Managing Data Projects

• Statistics for Poets
Investigative Projects Are About Herding Cats

Data Doubles the Fun
Risk Adjustment...
Bayesian Shrinkage...
Confidence Intervals...
Bullet Proofing...

It May Get Complicated
Run Your Methods
By a Wide Range of Experts
Think Hard About Data Visualization

Surgeon Scorecard

Guided by experts, ProPublica calculated death and complication rates for surgeons performing one of eight elective procedures in Melbourne, carefully adjusting for differences in patient health, age, and hospital quality. Use this database to know more about a surgeon before your operation.

Find Surgeon

Surgeons and Hospitals Near My Location

- Use My Location
- or Jump straight to your state
- Pick a state

Knee Replacement
Be Transparent About Methodology
• Circulate Your Explanation Before You Publish And Be Prepared to Fine-Tune

Assessing surgeon-level risk of patient harm during elective surgery for public reporting

Olga Pierce, Marshall Allen
ProPublica

Whitespaper as of
August 4, 2015

Olga Pierce and Marshall Allen are journalists at ProPublica, a non-profit organization dedicated to journalism in the public interest. This analysis was done by ProPublica in consultation with Sebastien Hacene, Karen Joynt, Ashish Jha of the Harvard T. H. Chan School of Public Health, Marty Mal of Johns Hopkins University School of Medicine, dozens of other research surgeons and other practicing physicians, and hundreds of patients who have been harmed while receiving medical care.

Abstract

Background Patients undergoing elective surgical procedures sometimes suffer avoidable, serious complications like infections, blood clots and hemorrhage. However, little is currently known in American medicine about the relative performance of surgeons when it comes to minimizing these types of harm. While practices such as peer review may identify individual egregious errors, there is little infrastructure in place to identify patterns of complications over time, or across separate facilities. Overall, it’s estimated that fewer than 1% of surgical outcomes are being measured, leaving patients, the medical community, and even surgeons themselves unaware of how their patients fare collectively over time. Most surgeons do not know how their peers outside their own facility perform. Tracking and publicly reporting the relative performance of surgeons could give medical providers, hospital leaders, and regulators a powerful tool — and an incentive — to improve the safety of patients undergoing surgery.

Methods Using administrative data, we identified all Medicare patients who underwent one of eight common elective, low-risk surgical procedures over a 5-year period. We then undertook to fairly compare surgeons and hospitals, without penalizing those with the most complex patients. To do so, we used two measures to identify harm to elective surgical patients: In-hospital mortality, and readmission within 30 days of discharge with a diagnosis identified by experts as a likely complication of surgery. A
More than a year ago, Medicare agreed to release data to ProPublica that allowed us to publicly compare the performance of surgeons who do common elective procedures. We
Be Prepared for Criticism

A Methodological Critique of the ProPublica Surgeon Scorecard

by Mark W. Friedberg, Peter J. Pronovost, David M. Shahian, Dana Gelb Safran, Karl Y. Bilimoria, Marc N. Elliott, Cheryl L. Damberg, Justin B. Dimick, Alan M. Zaslavsky


Citation

9 74 3
Our Rebuttal to RAND’s Critique of Surgeon Scorecard

The think tank claims Scorecard’s methods aren’t reliable, but its commentary is undermined by supposition, conflicts of interest and a lack of evidence.

by Stephen Engelberg and Olga Pierce
ProPublica, Oct. 7, 2015, 6:55 p.m.
Convene A Conversation That Includes All Sides

What Experts Are Saying About Surgeon Scorecard

When we announced we were publishing Surgeon Scorecard, a debate erupted over how and whether Medicare data can be used to compare surgeons. That conversation is certain to intensify as researchers, practitioners, and the public dig into our findings. We have created this page to facilitate that conversation.

The initial entries include comments from some of the patient safety experts who reviewed our methodology. Now that the scorecard is public, any expert who would like weigh in on our approach should send comments to: scorecard@ProPublica.org. We may edit responses for length.

We look forward to hearing from you.

This post was updated on Oct. 8, 2015.