

"Consumers simply don't have the information they need to pick a doctor based on measurable quality or the expected cost of care."

- Pacific Business Group on Health —

"Almost 60 percent of consumers ... use online reviews when choosing a new healthcare provider. ... but most sites ... don't offer nearly enough data to be useful."

- Consumer Reports -

"Go to the Wrong Hospital and You're 3 Times More Likely to Die"
- NY Times -

"More than half of [those] hospitalized in the previous three years said there was only one local hospital when, in fact, there were a median of three" - McKinsey & Company –

"empowering consumers with better information to make provider choices could improve the cost-effectiveness of the U.S. healthcare system..."

- Author's Conclusions & Recommendations -

Peter A. Wadsworth

Mory ssociates, LLP

July 11, 2018

HEALTHCARE CONSUMERISM & OUTCOMES: OPPORTUNITIES FOR IMPROVEMENT

Absent a sea change in national politics, competition in healthcare appears to be here to stay, at least for the foreseeable future. So, if we are to improve on the country's healthcare performance relative to other OECD nations, consumer empowerment must be part of the solution. This article explores the confluence of two significant, inter-related trends:

- increasing consumer use of the internet to choose providers and
- growing availability of hospital and surgical outcomes to consumers.

By examining these two trends, the author finds substantial unrealized opportunity based on the central premise that empowering consumers to choose providers based on outcomes will improve the overall quality of care in the U.S. and will likely reduce healthcare and related costs. At the very least, individual consumers can benefit from choosing providers with better outcomes.

EXECUTIVE SUMMARY

Research by McKinsey & Company, Consumer Reports, the Boston Consulting Group, the University of Michigan and other organizations reveals that the majority of consumers now use the internet to help select doctors, but that there's a need for better internet-based consumer information and consumer awareness:

- Consumers consider quality by far the most important aspect of choosing a primary care physician (PCP), but there aren't any good measures of individual PCP quality.
- Consumers often rely on patient surveys to choose a PCP, but those surveys don't measure quality and remain of questionable value after 10 years of compilation.
- Many recently hospitalized patients are unaware of the existence of other local hospitals.
- > Consumers barely mention hospital or medical group affiliation as a basis for choosing doctors.

Outcomes offer Opportunity for Improvement

This article finds opportunities for improvement in the current state of outcomes information, which could help further the goal of consumer empowerment:

- ➤ Variations in hospital and surgeons' outcomes possibly greater than 6 to 1 represent a major opportunity for consumers to lower risks (and costs) through provider choice.
- ➤ While the best-known hospital rating services don't agree on which hospitals are safest or adequately disclose outcomes performance, less well-known solutions currently exist.
- Medical group quality ratings and the national outcomes database need improvement.

And, of course, none of the above would change consumer behavior without consumer education

Industry Action Needed to Realize Results

As a consequence of these findings, the author recommends that the healthcare industry:

- > Self-regulate to improve the quality and availability of safety information to consumers and eliminate deceptive practices.
- Educate consumers to use available outcomes data to choose providers more wisely.
- > Support a nation-wide effort to rate the quality of care provided by physician groups;
- > Continue to work toward an integrated all-payer database of risk adjusted outcomes.

The author believes that a strong nationwide healthcare consumerism movement coupled with better information can eventually lead to a safer, more cost-effective healthcare system in the United States.

USING THE INTERNET

"Until recently, consumerism in the U.S. healthcare industry has moved slowly. However, several converging forces are likely to change the situation soon and result in a more dynamic market. Higher deductibles and copayments, greater transparency into provider performance and costs, and the rise of network narrowing and provider-led health plans are prodding patients to become more involved in healthcare decision making than ever before." • McKinsey & Company

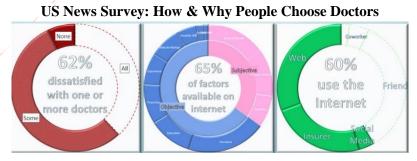
The internet is increasingly becoming the "weapon of choice" when shopping for doctors, hospitals and health plans. Research confirms that healthcare consumers are using the internet in growing numbers, driven not only by such factors as "higher deductibles and copayments, greater transparency into provider performance and costs, and the rise of network narrowing and provider-led health plans" i, but also the ubiquity of handheld and wearable information appliances.

The growth of **Consumer Directed Health Plans** (CDHPs) is certainly a driving factor increasing healthcare consumer involvement in provider choice. According to Tracy Watts, Senior Partner at Mercer in her testimony to Congress on 06/08/2018, "enrollment has more than tripled since 2009, with 30% of all covered employees enrolled)" and "among large employers, the average per-employee cost of HSA-eligible plans is 20% less than traditional PPO plans and even 6% less than PPOs with deductibles of \$1,000 or more."

According to Consumer Reports, "Almost 60 percent of consumers say that they use online reviews when choosing a new healthcare provider." A recent study by McKinsey reports that more than 80% of respondents view "digital solutions as the most effective way" to shop for doctors (84%) and health plans (81%).

Choosing Doctors

An online survey by US News in 2014 clearly defined the need for better ways to choose a doctor. The majority of people surveyed are dissatisfied with one or more of their doctors, use the internet or their health plan to look for new doctors and rely on objective factors, albeit not necessarily the right ones, to find a new doctor.



A recent **McKinsey & Company** surveyⁱ found that consumers overwhelmingly cited quality as the most important criterion for selecting their Primary Care Physician (PCP) by almost 4 to 1 compared to the second most important factor, out-of-pocket costs.

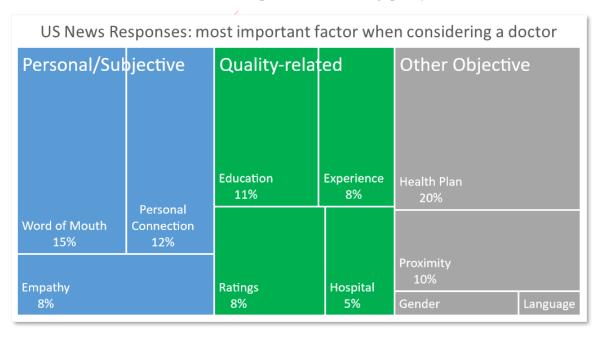
Criteria for Choosing PCP ■ Most Important Among Top 5 **Quality of Care** 41% 70% Out-of-Pocket Cost 11% 40% 7% Location 43% Continuity of care 5% 30% Appointment time 4% 28%

QUALITY OF CARE IS BY FAR THE MOST IMPORTANT CRITERION

SOURCE: McKinsey & Company

Yet most consumers do not have (or use) the right tools to judge the quality of their PCPs. In the US News survey cited above, for example, only 5% of those surveyed mentioned hospital affiliation (admitting privileges) as the most important factor when choosing a doctor. And medical group affiliation was not even mentioned.

When looking more closely at the US News responses to "The most important factor to me when considering a doctor is", we find that while objective factors represent the majority of responses, only about a third of all respondents mentioned a quality-related criterion: education (11%), experience (8%), ratings (8%) or hospital affiliation (5%). Some would argue that health plan (20%) is a quality-related criterion, although it depends upon the health plan. Conversely, it is unclear whether "rating" refers to patient ratings, which Consumer Reports finds unreliable and not related to quality. So, if we split the difference, we still have about one third of respondents mentioning quality-related criteria.



Our conclusion: consumers say that quality is most important, but when it comes to choosing a doctor, their selection criteria don't overwhelmingly reflect the quality criterion, whether of necessity, lack of conviction or lack of knowledge.

Choosing Hospitals

Based on a survey of over 300,000 households, NRC Health found that those who had visited a hospital website had risen by almost 50% from 2013 to 2016 to almost a third of those households. And "Patient Ratings/Reviews were the most important information needed on a hospital website."iii It was found that hospital website usage was on the increase among every age group. The same survey found that "for age 18-34, patient ratings/reviews is NOT most important... Payment and Billing Info is #1".

Hospital Website Usage by Age 35% 30% 25% 20% 15% 18-34 35-44 46-64 65+ **■** 2013 **■** 2014 **■** 2015 **■** 2016

Hospital Website Usage is Rising Rapidly for all Age Groups

SOURCE: NRC Health "2016 US health care statistics data by state & demographics"

Choosing a Health Plan

McKinsey also found that 81 percent of consumers surveyed viewed "digital solutions as the most effective way to ...shop for [a] health plan." Not all estimates are as rosy. PWC, for example, estimates that 55 percent purchased their insurance in a "retail" mode in 2017, but that proportion grew by 28 percent over the last 5 years. Certainly, the advent of the Affordable Care Act (ACA) and the required state- of federallyrun health insurance exchanges has contributed mightily to the practice of shopping online for health plans.

AVAILABLE METRICS FOR CONSUMER CHOICE

"Consumers simply don't have the information they need to pick a doctor based on measurable quality or the expected cost of care... Instead, they usually select physicians based on convenience or referrals"
- Pacific Business Group on Health —

Historically, consumer choice has been hobbled by two interrelated impediments:

- 1. Availability and usefulness of information about the quality of care has been limited.
- 2. Consumers haven't known which information and sources to rely on when choosing providers.

These two factors have led to inherent contradictions between what consumers say they want and what they are using. But the growing availability of outcomes and other metrics of quality offers an opportunity to empower healthcare consumers to make better decisions. The missing ingredients have been the availability of useful quality metrics (see medical groups and surgeons) and consumer awareness of their existence and how to use them.

Primary Care Doctors: Absence of Quality Metrics

Based on an extensive analysis of websites available for choosing doctors in Massachusetts, the author found "a bewildering array of websites that help consumers select a doctor, [but] none stand alone without knowledge of hospital quality." Two sources based their selections on other doctors' recommendations, but the resulting choices of a PCP within 5 miles of a close-in Boston suburb were so spotty (including the omission of doctors in a major multi-specialty group known to be of high quality) as to be of questionable value.

Unlike other sites, several health insurers enable the user to screen doctors by hospital and medical group affiliation. Some of those insurers labelled certain medical groups as preferred, although the basis for preference is inherently suspect, given the insurers' financial imperatives. In short, hospital and medical group affiliation appear to be the best inferential measures of quality of primary care, but that information may not available as a screening criterion unless you first choose that health insurer. (The author was able to access several insurers' site while shopping for a Medicare supplemental or advantage plan.)

Patient surveys of doctors have been promoted by some healthcare providers and third parties as the best way to choose a doctor. But "A new study reveals that these websites don't contain enough information to be useful to consumers." according to Consumer Reports. The reasons cited include lack of sufficient number of reviews (many doctors received 0 or 1 review), lack of objectivity and lack of correlation between the patient experience and actual quality of care. The article goes on to say,

"While sites like Healthgrades, RateMDs, Vital, and Yelp offer some of the most accessible sources of information for consumers, they're also riddled with limitations" "In ten years, none of them have amassed enough reviews to be useful."

- Consumer Reports -

In the absence of meaningful direct metrics of quality for primary care doctors or strong guidance from the healthcare community, it is understandable that consumers will choose based on amenities, recommendations of friends and the flimsy fabric of patient surveys.

All the above applies to primary care and other physicians working in solo or small group practices. Better information is available for surgeons and for group practices in certain states, as discussed below.

Surgeons' Outcomes: On Target but Harder to Find

The picture just painted for primary care physicians is the exact opposite of the of the situation for surgeons. There are websites that provide copious information about surgeons' outcomes (deaths and complications), but that information currently resides behind paywalls.

Although it is not widely known among consumers, surgeons' ratings are a promising development. Consumers' CheckBook magazine combines outcomes (deaths <u>and</u> complications), other doctors' recommendations, board certifications and hospital ratings in an easy to read, sortable format. It is "based on analyses of data on more than five million surgeries done in hospital by more than 50,000 surgeons" and covers 12 different type of surgery.

Mpirica Health Analytics has developed a surgical outcomes metric it calls the Mpirica Quality Score for surgeons, which incorporates "mortality, major complications (exhibited by prolonged and risk-adjusted lengths of stay), readmissions, and ER visits." It is based on "864 possible procedures...in 28 surgical categories: 15 inpatient, 10 outpatient, and 3 that can be performed in either setting. fall into these categories." Mpirica 's ratings are based on the Centers for Medicare & Medicaid Services (CMS) data. Notable is the extension of the readmission period considered from 30 days (typical) to 90 days. When last checked, Mpirica offered its services via employers, health plans and other organizations and not to individual consumers.

Medical Groups: Quality Metrics Under Development

With more than half of all physicians now practicing in medical groups, according to the AMA, differentiating the quality of care among groups has become both relevant and feasible. While there are no definitive measures of the quality of care for medical group practices, we can infer differences in quality in several ways:

- They generally have admitting privileges at selected local hospitals, for which there are ratings, or they may be closely affiliated with a specific hospital.
- Some insurers rate physician groups, although these ratings must be viewed with skepticism because they may be motivated more by financial than quality considerations.
- In some states, organizations rate medical groups based on process-oriented certain criteria.

Massachusetts Health Quality Partners (MHQP) has created a website called Healthcare Compass with the tagline "Your Guide to Quality Care in Massachusetts", which provides quality-related information for over 500 primary care practices across the state.

Minnesota Community Measurement has a sub-website called **Minnesota Health Scores**, which covers Clinics Quality and Patient Experience, Medical Group Quality and Total Cost, Hospital Quality and Patient Experience and Cost of Services and Procedures. Their measures of quality for clinics include asthma, depression, diabetes and vascular care. We have not dug deep enough to opine on the utility of the information, but the available information is certainly superior to the patient ratings used by some of the services previously cited.

In the responses to the US News survey cited above, medical group affiliation was not even mentioned as a criterion for choosing a doctor.

Hospital Ratings: Abundant but Confusing

"When choosing a hospital, quality measures such as complications and mortality rates are most important..." — HealthLeaders -

In contrast to doctors, there is an abundance of sources that rate the safety and quality of hospitals. The big four are: the Leapfrog Group (Hospital Safety Grades); US News; Consumer Reports; and Medicare. Consumer Reports, however, does not provide ratings on a regular basis, and the author finds their rating information more confusing to use than from other sources. All of these organizations rely on a combination of outcomes obtained from the Centers for Medicare & Medicaid Services (CMS), process-oriented data, e.g. communications, staffing, and, in some case, patient surveys, to arrive at their hospital ratings. Each of them, in their own way, provides a method of "drilling down" into the data to obtain more detail with varied usefulness. Some of them provide too much detail at the next level, others not enough.

But the various rating services don't agree on which hospitals are the safest (see table below). Is it any wonder that consumers are confused?

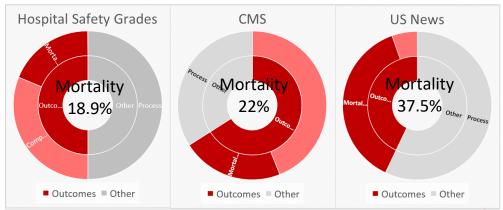
Hospital	Leapfrog Hospital Safety Grade	Consumer Reports Safety	U.S. News Patient Safety	Medicare Patient Safety Penalties (yrs)
Emerson Hospital	A	68	2	0
Newton-Wellesley Hospital	A	65	5	0
Winchester Hospital	A	61	4	0
Hallmark Health System	A	58	NR	2
South Shore Hospital	A	56	NR	2
Faulkner Hospital	A	55	5	0
Massachusetts General Hospital	A	53	3	0
Nashoba Valley Medical Center	A	53	NR	1
Beth Israel Deaconess Medical Center	A	47	2	0
Brigham & Women's Hospital	В	53	5	3
Lahey Hospital & Medical Center	В	51	2	3
Lawrence General Hospital	В	50	2	1
Falmouth Hospital	В	50	NR	3
Mercy Medical Center	В	43	NR	2
Beth Israel Deaconess Hospital - Needham	В	NR	3	1
North Shore Medical Center	C	58	NR	3
Cambridge Health Alliance	C	56	4	1
MetroWest Medical Center	С	56	NR	1
Fufts Medical Center	С	53	2	3
Boston Medical Center Corporation	С	49	1	3
UMass Memorial Medical Center	C	46	2	1

Hospital Rating Services often Disagree on which Hospitals are Safest

SOURCE: Amory Associates

One of the key reasons these services disagree is that they assign different weightings to outcomes, ranging from 43% (US News) to 66% (CMS Medicare), to arrive at their overall ratings.

WEIGHTING OF OUTCOMES DIFFERS AMONG HOSPITAL RATINGS SERVICES



SOURCE: Amory Associates, Leapfrog, US News & CMS

Worse for consumers, according to researchers at the University of Michigan there is virtually no correlation between Hospital Safety Grades (HSG) and outcomes vii even though HSG's hospital ratings weight outcomes by 50%. The same may also be true of the other rating services, but the author has not found research that establishes, or refutes, such lack of correlation.

"More than half" of participants "hospitalized in the previous three years said there was only one local hospital when, in fact, there were a median of three hospitals"

Debunking common myths about healthcare consumerism, McKinsey & Company

Summing Up: Current Status of Quality Metrics

Let's sum up the availability of quality metrics to aid consumer choice:

- 1. Although consumers overwhelmingly wish to choose their primary care doctor based on quality, there are no such measures of individual, non-surgical physician quality in use.
- 2. Patient surveys of doctors are unreliable, and can mislead consumers, due to bias, low participation and patients' inability to judge quality of care.
- 3. Unlike other information providers, certain insurers enable consumers to screen their choices of primary care doctors online based on inferential criteria of quality hospital and medical group affiliation.
- 4. Healthcare consumers are remarkably uninformed when it comes to their local hospitals and rarely consider hospital and medical group affiliation when choosing a doctor.
- 5. Surgeons ratings by outcomes is a promising development for consumers, but current offerings reside behind paywalls and (the author believes) are not yet widely used.
- 6. While medical group ratings are not yet a nation-wide phenomenon, progress is being made.
- 7. While the major hospital rating services all consider outcomes in their ratings, they often disagree on which are the best hospitals and don't detect hospitals with low death rates.

The author believes that making hospital and surgeons' outcomes more available to consumers and educating them on how to use that information represents a major opportunity to activate healthcare consumerism to improve the quality of care received.

OUTCOMES OFFER OPPORTUNITIES FOR IMPROVEMENT

"There's no such thing as a problem; it's an opportunity for improvement."

McKinsey & Company

The above aphorism or variations on it were often quoted by my former employer, and they certainly apply to healthcare consumerism and the emergence of outcomes as a basis for choosing providers.

Outcomes data shows substantial variations in performance among hospitals and surgeons. These variations represent opportunities for consumers to substantially improve their chances for survival and avoid post-surgical complications and re-admissions.

If large numbers of consumers base their choices of providers on outcomes, it stands to reason that the overall quality of care in the U.S. will improve. Management, regulatory and payor initiatives can also improve overall quality of care. Cost savings are likely to result.

The wide variations in outcomes documented below - 3 to 1 at minimum - argue strongly that wider dissemination of outcomes is an opportunity worth pursuing.

Significant Variations in Hospital Outcomes

Using Hospital Outcomes Scores we found that average hospitals death rates varied by as much as 60 percent from one state to another. Individual hospitals' death rates exhibit much wider variations – by at least 3 to 1 based on CMS data and possibly 6 to 1 using an expanded data-base. Such extreme variations suggest that empowering consumers with that data could substantially reduce the third leading cause of death in the United States and might also reduce healthcare costs.



SOURCE: AmoryAssociates

CMS Data: Hospital Death Rates vary by a Factor of 3 to 1

The New York Times recently published an article entitled, "Go to the Wrong Hospital and You're 3 Times More Likely to Die" wiii, which compared hospital death rates based on outcomes research by the Boston Consulting Group. By digging into the CMS hospital data we found some eye-opening results. For example, the most frequent cause of avoidable death is Serious Treatable Complications, reported rates range from 71 to 212 deaths per thousand, a 3 to 1 ratio that corroborates the NY Times article.

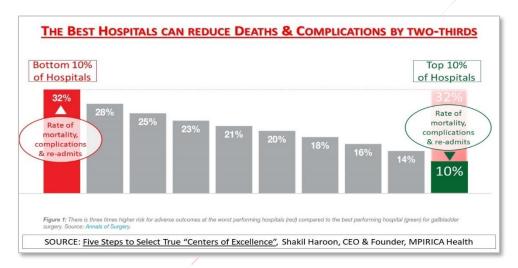
But even within the lowest quintile (top 20%) of hospitals, the death rate from Serious Treatable Complications varies from 71 to 122, a 1.7 to 1 ratio. This illustrates how dramatically you can increase your chances of survival by choosing the best of the best!

Death Rates from Serious Treatable Complications vary by a factor of 3 to 1



SOURCE: Amory Associates and CMS Database

The exhibit below from MPIRICA (annotations added by the author), also corroborates the 3 to 1 ratio of worst to best hospitals based on deciles. Individual hospital outcomes performance would, of course, vary even more.



But even within the lowest (best) quintile of hospitals, the lowest death rate (71) is a 70 percent lower than the highest (121) shows that choosing the safest hospital, even among the top tier of hospitals, can dramatically increase your chances of survival!

CMS Data: Hospital Complications Rates vary by a Factor of 6.2 to 1

Variations in avoidable complications among hospitals are much more dramatic, if not life threatening.

Post-surgical bloodstream infections, for example, range from 4.5 to 28.0 per thousand discharges or $\underline{\mathbf{6.2 to}}$ 1! That means that choosing the hospital with the lowest rate, reduces your chances of infection by 84% compared to the worst hospital and by more than half as compared to the median hospital!

Hospital Complications Rates by Quintile Median ■ Best Quintile ■ 2nd Qtl. ■ 3rd Qtl. ■ 4th Qtl. ■ 5 Qtl. 1. Complications - hip/knee repl. Median 2.70 3. Pressure sores Median 0.35 4. Collapsed lung Median 0.40 Median 0.16 5. Infections from catheter Median 0.87 6. Serious complications Median 4.7 7. Serious blood clots PS 8. Blood stream infection PS 9. A wound that splits open PS Median 2.23

CMS COMPLICATIONS RATES VARY AMONG HOSPITALS UP TO 6.2 TO 1

SOURCE: Amory Associates; CMS Database

Not all avoidable causes of deaths and complications vary that dramatically. And a significant number of hospitals did not even report sufficient data to be compared. Of the roughly 4800 acute care hospitals in the U.S., fewer than 4,000 reported sufficient data to be rated based on deaths and fewer than 3,100 for complications.

Hospital Outcomes Scores (HOS)

10. Accidental cuts and tears

The author has created a new rating system called Hospital Outcomes Scores, which facilitates comparison of hospitals' death and complications rates in the following ways:

> Compares only outcomes with separate scores for deaths and complications.

Median 1.38

- Enables comparison of an unlimited number of hospitals (more than 3 at time).
- ➤ Uses a scoring system from 0% (best) to 100% and a median of 50% to more easily differentiate among high performing hospitals that might otherwise be lumped together.

The objective of HOS is to provide a clear, easily understood, results-oriented basis for consumers to compare and select hospitals.

CMS Data: Deaths vs Complications

When the author examined the CMS outcomes in depth, he found much lower rates (per thousand) of complications than for deaths but with much greater variation on the high side:

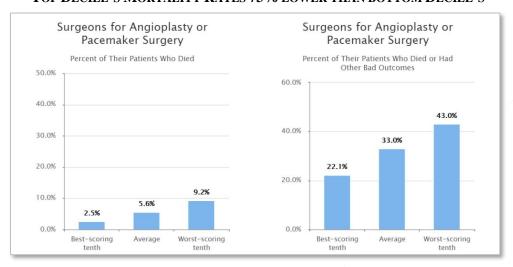
- Complications occurred with much lower frequency than deaths, averaging 2.6 per discharge compared to 29.2 for deaths (11.3 excluding Serious Treatable Complications after Surgery.)
- Complications, however, had much longer tails with the hospital with the highest complication rate for all causes averaging over 6.4 times the median as compared to 1.67 for all causes of deaths.

The author thinks that most people will consider death to be the most important outcome to avoid. Using this logic, it does not make sense to lump deaths and complications into one metric.

Death is the most important outcome to avoid.

Variations in Surgeons' Outcomes

To illustrate the importance of choosing the right surgeon, Consumers' CheckBook reports that the top performing decile (10%) of angioplasty or pacemaker surgeons experienced a 73% lower rate of deaths than the bottom decile (a ratio of 3.7 to 1) and a 49% reduction when complications are included.



TOP DECILE'S MORTALITY RATES 73% LOWER THAN BOTTOM DECILE'S

Source: SurgeonRatings.org

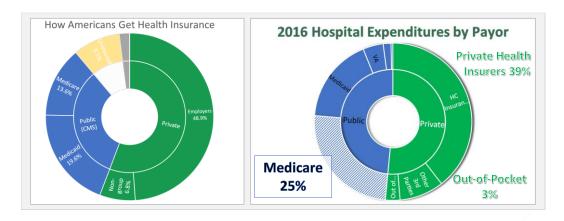
The variations among individual surgeons with the best and worst death rates would, of course, be even greater, and we can reasonably expect those variations in outcomes to exceed the variations among hospitals since there would be variations among surgeons even at the best hospitals.

All-payer Outcomes Database

The ARHQ/HCUP "National (Nationwide) Inpatient Sample (NIS) ... is the largest publicly available all-payer inpatient health care database in the United States, yielding national estimates of hospital inpatient stays. It contains data from more than 7 million hospital stays each year and estimates more than 35 million hospitalizations nationally."

Despite the fact that "everyone" uses the CMS outcomes data and at the risk of looking a gift horse in the mouth, the author believes it is important to recognize that the CMS data has some limitations

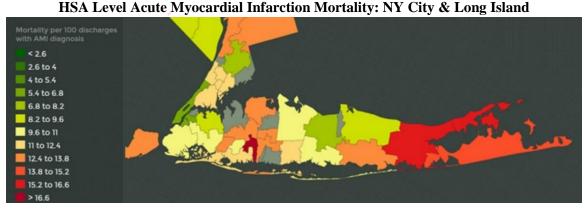
- ➤ The cutoff date for the most recent CMS data released during 1Q 2018 was June 30, 2016, nearly two years ago, and some of the data was closer to three years old.
- ➤ The data is for Medicare recipients 65 and older, which represents 13.6 percent of the population and 25 percent of national expenditures as of 2016^{ix}.



- Some argue that the data does not reflect the risks of the much larger under 65 population, which includes private insureds (60% of the population) and Medicaid recipients (20% of the population).
- Some clinicians find CMS's risk adjustment methodology insufficient, and at least two organizations apply a great many more adjustments to the raw data
- > The author is unaware of any finding that the CMS data is sufficiently robust to analyze trends over time at the hospital level.

In contrast to the single source of outcomes that has become the de facto industry standard, the Boston Consulting Group "used information from 16 independent data sources, including 22 million all-payer inpatient admissions from the Healthcare Cost and Utilization Project (which covers regions where 50% of the U.S. population lives) to analyze 24 inpatient mortality, inpatient safety, and prevention outcomes." Sample results are shown below.

There is a tendency for consumers and healthcare professionals to think that poor performing hospitals are in rural areas and inner cities or at least "not where I live". But the Boston Consulting Group's online database shows variations in small area mortality rates in the Boston and New York areas, for example, that tell a different story. The local heat maps show small area variations of greater than 5 to 1, and outcomes for individual hospitals would show even greater variation.



SOURCE: Boston Consulting Group: VBHC Outcomes Beta version

Mortality per 100 discharges with acute stroke diagnosis < 2.4 2.4 to 3.4 3.4 to 4.5 4.5 to 5.6 5.6 to 6.7 6.7 to 7.8 7.8 to 8.9 8.9 to 10 10 to 11.1 11.1 to 12.1 12.1 to 13.2 > 13.2 No data available

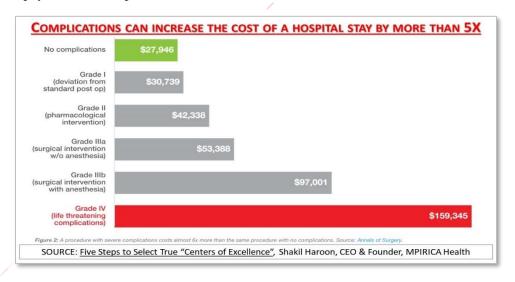
HSA Level Acute Stroke Mortality: Eastern Massachusetts

SOURCE: Boston Consulting Group: VBHC Outcomes Beta version

To be clear, the variations are based on specific causes of mortality, e.g. Acute Stroke and Acute Myocardial Infarction, which may show greater variation than overall death rates for individual hospitals. On the other hand, the data is aggregated by HSA, which by including several hospitals may mask greater variations in outcomes.

Better Outcomes may Reduce Cost of Care

Clearly reduced mortality rates mean lower societal costs, including employers' costs. But the impact of improved outcomes on healthcare costs is not well documented. Some data even suggest, for example, that lower mortality rates are associated with higher rates of complications. Perhaps that is a direct consequence of saving lives. The chart below, however, shows how dramatically complications (outcomes) can increase costs (and copayments) of hospital care.



While this assertion appears totally reasonable, the author was unable to corroborate this finding with other published information on the subject.

RECOMMENDED ACTIONS

Research shows that growing numbers of healthcare consumers are using the internet to choose providers. But available information about provider quality ranges from nil (for individual physicians) to abundant and contradictory (for hospitals).

Consumers are seriously under-informed about the availability of provider quality information and how to use it. Surgeons' and hospital outcomes promise to improve the situation, but for ambulatory care, medical group quality ratings are still under development.

Substantial variations in outcomes among hospital and surgeons - estimates range from 3 to 1 to more than 6 to 1 - represent a major opportunity for consumers to improve the quality of care in the U.S. and reduce costs. However, there are limitations in the way outcomes data is currently presented to consumers. Mainstream health information providers tend to package outcomes with process measures that mask the differences between good and bad performers. Better ways to present provider outcomes and other quality information to healthcare consumers already exist but are insufficiently widespread.

The industry currently depends on CMS outcomes data that is limited to Medicare recipients over age 65 (just 14 percent of the population) and is typically more than two years old and represents. Research by the Boston Consulting Group using and expanded database suggest that it may mask much greater variations in mortality rates among hospitals and surgeons.

Recommendations for the Healthcare Industry & Related Professionals

Change will be needed before healthcare consumerism can reach its full potential. Our resulting recommendations to the healthcare professionals, health information providers, the media and employee benefits professionals are as follows:

- 1. Establish self-regulatory safeguards to ensure that health information providers improve the quality, availability and integrity of the information and standards of disclosure.
 - a. Make hospital and surgeons' outcomes information much more accessible to consumers.
 - b. Encourage consumers to use hospital and medical group affiliation as key criteria for choosing doctors.
 - c. Ban the publication of statistically insignificant patient surveys of doctors.
 - d. Take any other actions needed to improve the integrity of the information provided to consumers and eliminate or disclose conflicts of interest.
- 2. Undertake a nationwide educational effort to teach consumers how to find and apply outcomes and other criteria to their provider choices.
- 3. Support and provide funding for a nation-wide effort to rate the quality of care provided by physician groups and coordinate with overlapping efforts by and for ACOs.
- 4. Continue to work toward a more robust all-payer database of risk-adjusted outcomes that is more up-to-date than currently and can identify trends at individual hospitals. This is clearly a job for big data but will require regulatory oversight and industry cooperation.

Only with a concerted effort by the healthcare industry and related professionals to provide better information and educate consumers to use it can the promise of healthcare consumerism realize its potential.

Suggested Methodology for Consumers choosing Primary Care Providers

DISCUSSION DRAFT

RECOMMENDATIONS FOR CONSUMERS

If you are considering changing your primary care physician (PCP), to maximize your chance of finding good care, choose one or more hospitals first, then a medical group and finally a PCP who has admitting privileges to the hospital(s) and is affiliated with the medical group. If you have a health plan, limit your choices to participating hospitals and medical groups.

- 1. Choose your hospital(s) within a reasonable distance (10 to 15 miles if you live in a metropolitan area) of home based on:
 - a. Outcomes performance AND safety ratings
 - b. Specialties you might require, e.g. maternity, cancer, cardiology.
 - c. Emergency room performance, e.g. wait times for admission or discharge, treatment for heart attacks and strokes, etc.

Do NOT rely only on the hospital's reputation. Example, not too long ago eastern Long Island residents were shocked to learn that their go-to teaching hospital had received a Hospital Safety Grade of "F"! (It has since been upgraded to "C".)

- 2. Choose a conveniently located primary care medical group, preferably large enough to include specialists, on-site testing, extended hours and urgent care. Base your choice on its hospital admitting privileges and any other information available, such as health plans accepted, quality ratings from an independent agency (e.g. MHQP in Massachusetts, if available) and finally insurers' ratings, if any.
- 3. From within the medical group you've selected, choose a primary care physician (typically required by your health plan) based on the primary care specialty you or your family needs. Your choices may be limited by your health plan, but consider whether you need internal or family medicine, ob/gyn, pediatrics or gerontology, or an applicable specialty or subspecialty, such as cardiology, if you have a pre-existing condition or relevant family history. Once you've narrowed it down, remember to check your candidates qualifications:
 - a. Hospital admitting privileges, which may differ from the medical group's (mine does)
 - b. Board certification
 - c. Medical education
 - d. Experience
 - e. Whether accepting new patients
 - f. Languages spoken, if relevant
 - g. Then and only then patient ratings, if you still care.

Nothing stated above is intended to discourage interviewing your finalists because ultimately the doctorpatient relationship is a critical factor in the quality of care you receive. But with so many doctors to choose from in most areas, you should first narrow down your choices as described above.

Please email comments to PAW@AmoryAssociates.com

THE AUTHOR

Mr. Wadsworth is the author of **Finding the Best Healthcare You Can Afford:** 2017 Massachusetts Edition, Owner/Principal of Amory Associates and recently developed Hospital Outcomes Scores, a new method of rating and comparing acute care hospitals. He has also been a healthcare consumer for over 70 years in Boston, New York, San Francisco and eastern Long Island. After beginning his career at IBM and McKinsey & Company, he spent the majority of his professional life as a health insurance executive, investment banker and consultant, in which capacities he raised over \$2 billion for some of the most prominent HMOs and voluntary hospitals in the country. He earned an undergraduate degree in operations research and an MBA from Cornell University and has done postgraduate work in public health at NYU.

Endnotes/Reference Material

ⁱ Debunking common myths about healthcare consumerism, McKinsey & Company (Dec. 2015)

ii Why You Can't Always Rely on Online Doctor Ratings (Jeneen Interlandi, Consumer Reports, 2/21/17)

iii https://nrchealth.com/2016-us-health-care-statistics-data-state-demographics/

iv Enabling Healthcare Consumerism McKinsey & Company, May 2017

^v Finding the Best Healthcare You Can Afford, 2017 Massachusetts Edition, Peter A. Wadsworth

vi How Real is Healthcare Consumerism? (Gregory a. Freeman, HealthLeaders 4/04/16)

vii Hospital Safety Scores: Do Grades Really Matter? by Andrew A. Gonzalez, MD, JD, MPH and Amir A. Ghaferi, MD, (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4254910/)

viii "Go to the Wrong Hospital and You're 3 Times More Likely to Die" (by Reed Abelson, NY Times 12/14/16)

ix National Health Expenditures by type of service and source of funds, CY 1960-2016 - CMS.gov

Quantifying Geographic Variation in Health Care Outcomes in the United States before and after Risk-Adjustment, (PLOS One, 12/14/16)