Team HEALD

Impact statement:

More than 115,000 admissions occur yearly in the US for patients with cirrhosis due to flares of hepatic encephalopathy (HE). Approximately 40% of these admissions could be prevented due to early detection and treatment of HE flares. Currently there is no practical way of tracking HE progression in its early stages. We present an app-based wristwatch tool to passively monitor sleep and movement patterns to predict with a machine-learning algorithm early HE progression for patients with cirrhosis and their caregivers, to prompt timely clinical intervention to reduce hospital admissions.