[Bayer Pharmaceuticals](#)' development portfolio often raises the question of sleep assessment as an important quality-of-life pillar of patients' health, which can be positively affected by the new therapies.

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Sleep is being increasingly recognized as a critical aspect of health. Sleep disturbances are often seen as symptoms of underlying chronic conditions. We viewed the Core Measures of Sleep project as an opportunity to unite resources on a pre-competitive basis and present the case for the development of novel digital endpoints for assessing sleep function. A pharmaceutical trial endpoint is not just a measurement, it is a clinically validated development tool.

— Michael Kremliovsky
Sr. Director, Medical Devices & eHealth, Bayer

The opportunity

- Bayer's partner companies, [BlueRock](#) and [AskBio](#), are developing novel cell and gene therapies to treat Parkinson's disease (PD). The therapies, which are hoped to produce lasting effects, will significantly improve patients' lives.

- Many patients with PD experience changes in their sleep quality as the disease progresses. Quantifying the changes and showing positive long-term effects of the cure can be an important measure of therapeutic success.

The impact

- ✔ The [Core Digital Measures of Sleep](#) allow Bayer to draw on the knowledge of relevant aspects of patient health arising from the conceptual model of sleep disturbances.

- ✔ Cataloging sleep monitoring technologies within the Core Digital Measures of Sleep system gives Bayer a basis for measuring sleep in PD patients longitudinally in real-life settings, allowing the development of a relevant biomarker for the disease progression.

The resources

- The Core Digital Measures of Sleep project developed a conceptual model highlighting the meaningful aspects of health that are important to patients.

- Bayer chose the Core Digital Measures of Sleep based on clinical and patient relevance and technological maturity in collecting the necessary data.

- The sleep measurement system describes the underlying variables in the core measures and heavily focuses on sleep staging and the evidence needed to offer a transparent account of sleep measurements. As evidenced by ongoing clinical studies, the system also allows Bayer to select clinical measures outside the defined Core Digital Measures specific to their needs.