

## **Large Multi-center Study on Joint Replacement Rehabilitation Finds that Hospital-based Rehabilitation Centers Provide Modestly Better Outcomes**

### **Study's Medium-volume Skilled Nursing Facilities also Perform Well**

In a series of five articles published in the August issue of the *Archives of Physical Medicine and Rehabilitation*, researchers report that hip and knee replacement patients in hospital-based rehabilitation centers, commonly known as inpatient rehabilitation facilities (IRFs), recover faster and have marginally better functional outcomes compared to patients who receive their rehabilitation in skilled nursing facilities (SNFs) where patients typically stay longer but receive less intense services.

The findings come from a large multi-center study of 2,152 joint replacement rehabilitation patients led by the National Rehabilitation Hospital's Center for Post-acute Studies in Washington, DC. The study was conducted in collaboration with the Institute for Clinical Outcomes Research in Salt Lake City, UT and with 9 SNFs and 11 IRFs from across the nation. The Lewin Group, a Washington area health policy research firm, and IT HealthTrack, a New York patient follow-up firm, also contributed to the study.

“After adjusting for patient differences, outcome differences between the two settings were not large and were even less noticeable after several months,” explains Gerben DeJong, PhD, the Center's director and the study's principal investigator.

Apart from setting, the study found three things that make for better outcomes:

- Starting rehabilitation earlier rather than later after surgery;
- Obtaining more intense therapy, namely more physical and occupational therapy per day akin to what is found in IRFs; and
- Going to a facility that serves a ‘medium volume’ of joint replacement patients.

“The study's medium-volume facilities, both SNFs and IRFs that treated between 100 and 183 yearly, had the best results. Low-volume facilities do much less well,” adds DeJong.

“Most striking is what we found in our follow-up interviews with patients,” DeJong notes. The study found that patients, after leaving a SNF or an IRF, go on to use a great deal more therapy through home health and outpatient care. “The use of these follow-up services may wash out some of the longer-term differences that might have otherwise existed, but more importantly, this finding told us that we need to examine the entire episode of care and not just the initial post-discharge setting.”

Hip and knee replacements are among the nation's most common surgical procedures with over 1 million joint replacements annually. The Centers for Medicare and Medicaid Services has been concerned about the growing demand for post-discharge rehabilitation associated with the procedure and would prefer to see joint replacement patients channeled to less expensive post-acute rehabilitation settings. SNF-level care is viewed as less expensive than IRF-level care.

Accompanying the five articles is a commentary by Margaret Stineman, MD and Leighton Chan, MD, the journal's deputy editor.

The study was funded by a consortium consisting of HealthSouth, Brooks Health, the ARA Research Institute, the American Hospital Association, the Federation of American Hospitals, the National Rehabilitation Hospital, and others.

More on the study can be found at: <http://www.archives-pmr.org/?tpstoken=71.c0us2GjNW4b46l4FlupT5Q25t8X45YA0AVkllsnxVtA7lu8YZmnRfA%3D%3D>