



**The Society of Thoracic Surgeons**  
633 N. St. Clair, Suite 2100  
Chicago, IL 60611  
[www.sts.org](http://www.sts.org)

# News

**Media Contact:**  
Jennifer Bagley  
312-202-5865  
[jbagley@sts.org](mailto:jbagley@sts.org)

## **Day of Discharge Does Not Influence Heart Surgery Patient Readmissions**

### ***Education and outpatient intervention programs credited with improved patient outcomes***

CHICAGO (October 11, 2018)—Despite a common belief that weekend and holiday discharge after major heart surgery may impact hospital readmissions, research published online today in *The Annals of Thoracic Surgery* showed that day of discharge does not affect readmissions.

“Hospital discharge is an intricate and dynamic process requiring choreography of patients, physicians, ancillary staff, and outpatient caregivers,” said Peyman Benharash, MD, from the University of California, Los Angeles (UCLA). “As the rate of rehospitalization after cardiac surgery has been reported at up to 22%, we wanted to investigate the potentially modifiable elements in the discharge process.”

For their study, Dr. Benharash and colleagues reviewed data from The Society of Thoracic Surgeons Adult Cardiac Surgery Database for all patients who underwent non-emergency heart operations between 2008 and 2016 at Ronald Reagan UCLA Medical Center. The researchers identified 4,877 patients, of whom nearly 20% of were discharged on a weekend or holiday. This subset was particularly important because of the so-called “weekend effect,” which has been described as worse outcomes attributed to decreased staffing and increased transitions of care.

The researchers found that the use of preoperative beta blockers, tobacco use, and surgical site infections were independent predictors of rehospitalization within 30 days, but day of discharge was not. The study showed comparable readmission rates for weekday and weekend/holiday discharges (11.4% vs. 10.9%).

“We were surprised to find that patients discharged on weekends and holidays had similar readmission rates and outcomes as patients who were cleared on weekdays,” said Dr. Benharash. “Prior planning was likely a critical aspect of successful weekend and holiday discharges at our institution.”

In 2010, UCLA launched a Readmission Reduction Program. The program includes discharge education, detailed medication instructions, postoperative care coordination, and routine phone calls for 4 weeks after discharge. Most recently, cardiac surgery patients who have been discharged home received discharge kits equipped with wireless

#### **KEY POINTS**

- The discharge process is one of the most important phases of hospitalization.
- The day of discharge does not impact readmission rates and patient outcomes for heart surgery patients.
- Patient education and accessibility to the heart surgery care team are critical elements of a successful discharge bundle.

enabled blood pressure monitors, oximeters, weight scales, and miniaturized electrocardiogram sensors synced to a mobile tablet device. The mobile application prompts patients to perform daily measurements and answer questions regarding pain, physical activity, and surgical wound appearance. Patients' responses are initially screened by the telemonitoring companies who generate summary reports. The UCLA cardiac surgery discharge staff reviews any information that falls outside of the normal range and triages the details to the appropriate provider for swift, real-time interventions. Resources such as these, in addition to improved access to expert advice following hospitalization, have significant potential to impact a patient's outpatient trajectory, explained Dr. Benharash.

"No individual component will significantly alter patient outcomes," he said. "Rather a synergy of patient empowerment and access to outpatient counseling and care will allow for alleviation of patient anxiety and early recognition of complications should they arise. We encourage patients to be engaged in the discharge process early on and to understand that returning home on a weekend does not mean you will have a higher chance of rehospitalization."

###

Sanaiha Y, Ou R, Ramos G, Juo Y, Shemin RJ, and Benharash P. Day of Discharge Does Not Impact Hospital Readmission After Major Cardiac Surgery. DOI: 10.1016/j.athoracsur.2018.07.031.

Find comprehensive medical information presented for patients by leading experts in cardiothoracic surgery on the STS Patient Website ([ctsurgerypatients.org](http://ctsurgerypatients.org)). For a copy of *The Annals* article, contact Jennifer Bagley at 312-202-5865 or [jbagley@sts.org](mailto:jbagley@sts.org).

Founded in 1964, The Society of Thoracic Surgeons is a not-for-profit organization representing more than 7,500 cardiothoracic surgeons, researchers, and allied health care professionals worldwide who are dedicated to ensuring the best possible outcomes for surgeries of the heart, lung, and esophagus, as well as other surgical procedures within the chest. The Society's mission is to enhance the ability of cardiothoracic surgeons to provide the highest quality patient care through education, research, and advocacy.

*The Annals of Thoracic Surgery* is the official journal of STS and the Southern Thoracic Surgical Association. It has an impact factor of 3.779.