Racial disparities in emergency department length of stay point to added risks for minority patients

March 5 2009

Sick or injured African-American patients wait about an hour longer than patients of other races before being transferred to an inpatient hospital bed following emergency room visits, according to a new national study published in the journal *Academic Emergency Medicine*. The authors say the findings underscore the urgency to find equitable, cost-effective solutions to provide better care in the nation's emergency departments, which are already strained by unprecedented crowding and more visits from the nation's uninsured population, which is expected to balloon toward 55 million people in the next decade.

"Emergency departments are not designed to care for patients for long time, but it happens all over the country," says lead author Jesse M. Pines, MD, MBA, MSCE, an assistant professor of Emergency Medicine and Epidemiology at the University of Pennsylvania School of Medicine and a senior fellow in Penn's Leonard Davis Institute of Health Economics. "What's most concerning is that the longer people stay in the ED, the more likely they are to die. Our findings may actually explain some of the worse outcomes that we see in black populations. But the good news is that these disparities are actually fixable. Hospitals do need to put more resources into EDs to improve efficiency, but the real problem is the on the 'back-end,' because hospitals tend to prioritize inpatient patients for elective procedures and make the ED patients wait. Now we know that minorities are disproportionately affected by this system."

In an examination of 14,516 hospital admissions from emergency departments in 408 U.S. hospitals between 2003 and 2005, the authors found a mean overall emergency room length of stay of 349 minutes. African-American patients, however, waited about an hour longer than those of other races, for admission to both intensive-care units and non-ICU beds. Despite adjusting for factors that might influence length of stay disparities, the authors were unable to identify a reason for the differences, though they say factors such as socioeconomic status or severity of patients' illnesses could play a role.

The disparity was most striking among the emergency departments' sickest patients, those admitted to ICUs. For black patients in this group, the mean length of stay in emergency departments was 367 minutes, compared to 290 minutes for non-African American patients. Fifty percent of black ICU patients also spent more than six hours waiting for an inpatient bed, compared to 37 percent of patients of other races. Since previous studies have linked emergency department boarding in excess of six hours to higher death rates among patients who are eventually admitted to ICUs, the authors say their findings may point to an added overall risk for minority patients.

Though admission from the emergency department requires an often complex matrix of steps, previous Penn research shows that prolonged emergency department stays before admission - called "boarding" -- is associated with myriad complications and shortcomings in care for acutely ill patients. Among the costs: Higher death rates, poor pain control, and greater risk of delays in key treatments for illnesses like heart attacks, pneumonia, stroke and appendicitis.

The non-profit National Quality Forum, which works to develop national strategies for health care quality measurement and reporting recently approved a project that will establish several measures of emergency department waiting times (including amount of time before patients see

a provider and overall length of stay). These will become a standard part of hospital quality measurement. Just as hospitals must reveal their compliance with recommended care for conditions including heart attack, surgical infections and pneumonia, these new measures will ensure that hospitals remain accountable for eliminating dangerous disparities.

"Some the greatest medical advancements of the last decade can be totally erased by spending a couple hours longer than necessary in the ED. It continues to perplex me as to why hospitals allow this to happen," says the study's senior author, Judd Hollander, MD, professor and director of clinical research in the department of Emergency Medicine. "Even prior to the economic downturn, some institutions had actually begun prioritizing hospital beds for insured patients having lucrative elective procedures. These measures will only worsen disparities for minorities. Congress needs to make certain that 'not for profit' hospitals do not compromise patient care in pursuit of greater profits."

Source: University of Pennsylvania School of Medicine