IDENTIFYING ACTIONABLE INFORMATION: PREVENTABLE 30-DAY NEUROSURGICAL READMISSIONS.

Maxwell Laurans,1 Evgeniya Tyrtova,2 Melani Semlow1. 1Yale-New Haven Hospital, United States; 2Yale School of Medicine, United States

Background Hospital readmissions within 30 days after discharge are increasingly recognized as markers of inpatient quality of care and significant contributors to rising healthcare expenditures. Identifying potentially preventable readmission causes and developing targeted interventions is a national priority.

Objectives To determine rate, reasons, and potential for prevention for 30-day unplanned neurosurgical readmissions at Yale-New Haven Hospital.

Methods Over a 6-month period, all patients who had been discharged from YNHH after receiving care from the Department of Neurosurgery and readmitted within 30 days were retrospectively identified. In-depth chart analysis was performed to uncover relevant medical/social history and admission/readmission details.

Results During 6 months, 84 (6.6%) of 1,279 patients were readmitted within 30 days. Reasons for readmission were categorized into miscellaneous (34%), non-surgical site infections (15%), postoperative wound complications (14%), intracranial hemorrhage (13%), neurological deficits: brain (10%), CSF device malfunction (8%), neurological deficits: spine (4%), and ischemic CNS events (2%). Most complications were moderate (54%) or mild (31%). Overall, 17% of readmissions were determined to be likely preventable, 10% – potentially preventable, 73% – not preventable. Notably, 42% of postoperative wound complications and 32% of brain-related neurological deficits could have been prevented. 49% of readmissions were related to initial hospitalization and 12% resulted from inappropriate post-discharge care; 34% and 88% of those, respectively, were preventable.

Conclusions Overall, 27% of 30-day neurosurgical readmissions were determined to be potentially preventable. Underlying reasons were identified and will be used to design targeted interventions. Preventing postoperative wound complications and providing appropriate discharge arrangements/instructions are the most promising areas of improvement.