

INSIGHTS FROM THE ISCARE CLINIC IN THE CZECH REPUBLIC

Groundbreaking achievement to improve IBD patient care by remote monitoring

The Clinical and Research Center for Inflammatory Bowel Disease ISCARE a.s. and Charles University is one of the largest clinical and research centers in the Czech Republic, where more than 5,000 patients receive treatment for inflammatory bowel diseases (IBD).

It is also the home of the Virtual Clinic for Inflammatory Bowel Diseases. This virtual clinic started its activity in 2018, and since the beginning of 2022, its services for distance care for IBD have been covered by public health insurance. Currently, 2,100 patients use the services of the IBD ISCARE Virtual Clinic.

DIGITAL HEALTH SOLUTIONS FOR REGULAR IBD MONITORING

People living with IBD can benefit from regular monitoring to decrease the number and severity of flare-ups. This could have a significant improvement in the quality of life and a significant decrease in medical facility use¹. Digital healthcare solutions (e-health) enable healthcare providers to remotely monitor patient health and provide real-time data on their condition. This helps reduce costs and time associated with direct visits for the patients. In addition, remote monitoring allows patients to have better control over their health, as they can receive regular updates regarding their medical condition.

Remote monitoring or e-health has revolutionized the way healthcare is delivered and will certainly play an important role in the future of healthcare delivery models. As the demand for medical resources rises, remote monitoring might become a cost-efficient alternative to deliver healthcare for people with IBD². Furthermore, the COVID-19 pandemic lockdowns have further illustrated the importance of e-health in maintaining health services to patients in geographic or social isolation.

"CalproSmart has played a critical role in achieving the reimbursement. CalproSmart it is an integral part of our telemedicine platform."

REIMBURSEMENT OF REMOTE IBD MONITORING SUPPORTED BY CALPROSMART®

As of the beginning of 2022 in the Czech Republic, remote care for patients diagnosed with IBD (or who have had at least one standard clinical examination) is covered by public health insurance. Insurance companies reimburse the procedure for centers specializing in the diagnosis and treatment of IBD. It is required that the results of remote examinations are automatically stored in the patient's medical record, together with image documentation of the examination.

This has been possible, in part, thanks to the use of CalproSmart self-test for remote monitoring of intestinal inflammation. Fecal calprotectin levels – a well-known inflammatory biomarker- are determined by CalproSmart at home and automatically stored in the patient's medical record on ISCARE virtual clinic website.

There is still more job to be done as patients that are stable or in remission for a long time would also benefit from remote monitoring, however it is a breakthrough achievement, elaborates MUDr. Černá.



MUDr. Karin Černá ISCARE Clinic





INCREASING ACCESS FOR IBD PATIENTS TO REMOTE CARE

To use the CalproSmart, users and patients first have to register on the ISCARE Virtual Clinic website. This is also where patient test result data is stored. Patient results are sent to the web portal, while at the same time, an encrypted email is sent to a pre-determined healthcare professional for followup. The test can be linked to hospital journal systems through API integration.

The Virtual Clinic gives patients easier and faster access to all necessary information. In one place, patients can request prescriptions, book appointments, get advice from their health care providers and have access to test results. Before starting calprotectin self-test, patients are instructed on how to self-monitor and receive detailed written instructions and a link to a detailed instructional video. The patient performs selftest 4 times a year (once a quarter), when health difficulties occur, or at the request of a physician.

Currently, 2,100 patients use the services of the ISCARE Virtual Clinic and over 200 patients perform self-testing of intestinal inflammation using the CalproSmart self-test kit and numbers are increasing every day.

"CalproSmart has played a critical role in achieving the reimbursement. CalproSmart it is an integral part of our telemedicine platform. The ease of use and accessibility of CalproSmart has made it possible for us to care for patients who may not have had the possibility to come to the clinic, I look forward to its continued use as we strive to provide the highest quality care to our patients", notes MUDr. Černá. "At Calpro, a Svar Life Science Company, we are dedicated to creating and delivering the most effective solutions for care for those with IBD. We have discovered that we can assist our partners in providing more convenient access to treatment and monitoring – we are optimistic that this will serve as a model for more countries."

Kris Sikorski, PhD Deputy CEO Calpro

CALPROSMART A RELIABLE WAY FOR REGULAR IBD REMOTE MONITORING

Studies show that Calprotectin, an inflammatory biomarker, starts to increase 3-6 months before the clinical symptoms are registered by the patient, making it possible to detect and treat a flare at sub-clinical levels^{3,4}.

CalproSmart is a rapid test for remote monitoring of patients with established IBD, such as Ulcerative Colitis and Crohn's Disease. Being a proactive test, the patient will perform the Calprotectin test at home at regular intervals at their own discretion. CalproSmart has been shown to be a fast and reliable assessment of gut inflammation by the patient themselves, making it a beneficial factor in the decision-making process of doctors and patients⁵.

The test is based on lateral flow immunoassay principles while utilizing app-based technology on mobile phones (Android and iOS) with a step-by-step guide, to give quantitative results. The range for the test is 77-1500 mg/kg^{*}.

1. Pang, L. et al. Role of Telemedicine in Inflammatory Bowel Disease: Systematic Review and Meta-analysis of Randomized Controlled Trials. J Med Internet Res 24, e28978 (2022).

2. Rojahn, K. et al. Remote Monitoring of Chronic Diseases: A Landscape Assessment of Policies in Four European Countries. PLoS One 11, e0155738 (2016).

4. Bjarnason, I. The Use of Fecal Calprotectin in Inflammatory Bowel Disease. Gastroenterol Hepatol (N Y) 13, 53–56 (2017).

 Vinding, K. K. et al. Fecal Calprotectin Measured By Patients at Home Using Smartphones—A New Clinical Tool in Monitoring Patients with Inflammatory Bowel Disease. Inflammatory Bowel Diseases 22, 336–344 (2016).
* According to data on IFU

Calrpo AS, a Svar Life Science company

Visiting address: Arnstein Arnebergsvei 30 1366 Lysaker Norway

T +47 40 00 42 79

- E calprosupport@svarlifescience.com
- W www.calpro.no



^{3.} Diederen, K. et al. Raised faecal calprotectin is associated with subsequent symptomatic relapse, in children and adolescents with inflammatory bowel disease in clinical remission. Alimentary Pharmacology & Therapeutics 45, 951–960 (2017).