

Cath Lab Digest

A Product, News and Clinical Update for the Cardiac Catheterization Laboratory Specialist

Cath Lab Spotlight



Colleen Caputo, RN, Dr. Saiyed Mohib, Dr. Elmer Murdock, Dr. Parul Patel, Dr. Ali Khan, Nancy McCarthy, RN, Paul Martz, RN, Trish Townsend, CVT, Annetta Tomlinson, CVT, Russ Rabensteine, CVT. Kneeling on the floor is Jesse Rober, RN, and Kevin Sample, RCIS.

Albert Einstein Medical Center

Joan Visco, RN, staff nurse
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Philadelphia, Pennsylvania

What is the size of your cath lab facility and number of staff members?

Albert Einstein Medical Center (AEMC) is located in the city of Philadelphia. The AEMC cath lab consists of 3 cardiac laboratories capable of performing a wide range of diagnostic and interventional cardiology procedures. One lab is equipped with a Philips Allura Xper FD20 (Bothell, WA) to perform various peripheral, diagnostic and interventional procedures.

Our cath lab staff consists of 1 nurse manager, 6 staff nurses, 6 cardiovascular technologists (CVTs) and 1 inventory coordinator. We also have 2 electrophysiology labs with their own dedicated staff of 8 registered nurses (RNs). Employee experience varies from 20 years to 1 year. Two of our CVTs recently retired after 25 years.

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CLINICAL REVIEW

The Rationale for PFO Closure: A Series of Arguments For or Against

Carl G.H. Dahlöf, MD, PhD, Lars Søndergaard, MD, Peter H. Hannam



Abstract

During the last decade, patent foramen ovale (PFO) and intermittent or permanent right-to-left shunting of venous blood has been proposed to play a pathogenetic role in a number of disorders. This review covers the most common and sometimes controversial indications for closure of the PFO. It considers the safety of the procedure, current evidence that supports closure, and counter arguments. It then offers a considered position for each indication.

Introduction

In recent years, there has been a great deal of attention paid to the patent foramen ovale (PFO). In particular, many have accused it of being responsible for a number of complex conditions, such as cryptogenic stroke and migraine.^{1,2} Figures 1–3 illustrate the

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SYSTEM SPOTLIGHT

From the Witt Series IV to Philips Xper Information Management: A Missouri cath lab staff member shares his experience

Cath Lab Digest talks with Jon E. Jenkins, RN, RCIS, Skaggs Community Health Center Branson, Missouri



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From the Witt Series IV to Philips Xper Information Management: A Missouri cath lab staff member shares his experience

Could you share some of your experience with the Series IV physiomonitring and information management system at Branson Heart Center in Branson, Missouri?

Branson Heart Center was an outpatient cath lab that was privately owned by a group of physicians. Diagnostic left and right heart cath made up 99% of the cases, along with some peripherals. When we started looking at hemodynamic systems, the Series IV seemed to be the most user-friendly, and easiest to acquire pressures and analyze hemodynamics. We liked the ease of editing the notes, since we were trying to customize the notes ourselves. Competitive pricing influenced our decision as well.

I was at the Branson Heart Center for two years before it was bought out by Skaggs Hospital. We moved over into the inpatient setting at that point.

The Series IV system was then relocated from Branson Heart Center to Skaggs Hospital.

Yes. We were in the process of putting in a new lab at the hospital, so Philips moved the Series IV system for us. My experience with Philips has been extraordinary on the customer service side and in what they are willing to do, which is whatever it takes to make things right. They've been very good to us.

Did the Series IV replace a system that the Skaggs cath lab was using?

Yes, the Series IV replaced a 10-year old hemodynamics system that Skaggs was using. Of course, after using a 10-year-old system, the cath lab staff loved the Series IV. To be honest, it's really an easy system to learn. Philips offered to bring in personnel to train staff on the new system, but I told them there was no need. Someone who worked with me at Branson Heart Center came over to Skaggs as well, and we both were very familiar with the Series IV, so

we just trained the staff ourselves in a couple of days.

What was the situation at Skaggs Hospital cath lab when you first arrived?

They already had one inpatient lab. I actually opened up the Skaggs Hospital cath lab in 1998. It has been there for 10 years. Currently, we have two rooms with the Philips Xper Information Management system. We do a full range of diagnostic and interventional procedures, as well as site implants; the only thing we don't do now (although we used to) is laser. We do not do electrophysiology studies.

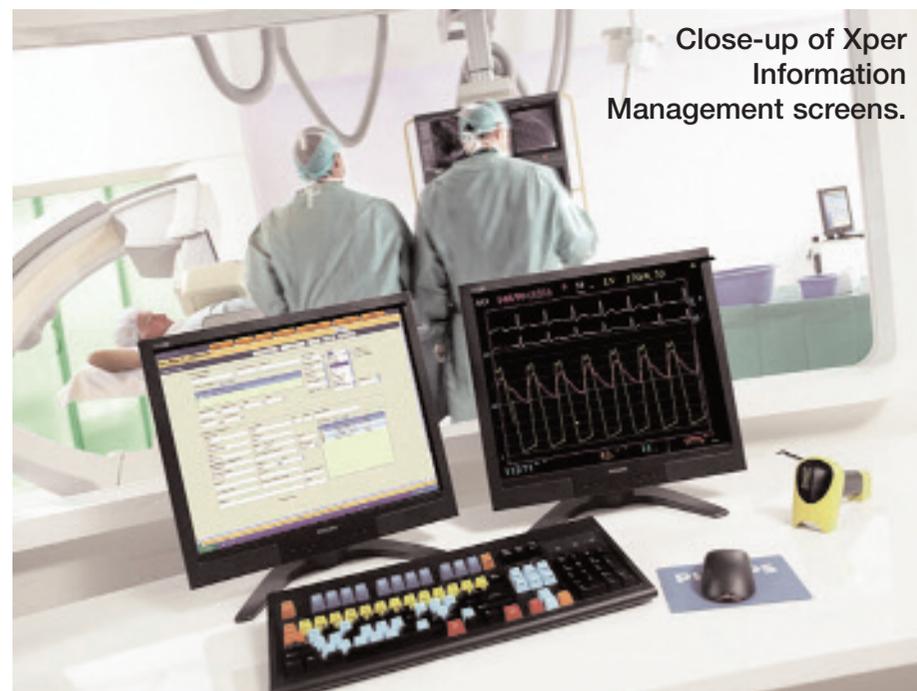
Skaggs Hospital serves a very large urban area. Springfield is the largest city near Branson and Branson is 30 miles south.

How was the upgrade from the Series IV to the Xper Information Management system?

When we upgraded, obviously, there was all kinds of training. I actually went down to Florida, to the Philips Melbourne facility, for a full two weeks. And it wasn't one of those courses where you go down and it's scheduled for 8 hours, and you get out in 4. It was a full day, every day, for two weeks. That was more of a superuser training in order to learn the ins and outs, how to customize and build interfaces, and the back end of the system. For the on-site applications training, we had Philips come in and spend a week with the staff at our facility. We built all of our custom interfaces post-installation. Four or five phone calls and it was a done deal.

What are the advantages of the Xper Information Management over the Series IV?

With the hemodynamics system, you'd be hard-pressed to tell that there is any difference. There is mostly just a rearranging of buttons and colors. The biggest thing Xper Information



Close-up of Xper Information Management screens.



A clinician in the control room charts with Xper Information Management.

Management offers, which is a huge improvement, is that it's on a SQL (Structured Query Language) database. This means that customizing and generating reports is extremely user-friendly. If I want to know how many 52-year-old white males from Taney county with LAD disease we have, I can find it. You can drill down to very, very minute data.

That was the only downfall of the Witt Series IV, which is that you really had to have someone from Witt create those custom reports for you or walk you through how to do it. It was very IT-intensive. Editing the notes on the Series IV also required a lot of background and back-end manipulation. With the Xper Information Management system, it's very, very easy. It's almost like live editing of the notes. When you're editing the notes, you're looking at exactly what it was like on the screen. It's not a back-end, code-based process.

How long have you been using the Xper Information Management system?

Since March 2008 — a little over a year. As far as the day-to-day application of the system and using it in the cath lab proper, we've got that down pat. You know, there's always little changes where you change product descriptions or how you want to word something, or meeting guidelines and documentation; you're always fine-tuning things here and there. I think we are always learning new things in the customized reports and how to auto-generate reports. You're constantly finding some little trick here and there.

Currently we have an Admission Discharge Transfer (ADT) interface built in the lab, which is going live any day now. All of that has been seamless. We have not had any down time. Even though we were one of the first 6 or 7 facilities to get Xper Information Management in 2008,

If you miss a pressure during a case or you analyze one incorrectly, the system gives you the ability to re-label or re-analyze, or even the ability to take two pressures and overlay them to get a gradient.

Philips was very upfront in telling us it was a brand-new system, it was one step after beta form, and there would be little glitches, just as with any kind of new software. In the first 3 months, there were little things, but throughout all that process, there was never a time that the system was down and prevented us from working or doing a case. A time or two we did have to reboot and everything came back up, but we never had a down room because of the system. Up time has been 100%.

How is it helping users the most?

Day-to-day, the actual charting of notes and charting of equipment has a much quicker and easier interface. Just one or two clicks and you have everything you need in the system. To generate complication reports, you do spend time on the front end to tell the system exactly what kind of report you want, but then if a physician comes up and says, I want to know how many left heart catheters I did in the past year, in about 30 seconds, you get a very detailed report of everything you need.

Do you track cost per procedure for physicians?

We do not. One of the components we do not use on the Xper Information Management system is inventory management. We use SpaceTRAX (InnerSpace Corp., Grand Rapids, MI), and at this point, we find it very difficult to improve on that process. You have to use the Xper Information Management inventory component to get the costs per procedure.

Do you see a benefit to having Philips cath lab equipment along with the Xper Information Management system?

If you are on Philips equipment, even if you look at Philips MRI equipment, the user interface is the same. So theoretically, you could go to an MRI machine and know where to go to process images, because it's exactly the same as it would be on the Philips cath lab, as it would be on their hemodynamics system. They built their interface to look the same across the board, so there is some consistency in how you interface with systems in an all-Philips room. Even within the Philips cath lab, the screens look the same. They have what they call "beans" across the top, which are their buttons. You click to go to different areas. If I'm working on our Philips lab, that screen setup looks exactly the same as it does when I'm in the Philips hemodynamics system.

Have you noticed any clinical benefits?

On the hemodynamics side, we've noticed the sensitivity. Of course, I'm comparing it to Skaggs Hospital's original system, which was 10 or 12 years old, but we have a power injector (Acist Medical Systems, Inc., Eden Prairie, MN), and with the old system, it used to give us a lot of dampened waveforms. It looked really muted. When we went with the Xper Information Management system, we found that the sensitivity and the fidelity of the waveforms is much more accurate. They don't dampen and they look better.

How are physicians reacting?

Our physicians like the cardiac output method. It's pretty much the same as the Series IV, but they like

the way that Philips handles cardiac output. It doesn't require you to put up a separate cold injectate system; it's just one connection into the catheter. It's quick and the physicians can view all the results in the room.

Another thing the Xper Information Management system allows for is a lot of freedom in post-processing pressures. All hemodynamic systems now have full disclosure, meaning once you start a case it starts recording every heartbeat

and pressure. If you miss a pressure during a case or you analyze one incorrectly, the system gives you the ability to re-label or re-analyze, or even the ability to take two pressures and overlay them to get a gradient. It is very easy to do and the physicians appreciate the ability to come back and re-analyze hemodynamics. n

Jon Jenkins can be contacted at jejenkins@skaggs.net

ADDITIONAL ARTICLES

Learn more about hemodynamics from author Jon Jenkins here:

Hemodynamics is a 12-Letter Word! An intro to the basics Part I: Basics with Wiggers
<http://cathlabdigest.com/article/6928>

Hemodynamics is a 12-Letter Word! An intro to the basics Part II
<http://cathlabdigest.com/article/7232>

Hemodynamics is a 12-Letter Word! An intro to the basics Part III: Stenosis and regurgitation
<http://cathlabdigest.com/article/7511>