

Use of intestinal ultrasound and other imaging tests in ulcerative colitis and Crohn's disease: insights from a German physician survey

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Key Takeaways

Intestinal ultrasound is widely used alongside colonoscopy for managing moderate-to-severe UC and CD in Germany. Physicians prioritizing transmural healing as a long-term treatment goal report greater use of intestinal ultrasound.

Physicians, overall and across all subgroups, most often use intestinal ultrasound to monitor disease activity and treatment response.

These findings highlight the technical capabilities and clinical benefit of intestinal ultrasound, underscoring its central role and broad utility in routine UC and CD management, from diagnosis to ongoing monitoring and surveillance.

Background and Objectives

- Imaging tests play a critical role in the management of ulcerative colitis (UC) and Crohn's disease (CD), including diagnosis, assessment, monitoring, and complication management.¹
- Among the available imaging tests for UC and CD, intestinal ultrasound is evolving as an important option given it is a non-invasive option that can be performed directly by gastroenterologists. Moreover, it offers reasonably high sensitivity and specificity, is patient-friendly, cost-effective, and produces real-time results.^{2,3}
- This study aimed to assess physicians' use of imaging tests and reasons for intestinal ultrasound use in Germany by practice setting and perceived importance of transmural healing as a long-term treatment goal for moderate-to-severe UC or CD.

Methods

Study design

- Cross-sectional, web-based, invitation-only, German-language survey of gastroenterologists practicing in Germany (September–October 2025), invited from a large, national physician directory.
- The questionnaire underwent review by experts with domain knowledge, internal stress testing and consistency checks, and pretesting for clarity and usability; it was programmed to require responses for all applicable items, resulting in no item-level missing data, and the final instrument and analysis plan were finalized prior to data collection

Sample criteria

- Eligibility criteria for licensed physicians included:
- Primary specialty in gastroenterology
 - Practiced in Germany
 - Prescribed an advanced treatment (i.e., biologic therapy, Janus kinase inhibitor, sphingosine 1-phosphate receptor modulator) to ≥ 1 patient with moderate-to-severe UC or CD in the past 12 months, excluding patients enrolled in interventional clinical trials.

Study measures

- Data on physician characteristics, imaging test use, and reasons for intestinal ultrasound use were collected.
 - Physicians were also asked to rank their long-term (i.e., ≥ 12 months) treatment goals, using a 5-point Likert-type importance rating from most important to least important.
- Statistical analysis**
- Study measures were summarized overall and stratified by practice setting and physicians' perceived importance of transmural healing (based on intestinal ultrasound, magnetic resonance imaging, or computed tomography) as most important vs. less-than-most important.
 - Means and standard deviations (SDs) were used for continuous variables and counts and proportions for binary variables.

Results

A total of 76 gastroenterologists participated in the survey (mean [SD] age 52.9 [8.1] years; mean [SD] practice duration 21.8 [6.8] years).

Table 1: Characteristics of participating physicians

	Overall sample (N = 76)
Mean \pm SD [median] or n (%)	
Age (years), mean (SD)	52.9 (8.1)
Male, n (%)	65 (85.5%)
Years practicing medicine, mean (SD)	21.8 (6.8)
Number of UC patients, mean (SD)	
Treated in the last 12 months	92.3 (78.9)
Prescribed an advanced treatment in the last 12 months	58.1 (61.7)
Number of CD patients, mean (SD)	
Treated in the last 12 months	87.4 (72.9)
Prescribed an advanced treatment in the last 12 months	52.5 (48.9)
Practice setting, ¹ n (%)	
Private practice	31 (40.8%)
Non-university hospital	20 (26.3%)
University hospital	18 (23.7%)
Medical care center	17 (22.4%)

Abbreviations: N = number; SD = standard deviation; UC = ulcerative colitis; CD = Crohn's disease.

Notes: ¹Multiple responses permitted. A medical care center was defined as a regional center or health center, composing several physicians, possibly from different specialties.

Physicians who viewed transmural healing as a most important long-term goal, compared to those viewing it as less-than-most important

- More often reported any intestinal ultrasound use (UC: 93.3% vs 82.0%; CD: 94.7% vs 87.7%).
- Were more likely to use intestinal ultrasound for treatment-response monitoring in UC (85.7% vs 80.0%) or for diagnosis in CD (72.2% vs 52.0%).

Table 2: Commonly used imaging tests and reasons for intestinal ultrasound use by perceived importance of transmural healing as a long-term treatment goal for moderate-to-severe UC and CD

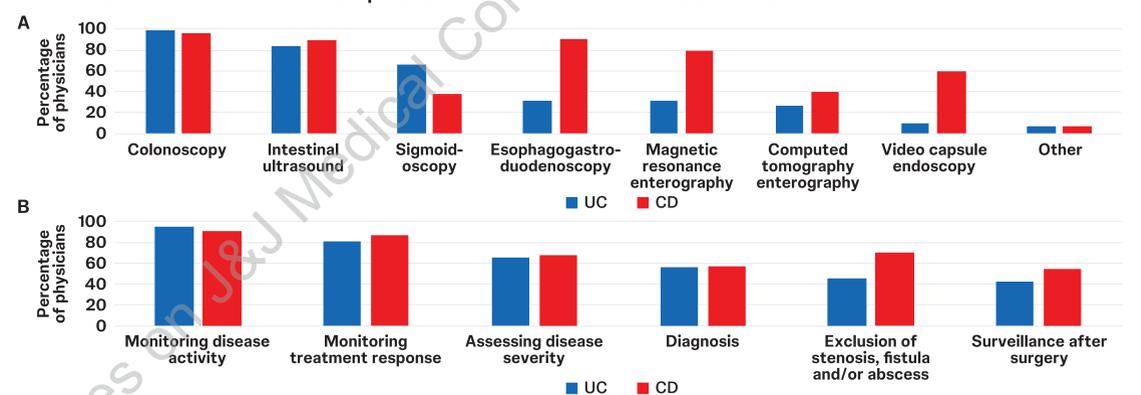
	Most important	Less-than-most important
UC		
Commonly used imaging tests	N=15	N=61
Colonoscopy	15 (100.0%)	60 (98.4%)
Intestinal ultrasound	14 (93.3%)	50 (82.0%)
Sigmoidoscopy	8 (53.3%)	42 (68.9%)
Reasons for intestinal ultrasound use	N=14	N=50
Monitoring disease activity	13 (92.9%)	48 (96.0%)
Monitoring treatment response	12 (85.7%)	40 (80.0%)
Assessing disease severity	7 (50.0%)	35 (70.0%)
Diagnosis	7 (50.0%)	29 (58.0%)
Exclusion of stenosis/fistula/abscess	6 (42.9%)	23 (46.0%)
Surveillance after surgery	3 (21.4%)	24 (48.0%)
Other	0 (0.0%)	2 (4.0%)
CD		
Commonly used imaging tests	N=19	N=57
Colonoscopy	19 (100.0%)	54 (94.7%)
Esophagogastroduodenoscopy	18 (94.7%)	51 (89.5%)
Intestinal ultrasound	18 (94.7%)	50 (87.7%)
Reasons for intestinal ultrasound use	N=18	N=50
Monitoring disease activity	16 (88.9%)	46 (92.0%)
Monitoring treatment response	16 (88.9%)	43 (86.0%)
Exclusion of stenosis/fistula/abscess	13 (72.2%)	35 (70.0%)
Diagnosis	13 (72.2%)	26 (52.0%)
Assessing disease severity	11 (61.1%)	35 (70.0%)
Surveillance after surgery	8 (44.4%)	29 (58.0%)
Other	0 (0.0%)	1 (2.0%)

Abbreviations: UC = ulcerative colitis; CD = Crohn's disease; N = number.

Among the overall sample:

- Most physicians reported using colonoscopy and intestinal ultrasound for both UC (98.7% and 84.2%, respectively) and CD (96.1% and 89.5%), with esophagogastroduodenoscopy also commonly used for CD (90.8%).
- Intestinal ultrasound was primarily used to monitor disease activity and treatment response for both UC (95.3% and 81.2%) and CD (91.2% and 86.8%).

Figure 1: A. Physician use of imaging tests for moderate-to-severe UC and CD in the past 12 months. B. Reasons for use of intestinal ultrasound in clinical practice for moderate-to-severe UC and CD.

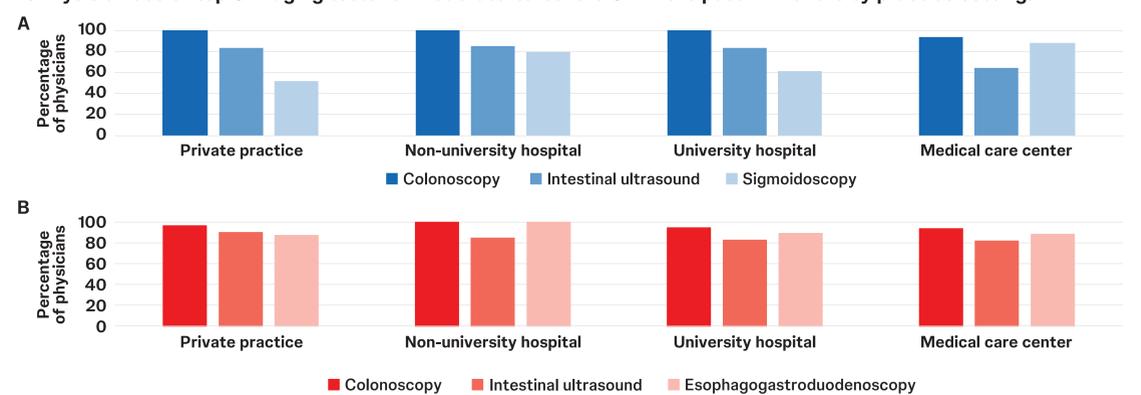


Abbreviations: UC = ulcerative colitis; CD = Crohn's disease.

Across practice setting:

- Most physicians used colonoscopy (94.1–100.0% for both UC and CD) and intestinal ultrasound (64.7–85.0% for UC; 82.4–90.3% for CD), with higher intestinal ultrasound use in private practices and hospitals.

Figure 2: A. Physician use of top 3 imaging tests for moderate-to-severe UC in the past 12 months by practice setting. B. Physician use of top 3 imaging tests for moderate-to-severe CD in the past 12 months by practice setting.

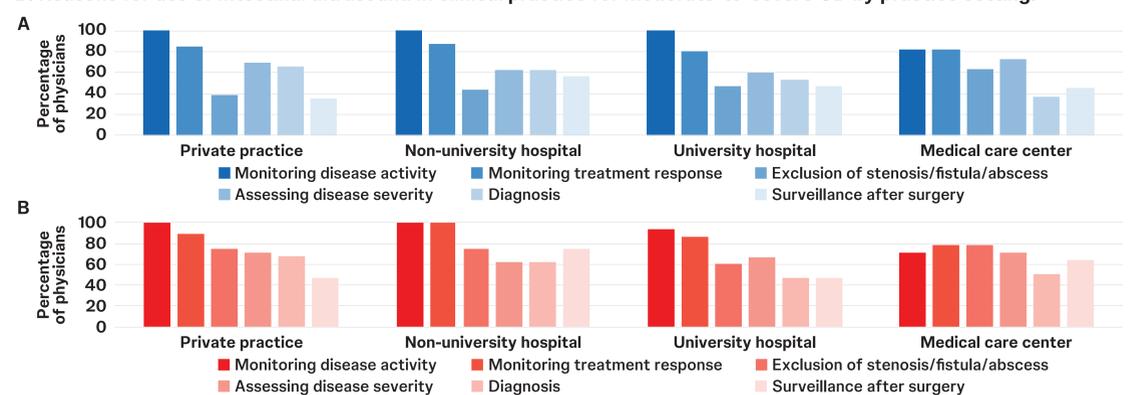


Abbreviations: UC = ulcerative colitis; CD = Crohn's disease.

Across practice setting:

- Use of intestinal ultrasound for disease-activity monitoring was more common in private practices and hospitals than medical care centers (UC: 100.0% vs 81.8%; CD: 93.3–100.0% vs 71.4%).
- Intestinal ultrasound use for surveillance after surgery was more frequent in non-university hospitals than other settings (UC: 56.2% vs 34.6–46.7%; CD: 75.0% vs 46.4–64.3%).

Figure 3: A. Reasons for use of intestinal ultrasound in clinical practice for moderate-to-severe UC by practice setting. B. Reasons for use of intestinal ultrasound in clinical practice for moderate-to-severe CD by practice setting.



Abbreviations: UC = ulcerative colitis; CD = Crohn's disease.