The Art and Science of Winning Physician Support for Six Sigma Change

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Six Sigma is a process improvement methodology that is remarkably effective across many industries.

As hospitals face mounting regulatory burdens, calls for improved quality and safety, serious budget challenges and extraordinary capital requirements for infrastructure and new technology, many are implementing or considering Six Sigma to simultaneously improve clinical quality and reduce operating costs.

When deploying Six Sigma, it's important to have strong buy-in and involvement of key stakeholders across the organization. Without acceptance by stakeholders of proposed improvement initiatives, failure is almost assured.

The physician relationship with hospitals is unique. Although physicians often are not employed by hospitals, they are critical drivers of hospital performance. Hospitals have limited influence over physicians given their independent status, technical expertise, political influence and, at times, different business objectives.

Physicians often complain about the difficulty of making improvements in hospitals. They may be skeptical of management's ability to deliver results, perceive meetings as a waste of time and see process improvement initiatives as endless—or as "flavors of the month" that will quickly pass.

Moreover, physicians perceive hospital improvement efforts largely as a way to reduce staff and services, while physicians want improvements in clinical quality.

The physician relationship with hospitals is unique in another way since physicians are simultaneously stakeholders and customers. They are stakeholders in that the quality of care they can provide is highly determined by how the hospital functions. Through medical staff committees, physicians greatly influence the operations of the organization.

On the other hand, as customers, physicians evaluate the hospital as a workplace and choose to practice in one system over another. When trying to enlist their support in change efforts, it is important to recognize this dual nature and address their needs in both roles.

Both physicians and hospital staff can bring destructive preconceptions with them when they try to collaborate on process improvement.

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Active physician participation and acceptance of Six Sigma is critical to successful implementation. Take a look at strategies and techniques that can help secure physician support for Six Sigma.

- Physicians may believe significant change is unlikely, that hospital managers are insensitive to the constraints on their time and that the only important goal is to save money.

- Management often feels that physicians veto initiatives without being involved, that they can circumvent institutional procedures to get what they want and that they are generally uninvolved unless an issue directly affects their practice.

- There is a sense that physicians undervalue the efforts of hospital managers and that there is no such thing as medical staff consensus.

Developing supporters from skeptics

The application of the Six Sigma performance improvement methodology can help bridge the chasm between the medical staff and management of a hospital.

Since it is highly quantitative, physicians find Six Sigma attractive and can appreciate the nuances of sampling, hypothesis testing and statistical relationships. The structured phases allow physicians to efficiently monitor the progress of a particular project.

Six Sigma projects are based on solid data that is carefully validated for accuracy. Such validation is necessary for physicians who are trained to be critical of the validity and reliability of data. They regularly evaluate clinical information in a precise manner, so inaccurate information destroys the credibility of improvement efforts.

Conversely, when data stands up to vigorous challenges by physicians, they become interested in understanding the data and its implications.

Finally, the Six Sigma methodology achieves lasting results. It explicitly acknowledges that without continuous monitoring and fundamental changes in systems and structures, problems will always recur and improvements will always deteriorate.

Physicians justifiably are skeptical of change initiatives that have not produced sustained improvements. The latter is a recurrent problem in many hospitals across the country.

to their role in the project, what is expected of them and how communication will be handled. Meetings should be scheduled on a regular basis, but only truly as needed.

Consider "just-in-time" physician involvement. Keep physicians informed about project progress and the active issues the team is considering. Team leaders might use

Measurement system accuracy is central to a Six Sigma project.

Tools and techniques for physician buy-in

Since physicians are likely to be skeptical, how should they be introduced to Six Sigma? Physicians may be customers, stakeholders, sponsors, team members, process owners or champions. It is important to be clear about the level of participation needed and the role physicians should fill.

For example, it is usually unrealistic to expect—and unnecessary for physicians to attend—weekly team meetings. Instead, determine what is needed from physicians up front and how best to obtain it and get agreement on these points with physicians. Sometimes the need is simply for physicians to refrain from active opposition.

Other situations may require a decision or specific technical information. Careful planning can lead to efficient use of physician time and increase their support.

Six Sigma provides techniques for identifying the level of participation required. Teams can use tools such as Stakeholder Analysis and ARMI (Approver, Resource, Member, Interested Party analysis) to determine the level of participation needed from physicians. Think creatively.

Consider convening a physician advisory group that only meets when truly necessary. This group might meet at the beginning of a project to understand the goals and validate the need for the effort.

Carefully explain and get agreement from the physicians as

In the course of a fairly complex project at one institution that addressed the safety and effectiveness of acute anticoagulation, only three 90-minute physician meetings were required during a six-month project.

Even so, physicians were sufficiently involved to propose and actively support the required improvements at the pharmacy and therapeutics committee and the medical executive committee.

e-mail for updates and to share the structured project documentation with important stakeholder physicians, then bring their thoughts and reactions back to the team.

This approach to including the physician perspective can keep the team on track with the medical staff.

Winning the data game

The disciplined approach to data integrity and analysis that is

Tips for Gaining Physician Support

- Get agreement up front on the role of physicians and the process of how their input will be given to the project

- Start with projects in which the processes are the responsibility of the hospital—get results to gain credibility

- Consider "just-in-time" physician involvement

- Use e-mail to maintain communication, provide updates and gain physician perspective

- Present "bulletproof" data when asking physicians to change their behavior

- During projects seek early wins for medical staff

- Work supportively with outlier physicians

- Celebrate success and recognize physician contribution

- Point out that improved financial performance results in more money for new equipment and technology

imbedded in the Six Sigma process helps win physician support. Management may anticipate a skeptical physician response to their data with good reason.

Physicians are adept at identifying flaws in data collection and analysis and have been trained throughout their careers to question the data presented to them. Patients go through repeated histories when multiple physicians are on a case because the gold standard for physician data is the data they collect themselves. They are trained to doubt even information gathered by trusted colleagues until it is confirmed by their own exam.

Physicians keep current by reading peer-reviewed articles. Remember, peer-reviewed means colleagues examine the data and conclusions presented, then work diligently to find flaws in the data. Only data and conclusions that withstand intense examination stand as new science. So it is not surprising that physicians will also doubt the data presented by hospital staff.

Six Sigma works very well in this environment. Measurement system accuracy is central to a Six Sigma project. Physicians are very impressed with rigorous confirmation of measurement system accuracy and the statistical projection of

What is Six Sigma?

Sigma is the Greek letter representing standard deviation or the amount of variation within a given process. The higher the Sigma level, the lower the number of defects. Achieving a Six Sigma level of quality equates to a mere 3.4 defects out of one million opportunities, or nearly error-free performance.

Sigma (DPMO)	Defects Per Million Opportunities
2.	308,537
3.	66,807
4.	6,210
5.	233
6.	3.4

DMAIC

Control — Sustain improvements
Improve — Mobilize change initatives
Analyze — Statistically find root causes
Measure — Measure what you care about
Define — Define the problem

Increased Return on Investment

Six Sigma is similar to other programs such as TQM (Total Quality Management) and CQI (Continuous Quality Improvement) but with several key differences:

Six Sigma focuses on process improvement that results in significant and quantitative change in important outcomes.

1. Careful analysis of customer expectations drives all improvement efforts and targets. In health care this usually means patients, but often includes physicians.

2. Six Sigma recognizes that the average performance of a process is only part of what customers experience—variation is also critical. It is important to reduce variation so that the customer's expectations are always met. Indeed, the goal of Six Sigma is to reduce failures to a level of nearly 3 in 1,000,000.

3. Six Sigma assures long-term, sustained improvement by mobilizing commitment from key stakeholders by using continuous monitoring and by making changes in systems and structures so short-term gains are maintained.

4. The tools and structure within Six Sigma are designed to organize problem-solving efforts and achieve measurable business results. The goal is to simultaneously reduce costs while improving quality and customer satisfaction.

required sample size that are integral to Six Sigma.

In our experience, physicians respond to Six Sigma data in three steps.

1. They challenge the data as usual.

2. When their initial objections are addressed, they take a more focused approach to questioning the quality of the data.

3. When the data stands up again, the physicians sit up a bit and dust off their methodological training. They ask a few more pointed questions about the methodology, see that it is sound and then a transformation takes place.

Often, this will be the first time they're seeing credible information about how an important process is truly performing. At this point you have their attention and often their support.

Six Sigma	Standard Quality Initiatives
• Projects carefully selected to focus on customer requirements and CTQs (critical to quality elements) • Targets variation within processes • Highly structured, phased approach built around rigorous metrics and statistical analysis • Incorporates Control Phase and tools such as "dashboards" to maintain improvement long-term	• Projects usually driven by the quality department and often not aligned with organizational objectives • Looks primarily at averages • Some familiar statistical tools, but applied with less rigor or structure • No built-in mechanism for assuring that changes don't unravel over time

1. Laboratory and radiology results readily available when the physicians made rounds

2. Nurses stations standardized and properly stocked with commonly used forms

improving the physician experience to increase physician buy-in.

At some point, many teams need to ask physicians to change their behavior to improve safety or reduce unnecessary resource utilization. This is the time to present

Six Sigma projects may take four to six months to get results

A planned approach

So, how to get started introducing Six Sigma to the medical staff?

First, focus on processes in clinical care that the hospital system is solely responsible for and that are important to physicians. Ask physicians about the day-to-day issues that impede their efficiency.

Only involve physicians who insist on participating. Improve these areas first and be prepared to show physicians how the process has changed.

For example, in one of our institutions two issues were identified that were sore points for medical staff:

We fixed these mundane problems and built trust to tackle more difficult issues. This step of "getting something done" buys credibility with physicians.

Next, work with the physicians to see what areas of shared responsibility can be improved. Finally, when the important remaining issues depend on changing physician behavior for improvement, seek changes from the medical staff.

Encourage physician complaints about hospital systems, especially early on in deploying Six Sigma. This is an important source of feedback. A willingness to address these issues may surprise physicians and encourage them to engage with the teams. Place a high priority on

bulletproof data demonstrating the impact of physician performance. Show what has already improved and what can only be achieved if physicians will change.

Data that illustrates process variation is particularly useful at this point and can highlight outlier physician behavior. Good data can generate creative tension within the medical staff. Consider supportively working with outlier physicians to help them understand the information and the potential benefits to them and their patients if they change.

Try to achieve some quick wins for the medical staff. Six Sigma projects may take four to six months to get results. During the project, more focused issues often become

evident. Rapid cycle problem solving can deliver meaningful improvements in a matter of days to weeks. Quick, significant improvements that make things better will get physician attention.

In the end, achieving meaningful results will deliver physician support. Be sure to communicate successes to the physicians.

A recent project resulted in a dramatic increase in billing and collection of carve-out items in the operating rooms at our system. Revenue resulting from this project is being driven directly back into capital projects that the physicians are very interested in. These connections are very clearly drawn for our medical staff.

One of the most important success factors in Six Sigma is celebrating successes. Even without regular meeting attendance, physicians are critical to the success of many projects and should be visibly recognized for their contributions.

Noting changes in longstanding clinical practices, outlier behaviors, improved billing practice, better on-time starts in the ORs and contributions of knowledge and experience are all important ways to acknowledge the critical role physicians play in supporting Six Sigma.

Six Sigma can help hospital leaders forge common goals and trust with physicians. Lasting improvement from hospital/physician collaboration is important for the productive long-term relationship that both parties need to provide outstanding patient care.

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