

What's Hot in Parkinson's Disease? February 2010

The Time for Comprehensive Care Networks for Parkinson's Disease: The Importance of the Dutch ParkinsonNet Concept

Michael S. Okun, M.D.
National Medical Director, National Parkinson Foundation

A very important article appeared in Lancet Neurology in the December 2010 Lancet Neurology issue (early view) featuring research from one of the NPF's Centers of Excellence in the Netherlands (Center Director- Bas Bloem). Munneke and colleagues from that center introduced the ParkinsonNet concept; a framework aimed at igniting a sea change in PD-related care. The concept is "powerful, potentially modifiable, and exportable to other regions and to other countries." The idea is simple: deliver Parkinson's disease care through an integrated network (that may be geographically dispersed across a country), that would provide a more convenient and more integrated experience for patients.

This group performed what is referred to as a cluster-randomised trial (699 patients) within community-based hospitals and they assigned patients to ParkinsonNet care or usual care and followed them for 6 months. The stated goals of the authors were " (a) to evaluate the implementation of this change in the healthcare system; (b) to record the consequences of implementing ParkinsonNet care, by measuring the health benefits for patients; and (c) to evaluate the influence on societal costs of this new organisation of care." Although the primary endpoint (a Patient Specific Index PSI-PD) did not differ between groups, the ParkinsonNet provided an overall greater quality of care while reducing the overall gross financial burden to society.

"Physical therapy is the most popular and widely utilized form of allied healthcare for PD-related motor and mobility issues. In fact, the number of published PD physiotherapy and exercise trials has increased by over 500% in recent years. Exciting findings from exercise-based animal studies have hinted at neuroplastic changes, and even the possibility of disease modifying effects. Several clinical trials have suggested that physiotherapy may significantly enhance both motor performance and quality of life. Unfortunately these findings have to date failed to penetrate into community-based practice."

"Though the results of this study were a little disappointing (re: the primary outcome variable), we should not take our eyes off the ParkinsonNet concept. Future redesigned studies may reveal more robust functional outcomes. The ParkinsonNet program was successfully initiated on a large population of patients who were widely dispersed across an entire country. Cost and treatment quality improved, and this novel initiative may provide an infrastructure for PD care that

will enhance the individual patient experience and hopefully improve outcomes.”

*The above What's Hot article was drawn from the article and the editorial in Lancet Neurology- reference listed below (please see full articles for details).

Munneke M, Nijkrake MJ, Keus SH, Kwakkel G, Berendse HW, Roos RA, Borm GF, Adang EM, Overeem S, Bloem BR; ParkinsonNet Trial Study Group. Efficacy of community-based physiotherapy networks for patients with Parkinson's disease: a cluster-randomised trial. *Lancet Neurol.* 2010 Jan;9(1):46-54. Epub 2009 Dec 1.

Hass CJ, Okun MS. Time for comprehensive care networks for Parkinson's disease. *Lancet Neurol.* 2010 Jan;9(1):20-2. Epub 2009 Dec 1.