

12/17/2004 New Electronic Patient Record Saves Lives in Race Against Time

Evanston Northwestern Healthcare Takes Patient Care to New Levels of Quality, Safety With Information Technology

When seconds count, access to information can make the difference between life and death. Glenview resident Selwyn Blum knows this firsthand after he suffered a life-threatening emergency on a Sunday evening and was fortunate to be taken to Evanston Northwestern Healthcare's Glenbrook Hospital, which has one of the nation's most advanced electronic patient record systems.



Glenbrook Hospital

Blum arrived at the Glenbrook Emergency Department at 10:00 p.m. confused and disoriented, and soon slipped into a deep coma. A CT scan revealed he was suffering from an acute subdural cerebral hemorrhage and serious brain compression. His emergency room physician, John Vozenilek, MD, spoke with Blum's wife and found out that he had a history of stroke and was on anticoagulation therapy. "I immediately began documenting Mr. Blum's care in an electronic chart," says Dr. Vozenilek, "so that each of the members of his care team would have access simultaneously to his medical record." He also contacted Issam Awad, MD, Director of Neurovascular Surgery and Neurocritical Care of Evanston Northwestern Healthcare and Professor of

Neurosurgery at Northwestern University's Feinberg School of Medicine.

"Quick action to treat a brain hemorrhage is critical in patients like Mr. Blum," says Dr. Awad, "and based on his condition, he needed a rapid reversal of his anticoagulation therapy and emergent surgery to save his life." From his home computer, Dr. Awad immediately accessed Blum's emergency medical records online, as well as the results of his CT scans using ENH's picture archival communication system (PACS). PACS transmits medical images digitally across the entire ENH system and provides nearly instantaneous access to a patient's scans. He began providing remote patient care in real time by electronically evaluating Blum's laboratory results, imaging scans and vital signs, and he conferred with Blum's on-call primary care physician.

Glenbrook Hospital emergency physicians started reversing Blum's anticoagulation therapy to control the bleeding in his brain, secured his airway and initiated treatment for his brain swelling. Then, they prepared to transport him to Evanston Hospital where a team of anesthesiologists, surgeons and other medical professionals mobilized simultaneously in order to provide him advanced neurosurgical care. Because they had access to Blum's medical record and could monitor his condition in real time, they were fully prepared to get to work as soon as he arrived. Within an hour, Dr. Awad began Blum's surgery at Evanston Hospital.

After nine days in intensive care and three weeks in rehabilitation, Blum returned home with home care. Although he still needed additional therapy and a second surgical procedure, he began to resume his normal life. "In large part, Mr. Blum made a miraculous recovery against all odds because ENH's single, integrated record system provided doctors information they needed for

better – and faster – medical decisions and seamless coordination of care among emergency physicians and specialists,” says Dr. Awad. “In fact, if he had gone to a hospital that did not have electronic records and images immediately available, he may not have received the rapid response needed to save his life.”