

## Competitors and product advantages

### Market Overview:

1. Primary competitors like MyIBD, Colitis Diary, CaraCare, Bowelle, etc., offer symptom tracking, educational content, community interaction, and some remote monitoring features. These apps focus on individual aspects of IBD management but lack a comprehensive and integrated approach.
2. Secondary competitors like Nerva, FODMAP Diet, Calm, and Toilet Finder address broader aspects related to IBD such as diet, stress management, and daily convenience. They cater to lifestyle and wellness but do not directly integrate medical or clinical care.

### Gap in the Market:

1. Integrated Patient-Clinician Interface: There is a clear gap in the market for an app that effectively bridges the communication and management divide between patients and healthcare providers in IBD.
2. Comprehensive Care: Most existing apps focus on specific areas (symptom tracking, diet, mental health), but an app that encompasses all these aspects, along with clinician involvement, is not currently available.

### Competitive Advantage:

1. Enhanced User Experience: Our app can significantly enhance the user experience by providing a one-stop solution for IBD management, encouraging long-term user retention.
2. Data-Driven Insights: Integrating patient and clinician data can provide valuable insights for personalised care plans and better disease management strategies.
3. Market Positioning: Our app's comprehensive approach positions it not just as another health app but as a critical tool in the IBD management ecosystem, appealing to patients and healthcare providers.
4. **Team Dynamics:** Zonitas is a team of experts led by a seasoned physician in Gastroenterology and surgery. The team includes nurses, clinicians, and an in-house technical expert, providing a good balance of subject and technological expertise for building a robust product.

## Potential challenges/risks in the future that could hinder the implementation of our solution

1. Integration into Clinical Workflows:

**Challenge:** Integrating with existing healthcare systems and workflows without causing any extra burden on clinicians.

**Risk:** Poor integration can lead to low adoption rates among healthcare providers and inefficiencies in patient care.

## 2. Digital Divide:

**Challenge:** Addressing differences in access to technology since not all patients may have the necessary devices or internet connectivity.

**Risk:** This could lead to missing out on patients who do not have the required technology.

## 3. Data Security and Privacy:

**Challenge:** Ensuring the security and privacy of patient data is crucial in healthcare applications.

**Risk:** Breaches in data security can cause trust to be lost and lead to legal and reputational consequences.

## 4. User Engagement and Retention:

**Challenge:** Keeping the clinicians and users engaged over time with the app.

**Risk:** Low engagement or high drop-off rates can undermine the app's effectiveness.

## 5. Regulatory Compliance:

**Challenge:** Meeting all healthcare regulations and standards may vary widely depending on the region.

**Risk:** Non-compliance can lead to legal issues and hinder the app's adoption.

## 6. Interoperability with Other Health Systems:

**Challenge:** Ensuring the app can effectively communicate and exchange data with other healthcare systems and tools.

**Risk:** Poor interoperability can limit the app's functionality and usefulness in healthcare.

## 8. Cost and Funding:

**Challenge:** Securing sufficient funding for the app's development, maintenance, and scaling.

**Risk:** Financial constraints can limit the app's development and impact.

## 9. User Education and Support:

**Challenge:** Educating users (patients and clinicians) on effectively using the app.

**Risk:** Lack of understanding or support can result in underutilisation or misuse of the app.

## The market we are addressing

The global market for treating Inflammatory Bowel Disease (IBD) was worth \$20.33 billion in 2022 and is projected to grow by 3.6% annually from 2023 to 2030. Market research suggests that there are between 2.5 to 3 million IBD patients in the European Union, which results in a direct healthcare cost of 4.6–5.6 billion Euros per year. The highest incidence and prevalence rates are found in Scandinavia and the United Kingdom, while Eastern Europe reports lower incidence rates. However, there are increasing incidence rates in Eastern Europe as well.

The cost of treating IBD is highest in the first year of diagnosis and decreases during follow-up appointments. More than half of the costs in the first year are attributed to hospitalisations and diagnostics; in subsequent years, biologicals account for increased expenditure. The mean annual cost per patient-year for biologicals is €866.

Direct healthcare costs have shifted from hospitalisation and surgery to drug-related expenditures with the increasing use of biological therapy and other novel agents. The direct healthcare costs are approximately €3500 in Crohn's disease (CD) and €2000 for ulcerative colitis (UC) per patient per year. Additionally, there are substantial indirect costs arising from work productivity loss with an annual cost of €1253 to €12063 per patient, depending on the country in EU. According to the Lancet Gastroenterology Hepatology, the mean cost per patient-year for IBD follow-up treatment in Europe is €2609. Considering direct, indirect, and follow-up costs for a patient population of 2.5-3 million, our comprehensive solution could contribute to greater overall savings.

## **Targeted market (size, competitive landscape) and the current demand for the innovation.**

### **Target Audience**

Inflammatory bowel disease (IBD) impacts around 6.8 million people globally and has two age-peak distributions. The first peak is between 30 and 40 years, and the second is between 60 and 70. Recent data shows that the age demographics of IBD patients have significantly shifted. In 2010, people aged 65 and above made up less than 20% of all IBD patients, but now they account for over a third. Currently, around 25-35% of IBD patients are over 60 years old. Moreover, approximately 25% of the IBD population develops the condition before the age of 18. It is essential to note that treatment approaches differ significantly between age groups. Children under 18 require different management strategies than adults. The remaining adult population, which forms the central portion of the population, is approximately 45-50%. This population is more prone to significant indirect costs, such as productivity loss.

Based on this data, here's the primary target audience.

1. **Young Adults (18-30 years):** They are likely to be highly receptive to a mobile app solution and have a long-term need for IBD management tools.
2. **Middle-Aged Adults (30-60 years):** This group can significantly benefit from an app integrating IBD management into their potentially busy lifestyles.

Also, since, there is a growing aging population and a significant number of people above 60 years old suffering from IBD, they will be the secondary target audience.

### **Demand for the Innovation**

The demand for an innovative solution like an IBD management app is robust and growing, particularly in the context of the challenges highlighted in the OECD report and the evolving demographics of IBD patients.

1. Aging Population and Increased Prevalence of IBD:

As the population ages, the prevalence of IBD in older adults is rising. This demographic shift increases the demand for efficient and accessible healthcare solutions. Zonitas can be a solution for older IBD patients, who represent a more significant portion of the IBD community.

## 2. Healthcare System Pressures:

The OECD healthcare faces significant pressures, including nursing shortages and capacity limitations. Zonitas can alleviate some of this pressure by offering patients tools for self-management, reducing the need for frequent in-person consultations.

## 3. Technological Advancement as a Solution:

The OECD report underscores the role of technological innovation in managing healthcare costs and improving care quality. With features like symptom tracking, medication reminders, and personalised care plans, Zonitas aligns well with this perspective, offering a cost-effective and scalable solution.

## 4. Integrated Care Systems:

There's a trend towards developing integrated care systems. By facilitating better patient data management and communication between patients and healthcare providers, Zonitas can be a cornerstone in integrated care for IBD patients.

## 6. Global Reach and Scalability:

The app's digital nature allows for easy scalability and adaptation to different markets and healthcare systems worldwide. This flexibility can cater to the diverse healthcare landscapes and patient needs across countries.

## **Competitive landscape**

Speaking of the key competitors, MyIBD, Colitis Diary, CaraCare, and Bowelle, are the top players. There are only a couple of players in the market, and these apps offer symptom tracking, educational content, and some level of remote monitoring. However, these apps lack a comprehensive solution that combines patient and clinician interfaces. There is a gap in the market for a unified communication platform that streamlines management and monitoring for both patients and clinicians, improving communication and treatment efficacy.

## **Potential development barriers (legal/market/users' acceptance, etc.), and how we are going to mitigate them?**

### 1. Legal and Regulatory Compliance:

**Barrier:** Navigating healthcare regulations and data privacy laws, such as HIPAA in the USA and GDPR in the European Union.

**Mitigation:** Collaborate with legal experts to ensure compliance with all relevant healthcare regulations and data protection laws. Regular audits and system updates as regulations evolve are essential.

### 2. Market Entry and Competition:

**Barrier:** Standing out in a market with established players like MyIBD, Colitis Diary, CaraCare, and Bowelle.

**Mitigation:** Focus on unique selling propositions, such as the unified patient-clinician interface and holistic approach, a smooth user interface, and gamification to ensure engagement. Additionally, a solid marketing strategy, collaborating with social media influencers, and exploring partnerships or alliances with healthcare providers could enhance market penetration.

### 3. User Acceptance and Adoption:

**Barrier:** Patient and clinician resistance due to a change in routine, technology apprehension, or lack of perceived value or trust in the application.

**Mitigation:** Conduct user-centred design and testing to ensure the app is user-friendly and meets the needs of both patients and clinicians. Collaboration with IBD organisations, groups, foundations, and hospitals will be crucial. Educational and training initiatives will ease the transition and demonstrate the app's value.

### 4. Integration with Existing Systems:

**Barrier:** Challenges in integrating the app with existing healthcare IT systems and electronic health records (EHRs).

**Mitigation:** Develop the app with interoperability in mind. Engage with IT experts and potential healthcare partners early in development to ensure seamless integration with existing systems.

### 5. Financial Sustainability:

**Barrier:** Ensuring the project is financially viable in the long term.

**Mitigation:** Explore diverse revenue models, such as subscription-based models for clinicians or institutions, partnering with insurance companies, or offering premium features. Additionally, seeking funding or grants, especially those aimed at innovative healthcare solutions, can support initial development and scaling.

### 6. Importing Data

**Barrier:** Help current users of competitors import their data to this application.

**Mitigation:** Develop a data import feature in the app that can easily extract and transfer data from competitors' standard file formats (CSV, JSON, XML).

By proactively addressing these barriers, Zonitas can enhance its chances of successful market entry and sustained growth in the competitive IBD mobile health market.