



## Ref Lab and Billing Interfaces Help MIMA Maximize Productivity

In May of 2000, with the contract on their previous LIS ready to expire, Melbourne Internal Medicine Associates (MIMA) began the search for a new LIS. While they had an LIS vendor in mind, Lisa Zinkovich, the (then) new laboratory manager, wanted to be sure they had made the best choice. After some additional investigation, MIMA decided to choose Orchard Software over the other LIS vendors.

MIMA is a busy multi-specialty group practice of 103 providers, encompassing their main facility as well as five additional satellites; the laboratory performs over 1,000,000

tests per year. MIMA takes advantage of many of Orchard Harvest™ LIS' capabilities, including reference lab interfaces, an interface to their electronic medical records system (Logician), a billing interface to IDX, and the Harvest LIS Microbiology Module.

A key point for selecting Harvest LIS was its robust interface to the EMR. The providers wanted all results available via Logician, and the previous lab system's interface to the EMR wasn't as reliable as they wished. Lisa noted that working with their prior LIS vendor on interface issues was a laborious process.

In addition, having a billing interface to their IDX system enabled them to streamline and automate the task of accurately capturing lab charges. Lisa told us, "Billing used to be delayed 14-30 days before Harvest LIS. Now charges are handled within a day." Lisa went on

to say, "The task of manually posting a day of lab charges to the billing system used to take nearly 16 hours. Now one person is able to review and accept the charges via the interface in less than 45 minutes." As a result, the billing department was able to decrease their staffing by two FTEs.

MIMA implemented additional interfaces to their reference laboratories as soon as they became available. They started with an interface to Quest Diagnostics in 2001, and then added an interface to LabCorp a year later. An interface to the local hospital was added in

2003. By adding these interfaces, MIMA considerably streamlined their workflow when it came to reference lab testing. "Thanks to these interfaces, I was able to reassign three of my FTEs who had been managing send-outs to other tasks," Lisa said.

The Harvest LIS Microbiology Module also gave the staff additional tools for managing the microbiology department. Lisa told us, "Before, it was all manual work cards, and the task of charging for organism IDs and sensitivity testing wasn't very efficient. Now with the Microbiology Module, we are able to capture those charges in a simpler and less error prone manner." Explaining how the electronic worksheet makes processing cultures much easier, Lisa noted that it helps in reporting as well by allowing the staff to standardize terminology on reports.

Lisa and/or a member of her staff has attended Orchard's Advanced User Training class for Harvest LIS each year since the training began. Lisa stated, "The interaction with the Orchard staff and the other users is so invaluable, and the face-to-face time with Orchard Software's development staff is also a big plus. It's nice to know that Orchard looks at the whole system, so that features or enhancements for other users integrate well into the system overall."

Lisa and her LIS administrator, Gwen Goodman, are also members of the Harvest LIS online user group. Lisa told us that, while they don't often post messages, they read every post and often find new ideas or nuances that help them get the most of their Harvest LIS system.

Lisa cited the continuous updates to Harvest LIS features, the system's flexibility, and the competence of the Orchard Software staff as other pluses regarding her experience with Orchard. She went on to say, "The Orchard staff is fabulous—they are so friendly and very helpful!"

MIMA continues to maximize the benefits of Harvest LIS by taking advantage of its interfacing capabilities, as well as Orchard's continuing education programs and user group forums. ●



The staff at MIMA enjoys how Orchard's interfaces have streamlined and simplified the workflow in the lab.

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# Medical Necessity Options Expanded

Orchard Software has completed an agreement with CodeMap®, of Barrington, Illinois, that will enhance your options when it comes to medical necessity verification. For a modest yearly fee, CodeMap will provide both NCD and LMRP codes tailored to your requirements, in a format compatible with your current Orchard software.

CodeMap is a leading provider of Medicare compliance and reimbursement solutions to many corporations and healthcare organizations across the U.S. Its staff is committed to providing the most accurate and timely information available. At the same time, CodeMap's fees are substantially less than others offering similar services.

In addition to the code sets, Orchard users who sign up under this agreement

will receive:

- Mid-year updates at no additional charge.
- Free support from CodeMap's analysts for questions related to coding and compliance.
- Substantial discounts on the purchase of additional code sets.

Orchard will continue to offer a free download of the unedited national codes. But, if your needs include local codes or expert support with the codes and their use, you may want to check this out. For general information, visit [www.codemap.com](http://www.codemap.com). To learn more about Orchard's special agreement with CodeMap, contact **Linda Emmerich** by phone at **847-381-5465**, or by email at [lindaemmerich@codemap.com](mailto:lindaemmerich@codemap.com).

## Aqueduct and the ISLH Rules

The ISLH (International Society of Laboratory Hematologists) finished a two-year study on the use of rules (guidelines) to determine when a slide review is indicated after performing a CBC with automated differential. With tight integration to Beckman Coulter Hematology analyzers, Orchard's Aqueduct™



consolidates all the related information from your LIS and your Coulter analyzers to facilitate use of all 41 rules recommended by the ISLH. For more information about Aqueduct's industry-leading features and the ISLH rules, visit [www.orchardsoft.com/product/aq\\_rulesISLH.html](http://www.orchardsoft.com/product/aq_rulesISLH.html).

## Where in the World is Orchy?

Several years ago, Orchard's Development department dreamed up a department mascot fashioned from an Orchard Software squishy apple—the stress ball-style toy apples we give out at trade shows. A few pipe cleaners, some googly eyes, and a permanent marker were all it took to bring Orchy to life. While his permanent residence is on a shelf in a programmer's office, Orchy likes to travel, and has tallied visits to over 20 U.S. cities and foreign countries. His travels are chronicled in the customer area of the Orchard website in the Museum section. Log in to see where he's been lately!



## Audrey Blackwell

Audrey Blackwell, our Corporate Communications Manager, joined the Development department as Orchard's first full-time technical writer in 2000.

Audrey creates help manuals and supporting documentation for all of our products, manages the documentation staff, and is our webmaster. She also



edited this newsletter for two years, and is very excited to be featured in the Employee Spotlight!

Before coming to Orchard, Audrey earned a Bachelor of Arts degree in Communication from Purdue University, and then worked as a contract technical writer in the Lafayette and Indianapolis, Indiana, areas.

Audrey collects many things, including Star Wars memorabilia and board games, which she likes to play with her friends and family (her favorite is Clue). She also likes to read, watch movies, maintain her personal website, and help plan gatherings with her friends at interesting places (including bowling alleys and corn mazes). Most of all, Audrey enjoys spending her time outside the office with her husband of eight years.

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Harvest LIS 6.0 includes new options for formulas to handle certain calculations that require numeric values to be assigned to specific patient demographic data, such as the formula for calculated Glomerular Filtration rate (GFR).

The GFR calculation for adult patients, as defined by the Modification of Diet in Renal Disease (MDRD) equation, requires a number of parameters, including serum creatinine, patient age, patient sex, and patient race.

While obtaining numeric values for serum creatinine (results reported by the instrument) and patient age (derived from the patient's date of birth) are simple, values for patient sex and race must use the specific numbers defined by the MDRD study (1.210 for African Americans and 0.742 for females).

The new formula identifiers in Harvest LIS for patient age (#PATIENT-AGE#), patient sex (#PATIENTSEX#), and patient race (#PATIENTRAC#, note there is no final "E" due to the 10 character limit) make it possible to handle these calculations with ease. Numeric values for #PATIENTAGE# are derived from the patient's date of birth. Numeric values for #PATIENTSEX# and #PATIENTRAC# are assigned using entries in Harvest LIS' Advanced Configuration Options (ACO) window.

To build this formula in Harvest LIS, do the following:

- 1) Create a lab test for calculated GFR to receive the result of the calculation. Be sure to give this test a unique formula identifier.
- 2) Create an order choice that contains both serum creatinine and cGFR or add the cGFR to an existing and relevant order choice (e.g., Renal panel).
- 3) Create the formula in the Formulas table of Harvest LIS using cGFR as the recipient test. The formula will be similar to:

```
186* (#SCREAT#^-1.154) * (#PATIENTAGE#^0.203) * #PATIENTSEX# * #PATIENTRAC#
```

(Replace #SCREAT# with the appropriate formula identifier for serum creatinine in your system.)

- 4) Open the Advanced Configuration Options (ACO) window, and, on the System-Wide tab, make the appropriate ACO entries to assign numeric values for patient sex and patient race under the [Formulas] section header. The ACO entries should take the following forms:

```
RACE_<formula identifier for test>_<race as defined in the race table, spaces removed>
SEX_<formula identifier for test>_<patient sex>
(which must be M, F or U)
```

Here are examples from the Orchard training database: (Note that Black/African American and Female are the two parameters that require a number assigned to them according to the MDRD equation.)

```
[Formulas]
RACE_CGFR_Black=1.210
RACE_CGFR_Caucasian=1
RACE_CGFR_Hispanic=1
RACE_CGFR_Asian=1
RACE_CGFR_NativeAmerican=1
SEX_CGFR_F=0.742
SEX_CGFR_M=1
```

If you do not assign a numeric value to a patient race or sex, Harvest LIS will automatically assign it a value of "1" when performing the calculation to avoid potential problems, such as divide-by-zero errors. Anytime Harvest LIS does this, it places an entry in the Event Log. So that you don't have to constantly monitor these events, we suggest you explicitly assign a value of 1 to those sex and race entries that don't require a specific number.

Keep in mind that Harvest LIS pulls the patient's sex and race from the patient file. If you are manually registering patients in Harvest LIS, your staff must enter this data. If you are receiving patient demographics from a host system, sex and race must be received in the demographics message for Harvest LIS to automatically assign these values to the patient file.

# Scheduling Report Printing in Orchard Harvest LIS

With the advent of HIPAA, many customers have asked about report scheduling as a way to control access to automatically generated patient reports. In a busy clinic or hospital lab, reports are generated around the clock, but administrators do not want these sensitive reports to accumulate on printers scattered around the organization when the office is closed, or when supervisory staff is not on duty to collect them.

You may use Orchard Harvest LIS' automatic result delivery feature and result delivery rules in conjunction with printer scheduling features built into Windows to help alleviate this potential security concern. With these tools, you may set a window of time when printing is allowed (e.g., 8AM to 5PM), and then outside of the designated timeframe, the printer driver will hold the reports until the next available print window. Alternately, you could set up the printer driver to print all queued reports at a specific time once each day (e.g., 5PM), so that you can ensure an appropriate staff member is available to process the reports.

Log in and visit the Tech Tips section of our website for the "Scheduling Report Printing in Orchard Harvest LIS" tip. Note that the tip applies to Harvest LIS 5.0.2 and later, since these versions have automatic result delivery rules. However, because this tech tip describes a feature in Windows, it may also be applied in a more limited fashion to all versions of Harvest LIS and Aqueduct.

### Electronic Newsletter

If you're looking for an electronic version of our newsletter (and past newsletters), go to [www.orchardsoft.com/news\\_links/newsletter/newsletterarchive.html](http://www.orchardsoft.com/news_links/newsletter/newsletterarchive.html)

## Orchard's Tradeshow Calendar 2004

10/20-10/22	Northeast Laboratory Conference	Portland, ME
10/20-10/22	Northwest Medical Laboratory Symposium	Portland, OR
10/20-10/23	COLA/POL Symposium	Baltimore, MD

# Harvest LIS + Copia = Outreach Power with Harvest CT

We have received many questions about Harvest CT™ from potential and current customers, so we thought you might like to know more about what Harvest CT™ is, how it works, and who can benefit from it.

## What is Harvest CT?

Orchard Harvest LIS started out over a decade ago servicing the needs of the physician office laboratory. Over the last 11 years, the software has advanced and grown to where it can comfortably handle large laboratories in clinics and busy, medium-sized hospitals. Today, we are continuing that growth as we offer Orchard Harvest CT, which is Orchard Harvest LIS teamed with Orchard Copia™, to address the special needs of larger institutions and the trend toward integrated health networks.

## How does Harvest CT work?

Harvest CT allows you to make the most of both Harvest LIS and Copia because they were made to work together.

Harvest LIS offers robust features for handling the complexities of the modern laboratory's workflow. By adding the advanced order and result delivery management capabilities of Copia to Harvest LIS, you can use one system to support complex business relationships (including multiple practices, locations, and hosts), as well as offer enhanced outreach.



Copia has the same ordering capability as Harvest LIS, and they share many of the same features; however there are several benefits to using Copia with Harvest LIS:

- Because Copia allows you to assign providers and locations to multiple practices, you may accommodate more elaborate business networks

within the software.

- Copia expands on Harvest LIS' sample routing capability by allowing you to route samples based on the ordering location and priority (routine, STAT, or ASAP), in addition to the patient's insurance.
- Copia can unify multiple clinical lab databases. This means that it can be the central repository for records coming from multiple labs containing multiple Harvest LIS databases.
- You may add optional modules to Copia to handle the cytology accessioning and freezer storage needs of your facility.

## Who benefits from Harvest CT?

We recommend Harvest CT for facilities that do a lot of outreach (or are looking to do more outreach), have or will need to have multiple Harvest LIS databases, require sophisticated report delivery options at their outreach sites, or function as a reference lab serving many different business entities. ●

## OrchardSoftware



*Harvest the Power*

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