

CASE STUDY: IS TRIAGE REALLY NECESSARY?

Like their colleagues at most busy emergency departments across the United States, the ED staff at UCSF Medical Center in San Francisco use a structured triage process for all walk-in patients. A greeter nurse briefly screens patients on arrival, and those who have obvious life-threatening complaints are immediately placed in a treatment room. All other patients are formally triaged before or after registration using the Emergency Severity Index (ESI). Then they are directed either to a treatment space or to the waiting room if no space is available.

Concerned that this mandatory triage process could be causing unnecessary delays in patient care, Dr. Weber, professor of emergency medicine at the UCSF School of Medicine, decided to investigate how quickly high-acuity walk-in patients completed triage. "I realized our staff might be reluctant to try other approaches to triage because they didn't want to compromise patient safety," Weber says. "So I wanted to look at whether our current triage process is really as safe as we think it is."

According to the ESI guidelines, ESI Level 1 patients should be treated by a physician upon arrival at the ED, and ESI Level 2 patients should be treated within 10 minutes. For her study, which was published in the *Annals of Emergency Medicine* in August 2011, Weber examined data on 3,932 high-acuity (ESI Level 1 or 2) walk-in patients who visited the ED at UCSF Medical Center in 2008. She found that only 41 percent of these patients completed triage within the recommended 10 minutes. The median time from arrival to triage completion for the group as a whole was 12.3 minutes.

"Since our research showed that we're not getting most of our high-acuity patients to providers within the time frame recommended by the ESI-5, perhaps now we should feel freer to experiment with triage," Weber says. "We need to do a better job of directing the limited amount of resources we have to the right people."

UCSF Medical Center is an academic hospital with an ED that provides care for approximately 40,000 patients each year. The ED is located in a culturally diverse urban area and serves many patients with complicated medical histories, but its intake challenges are not unique. Weber says physicians at EDs throughout the country have told her they think their triage processes may be causing unneeded delays.

Questioning Triage Practices

One problem, Weber notes, is that triage nurses wind up collecting more data than they need to determine each patient's ESI level. At the ED at UCSF Medical Center, a nurse takes the patients' vital signs and records their chief complaints, current medications, medical and surgical history, and pain severity. In some other EDs, triage nurses complete additional tasks such as conducting domestic violence risk assessments. "I don't think we need to be asking so many questions in triage—for example, we don't need to know all the patient's medications or allergies to assign an acuity level," says Weber.

Weber also worries that ED patients are being asked the same questions too many times. Patients often are asked to give their history when they're registering, then again when seen by the triage nurse, the bedside nurse, a resident or student, and the attending physician. This process can be inefficient, says Weber, and patients who've already repeated their stories multiple times may forget to share key details with the physicians who are actually treating them.

Learning from EDs in the United Kingdom

Weber was inspired to conduct her research on triage at UCSF Medical Center after studying ED intake processes in the United Kingdom during a 2008 sabbatical at the School of Health and Related Research at the University of Sheffield. To reduce ED wait times and crowding, Britain's National Health Service (NHS) mandated in 2005 that 98 percent of ED patients had to be treated and discharged or placed in an inpatient bed within four hours of arrival. One of the NHS recommendations was to eliminate formal triage of all walk-in patients. Weber collaborated with Suzanne Mason, MD, professor of emergency medicine at the School of Health and Related Research at the University of Sheffield, on several studies of how hospitals implemented the four-hour target.

Weber observed that in most EDs in the United Kingdom, patients arriving by ambulance and high-acuity walk-in patients are brought immediately into the treatment area. All other patients stay in the waiting room and are treated by a clinician in order of arrival. Nurses assess some of these waiting patients. "They do whatever they think is appropriate—for instance, they may take a patient's vital signs or provide pain medication," says Weber. "But they don't spend time sorting people into very specific categories and determining who is sicker within those categories." Because they're not

as focused on assigning priority to patients, the nurses can help speed up care by devoting more of their time to treating patients.

Streamlining Triage

Starting this June, UCSF Medical Center will be using a new electronic medical record. Weber and her colleagues see this as an opportunity to redesign their intake form. The triage nurses soon will use a directed series of questions that walk them through the ESI algorithm. “We’re going to be asking the patient about the medical problems that directly influence the acuity rating. If they have a fever, for example, we’ll ask if they are receiving chemotherapy or have had a transplant because if they are immunosuppressed, they should be an ESI Level 2 and if not, ESI Level 3,” Weber explains. “The form guides the nurses to ask only certain questions, so the time spent at triage should be shorter.”

She recommends that colleagues at other hospitals who are interested in improving intake processes repeat her study and find out whether they’re treating ESI Level 1 and 2 patients within the time frames recommended by the ESI-5. If they discover they’re not meeting these standards, they can try to identify and eliminate unnecessary steps in their triage process. She also suggests triaging patients in treatment rooms whenever they’re immediately available.

Ideally, Weber would like to see the ED at UCSF Medical Center and others in the United States adopting the United Kingdom’s approach to triage. “A system with two acuity classifications—see now and see later—makes a lot of sense to me,” she says.

Ellen J. Weber, MD, FACEP, professor of emergency medicine and vice chair for faculty development and diversity for the department of emergency medicine at the University of California, San Francisco (UCSF) School of Medicine