Implementing Systematic Screening and a Treatment Algorithm for Depression in Parkinson’s Disease

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**OBJECTIVE**

Assess the feasibility and impact of systematic depression screening and management in movement disorders centers.

**BACKGROUND**

Depression is common in Parkinson’s disease (PD) and has a significant impact on quality of life. A survey of clinicians at Parkinson’s Foundation Centers of Excellence (PF COEs) revealed that most centers do not systematically screen for depression, and that the use of mental health professionals and antidepressants varies substantially, suggesting that clinical practice changes could improve care. Here we describe the methods and outcome measures for a study designed to implement systematic screening and a treatment algorithm for PD depression as a standard of care.

**METHODS**

A mental health working group was convened, consisting of experts in Parkinson’s clinical research, psychiatry, social work, narrative medicine, implementation science, biostatistics, and a person living with PD. Additional psychiatry and psychology experts helped design a depression treatment algorithm and educational materials.

**Figure 1. Study Flow**

- **Prospective follow-up**: Monitor proportion screened for depression at the site. Assess screening impact: Follow screen-positives

- **-12 months**: Administer GDS-15 to patients at follow-up care visits

- **12 months**: Qualitative interviews to assess acceptability, feasibility, barriers and utility among: Patients and care partners, Health care providers

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**METHODOLOGY**

Two PF COEs in Canada and three in the United States will participate. To assess baseline depression screening practices, a consecutive sample of medical records will be reviewed. Prospectively, systematic depression screening of all PD patients will be implemented using the Geriatric Depression Scale-15 (GDS-15) (Figure 1). Clinicians will be provided with a recommended treatment algorithm (Figure 2), a shared decision-making tool specific for depression (Figure 3), and patient-facing educational resources. One hundred thirty individuals screening positive for depression will be prospectively followed for changes in health-related quality of life (PDQ-39) and GDS-15 scores. A subset of people with PD, care partners and health care providers will participate in qualitative interviews to assess the feasibility and acceptability of depression screening.

The primary outcome is the feasibility and acceptability of systematic depression screening. Secondary outcomes include the proportion of patients screening positive for depression and, within that group, the change in GDS-15 and PDQ-39 emotional subscales over 12 months.

**CONCLUSION**

This study will test the hypothesis that implementation of systematic depression screening will help to elucidate the logistics and impact of depression screening in routine care. Ultimately, the study will help identify unrecognized depression in PD, improve depression care, and improve quality of life for those living with PD.