Clinical operations excellence: Unlocking a hospital's true potential

A multiprong approach that puts physicians—and clinical care—at the heart of performance transformation efforts can help hospitals and health systems deliver more financially sustainable, patient-oriented, and physician-friendly care.

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Growing financial pressures are forcing most US hospitals to lower their total cost of care—especially for the most complicated and expensive Medicare and Medicaid patients—while simultaneously decreasing their reliance on cross-subsidization from commercially insured patients. The reasons are well-known: employers, payors, and consumers are demanding greater cost controls. Growth in Medicare and Medicaid reimbursement rates has slowed. Further pressure is being placed on hospital economics by the shift in payor mix from commercially insured patients toward more government-sponsored patients, as well as by the ongoing migration of procedures from the inpatient to the outpatient setting. In addition, there is an increasing move toward the use of innovative, value-based payment models as a way to incentivize reductions in the total cost of care. Most providers have come to accept that these trends are not transient but rather have created a "new normal."

As a result, many hospitals (and the health systems they are often part of) have undertaken operational improvement programs, such as lean transformations, Six Sigma projects, and rapid improvement events. Although some of these programs have helped the hospitals reduce costs, few have achieved substantial or long-term impact—in large part because most of them focused on nonclinical operations and did not seek the active involvement of physicians. Yet clinical care accounts for a significant portion of operational expenditures at most hospitals. Without significant changes to how clinical care is delivered, hospitals will not be able to achieve the 5- to 10-percent reduction in operational costs that most experts believe is needed to cope with today's economic challenges.

Involving physicians in operational performance improvement efforts is therefore crucial. A provider that wants to lower its operational costs by 5 to 10 percent would have to reduce its nonclinical variable costs by an average of about 30 percent if it left clinical operations off the table.[1] This level of savings is unrealistic for most hospitals. However, most providers are reluctant to address clinical operations, primarily for two reasons. First, many administrators and performance improvement staff members lack a clinical background and thus often shy away from changes that disproportionately affect clinicians and care delivery (because they either do not fully understand clinical processes or are intimidated by the clinicians who carry them out). Second, many providers believe that addressing clinical operations would alienate high-volume physicians, who might then take their patients to competing hospitals. Although this concern may once

[1]This estimate is based on our experience in 150+ community and academic hospitals nationwide.

have been justified, McKinsey research suggests it is no longer valid. In a survey we recently conducted of more than 1,400 US physicians, most respondents said that they are willing to change their practice to help control costs.[2]

Our experience "in the field" confirms that physicians can be actively engaged in performance improvement efforts and are willing to make changes in care delivery. Their involvement increases the likelihood not only that operational performance will increase but that care quality, patients' satisfaction, and physician/staff satisfaction will also rise.

Our "clinical operations excellence" approach enables hospitals to achieve all of these goals. It is quite different from the conventional change management programs most providers have been using, because it puts physicians—and clinical care—at the heart of the change effort. By doing so, providers can make transformative changes that improve costs, quality, and satisfaction simultaneously, and ensure that those changes are sustained over the long term.

What is clinical operations excellence?

Clinical operations excellence includes elements of traditional hospital performance improvement efforts (especially lean transformations), but it goes beyond them because of the emphasis it places on improving care delivery as well as nonclinical operations (Exhibit 1). It uses a variety of process improvement and change management concepts and approaches to increase operational efficiency and reduce clinical variability; the ultimate objective is to drive down the total cost of care while maintaining or improving care quality.

In our experience, most hospitals have significant, unintentional variability in how clinical care is delivered. Most hospital executives would agree that this variability drives up the cost of care, making hospitals less competitive and less likely to survive in a world of value-based payment. Reducing clinical variability would release working capital (e.g., through inventory reduction), lower supply costs (e.g., by shifting to one or two vendors), increase the pace of care delivery (e.g., by reducing

EXHIBIT 1 **Clinical operations excellence encapsulates a broader range of initiatives than many health systems typically use**

[2]For more information about this survey, see the accompanying article, "Engaging physicians to transform operational and clinical performance," on p. 5.

the number of potential paths of care), shorten average length of stay (e.g., by initiating care sooner in the care pathway), and reduce the likelihood of adverse events (e.g., by standardizing and error-proofing nursing workflows).

Physicians can be convinced to reduce the amount of variability in care delivery if they understand that the changes will not only help control costs but also improve patient outcomes. By ensuring that all patients receive high-quality care in a reproducible and evidence-driven manner, a virtuous circle can be created: as the quality and efficiency of care delivery rise, per-patient costs decrease, outcomes improve, patient and staff satisfaction increase, referral streams expand, and high-volume physicians become less likely to migrate to other hospitals.

Implementing the changes necessary to reduce or eliminate unintentional variability in care delivery in a sustainable way is far from easy. It requires a complex combination of approaches to streamline processes (including those for patient admissions and discharges), standardize clinical protocols, and rationalize supply utilization. Our experience suggests, however, that this combination can have a significant impact (Exhibit 2).

After using this multiprong approach in more than 150 hospital transformations over the past few years, we have found that it can significantly improve hospital performance. On average, most hospitals see a reduction of 5 percent or more in operating costs (Exhibit 3).

EXHIBIT 2 **Achieving 'best-in-class' performance can have compelling value**

Lever	'Best-in-class' impact achieved
1 Improved patient outcomes	Improve outcomes by service line (e.g., 25% reduction in severe sepsis mortality)
2 Operational efficiency (direct variable cost reduction)	Achieve positive EBITDA across Medicare Produce 15% annual reduction in ED DVCs
3 Improved supply utilization	Achieve sustained cost trend of 3-4% annually
4 Cost and capital avoidance	Delay/avoid big capital investments to increase capacity
5 Ability to capture disproportionate payor volume and price	Capture >90% of available PFP funds
6 Increased physician retention and ability to integrate physicians	Keep site-specific physician turnover below 7%
7 Nursing satisfaction and retention	Keep site-specific nursing turnover below 10%

DVC, direct variable cost; EBITDA, earnings before interest, taxes, depreciation, and amortization; ED, emergency department; PFP, pay for performance.

What prevents hospitals from achieving clinical operations excellence?

In our experience, five key issues have prevented many hospitals from achieving clinical operations excellence.

The first (as discussed above) is the belief that physicians, especially high-volume physicians, are not willing to engage in performance improvement efforts and will instead move their patients to other hospitals. Even if this belief were true, hospitals would have to consider whether their efforts to protect patient volumes and profitability in the short term are hindering their longer-term prospects. However, our research supports our experience that this concern is unwarranted. In late 2011, we surveyed 1,400 US physicians in a variety of specialties; 84 percent of the respondents said that they were willing to change at least some aspects of their practice to remove waste from healthcare.[3] We also discovered that many physicians regard the opportunity to be involved in operational decision making and performance improvement efforts as second only to financial incentives as a way to derive satisfaction from their work. In hospitals that have achieved clinical operations excellence, strong clinician engagement is encouraged and embraced. For example, physicians from a range of departments collaborate in clinical councils to drive policy decisions and help reconcile the many different viewpoints that individual physicians may express.

A second factor that can prevent hospitals from achieving clinical operations excellence is underestimation of the magnitude of change required. Too often, hospital leaders give the change program no more time, attention, or resources than had been allocated to previous, smaller improvement efforts. These

EXHIBIT 3 **Benchmarking performance is a prerequisite for achieving the level of financial impact required**

Examples of high-impact efforts

Average across more than 30 acute-care facilities, expressed as percentage of inpatient operating costs)[1]

	Improvement efforts	Impact	
	Lean operations • ED throughput/registration • OR throughput/pre-admit testing • Inpatient discharge	~1–3%	Combined impact for a multifaceted improvement effort should be +5–10% of operating costs A comprehensive program will be required to achieve these results
	Clinical standardization • ICU protocols • LOS reduction • IP vs. OBS determination	~3–4%	
	Supply utilization • OR/procedure supply use	~1–3%	

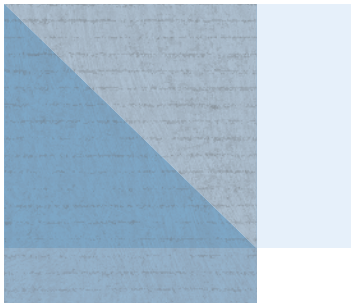
[1]The 30 hospitals referenced here are only a fraction of the 150+ hospitals in which McKinsey has led transformation efforts.
ED, emergency department; ICU, intensive care unit; IP, inpatient; LOS, length of stay; OBS, observational status; OR, operating room.

[3]2011 McKinsey Physician Survey.

leaders fail to recognize the potential of the frontline staff to implement changes and hence do not invest sufficiently in frontline capability building. Furthermore, they do not take the steps necessary to ensure that physicians are comfortable with the proposed changes and that evidence-based medicine principles are being applied appropriately. Leaders of successful programs understand that continuous improvement efforts do not spring up across an organization overnight, nor are they self-sustaining. Instead, the efforts require constant and significant engagement from senior leaders to set expectations, nurture new ideas, and remove roadblocks (both structural and human).

A third barrier to success is a failure to use a pragmatic, rigorously quantifiable approach to value creation in the clinical setting. Too often, the improvement efforts lack careful assessments of where the value (both clinical and financial) can be created and how feasible it will be to capture. Also absent is a cascading approach to performance management that starts with senior leadership and extends to the front line. In hospitals with best-in-class clinical operations programs, hospitals' executives ensure the sustainability of these efforts by making ongoing investments to build capabilities and strengthen performance management systems. By using these systems to closely track their performance on a range of metrics, hospital leaders can begin to quantify the value they have created through decreased supply costs, shorter length of stay, and increased payor reimbursement.

A fourth barrier centers around lack of leadership and role-modeling. Many health systems have built internal performance improvement departments, and too often leaders devolve most or all performance improvement efforts to them. The staff in these departments are left with "accountability without authority"—they are asked to drive change and hold clinicians and departments to specific performance targets without direct line reporting authority to do so. To achieve strong results with a performance improvement program, leaders at all levels of the organization need to champion and drive the effort, "role model" the behavior they want to see, and use their performance improvement group to facilitate the program.



Fifth, many internal performance improvement groups have a tendency to "cut and paste" approaches that work in manufacturing directly into healthcare settings. However, manufacturing environments are awash with industrial engineers who are comfortable using the hardcore tools of performance improvement (e.g., variance graphs with control limits, detailed value stream maps, and fishbone diagrams). Hospitals, on the other hand, employ individuals who are very different from engineers. Physicians and other clinicians are trained differently than engineers are; they also think differently and use a different language. Physicians do not typically see process measurement or improvement as a core part of their role. If performance improvement programs are to succeed in hospitals, the concepts, approaches, and language must be tailored to the healthcare environment and the clinical staff. Although clinicians will be the critical change agents in these efforts, they are not industrial engineers, and most of them will never achieve lean or Six Sigma certification. Their training must therefore be straightforward, relevant, practical, and memorable, and the tools they are given must be simple.

What must a change program include to achieve sustainable results?

Hospitals vary in their starting points, and thus the specific goals they want to achieve through a clinical operations excellence program can also vary. Furthermore, the approach used to transform a single hospital is somewhat different from that required for a multifacility health system. Nevertheless, a core set of tools and capabilities is required if a hospital or health system wants to reach and sustain clinical operations excellence.

Mind-sets and capabilities

The performance improvement program must include a structured approach to change mind-sets and build capabilities throughout the organization, including frontline and back-office staff. Experienced trainers should be used to ensure that all staff members—both those involved in care delivery and those working in support functions—learn operational improvement principles. A core curriculum is sufficient for most staff members, but some should undergo an advanced program to become experts in continuous improvement.

Most adults learn best by doing, and thus the individuals given primary responsibility for the performance improvement effort should be given the opportunity to directly apply what they were taught in training. As soon as possible, they should begin to develop solutions and implement operational improvement techniques, including "white-board" analysis of issues, stakeholder assessment, coaching from stakeholders on solutions, and counsel from others based on experience with similar problems encountered in other institutions.

Physician engagement

Because it is virtually impossible to change clinical processes and protocols without the active participation of the medical staff, it is crucial that the physicians who work at each hospital (both employees and those who simply have admitting privileges) are engaged in and co-lead the change program. To ensure that alignment is as broad as possible, the physicians should be given ample time to ask questions about the improvement effort and share concerns with hospital leadership and other staff members before the effort formally begins.

Some physicians should then become closely involved in the effort. They should work with the non-physician staff to develop solutions and be responsible for updating hospital leadership on progress. For example, physicians from multiple disciplines should be invited to participate in the clinical councils that determine new policies and oversee the changes made over the long term. As part of this work, the physicians should help develop "best-practice bundles" that define treatment standards for common diagnoses and the procedures the hospital(s) will use to ensure patient safety. In addition, some physicians should help develop the new practices that will be used to streamline registration and collections, because it is important that they understand firsthand the interdependencies that exist within the organization.

Furthermore, the physicians closely engaged in the effort should be encouraged to speak often with their peers and hold them ac-

Operational change in action

Over a three-year period, a large national health system with more than 25 hospitals in multiple states undertook a broad transformation program to improve quality and efficiency in its facilities. Lean improvement techniques and various other process redesign principles were applied to multiple clinical and support functions. In addition, both the frontline staff and managers (hospital and corporate) were trained in process improvement techniques. To this day, the improvement infrastructure created during the transformation continues to promote positive changes within the organization.

One of the hallmarks of the transformation was the use of multidisciplinary teams composed of frontline clinical staff members to identify the core issues that were adversely affecting the quality and efficiency of care delivery and then to act as change agents to address the opportunities identified. The use of these teams ensured that the solutions developed during the transformation were immediately compatible with the health system's work environment and that there would be a sufficient number of change agents within each hospital to champion and implement those solutions.

In parallel with the efforts of the multidisciplinary teams, key frontline staff members took part in a broad-based lean operations training program, which helped create institutional knowledge about process change within the health system. The training also empowered the staff members to seek additional quality and efficiency improvements in their own units.

Another hallmark of the transformation was the significant effort put into developing a robust performance tracking system. This system now generates reports that enable the frontline staff to regularly review and discuss their performance and work toward shared goals. At the same time, it gives senior leaders at both the individual hospital and organizational levels strong insight into the quality and efficiency of care delivery as well as the impact on financial performance. Results the health system has achieved to date include a 20- to 30-percent reduction in emergency department length of stay, a three- to six-hour improvement in discharge times from inpatient units, a roughly 25-percent improvement in turn-around time in the operating rooms, and a 100-percent increase in the number of first-case on-time operation starts. Patients are giving the health system higher satisfaction scores because care providers now spend more time with them and there are fewer delays till treatment begins. In addition, the satisfaction of physicians, nurses, and other staff members has risen because the level of rework has dropped significantly and there are fewer patient delays and less congestion in their departments. In addition, the performance improvement program created an average of $4 million in value per hospital, through a combination of increased revenues and decreased variable costs. As a result, the health system's EBITDA has risen by 2 to 3 percent.

countable for their actions and performance. They should also be encouraged to alter their behavior so that they can communicate more effectively, not only with their peers but also with the other clinicians on the patient care team—communication is a critical element in making change happen and endure.

Program management

The overall performance improvement effort should be overseen by an efficient program management office or team. Scorecards should be used to measure both baseline performance and improvement against that baseline; this approach helps ensure the

consistency of all measurements. Other management infrastructure should be used to ensure regular performance management discussions are happening on the organization's front lines.

The program management office/team will need significant assistance from IT as well as from data analysts who can pull information and evaluate it to make sure that the improvement effort remains focused on the areas with the most opportunity. At every stage of the transformation, these groups will be asked to help with performance measurement and reporting. In some cases, the reports will be needed on a daily basis.

Progress tracking should include cascading scorecards—reports with different levels of detail that are given regularly to everyone from the frontline staff and midlevel managers to the most senior leaders of the facility or system. The frontline staff is given precise performance data about the unit they work in, managers receive aggregate reports covering multiple units, and leaders are given summary metrics covering all units. (For example, the operating room staff would get a report that tracks, among other things, reductions in the use of targeted supplies, whereas senior leaders would receive a scorecard that summarizes annual savings in supply costs.)

However, the actual work required to implement changes in processes and protocols, especially those used in clinical care, will be done not by the program management office/team but by staff members working under the supervision of trained change agents. To the greatest extent possible, the change agents should be allowed to dedicate their attention to the transformation. It is unrealistic to assume that these people can continue to perform their existing duties while devoting a significant portion of their time to the transformation. The best outcomes are achieved when the change agents feel supported because their departments have arranged to have their normal assignments covered by others—this gives them the time they need for the improvement effort and demonstrates the organization's support for that effort.

Ideally, a few of the change agents should remain focused on performance improvement even after the formal transformation program has ended. Ensuring the sustainability of change is one of the biggest challenges for any operational improvement effort; the presence of a set of dedicated staff members who feel accountable for and take ownership of the needed changes goes a long way toward maintaining and expanding the impact of the transformation.

Visible leadership support

No performance improvement program can succeed unless the hospital's leaders—and, if relevant, the health system's leaders—are willing to demonstrate strong support for and involvement in it. Any organizational change involves an element of risk, not only to the organization itself but also to the people responsible for making the changes happen. Without visible, ongoing support from senior leadership, it is very hard for individuals (whether physicians, other clinicians, or nonclinical staff members) to accept that risk and continue their efforts with the needed intensity. Thus, senior leaders must go far beyond merely mouthing the right words; they must demonstrate true personal commitment to the program's success. They must also make it

clear to everyone that they are taking a long view: they recognize that the improvement program will engender many near-term costs and operational challenges, but the long-term results will make the effort worthwhile.

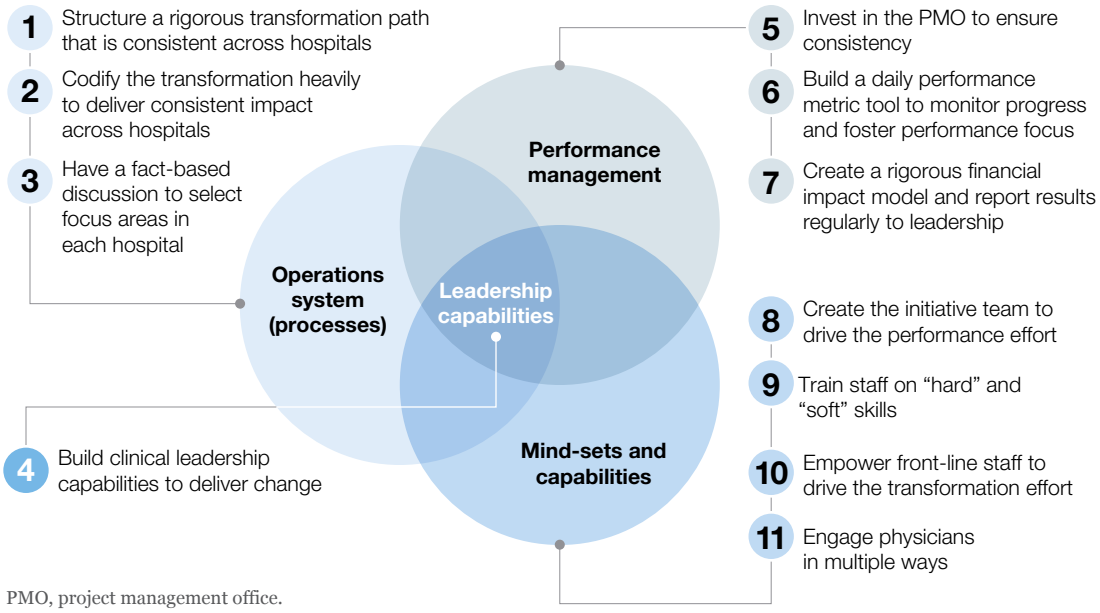
In addition, senior leaders must be willing to change the organization's incentive systems and, often, its culture and structures. They must ensure that good ideas are rewarded regardless of their origin, and that everyone views performance improvement as a valuable aspect of life within the organization. In addition, they must take steps to alter the hospital's or health system's culture to overcome silos so that individual pockets of excellence can rapidly spread their practices throughout the organization. This type of spread can happen only if leaders ensure that a high level of communication, unity, and common purpose is present.

How can a change program be scaled across a health system?

When a health system wants to scale a performance improvement program across multiple hospitals, a few extra steps are required. The key is to develop an integrated, sequenced approach through careful planning and the continuous involvement of senior leaders, and then use a set of common elements in all facilities (Exhibit 4).

In our experience, the best results are often achieved when the health system begins with a well-thought-through pilot in one or two facilities. The goal of the pilot is to evaluate areas of focus, determine what help will be required from the health system's IT group, and establish a training infrastruc-

EXHIBIT 4 **A common set of key elements is used in any multihospital clinical operations excellence program**



PMO, project management office.

ture that can build a cadre of people prepared to scale up the improvement effort across the entire system.

The results of the pilot will enable the program management office/team to refine the improvement effort and then roll it out in waves across the organization. As the rollout occurs, it is crucial that there be consistency in the measurements used—and the messages communicated—to ensure that results across facilities can be compared fairly. As more and more hospitals are transformed, the system should find that it has developed a network of peers who can codify their experiences and share ongoing discoveries about best practices.

When such a carefully designed, purposeful approach is used to scale up a performance improvement program, most health systems find that the program becomes self-funding within about 12 months. Substantial impact on the system's financial and clinical performance should be demonstrable within 24 months.

What are the first steps?

Taking the first steps in a clinical operations excellence improvement program can be daunting. However, several immediate, tangible steps can help minimize future risks:

- Begin by rigorously assessing your baseline performance and benchmarking the potential for improvement. Whenever possible, both internal and external benchmarks should be used for all clinical and financial metrics.

- Set bold but reasonable aspirations (related to both performance and organizational health) for the improvement program and establish time frames to achieve them.

- Convene a group of leaders who will oversee the clinical transformation. In addition, make one person accountable for the program overall and give that person the resources required to lead the program.

- Define how you want to start. Many health systems opt to launch the improvement program in a few high-impact focus areas in one or two facilities. They then roll the program out across other facilities. In some cases, however, it may make more sense to begin with a balanced representation of facilities or participants (not necessarily "the best"), or to select less specialized impact areas that are relevant to a wide array of units and facilities.

The key is to take these first steps, expecting that some mistakes will be made along the way. But by learning from the mistakes and moving forward with the improvement program, it becomes possible to make steady progress toward a more financially sustainable, patient-oriented, and physician-friendly hospital or health system.

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