



## Implementing caBIG<sup>®</sup> at UAMS, Part II: A CIO's Perspective

### Moderator:

Today we're speaking with Kari Cassel, Chief Information Officer at the University of Arkansas for Medical Sciences.

For the sixth time in nine years, the *Hospital & Health Networks* magazine of The American Hospital Association, has named the University of Arkansas for Medical Sciences Medical Center as one of the 100 most wired hospitals and health systems for its use of technology. UAMS Medical Center is one of only 11 organizations in the U.S. to be named six times to the most wired list in its nine-year history. Hospitals are recognized for how they use technology to address patient care, customer service, business processes, workforce and public safety issues. Thank you for joining us today, Kari.

### Kari Cassel:

Thank you for having me.

### Moderator:

Let's talk about your role at UAMS. Can you describe what you do on a regular basis?

### Kari Cassel:

Yes. UAMS is an academic health sciences university. We have five colleges: medicine, nursing, pharmacy, allied health, public health, and a graduate school. We have a hospital [and] many clinics, both on campus and throughout the State of Arkansas with our outreach. And then we have a large research component as well. I am the Chief Information Officer for the entire UAMS organization and I'm responsible for the IT for all of our missions.

### Moderator:

Let's rewind prior to the time the Cancer Center began implementing caBIG<sup>®</sup> tools. What were your most pressing information-related challenges? What did you need to do that you couldn't do at the time?



**Kari Cassel:**

Trials were being managed very independently at UAMS; there was no common approach to anything research-related. Data management was not centralized. We had difficulty separating our standard of care charges from our trial charges. We were coming up against some compliance constraints as well.

**Moderator:**

What was your vision for the Cancer Center in terms of information technology?

**Kari Cassel:**

I wanted a cohesive, complete set of research tools that would allow the clinical researchers to easily submit their studies, build their budgets, [and] manage their trials. And then on the other side of the trial, we wanted to be able to ensure that the management equality of the study data was as high as it possibly could be, and we wanted to ensure that all of the data made it into the appropriate data repositories so that we could use it for reporting, et cetera.

**Moderator:**

Why were these improvements critical? What benefits did they bring to staff and to patients?

**Kari Cassel:**

It was becoming increasingly difficult to recruit and train enough staff to do a good job of tracking everything manually. There was the danger that events that might be important in either the outcome of the research or to the quality of care to the patient could potentially be missed. The volume of data being tracked was just getting to be more than we could manually deal with.

**Moderator:**

What caBIG<sup>®</sup> tools are being used at the Cancer Center at this time?

**Kari Cassel:**

We're currently using caExchange, which is our hub. We're using C3PR to register our participants. We're using the study calendar; caTissue: caArray, which is the gene array lab viewer; and caTies to manage the demographic data and to de-identify that data.



**Moderator:**

How did you first hear about caBIG<sup>®</sup>? What really caught your attention?

**Kari Cassel:**

Actually, I'd attended a double AMC meeting where the City of Hope was presenting their caBIG<sup>®</sup> solutions and talking about where they wanted to take the whole idea of caBIG<sup>®</sup>. I believe there were NCI representation at that meeting as well and the open-source approach and the collaborative nature of what they were proposing really caught my eye, and I've always been a big proponent of open-source tools in healthcare research academic medicine.

**Moderator:**

Why did caBIG<sup>®</sup> seem to be a particularly viable solution for your specific problems?

**Kari Cassel:**

That's almost funny. I don't think at the time we were sure that it was a viable solution. But the concept was so interesting that we really watched closely, probably for about year. We watched where the tools were going, what direction the development was taking, and which organizations were starting to become involved, and as that progressed, we attended our first caBIG<sup>®</sup> meeting and were excited enough about it to jump in.

**Moderator:**

Actually it sounds like you've implemented quite a few caBIG<sup>®</sup> tools at the Cancer Center. Can you tell me a little bit about the core team that's been driving adoption of these tools?

**Kari Cassel:**

We have a very good hem-onc physician who's been the champion for the majority of this project, actually, and she was one of the individuals that attended that first caBIG<sup>®</sup> meeting. She's been invaluable in driving the process in speaking to it, to everyone on campus who does need to support it, and the Cancer Center director has become a very excellent supporter of this project as well. So from the top down, we've had support: from our chancellor, from the Cancer Center director, from our hem-onc physicians. In addition, our tissue bank director became excited about caTissue, and became the champion for that product. And then of course we



couldn't have done it without a very good IT research development group. They've been invaluable in making this happen.

**Moderator:**

It sounds like you have a very multi-disciplinary team there involved in this deployment. Why was that important?

**Kari Cassel:**

We've come at this from the very beginning that we didn't intend to just have this be a Cancer Center tool that we wanted it to be used for all of our various clinical research, and the more multidisciplinary the team, the better product you get at the end of the day. You have better ideas, better adoption; better support from the top as well.

**Moderator:**

How would you describe the benefits that caBIG® has brought to UAMS?

**Kari Cassel:**

caBIG® has allowed us to complete our vision for clinical research and provided a level of robustness in some of the toolkits that have come from the caBIG® collaborative that would've taken us years to have developed it on our own. So it really has jumped us much further ahead in terms of being able to deliver a full-blown clinical research toolkit to our research community.

**Moderator:**

How are you engaging the heads of department outside of the Cancer Center? What do they want to know from you before considering implementing caBIG®?

**Kari Cassel:**

Before they use caBIG®, they want to make sure that their needs are met, and because the tools are open-source and we have full management and support control of the software itself, we are able to build in their unique requirements to our budget system to make sure that anything they need that is over and above what the Cancer Center required for registration of participants is there and to customize their study calendars for their needs. So we have the ability to really customize the system to make sure that all of their needs are met. We're doing



demonstrations with them, and then the Cancer Center researchers are pretty much acting like evangelists or at our organization—and they tout this system on a regular basis.

**Moderator:**

Sounds like you've had a lot of success with caBIG® at UAMS. What are some of the best practices you could share with our listeners?

**Kari Cassel:**

I think the multidisciplinary team is critical. I think having the support of top administration from the chancellor or president at the organization to the director of the Cancer Center, to the dean of research, is absolutely critical. I think it's also critical that you have the champions in place. Our hem-onc docs and head of our tissue bank without them, we couldn't have made this successful. And then, you really need an IT team that doesn't know the meaning of the word n-o, that really believe they can accomplish anything and are willing to give it a try. IT is such a catalyst for innovation and creativity, and with a toolkit like this, what we can accomplish is limitless.

**Moderator:**

Looking forward, what sort of demands do you think will be placed on IT resources to support this growing drive towards personalizing medical care, towards implementing translational medicine, and the explosion of data that accompanies it?

**Kari Cassel:**

I think we're going to need more trained IT resources around the data gathering, storing, archiving. We'll have to find new ways to decide what data should be kept, what data we might not want to keep. We are going to have to continue to find ways to more cost-effectively store that data, because I believe that explosion of data, as you say, it's huge. As we look at the images that are scattered throughout our campus on CD drives or USB-thumb drives, or on a PC under somebody's desk and how to centralize all of that data in a way that makes it easy to retrieve and stores what's important, that we don't overload people with data. That's probably the next frontier in terms of IT and where we're going with this.



**Moderator:**

Thank you for joining us today, Kari, it's been a pleasure hearing your perspective about the success UAMS has had implementing caBIG<sup>®</sup> and I encourage listeners to the caBIG<sup>®</sup> podcast network to check back regularly, where we'll have additional interviews of people in the community and highlighting their experiences and successes they've had using caBIG<sup>®</sup> to support their basic and clinical research efforts.

**Kari Cassel:**

Thank you, it was a pleasure.



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## Interviewee

### **Karrie Cassel**

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For more information please visit [www.cabig.cancer.gov/](http://www.cabig.cancer.gov/).