+ CASE STUDY

CHARACTERIZING DISEASE FROM THE PATIENT'S POV

Characterizing a progressive, debilitating disease from the patient's point of view (POV) may sound obvious for disease assessment; however, in the case of relapsing-remitting multiple sclerosis (RRMS), slowing the progression of the disease is usually the first priority of treatment. Patient-centric outcomes, such as patient well-being and health-related quality of life (HRQoL), are often secondary considerations despite the fact that these outcomes may be profoundly affected by experience of symptoms.

VALIDATING BOTH PATIENT AND DISEASE ASSUMPTIONS IN CLINICAL TRIALS

The Challenge

A leading pharmaceutical company wanted to describe the symptoms of RRMS from the patient's perspective. They aimed to explore how symptoms cluster together in patients and assess the relationship between symptom clusters and health outcomes, including HRQoL. This would not be easy as patients attribute a wide variety of symptoms to MS, and symptoms are sometimes considered as clusters of symptoms rather than individual. Finally, no quantitative, data-driven identification of symptom clusters and their impact had been described in the MS literature. They engaged Kantar Health to help quantify the burden of symptoms.

The Kantar Health Difference

We leveraged the National Health and Wellness Survey (NHWS), the largest global, self-reported, general population survey in the healthcare industry. The study revealed that the most commonly reported symptoms of RRMS patients were fatigue, difficulty balancing or walking, numbness, pain, and difficulty remembering, all experienced by more than half of respondents. Clusters of symptoms were identified through hierarchical cluster analysis, and the impact of symptom clusters on outcomes was isolated using regression analysis.

Results indicated that patients' perceptions about their RRMS, as well as important patient-centric outcomes such as HRQoL, were strongly related to the experience of symptoms. These symptoms may be understood as clusters of symptoms, and several clusters were significantly associated with HRQoL. The number and type of symptoms is important in determining patients' perceptions of disease severity, with more severe patients reporting a greater number of symptoms on average.

We concluded that symptoms in RRMS are strongly related to HRQoL and that assessments of MS should incorporate patient experience of symptoms and impact on HRQoL, in addition to clinical measures of disease progression and disability, to comprehensively evaluate treatment interventions.