

Healthcare Informatics

CUSTOM MEDIA

MAKING VIRTUALIZATION A REALITY: UnityPoint Health and the Virtual Server Solution

by Kayt Sukel

As larger healthcare systems continue to grow, often merging with smaller regional and rural hospitals, information technology (IT) leaders are pressed to find innovative ways to deal with interoperability and data sharing across the enterprise. UnityPoint Health, a multi-campus health system in Iowa, needed to integrate a variety of radiologic and medical imaging systems across their rapidly expanding community.

To address the issue, this health system recently transitioned to a completely virtual server environment solution. Todd Holling, the Assistant Director of Clinical Legacy and Business Systems at UnityPoint Health, spoke with Healthcare Informatics about the challenges and opportunities of bringing together disparate systems across a large healthcare system—and how a virtual solution has helped leverage existing IT and medical imaging systems to achieve greater efficiency, improved care and increased cost savings.

Healthcare Informatics: UnityPoint Health has grown rather dramatically over the past few years. With so many different applications from so many different departments and institutions, what are some of the biggest challenges concerning interoperability and data sharing?

Todd Holling: The biggest challenge is that there's no, "one-size-fits-all" way to deal with the problem. There's never a solution that will be a perfect fit for everyone. UnityPoint Health is very much in a kind of growth mode as we integrate other partners into our system. And as we do that integration, we need to find ways to standardize as much as we can, creating the kind of platform that allows our partners to use our core systems. There are a lot of barriers. Many of our partners have ties to their old systems and may be reluctant to make a change. You have to address the question of how you can convert old data so it can be used by the new systems. What does that timeframe look like? What data moves to the new system? Where does the old data go? How do you retain that old data? There's a lot to consider.

How do you meet those kinds of challenges?

Holling: It's a fine balancing act. But it's one that can be managed with good communication—where the appropriate stakeholders are involved in those conversations early on, making sure everyone is up to speed. You also must have a systematic process in place to talk through all the issues. Because they can be difficult conversations—and you need to get your current users involved in those discussions so they can convey the benefits of using a standardized system. To let partners know that it's about coordination of care, sustainability efforts and optimization. Things that ultimately impact clinical care. So, early and often, you need to balance the different priorities of each site, get to a common ground consensus, and then have a collaborative process in place so you can get to a standardized end state where everyone is working on similar platforms.

Are there any issues that get magnified when your organization is in this kind of growth mode?

Holling: Getting buy-in can be an issue. And it's not a surprise. People at different sites get comfortable with where they're at—with the systems they have. Certainly, physicians do. And that's not to say that what they're using is necessarily the best product. But, they are systems that they know well. So the integration process can be a big culture change.

These physicians are coming into a larger institution. They're coming into a larger neighborhood where they'll have to

connect with more physicians and care team members. The support is going to likely come from a different avenue—in our case, it's a corporate location and we find local partners to support those systems.

But, again, if you focus on good communication early on, creating good decision documents that can demonstrate what you are doing to the community, you can get there. Get that information into the appropriate hands—and let those doctors start touching the new systems so they can get more comfortable. Do that and they quickly learn that the changes you make won't be so bad after all. And once they see that, they'll be part of a much larger network as well as a powerful system that has more tool sets and better support, they will really buy in. They have a real light bulb moment where they realize that their focus was on the wrong aspects of the change—and they will be able to, through this integration, open up a real community of care to help provide the best outcome for every patient, every time.

UnityPoint Health just made the transition to a virtual server environment to help assist with medical imaging data. Why? What are the advantages of such a solution as you are addressing interoperability and data sharing challenges?

Holling: First and foremost, virtualization allows for flexibility. In a traditional physical environment, if you exceed the bandwidth and growth capacity of a server, you have to then purchase another physical server—and keep adding more physical servers as needed. That takes time. It takes more money. It takes the whole lifecycle of a physical device.

Virtualizing allows you to scale out—and not up. That means, if you exceed your capacity virtualization, you already have the existing templates in-house for those virtual servers. You can add additional virtual servers literally within hours. So you can be much more flexible when you are compensating for growth—and all those eventual items that happen as that growth happens.

What kind of support did you receive during the implementation process?

Holling: We partnered a lot with McKesson on the virtualization process. We knew that we needed a solution that wouldn't just work for today, but one that would work for the next five years. McKesson understood that, too. So we never got a “No, you can't do this,” or “We're not comfortable doing this,” when we told them our requirements. Instead, they listened and said, “Yeah, let's do this together,” and “This is not just good for you, but good for all.” Ultimately, it ensured we had a successful virtual environment implementation.

Was it difficult to get buy-in from key stakeholders and physicians?

Holling: No. As we told the story about why we decided to move to virtualization, and the advantages of doing so, we got buy-in very easily. The fact that we can grow, be flexible

and then continue to expand without the constraints of a physical environment spoke to them. Physicians don't want care interrupted. They don't want to hear, “We need to wait six months for a new infrastructure to be spun up before you can do that.”

Does this solution change the way that clinicians work in different facilities across the organization?

Todd Holling: It's hard to quantify how a virtual server impacts a physician behind the screen. But I would say that it has brought changes because our solution means less down time. If there's an issue with one server, you can switch to another virtual server in real time. That means that physicians can focus on patient care instead of down times and other unforeseeable IT issues. And that's ultimately what you want. You want the clinicians asking “How can I provide the best care for my patient?” Not, “How can I get around this IT problem?”

How does this solution work across different branded software systems or third party applications?

Holling: We used a product called Enterprise Image Repository that allowed us to easily work with third party applications that maybe weren't native to our standardized McKesson environment. And having a virtualized environment, again, allowed us to be very nimble. We could change the different operating systems to meet more restrictive applications needs in the third party world and with other systems. Virtualization allowed us to do that faster, less expensively and, ultimately, with greater success.

What would you like other growing hospital systems or accountable care organizations (ACOs) to know about this kind of solution?

Holling: Ultimately, we all want to create a standardized environment that is flexible and scalable. You have to mitigate the unknown—because you don't always know what's going to happen tomorrow, but you do have to have control of the environment today. So making the investment in the right technology helps you to avoid a lot of pitfalls. Virtualization has allowed us to navigate some pretty difficult waters—with the data tsunami you get when you're a healthcare system acquiring other facilities as well as partnering with different facilities. It allows your organization to be very dynamic. And helps ensure that your IT dollars are invested not just for now, but for the long term.

If you could offer one piece of advice to an organization considering virtualization, what would it be?

Holling: Do your homework. Think really hard about where you want to be as an organization not just today, but two, three, four and five years from now. The investment you may make today will have repercussions years in the future. Investing in virtualization allows you to consider your needs today—and those tomorrow, too. So don't think too much about today. Really focus on what you may need later on.