

ORIGINAL ARTICLE

INFLAMMATORY DISEASE

HIGHLIGHTS

- In Brazil, there is no validated methodology for evaluating health services recognized as comprehensive care units (CCU), making it difficult to assess the quality of care provided.
- Most CCU were concentrated in the Southeast region and only one (2.4%) in the Northeast region of Brazil. This pattern follows the epidemiological trends of IBD in the country.
- There is still difficulty in accessing enteroscopy and/or small bowel capsule endoscopy in the public health system.
- Most centers have dedicated multidisciplinary teams and IBD specialist doctors.
- There is still a current need to improve the proportion of nurses treating IBD in Brazil.

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Structural evaluation of inflammatory bowel disease comprehensive care units in Brazil

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ABSTRACT – Background – The most efficient way to prevent complications from inflammatory bowel disease (IBD) is to provide patients with optimized care. Nonetheless, in Brazil, there is no validated methodology for evaluating health services recognized as comprehensive care units (CCU), making it difficult to assess the quality of care provided. **Objective** – To understand the current scenario, map the distribution of centers and identify strengths and weaknesses, considering local and regional characteristics. **Methods** – The study was carried out in three phases. Initially, the Brazilian Organization for Crohn's disease and colitis (GEDIIB) developed 22 questions to characterize CCU in Brazil. In the second phase, all GEDIIB members were invited to respond to the survey with the 11 questions considered most relevant. In the last phase, an interim analysis of the results was performed, using the IBM SPSS Statistics v 29.0.1.0 software. Descriptive statistics were used to characterize the center's profile. The chi-square test was used to compare categorical variables. **Results** – There were 53 responses from public centers (11 excluded). Most centers were concentrated in the Southeastern (n=22/52.4%) and only 1 (2.4%) in the Northern region of Brazil. Thirty-nine centers (92.9%) perform endoscopic procedures, but only 9 (21.4%) have access to enteroscopy and/or small bowel capsule endoscopy. Thirty-three centers (78.6%) offer infusion therapy locally, 26 (61.9%) maintain IBD patient records, 13 (31.0%) reported having an IBD nurse, 34 (81.0%) have specific evidence-based protocols and only 7 (16.7%) have a patient satisfaction methodology. In the private scenario there were 56 responses (10 excluded). There is also a concentration in the Southeastern and Southern regions. Thirty-nine centers (84.8%) have access to endoscopic procedures and 19 perform enteroscopy and/or small bowel capsule endoscopy, more than what is observed in the public environment. Infusion therapy is available in 24 centers (52.2%). Thirty-nine centers (84.8%) maintain a specific IBD patient database, 17 (37%) have an IBD nurse, 36 (78.3%) have specific evidence-based protocols, and 22 (47.8%) apply a patient satisfaction methodology. **Conclusion** – IBD CCU in Brazil were mainly located in the Southeastern and Southern regions of the country. Most centers have dedicated multidisciplinary teams and IBD specialists. There is still a current need to improve the proportion of IBD nurses in IBD care in Brazil.

Keywords – Crohn disease; ulcerative colitis; health care; health facility accreditation; outcome and process assessment.

INTRODUCTION

Inflammatory bowel diseases (IBD) are chronic and immunomediated diseases with a major impact in patient's quality of life and in healthcare costs. Crohn's disease (CD) and ulcerative colitis (UC) are the most common phenotypes of IBD, and their incidence and prevalence are currently increasing⁽¹⁾. The most effective way to avoid complications, restore quality of life and prevent disability is by give the patients the best possible care. Quality indicators for comprehensive care units (CCU) IBD were described for the first time in Spain in 2014⁽²⁾. Structure and process criteria were established. Process indicators are divided into quality and organization, diagnostic tests, patient care, surgery, admission, guidance, continuous education, and research. In almost ten years, several groups published on this subject with the aim of defining the best quality of care for patients with IBD⁽³⁾. One fundamental characteristic in a CCU is a multidisciplinary team (MDTs).

According to the National Accreditation Organization (ONA), "accreditation is the process by which health organizations acquire public recognition and provide, based on certain standards, the quality of services provided"⁽⁴⁾. Currently, quality indicators in care for people with IBD are gaining ground, with the aim of improving the general quality of care⁽⁵⁾. Nevertheless, in Brazil, there is no methodology for evaluating public and private health services that serve people with IBD, which can be recognized as CCU and with accreditation from the Brazilian Organization for Crohn's disease and colitis (GEDIIB), making it difficult to access the quality of care provided.

The aim of this study was to understand the current scenario, map the distribution of centers and identify strengths and weaknesses of each, considering local and regional characteristics. Considering the study's results, GEDIIB will propose levels of complexity in the IBD CCU. Additionally, the group intends to provide subsidies to strengthen each center with continuous education activities, training courses and personnel interchange.

METHODS

The study was carried out in three phases. Firstly,

a group of six IBD experts, members of the reference centers committee, representing the five Brazilian regions (one from the North, one from Northeast, one from Midwest, two from Southeast and one from South), developed 24 questions aiming to characterize the CCU in Brazil based on current literature (SUPPLEMENTARY TABLE 1)^(2,6-8).

In the second phase, all GEDIIB members were invited to respond the complete survey in which 11 questions (questions: 7; 11–14; 17; 20–24) were considered the most relevant by the committee and in line with the PANCCO (Pan American Crohn's and Colitis Organization) and GETECCU (Spanish Working Group on Crohn's Disease and Ulcerative Colitis) quality criteria (SUPPLEMENTARY TABLE 2)⁽⁷⁾.

An electronic mail containing the questionnaire was sent to all GEDIIB members and those who responded were included. All duplicate responses and those considered incomplete were excluded. Due to the subject in question, only those who believed they belonged to a reference center with a multidisciplinary structure responded to the questionnaire, excluding clinics and offices without such a structure, even if they exclusively treated IBD patients.

In the last phase, an analysis of the results was performed, using the IBM SPSS Statistics v 29.0.1.0 software. Descriptive statistics were used to characterize each center's profile. The chi-square test was used to compare categorical variables.

RESULTS

There were 53 replies as public centers. From these, five were excluded due to duplicity and six because of incomplete data. In regard to location, there is a clearly uneven distribution with the majority of centers concentrated in the Southeastern 22 (52.4%) and only one (2.4%) in the Northern region of Brazil. From the 42 validated replies, 33 centers (78.6%) have an IBD surgeon, 29 (69.0%) have regular scientific meetings, 31 (73.8%) have fellowship programs involved in patient care, 13 (31%) perform telemedicine, 40 (95.2%) reported easy access in the case of an IBD flare, 25 (59.5%) rely on an emergency service, while 38 (90.5%) have inpatient care, 36 with an IBD specialized physician. Regarding diagnostic assessment tools, 39 centers (92.9%) have endoscopic

SUPPLEMENTARY TABLE 1. Structural quality indicators in IBD^(2,6-8).

<i>Calvet et al</i>	<i>ECCO</i>	<i>PANCCO and GETECCU</i>	<i>Chen and Shen</i>
<p>Hospital characteristics</p> <p>1. The Inflammatory Bowel Disease Comprehensive Care Units (ICCU) should have a dedicated outpatient clinic with nurse care.</p> <p>2. The ICCU should have outpatient facilities where drugs can be administered intravenously.</p> <p>3. The ICCU should be integrated in a hospital with an Emergency Department.</p> <p>4. The ICCU should be integrated in a Digestive Disease Department that has hospitalization facilities.</p> <p>5. The ICCU should be integrated in a hospital with an Endoscopy Unit.</p> <p>Specific ICCU facilities</p> <p>6. There should be outpatient specialized clinics for IBD patients.</p> <p>7. The ICCU should have a telephone service for patient consultation.</p> <p>Registers</p> <p>8. The ICCU should have a registry of all the IBD patients.</p> <p>9. The ICCU should have a registry of IBD patients receiving biological drugs.</p> <p>Personnel</p> <p>10. The ICCU should have at least one IBD specialized nurse.</p>	<p>1. An IBD unit provides an interdisciplinary approach to the patient</p> <p>2. A structured interdisciplinary team for IBD has:</p> <ul style="list-style-type: none"> - an identified specialist - an identified nurse - an identified surgeon and clear referral pathway for complex IBD surgery such as ileoanal pouch - an identified pathologist - an identified radiologist - an identified dietician/nutritionist or a clear pathway for referral - an identified stoma management specialist or a clear pathway for referral - an identified endoscopist - an identified psychologist or a clear pathway for referral - a link to a pharmacist or a health care <p>3. At least one member of the multidisciplinary team provides patient education, counselling, emotional support, liaison, and continuity</p> <p>4. An IBD unit provides access to other appropriate medical specialties [e.g., rheumatologists, dermatologists, infectious disease specialists] to manage specific situations related to IBD in a timely manner</p> <p>5. An IBD unit has a named lead for the service</p> <p>6. An IBD unit develops and updates in-house departmental guidelines</p> <p>7. An IBD unit develops and updates quality indicators</p> <p>8. An IBD unit provides a contact line for the patient</p> <p>9. An IBD unit has outpatient facilities where</p>	<p>1. The Center of Excellence (COE) must have installations for outpatient care, at which drugs can be intravenously administered.</p> <p>2. The COE must be affiliated with a hospital that has an emergency service.</p> <p>3. The COE must be affiliated with a gastroenterology department that has hospitalization installations.</p> <p>4. The COE must be affiliated with a hospital with a gastrointestinal endoscopy service.</p> <p>5. The COE must provide specialized outpatient consultation for patients with IBD.</p> <p>6. The COE must have at least one nurse that is specialized in IBD.</p> <p>7. The COE must have a colorectal surgeon or a surgical team with experience in the surgical treatment of patients with IBD.</p> <p>8. The COE must include a radiologist with experience in IBD.</p> <p>9. The COE must have access to computed tomography (CT) imaging.</p> <p>10. The COE must have access to MRE and pelvic magnetic resonance imaging (MRI).</p> <p>11. The COE must have access to a diagnostic and therapeutic endoscopy unit with expertise in IBD.</p>	<p>1. IBD center should have a fixed MDT that includes gastroenterologists and surgeons, radiologists, pathologist, pharmacist, psychologist, obstetricians and gynecologist, and pediatrician to handle special cases. The team holds multidisciplinary case discussion regularly at least twice a month.</p> <p>2. IBD center has a fixed clinical dietitian.</p> <p>3. IBD center should have specialized nurses.</p> <p>4. Specialized outpatient unit is necessary in IBD center.</p> <p>5. IBD centers require a relatively fixed and reasonable number of hospital beds or specialized wards for IBD patients.</p> <p>6. All centers should have an electronic database.</p> <p>7. In these evaluation centers, standard operating procedure (SOP), including standardized screening, biological agent infusion process is necessary.</p> <p>8. Capsule endoscopy and enteroscopy should be the regular routine examination items.</p>

SUPPLEMENTARY TABLE 2. Survey variables.

1	Public or private health?
2	Localization and name of the center
3	Ambulatory care only, hospitalized patient or both
4	Multidisciplinary team at the center or referral
5	Nutritionist, nurse, psychologist
6	Ophthalmologist, rheumatologist, digestive surgeon, proctologist, radiologist, gastroenterologist, endoscopist, psychiatrist, pathologist, dermatologist, nutrologist
7	Surgeon with IBD experience
8	Scientific meetings and frequency
9	Fellows in IBD
10	Telemedicine
11	Easy access if flare
12	Emergency service
13	Hospitalized care with IBD specialist
14	Endoscopic exams and interventions
15	Endoscopy, colonoscopy, enteroscopy
16	Endoscopic dilatation
17	Radiologic exams
18	Computed tomography enterography and magnetic resonance enterography
19	Radiologist with experience in IBD
20	Infusion center for intravenous and subcutaneous drugs
21	IBD patient's registry
22	IBD specialized nurse
23	Evidence based protocols
24	Patient's satisfaction methodology

procedures, 33 (78.6%) with therapeutic endoscopy, but only 9 (21.4%) have access to enteroscopy and/or small bowel capsule endoscopy. The availability of computed tomography (CT) or magnetic resonance imaging (MRI) enterography was observed in 34 centers (81.0%) whilst 30 (71.4%) have an IBD experienced radiologist. Thirty-three centers (78.6%) offer infusion therapy locally, 26 (61.9%) keep registries of IBD patients, 13 (31.0%) reported having an IBD nurse, 34 (81.0%) have specific evidence-based protocols and only 7 (16.7%) have patient satisfaction methodology.

In the private scenario there were 56 replies from which 10 were excluded due to duplicity of data. Centers are again mostly concentrated in the Southeastern and Southern regions, similarly to public centers. Twenty-six centers are in the Southeastern (56.5%), eight in the Southern (17.4%) and none in the Northern region of Brazil. From the 46 valid replies, 39 centers (84.8%) have an IBD surgeon, 21 (45.7%) have regular scientific meetings, 25 (54.3%) perform telemedicine consultations, 41 (89.1%) reported easy access in flares, 25 (54.3%) have an emergency support service and 34 (73.9%) have an IBD specialist dedicated to inpatient care. In terms of diagnostic tools, 39 centers (84.8%) have access to endoscopic procedures and 19 have enteroscopy and/or small bowel capsule endoscopy, more than what was observed in the public setting. CT or MRI enterography is available in 41 centers (89.1%), of which 76%, have an IBD specialist radiologist. Infusion therapy is available in 24 centers (52.2%). Thirty-nine centers (84.8%) keep a specific database of IBD patients, 17 (37%) have an IBD nurse, 36 (78.3%) have specific evidence-based protocols and 22 (47.8%) apply a patient satisfaction methodology.

TABLE 1 summarizes the distribution of IBD care centers and TABLE 2 shows the location and number of all centers that responded to the survey by state.

FIGURES 1 and 2 demonstrate the geographical distribution of the prevalence of IBD, previously published by Quaresma et al.⁽⁹⁾ in correlation to the location of public and private CCU, respectively.

The results comparing public and private centers are summarized in TABLE 3. The presence of a multidisciplinary team, access to telemedicine, endoscopic capsule and infusion center, the maintenance of patient's registry and a patient's satisfaction methodology were all statistically different between public and private centers.

DISCUSSION

The largest and most current Brazilian epidemiological study to date was published by Quaresma et al. in 2022, carried out through data collection from the public health system⁽⁹⁾. A total of 212,026 unique patients with IBD were identified (UC: n=119,700; CD: n=71,321; unidentified inflammatory bowel disease (IBDU): n=21,005). In this nationwide population-based study from Brazil incidence rates of IBD remained stable over a decade, whilst they slightly decreased in CD and increased in UC. Cumulative prevalence significantly increased for IBD, CD and UC. A South-North gradient of prevalence of IBD was observed in 2020, with clusters of cities with higher prevalence being more concentrated in the South and Southeastern regions (more developed urbanized areas), whereas groups of cities with lower prevalence rates were more concentrated in the Northern and Northeastern regions (more rural areas). The snapshot

TABLE 1. Distribution of IBD care centers in Brazil by region.

Public Centers			Private Centers		
Region	Frequency	%	Region	Frequency	%
Midwest	5	11.9	Midwest	5	10.9
North	1	2.4	North	0	0
Northeast	9	21.4	Northeast	7	15.2
South	5	11.9	South	8	17.4
Southeast	22	52.4	Southeast	26	56.5
Total	42	100	Total	46	100

TABLE 2. Location and number of IBD centers per city and state.

Public center city	Public centers	State	Private center city	Private centers	State
Belo Horizonte	2	MG	Avaré	1	SP
Botucatu	1	SP	Barretos	1	SP
Brasília	2	DF	Belo Horizonte	3	MG
Campinas	1	SP	Blumenau	1	SC
Cascavel	1	PR	Botucatu	1	SP
Cuiabá	1	MT	Brasília	1	DF
Curitiba	1	PR	Campina Grande	1	PB
Dourados	1	MS	Campinas	1	SP
Fortaleza	1	CE	Campo Grande	1	MS
Gama	1	DF	Canoas	1	RS
Guarulhos	1	SP	Cascavel	1	PR
Itajaí	1	SC	Curitiba	1	PR
João Pessoa	1	PB	Divinópolis	1	MG
Juiz de Fora	1	MG	Goiânia	2	GO
Maceió	1	AL	Ipatinga	1	MG
Manaus	1	AM	Joaçaba	1	SC
Natal	1	RN	Juazeiro do Norte	2	CE
Niterói	1	RJ	Macaé	1	RJ
Passo Fundo	1	RS	Marília	1	SP
Porto Alegre	1	RS	Mossoró	1	RN
Recife	1	PE	Natal	1	RN
Rio de Janeiro	4	RJ	Niterói	1	RJ
Salvador	1	BA	Porto Alegre	3	RS
Santos	1	SP	Rio de Janeiro	3	RJ
São José do Rio Preto	1	SP	Salvador	1	BA
São Paulo	4	SP	Santo André	1	SP
Aracajú	1	SE	Santos	2	SP
Serra	1	ES	São Carlos	1	SP
Teresina	2	PI	São Paulo	4	SP
Uberlândia	2	MG	Sinop	1	MT
Vitória	2	ES	Teresina	1	PI
			Três Rios	1	RJ
			Vitória	1	ES
			Volta Redonda	1	RJ
Total	42		Total	46	

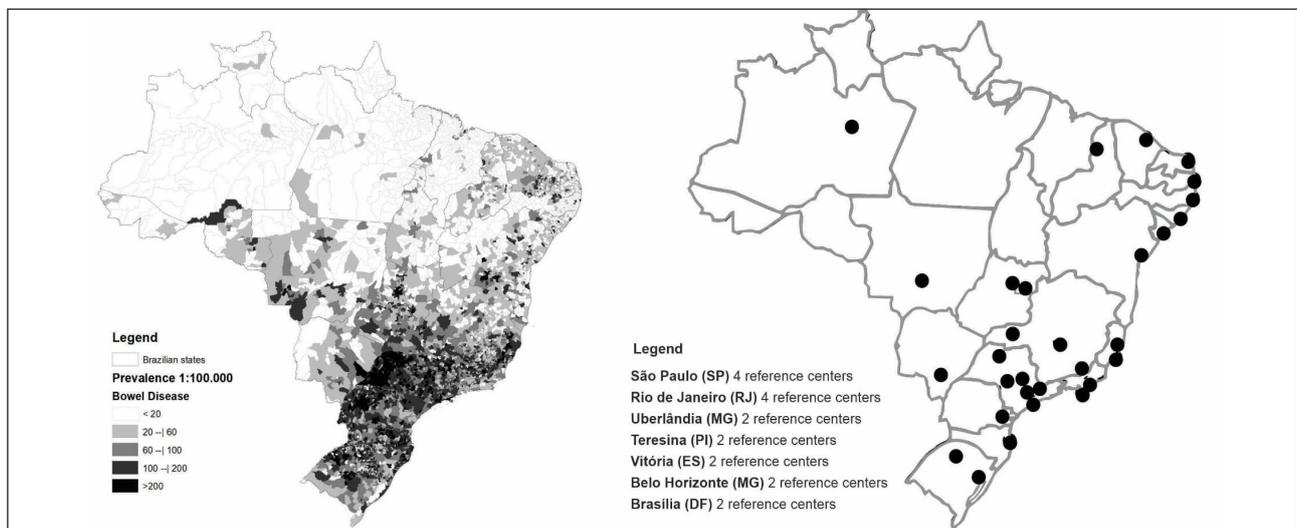


FIGURE 1. Prevalence maps and geographical distribution of the 42 public centers.

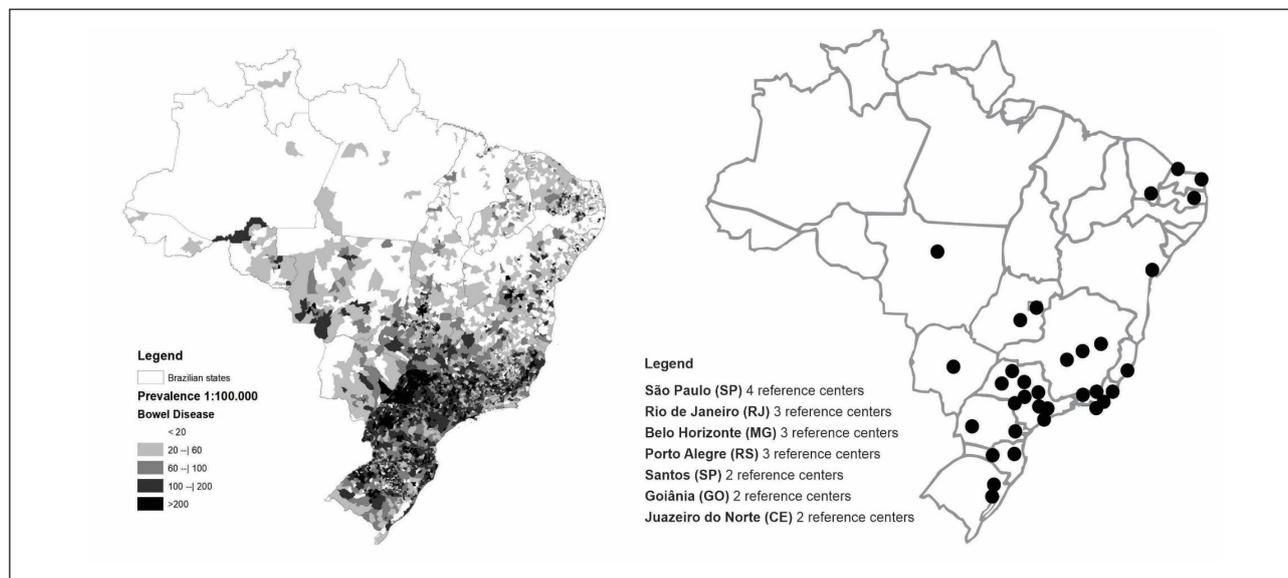


FIGURE 2. Prevalence maps and geographical distribution of the 46 private centers.

TABLE 3. Descriptive profile of the CCU regarding the healthcare system.

	Public (n=42)	Private (n=46)	P
Multidisciplinary team	42	37	0.002
Surgeon with IBD experience	33	39	0.451
Telemedicine	13	25	0.027
Easy access if flare	40	41	0.29
Emergency service	25	25	0.624
Hospitalized care with IBD specialist	36	34	0.17
Endoscopy	39	38	0.147
Colonoscopy	38	39	0.42
Enteroscopy	5	9	0.326
Small bowel capsule endoscopy	4	19	<0.001
Therapeutic endoscopist	33	39	0.451
Enterography (CT or MRI)	34	41	0.28
Radiologist with IBD experience	30	35	0.619
Infusion center	33	24	0.01
IBD patient's registry	26	39	0.015
Experienced IBD Nurse	13	17	0.553
Evidence-based protocols	34	36	0.755
Patient's satisfaction methodology	7	22	0.002

IBD: inflammatory bowel disease; CT: computed tomography; MRI: magnetic resonance imaging.

of this geographical distribution is important for the comparison of the location of most CCU. Indeed, CCU were mostly located in areas with higher prevalence of IBD throughout the country⁽⁹⁾.

In 2020, 0.1% of Brazilians were living with IBD contributing to a significant burden to the public healthcare system of Brazil. Most patients had a diagnosis of UC, with a UC:CD ratio of 1.7:1. These numbers place Brazil as a country with an intermediate to high prevalence of IBD in the 21st century. This significant rise in prevalence can support planning for future strategies for public healthcare providers in our country towards better IBD care, influencing the development of IBD CCU in the country⁽⁹⁾.

IBD management and access to healthcare in Brazil improved significantly over the last decades⁽¹⁰⁾. Rapid access to biological therapy, early treatment and multidisciplinary management are increasingly common practices in the most developed regions of the country. There is variability in care between urban cities with higher population concentrations and third-level hospitals compared to smaller cities in rural areas, where access to early diagnosis and diagnostic studies is more limited. The role of CCU is key to concentrate and standardize IBD care, and there is a clear lack of data on the specific impact of an IBD CCU in the country. The evaluation of patients with IBD by multidisciplinary teams can preferably be performed in specific high-volume centers,

located mainly in large urban centers. There is also variability in the number of CCU per region. Our data demonstrated that CCU, both in public and private healthcare systems, were mostly located in the Southern and Southeastern regions, mirroring the higher cumulative prevalence rates. These centers are located where there are more patients, as a natural consequence of concentration of IBD population.

There are ongoing initiatives to accredit CCU for the management of IBD in Latin America⁽⁷⁾, with the aim of improving referrals and allowing better management of the disease for patients in the region. This initiative was performed by the PANCCO following criteria defined by GETECCU⁽⁷⁾. Public IBD centers in Brazil most often have less resources in terms of multidisciplinary teams and diagnostic methods as compared to centers in Europe or North America⁽⁷⁾. This is a consequence of investment of resources in different healthcare systems, and more detail on outcomes derived from patient care in both realities deserves future investigation.

For GEDIIB, the accreditation of health services aims to reveal the standards of quality and safety in the care provided to people with IBD and conceptualize the levels of care in accordance with the proposed variables. As a proposal, IBD CCU can be categorized into three standards, as demonstrated in detail in TABLE 4. The criteria for classification of centers are based on availability of multidisciplinary teams, physical infra-structure, partnership with IBD surgeons and development of protocols for IBD care. The next steps of this project will be to create an updated record to apply process and outcome quality, to develop minimum requirements to define a reference center in IBD management in Brazil.

The first attempt to map CCU in Brazil was performed in 2017 (unpublished data), when a 33-item questionnaire involving personnel, facilities, surgery, and protocols was replied by 101 physicians. Most centers had a multidisciplinary team (53%), which participated in scientific meetings (52%), with a specialized endoscopist (53%), radiologist (67%) and surgeon (75%). Most had an infusion center (67%) and an emergency service (63%). Some weaknesses identified were the low numbers of IBD nurses (36%) and detailed patient registration as database

(36%). Clearly, in comparison with the more updated data, there was a development in the proportion of MDTs in CCU, demonstrating the growing interest in IBD care throughout the last years.

The N-ECCO (Nurses of the European Crohn's and Colitis Organization) consensus addresses the role of IBD nurses beyond administering medications and maintaining skin integrity in ostomy care. They represent a facilitator in the communication between the patient and the multidisciplinary team, providing information about fistulizing CD, diet and nutrition, incontinence, sexuality, fatigue and pain control with an impact on the patient's quality of life⁽¹¹⁾. Although there are no validated IBD nursing fellowships in Brazil recognized by the Federal Nursing Council⁽¹²⁾, the term IBD specialist nurse in the present study was adopted in reference to nurses who are deeply involved in IBD care due to their extensive clinical experience. Our data demonstrated that this is a current unmet need in CCU in Brazil. In addition, a study conducted by Barros and cols, identified the profile of IBD nurses in Brazil. Seventy-four nurses were included, the most of which are located in the Southeast and Northeast regions. The most prevalent workplaces were outpatient clinics and stoma therapy, they are also members of MDT, however, only four nurses worked exclusively with patients with IBD⁽¹³⁾. Therefore, efforts from our organization and national nursing councils are needed to improve specialized IBD nurses locally.

Additionally, ECCO's e-quality project is an initiative to identify gaps between ECCO recommendations and current practice in IBD care. A total of 119 centers from 25 countries answered 48 questions about structural quality indicators. Regarding the multidisciplinary team, 84% offered a specialized surgeon, 67% a pathologist, 72% a radiologist, 58% a nutritionist, 66% a stoma therapist and 55% a dedicated IBD nurse. As for the units, 93% had an infusion service and 87% had emergency departments⁽¹⁴⁾. These proportions demonstrate that in European countries, CCU have intrinsic weaknesses which still need improvement, even in developed regions, mostly in participation of IBD nurses in MDTs.

This study is associated with some limitations which need to be addressed. Data was based in self-reported information by physicians from diffe-

TABLE 4. Proposed standards for IBD CCU in Brazil.

	Standard A*	Standard B*	Standard C*
T E A M	MTDs consisting of all members in the same institution (gastroenterologist, surgeon, endoscopist, pathologist, radiologist, nurse, nutritionist, psychologist, rheumatologist, ophthalmologist, dermatologist, OG, social worker and pharmacist), all with experience in IBD. Regular multidisciplinary meeting to discuss cases (minimum monthly). Participation of the MTDs in IBD research.	MTDs**: gastroenterologist, surgeon, endoscopist, nurse, nutritionist with experience in IBD working in the same institution. Referenced professionals with experience in IBD: pathologist, radiologist, psychologist, rheumatologist, ophthalmologist, OG, dermatologist, social worker and pharmacist. Monthly multidisciplinary meeting to discuss cases.	MTDs**: gastroenterologist, surgeon, endoscopist, pathologist, radiologist, nurse, nutritionist, psychologist, rheumatologist, ophthalmologist, dermatologist, OG, social worker, and pharmacist, preferably with experience in IBD, referenced outside the institution.
S T R U C T U R E	Specific clinic for IBD. Diagnostic and therapeutic digestive endoscopy service with double-balloon and/or small bowel capsule endoscopy. Radiology service with CT/MR enterography. Infusion Center. Access to emergency care at the institution. Appropriate structure to deal with cases of severe acute colitis. Specific registry of patients with IBD. Specific record for biological medication. Open appointment for suspected reactivation and possible cases of hospitalization. Active participation of the responsible specialist in decisions during hospitalization. Ease of contact for problems related to treatment. Designation of a specialist doctor for each patient. Self-assessment system and information material for the patient.	Specific Clinic or Outpatient Clinic for IBD. Diagnostic and therapeutic digestive endoscopy service; enteroscopy and/or capsule not mandatory. Radiology service with CT/MR enterography. Infusion of biologicals in the institution according to protocols. Specific record of patients with IBD and for biologicals. Open access for suspected flares. Access to emergency care. Ease of contact for problems related to treatment. Appointment of a responsible specialist physician for each patient in the unit. Information material for the patient.	Clinic or outpatient clinic referred for IBD. Diagnostic and therapeutic digestive endoscopy service referred outside the institution. Radiology service with CT/MR enterography outside the institution. Specific record of patients with IBD. Specific record for biological medication. Appointment of open consultation for suspected flares. Ease of contact for treatment problems. Information material for the patient.
S U R G E R Y	Specific registry for surgical patients. Inpatient service with specialized IBD surgeons. Elective surgeries performed only by staff surgeons. Pre-surgical care with stoma care nurses. Ileal pouch performed only by trained and experienced surgeons. Documentation of pre-surgical risk and benefit guidelines (informed consent).	External access to inpatient service with specialized surgery for IBD	External access to inpatient service with specialized surgery for IBD
P R O T O C O L S	Use of updated protocols or adherence to international diagnostic and treatment guidelines. Use of drug protocols (preparation for immunosuppression and appropriate clinical monitoring for each therapy). Use of a specific protocol for patients treated at the institution's emergency room. Treatment protocols in pregnancy/lactation. Colorectal cancer prevention program in accordance with international guidelines. Antithrombotic therapy for all inpatients with IBD. Medication consent for patients taking medication.	Use of updated protocols or adherence to international diagnostic and treatment guidelines. Use of drug protocols (preparation for immunosuppression and appropriate clinical monitoring for each therapy). Use of a specific protocol for patients treated at the institution's emergency room. Treatment protocols in pregnancy/lactation. Colorectal cancer prevention program in accordance with international guidelines. Antithrombotic therapy for all inpatients with IBD. Medication consent for patients taking medication.	Use of updated protocols or adherence to international diagnostic and treatment guidelines. Use of drug protocols (preparation for immunosuppression and appropriate clinical monitoring for each therapy). Use of a specific protocol for patients treated at the institution's emergency room. Treatment protocols in pregnancy/lactation. Colorectal cancer prevention program in accordance with international guidelines. Antithrombotic therapy for all inpatients with IBD. Medication consent for patients taking medication.

CCU: comprehensive care units; IBD: inflammatory bowel disease; OG:obstetrician/gynecologist; MTDs: Multidisciplinary team. *Without hospitalization, surgery, or emergency. **Participation of team MEMBERS in at least one IBD scientific event per year.

rent levels of experience, who were members of the organization. Methodology was based in a survey, not audited by GEDIIB, and the number of responses was limited. Moreover, if these data represent both realities (public and private) at a national level, this still needs further investigation. Despite these limitations, the results from this national survey represent

the initial GEDIIB efforts aiming standardization of specific variables to define IBD CCU.

In summary, IBD CCU in Brazil were mostly located in southeastern and southern regions of the country. Most centers have dedicated multidisciplinary teams and specific physicians involved in IBD care. There is still a current need to improve the

proportion if involvement of IBD nurses in IBD care in Brazil. Future validation of the standards proposed in this manuscript is warranted.

Authors' contribution

Quaresma AB, Guedes LR, Barros JR, Kotze PG, Baima JP, Imbrizi M, Zerôncio MA, and Flores C designed and drafted the manuscript. All authors gave important intellectual contribution and reviewed the final version of the manuscript.

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Quaresma AB, Guedes LR, Barros JR, Baima JP, Imbrizi M, Zerôncio MA, Kotze PG, Flores C, on behalf of GEDIIB. Avaliação estrutural das unidades de atenção integral às doenças inflamatórias intestinais no Brasil. *Arq gastroenterol.* 2024;61:e23166.

RESUMO – Contexto – A forma mais eficiente de prevenir complicações da doença inflamatória intestinal (DII) é proporcionar aos pacientes cuidados otimizados. Contudo, no Brasil não existe uma metodologia validada para avaliação de serviços de saúde reconhecidos como unidades de atenção integral (UAI), dificultando a avaliação da qualidade da assistência prestada. **Objetivo** – Compreender o cenário atual, mapear a distribuição dos polos e identificar pontos fortes e fracos, considerando as características locais e regionais. **Métodos** – O estudo foi realizado em três fases. Inicialmente, a Organização Brasileira para Doença de Crohn e Colite (GEDIIB) desenvolveu 22 questões para caracterizar as UAI no Brasil. Na segunda fase, todos os membros do GEDIIB foram convidados a responder ao inquérito com as 11 questões consideradas mais relevantes. Na última fase foi realizada uma análise dos resultados, utilizando o software IBM SPSS *Statistics* v 29.0.1.0. Estatísticas descritivas foram utilizadas para caracterizar o perfil do centro. O teste qui-quadrado foi utilizado para comparar variáveis categóricas. **Resultados** – Houve 53 respostas de centros públicos (11 excluídas). A maioria das UAI concentrou-se na região sudeste (n=22/52,4%) e apenas 1 (2,4%) na região norte do Brasil. Trinta e nove centros (92,9%) realizam procedimentos endoscópicos, mas apenas 9 (21,4%) têm acesso à enteroscopia e/ou cápsula endoscópica. Trinta e três centros (78,6%) oferecem terapia de infusão localmente, 26 (61,9%) mantêm registros de pacientes com DII, 13 (31,0%) relataram ter uma enfermeira para DII, 34 (81,0%) têm protocolos específicos baseados em evidências e apenas 7 (16,7%) possuem uma metodologia de satisfação do paciente. No cenário privado houve 56 respostas (10 excluídas). Há também concentração nas regiões sudeste e sul. Trinta e nove centros (84,8%) têm acesso a procedimentos endoscópicos e 19 realizam enteroscopia e/ou cápsula endoscópica, mais do que o observado no ambiente público. A terapia infusional está disponível em 24 centros (52,2%). Trinta e nove centros (84,8%) mantêm um banco de dados específico de pacientes com DII, 17 (37%) têm uma enfermeira para DII, 36 (78,3%) têm protocolos específicos baseados em evidências e 22 (47,8%) aplicam uma metodologia de satisfação do paciente. **Conclusão** – As UAI do DII no Brasil estavam localizadas principalmente nas regiões sudeste e sul do país. A maioria dos centros possui equipes multidisciplinares dedicadas e médicos com experiência em DII. Ainda há uma necessidade atual de melhorar a proporção de enfermeiros no tratamento de DII no Brasil.

Palavras-chave – Doença de Crohn; colite ulcerativa; assistência médica; acreditação de unidades de saúde; avaliação de resultados e processos.

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