One of the interesting things about modern healthcare is that just about everything requires IT,” says Michael Pfeffer, MD, CIO at UCLA Health, a Los Angeles-based, four-hospital academic health system with 25,000 employees and a staff of 2,000 physicians. Pfeffer was previously CMIO and took the post of CIO in 2014, overseeing all IT operations, medical records and the analytics team.

“Everybody wants more health IT tools and platforms. But we have to spend less. It’s our everyday conundrum. How am I going to ensure that we provide the needed technologies for our patients and providers while ensuring the value proposition of health IT?” he says.

Clinical value is often defined as quality over cost, Pfeffer notes, and IT value can be similarly defined by the quality and reliability of the IT platforms and tools over the cost of IT. “Making certain your IT organization maximizes IT value is the business model I live in every single day. Costs generally go up because we’re seeing a higher volume of patients—which requires expanding our IT footprint and increased volume-based payments to vendors—and working to enable transformative technologies in the spaces of population health, mobile health, and precision health. Pile on top of that...
necessary but rising costs of cybersecurity and there is a real challenge for the CIO to continue to contain the growth of the IT budget,” he says.

“To do this, I found that choosing an IT-costing model that the organization—particularly your CFO—accepts is extremely helpful and can be a talking point both internal and external to the IT organization. The model should be an IT cost—capital, operating, both—over a denominator that best represents the organization. Whatever you decide, try to find a best-match industry benchmark to better gauge where you fall. However, whether you’re above such a benchmark or below does not necessarily mean you are providing more or less value from IT. In fact, one could argue that being well below the benchmark could mean that the value IT provides to the organization is marginal despite lower IT costs,” says Pfeffer.

For its benchmark of IT value, UCLA calculates total IT spend as a percent of total revenue, which Pfeffer shows in town halls convened for the entire IT organization as well as for its IT Steering Committee. “This is not just about saving money,” he asserts. “Our Director of IT Strategic Finance, an experienced thought leader in this space, put together a savings tracker and works closely with our IT finance team and the IT directors. We track savings very carefully—and we acknowledge those who find it. Some of the ways we save are in decommissioning systems, sun-setting platforms, leveraging scale with our campus and UCLA Health counterparts and opportunities in integrated delivery. We’ve been able to offset growth with savings. That increases our value to the business.”

Knowing what IT doesn’t do
“We’ve been successful in lowering our ‘unit’ cost of IT because we apply a laser focus to cost. All of these things that involve IT—continuum of care, managing the chronically ill, population health—are ultimately not the domains of the IT organization. Rather, we successfully partner with business units and help understand the problem they are trying to solve,” says Pfeffer.
As such, there isn’t a single platform that can do population health or value-based care. “None exists,” he says. “Vendors may tell you that their product offers a complete solution, but every organization—every patient—is unique. Recognizing that fact will allow you to avoid spending significant costs on additional IT tools when the ones you already have may very well solve the problem. This saves significant IT resources—nothing ever integrates easily into an EHR—significant upfront implementation costs, and ongoing maintenance costs that keep rising year after year. This is a clear way the IT organization can provide value to the business and keep costs down while delivering quality tools.”

**Accessing the collective mind of IT**

Rewarding IT staff for savings includes:

1. Recognition—“Calling out a job well done is really effective. I have really talented people in IT and acknowledging them is critical.”

2. Built-in yearly performance goals and incentives tied to those goals help align and monetarily reward employees.

3. Building savings into UCLA Health’s 5-year IT strategic plan.

4. Making it visible to everybody in the entire IT organization.

“You’ll be surprised by who comes up with savings ideas. You trigger the collective mind of the organization. I explain it in a way that every dollar we save in IT frees up a dollar for patient care or research. If it’s all just about saving money it won’t work. It works because people feel like they can (and do) make a real difference,” says Pfeffer.

**IT savings strategies**

Pfeffer offers some broad strategies for a leaner IT organization:

1. Look at how we allocate storage. Our associate CTO found we were allocating storage on a per-project basis, but if we switched to enterprise storage we could save close to a million dollars a year.

2. For maintenance contracts: Can we do multi-year contracts? We will work with the vendors on this.

3. Is there hardware we can get rid of?

4. Can we move more assets to the cloud? IaaS? Saas?

5. The way we manage projects: We have an academic-based governance structure, but the chairs of IT governance committee, faculty and leaders in the organization, conduct the initial screening and vetting. While IT staff supports all committees, it’s really important that business and clinical leaders set the direction and not the CIO. They decide: Is this project going to provide value? They’re asking the questions as we move forward. This is one way an IT organization becomes value-based. Then strategy is based on clinical process outcomes, for example, and not on the allure of mobile apps.

IT covers everything from robots to nursing informatics, so the CNIO and CMIO serve as bridges between IT and business. Because the CNIO and CMIO are within the IT organization, that spirit of clinical care and collaboration across the business has descended down to all in IT. “We have IT staff round in the hospitals to understand how the business works. It creates the idea that IT is not just about racking servers in the data center, but really providing value to the organization and our patients. We’re very much tied into patient outcomes,” he says.
The organization goals to focus on the patient, quality and safety are the same ones for IT. For example, an organizational goal is to reduce readmissions.

“The IT department didn’t start out by saying, ‘This is an IT tool.’ That’s not our role,” says Pfeffer. “We’re at the table, however, and the end result is we have a CDS tool in the EHR that scores patients on clinical variables breaking them into readmission risk quartiles—very high, high, medium or low. What’s making it successful is that it wasn’t an IT project. The IT piece was a smaller, but necessary, piece to make it possible. It’s really the operationalization of the score—case management, social work among other factors—that make it work.”

**Building balance through dialogue**

“There’s a balance, however, as I mentioned above regarding value. It’s not so much the benchmark number as it is the organizational comfort with it. It’s really a dialogue with your clinical and operational leaders. It’s important to track, but you don’t want to just get cheaper—you want to provide more value. It’s a fine balance,” he says.

Regarding analytics, Pfeffer acknowledges the organization is not at the highest maturity level, but has made significant progress because of an outstanding team and Chief Data Officer. “Analytics needs to be centralized and decentralized. You really need savvy operational analysts who can turn the data into visualizations and dashboards conveying information. People in IT are very skilled in understanding the data model, machine learning, and integrating data across databases. That part has to be centralized,” he says.

However, if the analytics team is spending all their time writing and rewriting operational reports, they won’t be able to collaborate as much with the business side in developing solutions. “You want analytics and IT in general to understand the business. It’s imperative that the central analytics team provides platforms for visualizations, machine learning, algorithms, precision medicine, clinically integrated networks and quality measurements.

Pfeffer says being an MD gives him a different lens to look through in terms of health IT. “I may not be able to configure a complex virtualized server in the data center, but I have an incredibly talented staff that can do that. As an MD CIO you really need to surround yourself with the best people. My role is to ensure we’re providing value back to the patient and the organization. I can have dialogues with clinicians—both when I am wearing the CIO hat and when I’m wearing my Hospitalist hat. This process allows me to bring the clinical aspect back to the IT organization. As a hospitalist who sees patients a couple days a week, I use the IT tools and platforms. I get it. I also teach residents, which is an overlooked group for feedback. They’re so critical to the organization. It’s fascinating: the system is designed one way and they’re doing something else. I’m continually learning.”

**Conclusion**

This issue concludes our Inside Edge three-part series “New Business Models: Operationalizing Strategy & IT Requirements.” However, our discussion will continue in a related vein this fall with “Population Health: Redesigning Care.” In the meantime, don’t miss the next IE covering another top priority for healthcare executives: “Cybersecurity.”
Check out “The UCLA Health Resident Informaticist Program—A Novel Clinical Informatics Training Program” in JAMIA
https://doi.org/10.1093/jamia/ocw174

Check out “University of California Health System CIOs Collaborate for Change” in Healthcare Informatics

Check out these 2017 SI Teleconferences on Digital Healthcare and New Business Models at
https://scottsdaleinstitute.org/teleconferences/2017.asp

July 26: Technology Organizational Transformation—What it is and How You Achieve it

July 25: Activity-based Costing Initiative at the University of Michigan

June 20: NYP Launches On-Demand Digital Health Services

June 1: Behavioral Health Integration and the EMR at Partners HealthCare

May 23: Journey to NextGen ACO at KentuckyOne

May 17: Leveraging the EHR with CDS to Prepare for Value-based Care at Cedars-Sinai

May 11: Achieving the Triple Aim in Critical Care Using Advanced IT and Business Strategy at Emory

For an interesting snapshot of how CIOs view digital technology, including mobile technology, in designing new business and clinical models, check out the CHIME survey report “The Healthcare CIO perspective on supporting clinical workflows.”
http://mailchi.mp/mail/survey-report-cios-on-supporting-clinical-workflows?e=037c17a009
(free but registration may be required)
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