Post-emergency department adverse outcomes in medicare patients presenting with musculoskeletal conditions

Statement of the Problem: Little is known regarding adverse events that occur after an acute unscheduled emergency department visit for musculoskeletal conditions that do not require admission to the hospital. If emergency physicians are to make better disposition decisions, it is important that these events be identified. The purpose of this study was to quantify post-discharge adverse events including death, repeat ED visit without admission and admission to the hospital or observation status in a cohort of Medicare-eligible patients within 30-days of an ED visit.

Methodology: 979,511 events for a subset of musculoskeletal system and connective tissue (MDC 08) that occurred in 2014 were identified in a review of 6.9 million ED visits. Visits for any diagnosis that resulted in >90% admission or inpatient observation stays were excluded. Discharge dispositions were identified as were the adverse outcomes of interest.

Finding: 927,006 medicare-eligible individuals made 979,511 eligible ED visits. About 713,842 (72.9%) events resulted in discharge from the ED. The most frequent discharge diagnoses included spinal and pelvic conditions (23.9%), back and neck pain (17%), lower extremity injuries (15.9%), pain or swelling (8.3%) and upper extremity injuries (7.2%). Post-ED visit rates across groups were 5.3% within 7-days of the visit and 11.2% within 30 days. The 30-day mortality rate was 0.2%. Admission or observation stay rates were 2.8% at 7 days and 7.5% within 30 days of the index ED visit.

Conclusion & Significance: This is the first study that identifies the frequency of post-ED visit adverse events for medicare-eligible patients suffering musculoskeletal trauma. The results should convince hospitals and physicians that these events are not rare, provide information regarding populations at risk for these events and to adopt tools that mitigate this risk.

Biography
Susan Nedza is the Senior Vice President of Clinical Outcomes at MPA Healthcare Solutions and an Adjunct Assistant Professor at the Feinberg School of Medicine of Northwestern University. She is board-certified in Emergency Medicine and Clinical Informatics. She has received her Bachelor of Science in Chemistry from Gannon University and her Doctorate from Loyola-Stritch School of Medicine. She has also completed the Executive Master's Program at the J L Kellogg Graduate School of Management at Northwestern University. She is experienced as a board-certified Emergency Medicine Specialist, Researcher, Chief Medical Officer at the Centers for Medicare and Medicaid Services, Senior Executive at the American Medical Association and a Health Information Technology Executive.

snedza@northwestern.edu

Notes: