



# Delivering value based healthcare

## Measuring outcomes that matter to patients:

Enhancing clinical management of non-motor symptom burden in Parkinson's Disease.



### The challenge

Non-motor symptoms are a key determinant of quality of life for patients with Parkinson's Disease.

- Parkinson's Disease is the second most common neurodegenerative disorder affecting more than 125,000 people in the UK, and one in 50 over 80 years-of-age
- Studies show that non-motor symptoms are a key determinant of quality of life for patients with Parkinson's Disease
- Studies further find that non-motor symptoms are often not recognised and poorly treated.

### Our intervention

Our researchers developed the first patient-reported questionnaires that allow clear documentation of different non-motor symptoms.

- Non-motor Symptoms Questionnaire (NMSQuest) was the first ever patient-screening tool to assess common Parkinson's Disease non-motor symptoms
- The Non-motor Symptoms Scale (NMSS) was developed to provide a measure of non-motor symptom severity. It provides a key predictor of health-related quality of life
- The Parkinson's Disease Sleep Scale (PDSS) and the PDSS-2, developed in 2002 and 2011 respectively, help address mild-moderate sleep disturbances experienced by Parkinson's Disease patients
- The Kings Parkinson's Pain Scale (KPPS) was developed for the management of severe pain in Parkinson's disease– a key unmet need.

### Our impact

NMSS is now used worldwide for cutting-edge clinical trials and patients feel empowered to report non-motor symptoms and receive appropriate treatment.

- NMSS is now used worldwide for cutting-edge clinical trials
- NMSQuest is recommended by foremost patient charities and societies across the world including, reference in ICHOM (International Consortium for Health Outcomes Measurement)
- Patients are empowered to report non-motor symptoms and receive appropriate treatments, leading to implementation of patient outcome-based policy-making in England and internationally
- PDSS and KPPS were recommended by a taskforce from the Movement Disorders Society for worldwide use, with 671 articles currently in Pubmed using PDSS.