdf/izy208.pdf>.

57 Yamamoto T, Lightner AL, Spinelli A, et al. Perioperative management of ileocecal Crohn's disease in the current era. *Expert Review of Gastroenterology and Hepatology*. 2020. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85089449979&doi=10.1080%2f17474124.2020.1802245&partnerID=40&md5=e1bb81782a69a63d73b0adeb3119b87d>.

58 Zittan E, Gralnek IM, Berns MS. The new proactive approach and precision medicine in Crohn's disease. *Biomedicines*. 2020;8(7):193.

59 Zullo S, Farraye FA. Updates on vaccinating the inflammatory bowel disease patient. *Expert Review of Gastroenterology and Hepatology*. 2019;13(3):229-39.

60 Bennett AL, Munkholm P, Andrews JM. Tools for primary care management of inflammatory bowel disease: do they exist? *World Journal of Gastroenterology*. 2015;21(15):4457.

61 Hibi T, Panaccione R, Katafuchi M, et al. The 5C concept and 5S principles in inflammatory bowel disease management. *Journal of Crohn's and Colitis*. 2017;11(11):1302-8. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5881677/pdf/jjx085.pdf>.

62 Holland R, Patel U, Lung P, et al., editors. Automatic detection of bowel disease with residual networks. *International Workshop on Predictive Intelligence In Medicine*; 2019: Springer.

63 Sulz MC, Burri E, Michetti P, et al. Treatment algorithms for Crohn's disease. *Digestion*. 2020:1-15.

64 Chen JH, Andrews JM, Kariyawasam V, et al. Review article: Acute severe ulcerative colitis - evidence-based consensus statements. *Alimentary Pharmacology and Therapeutics*. 2016. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84971434933&doi=10.1111%2fapt.13670&partnerID=40&md5=157a81377783940657b641e5befa1505>.

65 Kapasi R, Glatter J, Lamb CA, et al. Consensus standards of healthcare for adults and children with inflammatory bowel disease in the UK. *Frontline Gastroenterology*. 2020;11(3):178-87. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7223296/pdf/flgastro-2019-101260.pdf>.

66 Panaccione R, Steinhart AH, Bressler B, et al. Canadian Association of Gastroenterology clinical practice guideline for the management of luminal Crohn's disease. *Journal of the Canadian Association of Gastroenterology*. 2019;2(3):e1-e34. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6619415/pdf/gwz019.pdf>.

67 Peyrin-Biroulet L, Bouhnik Y, Roblin X, et al. French national consensus clinical guidelines for the management of Crohn's disease. *Digestive and Liver Disease*. 2017. Available from:

<https://www.scopus.com/inward/record.uri?eid=2-s2.0-85009259818&doi=10.1016%2fj.dld.2016.12.008&partnerID=40&md5=7e7625cbef85c3d3f3bf630bceb32598>.

68 Wei S-C, Chang T-A, Chao T-H, et al. Management of Crohn's disease in Taiwan: consensus guideline of the Taiwan Society of Inflammatory Bowel Disease. *Intestinal Research*. 2017;15(3):285. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5478754/pdf/ir-15-285.pdf>.

69 Bonnaud G, Bouhnik Y, Hagège H, et al. Monitoring of inflammatory bowel disease in 2019: a French consensus for clinical practice. *Digestive and Liver Disease*. 2020.

70 Buruiana F, Angelescu N, Skipper D. Crohn's disease management: conclusions of a comparative study between UK and Romania. *Chirurgia*. 2013;108:673-8.

71 Lee MJ, Brown SR, Fearnhead NS, et al. How are we managing fistulating perianal Crohn's disease? Results of a national survey of consultant gastroenterologists. *Frontline Gastroenterology*. 2018;9(1):16-22. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5824757/pdf/flgastro-2017-100866.pdf>.

72 Sebastian S, Lisle J, Subramanian S, et al. Practice pattern variability in the management of acute severe colitis: a UK provider survey. *Frontline Gastroenterology*. 2020;11(4):272-9. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7307042/pdf/flgastro-2019-101277.pdf>.

73 Jackson BD, Con D, Liew D, et al. Clinicians' adherence to international guidelines in the clinical care of adults with inflammatory bowel disease. *Scandinavian Journal of Gastroenterology*. 2017;52(5):536-42.

74 Kredel LI, Schneidereit O, Hoffmann JC, et al. Guideline recommendations for treatment of patients with inflammatory bowel diseases are not implemented in clinical practice—results of a non-representative survey. *International Journal of Colorectal Disease*. 2019;34(3):431-40. Available from: <https://link.springer.com/article/10.1007/s00384-018-3215-3>.

75 Martin J, Radeke HH, Dignass A, et al. Current evaluation and management of anemia in patients with inflammatory bowel disease. *Expert Review of Gastroenterology and Hepatology*. 2017;11(1):19-32.

76 Qureshi T, Peter Nguyen T, Wang R, et al. Improving anemia in inflammatory bowel disease: impact of the anemia care pathway. *Digestive Diseases and Sciences*. 2019. Available from: <https://link.springer.com/article/10.1007%2Fs10620-019-05559-w>.

77 Hou JK, Gasche C, Drazin NZ, et al. Assessment of gaps in care and the development of a care pathway for anemia in patients with inflammatory bowel diseases. *Inflammatory Bowel Diseases*. 2017;23(1):35-43. Available from: <https://pubmed.ncbi.nlm.nih.gov/27749376/>.

78 Abraham BP. Symptom management in inflammatory bowel disease. *Expert Review of Gastroenterology and Hepatology*. 2015;9(7):953-67.

79 Beaugerie L, Rahier J-F, Kirchgesner J. Predicting, preventing, and managing treatment-related complications in patients with inflammatory bowel diseases. *Clinical Gastroenterology and Hepatology*. 2020;18(6):1324-35. e2.

80 Garber A, Regueiro M. Extraintestinal manifestations of inflammatory bowel disease: epidemiology, etiopathogenesis, and management. *Current Gastroenterology Reports*. 2019;21(7):31.

81 Ibraheim H, Dhillon AS, Koumoutsos I, et al. Curriculum review: colorectal cancer surveillance and management of dysplasia in IBD. *Frontline Gastroenterology*. 2018;9(4):271-7. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6145437/pdf/flgastro-2017-100919.pdf>.

82 Velayos F. Managing risks of neoplasia in inflammatory bowel disease. *Current Gastroenterology Reports*. 2012;14(2):174-80.

83 Nocerino A, Nguyen A, Agrawal M, et al. Fatigue in inflammatory bowel diseases: etiologies and management. *Advances in Therapy*. 2020:1-16.

84 Qazi T. Fatigue in inflammatory bowel disease: a problematic ailment. *Current Opinion in Gastroenterology*. 2020. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85086052454&doi=10.1097%2fMOG.0000000000000644&partnerID=40&md5=0dbc415b6136c6a9a97ec2eda3622143>.

85 Ruel J, Ha C, Charpentier C, et al. IBD in the elderly. *Inflammatory Bowel Disease Monitor*. 2013;14(1):1-11. Available from: http://usc-edu-primo.hosted.exlibrisgroup.com/openurl/61USC/61USC_SP??url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ:ProQ%3Ahealthcompleteshell&atitle=IBD+in+the+Elderly&title=Inflammatory+Bowel+Disease+Monitor&issn=14667401&date=2013-07-01&volume=14&issue=1&spage=1&au=Ruel%2C+Joannie%3BHa%2C+Christina%3BCharpentier%2C+Clo%3%A9%3BGower-Rousseau%2C+Corinne%3BColombel%2C+Jean-Fr%3%A9d%3%A9ric&isbn=&jtitle=Inflammatory+Bowel+Disease+Monitor&bttitle=&rft_id=info:eric/&rft_id=info:doi/.

86 Ahmed O, Nguyen GC. Therapeutic challenges of managing inflammatory bowel disease in the elderly patient. *Expert Review of Gastroenterology and Hepatology*. 2016. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84966670326&doi=10.1080%2f17474124.2016.1179579&partnerID=40&md5=a84c59e575b9b3a6590594caca9f295e>.

87 Tran V, Limketkai BN, Sauk JS. IBD in the elderly: management challenges and therapeutic considerations. *Current Gastroenterology Reports*. 2019;21(11):60. Available from: <https://link.springer.com/article/10.1007%2Fs11894-019-0720-7>.

88 Hruz P, Juillerat P, Kullak-Ublick G-A, et al. Management of the elderly inflammatory bowel disease patient. *Digestion*. 2020:1-15.

89 Kim D, Taleban S. A comprehensive review of the diagnosis and pharmacological management of Crohn's disease in the elderly population. *Drugs and Aging*. 2019:1-18.

90 Shrestha MP, Taleban S. Management of ulcerative colitis in the elderly. *Drugs and Aging*. 2019. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85057950498&doi=10.1007%2fs40266-018-0611-x&partnerID=40&md5=02b8cba7e30de70242b46475e4e6d8a1>.

91 Hernández-Sampelayo P, Seoane M, Oltra L, et al. Contribution of nurses to the quality of care in management of inflammatory bowel disease: a synthesis of the evidence. *Journal of Crohn's and Colitis*. 2010;4(6):611-22.

- 92 Hinojosa J, Gisbert J, Gomollón F, et al. Adherence of gastroenterologists to European Crohn's and Colitis Organisation consensus on Crohn's disease: a real-life survey in Spain. *Journal of Crohn's and Colitis*. 2012;6(7):763-70. Available from: <https://pubmed.ncbi.nlm.nih.gov/22398092/>.
- 93 Asthana AK, Friedman AB, Maconi G, et al. The failure of gastroenterologists to apply intestinal ultrasound in inflammatory bowel disease in the Asia-Pacific: a need for action. *Journal of Gastroenterology and Hepatology*. 2015;30(3):446-52.
- 94 Bennett JL, Ha CY, Efron JE, et al. Optimizing perioperative Crohn's disease management: role of coordinated medical and surgical care. *World Journal of Gastroenterology*. 2015;21(4):1182.
- 95 Armuzzi A, Felice C, Lubrano E, et al. Multidisciplinary management of patients with coexisting inflammatory bowel disease and spondyloarthritis: A Delphi consensus among Italian experts. *Digestive and Liver Disease*. 2017;49(12):1298-305.
- 96 Deepak P, Park SH, Ehman EC, et al. Crohn's disease diagnosis, treatment approach, and management paradigm: what the radiologist needs to know. *Abdominal Radiology*. 2017;42(4):1068-86.
- 97 Ferman M, Lim AH, Hossain M, et al. Multidisciplinary team meetings appear to be effective in inflammatory bowel disease management: an audit of process and outcomes. *Internal Medicine Journal*. 2018;48(9):1102-8. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1111/imj.13965>.
- 98 Felice C, Leccese P, Scudeller L, et al. Red flags for appropriate referral to the gastroenterologist and the rheumatologist of patients with inflammatory bowel disease and spondyloarthritis. *Clinical and Experimental Immunology*. 2019;196(1):123-38.
- 99 Ashton JJ, Gavin J, Beattie RM. Exclusive enteral nutrition in Crohn's disease: Evidence and practicalities. *Clinical Nutrition*. 2019;38(1):80-9.
- 100 Balestrieri P, Ribolsi M, Guarino MPL, et al. Nutritional aspects in inflammatory bowel diseases. *Nutrients*. 2020;12(2):372.
- 101 Di Caro S, Fragkos KC, Keetarut K, et al. Enteral nutrition in adult Crohn's disease: toward a paradigm shift. *Nutrients*. 2019;11(9):2222.
- 102 Goens D, Micic D. Role of diet in the development and management of Crohn's disease. *Current Gastroenterology Reports*. 2020;22(4):1-9.
- 103 Haskey N, Gibson DL. An examination of diet for the maintenance of remission in inflammatory bowel disease. *Nutrients*. 2017;9(3):259.
- 104 Inns SJ, Emmanuel AV. Survey of UK and New Zealand gastroenterologists' practice regarding dietary advice and food exclusion in irritable bowel syndrome and inflammatory bowel disease. *Frontline Gastroenterology*. 2013;4(1):44-50. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5551968/pdf/flgastro-2012-100178.pdf>.
- 105 Lomer MC. Dietary and nutritional considerations for inflammatory bowel disease. *Proceedings of the Nutrition Society*. 2011;70(3):329-35. Available from: <https://www.cambridge.org/core/services/aop-cambridge-core/content/view/4D3D84EABD59874AB4C95F123FFC4049/S0029665111000097a.pdf/div-class-title-dietary-and-nutritional-considerations-for-inflammatory-bowel-disease-div.pdf>.

106 Massironi S, Rossi RE, Cavalcoli FA, et al. Nutritional deficiencies in inflammatory bowel disease: therapeutic approaches. *Clinical Nutrition*. 2013;32(6):904-10. Available from: [https://www.clinicalnutritionjournal.com/article/S0261-5614\(13\)00098-8/fulltext](https://www.clinicalnutritionjournal.com/article/S0261-5614(13)00098-8/fulltext).

107 Nazarenkov N, Seeger K, Beeken L, et al. Implementing dietary modifications and assessing nutritional adequacy of diets for inflammatory bowel disease. *Gastroenterology and Hepatology*. 2019. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85063409327&partnerID=40&md5=4e0415fdd179144c13ab3a32c2131dee>.

108 O'Sullivan M, Raftery T. Inflammatory bowel disease dietary management. *Advanced Nutrition and Dietetics in Gastroenterology* 2014. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84926456342&doi=10.1002%2f9781118872796.ch3.14&partnerID=40&md5=3cdd46407a394f9cf589e01deccd4098>.

109 Kodama H, Tanaka M, Naito Y, et al. Japan's practical guidelines for zinc deficiency with a particular focus on taste disorders, inflammatory bowel disease, and liver cirrhosis. *International Journal of Molecular Sciences*. 2020;21(8):2941.

110 Grover Z, Alex G. Management of inflammatory bowel disease in children: it is time for an individualised approach. *Journal of Paediatrics and Child Health*. 2019.

111 Sebastian S, Jenkins H, McCartney S, et al. The requirements and barriers to successful transition of adolescents with inflammatory bowel disease: differing perceptions from a survey of adult and paediatric gastroenterologists. *Journal of Crohn's and Colitis*. 2012. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84864579897&doi=10.1016%2fj.crohns.2012.01.010&partnerID=40&md5=cb32520dd165ea5c8413de2c8d08375f>.

112 Aloï M, Nuti F, Stronati L, et al. Advances in the medical management of paediatric IBD. *Nature Reviews Gastroenterology and Hepatology*. 2014;11(2):99-108.

113 Amil-Dias J, Kolacek S, Turner D, et al. Surgical management of Crohn disease in children: guidelines from the Paediatric IBD Porto Group of ESPGHAN. *Journal of Pediatric Gastroenterology and Nutrition*. 2017. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85014535655&doi=10.1097%2fMPG.000000000001562&partnerID=40&md5=b37507f78e3687513105d81e3b3bd7f4>.

114 Baldwin KR, Kaplan JL, editors. *Medical management of pediatric inflammatory bowel disease*. *Seminars in Pediatric Surgery*; 2017: Elsevier.

115 Carman N, Mack DR, Benchimol EI. Anticipatory care of children and adolescents with inflammatory bowel disease: a primer for primary care providers. *Current Opinion in Pediatrics*. 2019;31(5):654-60.

116 Kapoor A, Bhatia V, Sibal A. Pediatric inflammatory bowel disease. *Indian Pediatrics*. 2016;53(11):993-1002.

117 Lamparyk K, Debeljak A, Aylward L, et al. Impact of integrated care in a pediatric gastroenterology clinic on psychology utilization. *Clinical Practice in Pediatric Psychology*. 2018;6(1):51.

118 Miele E, Shamir R, Aloï M, et al. Nutrition in pediatric inflammatory bowel disease: a position paper on behalf of the Porto Inflammatory Bowel Disease Group of the European Society of Pediatric Gastroenterology, Hepatology and Nutrition. *Journal of Pediatric Gastroenterology and Nutrition*. 2018(4):687-708.

119 Miller T, Suskind DL. Exclusive enteral nutrition in pediatric inflammatory bowel disease. *Current Opinion in Pediatrics*. 2018. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85056484495&doi=10.1097%2fMOP.0000000000000660&partnerID=40&md5=2f965abfca2506c147491c77d2d112ca>.

120 Oliva S, Thomson M, de Ridder L, et al. Endoscopy in pediatric inflammatory bowel disease: a position paper on behalf of the porto IBD Group of the European Society for Pediatric Gastroenterology, Hepatology and Nutrition. *Journal of Pediatric Gastroenterology and Nutrition*. 2018;67(3):414-30.

121 Pappa H, Thayu M, Sylvester F, et al. A clinical report on skeletal health of children and adolescents with inflammatory bowel disease. *Journal of Pediatric Gastroenterology and Nutrition*. 2011;53(1):11. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3122140/pdf/nihms-287768.pdf>.

122 Patel AS, Gurram B. Recent advances in understanding and managing pediatric inflammatory bowel disease. *F1000 Research*. 2019. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85077333757&doi=10.12688%2ff1000research.19609.1&partnerID=40&md5=52c2ed6914b6b0f0ee613c4853d278e6>.

123 Regan BP, Bousvaros A. Pediatric ulcerative colitis: a practical guide to management. *Pediatric Drugs*. 2014;16(3):189-98. Available from: <https://link.springer.com/article/10.1007%2Fs40272-014-0070-8>.

124 Rufo PA, Denson LA, Sylvester FA, et al. Health supervision in the management of children and adolescents with IBD: NASPGHAN recommendations. *Journal of Pediatric Gastroenterology and Nutrition*. 2012;55(1):93. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3895471/pdf/nihms543264.pdf>.

125 Russell RKP, Turner DMDP. Management of severe pediatric ulcerative colitis. *Inflammatory Bowel Disease Monitor*. 2011;11(4):139-44. Available from: http://usc-edu-primo.hosted.exlibrisgroup.com/openurl/61USC/61USC_SP??url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ:ProQ%3Ahealthcompleteshell&atitle=Management+of+Severe+Pediatric+Ulcerative+Colitis&title=Inflammatory+Bowel+Disease+Monitor&issn=14667401&date=2011-04-01&volume=11&issue=4&spage=139&au=Russell%2C+Richard+K%2C+PhD%3BTurner%2C+Dan%2C+MD%2C+PhD&isbn=&jtitle=Inflammatory+Bowel+Disease+Monitor&bttitle=&rft_id=info:eric/&rft_id=info:doi/.

126 Siow VS, Bhatt R, Mollen KP, editors. Management of acute severe ulcerative colitis in children. *Seminars in Pediatric Surgery*; 2017: Elsevier.

127 Sun H, Vesely R, Lee KJ, et al. Pediatric Crohn disease clinical outcome assessments and biomarkers: current state and path forward for global collaboration. *Journal of Pediatric Gastroenterology and Nutrition*. 2017;64(3):368-72.

128 Turner D, Griffiths AM. Acute severe ulcerative colitis in children: a systematic review. *Inflammatory Bowel Diseases*. 2011;17(1):440-9.

129 Turner D, Levine A, Escher JC, et al. Management of pediatric ulcerative colitis: Joint ECCO and ESPGHAN evidence-based consensus guidelines. *Journal of Pediatric Gastroenterology and Nutrition*. 2012. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84865718633&doi=10.1097%2fMPG.0b013e3182662233&partnerID=40&md5=7badfa5ead38fcb8f72c646096dd17d1>.

130 Turner D, Ruemmele FM, Orlanski-Meyer E, et al. Management of paediatric ulcerative colitis, part 1: ambulatory care—an evidence-based guideline from European Crohn's and Colitis Organization and European Society of Paediatric Gastroenterology, Hepatology and Nutrition. *Journal of Pediatric Gastroenterology and Nutrition*. 2018;67(2):257-91.

131 Turner D, Ruemmele FM, Orlanski-Meyer E, et al. Management of paediatric ulcerative colitis, part 2: acute severe colitis—an evidence-based consensus guideline from the European Crohn's and Colitis Organization and the European Society of Paediatric Gastroenterology, Hepatology and Nutrition. *Journal of Pediatric Gastroenterology and Nutrition*. 2018;67(2):292-310.

132 Turner D, Travis SPL, Griffiths AM, et al. Consensus for managing acute severe ulcerative colitis in children: a systematic review and joint statement from ECCO, ESPGHAN, and the porto IBD working group of ESPGHAN. *American Journal of Gastroenterology*. 2011. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-79953795679&doi=10.1038%2fajg.2010.481&partnerID=40&md5=329c3603d8e6e150acf329f97c672ecc>.

133 Vernon-Roberts A, Lopez RN, Frampton C, et al. A symptom self-report tool for children with inflammatory bowel disease (IBDnow). *Journal of Pediatric Gastroenterology and Nutrition*. 2019;69(1):e7-e12.

134 Docherty MJ, Jones III RCW, Wallace MS. Managing pain in inflammatory bowel disease. *Gastroenterology and Hepatology*. 2011;7(9):592.

135 Zielińska A, Sałaga M, Włodarczyk M, et al. Focus on current and future management possibilities in inflammatory bowel disease-related chronic pain. *International Journal of Colorectal Disease*. 2019;34(2):217-27.

136 Gomes CF, Sousa M, Lourenço I, et al. Gastrointestinal diseases during pregnancy: what does the gastroenterologist need to know? *Annals of Gastroenterology*. 2018;31(4):385. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6033757/pdf/AnnGastroenterol-31-385.pdf>.

137 Afzali A. Inflammatory bowel disease during pregnancy: management of a disease flare or remission. *Current Opinion in Gastroenterology*. 2019;35(4):281-7.

138 Walker CH, Gaidos JK. Beyond pregnancy, women's health in inflammatory bowel disease. *Current Opinion in Gastroenterology*. 2019;35(4):288-95.

139 Mahadevan U, Robinson C, Bernasko N, et al. Inflammatory bowel disease in pregnancy clinical care pathway: a report from the American Gastroenterological Association IBD Parenthood Project Working Group. *Inflammatory Bowel Diseases*. 2019. Available from: <https://academic.oup.com/ibdjournal/article-abstract/25/4/627/5368148?redirectedFrom=fulltext>.

140 Tarricone I, Regazzi MG, Bonucci G, et al. Prevalence and effectiveness of psychiatric treatments for patients with IBD: a systematic literature review. *Journal of Psychosomatic Research*. 2017;101:68-95.

Available from:

<https://www.sciencedirect.com/science/article/abs/pii/S0022399917300879?via%3Dihub>.

141 Mackner LM, Whitaker BN, Maddux MH, et al. Depression screening in pediatric inflammatory bowel disease clinics: recommendations and a toolkit for implementation. *Journal of Pediatric Gastroenterology and Nutrition*. 2020. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85077297807&doi=10.1097%2fMPG.0000000000002499&partnerID=40&md5=71fcb97a3b85c0d6de1b94879311bfa8>.

142 Panés J, O'Connor M, Peyrin-Biroulet L, et al. Improving quality of care in inflammatory bowel disease: what changes can be made today? *Journal of Crohn's and Colitis*. 2014;8(9):919-26. Available from: <https://pubmed.ncbi.nlm.nih.gov/24713174/>.

143 Ahmed S, Siegel CA, Melmed GY. Implementing quality measures for inflammatory bowel disease. *Current Gastroenterology Reports*. 2015;17(4):14.

144 Lee NS, Pola S, Groessl EJ, et al. Opportunities for improvement in the care of patients hospitalized for inflammatory bowel disease-related colitis. *Digestive Diseases and Sciences*. 2016;61(4):1003-12. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5716623/pdf/nihms922410.pdf>.

145 Berry SK, Melmed GY. Quality indicators in inflammatory bowel disease. *Intestinal Research*. 2018;16(1):43.

146 Egberg MD, Gulati AS, Gellad ZF, et al. Improving quality in the care of patients with inflammatory bowel diseases. *Inflammatory Bowel Diseases*. 2018. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85054913456&doi=10.1093%2fibd%2fzy030&partnerID=40&md5=dd909a11218eeda206a55778bacab64e>.

147 Strohl M, Lorant Gonczi ZK, Bessissow T, et al. Quality of care in inflammatory bowel diseases: what is the best way to better outcomes? *World Journal of Gastroenterology*. 2018;24(22):2363. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6000296/pdf/WJG-24-2363.pdf>.

148 Fiorino G, Allocca M, Chaparro M, et al. 'Quality of care' standards in inflammatory bowel disease: a systematic review. *Journal of Crohn's and Colitis*. 2019;13(1):127-37. Available from: <https://pubmed.ncbi.nlm.nih.gov/30423033/>.

149 Shah-Khan SM, Cumberledge J, Shah-Khan SM, et al. Improving bone mineral density screening in patients with inflammatory bowel disease: a quality improvement report. *BMJ Open Quality*. 2019;8(3):e000624. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6711427/pdf/bmjog-2019-000624.pdf>.

150 Klag T, Stange EF, Wehkamp J. Management of Crohn's disease—are guidelines transferred to clinical practice? *United European Gastroenterology Journal*. 2015;3(4):371-80. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4528212/pdf/10.1177_2050640615580228.pdf.

151 Ahmad OF, Ayubi H, Clough J, et al. Quality of care in adult patients with inflammatory bowel disease transferring between healthcare providers: multicentre audit. *Frontline Gastroenterology*. 2020.

152 Leung Y, Heyman MB, Mahadevan U. Transitioning the adolescent inflammatory bowel disease patient: guidelines for the adult and pediatric gastroenterologist. *Inflammatory Bowel Diseases*. 2011;17(10):2169-73.

153 Goodhand J, Hedin CR, Croft NM, et al. Adolescents with IBD: the importance of structured transition care. *Journal of Crohn's and Colitis*. 2011. Available from: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-82255175223&doi=10.1016%2fj.crohns.2011.03.015&partnerID=40&md5=2e7d751a3d7db35998eac488b67f3daa>.

154 Bert F, Camussi E, Gili R, et al. Transitional care: a new model of care from young age to adulthood. *Health Policy*. 2020.

155 Brooks AJ, Smith PJ, Cohen R, et al. UK guideline on transition of adolescent and young persons with chronic digestive diseases from paediatric to adult care. *Gut*. 2017;66(6):988-1000.

156 Malter LB, Israel A, Rubin DT. Proposal to update the Curriculum in Inflammatory Bowel Diseases for Categorical Gastroenterology Fellows. *Inflammatory Bowel Diseases*. 2019;25(9):1443-9. Available from: <https://academic.oup.com/ibdjournal/article/25/9/1443/5497011>.

Appendix A: Black literature search terms – specific IBD topics

Topic	Explanatory notes	Keywords
IBD referral and management	<ul style="list-style-type: none"> • Optimal management requires tailored evidence-based interventions by clinicians. • The referral and management process for patients with IBD is complex and often variable across primary healthcare sites. • There are a number of different stages, flares and relapses associated with risk and co-morbidities, with a point of focus for IBD acute, IBD controlled and IBD uncontrolled. 	<ul style="list-style-type: none"> • 'IBD' and 'clinical guideline' • 'IBD' and 'clinical protocol' • 'IBD' and 'clinical standard' • 'IBD' and 'clinical pathway' • 'IBD' and 'action plan' • 'IBD' and 'shared care plan' • 'IBD' and 'GPMP management plan' • 'IBD' and 'referral' • 'IBD' and 'referral protocol' • 'IBD' and 'referral pathway'
IBD referral and management access	<ul style="list-style-type: none"> • There are many guidelines and protocols available for both patient and clinicians, but their access data are unknown. • Access (and refer time) to specialists is often limited. 	<ul style="list-style-type: none"> • 'IBD' and 'access' and 'clinical guideline' • 'IBD' and 'access' and 'clinical protocol' • 'IBD' and 'access' and 'clinical standard' • 'IBD' and 'access' and 'clinical pathway'
IBD referral and management utilisation	<ul style="list-style-type: none"> • While there are referral and management guidelines available, their utilisation is unknown. 	<ul style="list-style-type: none"> • 'IBD' and 'utilisation' and 'referral pathway' • 'IBD' and 'utilisation' and 'referral protocol' • 'IBD' and 'utilisation' and 'clinical guideline' • 'IBD' and 'utilisation' and 'clinical protocol' • 'IBD' and 'utilisation' and 'clinical standard' • 'IBD' and 'utilisation' and 'clinical pathway' • 'IBD' and 'application' and 'referral pathway' • 'IBD' and 'application' and 'referral protocol' • 'IBD' and 'application' and 'clinical guideline' • 'IBD' and 'application' and 'clinical protocol' • 'IBD' and 'application' and 'clinical standard' • 'IBD' and 'application' and 'clinical pathway'
IBD referral and management compliance	<ul style="list-style-type: none"> • Blood results and other test results can often reflect patient compliance with treatment. • In terms of clinician IBD referral and management compliance, 	<ul style="list-style-type: none"> • 'IBD' and 'compliance' and 'clinical guideline' • 'IBD' and 'compliance' and 'clinical protocol' • 'IBD' and 'compliance' and 'clinical standard' • 'IBD' and 'compliance' and 'clinical pathway' • 'IBD' and 'adherence' and 'clinical guideline'

	<p>these data are not comprehensive.</p>	<ul style="list-style-type: none"> • 'IBD' and 'adherence' and 'clinical protocol' • 'IBD' and 'adherence' and 'clinical standard' • 'IBD' and 'adherence' and 'clinical pathway'
<p>IBD management subpopulation – women</p>	<ul style="list-style-type: none"> • IBD is often diagnosed in women during childbearing ages (20–40 years). • Birth rates are lower in IBD women and men which suggests avoidance rather than inability. • Women considering conception should discuss with their specialist well before pregnancy. • Combined care is essential. 	<ul style="list-style-type: none"> • 'IBD' and 'pregnancy' and 'clinical protocol' • 'IBD' and 'pregnancy' and 'clinical guideline' • 'IBD' and 'pregnancy' and 'clinical standard' • 'IBD' and 'pregnancy' and 'clinical pathway' • 'IBD' and 'women' and 'clinical protocol' • 'IBD' and 'women' and 'clinical guidelines' • 'IBD' and 'women' and 'clinical standard' • 'IBD' and 'women' and 'clinical pathway' • 'IBD' and 'gynaecology' and 'clinical protocol' • 'IBD' and 'gynaecology' and 'clinical guideline' • 'IBD' and 'gynaecology' and 'clinical standard' • 'IBD' and 'gynaecology' and 'clinical pathway' • 'IBD' and 'obstetrics' and 'clinical protocol' • 'IBD' and 'obstetrics' and 'clinical guideline' • 'IBD' and 'obstetrics' and 'clinical standard' • 'IBD' and 'obstetrics' and 'clinical pathway'
<p>IBD management subpopulation – children</p>	<ul style="list-style-type: none"> • Disease activity indices such as PCDAI for CD and PUCAI for UC needs to be utilised by treating physicians. • Development of self-management skills in contrast to transfer of healthcare providers occurs at a distinct point in time dependant on maturity. 	<ul style="list-style-type: none"> • 'IBD' and 'children' and 'clinical protocol' • 'IBD' and 'children' and 'clinical guideline' • 'IBD' and 'children' and 'clinical standard' • 'IBD' and 'children' and 'clinical pathway' • 'IBD' and 'paediatric' and 'clinical protocol' • 'IBD' and 'paediatric' and 'clinical guideline' • 'IBD' and 'paediatric' and 'clinical standard' • 'IBD' and 'paediatric' and 'clinical pathway' • 'IBD' and 'PCDAI' • 'IBD' and 'PUCAI'
<p>IBD management – dietetics</p>	<ul style="list-style-type: none"> • There is significant management of IBD. 	<ul style="list-style-type: none"> • 'IBD' and 'diet' and 'clinical protocol' • 'IBD' and 'diet' and 'clinical guideline' • 'IBD' and 'diet' and 'clinical standard' • 'IBD' and 'diet' and 'clinical pathway'
<p>IBD management co-morbidity – mental health and wellbeing</p>	<ul style="list-style-type: none"> • There is impairment to quality of life due to anxiety and depression. • History of psychological co-morbidity is shown to be a poor prognosis factor in IBD. 	<ul style="list-style-type: none"> • 'IBD' and 'mental health' and 'clinical protocol' • 'IBD' and 'mental health' and 'clinical guideline' • 'IBD' and 'mental health' and 'clinical standard'

	<ul style="list-style-type: none"> • Patients with chronic disease and a care plan may be referred to a specialist if they meet certain criteria. 	<ul style="list-style-type: none"> • 'IBD' and 'mental health' and 'clinical pathway' • 'IBD' and 'wellbeing' and 'clinical protocol' • 'IBD' and 'wellbeing' and 'clinical guideline' • 'IBD' and 'wellbeing' and 'clinical standard' • 'IBD' and 'wellbeing' and 'clinical pathway' • 'IBD' and 'psychology' and 'clinical protocol' • 'IBD' and 'psychology' and 'clinical guideline' • 'IBD' and 'psychology' and 'clinical standard' • 'IBD' and 'psychology' and 'clinical pathway'
IBD management comorbidity – anaemia	<ul style="list-style-type: none"> • Anaemia is a common complication of IBD and can be one of the earliest indicators of the disease. • Any patient with gastrointestinal issues or unexplained fatigue and iron deficiency requires specialist referral. • It is the most common nutritional problem in IBD patients. 	<ul style="list-style-type: none"> • 'IBD' and 'iron deficiency' and 'clinical protocol' • 'IBD' and 'iron deficiency' and 'clinical guideline' • 'IBD' and 'iron deficiency' and 'clinical standard' • 'IBD' and 'iron deficiency' and 'clinical pathway' • 'IBD' and 'anaemia' and 'clinical protocol' • 'IBD' and 'anaemia' and 'clinical guideline' • 'IBD' and 'anaemia' and 'clinical standard' • 'IBD' and 'anaemia' and 'clinical pathway'
IBD management comorbidity – osteoporosis	<ul style="list-style-type: none"> • Poor nutrition, chronic inflammation, corticosteroid treatment, extensive small bowel disease or resection are cause for low bone mineral density and osteoporosis. • Management of osteoporosis prevention in people with IBD involves the effective control of the underlying disease and maintaining remission of disease, along with education on the importance of lifestyle changes. • IBD patients on corticosteroid therapy should receive calcium and vitamin D supplements. 	<ul style="list-style-type: none"> • 'IBD' and 'bone health' and 'clinical protocol' • 'IBD' and 'bone health' and 'clinical guideline' • 'IBD' and 'bone health' and 'clinical standard' • 'IBD' and 'bone health' and 'clinical pathway' • 'IBD' and 'osteoporosis' and 'clinical protocol' • 'IBD' and 'osteoporosis' and 'clinical guideline' • 'IBD' and 'osteoporosis' and 'clinical standard' • 'IBD' and 'osteoporosis' and 'clinical pathway'
IBD management	<ul style="list-style-type: none"> • Chronic abdominal pain is common among IBD patients. 	<ul style="list-style-type: none"> • 'IBD' and 'pain' and 'clinical protocol' • 'IBD' and 'pain' and 'clinical guideline' • 'IBD' and 'pain' and 'clinical standard'

comorbidity - pain	<ul style="list-style-type: none">• There is a link between higher disease activity and reduced quality of life.	<ul style="list-style-type: none">• 'IBD' and 'pain' and 'clinical pathway'
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APPENDIX B: Results – black literature

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Category	Management	Authors	Year	Title	Source title	Cited by	DOI	Link
Co-morbidity	Y	Abraham B.P.	2015	Symptom management in inflammatory bowel disease	Expert Review of Gastroenterology and Hepatology	5	10.1586/17474124.2015.1038241	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84931826229&doi=10.1586%2F17474124.2015.1038241&partnerID=40&md5=911c45f3a6491ab2f8b32fa0c435a5d
Pregnancy	Y	Afzali A.	2019	Inflammatory bowel disease during pregnancy: Management of a disease flare or remission	Current Opinion in Gastroenterology	1	10.1097/MOG.0000000000000541&partnerID=40&md5=4d2266a5f850fe358ad5b06875c1a351	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85069565419&doi=10.1097%2FMOG.0000000000000541&partnerID=40&md5=4d2266a5f850fe358ad5b06875c1a351
Transfer	N	Ahmad O.F., Ayubi H., Clough J., Dart R., Gadhok R., Pannick S., Parkes G., Pavlidis P., Segal J., Sellers P.	2019	Quality of care in adult patients with inflammatory bowel disease transferring between healthcare providers: Multicentre audit	Frontline Gastroenterology	10.1136/flgastro-2019-101347		https://www.scopus.com/inward/record.uri?eid=2-s2.0-85078011401&doi=10.1136%2Fflgastro-2019-101347&partnerID=40&md5=95a2041e580c4e8f332873ba79afdf
Elderly	Y	Ahmed O., Nguyen G.C.	2016	Therapeutic challenges of managing inflammatory bowel disease in the elderly patient	Expert Review of Gastroenterology and Hepatology	4	10.1080/17474124.2016.1179579	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84966670326&doi=10.1080%2F17474124.2016.1179579&partnerID=40&md5=a84c59e575b9b3a6590594caca9f295e
Quality	Y	Ahmed S., Siegel C.A., Melmed G.Y.	2015	Implementing Quality Measures for Inflammatory Bowel Disease	Current Gastroenterology Reports	16	10.1007/s11894-015-0437-1	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84924778132&doi=10.1007%2F11894-015-0437-1&partnerID=40&md5=844b38c4704b343510589bab79a8031b
Paediatrics	Y	Aloi M., Nuti F., Stronati L., Cucchiara S.	2014	Advances in the medical management of paediatric IBD	Nature Reviews Gastroenterology and Hepatology	27	10.1038/nrgastro.2013.158	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84893788912&doi=10.1038%2Fngastro.2013.158&partnerID=40&md5=9a403823b95edd5b179111a17dccc093a
Paediatrics (ESPGHAN)	Y	Amil-Dias J., Kolacek S., Turner D., Pærrregaard A., Rintala R., Afzal N.A., Karolewska-Bochenek K., Bronsky J., Chong S., Fell J., Hojsak I., Hugot J.-P., Koletzko S., Kumar D., Łazowska-Przeorek I., Lillehei C., Lionetti P., Martin-De-Carpi J., Pakarinen M., Ruemmele F.M., Shaoul R., Spray C., Staiano A., Sugarman I., Wilson D.C., Winter H., Kolho K.-L.	2017	Surgical Management of Crohn Disease in Children: Guidelines from the Paediatric IBD Porto Group of ESPGHAN	Journal of Pediatric Gastroenterology and Nutrition	24	10.1097/MPG.00000000000001562	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85014535655&doi=10.1097%2FMPG.00000000000001562&partnerID=40&md5=b37507f78e36b7513105d81e3b3bd7f4
Guideline	Y	Annese V.	2019	An update on treatment of ulcerative colitis	Expert Opinion on Orphan Drugs	10.1080/21678707.2019.1638249		https://www.scopus.com/inward/record.uri?eid=2-s2.0-85069469241&doi=10.1080%2F21678707.2019.1638249&partnerID=40&md5=d6702fa787b5aa3abe891e9edd6b03e778249
Multidiscipline	Y	Armuzzi A., Felice C., Lubrano E., Cantini F., Castiglione F., Gionchetti P., Orlando A., Salvarani C., Scarpa R., Marchesoni A., Vecchi M., Olivieri I., on behalf of the Italian SpA-IBD Expert Panel Group	2017	Multidisciplinary management of patients with coexisting inflammatory bowel disease and spondyloarthritis: A Delphi consensus among Italian experts	Digestive and Liver Disease	6	10.1016/j.dld.2017.06.004	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85027466858&doi=10.1016%2Fj.dld.2017.06.004&partnerID=40&md5=585bc86682aa100a3367feca2030c5ff
Nutrition	Y	Ashton J.J., Gavin J., Beattie R.M.	2019	Exclusive enteral nutrition in Crohn's disease: Evidence and practicalities	Clinical Nutrition	19	10.1016/j.clnu.2018.01.020	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85041601110&doi=10.1016%2Fj.clnu.2018.01.020&partnerID=40&md5=0950e1a639b3d4ddef5a8325c5b33dfa
Multidiscipline	Y	Asthana A.K., Friedman A.B., Maconi G., Maaser C., Kucharzik T., Watanabe M., Gibson P.R.	2015	The failure of gastroenterologists to apply intestinal ultrasound in inflammatory bowel disease in the Asia-Pacific: A need for action	Journal of Gastroenterology and Hepatology (Australia)	17	10.1111/jgh.12871	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84923264264&doi=10.1111%2Fjgh.12871&partnerID=40&md5=f4e195c18ce6721d5eb38fa5a3b56e3d
Paediatrics	Y	Baldwin K.R., Kaplan J.L.	2017	Medical management of pediatric inflammatory bowel disease	Seminars in Pediatric Surgery	4	10.1053/j.sempedsurg.2017.10.005	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85031304841&doi=10.1053%2Fj.sempedsurg.2017.10.005&partnerID=40&md5=68fe1215eca5785b87612edd6b061289
Nutrition	Y	Balestrieri P., Riboli M., Guarino M.P.L., Emerenziani S., Altomare A., Cicala M.	2020	Nutritional aspects in inflammatory bowel diseases	Nutrients	3	10.3390/nu12020372	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85079048258&doi=10.3390%2Fnu12020372&partnerID=40&md5=c45639ea2cfece15edd28afb2c0316f
Complications	Y	Beaugerie L., Rahier J.-F., Kirchgessner J.	2020	Predicting, Preventing, and Managing Treatment-Related Complications in Patients With Inflammatory Bowel Diseases	Clinical Gastroenterology and Hepatology	4	10.1016/j.cgh.2020.02.009	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85083429247&doi=10.1016%2Fj.cgh.2020.02.009&partnerID=40&md5=028bb1e1b02021249e5603057c0cf1c4
Tool	Y	Bennett A.L., Munkholm P., Andrews J.M.	2015	Tools for primary care management of inflammatory bowel disease: Do they exist?	World Journal of Gastroenterology	11	10.3748/wjg.v21.i5.4457	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84928192397&doi=10.3748%2Fwjg.v21.i5.4457&partnerID=40&md5=369e317f68dda6aa54a9fe17b9dd982c

Multidiscipline	Y	Bennett J.L., Ha C.Y., Efron J.E., Gearhart S.L., Lazarev M.G., Wick E.C.	2015	Optimizing perioperative Crohn's disease management: Role of coordinated medical and surgical care	World Journal of Gastroenterology	5	10.3748/wjg.v21.i4.1182	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84921769865&doi=10.3748%2Fwjg.v21.i4.1182&partnerID=40&md5=8b59dcd4aa79701f2d057db14833717
Guideline	Y	Bernasko N.E., Coviello J.S.	2019	Improving Provider Compliance With Adult Inflammatory Bowel Disease Patient Care Guidelines in the Ambulatory Setting Through the Use of Electronic Health Records	Gastroenterology nursing : the official journal of the Society of Gastroenterology Nurses and Associates	1	10.1097/GA.0000000000000382	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85075671263&doi=10.1097%2Fga.0000000000000382&partnerID=40&md5=85d0a9ac8d5b5ebf95cea25a769912045
Quality	Y	Berry S.K., Melmed G.Y.	2018	Quality indicators in inflammatory bowel disease	Intestinal Research	11	10.5217/ir.2018.16.1.43	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85040666937&doi=10.5217%2Fir.2018.16.1.43&partnerID=40&md5=f252cc4b50b9f1208310d09bf5608181
Transfer and Paediatrics	Y	Bert F., Camussi E., Gili R., Corsi D., Rossello P., Scarmozzino A., Siliquini R.	2020	Transitional care: A new model of care from young age to adulthood	Health Policy		10.1016/j.healthpol.2020.08.002	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85089749630&doi=10.1016%2Fj.healthpol.2020.08.002&partnerID=40&md5=25a88352f50e6beff4fa8515eeba249
Consensus	Y	Bonnaud G., Bouhnik Y., Hagehe H., Hebuterne X., Pariente B., Roblin X., Peyrin-Biroulet L.	2020	Monitoring of inflammatory bowel disease in 2019: A French consensus for clinical practice	Digestive and Liver Disease	1	10.1016/j.dld.2020.03.033	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85081683004&doi=10.1016%2Fj.dld.2020.03.033&partnerID=40&md5=cb504e27977efeb0ae280f5f5d7d3343
Transfer and Paediatrics	Y	Brooks A.J., Smith P.J., Cohen R., Collins P., Douds A., Forbes V., Gaya D.R., Johnston B.T., McKiernan P.J., Murray C.D., Sebastian S., Smith M., Whitley L., Williams L., Russell R.K., McCartney S.A., Lindsay J.O.	2017	UK guideline on transition of adolescent and young persons with chronic digestive diseases from paediatric to adult care	Gut	29	10.1136/gutjn-2016-313000	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85019189743&doi=10.1136%2Fgutjn-2016-313000&partnerID=40&md5=512dbe76c53b19f9cb4d036940577647
Guideline	Y	Brown S.R., Fearnhead N.S., Faiz O.D., Abercrombie J.F., Acheson A.G., Arnott R.G., Clark S.K., Clifford S., Davies R.J., Davies M.M., Douie W.J.P., Dunlop M.G., Epstein J.C., Evans M.D., George B.D., Guy R.J., Hargest R., Hawthorne A.B., Hill J., Hughes G.W., Limdi J.K., Maxwell-Armstrong C.A., O'Connell P.R., Pinkney T.D., Pipe J., Sagar P.M., Singh B., Soop M., Terry H., Torkington J., Verjee A., Walsh C.J.,	2018	The Association of Coloproctology of Great Britain and Ireland consensus guidelines in surgery for inflammatory bowel disease	Colorectal Disease	18	10.1111/codi.14448	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85057818328&doi=10.1111%2Fcodi.14448&partnerID=40&md5=1829750ca6b495a85998e5bc3f5b2cc
Consensus	N	Buruiana E.F., Angelescu N., Skipper D.	2013	Crohn's disease management: Conclusions of a comparative study between uk and romania	Chirurgia (Romania)			https://www.scopus.com/inward/record.uri?eid=2-s2.0-84891376725&partnerID=40&md5=903cfd3422ababf2932b92920cb5660d
Paediatrics	Y	Carman N., Mack D.R., Benchimol E.I.	2019	Anticipatory care of children and adolescents with inflammatory bowel disease: A primer for primary care providers	Current Opinion in Pediatrics	1	10.1097/MOP.0000000000000795	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071784529&doi=10.1097%2FMOP.0000000000000795&partnerID=40&md5=42b6b9afcb8a2e7003dcd146efb3e0cc
Consensus	Y	Chen J.-H., Andrews I.M., Kariyawasam V., Moran N., Gounder P., Collins G., Walsh A.J., Connor S., Lee T.W.T., Koh C.E., Chang J., Paramsothy S., Tattersall S., Lemberg D.A., Radford-Smith G., Lawrence I.C., McLachlan A., Moore G.T., Corte C., Katelaris P., Leong R.W.	2016	Review article: Acute severe ulcerative colitis - Evidence-based consensus statements	Alimentary Pharmacology and Therapeutics	29	10.1111/apt.13670	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84971434933&doi=10.1111%2Fapt.13670&partnerID=40&md5=157a8137783940657b641e5befa1505
Guideline	Y	Clarke W.T., Feuerstein J.D.	2019	Colorectal cancer surveillance in inflammatory bowel disease: Practice guidelines and recent developments	World Journal of Gastroenterology	14	10.3748/wjg.v25.i3.0148	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071557175&doi=10.3748%2Fwjg.v25.i3.0148&partnerID=40&md5=91f9daa2f4b446a06f9d743deba3ab99
Recommendations	Y	Cohen-Mekelburg S., Schneider Y., Gold S., Scherl E., Steinlauf A.	2017	Advances in the diagnosis and management of colonic dysplasia in patients with inflammatory bowel disease	Gastroenterology and Hepatology	4		https://www.scopus.com/inward/record.uri?eid=2-s2.0-85020788342&partnerID=40&md5=1f077db548328ba471f05604829e1c99
Guideline	Y	Davis S.C., Robinson B.L., Vess J., Lebel J.S.	2018	Primary care management of ulcerative colitis	Nurse Practitioner	1	10.1097/01.NPR.0000527565.05934.14	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85036580045&doi=10.1097%2F01.NPR.0000527565.05934.14&partnerID=40&md5=0a77cd007a79391691f1afadb44f17e05934.14

Guideline	Y	Deepak P., Bruining D.H.	2015	Update on the Medical Management of Crohn's Disease	Current Gastroenterology Reports	7	10.1007/s11894-015-0465-x	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84941887963&doi=10.1007%2f11894-015-0465-x&partnerID=40&md5=0169fcd8d34d5a5c52531a453c641a
Multidiscipline	Y	Deepak P., Park S.H., Ehman E.C., Hansel S.L., Fidler J.L., Bruining D.H., Fletcher J.G.	2017	Crohn's disease diagnosis, treatment approach, and management paradigm: what the radiologist needs to know	Abdominal Radiology	9	10.1007/s00261-017-1068-9	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85013092894&doi=10.1007%2f00261-017-1068-9&partnerID=40&md5=d329a1da37ea6f6f0fda06bd6282d43
Nutrition	Y	Di Caro S., Fragkos K.C., Keetaru K., Koo H.F., Sebeopoulos G., Saravanapavan H., Barragry J., Rogers J., Mehta S.J., Rahman F.	2019	Enteral nutrition in adult crohn's disease: Toward a paradigm shift	Nutrients	1	10.3390/nu11092222	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85072518706&doi=10.3390%2fnu11092222&partnerID=40&md5=ec962407dccc2a0dddfbc0f2c6c06964
Guideline	Y	Dillon D.L., Crimaldi J.E.	2020	Pathway-Driven Management of Inflammatory Bowel Disease	Journal for Nurse Practitioners	10.1016/j.nurpra.2020.04.020	10.1016/j.nurpra.2020.04.020	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85087070032&doi=10.1016%2fnurpra.2020.04.020&partnerID=40&md5=0e17f45277234081c1e617695ca8dadd
Pain	Y	Docherty M.J., Jones III R.C.W., Wallace M.S.	2011	Managing pain in inflammatory bowel disease	Gastroenterology and Hepatology	38		https://www.scopus.com/inward/record.uri?eid=2-s2.0-81855180518&partnerID=40&md5=f98232ac67537c20a31bf15b7333900
Quality	N	Egberg M.D., Gulati A.S., Gellad Z.F., Melmed G.Y., Kappelman M.D.	2018	Improving Quality in the Care of Patients with Inflammatory Bowel Diseases	Inflammatory Bowel Diseases	1	10.1093/ibd/izy030	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85054913456&doi=10.1093%2fibd%2fzy030&partnerID=40&md5=dd909a11218eeda206a55778bacab64e
Guideline	Y	Enns R.A., Hookey L., Armstrong D., Bernstein C.N., Heitman S.J., Teshima C., Leontiadis G.I., Tse F., Sadowski D.	2017	Clinical Practice Guidelines for the Use of Video Capsule Endoscopy	Gastroenterology	106	10.1053/j.gastro.2016.12.032	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85010749126&doi=10.1053%2fj.gastro.2016.12.032&partnerID=40&md5=0f64c9e6a498bad984ce96b458dbdae7
Guideline (ACG)	Y	Farraye F.A., Melmed Y., Lichtenstein G.R., Kane S.V.	2017	ACG Clinical Guideline: Preventive Care in Inflammatory Bowel Disease	American Journal of Gastroenterology	139	10.1038/ajg.2016.537	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85009215293&doi=10.1038%2fajg.2016.537&partnerID=40&md5=234c6844e18dda1346a5572093b8b3c
Multidiscipline	Y	Felice C., Leccese P., Scudeller L., Lubrano E., Cantini F., Castiglione F., Gionchetti P., Orlando A., Salvarani C., Scarpa R., Vecchi M., Olivieri I., Armuzzi A., Beltrami M., Bossa F., Costa F., Fries W., Galeazzi M., Giacomelli R., Lapadula G., Malavolta N., Principi M., Ramonda R., Riegler G., Triolo G., Zoli G., the Italian SpA-IBD Expert Panel Group	2019	Red flags for appropriate referral to the gastroenterologist and the rheumatologist of patients with inflammatory bowel disease and spondyloarthritis	Clinical and Experimental Immunology	5	10.1111/cei.13246	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85059704112&doi=10.1111%2fcej.13246&partnerID=40&md5=bd683ec97164b88e151fe88dccc8692bd
Multidiscipline	Y	Ferman M., Lim A.H., Hossain M., Siow G.W., Andrews J.M.	2018	Multidisciplinary team meetings appear to be effective in inflammatory bowel disease management: an audit of process and outcomes	Internal Medicine Journal	4	10.1111/imj.13965	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85052842022&doi=10.1111%2fijm.13965&partnerID=40&md5=0dc1fc3e99996752407270a7c758d85
Guideline	Y	Feuerstein J.D., Cheifetz A.S.	2017	Crohn Disease: Epidemiology, Diagnosis, and Management	Mayo Clinic Proceedings	57	10.1016/j.mayocp.2017.04.010	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85020401908&doi=10.1016%2fj.mayocp.2017.04.010&partnerID=40&md5=ac3905811b458b82792caadfee5a9b70
Guideline	Y	Feuerstein J.D., Moss A.C., Farraye F.A.	2019	Ulcerative Colitis	Mayo Clinic Proceedings	11	10.1016/j.mayocp.2019.01.018	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85067396801&doi=10.1016%2fj.mayocp.2019.01.018&partnerID=40&md5=c0ce4713d9e41bacf41d0e3d61e699098
Quality	Y	Fiorino G., Allocca M., Chaparro M., Coenen S., Fidalgo C., Younge L., Gisbert J.P.	2019	'Quality of care' standards in inflammatory bowel disease: A systematic review	Journal of Crohn's and Colitis	7	10.1093/ecco-jcc/jyy140	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85058915050&doi=10.1093%2fecco-jcc%2fjyy140&partnerID=40&md5=003c2068ea3ade106599b6c7abbab663
Co-morbidity	Y	Garber A., Regueiro M.	2019	Extraintestinal Manifestations of Inflammatory Bowel Disease: Epidemiology, Etiopathogenesis, and Management	Current Gastroenterology Reports	6	10.1007/s11894-019-0698-1	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85065877498&doi=10.1007%2f11894-019-0698-1&partnerID=40&md5=820473ee5a640b333a3b9213c669355
Nutrition	Y	Goens D., Micic D.	2020	Role of Diet in the Development and Management of Crohn's Disease	Current Gastroenterology Reports	10.1007/s11894-020-0755-9	10.1007/s11894-020-0755-9	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85081962550&doi=10.1007%2f11894-020-0755-9&partnerID=40&md5=e04ea7e3117bc8841d4befd7d31aa71b
Pregnancy	Y	Gomes C.F., Sousa M., Lourenço I., Martins D., Torres J.	2018	Gastrointestinal diseases during pregnancy: What does the gastroenterologist need to know?	Annals of Gastroenterology	10	10.20524/aog.2018.0264	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85049635278&doi=10.20524%2faog.2018.0264&partnerID=40&md5=2c667db74783e5a913ba9030ea67a8eb
Transfer and Paediatrics	Y	Goodhand J., Hedin C.R., Croft N.M., Lindsay J.O.	2011	Adolescents with IBD: The importance of structured transition care	Journal of Crohn's and Colitis	67	10.1016/j.crohns.2011.03.015	https://www.scopus.com/inward/record.uri?eid=2-s2.0-8225175223&doi=10.1016%2fcrohns.2011.03.015&partnerID=40&md5=2e7d751a3d7db35998eac488b67f3daa
Paediatrics	Y	Grover Z., Alex G.	2019	Management of inflammatory bowel disease in children: It is time for an individualised approach	Journal of Paediatrics and Child Health	10.1111/jpc.14652	10.1111/jpc.14652	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85074108381&doi=10.1111%2fjpc.14652&partnerID=40&md5=7d0d118d61b3d5e9667087e08e30866c

Nutrition	Y	Haskey N., Gibson D.L.	2017	An examination of diet for the maintenance of remission in inflammatory bowel disease	Nutrients	33	10.3390/nu9030259	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85015245125&doi=10.3390%2fnu9030259&partnerID=40&md5=e8ff6df5c22a9022ca68c0197313aeba
Multidiscipline	Y	Hernández	2010	Contribution of nurses to the quality of care in management of inflammatory bowel disease: A synthesis of the evidence	Journal of Crohn's and Colitis	34	10.1016/j.crohns.2010.08.009	https://www.scopus.com/inward/record.uri?eid=2-s2.0-78649498781&doi=10.1016%2fj.crohns.2010.08.009&partnerID=40&md5=b4d41d92508ade5cd06154b06664436
Tool	Y	Hibi T., Panaccione R., Katafuchi M., Yokoyama K., Watanabe K., Matsui T., Matsumoto T., Travis S., Suzuki Y.	2017	The 5C concept and 5S principles in inflammatory bowel disease management	Journal of Crohn's and Colitis	5	10.1093/ecco-jcc/jjx085	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85042188784&doi=10.1093%2fecco-jcc%2fjjx085&partnerID=40&md5=01f9e43b1a28fb6cd4e87532413ecbab
Multidiscipline	Y	Hinojosa J., Gisbert J.P., Gomollón F., López San Román A.	2012	Adherence of gastroenterologists to European Crohn's and Colitis Organisation Consensus on Crohn's disease: A real-life survey in Spain	Journal of Crohn's and Colitis	10	10.1016/j.crohns.2011.12.013	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84863470478&doi=10.1016%2fj.crohns.2011.12.013&partnerID=40&md5=19cbf72c1ceb0aedf4c4e5659605b916
Tool	Y	Holland R., Patel U., Lung P., Chotzoglou E., Kainz B.	2019	Automatic detection of bowel disease with residual networks	Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)	1	10.1007/978-3-030-32281-6_16	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85075681297&doi=10.1007%2f978-3-030-32281-6_16&partnerID=40&md5=a065f4e5793d7505e2fefbaf44290
Anaemia	Y	Hou J.K., Gasche C., Drazin N.Z., Weaver S.A., Ehrlich O.G., Oberai R., Zapala S., Siegel C.A., Melmed G.	2017	Assessment of gaps in care and the development of a care pathway for anemia in patients with inflammatory bowel diseases	Inflammatory Bowel Diseases	15	10.1097/MIB.0000000000000953	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85007125132&doi=10.1097%2fMIB.0000000000000953&partnerID=40&md5=dd4f433812f032a4956a61d007607a470953
Elderly	Y	Hruz P., Juillerat P., Kullak-Ublick G.-A., Schoepfer A.M., Mantzaris G.J., Rogler G.	2019	Management of the Elderly Inflammatory Bowel Disease Patient	Digestion	10	10.1159/000503099	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85078483829&doi=10.1159%2f000503099&partnerID=40&md5=cbac92744b6d059df235142deafe9b0
Co-morbidity	Y	Ibrahim H., Dhillon A.S., Koumoutsos I., Gulati S., Hayee B.	2018	Curriculum review: Colorectal cancer surveillance and management of dysplasia in IBD	Frontline Gastroenterology	1	10.1136/flgastro-2017-100919	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85049182176&doi=10.1136%2fflgastro-2017-100919&partnerID=40&md5=c3a0780e1aa7bae89b1a1633f32b1344
Nutrition	Y	Inns S.J., Emmanuel A.V.	2013	Survey of UK and New Zealand gastroenterologists' practice regarding dietary advice and food exclusion in irritable bowel syndrome and inflammatory bowel disease	Frontline Gastroenterology	5	10.1136/flgastro-2012-100178	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84988614677&doi=10.1136%2fflgastro-2012-100178&partnerID=40&md5=48f7572e051a1e0427f089609a3b3cfc
Adherence	Y	Jackson B.D., Con D., Liew D., De Cruz P.	2017	Clinicians' adherence to international guidelines in the clinical care of adults with inflammatory bowel disease	Scandinavian Journal of Gastroenterology	7	10.1080/0365521.2017.1278785	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85010702859&doi=10.1080%2f0365521.2017.1278785&partnerID=40&md5=ffc1d6b7a068c35d4e2a03fc2d7379a2
Recommendations	Y	Jain S., Ahuja V., Limdi J.K.	2019	Optimal management of acute severe ulcerative colitis	Postgraduate Medical Journal	5	10.1136/postgradmedj-2018-136072	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85059892583&doi=10.1136%2fpostgradmedj-2018-136072&partnerID=40&md5=ee907bdd8b4e70b1274454ab3cf0db
Recommendations	Y	Jansen F.M., Vavricka S.R., den Broeder A.A., de Jong E.M.G.J., Hoentjen F., van Dop W.A.	2020	Clinical management of the most common extra-intestinal manifestations in patients with inflammatory bowel disease focused on the joints, skin and eyes	United European Gastroenterology Journal	10	10.1177/2050640620958902	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85091022628&doi=10.1177%2f2050640620958902&partnerID=40&md5=46a51fee05a72e172ea4b1c2413974cb
Recommendations	Y	Johnson C.M., Linzay C.D., Dassopoulos T.	2019	Maneuvering Clinical Pathways for Ulcerative Colitis	Current Gastroenterology Reports	1	10.1007/s11894-019-0716-3	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071776981&doi=10.1007%2fs11894-019-0716-3&partnerID=40&md5=c6d9461b1ec59c4e02fb86b63a0a83b
Guideline	Y	Kammermeier J., Morris M.-A., Garrick V., Furman M., Rodrigues A., Russell R.K.	2016	Management of Crohn's disease	Archives of Disease in Childhood	21	10.1136/archdischild-2014-307217	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84964413038&doi=10.1136%2farchdischild-2014-307217&partnerID=40&md5=2ffdc74c44c0f3ada64d3e93b5fa77c2
Consensus	Y	Kapasi R., Glatzer J., Lamb C.A., Acheson A.G., Andrews C., Arnott I.D., Barrett K.J., Bell G., Bhatnagar G., Bloom S., Brookes M.J., Brown S.R., Burch N., Burman A., Crook K., Cummings J.R.F., Davies J., Demick A., Epstein J., Faiz O., Feakins R., Fletcher M., Garrick V., Jaffray B., Johnson M., Keetarut K., Limdi J., Meade U., Muhammed R., Murdock A., Posford N., Rowse G., Shaw I., St Clair Jones A., Taylor S., Weaver S., Younge L., Hawthorne A.B.	2020	Consensus standards of healthcare for adults and children with inflammatory bowel disease in the UK	Frontline Gastroenterology	7	10.1136/flgastro-2019-101260	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85070078561&doi=10.1136%2fflgastro-2019-101260&partnerID=40&md5=084da4c3b08a79c26495323cee718442
Paediatrics	Y	Kapoor A., Bhatia V., Sibal A.	2016	Pediatric inflammatory bowel disease	Indian Pediatrics	4	10.1007/s13312-016-0975-0	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84997525084&doi=10.1007%2fs13312-016-0975-0&partnerID=40&md5=60de7caf651ed6e09557fb4010de6b4
Elderly	Y	Kim D., Taleban S.	2019	A Comprehensive Review of the Diagnosis and Pharmacological Management of Crohn's Disease in the Elderly Population	Drugs and Aging	1	10.1007/s40266-019-00672-x	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85065393378&doi=10.1007%2fs40266-019-00672-x&partnerID=40&md5=44b0993ddc336137034072d8856021a4

Transfer	Y	Klag T., Stange E.F., Wehkamp J.	2015	Management of crohn's disease – are guidelines transferred to clinical practice?	United European Gastroenterology Journal	910.1177/2050640615580228	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85006210379&doi=10.1177%2f2050640615580228&partnerID=40&md5=911746cd02d7ad2e350df7ebb65944
Nutrition	Y	Kodama H., Tanaka M., Naito Y., Katayama K., Moriyama M.	2020	Japan's practical guidelines for zinc deficiency with a particular focus on taste disorders, inflammatory bowel disease, and liver cirrhosis	International Journal of Molecular Sciences	110.3390/ijms21082941	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85084031277&doi=10.3390%2fijms21082941&partnerID=40&md5=ca47623aa5121827b5df8535dbf96b
Guideline (ACG)	Y	Kornbluth A., Sachar D.B.	2010	Ulcerative colitis practice guidelines in adults: American college of gastroenterology, practice parameters committee	American Journal of Gastroenterology	90110.1038/aig.2009.727	https://www.scopus.com/inward/record.uri?eid=2-s2.0-77949271455&doi=10.1038%2fajg.2009.727&partnerID=40&md5=b148f512ee5617725a122bcc5443a56
Adherence	Y	Kredel L.I., Schneidreid O., Hoffmann J.C., Siegmund B., Preiß J.C.	2019	Guideline recommendations for treatment of patients with inflammatory bowel diseases are not implemented in clinical practice—results of a non-representative survey	International Journal of Colorectal Disease	110.1007/s00384-018-3215-3	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85057976608&doi=10.1007%2f00384-018-3215-3&partnerID=40&md5=f4869badebce9642b9f647df748ca8a
Paediatrics	Y	Lamparyk K., Debeljak A., Aylward L., Mahajan L.	2018	Impact of integrated care in a pediatric gastroenterology clinic on psychology utilization	Clinical Practice in Pediatric Psychology	110.1037/cpp0000218	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85043593688&doi=10.1037%2fpp0000218&partnerID=40&md5=d518381e332742c8b3d93436f140bca
Consensus	Y	Lee M.J., Brown S.R., Fearhead N.S., Hart A., Lobo A.J.	2018	How are we managing fistulating perianal Crohn's disease? Results of a national survey of consultant gastroenterologists	Frontline Gastroenterology	110.1136/flgastro-2017-100866	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85041703386&doi=10.1136%2fflgastro-2017-100866&partnerID=40&md5=743a92e9f3abae47c23d5f5047456b
Quality	Y	Lee N.S., Pola S., Groessl E.J., Rivera-Nieves J., Ho S.B.	2016	Opportunities for Improvement in the Care of Patients Hospitalized for Inflammatory Bowel Disease-Related Colitis	Digestive Diseases and Sciences	1010.1007/s10620-016-4046-0	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84961162744&doi=10.1007%2f10620-016-4046-0&partnerID=40&md5=8cd87dca6bb295e5da09a9043f7b81e1
Transfer and Paediatrics	Y	Leung Y., Heyman M.B., Mahadevan U.	2011	Transitioning the adolescent inflammatory bowel disease patient: Guidelines for the adult and pediatric gastroenterologist	Inflammatory Bowel Diseases	6610.1002/ibd.21576	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85092736707&doi=10.1002%2fibd.21576&partnerID=40&md5=4f518d6ea90a0520315eb7c6ba47d6c0
Guideline	Y	Lewin S., Velayos F.S.	2020	Day-by-day management of the inpatient with moderate to severe inflammatory bowel disease	Gastroenterology and Hepatology		https://www.scopus.com/inward/record.uri?eid=2-s2.0-85092412462&partnerID=40&md5=5d712f6a87872f89c8d9568c715a90
Guideline (ACG)	Y	Lichtenstein G.R., Loftus E.V., Jr., Isaacs K.L., Regueiro M.D., Gerson L.B., Sands B.E.	2018	ACG Clinical Guideline: Management of Crohn's Disease in Adults	American Journal of Gastroenterology	18010.1038/ajg.2018.27	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85044836612&doi=10.1038%2fajg.2018.27&partnerID=40&md5=8607464c7d5d9c4b80847bc4096554f0
Nutrition	Y	Lomer M.C.E.	2011	Symposium 7: Nutrition in inflammatory bowel disease Dietary and nutritional considerations for inflammatory bowel disease	Proceedings of the Nutrition Society	4310.1017/S002966511000097	https://www.scopus.com/inward/record.uri?eid=2-s2.0-80054955786&doi=10.1017%2fS002966511000097&partnerID=40&md5=1c54a0bb3cf307fb397501d9ce9a25
Recommendations	Y	Louis E., Dotan I., Ghosh S., Mlynarsky L., Reenaers C., Schreiber S.	2015	Optimising the inflammatory bowel disease unit to improve quality of care: Expert recommendations	Journal of Crohn's and Colitis	2510.1093/ecco-jcc/jiv085	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84973154936&doi=10.1093%2fecco-jcc%2fjiv085&partnerID=40&md5=e34235429a671d5654ad14f37c424818
Psychology	Y	Mackner L.M., Whitaker B.N., Maddux M.H., Thompson S., Hughes-Reid C., Drovetta M., Reed B.	2020	Depression Screening in Pediatric Inflammatory Bowel Disease Clinics: Recommendations and a Toolkit for Implementation	Journal of Pediatric Gastroenterology and Nutrition	310.1097/MPG.0000000002499	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85077297807&doi=10.1097%2fMPG.0000000002499&partnerID=40&md5=71fcb97a3b85cd6de1b94879311bfa8
Guideline (EFSUMB)	Y	Maconi G., Nylund K., Ripolles T., Calabrese E., Dirks K., Dietrich C.F., Hollerweger A., Sporea I., Saftoiu A., Maaser C., Hausken T., Higginson A.P., Nürnberg D., Pallotta N., Romanini L., Serra C., Gilja O.H.	2018	EFSUMB Recommendations and Clinical Guidelines for Intestinal Ultrasound (GIUS) in Inflammatory Bowel Diseases	Ultraschall in der Medizin	2310.1055/s-0043-125329	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85044347024&doi=10.1055%2fs-0043-125329&partnerID=40&md5=54eb26dec51253d5c005b4dec56e1be
Pregnancy	Y	Mahadevan U., Robinson C., Bernasko N., Boland B., Chambers C., Dubinsky M., Friedman S., Kane S., Manthey J., Sauberman J., Stone J., Jain R.	2019	Inflammatory bowel disease in pregnancy clinical care pathway: A report from the american gastroenterological association ibd parenthood project working group	Inflammatory Bowel Diseases	210.1093/ibd/izz037	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85062850180&doi=10.1093%2fibd%2fizz037&partnerID=40&md5=a4001afa6ed46a4d1dbfbf0636491c65
Training	Y	Malter L.B., Israel A., Rubin D.T.	2019	Proposal to Update the Curriculum in Inflammatory Bowel Diseases for Categorical Gastroenterology Fellows	Inflammatory Bowel Diseases	10.1093/ibd/izz107	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071707728&doi=10.1093%2fibd%2fizz107&partnerID=40&md5=d8da0d94779c4036c3f4667c905e4
Anaemia	Y	Martin J., Radeke H.H., Dignass A., Stein J.	2017	Current evaluation and management of anemia in patients with inflammatory bowel disease	Expert Review of Gastroenterology and Hepatology	1910.1080/17474124.2017.1263566	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85003856401&doi=10.1080%2f17474124.2017.1263566&partnerID=40&md5=b879c9b6a33e0108117e4c23446fd2e
Nutrition	Y	Massironi S., Rossi R.E., Cavalcoli F.A., Della Valle S., Fraquelli M., Conte D.	2013	Nutritional deficiencies in inflammatory bowel disease: Therapeutic approaches	Clinical Nutrition	6810.1016/j.clnu.2013.03.020	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84887621526&doi=10.1016%2fj.clnu.2013.03.020&partnerID=40&md5=39ee2f050276ba7e3b76c81bd5f89ea4

Guideline (JSG)	Y	Matsuoka K., Kobayashi T., Ueno F., Matsui T., Hirai F., Inoue N., Kato J., Kobayashi K., Kobayashi K., Koganei K., Kunisaki R., Motoya S., Nagahori M., Nakase H., Omata F., Saruta M., Watanabe T., Tanaka T., Kanai T., Noguchi Y., Takahashi K.-I., Watanabe K., Hibi T., Suzuki Y., Watanabe M., Sugano K., Shimosegawa T.	2018	Evidence-based clinical practice guidelines for inflammatory bowel disease	Journal of Gastroenterology	108	10.1007/s00535-018-1439-1	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85041923106&doi=10.1007%2f00535-018-1439-1&partnerID=40&md5=0925ddf55f988708c4c858d07af58b53
Paediatrics	Y	Miele E., Shamir R., Aloï M., Assa A., Braegger C., Brons J., De Ridder L., Escher J.C., Hojsak I., Kolaček S., Koletzko S., Levine A., Lionetti P., Martinelli M., Ruemmele F., Russell R.K., Boneh R.S., Van Limbergen J., Veereman G., Staiano A.	2018	Nutrition in Pediatric Inflammatory Bowel Disease: A Position Paper on Behalf of the Porto Inflammatory Bowel Disease Group of the European Society of Pediatric Gastroenterology, Hepatology and Nutrition	Journal of Pediatric Gastroenterology and Nutrition	33	10.1097/MPG.0000000000001896	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85044220857&doi=10.1097%2fMPG.0000000000001896&partnerID=40&md5=14237c03488494f0250eedac09684e8
Paediatrics	Y	Miller T., Suskind D.L.	2018	Exclusive enteral nutrition in pediatric inflammatory bowel disease	Current Opinion in Pediatrics	5	10.1097/MOP.0000000000000660	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85056484495&doi=10.1097%2fMOP.0000000000000660&partnerID=40&md5=2f965abfca2506c147491c77d2d112ca
Recommendations	Y	Mir F.A., Kane S.V.	2018	Health Maintenance in Inflammatory Bowel Disease	Current Gastroenterology Reports	7	10.1007/s11894-018-0621-1	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85045611985&doi=10.1007%2f11894-018-0621-1&partnerID=40&md5=6cb872fd690628a726d2d1e041fe7314
Nutrition	Y	Nazarenkov N., Seeger K., Beeken L., Ananthakrishnan A.N., Khalili H., Lewis J.D., Konijeti G.G.	2019	Implementing dietary modifications and assessing nutritional adequacy of diets for inflammatory bowel disease	Gastroenterology and Hepatology	2		https://www.scopus.com/inward/record.uri?eid=2-s2.0-85063409327&partnerID=40&md5=4e0415fdd179144c13ab3a32c2131dee
Recommendations	Y	Nguyen G.C., Boland K., Aff W., Bressler B., Jones J.L., Weizman A.V., Fowler S., Halder S., Huang V.W., Kaplan G.G., Khanna R., Murthy S.K., Ruel J., Seow C.H., Targownik L.E., Chawla T., Guimaraes L., Fernandes A., Saleh S., Melmed G.Y.	2017	Modified Delphi Process for the Development of Choosing Wisely for Inflammatory Bowel Disease	Inflammatory Bowel Diseases	9	10.1097/MIB.0000000000001152	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85019709463&doi=10.1097%2fMIB.0000000000001152&partnerID=40&md5=343fca1fd3ca4bcd0ac38420296655c
Recommendations	Y	Nguyen G.C., Devlin S.M., Afif W., Bressler B., Gruchy S.E., Kaplan G.G., Oliveira L., Plamondon S., Seow C.H., Williams C., Wong K., Yan B.M., Jones J.	2014	Defining quality indicators for best-practice management of inflammatory bowel disease in Canada	Canadian Journal of Gastroenterology and Hepatology	31	10.1155/2014/941245	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84902659142&doi=10.1155%2f2014%2f941245&partnerID=40&md5=a099d24954d3385f7a9fce19790c7206
Fatigue	Y	Nocerino A., Nguyen A., Agrawal M., Mone A., Lakhani K., Swaminath A.	2020	Fatigue in Inflammatory Bowel Diseases: Etiologies and Management	Advances in Therapy		10.1007/s12325-019-01151-w	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85075519686&doi=10.1007%2f12325-019-01151-w&partnerID=40&md5=48da98cd381ea891d3d0c15316c8e440
Paediatrics	Y	Oliva S., Thomson M., De Ridder L., Martín-De-Carpi J., Van Biervliet S., Braegger C., Dias J.A., Kolaček S., Miele E., Buderus S., Brons J., Winter H., Navas-López V.M., Assa A., Chong S.K.F., Afzal N.A., Smets F., Shaoul R., Hussey S., Turner D., Cucchiara S.	2018	Endoscopy in pediatric inflammatory bowel disease: A position paper on behalf of the Porto IBD Group of the European Society for Pediatric Gastroenterology, Hepatology and Nutrition	Journal of Pediatric Gastroenterology and Nutrition	17	10.1097/MPG.0000000000002092	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85056882748&doi=10.1097%2fMPG.0000000000002092&partnerID=40&md5=ab81af15959ace32d76de35fdaad8c3af
Nutrition	Y	O'Sullivan M., Raftery T.	2014	Inflammatory bowel disease dietary management	Advanced Nutrition and Dietetics in Gastroenterology	1	10.1002/9781118872796.ch3.14	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84926456342&doi=10.1002%2f9781118872796.ch3.14&partnerID=40&md5=3cdd46407a394f9cf589e01decdd4098

Consensus	Y	Panaccione R., Steinhart A.H., Bressler B., Khanna R., Marshall J.K., Targownik L., Afif W., Bitton A., Borgaonkar M., Chauhan U., Halloran B., Jones J., Kennedy E., Leontiadis G.I., Loftus E.V., Jr., Meddings J., Moayyedi P., Murthy S., Plamondon S., Rosenfeld G., Schwartz D., Seow C.H., Williams C., Bernstein C.N.	2019	Canadian Association of Gastroenterology Clinical Practice Guideline for the Management of Luminal Crohn's Disease	Clinical Gastroenterology and Hepatology	6	10.1016/j.cgh.2019.02.043	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85064715594&doi=10.1016%2fcgh.2019.02.043&partnerID=40&md5=d17bf2bb45af21f034f97ad321644739
Quality	Y	Panés J., O'Connor M., Peyrin-Biroulet L., Irving P., Petersson J., Colombel J.-F.	2014	Improving quality of care in inflammatory bowel disease: What changes can be made today?	Journal of Crohn's and Colitis	46	10.1016/j.crohns.2014.02.022	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84906789688&doi=10.1016%2fcrohns.2014.02.022&partnerID=40&md5=3fb181bd19e658fba91de6ca7c154654
Paediatrics	Y	Pappa H., Thayu M., Sylvester F., Leonard M., Zemel B., Gordon C.	2011	Skeletal health of children and adolescents with inflammatory bowel disease	Journal of Pediatric Gastroenterology and Nutrition	61	10.1097/MPG.0b013e31821988a3	https://www.scopus.com/inward/record.uri?eid=2-s2.0-79959817514&doi=10.1097%2fMPG.0b013e31821988a3&partnerID=40&md5=c7315062c7fb5c95a55e60e66c8ffeff
Guideline	Y	Park J.J., Yang S.-K., Ye B.D., Kim J.W., Park D.I., Yoon H., Im J.P., Lee K.M., Yoon S.N., Lee H., IBD Study Group of the Korean Association for the Study of Intestinal Diseases	2017	Second Korean guidelines for the management of Crohn's disease	Intestinal Research	19	10.5217/ir.2017.15.1.38	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85012951194&doi=10.5217%2fir.2017.15.1.38&partnerID=40&md5=a2e6a103bb27491abc6e8fb57dd4c57
Paediatrics	Y	Patel A.S., Gurram B.	2019	Recent advances in understanding and managing pediatric inflammatory bowel disease	F1000Research		10.12688/f1000research.19609.1	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85077333757&doi=10.12688%2ff1000research.19609.1&partnerID=40&md5=52c2ed6914b6b0fe613c4853d278e69.1
Recommendations	Y	Pellino G., Keller D.S., Sampietro G.M., Angriman I., Carvello M., Celentano V., Colombo F., Di Candido F., Laureti S., Luglio G., Poggioni M., Rottoli M., Scaringi S., Sciaudone G., Sica G., Sofo L., Leone S., Danese S., Spinelli A., Delaini G., Selvaggi F., the Italian Society of Colorectal Surgery SICCR	2020	Inflammatory bowel disease position statement of the Italian Society of Colorectal Surgery (SICCR): Crohn's disease	Techniques in Coloproctology	7	10.1007/s10151-020-02183-z	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85081366345&doi=10.1007%2fs10151-020-02183-z&partnerID=40&md5=1534eba8829dccc5f3aa15be3de885d
Recommendations	Y	Pellino G., Keller D.S., Sampietro G.M., Annesse V., Carvello M., Celentano V., Coco C., Colombo F., Cracco N., Di Candido F., Franceschi M., Laureti S., Mattioli G., Pio L., Sciaudone G., Sica G., Villanacci V., Zinicola R., Leone S., Danese S., Spinelli A., Delaini G., Selvaggi F., the Italian Society of Colorectal Surgery (SICCR)	2020	Inflammatory bowel disease (IBD) position statement of the Italian Society of Colorectal Surgery (SICCR): general principles of IBD management	Techniques in Coloproctology	8	10.1007/s10151-019-02145-0	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85078185436&doi=10.1007%2fs10151-019-02145-0&partnerID=40&md5=22caa5f653810384ae38f36c99b66ff0

Recommendations	Y	Pellino G., Keller D.S., Sampietro G.M., Carvello M., Celentano V., Coco C., Colombo F., Geccherle A., Luglio G., Rottoli M., Scarpa M., Sciaudone G., Sica G., Sofo L., Zinicola R., Leone S., Danese S., Spinelli A., Delaini G., Selvaggi F., Angriman I., Caprino P., Di Candido F., Di Ruscio M., Laureti S., Poggioli G., Rizzo G., Roda G., Sacchetti F., Scaringi S., Sensi B., Variola A., Pellino C.G., Keller D.S., Sampietro G.M., Leone S., Danese S., Delaini	2020	Inflammatory bowel disease position statement of the Italian Society of Colorectal Surgery (SICCR): ulcerative colitis	Techniques in Coloproctology	2	10.1007/s10151-020-02175-z	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85081371012&doi=10.1007%2Fs10151-020-02175-z&partnerID=40&md5=f4563738cc86a0ee9651550f60281390
Guideline (ESGE)	Y	Pennazio M., Spada C., Eliakim R., Keuchel M., May A., Mulder C.J., Rondonotti E., Adler S.N., Albert J., Baltes P., Barbaro F., Cellier C., Charton J.P., Delvaux M., Despott E.J., Domagk D., Klein A., McAlindon M., Rosa B., Rowse G., Sanders D.S., Saurin J.C., Sidhu R., Dumonceau J.-M., Hassan C., Gralnek I.M.	2015	Small-bowel capsule endoscopy and device-assisted enteroscopy for diagnosis and treatment of small-bowel disorders: European Society of Gastrointestinal Endoscopy (ESGE) Clinical Guideline	Endoscopy	321	10.1055/s0034-1391855	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84964221784&doi=10.1055%2Fs0034-1391855&partnerID=40&md5=99c8dd738d037eeef5452934ec2e6ac
Consensus	Y	Peyrin-Biroulet L., Bouhnik Y., Roblin X., Bonnaud G., Hagège H., Hébuterne X., on behalf of the gastroenterologist nominal group	2017	French national consensus clinical guidelines for the management of Crohn's disease	Digestive and Liver Disease	8	10.1016/j.dld.2016.12.008	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85009259818&doi=10.1016%2Fj.dld.2016.12.008&partnerID=40&md5=7e7625cbe85c3d33f630bceb32598
Recommendations	Y	Pola S., Patel D., Ramamoorthy S., Mclimore E., Fahmy M., Rivera-Nieves J., Chang J.T., Evans E., Docherty M., Talamini M., Sandborn W.J.	2012	Strategies for the Care of Adults Hospitalized for Active Ulcerative Colitis	Clinical Gastroenterology and Hepatology	36	10.1016/j.cgh.2012.07.006	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84869456003&doi=10.1016%2Fj.cgh.2012.07.006&partnerID=40&md5=4cc0661324d4917ccbd5aa170e2506d
Fatigue	Y	Oazi T.	2020	Fatigue in inflammatory bowel disease: A problematic ailment	Current Opinion in Gastroenterology	10	10.1097/MOG.0000000000000644	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85086052454&doi=10.1097%2FMOG.0000000000000644&partnerID=40&md5=0dbc415b6136c6a9a97ec2eda362214300644
Recommendations	Y	Queiroz N.S.F., Barros L.L., de Azevedo M.F.C., Oba J., Sobrado C.W., Carlos A.S., Milani L.R., Sipahi A.M., Cintra Damião A.O.M.	2020	Management of inflammatory bowel disease patients in the covid-19 pandemic era: A Brazilian tertiary referral center guidance	Clinics	4	10.6061/CLINICS/2020/E1909	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85083947564&doi=10.6061%2FCLINICS%2F2020%2FE1909&partnerID=40&md5=9e09715f9b56e6787ff537123a91734c
Anaemia	Y	Qureshi T., Peter Nguyen T., Wang R., Willis D., Shah R., Hou J.K.	2019	Improving Anemia in Inflammatory Bowel Disease: Impact of the Anemia Care Pathway	Digestive Diseases and Sciences	1	10.1007/s10620-019-05559-w	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85063024584&doi=10.1007%2Fs10620-019-05559-w&partnerID=40&md5=93e44e845e9c865380bd69e26b80ae1
Recommendations	Y	Ran Z., Wu K., Matsuoka K., Jeen Y.T., Wei S.C., Ahuja V., Chen M., Hu P.-J., Andoh A., Kim H.J., Yang S.-K., Watanabe M., Ng S.C., Hibi T., Hilmi I.N., Suzuki Y., Han D.S., Leung W.K., Sollano J., Ooi C.J., Qian J.	2020	Asian Organization for Crohn's and Colitis and Asia Pacific Association of Gastroenterology practice recommendations for medical management and monitoring of inflammatory bowel disease in Asia	Journal of Gastroenterology and Hepatology (Australia)	10	10.1111/jgh.15185	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85088692907&doi=10.1111%2Fjgh.15185&partnerID=40&md5=5a589b980207c2937648201ff890bd9
Paediatrics	Y	Regan B.P., Bouvaros A.	2014	Pediatric ulcerative colitis: A practical guide to management	Pediatric Drugs	12	10.1007/s40272-014-0070-8	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84902364753&doi=10.1007%2Fs40272-014-0070-8&partnerID=40&md5=06af8d26af9c95badda1575402651d51
Recommendations	Y	Roda G., Chien Ng S., Kotze P.G., Argollo M., Panaccione R., Spinelli A., Kaser A., Peyrin-Biroulet L., Danese S.	2020	Crohn's disease	Nature Reviews Disease Primers	3	10.1038/s41572-020-0156-2	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85082951446&doi=10.1038%2Fs41572-020-0156-2&partnerID=40&md5=77ec92c95daaa276bb0c0204462cfc8c4

Paediatrics (ECCO ESPGHAN)	Y	Turner D., Levine A., Escher J.C., Griffiths A.M., Russell R.K., Dignass A., Dias J.A., Bronsky J., Braegger C.P., Cucchiara S., De Ridder L., Fagerberg U.L., Hussey S., Hugot J.-P., Kolacek S., Kolho K.L., Lionetti P., Pærrregaard A., Potapov A., Rintala R., Serban D.E., Staiano A., Sweeny B., Veerman G., Veres G., Wilson D.C., Ruemmele F.M.	2012	Management of pediatric ulcerative colitis: Joint ECCO and ESPGHAN evidence-based consensus guidelines	Journal of Pediatric Gastroenterology and Nutrition	252	10.1097/MPG.0b013e3182662233	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84865718633&doi=10.1097%2fMPG.0b013e3182662233&partnerID=40&md5=7badfa5ead38fcb872c646096dd17d1
Paediatrics (ECCO ESPGHAN)	Y	Turner D., Ruemmele F.M., Orlanski-Meyer E., Griffiths A.M., De Carpi J.M., Bronsky J., Veres G., Aloï M., Strisciuglio C., Braegger C.P., Assa A., Romano C., Hussey S., Stanton M., Pakarinen M., De Ridder L., Katsanos K., Croft N., Navas-López V., Wilson D.C., Lawrence S., Russell R.K.	2018	Management of paediatric ulcerative colitis, part 1: Ambulatory Care-An Evidence-based Guideline From European Crohn's and Colitis Organization and European Society of Paediatric Gastroenterology, Hepatology and Nutrition	Journal of Pediatric Gastroenterology and Nutrition	54	10.1097/MPG.00000000000002035	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85052653220&doi=10.1097%2fMPG.0000000000002035&partnerID=40&md5=84360a8dab329ecb6d362b5d6c3bfbf
Paediatrics (ECCO ESPGHAN)	Y	Turner D., Ruemmele F.M., Orlanski-Meyer E., Griffiths A.M., De Carpi J.M., Bronsky J., Veres G., Aloï M., Strisciuglio C., Braegger C.P., Assa A., Romano C., Hussey S., Stanton M., Pakarinen M., De Ridder L., Katsanos K.H., Croft N., Navas-Lopez V.M., Wilson D.C., Lawrence S., Russell R.K.	2018	Management of paediatric ulcerative colitis, part 2: Acute severe colitis - An evidence-based consensus guideline from the european Crohn's and colitis organization and the european society of paediatric gastroenterology, hepatology and nutrition	Journal of Pediatric Gastroenterology and Nutrition	27	10.1097/MPG.00000000000002036	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85056457044&doi=10.1097%2fMPG.0000000000002036&partnerID=40&md5=6377adc3169d932a989a064255afe3e9
Paediatrics (ECCO ESPGHAN)	Y	Turner D., Travis S.P.L., Griffiths A.M., Ruemmele F.M., Levine A., Benchimol E.I., Dubinsky M., Alex G., Baldassano R.N., Langer J.C., Shamberger R., Hyams J.S., Cucchiara S., Bousvaros A., Escher J.C., Markowitz J., Wilson D.C., Van Assche G., Russell R.K.	2011	Consensus for managing acute severe ulcerative colitis in children: A systematic review and joint statement from ECCO, ESPGHAN, and the porto IBD working group of ESPGHAN	American Journal of Gastroenterology	157	10.1038/ajg.2010.481	https://www.scopus.com/inward/record.uri?eid=2-s2.0-79953795679&doi=10.1038%2fajg.2010.481&partnerID=40&md5=329c3603d8e6150acf329f97c672ecc
Co-morbidity	Y	Velayos F.	2012	Managing risks of neoplasia in inflammatory bowel disease	Current Gastroenterology Reports	5	10.1007/s11894-012-0247-7	https://www.scopus.com/inward/record.uri?eid=2-s2.0-84861092341&doi=10.1007%2fs11894-012-0247-7&partnerID=40&md5=cf91fbf2921a72185ed65cb446e59eaf
Paediatrics	Y	Vernon-Roberts A., Lopez R.N., Frampton C., Geary R.B., Lemberg D.A., Day A.S.	2019	A Symptom Self-report Tool for Children with Inflammatory Bowel Disease (IBDnow)	Journal of Pediatric Gastroenterology and Nutrition	10	10.1097/MPG.00000000000002329	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85068587991&doi=10.1097%2fMPG.0000000000002329&partnerID=40&md5=6ceedea5d44780c8936acf1ca53e35d
Pregnancy	Y	Walker C.H., Gaidos J.K.J.	2019	Beyond pregnancy, women's health in inflammatory bowel disease	Current Opinion in Gastroenterology	10	10.1097/MOG.0000000000000552	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85071123324&doi=10.1097%2fMOG.0000000000000552&partnerID=40&md5=69201423332a383f2d0d4bfe551b8b51

Consensus	Y	Wei S.-C., Chang T.-A., Chao T.-H., Chen J.-S., Chou J.-W., Chou Y.-H., Chuang C.-H., Hsu W.-H., Huang T.-Y., Hsu T.-C., Lin C.-C., Lin H.-H., Lin J.-K., Lin W.-C., Ni Y.-H., Shieh M.-J., Shih I.-L., Shun C.-T., Tsang Y.-M., Wang C.-Y., Wang H.-Y., Weng M.-T., Wu D.-C., Wu W.-C., Yen H.-H., Wong J.-M.	2017	Management of Crohn's disease in Taiwan: Consensus guideline of the Taiwan society of inflammatory bowel disease	Intestinal Research	11	10.5217/ir.2017.15.3.285	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85020397777&doi=10.5217%2fir.2017.15.3.285&partnerID=40&md5=733f9efe72d66854cd63a93747121842
Recommendations	Y	Whaley K.G., Rosen M.J.	2019	Contemporary medical management of acute severe ulcerative colitis	Inflammatory Bowel Diseases	7	10.1093/ibd/izy208	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85058608852&doi=10.1093%2fibd%2fzy208&partnerID=40&md5=3f98ac047a8546e005b0c2512e32a0f
Recommendations	Y	Yamamoto T., Lightner A.L., Spinelli A., Kotze P.G.	2020	Perioperative management of ileocecal Crohn's disease in the current era	Expert Review of Gastroenterology and Hepatology	10.1080/17474124.2020.1802245	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85089449979&doi=10.1080%2f17474124.2020.1802245&partnerID=40&md5=e1bb81782a69a63d73b0adeb3119b87d	
Pain	Y	Zielińska A., Sałaga M., Włodarczyk M., Fichna J.	2019	Focus on current and future management possibilities in inflammatory bowel disease-related chronic pain	International Journal of Colorectal Disease	6	10.1007/s00384-018-3218-0	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85060037456&doi=10.1007%2fs00384-018-3218-0&partnerID=40&md5=7295a6b5b3a304fa059824cf1baadde3
Recommendations	Y	Zittan E., Gralnek I.M., Berns M.S.	2020	The new proactive approach and precision medicine in crohn's disease	Biomedicines	10.3390/B10MEDICINES8070193	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85089280257&doi=10.3390%2fBI0MEDICINES8070193&partnerID=40&md5=9cdbc7ff427a7aaab09cfd846a8f650d	
Recommendations	Y	Zulow S., Farraye F.A.	2019	Updates on vaccinating the inflammatory bowel disease patient	Expert Review of Gastroenterology and Hepatology	1	10.1080/17474124.2019.1565993	https://www.scopus.com/inward/record.uri?eid=2-s2.0-85060472822&doi=10.1080%2f17474124.2019.1565993&partnerID=40&md5=62e1bb55250b36ff87931e0af05e0d83