Study IDs surgical never events, contributing factors

June 5 2015

(HealthDay)—Surgical never events and contributing human factors have been identified, with individual cognitive factors contributing one half of all nano-codes, according to a study published online May 29 in *Surgery*.

Cornelius A. Thiels, D.O., from the Mayo Clinic in Rochester, Minn., and colleagues conduced a systematic causation analysis promptly after operative and invasive procedural "Never Events" (retained foreign object, wrong site/side procedure, wrong implant, wrong procedure) from August 2009 to August 2014. Contributing human factors were classified based on four levels of error causation described by subcategories (nano-codes).

The researchers identified 69 never events in about 1.5 million procedures performed during the study. They identified 628 contributing human factor nano-codes. Across all four types of events, most nano-codes were action-based errors (260) and preconditions to actions (269), with individual cognitive factors accounting for one half of the nano-codes. Confirmation bias and failure to understand were the most common action nano-codes (36 each). Channeled attention on a single issue and inadequate communication were the most common precondition nano-codes (33 and 30, respectively).

"Targeting quality and interventions in system improvement addressing cognitive factors and team resource management as well as perceptual biases may decrease errors and further improve patient safety," the authors write. "These results delineate targets to further decrease never events from our health care system."

Two authors disclosed financial ties to medical device companies.

More information: Abstract
Full Text (subscription or payment may be required)