

Issue Date: April 2008

The Art of the Project

Healthcare CIOs are under enormous pressure to manage a growing portfolio of ultra-complex projects

by Mark Hagland

Ten years ago, when the CIO role was first coming into focus, getting staff, budget funding, and executive management buy-in for IT implementations were the most immediate concerns. Nowadays, when most CIOs no longer have to justify their positions or their department's functions, the landscape has shifted considerably.

Instead of having to justify their responsibilities, CIOs now have to rationalize how their department works, as end-user stakeholder groups bombard them with implementation requests. What's more, the growing industry-wide recognition of the need to quickly begin implementing core clinical information systems — including EMRs, CPOE, eMARs and PACS — is forcing IT departments to ramp up their efforts more aggressively than ever before. How to make sense of the competing needs, demands and priorities?

The solution that healthcare CIOs have hit upon (but which has long been known and used in other industries, particularly in manufacturing) is project management, along with its corollary, portfolio management. (Sometimes, confusingly, the overall concept is also referred to as project portfolio management.)

Different experts define the terms differently, but the bottom line is a simple one: as healthcare CIOs (like their non-healthcare counterparts) are faced with growing demands, increasingly complexity of implementations, and a diverse rainbow of priorities, they are planning projects in advance. More and more they are scoping out their parameters, resource needs, and estimated timelines. This planning is becoming a necessity rather than a luxury.

In many progressive hospital-based organizations, every IT project is being developed in this way. Projects are going through careful planning, approval by committees or a formal project management office, or both, and then being put into a coordinated queue. Some executives are also creating the umbrella concept of portfolio management around this, meaning that they are evaluating potential projects in the context of overall strategic priorities.



David Muntz, senior vice president of information services and CIO, and Nayan Patel, corporate manager of portfolio management Baylor Healthcare System

Consider the following examples:

At the 14-hospital Baylor Healthcare System in the Dallas metropolitan area and northern Texas, not only has the IT organization created a formal portfolio management office with a portfolio management director; it has trained and had certified all of the IT professionals in that office in formal project management methodologies. The organization has also created a formal information services governance committee (whose members include the Baylor system's CFO, CMO and CNO, in addition to the CIO) whose responsibilities include approving any project with a price tag over \$100,000. David Muntz, Baylor's senior vice president of information services and CIO, and Nayan Patel, the corporate manager of portfolio management who runs the PMO, say that developing the process and staff has led to enormous breakthroughs in efficiency and cost-effectiveness when implementing information systems across Baylor.



Matt Ebaugh

At the University of Texas M.D. Anderson Cancer Center in Houston, vice president and CIO Lynn Vogel, Ph.D., and Patti Layne, director of project support and coordination services, say that the conversion of the entire M.D. Anderson Cancer Center organization to project management principles has rationalized IT investment tremendously. Like their colleagues at Baylor, the M.D. Anderson folks have created a PMO (there called a project management office), hired a formal director (Layne), trained a cadre of project management professionals within IT, and structured a detailed, formalized governance process around it all. CIO Vogel says it has helped everyone in the organization to think more productively and effectively about IT investments as a whole. And Layne notes that, in the four years since the whole process began, the efficiency of IT implementations has improved dramatically. At the outset, she reports, IT projects had been running 107 percent over baseline, meaning that a project anticipated to take 12 months to complete was taking more than 24 months; and projects were incurring an average 29-percent budget overrun. Within two years, projects were running 7 percent over schedule, were running under budget by 4 percent, and only half required scope changes, compared to 90 percent previously.

Some hospital-based organizations are implementing project management principles, but in less orthodox ways. For example, Matt Ebaugh, vice president and CIO at the 300-bed Silver Cross Hospital — a freestanding community hospital in Joliet, Ill., a southwestern suburb of Chicago — two years ago began to establish a project management office, which went live a year ago, and is staffed by a project coordinator.

Among other innovations, the organization now maintains and updates a summary report on all IT projects on the hospital's intranet, in order to promote transparency and buy-in. But rather than creating a discrete IT project management staff, every one of the 35 professionals on the hospital's IT staff is a project leader for one or more IT projects, Ebaugh says. He has eschewed certification or the use of formal methodologies as not appropriate to his hospital's speed-driven culture. In any case, he says, adopting project management principles and discipline has been highly successful at Silver Cross. "The IT people here have probably done more in the past two years than in the previous 10," Ebaugh reports.

Even some smaller hospitals are developing sophisticated project and portfolio management programs. That's certainly true at the 140-bed Ephrata Community Hospital, located in the small town of Ephrata, an hour west of Philadelphia in Pennsylvania Dutch country. Vice president and CIO William Johnson, and his IT project manager, Amanda Yocom, note that while smaller hospitals naturally tend to have much smaller IT staffs (Ephrata has about 26 altogether), most are busy implementing nearly the same number of core clinical and other applications as are their larger brethren organizations. As a result, Johnson says, project management is becoming at least as critical for the CIOs of smaller hospitals as for those of larger organizations. And the concepts, rigorously applied at this smaller organization, have yielded far greater efficiency and operational discipline at Ephrata, Johnson says.

Complexity driving adoption

All those interviewed for this article agree that project management has become vital to their work as CIOs and other IT executives, and that the success of most large IT implementations going forward will depend on it.

Indeed, the complexity of IT implementations is emerging as one of the most important factors driving the adoption of the project management concept and its tools and methods. This isn't only true of healthcare, either. A Dec. 31 article in *Computerworld* discussed that magazine's recent survey, which found a global concern among CIOs in all industries over the increasing complexity of IT implementations of all types. Indeed, that magazine's survey found that the challenge of managing projects had risen to the number-one spot in its most recent survey of CIO concerns.

In U.S. healthcare, there is the added element that EMR, CPOE, PACS, and other clinical implementations, some of the most complex ever attempted enterprise-wide, are now peaking across the industry, many of them with timelines outstripping industry-average CIOs' lengths of tenure. Is it any surprise that smart CIOs are turning to project management for professional, as well as organizational, survival?

Not surprisingly, smart CIOs are finding that moving quickly and early to implement project management discipline is reaping major rewards in productivity, cost, and stakeholder acceptance and satisfaction.

Baylor's Muntz puts it bluntly: "There really is no other way to manage resources and to set expectations now," he says. "The fact is, the demand for our services has probably grown faster than at any time in my career. It used to be that we worked in a 'push' mode, trying to get people to join us in doing things. Now, they're demanding things of us. And it's not that you're not doing things well already. Even if you're doing well, you can do things better," he adds. "And good portfolio management has been the key to our success. And it didn't happen overnight; you have to struggle to do things better. And Nayan (Patel) has been a big part of that success."

For his part, Patel says that project portfolio management "is like investment banking. You have projects to consider, and are trying to figure out which ones will bring the greatest return" on their investment to the organization. First, though, it was necessary for Patel and his team to name and define all of Baylor's IT projects and enter them into a centralized database. For that, they relied on a solution from Austin, Texas-based Planview Inc.

One of the greatest benefits of using portfolio and project management techniques, Patel says, is the creation of transparency in terms of IT operations. Potential end-users in all the organization's departments and service lines can view the project management report generated weekly and available on the organization's intranet, for all 150 or so open, active, approved IT projects. The impact on IT end-user relations has been very significant, he says.

Sharing ownership of IT projects

M.D. Anderson's CIO Vogel emphasizes the importance of process. Referencing the 2004 book by Peter Weil and Jeanne Ross, "IT Governance: How Top Performers Manage IT Decision Rights for Superior Results," Vogel says, "One of the comments from Peter's book really captures the challenge of governance pretty well. He makes the comment that how you decide what your investments are in some ways is more important than what you decide. And that's really true in healthcare, because the success of any IT implementation in healthcare depends so much on the buy-in of stakeholders. And to the extent that we involve our customers in the decision-making process that is governance, we share with them in the success of that decision-making process. And we've found here at M.D. Anderson that by involving our customers in that process, we get them to share in the decision, the process, and the ownership of that process."

There are other advantages in project or portfolio management development as well, notes Cheryl Croft, chair of information technology and CIO at Mayo Clinic-Jacksonville in Florida. One important element in the 214-bed academic medical center's methodology (referred to there as "standard implementation methodology") is risk assessment, notes Croft.

"We do an initial risk assessment at the beginning of every project management planning process," she says. "We do a second risk assessment at the conclusion of the design and planning phase; and then again after the build-

and-testing phase, just before implementation. In those risk assessments, we might do a scenario in which we try to evaluate the worst-case scenario. What if the application doesn't work, or if it has a major flaw? Or if we didn't provide enough education? Adding that element in helps us to think about what could potentially happen during an implementation, and to plan for contingencies." (She and her colleagues are using a self-created implementation methodology, in tandem with a facilitative tool from Kansas City-based Cerner.)

Meanwhile, some of the core principles of good project and portfolio management simply make practical sense, says Kim Brant-Lucich, director of process redesign in information services at the 14-hospital St. Joseph Health System, based in Orange, Calif.

At its top end, project management meets strategic planning, she points out. So doing effective strategic planning for IT, supported by good project management, means that an organization's leaders can optimally align their IT initiatives with their overall business strategy and goals, Brant-Lucich adds. What's more, both concepts, when executed properly, engage and involve stakeholders appropriately.

It's no surprise that project management is becoming a bigger phenomenon in healthcare, following its implementation not only in manufacturing but also in such industries as financial services, says Patrick Durbin, founder and CEO of software vendor Planview. The IT projects in both healthcare and financial services are becoming increasingly complex and challenging to manage, Durbin says.

The difference, he says, is that executives in financial services "truly see the value of IT, whereas healthcare still has some of the old thinking" that sees IT as a drain on revenues. Increasingly, that kind of thinking is fading, though, he notes. Accordingly, healthcare is accounting for a growing percentage of his and other project management software vendors' revenues.

In the end, says Baylor's Muntz, project and portfolio management programs will continue to be established and flourish in the IT organizations of hospitals and health systems, because IT implementations will continue to grow in complexity and resource needs. And project management genuinely helps rationalize complex processes, he says.

"This has improved the integrity of the process more than anything, taking the personality issues out of the IT governance process," Muntz says. "We in IS want to please everyone, and find it hard to say no. Now, rather than just falling back to the technological 'yes' position, we can rely on a rational process to accomplish things."

Sidebar

For More Information Online Resource Center: <http://www.healthcare-informatics.com/Administrative> Search Our News Archives by Organization Type: acute Search our Web Site by keywords: EMR, project management