

## **Factors Contributing to Sleep Disturbance with Patients in an Acute Hospital Setting**

Investigators: Todd Hultman, Ph. D., ACNP, ACHPN, Siobhan Haldeman, MSN, RN, Christine Annese MSN, RN, Sharon Bouvier MS, RN

Contact Person: Todd Hultman  
Work Address: 600 Founders Hall  
Massachusetts General Hospital  
55 Fruit Street  
Boston, MA 02114

Email Address: [thultman@partners.org](mailto:thultman@partners.org)  
Telephone: 617-724-5953

Approved HRC Protocol #: 2009P002838

---

**Purpose of the Study:** This study investigated the sleep experiences of hospitalized patients prior to their admission as well as during their acute care stay.

**Background/Significance:** Sleep disturbance has been correlated with a decrease in immune function, changes in mental status, and increased stress levels. Negative effects on the immune system, functional status and stress levels may aggravate the healing process for adults requiring acute care in a hospital setting. Further research is required to understand better how environmental modifications and nursing interventions may effectively support sleep for patients in acute care settings.

**Method/Design:** This qualitative study used open-ended questions related to sleep and sleep disturbance. A convenience sample of patients who had spent three consecutive nights on a general medical unit, a surgical unit or a cardiac access unit were interviewed. Structured interviews were audio-taped and transcribed.

Members of the research team analyzed the transcripts using content analysis to identify critical themes. These findings were shared with unit-based nursing staff for content validity.

**Findings:** Trends in responses suggested that patients do not expect to sleep well at the hospital. The themes identified were: the hospital ambience aggravates sleep, the importance of more aggressive symptom management including sleep disturbance, brief naps during the daytime help the patient to feel rested, and that patients find routine nocturnal care (such as vital signs) as both understandable and bothersome.

**Implications for Nursing Practice, Research, Policy, and/or Education:** The patient's perceived sleep disturbance bear further investigation as it relates to nursing practice. Given the need for more aggressive symptom management, investigating nursing advocacy and patient education in symptom management is indicated. It is anticipated that this pilot study will lead to further research in nursing practice as it relates to supporting sleep and rest in hospitalized patients.

## **Fall Prevention in Hospitals: Impact of Fall TIPS Toolkit on Documentation Quality**

Investigators: Diane L. Carroll, PhD, RN, Patricia Dykes, RN, DNSc, Ann C. Hurley, DSNc, RN

Contact Person: Diane L. Carroll, PhD, RN

Work Address: POB 426

Email Address: dcarroll3@partners.org

Telephone: 617-724-4934

Approved HRC Protocol #: 2007p001583

Presented at: American Academy of Nursing November 2010 Washington, DC

---

**Purpose of the Study:** The purpose of this study was to evaluate the effectiveness of an electronic fall prevention toolkit (Fall TIPS) for promoting documentation of fall risk status, and planned and completed fall prevention interventions.

**Background/Significance:** Patient falls are serious problems in acute care hospitals. Nurses routinely perform fall risk assessment on hospitalized patients. However, the use of patient-specific screening results to tailor a fall prevention plan is less frequent. The process of translating a multiple-level fall risk assessment into tailored interventions is time consuming and difficult in the context of busy acute care workflow.

**Method/Design:** Randomly assigned medical units at 4 hospitals received the Fall TIPS toolkit (n = 4 (5267 patients)) or usual care (n=4 (5116 patients)). To evaluate the quality of the documentation, study staff used a random number generator to select 15 medical records during 3 separate visits to treatment or usual care units. Records were reviewed and documentation related to fall risk status, planned, and completed interventions were entered into a data base.

**Findings:** Patients on the treatment units were more likely to have fall risks Identified on the plan of care (88.7% vs. 64/4%, p<.0001) and interventions documents to address risks Including history of falls ( 98% vs 48%, p<.0001), secondary diagnosis (93% vs 28%, p<.0001); need for ambulatory aid (95% vs 34%, p<.0001), intravenous therapy (93% vs 34%, p<.0001), impaired gait ( 93% vs 43%, p<.0001), impaired mental status (92% vs 62%, p<.002). No differences were found related to documentation of completed interventions on treatment or usual care units.

**Implications for Nursing Practice, Research, Policy, and/or Education:** Implications for Nursing Practice, Research, Policy, and/or Education: The documentation of fall risk status and planned interventions tailored to patient-specific areas of risk was significantly better on the treatment units than usual care units, but no other differences were noted to documentation of completed intervention.