



## PARKINSON'S DISEASE NEWS

<http://www.viartis.net/parkinsons.disease/news.htm>

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### MONITORING PARKINSON'S DISEASE USING SMARTPHONES

Smartphones have been assessed for their use in monitoring Parkinson's Disease. A smartphone (smart phone) is a mobile phone with an advanced mobile operating system. For more information go to : <https://en.wikipedia.org/wiki/Smartphone>

Participants were provided with smartphones with an Android operating system containing a smartphone application that assessed voice, posture, gait, finger tapping, and response time. They underwent in-clinic assessments, including the Unified Parkinson's Disease Rating Scale (UPDRS), which is the most used Parkinson's Disease symptom questionnaire.



Participants then took the smart phones home to perform the five tasks four times a day for a month. Once a week they had a remote visit with a Parkinson's Disease specialist in which a modified (excluding assessments of rigidity and balance) UPDRS was performed. The analyses of the five tasks differed between those people with Parkinson Disease and those people who did not have Parkinson's Disease. There was a high degree of accuracy. In discriminating participants with Parkinson's Disease the mean sensitivity was 96% and the mean specificity was 96%.

Measuring Parkinson's Disease symptoms via a smartphone is highly accurate in distinguishing people with Parkinson's Disease. The researchers conclude that it is therefore feasible and has potential value as a diagnostic support tool.

Reference : Parkinsonism Related Disorders [2015] Mar 7 [Epub ahead of print] (S.Arora, V.Venkataraman, A.Hang, S.Donohue, K.M.Biglan, E.R.Dorsey, M.A.Little)  
Complete abstract : <http://www.ncbi.nlm.nih.gov/pubmed/25819808>

<http://www.viartis.net/parkinsons.disease/news/150403.pdf>  
mail@viartis.net  
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