news@orchard
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OrchardSoftware
Harvest the Power

Orchard's Flexibility Keeps Colorado Springs Health Partners Nimble

Colorado Springs Health Partners (CSHP) is the largest multi-specialty physician group in the Colorado Springs area. The laboratory at CSHP presently supports 90 physicians and 25 physician assistants in more than 13 locations throughout greater Colorado Springs. The laboratory network, including five draw sites, one STAT lab, and one main lab, runs a total of 350-400 samples a day.

Front Row (from left to right): Luisa Flesher, Jessica Ward; Middle Row: Lynne Bauer, Becky Miller; Back Row: Paul Novotny, Steve Doll.

Colorado Springs Health Partners has been a dedicated Orchard Harvest™ LIS user since it was installed in November of 1997. Paul Novotny, Laboratory Manager, and Steve Doll, LIS Coordinator, were both at CSHP when Harvest LIS was first installed. Paul says, "At that time, the lab was supporting 70 providers and was working without a laboratory information system. With the introduction of Harvest into the lab, time spent entering orders and logging in has decreased from three to four hours to 30-45 minutes."

Harvest LIS also helped the lab improve patient service and decrease the number of redraws and transcription errors. The delivery of results has been more timely and user-friendly since the implementation of Harvest LIS. Steve proudly interjects, "The lab is also able to run STAT tests more efficiently, and CSHP turnaround times are two hours, compared to the four to five hours of surrounding hospitals. And as the group has grown, Harvest LIS' flexibility and adaptability has grown with it. The networking capability of Harvest has allowed the laboratory to handle 13 locations without difficulty."

Not only has Harvest LIS helped improve productivity and efficiency, it also helped the laboratory survive in the competitive environment of Colorado Springs. CSHP is the largest physician office laboratory in Colorado Springs and once feared being "swallowed up by a bigger competitor." At one point, both Quest and LabCorp had an eye on the laboratory, but the physicians wanted to maintain control of their lab work and retain the revenue.

The implementation of Harvest LIS in the laboratory has helped CSHP stay ahead of Quest and LabCorp. Paul summarizes, "The system's flexibility, efficiency in results delivery, and data verification has allowed CSHP to provide better customer service than both Quest and LabCorp. We can adapt much more quickly than the 'big guys' can."

Paul exclaims, "Orchard is the best vendor I have ever worked with!" Although there are many things the laboratory likes about Harvest LIS, CSHP values the flexibility and adaptability of their Harvest LIS the most. He continues, "Our system has been able to grow and adapt as Colo-

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Where in the World is Orchy?

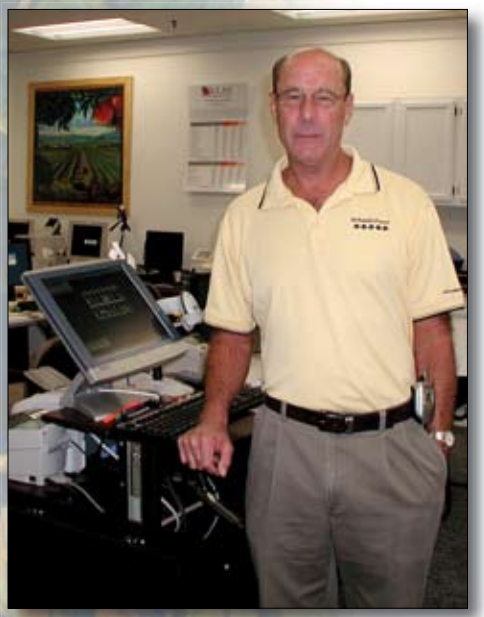
Orchard's unofficial mascot, Orchy, enjoyed his summer vacation and visited several states and countries. If you know Orchy's location in this photo, send your answer to news@orchardsoft.com by November 15 to be eligible to win an Orchard prize package. Valarie Broadway of East Texas Physician's Alliance in Palestine, Texas, correctly guessed that Orchy was visiting New Zealand, where he got to see the Hobbiton film set used in the *Lord of the Rings* trilogy. Log in to the Orchard website to see where in the world Orchy has been lately!

employee spotlight

Ed Hougendobler:

Lead Instructor for Customer Training

If you have come to Orchard's Corporate Headquarters in Carmel, Indiana, lately, you have more than likely been exposed to the teachings of Ed Hougendobler, Orchard's Lead Instructor for Customer Training. Ed joined Orchard in 1997 as a Systems Engineer, installing Harvest LIS and its predecessor, Costello, in laboratory settings varying from small physician office labs to large multi-specialty clinics. In his current role, Ed spends most of his time in the corporate office conducting training classes for new Harvest LIS system administrators.



Prior to joining Orchard Software, Ed served as a Medical Laboratory Technologist for the United States Air Force for 20 years. Ed attended Florida State University and the Community College of the Air Force and attained his associate's degree in Medical Technology. He retired from the Air Force in 1997.

In his free time, Ed enjoys golf, fishing, boating and just hanging out at home. Ed has been married for four years to Mary Pat who just recently joined Orchard as an administrative assistant in the Operations department. He also has a son, Edward, who lives in Louisiana. Ed enjoys his time at Orchard. "I feel extremely fortunate to belong to the Orchard family," he says. "Even though I work in the software industry, my roots will always be planted in the medical laboratory profession. I have the utmost respect for that profession."

Colorado Springs

continued from previous page.

rado Springs Health Partners has also grown and changed over the years." Steve adds, "There is not a new situation that comes to the lab that I can't find a way to work around because Harvest's flexibility provides me with the ability to react and fix the problem. And the Request For Modification system that Orchard has employed works very well for turning our input into system upgrades very quickly."

So what does the future hold for CSHP and Harvest LIS? Currently, the group has an EMR that has not grown as the practice has grown. It only provides a unidirectional interface that allows Harvest LIS to send results, but not pull orders from the EMR, which requires the laboratory to manually enter orders. Paul happily admits, "The group is currently looking to purchase a new EMR by the end of the year that will allow for a bi-directional interface with Harvest LIS. With the implementation of a new EMR, we look forward to electronic order entry, which will help improve our workflow and productivity even more."

Anatomic Pathology Module is Now Available!

In order to serve a broader hospital and reference laboratory market, Orchard met the needs of our current and future customers by creating the new Orchard Harvest LIS Anatomic Pathology module. With our AP module, not only will you have instant access to clinical data, but many of the features you've come to love in your Harvest LIS, such as the rules-based technology and data mining, can be available to your AP department. Following are some of our AP module highlights:

Fully Integrated AP Module

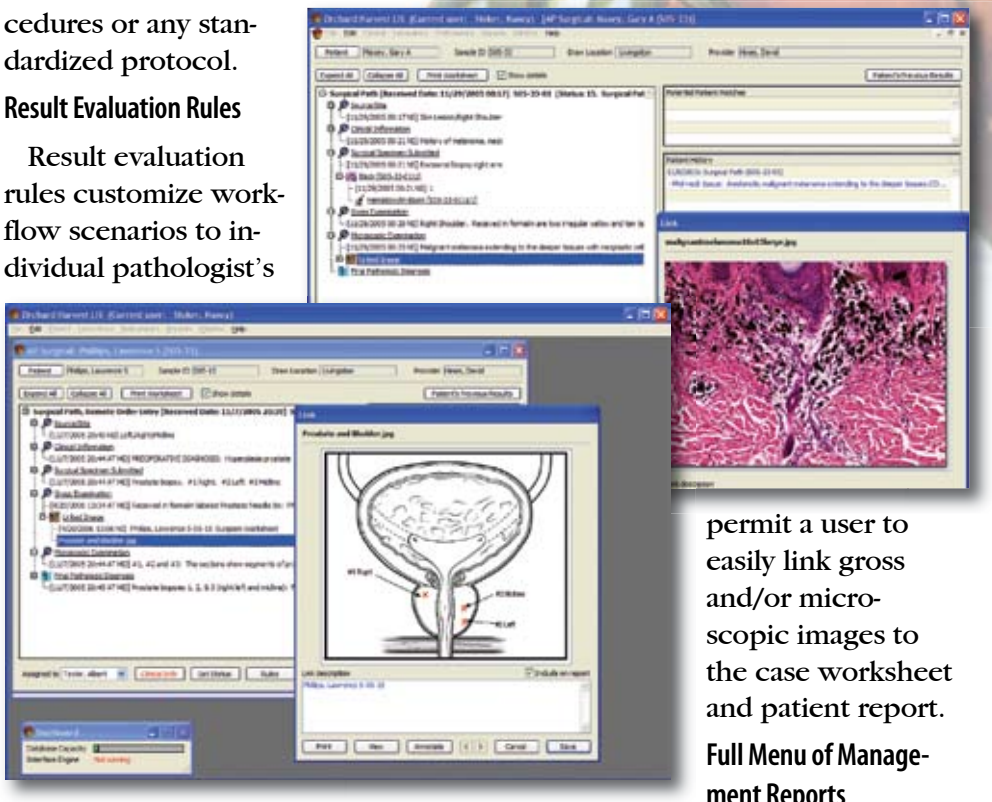
The AP module is fully integrated into Harvest LIS and provides direct access to cytology, pathology, and clinical laboratory results, including all historical results. A single mouse-click gives your pathologist immediate access to the patient's entire clinical history, saving time and streamlining diagnosis.

Simplified Case Management

The Harvest LIS AP module employs a "worksheet" window with templates that can be customized to follow your own laboratory procedures or any standardized protocol.

Result Evaluation Rules

Result evaluation rules customize workflow scenarios to individual pathologist's needs. As an example, send-out tests and correlations can be automatically reflex-ordered according to interpretation/results, and rules can be set up to present technical instructions automatically.



Easy Image Management

The Harvest LIS AP module's integrated image management tools permit a user to easily link gross and/or microscopic images to the case worksheet and patient report.

Full Menu of Management Reports

Evaluations, correlation studies, and many other management reports can easily be created without the need for special programming skills. Users may perform searches by specimen, diagnosis, test result, or case number using the system's powerful data-mining abilities.

Coming Soon: Windows Vista

Many of you have probably heard about Windows® Vista™ by now. Vista is Microsoft's next revision to their Windows operating system, which is currently expected to hit store shelves by the first quarter of 2007.

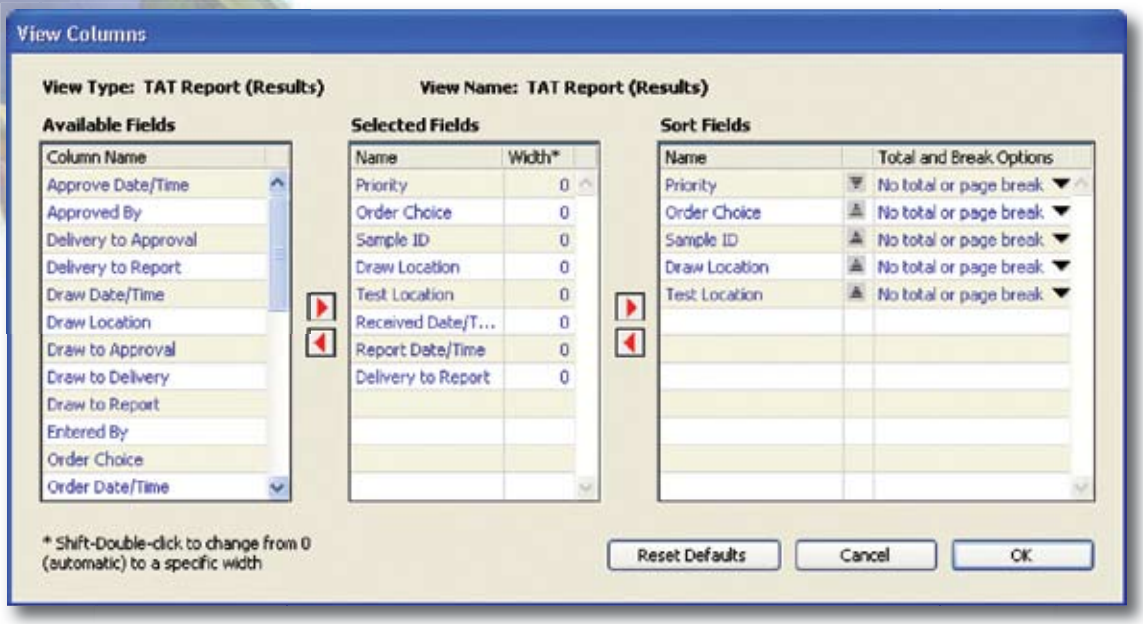
Orchard has done preliminary testing of Harvest LIS with a beta release of Windows Vista, and while it appears to be fully compatible, Orchard will not be supporting this operating system immediately. We still need to guarantee compatibility with Aqueduct and with the third-party software we use in conjunction with Harvest LIS, such as Timbuktu Pro, LabelPrinter, Mapper, our various models of serial port cards, WinFax, and other utilities; this process can't be done until the final version of Vista ships from Microsoft. Copia is unaffected by this, as it runs on Windows Server 2003 and Windows 2000 Server, which are not desktop operating systems.

While it may be tempting to jump on board the Vista bandwagon early, remember that Orchard will not be able to help you with any Vista-related problems until we certify that our entire suite of applications is ready for Vista, and until our support staff is trained on the new operating system. Be sure to watch this newsletter as well as the online user groups next year for more information about Windows Vista as it becomes available!

Feature Focus: Customizing the Turnaround Time Report

The Turnaround Time (TAT) Report is a helpful tool that can be used to track the time it takes for orders to be processed. You can access the TAT Report in Harvest LIS either via the Reports menu or by pressing [Ctrl] [8].

There are also several ways to customize the TAT Report, enabling you to tailor the report options to satisfy your facility's needs.



The Column Views table allows you to customize the look of the Turnaround Time report by specifying which columns you want to appear.

Creating Custom Calculations

By modifying your advanced configuration options, you can use up to eight custom calculations in a TAT Report. For example, you may create a column to display an "Order to Draw" calculation. After establishing your advanced configuration options, you can then add your custom calculations to the desired column view in the Column Views table.

Log in to our website, www.orchardsoft.com, to review the full "Customizing the Turnaround Time Report" tech tip, which provides steps and additional details for performing the modifications described here. You may also refer to the online or printed documentation for more information and useful tips relating to the Turnaround Time Report.

Setting STAT and Non-STAT Target Turnaround Times for Different Shifts

In the Order Choices table, you can specify target turnaround times for a particular order choice. Click the TAT Report button to open the Turnaround Time Report Settings window, and enter STAT Target Times and Non-STAT Target Times in DDD:HH:MM format with target times (for up to three different shifts) separated by commas.

Specifying the Columns to Display

You can specify the columns you want to appear on the TAT Report by modifying views in the Column Views table. You can configure the column layout for two different TAT Report view types: TAT Report (Results) and TAT Report (Stats). You can also change the order the columns appear on the TAT Report, as well as the sorting options.

Creating Saved Criteria

By saving criteria, you can quickly select a predefined set of report options. After you have selected your desired report options, click the Save or Delete Criteria button to save the criteria set for future use. You can enter a name for the search settings in the "Description" field, and also select date range options. The new entry becomes an option in the "Saved criteria" dropdown list on the Turnaround Time Report Options window.

See "Turnaround Time" on page 5.

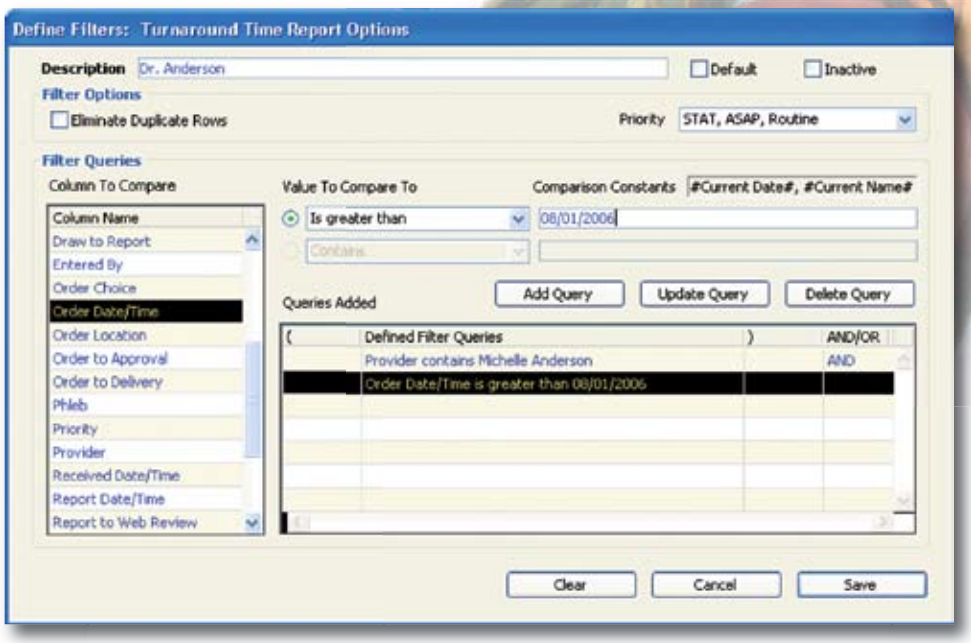
Saving your defined criteria enables quick and easy report generation for the future.

Turnaround Time

continued from previous page.

Defining Filters

You can also create filters to further modify your search criteria. Filters allow you to control the types of information displayed in the report. You may define and save more than one type of filter, and you may assign one filter to be used by default. You may select the filter you wish to apply from the "Filter" drop-down list on the TAT Report options window or, after performing your search, on the Results tab of the TAT Report.



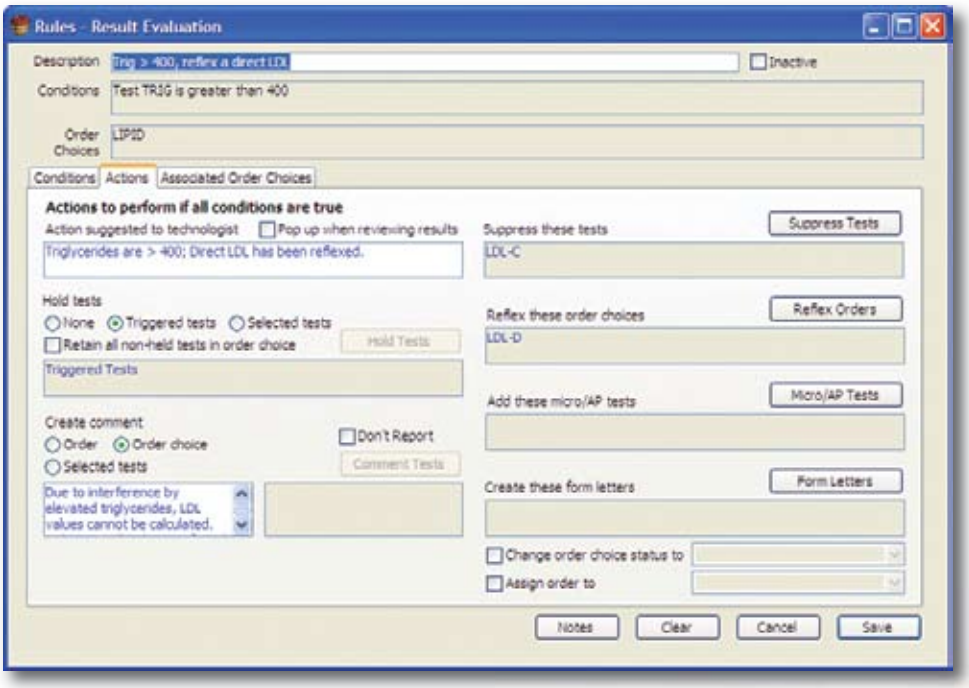
Defining filters provides quick and easy data mining capability to turnaround time reports. Create the filter and then apply it before or after the report is generated to quickly obtain specific information.

Case Study Triglycerides are over 400—How Harvest LIS Can Help

It is difficult to beat the "brain trust" in an Orchard advanced user class—the interaction between the class instructors and students always bring to light useful insights and suggestions for system configuration that can help simplify workflow or solve a problem. Often our students present questions that represent common problems encountered by our users. This is the first of a new series of articles that will draw from some of the questions asked during training classes and on our user group forums. While there is no substitute for attending advanced user training, we hope you find this and future case studies informative and useful.

When performing lipid testing, users commonly must deal with patient samples where hyperlipidemia interferes with calculated test results. Once Triglycerides exceed 400 mg/dl, the equation commonly used to derive calculated LDL, VLDL and LDL/HDL ratio is no longer valid. Reflex of a Direct LDL (DLDL) measurement is indicated in these circumstances. This makes suppressing the calculated LDL necessary, and calculating the remaining results using the DLDL preferable.

Fortunately, Harvest LIS can automatically handle this scenario easily using two features: Rules for Result Evaluation and Conditional Formulas.



In this example, the rule will perform several necessary actions to address the issue of a hyperlipemic sample.

See "Case Study" on page 6.

Case Study

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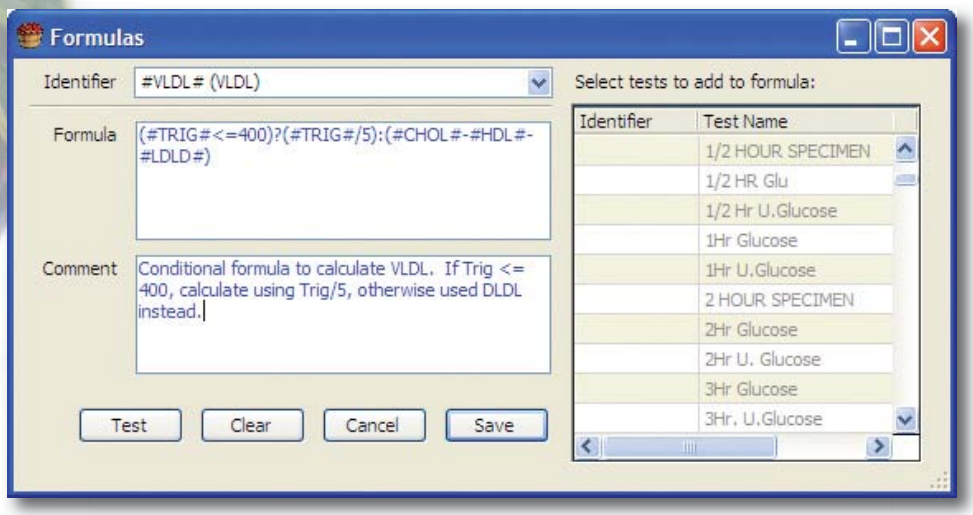

You may configure a conditional formula to calculate test results using one of two equations. Which equation to use will depend on the triglyceride result.

Configuring the Rule

We will use Rules for Result Evaluation to suppress the calculated LDL and reflex the direct LDL.

1. Open the Rules for Result Evaluation table from Table Setup.
2. Click the New Rule button.
3. Enter a description.
4. On the Conditions tab, add a test condition for TRIG > 400.
5. On the Actions tab, add the following actions:
   a. Actions suggested to the technologist: Triglycerides are > 400; Direct LDL has been reflexed.
   b. Set Hold Test to "Triggered Tests."
   c. (Optional) Add a reportable order choice level comment to alert the provider to the problem.
   d. Suppress the calculated LDL.
   e. Reflex the direct LDL.
6. On the Associated Order Choices tab, add Lipid Panel to the Selected Order Choices list.
7. Click the Save button to store the rule.

Configuring the Formulas

Using the Formulas table in Harvest LIS Version 7.0, you can configure how to calculate results.

In our example, there are three results being calculated for a Lipid Panel: LDL, VLDL, and LDL/HDL Ratio. Each of these formulas can be written as a conditional formula. Conditional formulas use an "if, then, or" syntax: if a condition is true, then calculate using formula A, or if the condition is false, then calculate using formula B.

Harvest LIS requires you to enter this syntax in a specific way:

```
(Condition to be tested)?(Formula if true):(Formula if false)
```

Because our calculated LDL will be suppressed using a rule, no alterations to that formula are necessary. However, we will use the conditional formula syntax to write the calculations for VLDL and LDL/HDL Ratio.

VLDL:

```
(#TRIG#<=400)?(#TRIG#/5):(#CHOL#-#HDL#-#LDLD#)
```

LDL/HDL Ratio:

```
(#TRIG#<=400)?((#CHOL#-#HDL#)-(#TRIG#/5)/#HDL#):(#LDLD#/#HDL#)
```

Putting the Setup into Action

With the rule and formula setup in place, Harvest LIS can deal with patient samples with hyperlipidemia that would otherwise interfere with the calculated results:

When patient triglycerides are less than 400, the LDL, VLDL, and risk ratios will calculate using the normal equations.

When patient triglycerides are greater than 400, the rule will suppress the calculated LDL and reflex a direct LDL. The conditional formula will then calculate test results using the result of the direct LDL.

By using rules and formulas, Harvest LIS is able to handle the problem scenario in a manner that eliminates the need for technologist intervention.

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View the newsletter online at:
www.orchardsoft.com/news_links/newsletter/newsletterarchive. html

Orchard's First Symposium—Bringing the Orchard to You!

Orchard Software filled up the crates and brought a little of the Orchard to the Northwest coast. On September 13, 2006, Orchard held its first symposium at the Doubletree Hotel & Executive Meeting Center in Portland, Oregon. The event, designed for current Orchard Harvest LIS users and prospective users alike, attracted 72 attendees. Orchard's ever-growing customer base makes this symposium format feasible, and we have plans in place to do this again in 2007 in other areas of the country.

The day-long event started with breakfast, followed by a keynote address on the subject of system integration from Henry Oglesby, VP of Operations, and Curt Johnson, VP of Marketing and Sales. After the keynote address, attendees were able to choose from one of three breakout sessions: *An Introduction to Harvest LIS*, presented by Nancy Stoker; *What's New in Harvest LIS Version 7.0*, presented by Thom Franklin; and *IT Issues*, presented by Henry Oglesby.

After the morning breakout, everyone gathered for a delightful lunch and an open forum "town hall" meeting with Orchard executives Robert Bush, President; Henry Oglesby; and Curt Johnson. Questions from

Harvest LIS users Joni Martin and Michael Boehme from Bay Clinic in Coos Bay, Oregon, speak with Maureen Sullivan, Orchard's Travel & Event Manager during registration.

the audience covered a variety of topics ranging from training to EMR implementation to the future focus of the company. Rob, Curt, and Henry, each took their turn at answering everyone's questions.

Following lunch, there were two more breakout sessions, and again for each session, attendees had the opportunity to select one topic from a list of three.

Orchard's executives speak with symposium attendees during lunch. From left, Henry Oglesby, VP of Operations; Curt Johnson, VP of Sales & Marketing; and Rob Bush, President.

For the first afternoon session, the options were: *Microbiology Module*, by Nancy Stoker, *Data Mining and Report Writing in Harvest LIS* by Ginger Wooster, and again (because of the high demand for this session) *What's New in Harvest LIS Version 7.0* by Thom Franklin. For the final breakout, the topics were *Anatomic Pathology Module* by Nancy Stoker, *Setting up Rules in Harvest LIS* by Thom Franklin, and *Improving Lab Outreach/Webstation* by Carla Hearst.

Attendees found the sessions and the face-to-face interaction with other Harvest LIS users and Orchard employees very beneficial. Just about everyone expressed their interest for Orchard to hold another symposium in the Northwest again soon.

Due to the success of our first event, Orchard has already begun planning two more day-long symposiums in 2007. Tentatively, we are looking at one in Baltimore during April or May, and another in Dallas in September. Those of you in these areas of the country should stay tuned for more information. Keep your eyes on our website, because as soon as we have information for our 2007 symposiums, we will post the details.

We want to thank everyone who attended and supported our first symposium event. We enjoyed meeting each of you and appreciate all the positive feedback you gave us. To those of you near Baltimore and Dallas, we hope to see you at our symposiums in 2007! If anyone has suggestions for topics to be covered in future symposiums, please email Kerry Foster at kfoster@orchardsoft.com.

Keep up on the Latest Modifications with Online Tech Tips!

Many customers have told us that the Tech Tips section is one of their favorite parts of our newsletter. Did you know that the tips from news@orchard and other tips are available to you 24 hours-a-day with a few simple mouse clicks? So, if you've misplaced your copy of the newsletter that had a tip you wanted to review more closely, simply log in to our website, and visit our Tech Tips page.

We base our tips on questions from our online user groups, customers' calls to the Orchard Software Technical Support center, and from talking with users who attend our training classes. Recent tip additions include "Adding Prices to the Exported Billing Summary Report," "Allowing Harvest Webstation Users to Delete Orders," "Restricting a Workstation to a Specific Tab When Ordering," and many more.

We're adding more tips all the time, so be sure to visit frequently. Our Tech Tips are great resources for time-saving techniques, feature details, and trouble-shooting steps. If you cannot find help there or in the online or printed help for your product, contact Orchard Software Technical Support at (800) 571-5835.

To access the Tech Tips on our website:

1. Log in to our website, www.orchardsoft.com, with your user name and password.
2. Click the Tech Tips link at the top of the wel come page.
3. Scroll through the list of tips, or use the "Tech Tip Categories" links to quickly navigate through the list.
4. Click the name in the "Tech Tip Title or Category" column to review the selected Tech Tip.

We hope you find the tips useful. Please direct any questions, comments, or suggestions regarding the tips to documentation@orchardsoft.com.

Orchard's Trade Show Calendar 2006

Dates	Name	Location
10/18-10/20/06	Northwest Medical Laboratory Symposium	Portland, OR
10/19-10/22/06	American Society for Clinical Pathology	Las Vegas, NV
10/26-10/27/06	Central New York CLMA	Verona, NY
11/12-11/15/06	NextGen Healthcare	Las Vegas, NV
11/16-11/17/06	Southwest College Health Association	Wichita Falls, TX
12/6-12/8/06	Pyramed User's Conference	Denver, CO

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