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SCHEDULED FOR PUBLICATION IN *TRUSTEE*, AUGUST 2003**

Boards, Administrators, Medical Staffs and Quality:

Sorting Out the Roles

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Hospital trustees often express uncertainty about their role in overseeing and improving the quality of their hospitals' services, particularly when it comes to clinical care. At a recent meeting of trustees, administrators and medical staff leaders from hospitals across the United States, when the subject turned to the improvement of intensive care services, evidence-based medical care, risk of hospital-acquired infections, and other clinical matters, typical reactions from trustees were:

“These clinical quality problems are the job of the doctors, nurses, and administrators. I wouldn't know the first thing about those issues. I'm a banker. The board's job is just to make sure that our physicians are excellent, and credentialed properly, and then the clinical quality should take care of itself. Isn't that right?”

“At our last Board meeting, the packet included 322 separate measures of so-called 'quality indicators' ranging from the time to answer a call button on 5 West, to the percentage of heart attack patients who received aspirin, to the hospital's overall mortality rate. I have no idea what all these things mean, and what's important and what's not. I assume the administrators and doctors must know. Don't they?”

The purpose of this article is to address these and other questions about the roles of hospital Boards, administrators, and medical staff leaders in clinical quality, with the emphasis on clarifying the key responsibilities of trustees in overseeing the core work of their institutions—caring for the sick. The Board's roles, which are explained more fully below, can be summarized as follows:

1. Understand the important things your community expects from your hospital.
2. See that a few system-level measures of those things are established, understood, and monitored (the “Big Dots.”)
3. Aim to improve the Big Dots, and link the improvement of those things to your main strategic goals.
4. Build the hospital's will to achieve these aims.

5. Maintain constancy of purpose for the long-term quality transformation of the hospital.
6. Promote collaboration across the community for redesign of care.

What do your patients want the hospital to do?

If you were to ask your patients and community why they need the hospital, and what they want it to do for them, you might get a variety of answers. But the core themes of those answers, particularly with regard to clinical care, would sound something like the following:

- *Cure me.* If I get really sick or badly injured, I want you to cure me, if a cure is possible.
- *Heal me.* I want you to help me to heal, even when a cure is not possible.
- *Don't hurt me.* I'd like you not to make things worse by the process of evaluation and treatment.

These answers form the three pillars of the clinical mission of a hospital: *cure when cure is possible, heal even when cure is impossible, and throughout the process, do no harm.* The first of these needs is about clinical effectiveness—about organizing and delivering care in such a way that all the known science of medicine is applied to each patient, and gets the best possible results. The second need is about the building of healing relationships between patients, doctors, and nurses, and centering the design of care on each individual patient and family. The third need is primarily about safety and confidence, but it can also be broadened to include unnecessary costs as another form of harm. Hospital Boards must understand and accept all three of these drivers of the hospital's clinical mission.

Know Your Big Dots

If curing, healing, and not harming form the core clinical mission of the hospital, the next quality responsibility of trustees is to see to it that the hospital has system-level measures of these things. By “system-level,” I mean measures of the performance of the hospital as a system, rather than the performance of each part of the system. Trustees don't need to know how 5 West compares to 5 East in safety. They need to know how the entire hospital is performing on these measures. Trustees should not be reviewing Board packets that contain scores of performance measures and run charts for individual floors, units, physicians, and conditions. These are the “little dots.” It is important that administrators and clinicians understand these little dots as they work on improvement. Board members, on the other hand, should establish, review, and monitor the “Big Dots”—measures of the entire system's performance.

Examples of system-level performance measures of curing, healing, and harm include:

- Overall hospital mortality rate (*curing, harm*)
- Functional outcomes for a few specific major procedures and conditions treated in your hospital (e.g. mortality rates for coronary artery bypass grafting, outcomes for total knee and hip arthroplasty) (*curing, harm*)

- Patient satisfaction (a good proxy for *healing*)
- Nursing staff voluntary turnover (another good proxy for *healing*)
- Rate of adverse drug events per 1000 doses (*harm*)
- Cost per admission (*harm*)

At this point, trustees often say: “That’s all well and good, but I’m not a doctor. I might understand measures of service quality, but I don’t understand clinical numbers such as mortality rate. So what good does it do to establish measurements for these things, and report them to the Board? These are medical matters.”

Perhaps the best response to this question is simply to ask another question, using mortality rate as a specific example: *If “please save my life if I’m badly injured or critically ill” is one of the most important things your patients and community want from your hospital, don’t you think trustees should know how well the hospital is doing? Shouldn’t you understand your hospital’s performance on something as important as ‘alive or dead’ at least as well as you understand numbers such as ‘debt service coverage ratio’ and ‘days cash on hand?’*

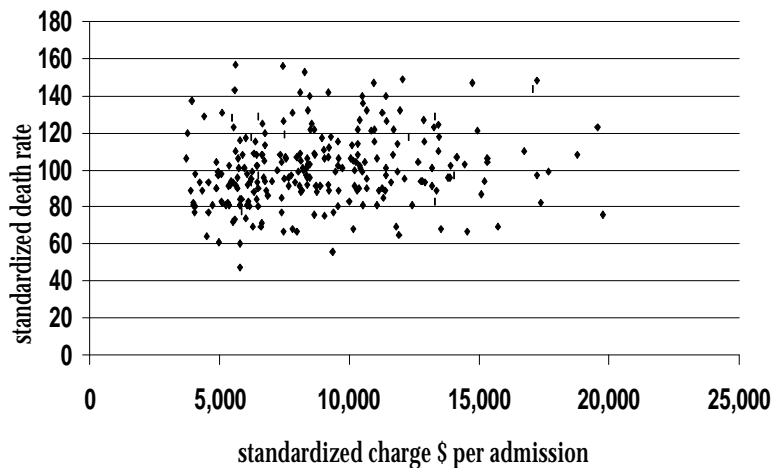
Understanding the Biggest of the Big Dots: Hospital Mortality Rates

Among the various system-level measures of clinical quality, “hospital standardized mortality rate” (HSMR) is a powerful indicator of performance, and should definitely be on every Board’s list of Big Dots. Mortality rate has a lot of advantages over other measures. Death is a definite, unique, unambiguous event, unlike many other measures such as morbidity, and functional status. By law, hospital deaths must be recorded, and so the record is more complete and accurate than most other clinical indicators. Furthermore, death rates are understood by the public, and by politicians, to be something important. You don’t need an arrow pointing up or down on a graph of death rates in order to understand which direction the public prefers! Finally, adjusted death rates can be used to compare hospitals, and it is highly likely that your hospital’s death rate will be published in the newspaper, alongside regional and national comparisons, in the near future. (For a glimpse of the future, see the British version of these hospital quality reports at www.drfooster.co.uk)

One of the world’s finest health services researchers, Sir Brian Jarman, recently spent a year working with publicly available data from the Medicare database, and has produced an exceptionally well-adjusted set of HSMRs for US hospitals. Jarman’s analysis is now available to the members of the IMPACT network, an improvement collaborative sponsored by the Institute for Health Care Improvement in Boston, consisting of 100 innovative US hospitals and other health care organizations. These hospitals are reviewing their HSMR, comparing it to others, learning what drives good HSMR results, and starting to implement those changes. Jarman’s work will be published, and publicly available at some point soon.

The chart below shows Jarman’s HSMRs for 250 randomly selected US hospitals, according to standardized charges per admission.

Hospital age, sex, race, payer, admission source,
admission type standardized death rate
vs age, diagnosis standardized charge per admission,



The important points to note:

- There is *no obvious correlation between standardized charges and HSMR*. Being more expensive doesn't have any relationship to better mortality results.
- The risk of dying in the worst hospitals is *four times higher* than in the best hospitals.

So what does this really mean? How are these rates determined? If one hospital gets all the tough cases, is it fair to compare them to hospitals that get the easy cases? Trustees should have an understanding of the answers to these questions at the same level at which they understand the issues around performance measures such as “operating margin.” A full explanation of the analytical methods involved in calculating your HSMR is beyond the scope of this article, but the following outline might help trustees understand the process by which these HSMR numbers are produced.

1. Each individual patient admitted to hospitals in the US is placed into one of hundreds of “cells” according to that patient’s diagnosis, age, sex, race, payer type, and admission source (e.g. referral, no primary MD...), admission type (e.g. emergent, elective).
2. All the patients in a particular cell (e.g. all Medicare beneficiaries who are black women aged 70 to 75 admitted on an emergency basis with septic shock, with no primary MD) are then analyzed to determine an “expected” death rate—the average—for that cell, for the time period in question (e.g. 2001).
3. The experience of each individual patient admitted to your hospital in 2001 is then compared to the predicted experience, cell by cell.

4. Your hospital's data is adjusted for regional characteristics such as the availability of hospice resources, prevalence of conditions, and other important variables (for example, if your community has no hospice facilities, it's likely that a higher percentage of all deaths will take place in your hospital, rather than elsewhere, so your data are corrected for this regional characteristic)
5. The results are then "normalized" so that the average performance for a hospital is an HSMR score of 100. If your HSMR is 125, that means that patients being admitted to your hospital have a 35% higher chance of dying in your hospital than in a hospital with an HSMR of 90.

Some important points about HSMRs for trustees to know:

1. The HSMR for any given hospital tends to be fairly stable from year to year. It is a predictable result of the system of care in your institution.
2. The "our patients are sicker" argument really doesn't hold much water, given the method by which the HSMR is developed. Comparison at the level of individual patients, cell by cell, makes this issue much less important. For example, when a leader of a hospital with a high HSMR says "Oh yes, that's because of our Stroke Center. We get all the tough stroke patients in the community," they are often puzzled to find out that eliminating the stroke patients from the analysis doesn't change their HSMR results at all.
3. A bad HSMR is not the result of a bad doctor or two, or bad processes of care for a couple of diseases or conditions. *HSMR is a system attribute of your hospital, related to broad operational and cultural issues such as nurse staffing levels, the degree of teamwork between doctors and nurses, and how your ICU is organized.*
4. Being an academic health center, or a Top 100 hospital, is no guarantee of having a good HSMR. In aggregate, the HSMRs of these prestigious clusters of hospitals look pretty much like the rest of the US hospitals.

How would you go about learning what your HSMR is? If you were an IHI IMPACT member, you would simply call IHI and get a full report on your performance, and how you compare to other hospitals regionally and nationally. There are a number of other vendors of solid reports on hospital mortality, including CareScience, The Delta Group, and others. Although the methods by which each vendor calculates mortality rates vary, somewhat, it's probably less important which report your Board chooses, than that you choose one and establish an aim for improving your mortality performance, wherever you might fall on the spectrum.

Establish Aims for your Big Dots

Once you know how your hospital is doing as a system, the next role for the Board is to establish system-level aims for improvement. If we continue with the example of mortality rates, supposing your hospital's HSMR is 125, (25% higher than the norm in the US) what would be an appropriate aim for improvement? (The same type of question might be asked of nurse voluntary turnover rates, patient satisfaction ratings, adverse drug events per 1000 doses, and other Big Dots.)

There are probably as many methods for setting Board goals as there are Boards, but some general rules for quality goals are as follows:

- *Aim high:* If dozens of patients are dying unnecessarily in your hospital every year, incremental improvement is hardly an appropriate goal. Similarly, if patients are being harmed by adverse drug events (ADEs) all over the country, and your hospital is currently worse than average, is it enough to say “let’s get our rate down to the point where we hurt as many patients with medications as is being done in the average hospital in America?”

The highest you can aim is perfection, or the “theoretical ideal of performance.” This is a daunting idea, and since perfection really is never achievable, setting goals at this level generates a lot of cynicism. But you can use perfection as a point of reference for your goals. For example, most hospitals have ADE rates of 5 per 1000 or higher. Perfection would be zero per 1000. Could you set the aim to close the gap between current performance and zero by half, to 2.5 per 1000, in the next year?

Another approach is to set your goals based on the best performance you can find. Would it help if you knew that at least 3 hospitals in America have achieved ADE rates of 0.5 per 1000? (They have.) If you can’t aim directly at perfection, isn’t it reasonable to set an aim that targets the best known performance, rather than modest, incremental improvement?

- *Connect your quality goals to your strategy:* When I ask hospital CEOs, “What are the one or two things that you simply must accomplish in the next 3 years, or your job will be on the line?” the answers are usually framed in terms of key strategic directions for which they are held to account by their Boards. They say, “We must grow by 15%,” or “We must improve margins from breakeven to 5%,” and “We must become less dependent on government payers, and more attractive to a diverse group of patients.” When I then ask them, “And how does your work on quality improvement—say, on mortality rates, or nurse job satisfaction—relate to those key strategic directions?” their answers often sound a lot more fuzzy and vague.

The important point about quality goals—the Big Dots—and strategy is that your Board and CEO must develop a logical and quantifiable relationship between your Big Dots and your main strategic goals. This isn’t always easy, but it’s critical to success. Far too often, the key strategic work and quality work are unconnected, and therefore occur in two separate parts of the organization. Line managers and key executives work on the strategic goals, and the “quality staff and a few doctors and nurses” work on the quality goals, along with other activities such as getting ready for JCAHO. When the going gets tough, is it any mystery why the quality work suffers? Assigning quality as a staff function, of no real strategic importance, is a recipe for mediocrity in quality.

The Board can forestall this by demanding that the CEO work with you to “connect the dots” between your quality goals and your strategic goals. In essence, you need to see to it that a coherent theory of your strategy is developed, and that it includes the right quality aims. This will also help you prioritize among various quality aims. For example, if growth is your most critical strategic imperative, which of the Big Dots will be the most powerful drivers of growth? The answers might vary by market and institution, but the board must ensure that your institution has addressed the question.

Build Organizational Will

Boards can make sure that system-level measures of quality are in place, and can learn how to interpret them. They can set aims for improvement. But Boards can’t actually participate in the process of making the improvements, can they? Isn’t that the doctors and administrators’ job? Do Boards have any role in actually *moving* the Big Dots?

Leadership of major change is sometimes described as a mix of Will, Ideas, and Execution. With regard to clinical quality, it isn’t likely, or even appropriate, that Board leaders would be responsible for *Ideas* for how to reduce mortality rates, or the *Execution* of changes in clinical processes to improve their reliability and safety. But Boards do, and must, have a powerful role in establishing institutional *Will* for improvement. If your hospital is to improve its HSMR, your Board is going to have to work through some highly controversial issues such as how your ICUs are organized and staffed, how your nurse staffing levels are determined, and how the Medical Executive Committee can assure evidence-based medicine in all the practices of a diverse physician staff. This will require that the Board demonstrate backbone, and send a clear set of signals to the organization that you intend to achieve your quality aims, even if the required changes are painful. There are at least five ways in which trustees can send these signals.

- *Attention*: The currency of leadership is attention. If the board reviews the financial performance monthly, but reviews mortality, ADEs, and other quality data annually, the organization’s attention is not being channeled toward quality. Your Board can build *Will* by channeling at least as much attention to the big quality dots as to capital projects and the bottom line.
- *Accountability*: Other than the overall stewardship of the mission of the institution, the four main jobs of the Board are oversight of quality, finances, strategy, and management. You can build *Will* by establishing clear accountability for the CEO for achieving your quality aims.
- *Resources*: Organizations watch resources, not words, to determine whether you are really serious about your aims. Boards can and do allocate resources, in their approvals of capital and operating budgets. You can build *Will* for quality by making sure that you don’t flinch at budget time.
- *Policy*: Boards don’t usually decide which managers get promoted, and which physicians are appointed to key positions. But Boards can and should establish policies about these things, policies that would help to drive the quality

transformation of your hospital. How quickly would your hospital begin to improve its quality if you established the policy that a demonstrated ability to improve quality is an absolute requirement for any candidate for promotion or new appointment? You can build *Will* into your policies.

- *Courage*: As stated above, when you start to move your Big Dots, you're going to face resistance. What are you going to do when your Medical Staff President reports that one of your highest volume admitters refuses to adopt the medical staff's recommended best practices, and threatens to leave the hospital? An institution that is undergoing the quality transformation will face many such issues. The Board can establish *Will* by acting steadfastly and courageously in response to these predictable challenges.

Maintain Constancy of Purpose

Moving the Big Dots from their current level to something close to the theoretical ideal, for all activities in which you engage, is not a short-term project. At some point, it will involve deep, fundamental change in your institution's culture, structure, processes, and strategies. It's not unreasonable to think of such a transformation as occurring over 10 to 20 years, at minimum. It's the Board's role to maintain constancy of purpose for this transformation over the long haul. No one else can really take this role.

The tenure of hospital CEOs is typically less than 5 years. Medical staff Presidents, Chief Nursing Officers, Vice Presidents of Medical Affairs, and other key leaders have similarly short periods of influence and responsibility. It's clear that long-term quality transformation will not occur if it is seen as the pet project of the CEO, or any other powerful individual, because these roles are too transient. The only leadership constant throughout the years of the transformation is the Board, (note: not the individual trustees themselves) and therefore, the Board must take this responsibility.

Aside from the mechanisms under *Will* (above), the principal method by which the Board can maintain constancy of purpose is in the succession planning process by which CEOs are groomed and selected. An important quality role of the Board is to design structures and systems that will ensure that each new CEO will continue the quality transformation.

Collaborate Across the Community

If you are to achieve truly bold, patient-centered aims for clinical quality, it is highly likely that your hospital cannot work in splendid isolation from physician office practices, home health agencies, nursing homes, and yes, even your competitors. For example, supposing you learned that by joining with your competitor hospital to develop a common physician order entry system, you could reduce serious medication "reconciliation" errors between hospital and office practices by 90%. To achieve this, your hospital would have to invest \$2 million, and the competitor only \$500,000. The benefit to all the patients in your community would be enormous. This decision has

elements of competitive strategy, quality improvement, financial oversight, and physician relations. Who could make such a decision?

When cooperation across otherwise “sovereign” organizations is required, only the Board has the authority to decide to share resources, invest in radical redesigns of care, and other actions that transcend the boundaries of your institution. As a trustee, you play an important role in encouraging, and permitting, such cross-institutional clinical improvement work.

What about the Administrators and Physicians?

The focus of this paper is on the role of trustees in clinical quality, and has emphasized mission, measurement, aims, will, strategy, and community cooperation. Administrators and physicians share some responsibility with the Board for many of these things, but their professional knowledge bases and operational roles put them in squarely in position to take the actions necessary to improve clinical quality—to actually move the Big Dots, in part by moving hundreds of little dots. Whereas the Board primarily establishes *Will*, the administration and medical staff work mainly in the arenas of *Ideas* and *Execution*. Consider the biggest Big Dot—HSMR—as an example.

Mortality rates appear to be a huge, formless problem, until a good idea for how to attack the problem appears. The best current idea for addressing HSMR is a simple, powerful *stratification* approach advanced by Tom Nolan, and being tested in a number of innovative hospitals. The idea is to review your hospital’s last 50 consecutive deaths, and place each death into one of 4 boxes on a 2 X 2 matrix, and then work on each box as a specific problem:

Box One: admitted for comfort care only, to an ICU

Box Two: admitted for comfort care only, to a regular floor

Box Three: admitted with intent to save the patient’s life, to an ICU

Box Four: admitted with intent to save the patient’s life, to a regular floor

Each hospital has its own patterns of deaths, but typically, 5% of deaths are in Box One, 15% in Box Two, and 40% each in Boxes Three and Four (Note: Boxes One and Two can contain as many as 60% of all deaths in some hospitals, especially those without community hospice facilities. These 2 boxes raise important questions about allocation of scarce ICU and hospital resources for end-of-life care, and clearly represent a big opportunity to improve costs of care (harm) as well as patient-centered end-of-life care planning.)

Boxes Three and Four command most of the attention of administrators and medical staffs, since preliminary analysis of 50 consecutive deaths in many hospitals suggests that major improvement might be possible in these Boxes. For example, in Box Three, the evidence shows that many hospitals could improve the effectiveness of their ICUs by establishing “closed” units staffed by full-time intensivists, by using multidisciplinary daily rounds, and by employing evidence-based “bundles” of interventions such as the

five simple things that should be done for every patient on a ventilator (which, if done, might reduce mortality, morbidity, and length-of-stay by as much as 30%).

Box Four's deaths occur in patients who were admitted to a regular hospital medical or surgical floor, but because of an unchecked deterioration in their condition, a medication error or other mishap, they die. When Box Four is studied closely, it is a telling window into many cultural and operational issues within the hospital. For example, a common pattern of Box Four deaths is labeled "lack of responsiveness to nurses concerns." In this pattern, a patient's condition deteriorates over several hours, despite an escalating series of "distress calls" from the nurse to the physician on call, whose response may be a series of temporizing orders. Eventually, the patient has a cardiac arrest or other catastrophe, and dies. Other common patterns in Box Four are:

- "the nurse was stretched to the limit, and couldn't devote attention to a suddenly deteriorating patient"
- "no one knew which doctor was in charge"
- "multiple handoffs from doctor to doctor for a night or weekend admission with no clear care plan"
- "patient admitted to the wrong unit for that patient's problem, but there were no beds available in the appropriate unit"

Note: these problems are systemic, rather than disease- or physician-specific. The remedies are based in cultural, process, and other changes that build multilayered, redundant organizations that communicate extraordinarily well, and learn extremely quickly—i.e. so-called "high reliability organizations."

The roles of the administration and physicians in moving Big Dots such as HSMR can be summarized as follows:

1. Establish safe levels of nurse staffing, and give nurses a large measure of control of their practice environment.
2. Establish an environment that fosters professional teamwork between doctors and nurses.
3. Manage hospital flow so that the right patients are put on the right units at the right time.
4. Apply the known evidence to your ICUs: team rounds, daily goals, ventilator bundles, closed staffing of the units....
5. Tackle what you find in "Box Four."

Conclusion

Trustees often experience hesitance and confusion about their role in clinical quality. Most Boards know that they must establish a process for credentialing physicians—a process which is usually delegated to the Medical Staff, with only cursory review by the Board itself. But after credentialing, then what?

Boards play a vital and necessary role in clinical quality, far beyond credentialing. This role starts with the embedding into the hospital's mission of the core needs of patients for curing, healing, and avoidance of harm. Boards must then establish system-level measures of those core needs, set aims for improvement, and build the will to achieve those clinical quality aims. Finally, Boards are responsible for establishing constancy of purpose for quality through CEO and medical staff leadership changes, and for working with other community organizations to innovate on behalf of better patient care. In the hospitals at the forefront of quality in American health care, the trustees are not merely passive recipients of reports on what the administration and medical staff are doing to improve quality. In the best organizations, the Board is the principal driver of the quality transformation.