

Important Trends for the Evolving Lab Industry: PAMA, Patient-focused Care, & POCT's New Role

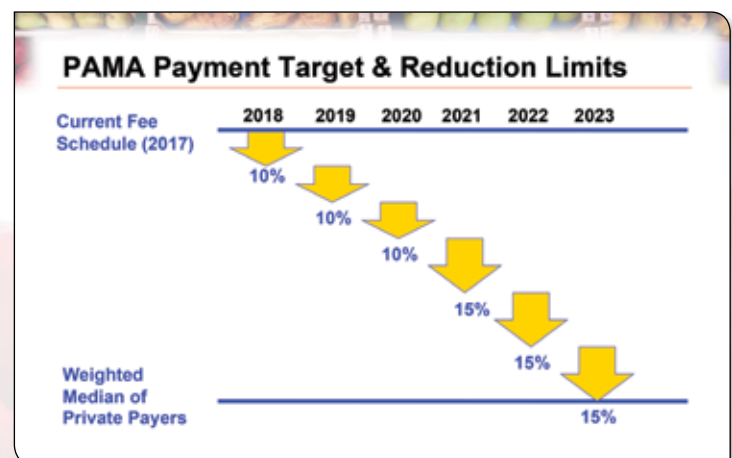
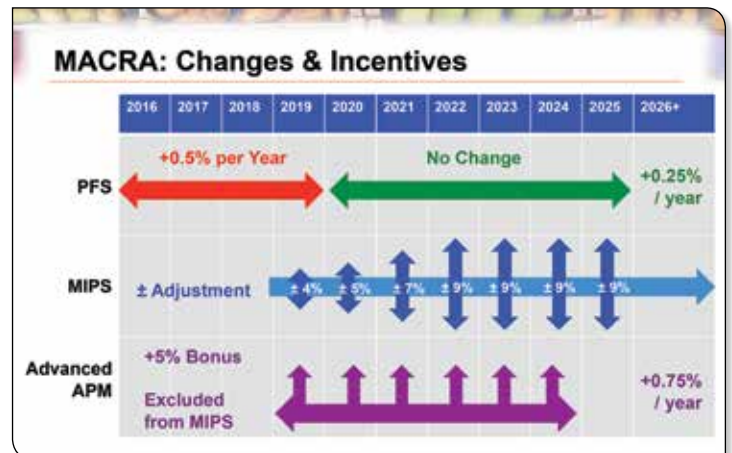
Changes in the healthcare industry and the laboratory care happening at a steady pace as our healthcare system evolves to value-based care. Focus is turning to population health management and patient-centered care rather than episodic care that does not consider the patient before and after their visit. As this evolution continues, labs must learn how to adapt to maximize their value in this environment and contribute to improved patient outcomes. Below are some of the trends discussed at Executive War College (EWC) that laboratories should be aware of.

Continued Change

The opening keynote at this year's EWC covered four main forces the healthcare industry and the laboratory are preparing for: healthcare reform, patients as consumers, technology advances, and risk allocation. The session, given by Shubham Singhal, Senior Partner and Global Leader of the Healthcare Systems & Services Practice, McKinsey & Company, discussed the shift in healthcare to deliver greater convenience and access and to integrate data and analytics at the point of patient care. These factors are causing a realignment of strategies and the development of new business models for healthcare organizations and the laboratories that serve them.

PAMA

Another hot topic for all laboratorians is the Protecting Access to Medicare Act of 2014 (PAMA) and its potential effects on laboratory reimbursements.



Visit www.orchardsoft.com to view Dr. Brimhall's webinar to learn more about PAMA and MACRA.

See "Trends for the Evolving Lab" on page 2.

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Dr. Brad Brimhall's EWC session—*Prepare for Coming Medicare Fee Cuts & Other Changes to Laboratory Payment Models by Focusing on Accurate Cost Accounting & Financial Analysis*—outlined exactly how PAMA is expected to impact lab reimbursements from 2018 through 2023, and explained the new Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) payment models. Dr. Brimhall stressed that laboratories should prepare for coming Medicare fee cuts and other changes to laboratory payment models by focusing on accurate cost accounting and financial analysis. Yet, he also referred to PAMA as a bit of a “head fake,” meaning PAMA is reducing lab reimbursement at a time when much bigger payment restructuring is taking place. PAMA is a bit of a distraction while we see how lab quality feeds into MACRA.

If you would like more information about how labs should prepare, Dr. Brimhall

presented a PAMA webinar that is available on Orchard Software's website: www.orchardsoft.com/prepare-lab-pama-understand-costs-compare-new-reimbursements-webinar/.

Moving from Lab 1.0 to Lab 2.0

Khosrow Shotorbani summarizes it like this: “PAMA is not a reimbursement problem; it is a business model problem.”

Clinical Lab 1.0 <i>transactional</i>	Clinical Lab 2.0 <i>integrative</i>
Sick Care Receive Test Sample Result Test Sample	Health Care Population Health Using Lab Data Total Cost of Care Leveraging Lab Data
Disease Screening Protocol-driven Scheduled by Treating Physician Lab is Derivative	Time to Diagnosis Diagnostic Optimization Care Optimization Therapeutic Optimization Monitoring Optimization Screening Optimization
Wellness Programming Managed by Treating Physician Lab is Derivative	Risk Management Identification of Risk Real-time Tracking of Risk Escalation/De-escalation of Acuity
Payment Models Lab is a Commodity Value is Cost-per-test	Wellness Programming Gaps in Care Closed Using Lab Data Outcomes of Program Using Lab Data
	Predictive Analytics What Will Happen? When? Why?
	Payment Models Value of Lab for Total Cost of Care

A newly published paper, *Improving American Healthcare through “Clinical Lab 2.0”: A Santa Fe Project*, covers the move from Lab 1.0 to 2.0.

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View the newsletter online at: www.orchardsoft.com/newsletters.

He covers the move from Lab 1.0 to 2.0 in the newly published paper *Improving American Healthcare through “Clinical Lab 2.0”: A Project Santa Fe Report*. The paper is a call to action for laboratorians to use their unique educational background and training to further influence the design of healthcare delivery and population health management, moving from transactional to integrative (above).¹ Lab 2.0 is an example of a successful business model for labs that are combining lab data to deliver value because payers are willing to pay for added

downstream value. Shotorbani recommends that laboratorians “become the meteorologists of disease through use of predictive analytics to determine what kind of storm is coming your way.”

Moving Care to the Patient

EWC included a great deal of discussion about patient engagement, including the increased use of mobile apps, telehealth applications, and genetic sequencing. Dr. Myra Wilkerson, Division of Laboratory Medicine Chair at Geisinger Health System, suggested that labs should post and publish documented outcomes resulting from actions based on lab results. Because it is a challenge to prove value beyond results, Dr. Wilkerson proposed measuring quality, patient benefits, and costs. For example, Geisinger was able to reduce the turnaround time of blood culture identification by 20%, resulting in a 45% decrease in the expected mortality rate for sepsis, aiding in population health management.

POCT Helps Bring Care to the Patient

The renewed focus on bringing care to the patient shines a light on the need to properly implement, manage, and integrate point-of-care testing (POCT). An EWC session given by Patricia Hines, MT(ASCP)BA, Community Physician Labs Administrator at University Hospitals Cleveland Medical Center, demonstrated how University Hospitals is using Orchard® Trellis™ to gain

better control of POCT management and integration. By adding a POCT management and integration solution, it has reduced manual entry errors, improved quality, and increased its data mining capabilities.

Visit the Orchard website to view a webinar you may find beneficial if you are interested in integration and comprehensive management of your POCT: www.orchardsoft.com/watch-the-webinar-point-care-testing-benefits-challenges-orchards-integration-management-solution/.

Overall Message: Labs Need a Fresh Business Model

Robert Michel, Editor-in-Chief of Dark Daily, summarized the trends happening in healthcare:

- Continued provider consolidation and narrow networks
- Informed consumers and more transparency
- Need for improvements in healthcare productivity
- Focus on population health management
- Growth and impact of precision medicine
- Increased value of analytics in healthcare
- Need for a new business model
- Need for adaptability and flexibility
- Expectation that everything will be measured, reported, and transparent
- High costs, poor quality, and poor patient service will not continue to be tolerated 🍎

POCT Successes

- Decreased data entry errors.
 - Pre-Trellis random review: 5 out of 5 samples had at least one error.
 - Post -Trellis random review: 5 out of 5 samples had no errors.
- Data mining capabilities.
- More confidence in quality outcomes for patients due to the input of quality results.
- Remote and real-time QC reviews now possible.

University Hospitals Cleveland Medical Center's POCT successes with Trellis.

Notes

1. Crawford, J. M., Shotorbani, K., Sharma, G., Crossey, M., Kothari, T., Lorey, T. S., ..., & Fisher, N. (2017). Improving American healthcare through “Clinical Lab 2.0”: A project Santa Fe report. *Academic Pathology*, 4, 1-8. Retrieved from <http://dx.doi.org/10.1177/2374289517701067>.

Stay Abreast of Lab Industry Changes with Orchard's White Paper Series

Alongside the evolution of the healthcare environment, the way laboratories provide value is shifting. Orchard Software understands the importance of keeping laboratory professionals informed. That is why we continue to create free resources with the laboratory in mind. Below are summaries of the three latest white papers.



Laboratory Leadership in a Time of Change

Strong leadership, forward-looking organizational culture, and readiness for change are necessary to thrive in today's rapidly evolving healthcare system. This paper examines some of the accepted truths about leadership characteristics, shares anecdotal laboratory leadership scenarios, and discusses the importance of change management and maintaining an organization-wide culture of innovation and openness to change.

Total Cost of Ownership for a Laboratory Information System

If you are considering an LIS or other health information technology (HIT) investment, or just want to understand more about Total Cost of Ownership (TCO), read this informative white paper to explore in-depth costs that need consideration. This white paper is a great resource for any laboratory that is researching its next big purchase decision or trying to understand total costs throughout the system lifecycle.

A Personal Journey: Understanding the Value of Medical Analytics

Medical analytics is a powerful tool that not only helps laboratories bring additional value to patient care, but can also contribute to organization-wide opportunities for cost savings. Read about Dr. Thomas Novicki's personal journey utilizing a medical analytics program to uncover significant waste through two pilot projects he led at the Marshfield Clinic Laboratory.

These three white papers and many more are available for download at www.orchardsoft.com/whitepapers/. As always, Orchard is invested in the laboratory and its changing needs, and is proud to present the white paper series to support and educate those in the industry. 🍎

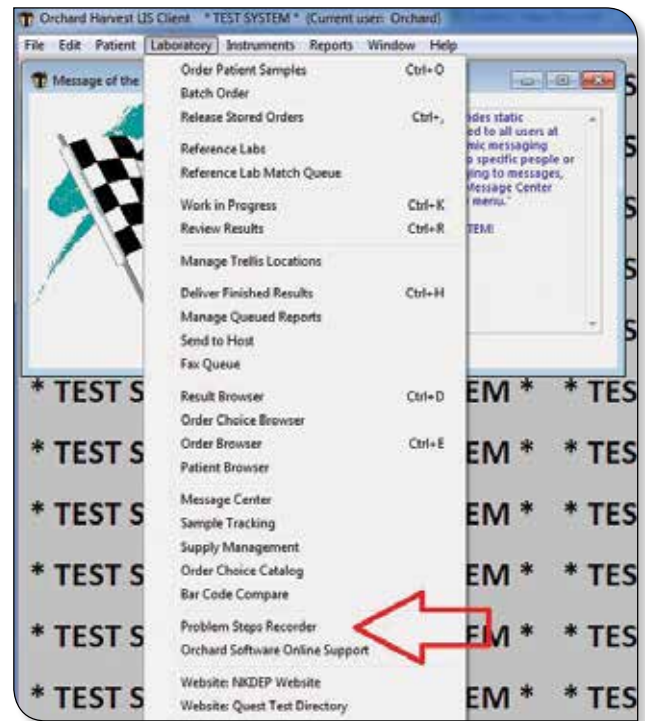
Problem Steps Recorder

We've introduced a new feature called the Problem Steps Recorder, which is available in the **Laboratory** menu. It captures screenshots of actions within Orchard® Harvest™ LIS and Orchard® Pathology, other applications, or the Windows OS. The Problem Steps Recorder provides a visual transcript of actions that occurred in the system for the first 99 mouse clicks.

The file is saved in a compressed format to your default download path within Windows. When opened, it is presented as an HTML page.

Uses for the Recorder

The Problem Steps Recorder is useful for capturing troubleshooting steps on your system. You can also use it to capture information for demonstration or training purposes. You may also wish to save these files for future reference. 🍎



Use the Problem Steps Recorder for troubleshooting or training.



Where in the World is Orchy?

Congratulations, Beth Ann!

Beth Ann Ralston, MLS (ASCP), Laboratory Supervisor at Faculty Internal Medicine, correctly guessed Orchy's location in Singapore and won the drawing for the Orchy prize package.

Orchy Loves Monsters

Orchy is on the road again and is sharing his love for monster movies, which has brought him to the location known as the "monster magnet." Built in 1958, this 1,092-foot tower is a major landmark and has been seen in at least a dozen television shows and movies. Orchy better stay on guard when he takes an elevator to the top observation deck; it's a favorite hangout of Godzilla, Baragon, Mothra, and King Kong! From what Orchy has seen, sometimes his new friends don't play nicely.

If you think you know where Orchy is located, please send your answer to news@orchardsoft.com by August 4th, 2017, to be eligible to win an Orchard prize package. 🍎



Orchy at the "monster magnet."

The Advance Beneficiary Notice of Noncoverage (ABN), otherwise known as Form CMS-R-131 (used for Medicare patients when payment is expected to be denied), is typically updated every three years. The effective date for the latest revision is June 21st, 2017.

Minimal Changes

While there are no major changes, the expiration date (located on the bottom left of the form) is updated to 03/2020, and the new ABN informs beneficiaries of their rights to nondiscrimination practices and explains how to request the ABN in an alternative format if needed.

For detailed information from the Centers for Medicare & Medicaid (CMS), visit www.cms.gov/Medicare/Medicare-General-Information/BNI/ABN.html.

How to Update the ABN in Orchard's Systems

For Orchard Software customers who use the ABN in Harvest LIS, Orchard Pathology, or Orchard® Copia®, directions to update the form in your system(s) are located on the Orchard Resource Center (ORC): www.orc.orchardsoft.com/. There are two options available; however, Option One is recommended to maintain maximum system integrity and eliminate any potential for errors in form selection.

"CMS does not discriminate in its programs and activities. To request this publication in an alternative format, please call: 1-800-MEDICARE or email: AltFormatRequest@cms.hhs.gov."

Option One (Recommended):

The option recommended by Orchard involves updating your system with the latest build that contains the new ABN. The updated ABN will then become the default ABN template. Following is a list of specific build numbers for versions of

A. Notifier:

B. Patient Name:

Advance Beneficiary Notice

NOTE: If Medicare doesn't pay for D. _____ Medicare does not pay for everything, even some good reason to think you need. We expect Medicare

D.	E. Reason

WHAT YOU NEED TO DO NOW:

- Read this notice, so you can make an informed decision.
- Ask us any questions that you may have.
- Choose an option below about whether to accept the D. _____ service. **Note:** If you choose Option 1 or 2, we may bill you for the service that you might have, but Medicare will not pay for it.

G. OPTIONS: Check only one box. We cannot bill you for the D. _____ service if you choose Option 3.

- OPTION 1.** I want the D. _____ listed on this notice. I also want Medicare billed for an official decision on this service. I understand that if Medicare does not pay, I can appeal to Medicare by following the instructions on the Summary Notice (MSN). If Medicare does pay, you will refund any payments I made for this service.
- OPTION 2.** I want the D. _____ listed on this notice. I ask to be paid now as I am responsible for payment for this service.
- OPTION 3.** I don't want the D. _____ listed on this notice. I am not responsible for payment, and I cannot be billed for this service.

H. Additional Information:

This notice gives our opinion, not an official Medicare decision. If you have questions about this notice or Medicare billing, call 1-800-MEDICARE. Signing below means that you have received and understand this notice.

I. Signature:

CMS does not discriminate in its programs and activities. To request this publication in an alternative format, please call: 1-800-MEDICARE or email: AltFormatRequest@cms.hhs.gov."

According to the Paperwork Reduction Act of 1995, no persons are required to respond to this collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0938-0566. The average burden for this collection of information is estimated to average 10 minutes per response, including the time to review instructions, search existing data sources, gather the data needed, review the collection of information, and complete and review the collection of information. If you have comments concerning the accuracy of the time estimate, write to: PRA Reports Clearance Officer, Baltimore, Maryland 21244-1811.

Form CMS-R-131 (Exp. 03/2020)

C. Identification Number:

Notice of Noncoverage (ABN)
 _____ below, you may have to pay.
 We care that you or your health care provider have
 _____ are may not pay for the D. _____ below.

Person Medicare May Not Pay:	F. Estimated Cost

_____ informed decision about your care.
 _____ after you finish reading.
 _____ to receive the D. _____ listed above.
 _____ may help you to use any other insurance
 _____ cannot require us to do this.

I cannot choose a box for you.

_____ d above. You may ask to be paid now, but I
 _____ on payment, which is sent to me on a Medicare
 _____ Medicare doesn't pay, I am responsible for
 _____ following the directions on the MSN. If Medicare
 _____ to you, less co-pays or deductibles.
 _____ ted above, but do not bill Medicare. You may
 _____ ment. **I cannot appeal if Medicare is not billed.**
 _____ listed above. I understand with this choice I
 _____ appeal to see if Medicare would pay.

Medicare decision. If you have other questions on
 _____ ARE (1-800-633-4227/TTY: 1-877-486-2048).
 _____ I understand this notice. You also receive a copy.

J. Date:

_____ and activities. **To request this publication in an
 _____ ARE or email: AltFormatRequest@cms.hhs.gov.**

_____ respond to a collection of information unless it displays a valid OMB control number.
 _____ the time required to complete this information collection is estimated to average 7
 _____ data resources, gather the data needed, and complete and review the information
 _____ ate or suggestions for improving this form, please write to: CMS, 7500 Security
 _____ 50.

Form Approved OMB No. 0938-0566

Harvest LIS, Orchard Pathology, and Copia that include the revised ABN. Please contact Orchard's Technical Support at **(800) 571-5835** or email support@orchardsoft.com if you require assistance.

- Harvest LIS and Orchard Pathology build 10.0.160707.170418 or later
- Harvest LIS and Orchard Pathology build 11.170323.170418 or later
- Copia build 7.170214.170420 or later
- Copia build 7.170501 or later

Option Two

The other option involves importing the templates into an older build. Be aware that with this option, the template being used is no longer technically the "default." It becomes a custom template, so users cannot employ the typical method of copying the default template. They will need to copy the imported one instead.

Templates for Harvest LIS, Orchard Pathology, and Copia can be found on the ORC: www.orc.orchardsoft.com/display/harvest/How+To+Import+an+ABN+Layout+Template. Follow the step-by-step guide to load the template and select it as the new ABN default in Harvest LIS or Orchard Pathology.

For Copia, after downloading the templates from the ORC site listed above, use the following steps to import the templates:

1. Extract the files and open them with a text editor, such as Notepad.
2. In Copia, select **Administration**, select **Customization**, and then select **Layout Templates**.
3. On the **Create Templates** tab, select **Import Template From File** (bottom of the page).
4. Copy the contents from the extracted XML file into the import text area.
5. Select the import link above the text area.

Please contact Orchard's Technical Support at **(800) 571-5835** or email support@orchardsoft.com if you require assistance. 🍏

Tech Tip: Swapping Connections from Serial to Network

Orchard Software's Digi PortServer TS is a great option for labs to connect serial instruments to Harvest LIS over a network (TCP/IP) connection. It is commonly used in Citrix or virtual environments, or when an instrument is too far away from the nearest Harvest LIS workstation to use a direct serial connection.

The Difference Between a Serial & Network Connection

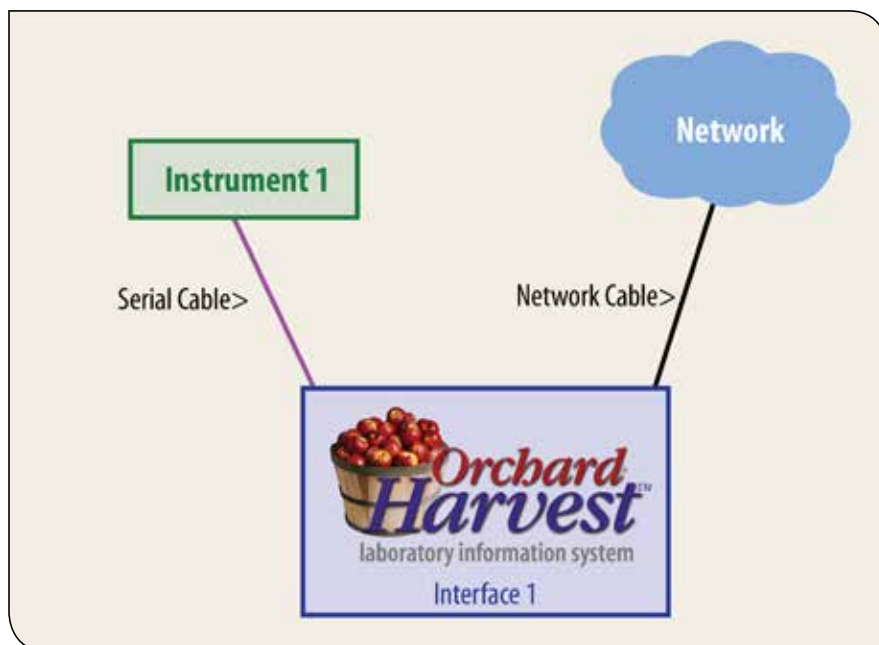
A serial connection, a direct point-to-point connection from an instrument to a Harvest LIS workstation that manages that interface, works when the instrument is located next to the workstation. The Digi PortServer, however, connects the instrument through the network, so the instrument and workstation do not have to be physically next to each other. This eliminates the need for a cable to run between or through a laboratory, which saves space and keeps employees safe.

Security Benefits

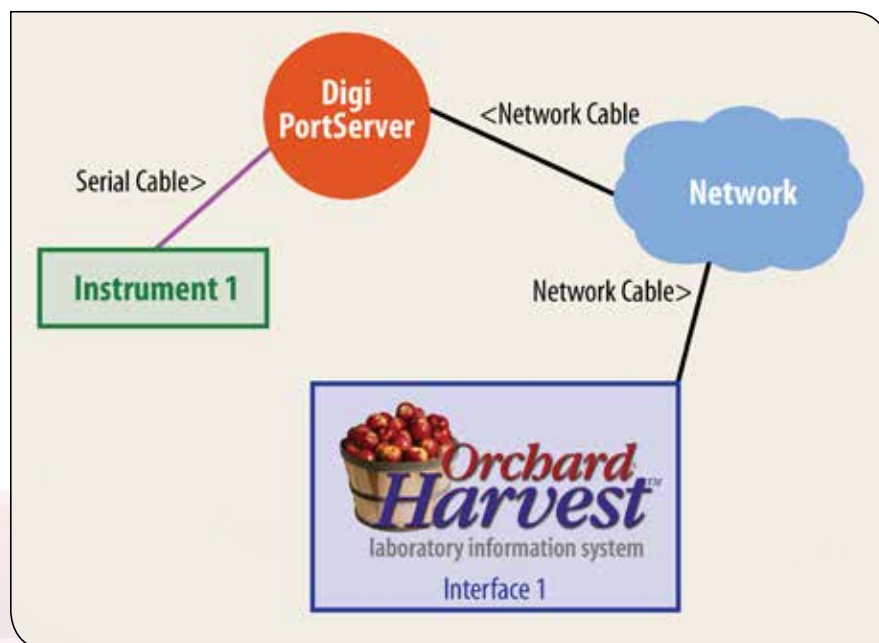
You can use Digi PortServer to set up a Harvest LIS workstation to manage interfaces in a more secure environment, such as a server room or data center, in case your physical workstation fails. There is also the security benefit of one person managing your entire network from afar instead of needing to check in on each workstation.

How It Works

An instrument connects to the Digi PortServer with a serial connection. The Digi PortServer converts it to a network connection. Harvest LIS communicates with the Digi PortServer with a TCP socket connection, a type of network connection.



Serial connection.



Network connection using the Digi PortServer TS.

To talk about your instrument interface options, contact your Orchard Account Manager at (800) 856-1948. 🍏

Featured ORC Question

Sign in to the ORC today and join the conversation!

Q Is there a place where I can see which users are currently logged in to Copia? Or is there a query I can use to get this information?

(orc.orchardsoft.com/questions/62081871/how-can-i-see-who-is-currently-logged-in-copia)

A If you have access to view the **User Actions Log**, this is where this information is kept. You can access it through AdminCenter: Select **Monitor**, select **User Actions Log**, and then select the **Current Users** tab.

The Questions area of the Orchard Resource Center (ORC) provides a forum for timely and detailed answers to your inquiries regarding Orchard's product line.

Navigate to www.orchardsoft.com/questions to sign into the main **Questions** page, where you can browse existing questions or topics, and submit new questions. Searching for questions is as simple as typing the question or subject into the search bar of the main ORC page.

Questions are evaluated not just by Orchard staff, but also Orchard clients and other experts! 🍏

www.orchardsoft.com/questions

Spotlight On: Quentin Law, CFO



Met Quentin Law, Orchard Software's Chief Financial Officer. Quentin and his wife Melissa have two boys, ages 8 and 10. They enjoy playing and watching sports, traveling together, and eating good food. He is a graduate of the University of Indianapolis, where he earned a Bachelor of Science in Accounting. Quentin is also an alumnus of Indiana University, where he received his Master of Business Administration. He has been at Orchard for two years.

Part of Orchard's Leadership Team

As CFO, Quentin provides executive leadership to the Accounting Department. He works with his team to develop and implement processes to strengthen budget structures and analyze overall project costs that improve the efficiency and effectiveness of the company. 🍏

Keeping the Peace: How to Leverage Provider Feedback to Develop & Enhance Your Laboratory Stewardship Program

Orchard Software is proud to sponsor a **free** P.A.C.E.-accredited webinar on July 18th, 2017, 2PM EDT. This webinar is the third in the Laboratory Stewardship series in collaboration with Seattle Children's Hospital. In this webinar, speakers will present a new perspective on lab test utilization—a collaborative, relationship-based approach to interventions that can be a valuable tool to help your laboratory reduce costs and unnecessary testing.

Following the Webinar, You Will Be Able To:

1. Create a provider attitude survey, and understand two of the most important topics to include.
2. List effective strategies for incorporating provider feedback into the development or modification of your laboratory's stewardship program.

About the Speakers:



Jane Dickerson, PhD, DABCC, is Co-director of Chemistry and Director of Reference Lab Services at Seattle Children's Hospital. As a faculty member at Seattle Children's and the University of Washington Department of Lab

Medicine, Dr. Dickerson focuses her research on the science of the delivery of care—improving processes to get the right test ordered (utilization management), performed (analysis of alternative matrices), and resulted (failure to retrieve) for the best patient care.



Jessie Conta, MS, CGC, is a licensed genetic counselor in the Department of Laboratories at Seattle Children's Hospital. Conta helped develop the laboratory stewardship program, provides pre- and post-analytic support to the genetics subspecialty labs at Seattle Children's Hospital, participates in test utilization management case review, and is leading insurance advocacy efforts related to genetic testing.

Stay tuned; the link will be available soon at www.orchardsoft.com. Be sure to use our Discount Code: Orchard. 🍏

Come Visit the Orchard at AACC in San Diego, August 1st-3rd, Booth #1828



As always, Orchard will be at AACC and exhibiting August 1st-3rd. Look for the big sequoia tree in booth #1828. We will be showing off our enhanced enterprise POC testing management system—Orchard Trellis. Over the past year, we have been working to enhance our product to serve the large integrated healthcare networks where a variety of near-patient and remote testing is being done. This type of testing can be very difficult to manage, such as tracking user certification and instrument QC, in addition to integrating results into the EHR. Come see our enhancements and how we simplify the management and integration of POC testing. 🍏

Harvest the power of Orchard's white paper series to help you demonstrate the value your laboratory provides.



The changes taking place in healthcare necessitate careful decisions about health information technology partners. As part of our ongoing efforts to support the laboratory community, Orchard Software offers an informative white paper series chock-full of the latest lab-related information you need to stay successful.

A "Must Read" for Laboratorians & Healthcare Leaders

If you are interested in learning about the laboratory's role in the changing healthcare environment, download Orchard's informative white papers at www.orchardsoft.com/whitepapers.

- *The Value of the Lab in the New Healthcare Model*
- *The Value of Data in the New Healthcare Model*
- *Structured Data: Essential in Healthcare Analytics & Interoperability*
- *Effective Test Utilization: A Laboratory's First Step in Contributing to the New Healthcare Model*
- *Laboratory Informatics: Supporting the Future Needs of Healthcare*
- *Laboratory Point-of-Care Testing: A Future Outlook*
- *Laboratory Data Integration Driving Meaningful Medical Analytics*
- *Tulare County Public Health Lab's Lean Journey*
- *Molecular Informatics: Shaping Change in the Lab*
- *Point-of-Care Testing: The Great Boom Ahead*
- *Extending the Laboratory's Reach to Meet Healthcare's New Paradigm*
- *Total Cost of Ownership for a Laboratory Information System*
- *A Personal Journey: Understanding the Value of Medical Analytics*

Call Orchard at (800) 856-1948 to learn more about our various lab information systems and how they can assist you in demonstrating your lab's value.





Important trends for the evolving lab industry.

2017 Orchard Software Event Calendar

Date	Trade Show/Event	Location
7/30 - 8/3/2017	AACC Clinical Lab Expo	San Diego, CA
8/8 - 8/10/2017	Allscripts Client Experience (ACE) Meeting	Chicago, IL
9/6 - 9/8/2017	ASCP	Chicago, IL
10/8 - 10/11/2017	CAP17-The Pathologists' Meeting	National Harbor, MD



***Come visit us at AACC in San Diego, August 1st-3rd.
Look for the big sequoia tree in booth #1828.***