Study shows a quarter of patients discharged from hospitals return to ERs within 30 days

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A study led by researchers at the Perelman School of Medicine at the University of Pennsylvania and Boston University School of Medicine has found that nearly one quarter of patients may return to the emergency department within 30 days of being discharged from a hospitalization. None of these emergency room visits that do not lead to subsequent admission are included in calculating hospital readmission rates, which are a key focus of health care cost containment and quality improvement efforts. The findings are published in *Annals of Emergency Medicine*.

The authors say the number of emergency department visits following hospital discharge may be even higher than the rate they found, since data collection was restricted to the data from a single "safety-net" hospital in Boston, meaning there was no way to determine whether patients were treated at another hospital's emergency department during the period of the study.

"Hospital readmissions within 30 days of inpatient discharge are frequent and costly," said the study's lead author, Kristin Rising, MD, a fellow in the Center for Emergency Care Policy & Research in the department of Emergency Medicine in Penn's Perelman School of Medicine. "But current methods of measuring readmissions are missing a large part of the picture since they only include inpatient-to-inpatient hospitalization and ignore return visits to the emergency department that do not result in admissions."

The findings are important because a large number of U.S. patients receive their care from safety-net institutions like the one studied, the authors note. Safety-net hospital patients are disproportionately likely to be beneficiaries of Medicare and Medicaid, and they're more likely to be uninsured and not have a family physician—and thus more apt to turn to the emergency department for care when they experience complications after being discharged from the hospital.

The federal government, principally the Centers for Medicare & Medicaid Services, has invested heavily in policies, incentives, technical assistance, and new payment models to prompt providers to reduce avoidable rehospitalization.

For example, under pay-for-performance, hospitals are financially penalized for readmissions that occur within 30 days of discharge. As a result, they have undertaken a number of steps to reduce readmissions, including patient and family education, nurse check-ins, and even telemonitoring once patients return home.

A major implication of the study is that emergency department clinicians should play an active role in efforts to reduce avoidable hospital use. "The large number of patient visits to the emergency department shortly after discharge—and the fact that emergency departments are increasingly the primary source of hospital admissions—means that at least part of the solution to reducing readmissions will rest with clinicians in the emergency department who are making decisions about whether to admit patients to the hospital," said Rising. The question of how ED providers can be most effective in breaking the readmission cycle depends upon determination of patients' greatest needs at time of ED presentation, she adds.

The study found that nearly half of return visits – 46 percent—did lead to subsequent rehospitalization, which means they are included in

readmission data. Rising and her colleagues found that congestive heart failure was the primary diagnosis for return emergency department visits with both subsequent discharge and subsequent readmission. After heart failure, the clinical patterns diverge: the top three diagnoses for return emergency-department visits with subsequent discharge were diabetes with complications, complications of a device, and pneumonia. In contrast, the top three diagnoses for return emergency-department visits with subsequent readmission were complications of a device, sickle cell anemia, and abdominal pain. "These findings indicate that initiatives to address recurrent hospital use may need to vary, depending on the types of recurrent visits being targeted," said Rising.

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