

Accurate assessment of tremor in patients with movement disorders is crucial for optimizing therapy and clinical trials. Current practice for assessment of motor symptoms is based on a brief clinical evaluation. However, these evaluations are limited due to fluctuations in symptoms during the day. With rapid advances in micro-electro mechanical systems, inertial sensors have successfully been used to monitor patients' movement mainly in clinics. In this study, we used inertial sensors to track tremor in patients with Parkinson's disease at home. We show that simple objective measures calculated from inertial sensors can successfully track tremor fluctuations caused by dose cycles during normal daily activities.