Major disasters tax surgical staff but may reduce costs for routine operations

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New research published in the September issue of the *Journal of the American College of Surgeons* offers important insights into the long-term impact of a major disaster on routine surgical services in a hospital. In the study, researchers at Ochsner Health System, New Orleans, LA, showed that although Hurricane Katrina resulted in a significant loss of surgical staff and an increase in the number of uninsured patients undergoing operations, greater cost efficiencies were achieved.

Hurricane Katrina forced 11 major hospitals in the New Orleans metropolitan area to close. Ochsner Health System was one of the three hospitals that remained functional during the storm. The ripple effects of Hurricane Katrina, which hit New Orleans on August 29, 2005, continue to be experienced today in the hospitals currently serving the area.

"Hurricane Katrina placed enormous burdens on our institution but forced us to learn how to run an operating room with fewer full-time employees, which required staff to cover and share more duties," said William S. Richardson, MD, FACS, department of surgery, Ochsner Health System. "While geographic location is a major determinant of post-disaster success, a sound disaster preparedness plan and the ability to adapt quickly can allow a hospital to function effectively during and after circumstances as extreme as Hurricane Katrina."

Using a prospectively collected database, researchers compared patients undergoing laparoscopic cholecystectomy (LC) - surgical removal of the gallbladder through a tiny incision in the abdomen - before and after

Hurricane Katrina at Ochsner Health System. Because there was little operative activity due to low population in the area initially after the storm, researchers compared patients undergoing LC during the seven months preceding the storm with patients undergoing LC in the seven months after the first three months post-storm, when operative volume was closer to pre-storm level. The researchers said that the establishment of clear lines of communication to displaced employees and providing transportation and housing for evacuated employees were key factors to achieving pre-storm levels of operative volume in a relatively short period of time.

Total cases included 196 pre-storm and 167 post-storm outpatient operations and 62 pre-storm and 64 post-storm inpatient operations. The study did not find a significant change in operative time, length-of-stay or turnover time, despite staffing difficulties in the operative area. The percentage of inpatient cases increased from 39 percent pre-storm to 45 percent post-storm. Post-storm costs decreased for both inpatient and outpatient operations, largely because the hospital was required to perform procedures with fewer staff. Revenue was down for inpatient operations and up slightly for outpatient operations. The change in profit was not significant.

There was a decrease in the number of privately insured patients, with a concomitant increase in Medicare, Medicaid, and noninsured patients for both inpatient and outpatient operations. The largest shift in payer mix was observed in the inpatient group. Reimbursement decreased from 43.7 percent to 41.1 percent.

Source: Weber Shandwick Worldwide (news : web)