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Assessing Progress on the Journey to Organizational Excellence

There's no disputing that hospitals today are pressed by many challenges to keep the ship afloat, while at the same time investing in a solid foundation for the future. Fiscal pressures, staffing shortages, changes to regulations and reimbursement, and a growing need to be accountable for performance all combine to make it difficult to determine where to focus energies and constrain resources. The reality that these pressures will only intensify is a sobering one.

After considering this landscape and its implications, we have described characteristics hospitals will need to possess in order to thrive in the future. These are organized around Four Truths about the future and, hence, the four dimensions of excellence that together will shape the business reality for hospitals.

The Four Truths

SAFE

The expectation is that care will be as safe as technically possible.

EFFICIENT

More patients and fewer providers plus continued cost pressures will force healthcare organizations to become much more efficient.

PATIENT-CENTERED

Care and the care experience must be patient-centered to meet the needs and preferences of customers.

ACCOUNTABILITY/TRANSPARENCY

Cost and quality transparency will be demanded by payers and consumers alike.

Information Technology (IT) will play a critical role in enabling new processes that respond to the Four Truths. Process improvement alone goes only so far without the assistance of IT. Without a conscious effort to optimize process, IT will only perpetuate what's in place today. Organizations that do the best job of reaching a new level of organizational excellence will combine both elements. To be successful, they will need to become excellent in all of the dimensions suggested by the Four Truths: safety, efficiency, patient-centeredness, and accountability/transparency.

To help individual hospitals and health systems gauge how far they have come in preparing both process and IT for the future, we designed a survey incorporating widely accepted indicators for operations and IT for each of the four dimensions of excellence — eight areas in total. For each

indicator, the survey depicts the future state and asks whether this is in place throughout the hospital (a simple “yes” or “no” response). Ten indicators are posed for operational and IT readiness in each of the four dimensions.

Twenty-seven leading organizations have completed the survey so far. This paper looks at the composite findings to answer the following questions:

- **Where in the journey to organizational excellence is this group?** The organizations sampled are admittedly somewhat biased toward the leading edge, and thus provide a view of a more advanced state than “typical.”
- **What are the implications of what’s been accomplished so far and the work remaining to be done?** This sheds light on where organizations will be focusing in the next 3 to 5 years.
- **What can we learn about where organizations have focused so far?** Is there a clear pattern or a divergence of where they have invested? This can tell us what consumers of healthcare should be expecting today from the industry as a whole.

In the following discussion, average scores for the participating organizations represent how many indicators were in place throughout the organization (a “yes” response) of the ten possible for each dimension (e.g., 7 out of 10).

Progress on the Safety Dimension

Organizations that participated in this early sample of industry progress were generally further ahead in operations than in IT supporting patient safety.

Readiness Component	Definition	Scores
Operational	<ul style="list-style-type: none"> • The degree of organizational focus on performance • Governance of and investment in quality management • Success in making widely-recognized safe practices the standard of care 	Average 7.2 Range 4 to 9
IT	<ul style="list-style-type: none"> • Adoption by clinicians of IT as part of the routine for error-prone processes • Use of clinical decision support as an additional safety net for key processes • Electronic capture of information needed to monitor safety 	Average 4.6 Range 2 to 10

Operational Readiness for the Safety Dimension

Progress has been greatest across the board for achieving an organizational focus on quality and safety, as reflected in organizational goal-setting (93 percent said “yes,” this is the current practice) and direct involvement of the board in monitoring (96 percent). This is good news because these are pre-requisites for investing and sustaining the necessary management focus and resources to make a difference. Critical deployment of pharmacists to enhance medication safety is also in place most of the time: clinical pharmacists doing patient care rounds (78 percent) and 24-hour coverage by a pharmacist (89 percent). This is especially encouraging, given the widely acknowledged and continuing shortage of pharmacists to work in hospitals.

Less progress has been made though at the process level, most notably in medication reconciliation for which only 33 percent reported that it is always timely, complete, and accurate, despite the focus of the Joint Commission and the National Quality Forum on this critical hand-off process. Use of institutional order sets as common practice throughout the hospital was also low (52 percent) as was universal compliance with protocols for high-risk medications (56 percent). Hospitals clearly still have major work ahead to standardize error-prone processes as the routine practice and use practice aids that assist physicians in avoiding common errors of omission and commission.

IT Readiness for the Safety Dimension

Although one participating organization had a perfect score of 10, comprehensive use of the full capabilities of advanced clinical systems is typically at an early state in this sample of hospitals and lags the work on the process side. In fact, the second-lowest score for any indicator on the survey was for physician direct entry of at least 75 percent of inpatient medication orders into Computerized Physician Order Entry (CPOE) (15 percent said “yes”). A 2007 American Hospital Association survey of 1,500 community hospitals showed a slightly lower 8 percent adoption (although it asked about percent of physicians entering medication orders, rather than percent of medication orders entered by physicians). Wider adoption of CPOE will undoubtedly be paralleled by wider use of order sets, because grouping electronic orders speeds physician order writing, in addition to being a critical aid to reducing undesirable variation in care.

Although more than 90 percent report that nurses document “at least some” patient information and care documentation in an electronic medical record, only 33 percent of respondents indicate that physicians document progress notes electronically. That so many responses state that physicians engage in electronic documentation is somewhat surprising because this challenging area is typically one of the later ones in clinical system roll-outs.

Use of electronic clinical decision support as an additional safety net is also at an early stage. Though medication orders at close to 60 percent of sites are screened for contraindications such as drug-drug and drug-allergy interactions, therapeutic duplication, and appropriate dosing, the low rate of adoption of CPOE suggests that any alerts or other advice are not yet being delivered directly to physicians much of the time. In addition, use of bar-code scanning as a double check on the five rights for medication administration (right patient, medication, dose, route, and time) is only a universal practice in 41 percent of the responding organizations — although this rate of adoption is considerably higher than the 14 percent rate reported in the AHA survey.¹ General use of clinical decision support as a tool for advancing quality and safety is also low: 30 percent report that the hospital is able to bring the recommendations of quality improvement projects quickly to the point of care using these tools in the electronic medical record.

Growing concern about hospital-acquired infection — now reinforced by public reporting and lack of reimbursement for consequent care — is prompting hospitals to invest in specialized IT to facilitate constant screening of patients for infections and aid in antibiotic use in some cases. In this sample, 33 percent report that the infection management team is equipped with IT support.

¹ “Continued Progress: Hospital Use of Information Technology”, AHA, 2007.

Progress on the Efficiency Dimension

Efficiency was the only dimension for which average scores for IT were higher than average scores for operational readiness.

Readiness Component	Definition	Scores
Operational	<ul style="list-style-type: none"> Fewer bottlenecks in patient throughput Routine practices to reduce cost Reimbursement issues dealt with ahead of the service rather than after Rework as the exception rather than the norm for the workforce 	Average 5.4 Range 1 to 8
IT	<ul style="list-style-type: none"> Clinicians able to work electronically in any location where they are making decisions about patients Information about patients and about clinical policies and procedures migrated from paper to electronic data Minimal to no redundant entry of patient information 	Average 6.7 Range 3 to 10

Operational Readiness for the Efficiency Dimension

Overall, operational scores were highest for achieving voluntary staff turnover rates that are lower than industry benchmarks (89 percent) and standardized documentation of medication administration across all inpatient units (81 percent).

The ability to address reimbursement issues consistently prior to providing care, rather than after, was a challenge for many respondents. Roughly one-fourth (26 percent) indicate that co-payments are collected for ambulatory patients at least 90 percent of the time. More than one-half (56 percent) respond that for at least 90 percent of scheduled admissions, pre-certification and prior authorization are in place when the patient is admitted. As more patients participate in new, more complicated, “consumer-directed” health plans that can be highly personalized and place more financial responsibility on the patient, the importance of efficiently handling reimbursement aspects in advance will increase significantly. Similarly, the ability to demonstrate that the cost per discharge for the top 10 diagnoses is the lowest in the local market will be a major competitive advantage, which only 19 percent can claim today.

IT Readiness for the Efficiency Dimension

Hospitals have clearly been stepping up to many of the IT investments that can improve the efficiency of the clinician workforce.

- Every respondent provides employees in all departments with immediate electronic access to policies, procedures, and the external reference systems necessary to do their job.
- Eighty-nine percent indicate that wireless is deployed “throughout” the organization, and 85 percent that multiple mobile device options are available to suit different workflows and user preferences.
- Roughly two-thirds offer remote access to the system, including the ability to enter orders and document into the system, from the home or office, and 59 percent use technology such as voice-over-IP to improve communication among providers.

All of these investments equip clinicians to obtain information, coordinate care, and make decisions about their patients anywhere, any time.

Deployment of some specific tools and technologies is less advanced. Only 30 percent indicate that they use technology such as Radio Frequency Identification (RFID) and/or electronic tracking to improve patient flow and bed management, while less than half (48 percent) said a single sign-on and single portal are in place for clinicians to quickly access all necessary software applications to do their work.

Progress on the Patient-Centeredness Dimension

The patient-centeredness dimension had the largest gap between average scores in operational IT components, with operational readiness far ahead.

Readiness Component	Definition	Scores
Operational	<ul style="list-style-type: none"> Attention to patient satisfaction and service quality as major indicators of performance Ease of matching patient needs and preferences with services High patient satisfaction with access and the care experience 	Average 7.2 Range 4 to 10
IT	<ul style="list-style-type: none"> Extent of options available to patients for clinical, administrative, and reimbursement-related self-service IT-facilitated continuity of care Ease of navigation by patients for access, care follow-up, and billing issues 	Average 3.4 Range 0 to 8

Operational Readiness for the Patient-Centeredness Dimension

Generally speaking, progress is good in many of the operational aspects of this dimension. For each of the ten indicators, at least 48 percent of respondents answered “yes.”

The most progress so far relates to elevating the importance placed on patient satisfaction and service quality to major indicators of performance. Close to 100 percent indicate that the organization regularly sets goals for patient satisfaction (96 percent), a subcommittee of the board or the board as a whole regularly receives patient satisfaction results (96 percent), and patient satisfaction is one of the quality indicators used for routine management throughout the organization (96 percent). Undoubtedly a contributing factor is the new requirement from Medicare for the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAPS) survey and the way it treats the patient experience.

Answers to other questions also demonstrate progress in responding to language needs of patients regarding educational materials (59 percent) and the availability of interpreters (74 percent), as well as providing one telephone touch point for scheduling multiple services (70 percent) and addressing issues regarding bills for services provided anywhere in the hospital or health system (48 percent).

IT Readiness for the Patient-Centeredness Dimension

Progress on IT to support continuity of care was mixed. More than two-thirds (70 percent) indicate that community physicians are routinely notified when their patients are seen in the Emergency Department or admitted to the hospital, but fewer than one in four (22 percent) could say that patients are rarely, if ever, expected to be the primary source of information about their health history. One-third report that clinical programs are beginning to use technology that supports patient self-

care and follow-up (e.g., remote monitoring). (This is substantially higher than the 11 percent rate in the more representative AHA survey.)¹

Adoption of IT to support self-service activities adds convenience for patients, as well as labor savings for the hospital. All of the examples included in the survey are in limited use. Only 26 percent report that online pre-registration was widely used and even fewer that patients could schedule appointments and request prescription refills online (19 percent) or view their test results and engage in e-visits (11 percent).

Progress on the Accountability/Transparency Dimension

On this dimension, organizations are farther ahead in relying on measurement internally than in transparency with the wider community.

Readiness Component	Definition	Scores
Operational	<ul style="list-style-type: none"> Extent of reliance performance measurement as part of routine governance, management, and community relations Use of credible performance feedback as a standard quality improvement tool Transparency with board and community about performance 	Average 6.5 Range 3 to 10
IT	<ul style="list-style-type: none"> Easy access to information to analyze and improve both practice and process Replacement of chart reviews as the major source of information for measurement Availability of real-time performance dashboards on demand 	Average 6.1 Range 2 to 10

Operational Readiness for the Accountability/Transparency Dimension

Progress has been notable for at least targeted measures of performance. All 27 respondents (100 percent) indicate that a subcommittee of the board and/or the board as a whole regularly receives performance data on quality. Additionally, more than two-thirds (70 percent) of organizations say clinicians regularly receive feedback about the quality of the care and services they provide, and that quality indicators are used in routine management at every level of the organization. Close to 90 percent of organizations indicate that the organization is viewed as the high quality provider in the community, although only 44 percent indicate that their organization is viewed as the most open about quality and service goals and performance.

Availability and use of detailed current information on demand as it is needed for management and quality improvement is in an earlier stage: 59 and 41 percent, respectively. This is not surprising, since many of the advanced clinical systems that capture needed information about individual patients are not in universal use, as reflected in findings from other parts of the survey. However, investments in applications to support operational dashboards and user-defined iterative analysis of clinical practice and process will undoubtedly also be needed before managers and quality improvement teams have the information they need at their fingertips.

IT Readiness for the Accountability/Transparency Dimension

Progress on electronic capture of information needed for measurement is apparent in several areas, including data for measures for external quality reporting (59 percent) and the ability to combine financial and

¹ "Continued Progress: Hospital Use of Information Technology", AHA, 2007.

clinical data when examining safety and quality (70 percent). Many of the participating organizations (81 percent) incorporate benchmarks in reports assessing safety and quality performance.

As more information is captured electronically through documentation, hospitals will be better equipped to track patients for compliance with core measures and other quality indicators in real time (currently in place for 37 percent of the respondents) and to measure performance based on all patients rather than the current practice of relying upon a sample (currently in place for 48 percent). The survey measured this in very black and white terms (e.g., tools and technologies are in place for concurrent patient review). Actual progress will be very incremental over the next 3 to 5 years as IT supports more inpatient care processes and more documentation is not just electronic, but also codified (available for analysis).

The advanced state of transparency is proactive reporting of performance on a wider range of measures than those for mandated external reporting. Noteworthy is that 37 percent of the organizations in this sample are already routinely posting performance information on a website for the community.

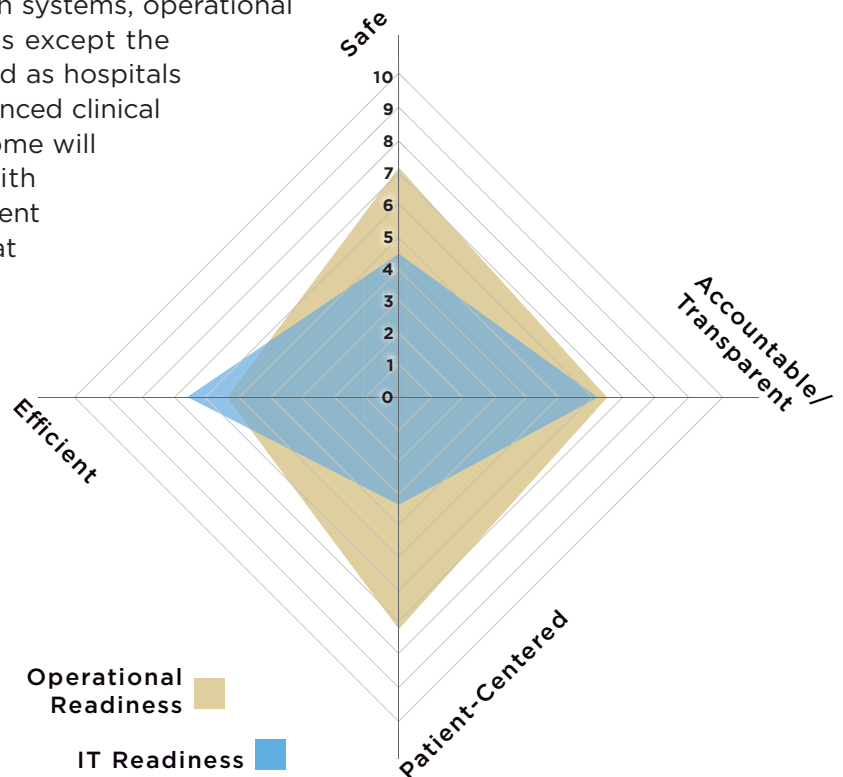
Putting It All Together

At least in this early sample of hospitals and health systems, operational readiness is ahead of progress with IT in all areas except the efficiency dimension. Some of this gap will be filled as hospitals move forward with completing the roll-out of advanced clinical systems such as CPOE and documentation, but some will also require new specialized software to help with increasingly important tasks such as bed management and nosocomial infection surveillance. The fact that so much progress has been made on the operational side is good news because the experience gained with standardization of clinical practice and process will pay off in speedier implementations, as well as provide process models for more optimized performance on all dimensions.

Clearly much work remains to be done in all four dimensions. Several areas that stand out are electronic documentation by clinicians of all disciplines, physician electronic order entry, and self-service options for patients. All of these represent big operational challenges and multi-year project horizons. Patient self-service must also be integrated with back-end systems for real-time processing to meet patient expectations and increase efficiency. The challenge for hospitals will be to pick the path that addresses immediate priorities, while at the same time build toward overall organizational excellence.

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