

# Rates of emergency bowel surgery vary wildly from state to state

June 4 2013

---

Johns Hopkins researchers have documented huge and somewhat puzzling interstate variations in the percentage of emergency versus elective bowel surgeries. Figuring out precisely why the differences occur is critical, they say, because people forced to undergo emergency procedures are far more likely to die from their operations than those able to plan ahead for them.

"With surgery, just as with most things in life, planning under optimal conditions leads to a better result," says study leader Adil H. Haider, M.D., M.P.H., an associate professor of surgery at the Johns Hopkins University School of Medicine. "And the differences we found are not trivial. Some 7 percent of those who had [emergency surgery](#) died compared to less than 1 percent of those who had surgery in an elective manner."

Reporting details of their findings in the May issue of the *Journal of Trauma and Acute Care Surgery*, Haider's team found, for example, that people having part of their colon removed in Nevada required emergency surgery half the time, while in Texas, only 22 percent did. After Nevada, the states with the highest percentage of emergency surgery cases include North Carolina, Utah, New Jersey, Montana and West Virginia. After Texas, the states with the lowest percentage of emergency surgery cases are New Mexico, Washington, South Dakota, Kansas, Minnesota and Wyoming.

Haider says that identifying such interstate variations for colon surgeries

suggests there may be a way to decrease the rates of emergency procedures by analyzing potentially contributing factors. Part of the colon may be removed because of cancer or a number of other diseases.

"If one state or region can do a procedure more safely, more cost-effectively or with better outcomes, others can learn from and emulate it," Haider says. "Whether these differences occur on a practitioner level, institutional level, regional level or otherwise, we don't yet know, but it is essential that we identify and address them."

In their study, Haider and his colleagues analyzed hospital discharge data from the 2005 to 2009 Nationwide Inpatient Sample, identifying 203,050 patients older than 18 who underwent surgery, either electively or emergently, to remove part of the colon. The data came from 44 states. Overall, 59 percent of patients had elective surgery while 41 percent underwent [emergency procedures](#).

Geography, population makeup or regional trends did not appear to play a role in the differences. Montana and Wyoming, for example, share a border, but have among the highest and lowest rates of emergency colectomy, respectively. Similarly, New Mexico and Nevada, both of which are located in the southwest and may theoretically share a similar population, have vastly different rates.

"We were surprised by the very large variations from state to state," Haider says. "It was hard to believe there was this 30 percent swing depending on where you live. We need to do something to decrease the variations and do better for everyone."

Haider says worse outcomes following emergency surgery are typically related to the severity of the patient's condition upon arrival in the operating room. The disease may be far more advanced. The patient's other health conditions may not be in check. There may be

complications due to the rupturing of the intestines that increase infection risk.

Many of those situations, he adds, can likely be traced to a lack of access to health care, screening or timely referral to surgical specialists. Generally, he says, minority patients, people without insurance and those who live in poor neighborhoods end up requiring emergency surgery more often.

Provided by Johns Hopkins University School of Medicine

Citation: Rates of emergency bowel surgery vary wildly from state to state (2013, June 4)  
retrieved 23 April 2024 from

<https://medicalxpress.com/news/2013-06-emergency-bowel-surgery-vary-wildly.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.