



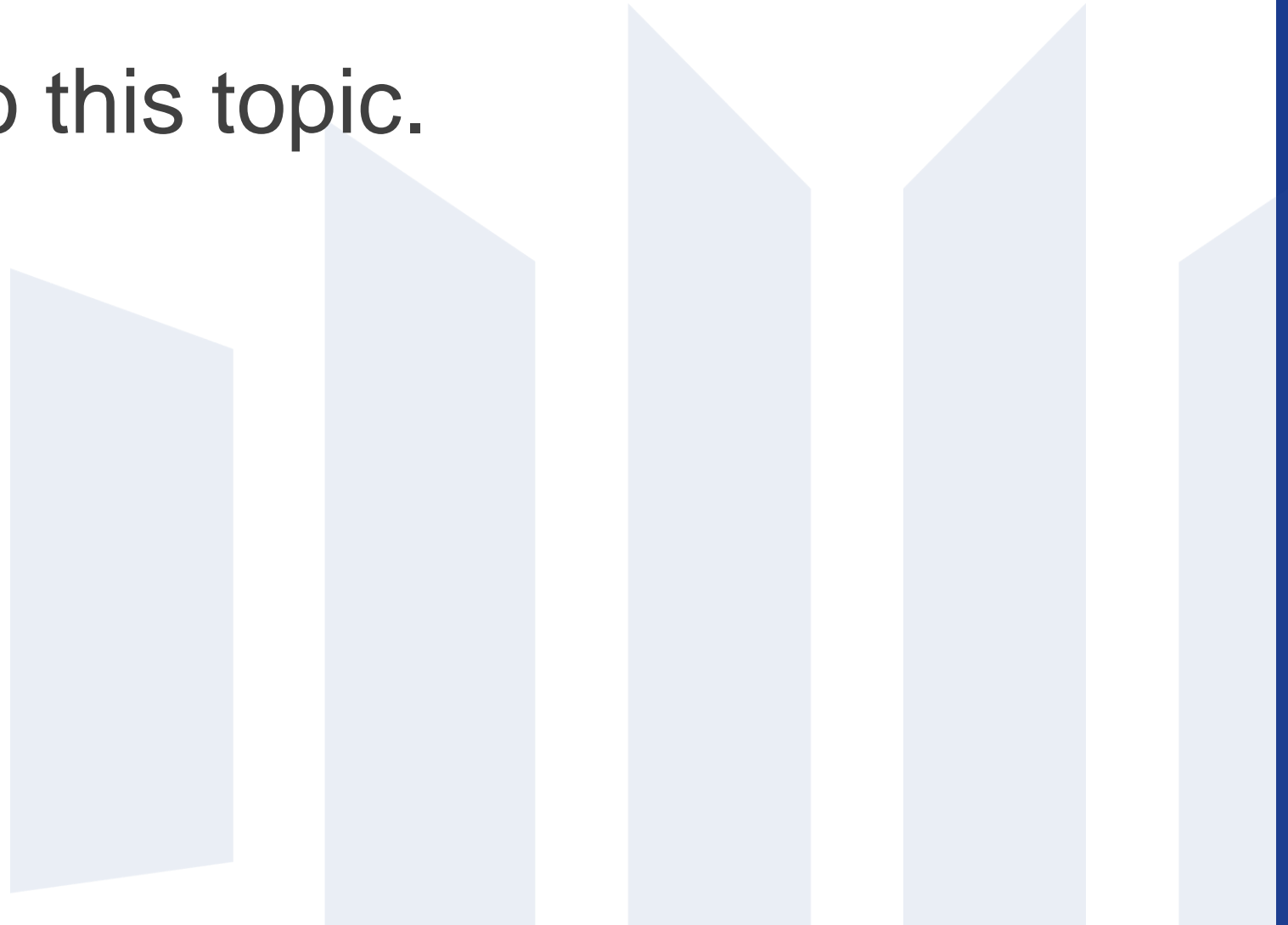
# Writing for Impact

Justin B. Dimick, MD, MPH

Frederick A. Coller Distinguished Professor of Surgery  
Chair, Department of Surgery, University of Michigan  
Past President, Association for Academic Surgery

# Disclosures

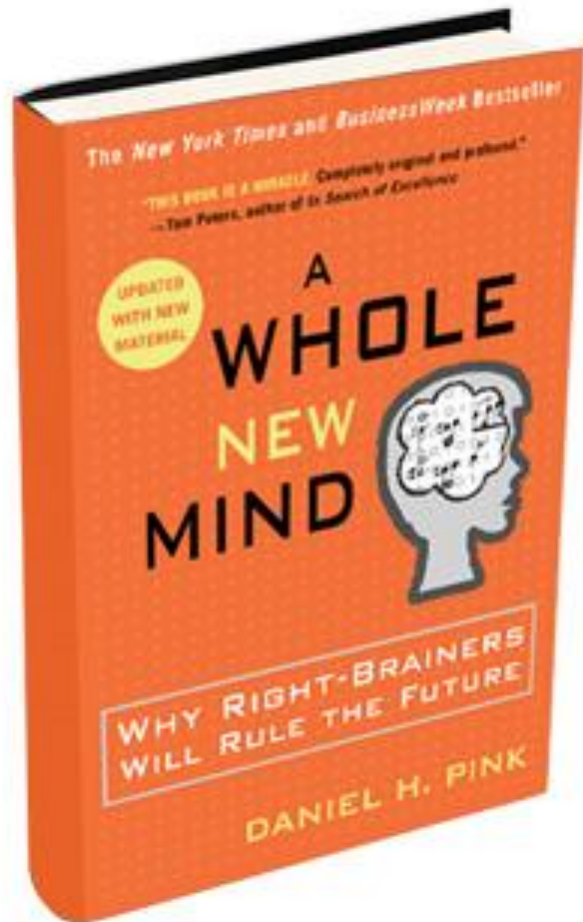
- None relevant to this topic.



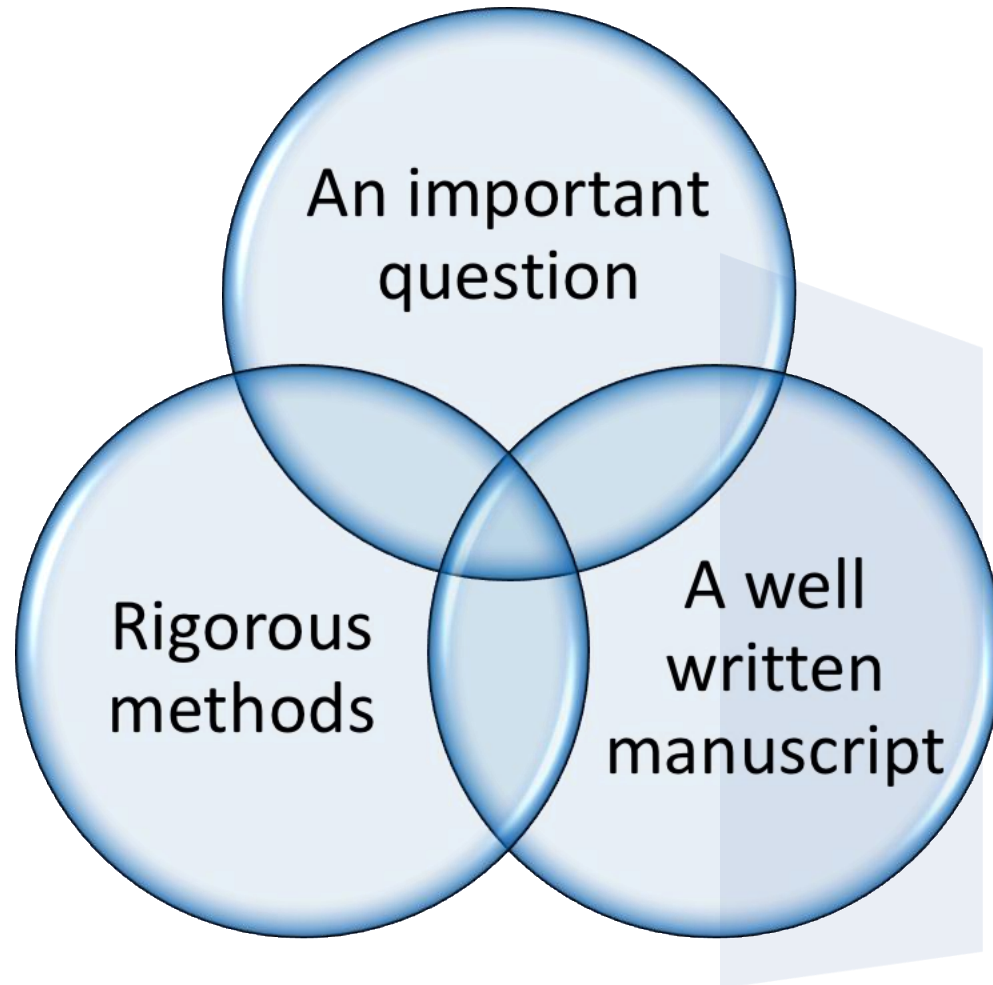
# Why work on your writing?

- IMPACT
- DISSEMINATION
- Change practice or policy
- A good paper is a good paper, no matter where it is published
- Good writing isn't just good writing. Good writing is clear thinking

# Why right brainers will rule the future



# Recipe for a high impact publication:



Challenge: Finding surgical topics that appeal to a broad audience

# The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812

FEBRUARY 25, 2016

VOL. 374 NO. 8

## National Cluster-Randomized Trial of Duty-Hour Flexibility in Surgical Training

Karl Y. Bilimoria, M.D., M.S.C.I., Jeanette W. Chung, Ph.D., Larry V. Hedges, Ph.D., Allison R. Dahlke, M.P.H., Remi Love, B.S., Mark E. Cohen, Ph.D., David B. Hoyt, M.D., Anthony D. Yang, M.D., John L. Tarpley, M.D., John D. Mellinger, M.D., David M. Mahvi, M.D., Rachel R. Kelz, M.D., M.S.C.E., Clifford Y. Ko, M.D., M.S.H.S., David D. Odell, M.D., M.M.Sc., Jonah J. Stulberg, M.D., Ph.D., M.P.H., and Frank R. Lewis, M.D.

### ABSTRACT

#### BACKGROUND

Concerns persist regarding the effect of current surgical resident duty-hour policies on patient outcomes, resident education, and resident well-being.

#### METHODS

We conducted a national, cluster-randomized, pragmatic, noninferiority trial involving 117 general surgery residency programs in the United States (2014–2015 academic year). Programs were randomly assigned to current Accreditation Council for Graduate Medical Education (ACGME) duty-hour policies (standard-policy group) or more flexible policies that waived rules on maximum shift lengths and time off between shifts (flexible-policy group). Outcomes included the 30-day rate of postoperative death or serious complications (primary outcome), other postoperative complications, and resident perceptions and satisfaction regarding their well-being, education, and patient care.

#### RESULTS

In an analysis of data from 138,691 patients, flexible, less-restrictive duty-hour policies were not associated with an increased rate of death or serious complications (9.1% in the flexible-policy group and 9.0% in the standard-policy group,  $P=0.92$ ; unadjusted odds ratio for the flexible-policy group, 0.96; 92% confidence interval, 0.87 to 1.06;  $P=0.44$ ; noninferiority criteria satisfied) or of any secondary postoperative outcomes studied. Among 4330 residents, those in programs assigned to flexible policies did not report significantly greater dissatisfaction with overall education quality (11.0% in the flexible-policy group and 10.7% in the standard-policy group,  $P=0.86$ ) or well-being (14.9% and 12.0%, respectively;  $P=0.10$ ). Residents under flexible policies were less likely than those under standard policies to perceive negative effects of duty-hour policies on multiple aspects of patient safety, continuity of care, professionalism, and resident education but were more likely to perceive negative effects on personal activities. There were no significant differences between study groups in resident-reported perception of the effect of fatigue on personal or patient safety. Residents in the flexible-policy group were less likely than those in the standard-policy group to report leaving during an operation (7.0% vs. 13.2%,  $P<0.001$ ) or handing off active patient issues (32.0% vs. 46.3%,  $P<0.001$ ).

#### CONCLUSIONS

As compared with standard duty-hour policies, flexible, less-restrictive duty-hour policies for surgical residents were associated with noninferior patient outcomes and no significant difference in residents' satisfaction with overall well-being and education quality. (FIRST ClinicalTrials.gov number, NCT02050789.)

From the Surgical Outcomes and Quality Improvement Center (SOQIC), Department of Surgery and Center for Healthcare Studies, Feinberg School of Medicine and Northwestern Medicine, Northwestern University (K.Y.B., J.W.C., A.R.D., R.L., A.D.Y., D.M.M., D.D.O., J.J.S.), and the American College of Surgeons (K.Y.B., M.E.C., D.B.H., C.Y.K.), Chicago, the Department of Statistics, Northwestern University, Evanston (L.V.H.), and the Department of Surgery, Southern Illinois University, Springfield (J.D.M.) — all in Illinois; the Department of Surgery, Vanderbilt University, Nashville (J.L.T.); the Department of Surgery and the Center for Surgery and Health Economics, Perelman School of Medicine, University of Pennsylvania (R.R.K.), and the American Board of Surgery (F.R.L.) — both in Philadelphia; and the Department of Surgery, University of California, Los Angeles, School of Medicine, Los Angeles (C.Y.K.). Address reprint requests to Dr. Bilimoria at the Surgical Outcomes and Quality Improvement Center (SOQIC), Department of Surgery, Feinberg School of Medicine and Northwestern Medicine, Northwestern University, 633 N. St. Clair St., 20th Fl., Chicago, IL 60611, or at k-bilimoria@northwestern.edu.

This article was published on February 2, 2016, at NEJM.org.

N Engl J Med 2016;374:713–27.  
DOI: 10.1056/NEJMoa1515724  
Copyright © 2016 Massachusetts Medical Society.

N ENGL J MED 374:8 NEJM.ORG FEBRUARY 25, 2016

713

The New England Journal of Medicine

Downloaded from nejm.org at UNIVERSITY OF MICHIGAN on October 13, 2016. For personal use only. No other uses without permission.  
Copyright © 2016 Massachusetts Medical Society. All rights reserved.



- Karl Bilimoria, MD, MS
- Impacting work hour policy for surgical residents



# Kidney Paired Donation and Optimizing the Use of Live Donor Organs

Dorry L. Segev, MD

Sommer E. Gentry, MS

Daniel S. Warren, PhD

Brigitte Reeb, MFA

Robert A. Montgomery, MD, DPhil

**R**ENAL TRANSPLANTATION HAS emerged as the treatment of choice for medically suitable patients with end-stage renal disease.<sup>1</sup> More than 60 000 patients await kidney transplantation and are listed on the United Network for Organ Sharing (UNOS) recipient registry.<sup>2</sup> Live donor renal transplantation represents the most promising solution for closing the gap between organ supply and demand.

Unfortunately, many patients with willing live donors will be excluded from live donor renal transplantation because of blood type incompatibility or positive donor-specific crossmatch. Based on blood type frequencies in the United States, there is a 35% chance that any 2 individuals will be ABO incompatible. Furthermore, 30% of the patients awaiting donation from the UNOS recipient registry are sensitized to allo-HLA due to previous transplants, pregnancies, or blood transfusions. While successful desensitization techniques have been developed to overcome incompatibilities, these have been limited to specialized programs and are very resource intensive.<sup>3-10</sup>

Kidney paired donation (KPD) offers an incompatible donor/recipient pair the opportunity to match with another donor and recipient in a similar situation.<sup>11</sup> In the United States, these transplantations are currently performed at few institutions, with matches identified through local or regional pa-

**Context** Blood type and crossmatch incompatibility will exclude at least one third of patients in need from receiving a live donor kidney transplant. Kidney paired donation (KPD) offers incompatible donor/recipient pairs the opportunity to match for compatible transplants. Despite its increasing popularity, very few transplants have resulted from KPD.

**Objective** To determine the potential impact of improved matching schemes on the number and quality of transplants achievable with KPD.

**Design, Setting, and Population** We developed a model that simulates pools of incompatible donor/recipient pairs. We designed a mathematically verifiable optimized matching algorithm and compared it with the scheme currently used in some centers and regions. Simulated patients from the general community with characteristics drawn from distributions describing end-stage renal disease patients eligible for renal transplantation and their willing and eligible live donors.

**Main Outcome Measures** Number of kidneys matched, HLA mismatch of matched kidneys, and number of grafts surviving 5 years after transplantation.

**Results** A national optimized matching algorithm would result in more transplants (47.7% vs 42.0%,  $P < .001$ ), better HLA concordance (3.0 vs 4.5 mismatched antigens;  $P < .001$ ), more grafts surviving at 5 years (34.9% vs 28.7%;  $P < .001$ ), and a reduction in the number of pairs required to travel (2.9% vs 18.4%;  $P < .001$ ) when compared with an extension of the currently used first-accept scheme to a national level. Furthermore, highly sensitized patients would benefit 6-fold from a national optimized scheme (2.3% vs 14.1% successfully matched;  $P < .001$ ). Even if only 7% of patients awaiting kidney transplantation participated in an optimized national KPD program, the health care system could save as much as \$750 million.

**Conclusions** The combination of a national KPD program and a mathematically optimized matching algorithm yields more matches with lower HLA disparity. Optimized matching affords patients the flexibility of customizing their matching priorities and the security of knowing that the greatest number of high-quality matches will be found and distributed equitably.

JAMA. 2005;293:1883-1890

www.jama.com

tient databases.<sup>2,4,12</sup> However, even with the increasing popularity of KPD, only 51 patients have received transplants via paired donation, with nearly half of them performed at Johns Hopkins University.<sup>2</sup> UNOS has recently proposed a national live donor KPD program through the Organ Procurement and Transplantation Network, but regulatory obstacles to a national program still exist (including the question of "valuable consideration"); therefore, no data exist regarding the impact of national vs regional programs.<sup>12,13</sup> Because it is

critical to find the most effective method of matching patients and donors at the outset, before any national strategy is implemented, we investigated virtual paired donation programs on simulated patient populations.

**Author Affiliations:** Department of Surgery, Johns Hopkins University School of Medicine, Baltimore, Md (Drs Segev, Warren, and Montgomery and Ms Reeb); and Laboratory for Information and Decision Systems, Massachusetts Institute of Technology, Cambridge (Ms Gentry).

**Corresponding Author:** Dorry L. Segev, MD, Division of Transplantation, Department of Surgery, Johns Hopkins University School of Medicine, 720 Rutland Ave, Ross 765, Baltimore, MD 21287 (dorry@jhmi.edu).



- Dorry Segev & Sommer Gentry
- Created math and methods for large-scale paired kidney donation



#DJDorry





# High impact academic writing



Invest like  
Warren Buffet



Train like  
Simon Biles



Strike out like  
Babe Ruth

# Diversify your research portfolio:



Invest like  
Warren Buffet

## 1. Overcoming bibliopenia

- Promotion
- National reputation
- Mentoring residents & fellows

## 2. Changing the world

- Truly ground-breaking
- Long time horizon
- Often externally funded work

## Complications, Failure to Rescue, and Mortality With Major Inpatient Surgery in Medicare Patients

*Amir A. Ghaferi, MD, John D. Birkmeyer, MD, and Justin B. Dimick, MD, MPH*

## Hospital Characteristics Associated with Failure to Rescue from Complications after Pancreatectomy

Amir A Ghaferi, MD, MS, Nicholas H Osborne, MD, MS, John D Birkmeyer, MD, FACS,  
Justin B Dimick, MD, MPH, FACS

Original Investigation | SURGICAL CARE OF THE AGING POPULATION

## Socioeconomic Disparities in Mortality After Cancer Surgery Failure to Rescue

Bradley N. Reames, MD, MS; Nancy J. O. Birkmeyer, PhD; Justin B. Dimick, MD, MPH; Amir A. Ghaferi, MD, MS

## Hospital Volume and Failure to Rescue With High-risk Surgery

*Amir A. Ghaferi, MD, MS, John D. Birkmeyer, MD, and Justin B. Dimick, MD, MPH*

## Understanding Failure to Rescue and Improving Safety Culture

*Amir A. Ghaferi, MD, MS,\*† and Justin B. Dimick, MD, MPH\**

## Importance of teamwork, communication and culture on failure-to-rescue in the elderly

A. A. Ghaferi<sup>1,2,3</sup> and J. B. Dimick<sup>2,3</sup>

Original Investigation

## Understanding the Volume-Outcome Effect in Cardiovascular Surgery The Role of Failure to Rescue

Andrew A. Gonzalez, MD, JD, MPH; Justin B. Dimick, MD, MPH; John D. Birkmeyer, MD; Amir A. Ghaferi, MD, MS

## Improving Mortality Following Emergent Surgery in Older Patients Requires Focus on Complication Rescue

*Kyle H. Sheetz, BS, Seth A. Waits, MD, Robert W. Krell, MD, Darrell A. Campbell, Jr, MD, Michael J. Englesbe, MD, and Amir A. Ghaferi, MD, MS*

SPECIAL ARTICLE

## Variation in Hospital Mortality Associated with Inpatient Surgery

Amir A. Ghaferi, M.D., John D. Birkmeyer, M.D.,  
and Justin B. Dimick, M.D., M.P.H.

### ABSTRACT

From the Michigan Surgical Collaborative for Outcomes Research and Evaluation, the Department of Surgery, University of Michigan, Ann Arbor. Address reprint requests to Dr. Ghaferi at Michigan Surgical Collaborative for Outcomes Research and Evaluation, 211 N. Fourth Ave., Suite 201, Ann Arbor, MI 48104, or at [aghaferi@umich.edu](mailto:aghaferi@umich.edu).

N Engl J Med 2009;361:1368-75.  
Copyright © 2009 Massachusetts Medical Society.

### BACKGROUND

Hospital mortality that is associated with inpatient surgery varies widely. Reducing rates of postoperative complications, the current focus of payers and regulators, may be one approach to reducing mortality. However, effective management of complications once they have occurred may be equally important.

### METHODS

We studied 84,730 patients who had undergone inpatient general and vascular surgery from 2005 through 2007, using data from the American College of Surgeons National Surgical Quality Improvement Program. We first ranked hospitals according to their risk-adjusted overall rate of death and divided them into five groups. For hospitals in each overall mortality quintile, we then assessed the incidence of overall and major complications and the rate of death among patients with major complications.

### RESULTS

Rates of death varied widely across hospital quintiles, from 3.5% in very-low-mortality hospitals to 6.9% in very-high-mortality hospitals. Hospitals with either very high mortality or very low mortality had similar rates of overall complications (24.6% and 26.9%, respectively) and of major complications (18.2% and 16.2%, respectively). Rates of individual complications did not vary significantly across hospital mortality quintiles. In contrast, mortality in patients with major complications was almost twice as high in hospitals with very high overall mortality as in those with very low overall mortality (21.4% vs. 12.5%,  $P<0.001$ ). Differences in rates of death among patients with major complications were also the primary determinant of variation in overall mortality with individual operations.

### CONCLUSIONS

In addition to efforts aimed at avoiding complications in the first place, reducing mortality associated with inpatient surgery will require greater attention to the timely recognition and management of complications once they occur.



## Amir Ghaferi, MD, MS

- Understanding & improving failure to rescue in surgery
- AHRQ K-award
- AHRQ P30 grant

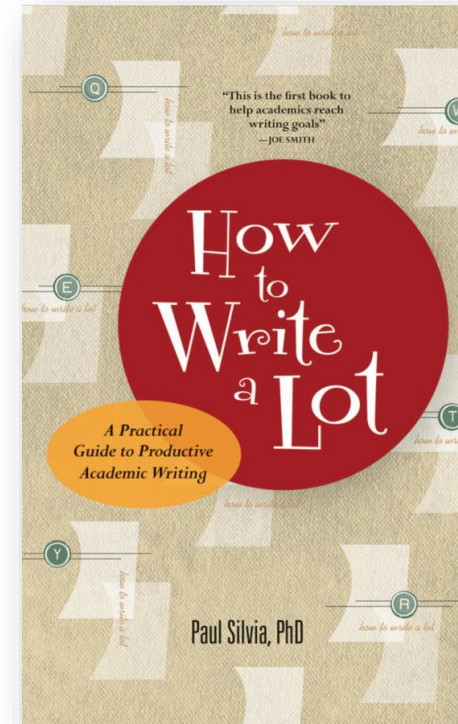


“If they ask me to do 5 pull ups, I want to do 10.”



Train like  
Simon Biles

How much time each week  
do you [really] spend  
becoming a better writer?



- Block time
- Learn templates
- Study papers
- Writing groups









“Opportunity is missed by most people because it is dressed in overalls and looks like hard work.” ~Thomas Edison



# Seek out the right coach: Someone who writes better than you



## ORIGINAL CONTRIBUTION

### Surgical Mortality as an Indicator of Hospital Quality The Problem With Small Sample Size

Justin B. Dimick, MD  
H. Gilbert Welch, MD, MPH  
John D. Birkmeyer, MD

**P**ATIENTS AND POLICY MAKERS increasingly use rates of surgical mortality to assess hospital performance. New York and Pennsylvania have long-standing systems for tracking and publicly reporting risk-adjusted mortality rates after cardiac surgery<sup>1,2</sup>; California and New Jersey have more recently adopted this approach.<sup>3,4</sup> The Leapfrog Group, a large coalition of employers and purchasers, has made surgical mortality rates one of the criteria for "evidence-based referral" for cardiac procedures.<sup>5</sup> As part of its broader efforts to develop a core set of quality indicators, the Agency for Healthcare Research and Quality (AHRQ) has recently endorsed the use of surgical mortality rates for 7 surgical procedures including repair of abdominal aortic aneurysm, esophageal resection, and hip replacement.<sup>6</sup>

However, there are 2 reasons to question whether rates of surgical mortality can reliably detect quality problems. First, the targeted operations are infrequently performed at individual hospitals. Second, the mortality rates for many of these procedures are often relatively low. Small samples and low event rates combine to limit the statistical power of a comparison between an individual hospital and a population-based benchmark.

**Context.** Surgical mortality rates are increasingly used to measure hospital quality. It is not clear, however, how many hospitals have sufficient caseloads to reliably identify quality problems.

**Objective.** To determine whether the 7 operations for which mortality has been advocated as a quality indicator by the Agency for Healthcare Research and Quality (coronary artery bypass graft [CABG] surgery, repair of abdominal aortic aneurysm, pancreatic resection, esophageal resection, pediatric heart surgery, craniotomy, hip replacement) are performed frequently enough to reliably identify hospitals with increased mortality rates.

**Design and Setting.** The US national average mortality rates and hospital caseloads of the 7 operations were determined using the 2000 Nationwide Inpatient Sample (NIS), and sample size calculations were performed to determine the minimum caseload necessary to reliably detect increased mortality rates in poorly performing hospitals. A 3-year hospital caseload was used for the baseline analysis, and poor performance was defined as a mortality rate double the national average.

**Main Outcome Measure.** Proportion of hospitals in the United States that performed more than the minimum caseload for each operation.

**Results.** The national average mortality rates for the 7 procedures examined ranged from 0.3% for hip replacement to 10.7% for craniotomy. Minimum hospital caseloads necessary to detect a doubling of the mortality rate were 64 cases for craniotomy, 77 for esophageal resection, 86 for pancreatic resection, 138 for pediatric heart surgery, 195 for repair of abdominal aortic aneurysm, 219 for CABG surgery, and 268 for hip replacement. For only 1 operation did the majority of hospitals exceed the minimum caseload, with 90% of hospitals performing CABG surgery having a caseload of 219 or higher. For the remaining operations, only a small proportion of hospitals met the minimum caseload: craniotomy (33%), pediatric heart surgery (25%), repair of abdominal aortic aneurysm (8%), pancreatic resection (7%), esophageal resection (1%), and hip replacement (<1%).

**Conclusion.** Except for CABG surgery, the operations for which surgical mortality has been advocated as a quality indicator are not performed frequently enough to judge hospital quality.

JAMA. 2004;292:847-851

www.jama.com

**Author Affiliations:** VA Outcomes Group, Department of Veterans Affairs Medical Center, White House Junction, VT (Dr Dimick and Welch); Center for the Evaluation of Veterans Health Care, Department of Veterans Affairs Medical Center, 210 N Main St, White River Junction, VT 05009 (Dr Birkmeyer); Department of Surgery, University of Michigan Medical Center, Ann Arbor (Dr Dimick and Birkmeyer).

**Corresponding Author:** Justin B. Dimick, MD, VA Outcomes Group 1118, Department of Veterans Affairs Medical Center, 210 N Main St, White River Junction, VT 05009 (jdimick@dartmouth.edu).

©2004 American Medical Association. All rights reserved.

(Reprinted) JAMA, August 18, 2004—Vol 292, No. 7 847



The New England Journal of Medicine

## Special Article

### HOSPITAL VOLUME AND SURGICAL MORTALITY IN THE UNITED STATES

JOHN D. BIRKMEYER, M.D., ANDREA E. SEEVERS, M.P.H., EMILY V.A. PHILLIPSON, M.D., THERESA A. STUDEL, Ph.D., F. LEE LUCAS, Ph.D., ISA BATISTA, B.A., H. GILBERT WELCH, M.D., M.P.H., AND DAVID E. WENNERBERG, M.D., M.P.H.

#### ABSTRACT

**Background.** Although numerous studies suggest that there is an inverse relation between hospital volume of surgical procedures and surgical mortality, the relative importance of hospital volume in various surgical procedures is disputed.

**Methods.** Using information from the national Medicare claims data base and the Nationwide Inpatient Sample, we examined the mortality associated with six different types of cardiovascular procedures and eight types of major cancer resections between 1994 and 1999 (total number of procedures, 2.5 million). Regression techniques were used to describe relations between hospital volume (total number of procedures performed per year) and mortality (in-hospital or within 30 days), with adjustment for characteristics of the patients.

**Results.** Mortality decreased as volume increased for all 14 types of procedures, but the relative importance of volume varied markedly according to the type of procedure. Absolute differences in adjusted mortality rates between very-low-volume hospitals and very-high-volume hospitals ranged from over 12 percent for pancreatic resection, 16.3 percent vs. 3.8 percent for carotid endarterectomy, 1.7 percent vs. 1.5 percent. The absolute differences in adjusted mortality rates between very-low-volume hospitals and very-high-volume hospitals were greater than 5 percent for esophagectomy and pneumonectomy, 2 to 5 percent for gastrectomy, cystectomy, repair of a nonruptured abdominal aneurysm, and replacement of an aortic or mitral valve, and less than 2 percent for coronary-artery bypass grafting, lower-extremity bypass, colectomy, lobectomy, and nephrectomy.

**Conclusions.** In the absence of other information about the quality of surgery at the hospitals near them, Medicare patients undergoing selected cardiovascular or cancer procedures can significantly reduce their risk of operative death by selecting a high-volume hospital. (N Engl J Med 2002;346:1128-37.)

Copyright © 2002 Massachusetts Medical Society.

**O**VER the past three decades, numerous studies have described higher rates of operative mortality with selected surgical procedures at hospitals where few such procedures are performed (low-volume hospitals).<sup>1-4</sup> Several recent reviews suggest that thousands of preventable surgical deaths occur each year in the United States because elective but high-risk surgery is performed in hospitals that have inadequate experience with the surgical procedures involved.<sup>5-7</sup> As part of a broader initiative aimed at improving hospital safety, a large coalition of private and public purchasers of health insurance—the Leapfrog Group—is encouraging patients undergoing one of five high-risk procedures to seek care at high-volume hospitals.<sup>8</sup> In the lay media, there has been an emphasis on the importance of experience with particular procedures,<sup>9,10</sup> and several consumer-oriented Web sites (e.g., <http://www.healthscope.org>) have begun providing patients with information about volume at hospitals near them.

Despite the recent interest in surgical volume, many question the applicability of previous research on volume and outcome to current practice.<sup>11-13</sup> First, many studies of volume and outcome are outdated. Given that the surgical mortality associated with many procedures has fallen considerably since these studies were conducted,<sup>14,15</sup> the relative importance of the volume of procedures performed may be declining. Second, most published studies on volume and outcome have used state-level data bases or regional populations that are served by a small number of high-volume centers.<sup>6</sup> Whether their results are broadly generalizable is uncertain. And finally, although some procedures (e.g., cardiac surgery) have been studied extensively, the relative importance of hospital volume to mortality with

From the Veterans Affairs Outcomes Group, Department of Veterans Affairs Medical Center, White River Junction, VT (J.D.B., E.V.A., T.H.W.), the Department of Surgery, Dartmouth-Hitchcock Medical Center, Dartmouth, N.H. (J.D.B.), the Center for the Evaluation of Veterans Health Care, Department of Veterans Affairs Medical Center, 210 N Main St, White River Junction, VT 05009 (J.D.B., T.A.S., H.G.W., D.E.W.), the Center for Outcomes Research and Evaluation, Maine Medical Center, Portland, A.E.A., J.B., D.V.), and the Department of Surgery, University of California, San Francisco (E.V.A.). Address reprint requests to Dr Birkmeyer at the Veterans Affairs Outcomes Group (1118), Department of Veterans Affairs Medical Center, White River Junction, VT 05009, or at [jdimick@dartmouth.edu](mailto:jdimick@dartmouth.edu).

# Classic playbook for clear writing:

## Preparing Manuscripts for Submission to Medical Journals: The Paper Trail

**CONTEXT.** Preparing a manuscript for publication in a medical journal is hard work.

**OBJECTIVE.** To make it easier to prepare a readable manuscript.

**APPROACH.**

*Start early*—A substantial portion of the manuscript can be written before the project is completed. Even though you will revise it later, starting early will help document the methods and guide the analysis.

*Focus on high-visibility components*—Pay attention to what readers are most likely to look at: the title, abstract, tables, and figures. Strive to develop a set of tables and figures that convey not only the major results but also the basic methods.

*Develop a systematic approach to the body of the paper*—A standard framework can make it easier to write the introduction, methods, results, and discussion. An obvious organization with frequent subheadings and consistent labels makes the paper easier to read.

*Finish strong*—Improve the paper by sharing it with others and by learning how to elicit and receive their feedback. Take the time to incorporate useful feedback by revising frequently.

### SELECTED TOPICS

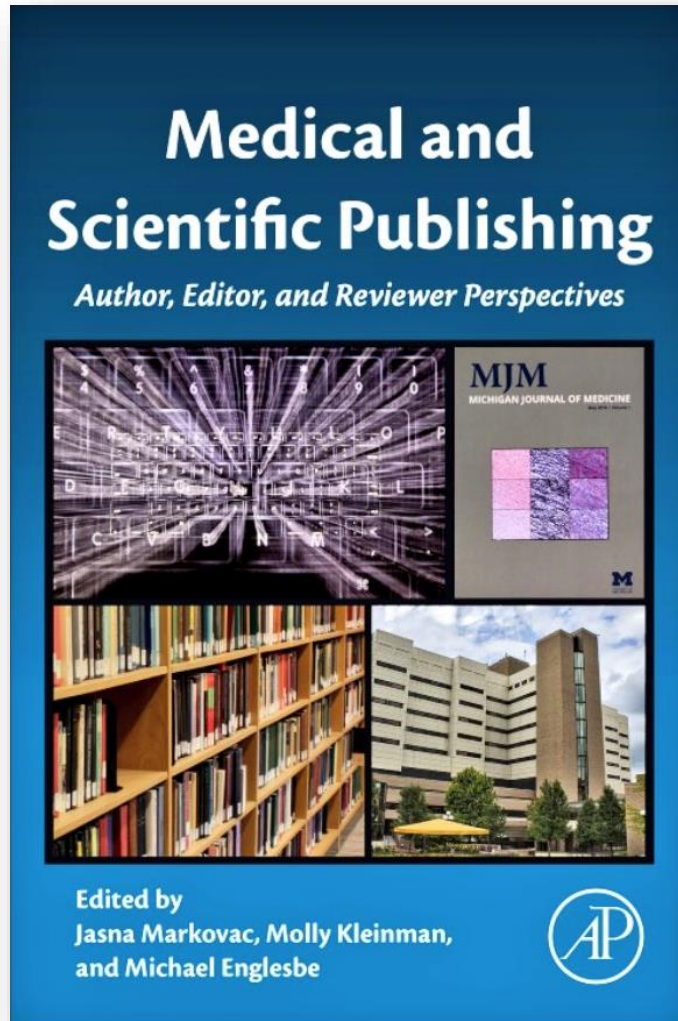
H. GILBERT WELCH, MD, MPH

Editor

*Effective Clinical Practice.*  
1999;2:131–137.



# Our interpretation:



## Chapter 9

### Writing for Impact: How to Prepare a Journal Article

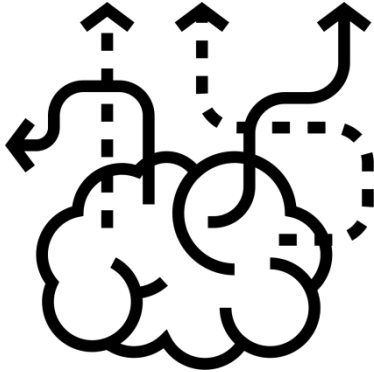
Andrew M. Ibrahim, Justin B. Dimick  
*University of Michigan, Ann Arbor, MI, United States*

*I would not give a fig for the simplicity this side of complexity, but I would give my life for the simplicity on the other side of complexity.*

Oliver Wendell Holmes, Jr., United State Supreme Court Justice, 1902–1932.

## The Three Roles of an Abstract Across the Manuscript Timeline

**When Writing**  
Improving your  
Research Question



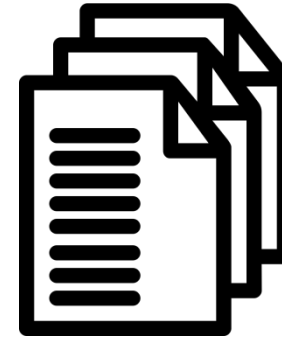
*Write the abstract first to  
troubleshoot the research  
question before moving on.*

**Once Submitted**  
Convincing Editors It's  
Worthy of Peer-Review



*Half of manuscripts at high-  
impact journals are rejected  
based on the abstract.*

**After Publication**  
Getting the Rest  
of the Article Read



*Readers will start here to  
decide if the rest of the  
article is worth reading.*

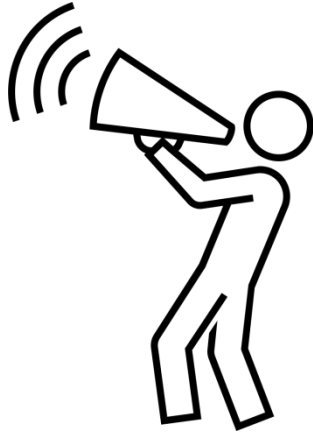
Ibrahim AM, Dimick JB. "Writing for Impact: How to Prepare a Journal Article."  
Medical Writing and Editing. Editors Markovac, Kleinman, Englesbe. Forthcoming  
in 2017.



# The Three Paragraphs of an Effective Introduction

## Give Context

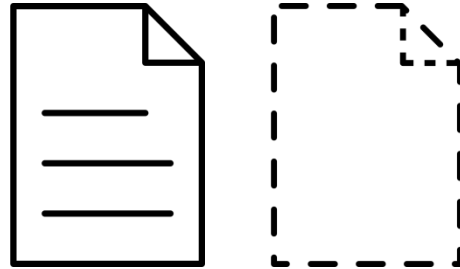
Get the reader to care about the topic.



*Bring the reader up to speed on the why the topic is important.*

## Create a Knowledge Gap

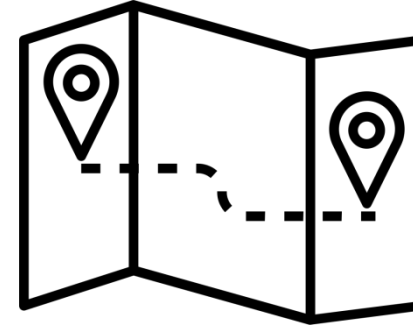
Get the reader curious about what is missing.



*Make clear what is known and what is unknown to date.*

## Preview Your Plan

Connect the knowledge gaps to your study plan.



*State how your study will fill the knowledge gap.*

Ibrahim AM, Dimick JB. "Writing for Impact: How to Prepare a Journal Article."  
Medical Writing and Editing. Editors Markovac, Kleinman, Englesbe. Forthcoming in 2017.

# Association of Hospital Critical Access Status With Surgical Outcomes and Expenditures Among Medicare Beneficiaries

Andrew M. Ibrahim, MD; Tyler G. Hughes, MD; Jyothi R. Thumma, MPH; Justin B. Dimick, MD, MPH

JAMA 2016;315: 2095-2103.

**TABLE 1**

## Framework for a Three-Paragraph Introduction

PARAGRAPH	QUESTION	EXAMPLE 1
1	What is the general problem or current situation?	Otitis media is the most common reason that children receive antibiotics.
2	What is the specific problem or controversy?	Many patients receiving the diagnosis of otitis media have no microbiological evidence of infection.
3	How will this study help?	To better delineate the vagaries of the otologic examination, we studied interobserver variability in the diagnosis of otitis media.

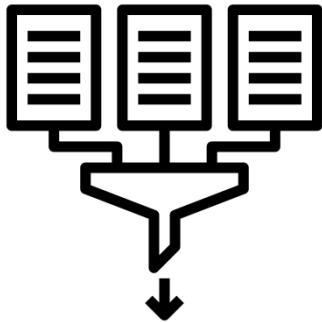
Critical access hospital designation was created to help ensure access to the more than 59 million people living in rural populations.<sup>1</sup> Established in 1997 under the Medicare Rural Hospital Flexibility Program when policy makers were worried these hospitals would close due to financial hardship, the critical access hospital provision entitled hospitals to increased reimbursements if they had fewer than 25 inpatient beds and were located more than 35 miles away from another hospital.<sup>2</sup> More than 1300 hospitals enrolled in this program, but concern about the resultant Medicare budget growing to more than \$9 billion annually led government agencies and advisory groups to call for modification and even elimination of the critical access designation.<sup>3-6</sup> Advocates for critical access hospitals argue that changes would be disruptive to communities that heavily rely on them for their health care.<sup>7,8</sup>

Debates about the value of critical access hospitals continue with limited evidence about the clinical outcomes and costs to Medicare in these settings. Increased mortality rates and worse process of care measures have been reported for common medical admissions at critical access hospitals<sup>9,10</sup>; however, far less is known about patients undergoing surgical procedures. To date the largest study of surgical outcomes captures only approximately one-third of critical access hospitals and lacks postdischarge follow-up and payment information.<sup>11</sup> Nevertheless, this single study found no difference in postoperative mortality rates suggesting that critical access hospitals may provide comparable surgical care with their acute care counterparts. Whether these findings are representative of surgical care across all critical access hospitals and what the costs are to Medicare remain unknown.

The purpose of this study was to evaluate outcomes and costs among Medicare beneficiaries undergoing surgical procedures at critical access and non-critical access hospitals.

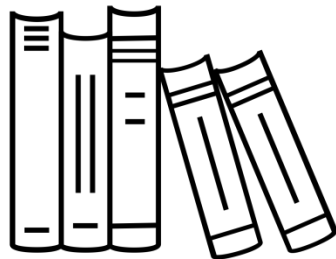
# Components of a Compelling Discussion

## Summarize the Findings



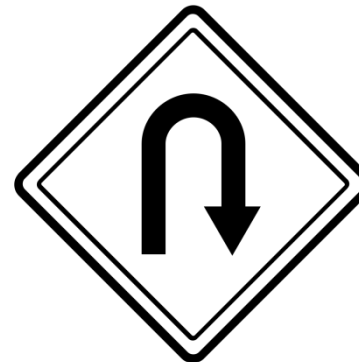
*Summarize plainly the study and key findings*

## Put Your Findings Into Context



*Review other major studies on same topic*

## Recognize Limitations



*Explain limitations & how you tried to mitigate them*

## Implications Moving Forward



*Outline implications & recommendations moving forward*

Ibrahim AM, Dimick JB. "Writing for Impact: How to Prepare a Journal Article." Medical Writing and Editing. Editors Markovac, Kleinman, Englesbe. Forthcoming in 2017.



You strike out more often than you hit a home run



Strike out like  
Babe Ruth

“Every strikeout brings me closer to my next home run.”

“I swing with everything I’ve got. I hit big or miss big. I like to live as big as I can.”

# Developing a “growth” mindset:

## New England Journal of Medicine 16-11870

▾ Ibrahim, Andrew

To:  Dimick, Justin (Justin)

Inbox

   Actions ▾

Monday, September 26, 2016 10:46 AM

Thoughtful reviewers  
I'll bring to our next meeting to plan revisions before sending elsewhere

@andrewmibrahim

Begin forwarded message:

**From:** New England Journal of Medicine <[onbehalfof+editorial+nejm.org@manuscriptcentral.com](mailto:onbehalfof+editorial+nejm.org@manuscriptcentral.com)>  
**Date:** September 26, 2016 at 10:28:43 AM EDT  
**To:** <[iandrew@umich.edu](mailto:iandrew@umich.edu)>, <[andrew.m.ibrahim@gmail.com](mailto:andrew.m.ibrahim@gmail.com)>  
**Subject:** New England Journal of Medicine 16-11870  
**Reply-To:** <[editorial@nejm.org](mailto:editorial@nejm.org)>

Dear Dr. Ibrahim:

I am sorry to inform you that your submission, "Realizing the Benefits of Hospital Consolidations by Decentralizing Specialty Care," has not been accepted for publication in the Journal. It was evaluated by members of our editorial staff and by two outside experts. After considering its focus, content, and interest, as well as the concerns expressed by the reviewers (see below), we made the editorial decision not to consider your submission further. We are informing you of this decision promptly so that you can submit it elsewhere.

Thank you for the opportunity to consider your submission.

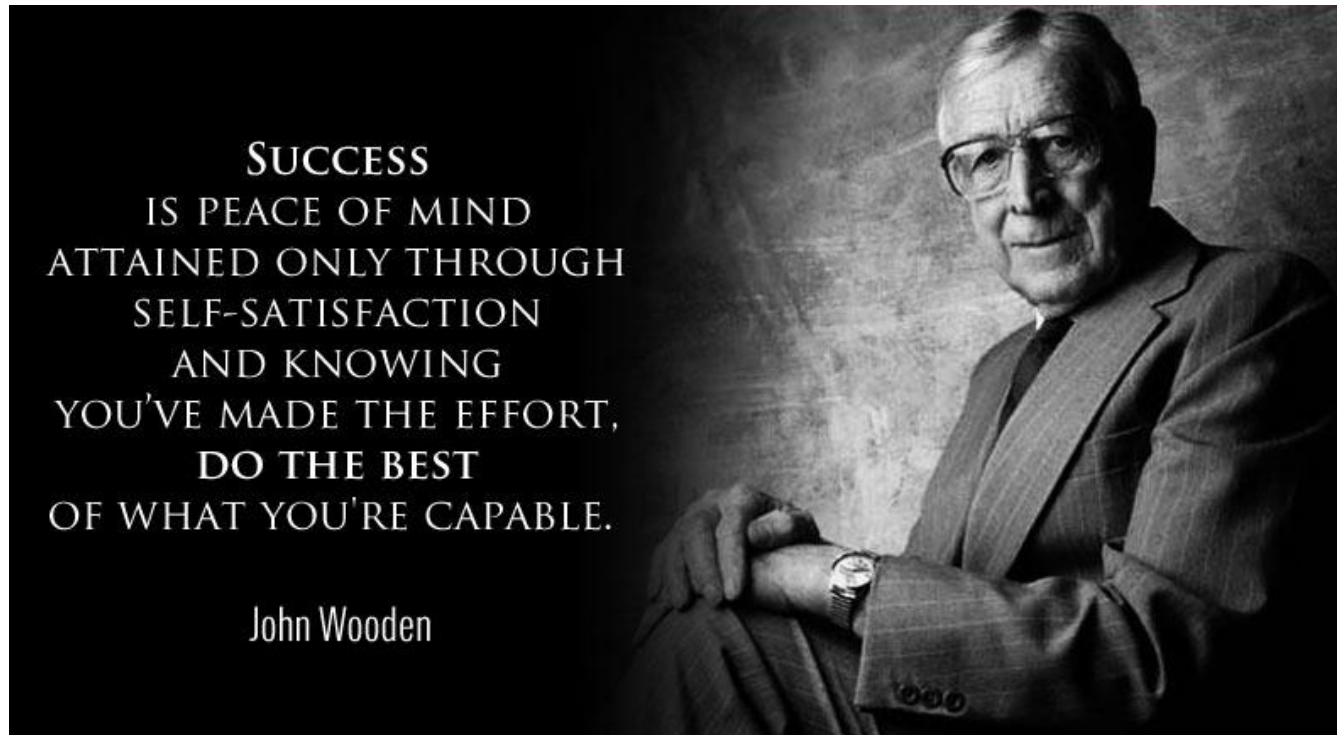
Sincerely,

Debra Malina, Ph.D.  
Perspective Editor

New England Journal of Medicine  
10 Shattuck Street  
Boston, MA 02115  
(617) 734-9800  
Fax: (617) 739-9864  
<http://www.nejm.org>



Good writing is a *process*, not an *event*.





# High impact academic writing



Invest like  
Warren Buffet



Train like  
Simon Biles



Strike out like  
Babe Ruth