

## “Mobile Health in Management of Gastrointestinal Diseases: Opportunities and Challenges”

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**Background:** With the advancement of technology and the ubiquity of mobile device and smartphone, people have started using mobile applications for various health needs. For patients with gastrointestinal diseases, using of mobile health can promote improved quality of care delivery and clinical outcomes.

**Objectives:** the purpose of this study is to investigate the application and challenges of mobile health in management of gastrointestinal disease.

**Materials and Methods:** We searched Web of Science, PubMed, Scopus and Google Scholar by using related keywords such as “gastrointestinal disease”, “digestive disorder”, “mobile app”, and “mobile health”. Relevant studies have been selected and reviewed based on the specified inclusion/exclusion criteria.

**Results:** Mobile health has various applications in management of gastrointestinal disease, including Information dissemination, patient education, virtual visit and communicate with health care providers, patient monitoring and tracking, and reminder and alarms. Based on the review, there are some challenges and limitations in utilizing mobile health in the care of these patients, including privacy and confidentiality issues, smartphone accessibility, e-health literacy, lack of health care professional involvement in the design of mHealth apps, usability issues, limited evidence related to validity, accuracy and clinical outcomes of mHealth apps, user acceptance and insurance reimbursements.

**Conclusion:** Mobile health can be effective in managing digestive disease and improving self-management, patient empowerment and quality of care delivery. Despite the advantages and capabilities, there remain some potential challenges and limitations that need to be investigated and addressed.

**Keywords:** mHealth, mobile health, digestive disorder, gastrointestinal disease

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