Impact For Patients: Patient-Reported Outcome Consortium

Patient-Reported Outcome (PRO) Consortium helps to provide drug developers with the clinical outcome assessment (COA) tools necessary to target symptoms and functional impacts that matter most to patients.

PRO Consortium: integrating voices of patients, enabling future therapies

Irritable bowel syndrome (IBS) is a chronic and oftentimes debilitating collection of symptoms that occur in conjunction with disruptions in a person’s bowel movements. These disruptions can include constipation, diarrhea, or both and are accompanied by symptoms that include bloating, cramping, abdominal pain and urgency. IBS is one of the most common gastrointestinal (GI) disorders, impacting around 11% of the global population. Its diagnosis is based on symptom criteria because there are no consistent and reliable diagnostic biomarkers.

Despite its prevalence, there are still considerable gaps in our understanding of what causes IBS. IBS is categorized as a functional GI disorder, reflecting the influence that important interactions between the brain and the gut have on bowel function and associated symptoms. Research suggests many factors contribute to distinct subtypes of individuals processing food through their GI tract either too quickly (diarrhea-predominant), too slowly (constipation-predominant), or both (mixed). Although some patients have success treating IBS symptoms with changes in diet, probiotics, lifestyle changes, or mental health interventions, others rely on medication for relief from symptoms.

Drug development for IBS is complicated. Because of the differences in bowel disturbances across subtypes of IBS patients (i.e., diarrhea-predominant, constipation-predominant, or mixed), it is unlikely that a single potential therapy would prove successful in treating all patients. Furthermore, the severity of IBS symptoms can vary day-to-day, even with treatment, making it difficult to measure the efficacy of potential therapies across subtypes of patients (i.e., diarrhea-predominant, constipation-predominant, or mixed). Because there is no “gold standard” treatment for IBS, potential therapies must be compared to a placebo, and, importantly, because there are no reliable biomarkers associated with the disorder, assessment of symptom severity and treatment responses during clinical trials must be done using patient-reported outcome (PRO) measures. These challenges stress the need for measures that are capable of monitoring symptoms that vary across time and that are sensitive enough to capture changes within a clinical trial, that capture metrics that are meaningful to patients, and that can distinguish between patients with different subtypes. PRO Consortium was formed in 2008 by Critical Path Institute (C-Path) in cooperation with the U.S. Food and Drug Administration’s (FDA) Center for Drug Evaluation and Research and the pharmaceutical industry. The mission of PRO Consortium is to establish and maintain a collaborative framework with appropriate stakeholders for the qualification of PRO measures and other clinical outcome assessments (COAs) that will be publicly available for use in clinical trials where COA-based endpoints are used to support product labeling claims.

Since 2010, PRO Consortium’s IBS Working Group has been developing PRO measures for each of the three IBS subtypes, with the anticipation that patient responses to PRO measures would be used to generate endpoints in clinical trials for new treatments. Using structured interviews with patients to inform the process, PRO Consortium developed the Diary for Irritable Bowel Syndrome Symptoms (DIBSS) and...
refined the measure to reflect the experiences of patients with each of the three subtypes: constipation-predominant (DIBSS-C), diarrhea-predominant (DIBSS-D), and mixed symptom (DIBSS-M). The DIBSS was developed as a daily and event-based diary to facilitate the collection of reliable data in a condition subject to natural variability.\(^5\)

By tailoring PRO measures for each subtype, PRO Consortium helps provide drug developers with the tools necessary to incorporate the patient’s voice into the process, enables targeting of the specific symptoms that matter most to patients, and provides a means of informing novel patient-focused endpoints.

For example, FDA expanded the label for the drug LINZESS® (linaclotide) to include results of a phase 3b clinical trial conducted by Ironwood Pharmaceuticals, Inc. and AbbVie Inc. that used DIBSS-C to assess an endpoint for improved abdominal symptoms (bloating, abdominal pain, abdominal discomfort).\(^6\) This is the first time a PRO Consortium measure has been used to support a label claim.

C-Path and PRO Consortium orchestrate collaborative efforts across diverse groups of stakeholders to make drug development tools, like the DIBSS, publicly available. Tools like the DIBSS-C enable patients’ voices to be more effectively heard and incorporated into the medical product development process and accelerate the path of novel therapies to patients in need.

“The use of patient-reported outcomes to support a treatment’s label expansion reinforces FDA’s commitment to the needs of the gastrointestinal illness community. It is a clear indication that patient voices are being heard and a huge win for the community as a whole. IFFGD is proud to be a part of PRO Consortium’s IBS Working Group and we are excited to see the continued emphasis on meeting true patient needs by listening to patient voices.”

Ceciel T. Rooker, President of International Foundation for Gastrointestinal Disorders and a participant in the IBS Working Group

Access Citations