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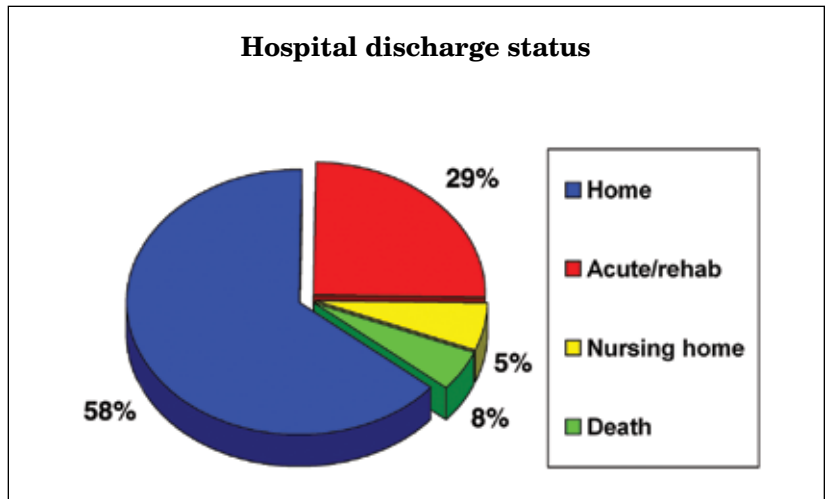
## NTDB® data points

# The river runs through it

by Richard J. Fantus, MD, FACS, Chicago, IL

Fractures to the pelvic ring occur as the result of high-energy mechanisms of injury such as motor vehicle crashes, pedestrians struck by vehicles, and falls. Three main vectors of force—anteroposterior compression, lateral compression, and vertical shear—result in pelvic ring fractures. Each force produces a characteristic fracture pattern. These injuries carry a significant morbidity and mortality related not only to complications of the pelvic fracture but also the commonly associated injuries. In addition to injury to the usual organs—that is, liver, spleen, and kidney—injuries to the mesentery, diaphragm, and gastrointestinal tract occur. Structures of the genitourinary system that are in close proximity to the pelvic ring are also susceptible to injury. Bladder injury can occur as an associated injury or as a complication of the pelvic ring fracture. Extraperitoneal bladder rupture occurs more commonly, whereas intraperitoneal rupture tends to occur in patients who are injured when the bladder is full. Urethral injuries result from the same type of shearing forces that lead to extraperitoneal bladder rupture.

In order to examine the occurrence of these injuries in the National Trauma Data Bank® Dataset 6.0, the *International*



*Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) codes for pelvic fractures 808.0 through 808.5, 808.8, and 808.9 were used. There were 62,755 records containing 87,504 pelvic bone fractures as a result of blunt force trauma. Among the patients in these records, 33,208 were discharged to home; 16,451 to acute care/rehabilitation; and 2,580 to nursing homes; there were 4,564 deaths. These data are depicted in the figure on this page. This group of patients was nearly equally distributed between male and female, on average 44 years of age, with an average length of stay of 9.8 days and an average injury severity score of 17.28.

Pelvic fractures carry signifi-

cant morbidity and mortality as evidenced by more than one-fourth requiring further acute care or rehabilitation. With the proximity of genitourinary structures and the propensity for their injury, it would be wise to empty the river that runs through it before getting into a motor vehicle for a long car ride and putting your pelvis at risk.

Throughout the year, this column will provide brief monthly reports. The full NTDB *Annual Report Version 6.0* is available on the ACS Web site as a PDF file and a PowerPoint presentation at <http://www.ntdb.org>.

If you are interested in submitting your trauma center's data, contact Melanie L. Neal, Manager, NTDB, at [mneal@facs.org](mailto:mneal@facs.org).