

Model Systems Knowledge Translatior Center

# Quick Review of Model System Research

## Evaluating the Siebens Model in Geriatric-Stroke Inpatient Rehabilitation to Reduce Institutionalization and Acute-Care Readmissions<sup>1\*</sup>

#### What is the study about?

This study looked at the differences between older stroke patients treated with the Siebens Domain Management Model (SDMM) and older patients not treated with the SDMM. The SDMM provides a patient management plan to provide a standard structure for all weekly multi-disciplinary conferences to assess patient problems, progress and barriers to discharge to home.

#### Who participated in the study?

The study included all stroke patients over the age of 75 admitted to one inpatient rehabilitation hospital between 2010 and 2012. It also included data for all stroke patients over the age of 75 in a national database for medical rehabilitation outcomes (the Uniform Data Systems for Medical Rehabilitation (UDSMR) Metrics Reports).

#### How was the study conducted?

This study compared the before-and-after effects of using the SDMM at the hospital. The study compared patients' recovery before the hospital used the method to the recovery of patients treated after the hospital started the SDMM method. Researchers compared both groups' recovery outcomes (Functional Independence Measures efficiency scores at discharge, and disposition rates to acute-care, institutional care and home), to the national average of patients over 75 who had a stroke.

### What did the study find?

Overall, researchers found that the SDMM method is helpful for older stroke patients. Patients using the SDMM stayed in the hospital for less time, were sent back to their home and community more often, had less complications resulting in transfers back to an acute-care hospital, and had higher cognitive and motor functioning scores compared to both the national average and the pre-SDMM group. These are important measures for recovery.

The contents of this quick review were developed under a grant from the National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR grant number 90DP0012). However, these contents do not necessarily represent the policy of Department of Health and Human Services, and you should not assume endorsement by the Federal Government.

<sup>1</sup> Kushner, D.S., Peters, K.M., & Johnson-Green, D. (2016, February). Evaluating the Siebens Model in geriatric-stroke inpatient rehabilitation to reduce institutionalization and acute-care readmissions. Journal of Stroke and Cerebrovascular Diseases, 25(2), 317-326. \*The contents of this summary have been reviewed by the corresponding author of the original study.