



Deep Brain Stimulation: Patient Selection for Parkinson's disease

NASEM Workshop (October 31, 2023)

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Disclosures

Travel expenses for educational events: Boston Scientific, Medtronic
Deep Brain Stimulation Nurse Association (DBSNA) educational grants: Boston Scientific, Medtronic and Abbott



Patient selection

- Multidisciplinary approach, expert clinicians and patient involvement
- Eligibility Criteria for DBS surgery
- Identifying predictive factors that will influence outcome after DBS surgery
- Special considerations
 - Patient expectations and Motivations
 - Educating patients and family regarding perspectives of living with implantable device
 - Establishing a suitable device for the patient





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Standard Eligibility Criteria

- Established Diagnosis
 - UK Parkinson's Society Brain Bank Criteria
 - 5 years minimum disease duration (CAPSIT-PD)
- Levodopa responsiveness
 - – 33% (CAPSIT-PD)
 - - 40% (UK NHS Eligibility criteria)
- Neuroimaging
- Cognitive/neuropsychology assessment
- Motor fluctuations
 - >30% of a 24-hour period in either a disabling off state or with disabling dyskinesia (UK NHS)
 - Life expectancy of 5 or more years (UK NHS)
- Speech and swallowing
- Psychiatric assessment



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|--------------------|------------------|
| • Age | targeting |
| • Quality of life | • Levodopa |
| • Disease duration | responsiveness |
| – early versus | • Neuroimaging |
| delayed DBS | • Axial symptoms |
| • Cognition and | • Co-morbidities |
| behavior | • Non-motor |
| • Disease | burden |
| phenotype | |
| • Genetics | |
| • Electrode | |



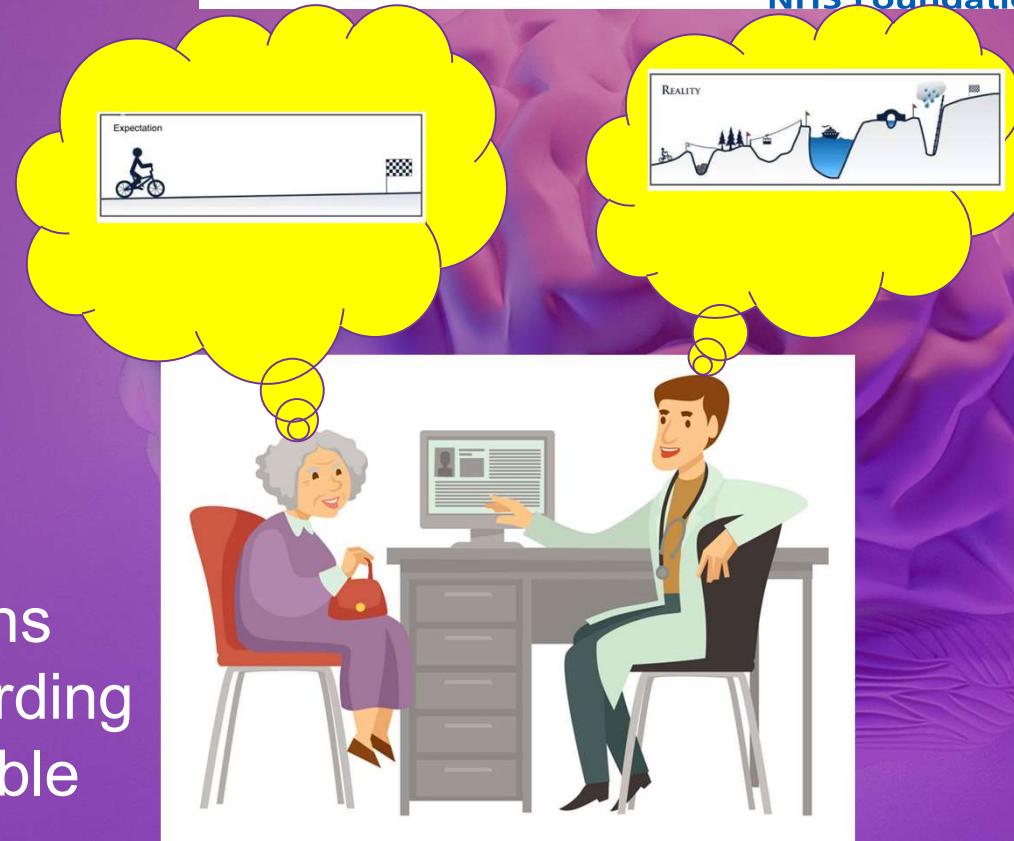
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University College London Hospital
NHS Foundation Trust

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