THE PENETRATING POINT

Can Healthcare Go from Good to Great?

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Healthcare's improvement efforts have focused on the point of care, targeting specific processes such as preventing central line infections, while paying relatively less attention to the larger issues of organizational structure and leadership. Interestingly, the business community has long recognized that poor management and structure can thwart improvement efforts. Perhaps the corporate world's best-known study of these issues is found in the book *Good to Great*, which identifies top-performing corporations, compares them to carefully selected organizations that failed to achieve similar levels of performance, and gleans lessons from these analyses. In this article, we analyze the feasibility of carefully applying *Good to Great's* methods for analyzing organizational structure and leadership to healthcare. While a few studies in healthcare have come close to emulating *Good to Great's* methodology, none have matched its rigor. These shortcomings highlight key information and measurement gaps that must be addressed to facilitate unbiased, rigorous studies of the organizational and leadership predictors of institutional excellence in healthcare. *Journal of Hospital Medicine* 2012;7:60–65 © 2011 Society of Hospital Medicine

The American healthcare system produces a "product" whose quality, safety, reliability, and cost would be incompatible with corporate survival, were they created by a business operating in a competitive industry. Care fails to comport with best evidence nearly half of the time.[1] Tens of thousands of Americans die yearly from preventable medical mistakes.[2] The healthcare inflation rate is nearly twice that of the rest of the economy, rapidly outstripping the ability of employers, tax revenues, and consumers to pay the mounting bills.

Increasingly, the healthcare system is being held accountable for this lack of value. Whether through a more robust accreditation and regulatory environment, public reporting of quality and safety metrics, or pay for performance (or "no pay for errors") initiatives, outside stakeholders are creating performance pressures that scarcely existed a decade ago.

Healthcare organizations and providers have begun to take notice and act, often by seeking answers from industries outside healthcare and thoughtfully importing these lessons into medicine. For example, the use of checklists has been adopted by healthcare (from aviation), with impressive results.[3,4] Many quality methods drawn from industry (Lean, Toyota, Six Sigma) have been used to try to improve performance and remove waste from complex processes.[5,6]

While these efforts have been helpful, their focus has generally been at the point-of-care—improving the care of patients with acute myocardial infarction or decreasing readmissions. However, while the business community has long recognized that poor management and structure can thwart most efforts to improve individual processes, healthcare has paid relatively little attention to issues of organizational structure and leadership. The question arises: Could methods that have been used to learn from top-performing businesses be helpful to healthcare's efforts to improve its own organizational performance?

In this article, we describe perhaps the best known effort to identify top-performing corporations, compare them to carefully selected organizations that failed to achieve similar levels of performance, and glean lessons from these analyses. This effort, described in a book entitled *Good to Great: Why Some Companies Make the Leap...and Others Don't*, has sold more than 3 million copies in its 35 languages, and is often cited by business leaders as a seminal work. We ask whether the methods of *Good to Great* might be applicable to healthcare organizations seeking to produce the kinds of value that patients and purchasers need and deserve.

"GOOD TO GREAT" METHODOLOGY
In 2001, business consultant Jim Collins published *Good to Great*. Its methods can be divided into 3 main components: (1) a gold standard metric to identify top organizations; (2) the creation of a control group of organizations that appeared similar to the top performers at the start of the study, but failed to match the successful organizations' performance over time; and (3) a detailed review of the methods, leadership, and structure of both the winning and laggard organizations, drawing lessons from their differences.

TABLE 1. Four Metrics Used by *Good to Great** to Identify Top-Performing Companies

The company had to show a pattern of good performance punctuated by a transition point when it shifted to great performance. Great performance was defined as a cumulative total stock return of at least 3 times the general stock market for the period from the transition point through 15 years.

The transition from ''good to great'' had to be company-specific, not an industry-wide event.

The company had to be an established enterprise, not a startup, in business for at least 10 years prior to its transition.

At the time of the selection (in 1996), the company still had to show an upward trend.

*See Collins.[8]

TABLE 2. Experimental and Control Companies Used in *Good to Great**

Experimental Company	Control Company
Abbott	Upjohn
Circuit City	Silo
Fannie Mae	Great Western
Gillette	Warner-Lambert
Kimberly-Clark	Scott Paper
Kroger	A&P
Nucor	Bethlehem Steel
Philip Morris	R.J. Reynolds
Pitney Bowes	Addressograph
Walgreen's	Eckerd
Wells Fargo	Bank of America

*See Collins.[8]

Before discussing whether these methods could be used to analyze healthcare organizations, it is worth describing Collins' methods in more detail.

The first component of *Good to Great's* structure was the use of 4 metrics to identify top-performing companies (Table 1). To select the ''good to great'' companies, Collins and his team began with a field of 1435 companies drawn from *Fortune* magazine's rankings of America's largest public companies. They then used the criteria in Table 1 to narrow the list to their final 11 companies, which formed the experimental group for the analysis.

After identifying these 11 top-performing companies, Collins created a control group, composed of companies with similar attributes that could have made the transition, but failed to do so.[7] To create the control group, Collins matched and scored a pool of control group candidates based on the following criteria: similarities of business model, size, age, and cumulative stock returns prior to the ''good to great'' transition. When there were several potential controls, Collins chose companies that were larger, more profitable, and had a stronger market position and reputation prior to the transition, in order to increase the probability that the experimental companies' successes were not incidental.[8] Table 2 lists the paired experimental and control companies.

Finally, Collins performed a detailed historical analysis on the experimental and control groups, using materials (such as major articles published on the company, books, academic case studies, analyst reports, and financial and annual reports) that assessed the companies in real time. *Good to Great* relied on evidence from the period of interest (ie, accrued prior to the transition point) to avoid biases that would likely result from relying on retrospective sources of data.[9]

This analysis identified a series of factors that were generally present in ''good to great'' companies and absent in the control organizations. In brief, they were: building a culture of discipline, making change through gradual and consistent improvement, having a leader with a paradoxical blend of personal humility and professional will, and relentlessly focusing on hiring and nurturing the best employees. Over 6000 articles and 5 years of analysis support these conclusions.[8]

EFFORTS TO DATE TO ANALYZE HEALTHCARE ORGANIZATIONAL CHARACTERISTICS

We reviewed a convenience sample of the literature on organizational change in healthcare, and found only 1 study that utilized a similar methodology to that of *Good to Great*: an analysis of the academic medical centers that participate in the University HealthSystem Consortium (UHC). Drawing inspiration from Collins' methodologies, the UHC study developed a holistic measure of quality, based on safety, mortality, compliance with evidence-based practices, and equity of care. Using these criteria, the investigators selected 3 UHC member organizations that were performing extremely well, and 3 others performing toward the middle and bottom of the pack. Experts on health system organization then conducted detailed site visits to these 6 academic medical centers. The researchers were blinded to these rankings at the time of the visits, but were able to perfectly predict which cohort the organizations were in.

The investigators analyzed the factors that seemed to be present in the top-performing organizations, but were absent in the laggards, and found: hospital leadership emphasizing a patients-first mission, an alignment of departmental objectives to reduce conflict, a concrete accountability structure for quality, a relentless focus on measurable improvement, and a culture promoting interprofessional collaboration on quality.[10]

While the UHC study is among the most robust exploration of healthcare organization dynamics in the literature, it has a few limitations. The first is that it studied a small, relatively specialized population: UHC members, which are large, mostly urban, well-resourced teaching hospitals. While studying segments of populations can limit the generalizability of some of the UHC studies' findings, their approach can be a useful model to apply to studying other types of healthcare institutions. (And, to be fair, *Good to Great* also studies a specialized population—*Fortune* 500 companies—and thus its lessons need to be

TABLE 3. Summary of Key Studies on High-Performing Healthcare Organizations

Study	Key Findings
Keroack et al.[10]	Superior-performing organizations were distinguished from average ones by having: hospital leadership emphasizing a patients-first mission, an alignment of departmental objectives to reduce conflict, concrete accountability structures for quality, a relentless focus on measurable improvement, and a culture promoting interprofessional collaboration toward quality improvement measures.
Jha et al.[22]	Factors that led to the VA's improved performance included: • Implementation of a systematic approach to measurement, management, and accountability for quality. • Initiating routine performance measurements for high-priority conditions. • Creating performance contracts to hold managers accountable for meeting improvement goals. • Having an independent agency gather and monitor data. • Implementing process improvements, such as an integrated, comprehensive medical-record system. • Making performance data public and distributing these data widely within the VA and among other key stakeholders (veterans' service organizations, Congress).
Shortell et al.[20]	Focusing on reducing the barriers and encouraging the adoption of evidence-based organizational management is associated with better patient outcomes. Examples of reducing barriers to encourage adoption of evidence-based guidelines include: • Installing an IT system to improve chronic care management. • Creating a culture where practitioners can help each other learn from their mistakes.
Knaus et al.[21]	The interaction and coordination of each hospital's ICU staff had a greater correlation with reduced mortality rates than did the unit's administrative structure, amount of specialized treatment used, or the hospital's teaching status.
Pronovost et al.[3]	Introducing a checklist of 5 evidence-based procedures into a healthcare team's operation can significantly reduce the rate of catheter-associated infections. Simple process change interventions, such as checklists, must be accompanied by efforts to improve team culture and create leadership accountability and engagement.
Pronovost et al.[30]	Implementing evidence-based therapies by embedding them within a healthcare team's culture is more effective than simply focusing on changing physician behavior. The authors proposed a 4-step model for implementing evidence-based therapies: select interventions with the largest benefit and lowest barriers to use, identify local barriers to implementation, measure performance, and ensure all patients receive the interventions.

Abbreviations: ICU, intensive care unit; IT, information technology.

extrapolated to other businesses, such as small companies, with a degree of caution.) The study also suffers from the relative paucity of publicly accessible organizational data in healthcare. The fact that the UHC investigators depended on both top-performing and laggard hospitals, to voluntarily release their organizational data and permit a detailed site visit, potentially introduces a selection bias into the survey population, a bias not present in *Good to Great* due to Collins' protocol for matching cases and controls.

There have been several other efforts, using different methods, to determine organizational predictors of success in healthcare. The results of several important studies are shown in Table 3. Taken together, they indicate that higher performing organizations make practitioners accountable for performance measure-

ments, and implement systems designed to both reduce errors and facilitate adherence to evidence-based guidelines. In addition to these studies, several consulting organizations and foundations have performed focused reviews of high-performing healthcare organizations in an effort to identify key success factors.[11] These studies, while elucidating factors that influence organizational performance, suffer from variable quality measures and subjective methods for gathering organizational data, both of which are addressed within a "good to great"-style analysis.[12]

Perhaps the best-known study on healthcare organizational performance is *The Dartmouth Atlas*, an analysis that (though based on data accumulated over more than 30 years) has received tremendous public attention, in recent years, in the context of the debate over healthcare reform.[13] However, by early 2010, the Dartmouth analysis was stirring controversy, with some observers expressing concerns over its focus on care toward the end of life, its methods for adjusting for case-mix and sociodemographic predictors of outcomes and costs, and its exclusive use of Medicare data.[14,15] These limitations are also addressed by a "good to great"-style analysis.

WOULD A "GOOD TO GREAT" ANALYSIS BE POSSIBLE IN HEALTHCARE?

While this review of prior research on organizational success factors in healthcare illustrates considerable interest in this area, none of the studies, to date, matches *Good to Great* in the robustness of the analysis or, obviously, its impact on the profession. Could a "good to great" analysis be carried out in healthcare? It is worth considering this by assessing each of Collins' 3 key steps: identifying the enterprises that made a "good to great" leap, selecting appropriate control organizations, and determining the factors that contributed to the successes of the former group.

Good to Great used an impressive elevation in stock price as a summary measure of organizational success. In the for-profit business world, it is often assumed that Adam Smith's invisible hand makes corporate information available to investors, causing an organization's stock price to capture the overall success of its business strategy, including its product quality and operational efficiency.[16] In the healthcare world, mostly populated by non-profit organizations that are simultaneously working toward a bottom line and carrying out a social mission, there is no obvious equivalent to the stock price for measuring overall organizational performance and value. All of the methods for judging top hospitals, for example, are flawed—a recent study found that the widely cited *U.S. News & World Report's* "America's Best Hospitals" list is largely driven by hospital reputation,[17] while another study found glaring inconsistencies among methods used to calculate risk-adjusted mortality rates.[18] A generally accepted set of metrics defining the value of

TABLE 4. Summary of the *Good to Great* Measures, Healthcare's Nearest Analogs, and Some of the Challenges of Finding Truly Comparable Measures in Healthcare

Issue*	*Good to Great**	What Exists in Healthcare	How Healthcare Can Fill in the Gaps
Gold standard measure of quality	Cumulative total stock return of at least 3 times the general market for the period from the transition point through 15 years.	Risk-adjusted patient outcomes data (eg, mortality), process data (eg, appropriate medication use), structural data (eg, stroke center).	Create a more robust constellation of quality criteria to measure organizational performance (risk-adjusted patient outcomes, avoidable deaths, adherence to evidence-based guidelines, cost effectiveness, patient satisfaction); develop a generally accepted "roll-up" measure. Of the studies we reviewed, the UHC study's summary measure was the closest representation to a "good to great"-summary performance measure.
	At the time of the selection, the "good to great" company still had to show an upward trend.	The study of the VA's transformation and the ongoing UHC study stand out as examples of studying the upward trends of healthcare organizations.[22]	Make sure that the high-performing healthcare organizations are still improving—as indicated by gold standard measures. Once the organizations are identified, study the methods these organizations utilized to improve their performance.
	The turnaround had to be company-specific, not an industry-wide event.	A few organizations have been lauded for transformations (such as the VA system).[22] In most circumstances, organizations praised for high quality (eg, Geisinger, Mayo Clinic, Cleveland Clinic) have long-established corporate tradition and culture that would be difficult to imitate. The VA operates within a system that is unique and not replicable by most healthcare organizations.	Healthcare needs to identify more examples like the VA turnaround, particularly examples of hospitals or healthcare organizations operating in more typical environments—such as a community or rural hospital.
	The company had to be an established enterprise, not a startup, in business for at least 10 years prior to its transition.	Most of the healthcare organizations of interest are large organizations with complex corporate cultures, not startups.	Not applicable.
Comparison method	Collins selected a comparison company that was almost exactly the same as the "good to great" company, except for the transition. The selection criteria were business fit, size fit, age fit, stock chart fit, conservative test, and face validity.*	Healthcare organizational studies are mostly comparisons of organizations that all experience success; few studies compare high-performing with non–high-performing organizations. (Jha et al. compared Medicare data from non-VA hospitals and the VA, but did not use similar criteria to select similar organizations[22]; Keroack and colleagues' comparison of 3 mediocre to 3 superior-performing hospitals is the closest analog to the *Good to Great* methodology thus far.[10])	Similar to the *Good to Great* study, a set of factors that can categorize healthcare organizations according to similarities must be devised (eg, outpatient care, inpatient care, academic affiliation, tertiary care center, patient demographics), but finding similar organizations whose performance diverged over time is challenging.
Analysis of factors that separated great companies from those that did not make the transition to greatness	*Good to Great* used annual reports, letters to shareholders, articles written about the company during the period of interest, books about the company, business school case studies, analyst reports written in real time.	Most of the research conducted thus far has been retrospective analyses of why organizations became top performers.	The historical source of data is almost nonexistent in comparison with the business world. A parallel effort would have to capture a mixture of structure and process changes, along with organizational variables. The most effective method would be a prospective organizational assessment of several organizations, following them over time to see which ones markedly improved their performance.

Abbreviations: UHC, University HealthSystem Consortium; VA, Veterans Affairs.
* See Collins.[8]

care produced by a healthcare organization (including quality, safety, access, patient satisfaction, and efficiency) would be needed to mirror the first "good to great" step: defining top-performing organizations using a gold standard.[19] The summary measure used in the UHC study is the closest we have seen to a "good to great"-style summary performance measure in healthcare.[10]

While it is important to identify a gold-standard measure of organizational quality, careful selection of a control organization may be the most important step in conducting a "good to great" analysis. Although Collins' use of stock price as a summary measure of organizational performance is the best

measure available in business, it is by no means perfect. Despite this shortcoming, however, Collins believes that the central requirement is not finding a perfect measure of organizational success, but rather determining what correlates with a divergence of performance in stock price (J. Collins, oral communication, July 2010). Similar to clinical trials, meticulous matching of a "good to great" organization with a control has the advantage of canceling out extraneous environmental factors, thereby enabling the elucidation of organizational factors that contribute to divergent performance. *Good to Great's* methods depended on substantial historical background to define top performers and controls. Unfortunately, healthcare lacks

an analog to the business world's robust historical and publicly accessible record of performance and organizational data. Therefore, even if a certain organization was determined to be a top performer based on a gold-standard measure, selecting a control organization by matching its organizational and performance data to the top performer's would be unfeasible.

Finally, the lack of a historical record in healthcare also places substantial roadblocks in the way of "looking under the organization's hood." Even in pioneering organizational analyses by Shortell et al.,[20] Knaus et al.,[21] and Jha et al.,[22] substantial parts of their analyses relied on retrospective accounts to determine organizational characteristics. To remove the bias that comes from knowing the organization's ultimate performance, Collins was careful to base his analysis of organizational structures and leadership on documents available before the "good to great" transition. Equivalent data in healthcare are extremely difficult to find.

While it is best to rely on an historical record, it may be possible to carry out a "good to great"-type analysis through meticulous structuring of personal interviews. Collins has endorsed a non-healthcare study that utilized the "good to great" matching strategy but used personal interviews to make up for lack of access to a substantial historical record.[23] To reduce the bias inherent in relying on interviews, the research team ensured that the "good to great" transition was sustained for many years, and that the practices elicited from the interviews started before the "good to great" transition. Both of these techniques helped increase the probability that the identified practices contributed to the transition to superior results (in this case, in public education outcomes) and, thus, that the adoption of these practices could result in improvements elsewhere (J. Collins, oral communication, July 2010).

To make such a study possible in healthcare, more organizational data are required. Without prodding by outside stakeholders, most healthcare organizations have been reluctant to publicize performance data for fear of malpractice risk,[24] or based on their belief that current data paint an incomplete or inaccurate picture of their quality.[25] Trends toward required reporting of quality data (such as via Medicare's "Hospital Compare" Web site) offer hope that future comparisons could rely on robust organizational quality and safety data. Instituting healthcare analogs to Securities & Exchange Commission (SEC) reporting mandates would further ameliorate this information deficit.[26]

While we believe that *Good to Great* offers lessons relevant to healthcare, there are limitations that are worth considering. First, the extraordinary complexity of healthcare organizations makes it likely that a matched-pair-type study would need to be accompanied by other types of analyses, including more quantitative analyses of large datasets, to give a full picture of structural and leadership predictors of strong per-

formance. Moreover, before embracing the "good to great" method, some will undoubtedly point to the demise of Circuit City and Fannie Mae (2 of the *Good to Great* companies; Table 2) as a cautionary note. Collins addresses this issue with the commonsensical argument that the success of a company needs to be judged in the context of the era. By way of analogy, he points to the value of studying a sports team, such as the John Wooden-coached UCLA teams of the 1960s and 1970s, notwithstanding the less stellar performance of today's UCLA team. In fact, Collins' recent book mines some of these failures for their important lessons.[27]

"GOOD TO GREAT" IN HEALTHCARE

Breaking through healthcare's myopia to explore solutions drawn from other industries, such as checklists, simulation, and industrial approaches to quality improvement, has yielded substantial insights and catalyzed major improvements in care. Similarly, we believe that finding ways to measure the performance of healthcare organizations on both cost and quality, to learn from those organizations achieving superior performance, and to create a policy and educational environment that rewards superior performance and helps poor performers improve, is a defining issue for healthcare. This will be particularly crucial as the policy environment changes—transitions to Accountable Care Organizations[28] and bundled payments[29] are likely to increase the pressure on healthcare organizations to learn the secrets of their better-performing brethren. These shifts are likely to put an even greater premium on the kinds of leadership, organizational structure, and ability to adapt to a changing environment that Collins highlighted in his analysis. After all, it is under the most challenging conditions that top organizations often prove their mettle.

Although there are considerable challenges in performing a "good to great" analysis in healthcare (Table 4), the overall point remains: Healthcare is likely to benefit from rigorous, unbiased methods to distinguish successful from less successful organizations, to learn the lessons of both, and to apply these lessons to improvement efforts.

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