



APPLY TODAY

Grant Descriptions and Deadlines

Deadline June 1, 2008

NEW:

■ **CAP Foundation Conference Travel Stipend for Digital Pathology** for CAP Junior Members to attend the digital pathology conference, Pathology Visions on November 2- 4, 2008, in San Diego. Funding is provided by Aperio.

■ **CAP Foundation Pathology Informatics Grant** is a one month informatics elective for Junior Members. Three weeks in a business laboratory setting in Minnesota and one week visiting additional labs. Timeframe is between August 1 and November 1, 2008. Funding is provided by McKesson Information Solutions.

GRANTS:

■ **CAP Foundation/API Pathology Informatics Scholarship** for CAP Junior Members exposes pathologists-in-training to new developments in information technology. The scholarship includes a \$5,000 grant for educational, living, and travel expenses incurred during the rotation.

■ **CAP Foundation Informatics Grants for Telepathology** for CAP Junior Members support developments in and the use of telepathology and information technology for the practice of pathology. Funding is provided by Olympus America and Nikon Instruments.

▼ **CAP Foundation Humanitarian Grants Program** funds projects up to \$30,000 that deliver pathology and medical services to under-served patients and in underdeveloped areas. OPEN TO ALL CAP MEMBERS. Funding is provided by Olympus America.

INFORMATICS TRAVEL STIPENDS:

■ **CAP Foundation Conference Travel Stipends for Informatics (APIII)** for CAP Junior Members and other qualified applicants provide funding for recipients to attend the fall National Conference on Advancing Practice, Instruction and Innovation through Informatics (APIII).

■ **CAP Foundation Conference Travel Stipends for Informatics (CHC)** for CAP Junior Members provide funding for recipients to attend the fall Cerner Health Conference. Funding is provided by Cerner Corporation.

How Do I Apply?

For more information on how to apply and application guidelines for a CAP Foundation grant, visit <http://foundation.cap.org>, email CAPFdn@cap.org, or call 800-323-4040 ext. 7324. An application must be completed in its entirety and postmarked by the date of the application deadline to be considered.

Grant Eligibility Requirements

■ Pathology residents and those doing fellowships are eligible to apply for the all Conference Travel Grants for Informatics, Informatics Scholarship, Telepathology Grant, Futurescape Conference Grants. CAP Junior Membership is required and available at no charge.

▼ All pathologists (residents, practicing, and emeritus) are eligible to apply for Humanitarian Grants. CAP Membership is required.

Laboratory-provider links software

Part 1 of 11	Antek HealthWare, LLC Paul Taylor ptaylor@antekhealthware.com 228 Business Center Drive Reisterstown, MD 21136 800-359-0911 www.antekhealthware.com
<i>See accompanying article on page 70</i>	
Name of laboratory-provider links (LPL) software/system	LabDAQ DAQaccess
First ever/most recent installation of LPL software (based on Feb. 2008 survey deadline)	2003/February 2008
No. of host or central labs using software clinically	12
• No. of host labs that electronically transfer orders from physician's office to LIS	12
No. of satellite locations installed/non-U.S. host installations (In what countries?)	not tracked/0
No. of contracts for host labs signed in calendar year 2007	3
Percentage of installations that have stand-alone LPL systems*	0
Staff to develop—install & support—other** in entire firm/in LPL software division	10-35-40/10-35-40
National commercial labs that use LPL software	none (regional reference labs)
Average time to install, build files, train office staff in a typical physician's office	8 hours
LIS, HIS, other interfaces (other than company's own products)	Meditech, Cerner
Software modifications or modules required on host LIS to interface?	yes (security connectivity to reference lab server)
POPMS*** used to transfer patient demographics and billing info. to LPL system	Misys, Allscripts, eClinicalWorks, A4, NextGen
How demographics and billing information are transferred from POPMS at physician's office or clinic to LPL system	one-time batch download/file transfer; daily update of demographics, more frequent automatic update of all demographics that have changed, POLL provides patient ID to POPMS and POPMS replies in real time
External software tools or vendors used to transfer data from POPMS to LPL system	none (Antek's interface engine)
Test directory stored on physician's office system?	no
How results are returned to physician's office	block of text, PDF, individually segmented fields
Data interface standards supported	HL7 2.x, custom when required
System supports LOINC for identifying lab result database elements?	yes
System architecture or functionality	thick client, PC, while connected to lab host; thin proprietary client; all standard Web browsers
Patient order and result database maintained on local PC?	no
• Software displays results and allows orders to be entered in an offline mode?	no
Online connections between physician's office and central or host system	VPN, public Internet connection (DSL/cable modem required)
Complete ASP solution for LPL software?/method of charging for ASP solution	no/—
Features (listed as a percentage of live installs or based on availability)	
• Order entry	
- Medicare compliance checking using carrier-specific rules	installed
- Advanced beneficiary notice printed if medical necessity criteria not met	installed
- Local medical review policies can be viewed	not available
- Automatic routing of an order to different labs according to payer rules	installed
- Printing of lab's requisitions	installed
- Printing of requisitions for other lab providers	installed
- Duplicate order checking	100%
- Physician office-specific panels	installed
• Electronic order entry (from physician's office to host)	
- Transfer of patient demographics or insurance	20%
- Automatic handling of scheduled or standing orders	installed
- Automatic routing of orders to hospital or commercial labs depending on payer rules	installed
• Bar-code collection label printing	100%
• Two-dimensional bar code on printed requisition	available but not installed
• Software adapted for use in phlebotomy or collection stations	installed
• Result receipt	
- Stored as a block of text	100%
- All items (result, reference range, units) stored as individual data elements	100%
- Automatic parsing of report pages to extract results	installed
- Inquiry mode that allows physician's office to check status of specimens with host	installed
• Reporting	
- In exact format received from host lab	100%
- Cumulative	not available
- Integration of host and physician's office lab results	installed
- Display of new results for patient and/or clinic	installed
- Remote access available to on-call physicians	installed
- Unattended printing of reports	installed
- Display current report with historical data on same screen	installed
- Graph historical results with current results for trend analysis	installed
• Physician can electronically sign reports to confirm review	available but not installed
• Physician can compose and send secure electronic messages to patients	not available
• User-defined rule-based system and alerts in physician's office module	installed
• Electronic transfer of data to another physician's office	installed
- E-mail/encrypted e-mail	installed/installed
- Web reference or pointer to Web site	installed
- Fax	installed
• Physician's office orders supplies from host lab	not available
- Specimen pickup or courier requests to host lab	available but not installed
• Financial	
- Billing, collections, accounts receivable	not available
- Electronic claims transfer/interfaces to billing systems	not available/installed
• Electronic medical record interface	20%
• Interfaces to physician's office lab instruments	available but not installed
• Entry of physician's office lab results with edit checks	available but not installed
System cost: one-time or initial charges/monthly or subscription fees	\$5k-\$17k/—
• Basis for increasing fees as physician's offices are added	based on No. of concurrent licenses needed
• Situations where fees increase with additional services	if order entry is added to result transmission or vice versa, for exporting results to POL EMR
System priced on a cost-per-transaction basis?	no
Distinguishing product features (supplied by vendor)	• cost effective • medical necessity and label printing at physician office labs • minimal training for physician office lab sites
*no other modules installed by vendor in institution	
**other=sales, marketing, administration, other company functions	
***POPMS=physician office practice management systems	

Laboratory-provider links software

Part 2 of 11	Atlas Medical Software Lois Coburn sales@atlasdev.com 26679 W. Agoura Rd., Suite 200 Calabasas, CA 91302 818-340-7080 www.atlasmedical.com	Atlas Medical Software Lois Coburn sales@atlasdev.com 26679 W. Agoura Rd., Suite 200 Calabasas, CA 91302 818-340-7080 www.atlasmedical.com
<i>See accompanying article on page 70</i>		
Name of laboratory-provider links (LPL) software/system	Atlas LabWorks	Atlas LabWorks—Thick Client
First ever/most recent installation of LPL software (based on Feb. 2008 survey deadline)	1995/February 2008	1995/February 2008
No. of host or central labs using software clinically	95 [†]	95 [†]
• No. of host labs that electronically transfer orders from physician's office to LIS	78 [†]	78 [†]
No. of satellite locations installed/non-U.S. host installations (In what countries?)	10,000+/0 [†]	10,000+/0 [†]
No. of contracts for host labs signed in calendar year 2007	20 [†]	20 [†]
Percentage of installations that have stand-alone LPL systems*	100%	100%
Staff to develop—install & support—other** in entire firm/in LPL software division	65-52-23/52-45-21	65-52-23/52-45-21
National commercial labs that use LPL software	Spectrum Laboratory Network, Sunrise Medical Labs, Carilion Labs, Westcliff Medical Labs, Integrated Regional Labs, Mayo Medical Labs	Spectrum Laboratory Network, Sunrise Medical Labs, Carilion Labs, Westcliff Medical Labs, Integrated Regional Labs, Mayo Medical Labs
Average time to install, build files, train office staff in a typical physician's office	1-2 hours	1-2 hours
LIS, HIS, other interfaces (other than company's own products)	Sunquest, Cerner, Meditech, GE, McKesson, SCC Soft Computer, Aspyra, CPSI, Siemens, Seacoast, others	Sunquest, Cerner, Meditech, GE, McKesson, SCC Soft Computer, Aspyra, CPSI, Siemens, Seacoast, others
Software modifications or modules required on host LIS to interface?	yes (for HL7 orders and results)	yes (for HL7 orders and results)
POPMS*** used to transfer patient demographics and billing info. to LPL system	Allscripts, Athena, Acer, Advantx, Medical Manager, VitalWorks, Clinscan, Meditech, Vision, Reynolds and Reynolds, NextGen, MediSoft, others	Allscripts, Athena, Acer, Advantx, Medical Manager, VitalWorks, Clinscan, Meditech, Vision, Reynolds and Reynolds, NextGen, MediSoft, others
How demographics and billing information are transferred from POPMS at physician's office or clinic to LPL system	one-time batch download/file transfer, more frequent automatic update of all demographics that have changed, POLL provides patient ID to POPMS and POPMS replies in real time, other	one-time batch download/file transfer, more frequent automatic update of all demographics that have changed, POLL provides patient ID to POPMS and POPMS replies in real time, other
External software tools or vendors used to transfer data from POPMS to LPL system	Ellkay, Boston Workstation	Ellkay, Boston Workstation
Test directory stored on physician's office system?	no	no
How results are returned to physician's office	block of text, PDF, individually segmented fields	block of text, PDF, individually segmented fields
Data interface standards supported	ASTM 1238, HL7 2.x, XML, custom when required	ASTM 1238, HL7 2.x, XML, custom when required
System supports LOINC for identifying lab result database elements?	yes	yes
System architecture or functionality	standard Web browser (Internet Explorer)	thick client, PC, while not connected to lab host
Patient order and result database maintained on local PC?	no	yes
• Software displays results and allows orders to be entered in an offline mode?	no	yes
Online connections between physician's office and central or host system	leased line, VPN, public Internet connection, others	no online connection
Complete ASP solution for LPL software?/method of charging for ASP solution	yes/transaction based, site-based monthly, other models	yes/transaction based, site-based monthly, other models
Features (listed as a percentage of live installs or based on availability)		
• Order entry		
- Medicare compliance checking using carrier-specific rules	98% [†]	98% [†]
- Advanced beneficiary notice printed if medical necessity criteria not met	98% [†]	98% [†]
- Local medical review policies can be viewed	98% [†]	98% [†]
- Automatic routing of an order to different labs according to payer rules	80% [†]	80% [†]
- Printing of lab's requisitions	98% [†]	98% [†]
- Printing of requisitions for other lab providers	80% [†]	80% [†]
- Duplicate order checking	98% [†]	98% [†]
- Physician office-specific panels	80% [†]	80% [†]
• Electronic order entry (from physician's office to host)		
- Transfer of patient demographics or insurance	98% [†]	98% [†]
- Automatic handling of scheduled or standing orders	98% [†]	98% [†]
- Automatic routing of orders to hospital or commercial labs depending on payer rules	80% [†]	80% [†]
• Bar-code collection label printing	98% [†]	98% [†]
• Two-dimensional bar code on printed requisition	10% [†]	10% [†]
• Software adapted for use in phlebotomy or collection stations	80% [†]	80% [†]
• Result receipt		
- Stored as a block of text	98% [†]	98% [†]
- All items (result, reference range, units) stored as individual data elements	98% [†]	98% [†]
- Automatic parsing of report pages to extract results	8% [†]	8% [†]
- Inquiry mode that allows physician's office to check status of specimens with host	80% [†]	80% [†]
• Reporting		
- In exact format received from host lab	50% [†]	50% [†]
- Cumulative	90% [†]	90% [†]
- Integration of host and physician's office lab results	10% [†]	10% [†]
- Display of new results for patient and/or clinic	98% [†]	98% [†]
- Remote access available to on-call physicians	98% [†]	98% [†]
- Unattended printing of reports	95% [†]	95% [†]
- Display current report with historical data on same screen	98% [†]	98% [†]
- Graph historical results with current results for trend analysis	98% [†]	98% [†]
• Physician can electronically sign reports to confirm review	80% [†]	80% [†]
• Physician can compose and send secure electronic messages to patients	5% [†]	5% [†]
• User-defined rule-based system and alerts in physician's office module	20% [†]	20% [†]
• Electronic transfer of data to another physician's office	10% [†]	10% [†]
- E-mail/encrypted e-mail	available but not installed/available but not installed [†]	available but not installed/available but not installed [†]
- Web reference or pointer to Web site	50% [†]	50% [†]
- Fax	5% [†]	5% [†]
• Physician's office orders supplies from host lab	50% [†]	50% [†]
- Specimen pickup or courier requests to host lab	installed [†]	installed [†]
• Financial		
- Billing, collections, accounts receivable	not available [†]	not available [†]
- Electronic claims transfer/interfaces to billing systems	not available/20% [†]	not available/20% [†]
• Electronic medical record interface	50% [†]	50% [†]
• Interfaces to physician's office lab instruments	2% [†]	2% [†]
• Entry of physician's office lab results with edit checks	2% [†]	2% [†]
System cost: one-time or initial charges/monthly or subscription fees	—	—
• Basis for increasing fees as physician's offices are added	tiered transaction, site-based capital, site-based/user-based monthly models, hybrids	tiered transaction, site-based capital, site-based/user-based monthly models, hybrids
• Situations where fees increase with additional services	tiered transaction, site-based capital, site-based/user-based monthly models, hybrids	tiered transaction, site-based capital, site-based/user-based monthly models, hybrids
System priced on a cost-per-transaction basis?	yes	yes
Distinguishing product features (supplied by vendor)	<ul style="list-style-type: none"> • supports electronic delivery of 85+% of a high-volume lab's outreach test ordering • over 1,500 configurable parameters • robust clinical integration capability 	<ul style="list-style-type: none"> • supports electronic delivery of 85+% of a high-volume lab's outreach test ordering • over 1,500 configurable parameters • robust clinical integration capability
*no other modules installed by vendor in institution		
**other=sales, marketing, administration, other company functions		
***POPMS=physician office practice management systems		
	[†] numbers reflect a mix of thick- and thin-client offerings	[†] numbers reflect a mix of thick- and thin-client offerings

Laboratory-provider links software

Part 3 of 11	CareEvolve Brian T. Jones bjones@careevolve.com 481B Edward Ross Drive Elmwood Park, NJ 07407 888-322-5222 www.careevolve.com	Cerner Corp. Ashley McDonald ashley.mcdonald@cerner.com 2800 Rockcreek Parkway Kansas City, MO 64117 816-201-7988 www.cerner.com
See accompanying article on page 70		
Name of laboratory-provider links (LPL) software/system	CareEvolve Portal (EMR CareConnect – stand-alone connectivity tool)	Cerner WebConnect
First ever/most recent installation of LPL software (based on Feb. 2008 survey deadline)	1999/January 2008	1997/October 2007
No. of host or central labs using software clinically	54	3
• No. of host labs that electronically transfer orders from physician's office to LIS	52	3
No. of satellite locations installed/non-U.S. host installations (In what countries?)	5,000+/0	550/0
No. of contracts for host labs signed in calendar year 2007	9	1
Percentage of installations that have stand-alone LPL systems*	100%	75%
Staff to develop–install & support–other** in entire firm/in LPL software division	25-40-1,000+/4-5-6	—/1-5-1
National commercial labs that use LPL software	BioReference Laboratories, Catholic Healthcare West, Alverno Clinical Laboratories	n/a
Average time to install, build files, train office staff in a typical physician's office	less than 1 hour	4 hours
LIS, HIS, other interfaces (other than company's own products)	Cerner, SCC Soft Computer, Meditech, Sunquest, McKesson, GE, CIS, Epic, Siemens, others	Cerner, Misys, IDX
Software modifications or modules required on host LIS to interface?	yes (HL7 export module, optional HL7 import)	yes (HL7 module on LIS)
POPMS*** used to transfer patient demographics and billing info. to LPL system	eClinicalWorks, Greenway, Misys, Medic, Medical Manager, Allscripts, GE, Dairyland, Practice Partners, NextGen, others	n/a
How demographics and billing information are transferred from POPMS at physician's office or clinic to LPL system	one-time batch download/file transfer, daily update of demographics, more frequent automatic update of all demographics that have changed, POLL provides patient ID to POPMS and POPMS replies in real time	one-time batch download/file transfer, POLL provides patient ID to POPMS and POPMS replies in real time
External software tools or vendors used to transfer data from POPMS to LPL system	Elkay Solutions, Hilgraeve, CompuNet	Hilgraeve
Test directory stored on physician's office system?	—	no
How results are returned to physician's office	PDF, individually segmented fields	block of text, individually segmented fields
Data interface standards supported	ASTM 1238, HL7 2.x, HL7 3.0, ANSI X12, XML, custom when required, PDF file transfer	HL7 2.x, XML, custom when required
System supports LOINC for identifying lab result database elements?	yes	no
System architecture or functionality	all standard Web browsers	all standard Web browsers
Patient order and result database maintained on local PC?	no	no
• Software displays results and allows orders to be entered in an offline mode?	—	—
Online connections between physician's office and central or host system	public Internet connection	public Internet connection
Complete ASP solution for LPL software?/method of charging for ASP solution	yes/—	yes/transaction based
Features (listed as a percentage of live installs or based on availability)		
• Order entry		
- Medicare compliance checking using carrier-specific rules	96%	90%
- Advanced beneficiary notice printed if medical necessity criteria not met	96%	90%
- Local medical review policies can be viewed	96%	90%
- Automatic routing of an order to different labs according to payer rules	70%	90%
- Printing of lab's requisitions	96%	90%
- Printing of requisitions for other lab providers	70%	90%
- Duplicate order checking	96%	90%
- Physician office-specific panels	96%	90%
• Electronic order entry (from physician's office to host)		
- Transfer of patient demographics or insurance	70%	90%
- Automatic handling of scheduled or standing orders	installed	90%
- Automatic routing of orders to hospital or commercial labs depending on payer rules	70%	90%
• Bar-code collection label printing	80%	90%
• Two-dimensional bar code on printed requisition	50%	available but not installed
• Software adapted for use in phlebotomy or collection stations	96%	75%
• Result receipt		
- Stored as a block of text	10%	100%
- All items (result, reference range, units) stored as individual data elements	80%	100%
- Automatic parsing of report pages to extract results	available but not installed	not available
- Inquiry mode that allows physician's office to check status of specimens with host	8%	100%
• Reporting		
- In exact format received from host lab	10%	not available
- Cumulative	installed	not available
- Integration of host and physician's office lab results	installed	25%
- Display of new results for patient and/or clinic	100%	100%
- Remote access available to on-call physicians	installed	100%
- Unattended printing of reports	90%	not available
- Display current report with historical data on same screen	80%	not available
- Graph historical results with current results for trend analysis	100%	100%
• Physician can electronically sign reports to confirm review	100%	not available
• Physician can compose and send secure electronic messages to patients	available but not installed	not available
• User-defined rule-based system and alerts in physician's office module	100%	not available
• Electronic transfer of data to another physician's office	installed	not available
- E-mail/encrypted e-mail	not available/100%	not available/not available
- Web reference or pointer to Web site	75%	not available
- Fax	available in December 2008	not available
• Physician's office orders supplies from host lab	100%	available but not installed
- Specimen pickup or courier requests to host lab	100%	available but not installed
• Financial		
- Billing, collections, accounts receivable	not available	not available
- Electronic claims transfer/interfaces to billing systems	not available/15%	not available/not available
• Electronic medical record interface	75%	not available
• Interfaces to physician's office lab instruments	not available	not available
• Entry of physician's office lab results with edit checks	available but not installed	not available
System cost: one-time or initial charges/monthly or subscription fees	\$30k–\$75k/\$1k–\$5k	—
• Basis for increasing fees as physician's offices are added	based on No. of physicians of record	—
• Situations where fees increase with additional services	if order entry is added to result transmission or vice versa	—
System priced on a cost-per-transaction basis?	no	—
Distinguishing product features (supplied by vendor)	<ul style="list-style-type: none"> • more than 200 EMR interfaces to 20 vendors • CareEvolve's parent company, BioReference Laboratories, has installed CareEvolve in more than 2,500 customer sites • user friendly product; end users trained in 20 to 30 minutes 	<ul style="list-style-type: none"> • unifies with physician EMRs and practice management systems, regardless of whether they are Cerner solutions • Web portal hosted in Cerner's HIPAA-enabling, ISO 9001:2000-certified data center • one-stop shopping that supports automatic routing of tests and eliminates need for chart pulls
*no other modules installed by vendor in institution		
**other=sales, marketing, administration, other company functions		
***POPMS=physician office practice management systems		

Laboratory-provider links software

Part 4 of 11	Emdeon Business Services Mark Jakubik clinician@emdeon.com 1283 Murfreesboro Pike Nashville, TN 37217 800-753-7248 ext. 2019 www.emdeon.com	eTeleNext Joseph Nollar sales@etelenext.com 28570 Marguerite Parkway, Suite 222 Mission Viejo, CA 92692 949-365-0952 www.etelenext.com
<i>See accompanying article on page 70</i>		
Name of laboratory-provider links (LPL) software/system	Emdeon Clinician	eTeleNext
First ever/most recent installation of LPL software (based on Feb. 2008 survey deadline)	1999/January 2008	1998/February 2008
No. of host or central labs using software clinically	58	33
• No. of host labs that electronically transfer orders from physician's office to LIS	30	22
No. of satellite locations installed/non-U.S. host installations (In what countries?)	2,200/0	375+/0
No. of contracts for host labs signed in calendar year 2007	25	2
Percentage of installations that have stand-alone LPL systems*	95%	55%
Staff to develop—install & support—other** in entire firm/in LPL software division	486-859-1,079/7-21-3	8-4-5/8-4-5
National commercial labs that use LPL software	LabCorp, Quest Diagnostics, Genzyme, Sonic Healthcare, AmeriPath	—
Average time to install, build files, train office staff in a typical physician's office	2–3 hours	1 hour
LIS, HIS, other interfaces (other than company's own products)	Cerner, Meditech, McKesson, Misys, Hex, Eclipsys, others	Cortex, GE, Misys, Meditech, Cerner, others
Software modifications or modules required on host LIS to interface?	yes (ability to push reports/results through printer connection or HL7 interface)	no
POPMS*** used to transfer patient demographics and billing info. to LPL system	A4, Altapoint, Sage, Medical Manager, GE, eClinicalWorks, McKesson, Medic, Mega West, Misys, others	Medical Manager, MediSoft, NextGen, others
How demographics and billing information are transferred from POPMS at physician's office or clinic to LPL system	one-time batch download/file transfer, daily update of demographics, more frequent automatic update of all demographics that have changed, POLL provides patient ID to POPMS and POPMS replies in real time	one-time batch download/file transfer, daily update of demographics, more frequent automatic update of all demographics that have changed, POLL provides patient ID to POPMS and POPMS replies in real time
External software tools or vendors used to transfer data from POPMS to LPL system	Cloverleaf	BizTalk, Hilgraeve
Test directory stored on physician's office system?	no	yes
How results are returned to physician's office	block of text, PDF, individually segmented fields	block of text, PDF, individually segmented fields
Data interface standards supported	HL7 2.x, custom when required	HL7 2.x, 1 HL7 3.0, XML, custom when required
System supports LOINC for identifying lab result database elements?	yes	yes
System architecture or functionality	standard Web browser (Internet Explorer)	thin proprietary client, standard Web browser (Internet Explorer)
Patient order and result database maintained on local PC?	no	no
• Software displays results and allows orders to be entered in an offline mode?	no	—
Online connections between physician's office and central or host system	public Internet connection (DSL/cable modem required)	dial-up modem to private phone No., VPN, public Internet connection (dial-up sufficient)
Complete ASP solution for LPL software?/method of charging for ASP solution	no/—	yes/fixed monthly fee
Features (listed as a percentage of live installs or based on availability)		
• Order entry		
- Medicare compliance checking using carrier-specific rules	50%	78%
- Advanced beneficiary notice printed if medical necessity criteria not met	50%	78%
- Local medical review policies can be viewed	not available	78%
- Automatic routing of an order to different labs according to payer rules	50%	78%
- Printing of lab's requisitions	50%	88%
- Printing of requisitions for other lab providers	50%	78%
- Duplicate order checking	installed	78%
- Physician office-specific panels	installed	88%
• Electronic order entry (from physician's office to host)		
- Transfer of patient demographics or insurance	installed	78%
- Automatic handling of scheduled or standing orders	installed	78%
- Automatic routing of orders to hospital or commercial labs depending on payer rules	50%	78%
• Bar-code collection label printing	installed	88%
• Two-dimensional bar code on printed requisition	installed	88%
• Software adapted for use in phlebotomy or collection stations	50%	78%
• Result receipt		
- Stored as a block of text	installed	100%
- All items (result, reference range, units) stored as individual data elements	installed	100%
- Automatic parsing of report pages to extract results	installed	88%
- Inquiry mode that allows physician's office to check status of specimens with host	not available	88%
• Reporting		
- In exact format received from host lab	installed	100%
- Cumulative	available in fourth quarter 2008	88%
- Integration of host and physician's office lab results	installed	75%
- Display of new results for patient and/or clinic	installed	100%
- Remote access available to on-call physicians	installed	100%
- Unattended printing of reports	installed	0
- Display current report with historical data on same screen	not available	100%
- Graph historical results with current results for trend analysis	installed	100%
• Physician can electronically sign reports to confirm review	available in fourth quarter 2008	75%
• Physician can compose and send secure electronic messages to patients	not available	75%
• User-defined rule-based system and alerts in physician's office module	not available	100%
• Electronic transfer of data to another physician's office	not available	100%
- E-mail/encrypted e-mail	not available/available in fourth quarter 2008	0/25%
- Web reference or pointer to Web site	not available	100%
- Fax	installed	60%
• Physician's office orders supplies from host lab	not available	20%
- Specimen pickup or courier requests to host lab	not available	0
• Financial		
- Billing, collections, accounts receivable	not available	not available
- Electronic claims transfer/interfaces to billing systems	not available/installed	not available/30%
• Electronic medical record interface	installed	30%
• Interfaces to physician's office lab instruments	available but not installed	40%
• Entry of physician's office lab results with edit checks	available in third quarter 2008	100%
System cost: one-time or initial charges/monthly or subscription fees	\$25k–\$100k/\$0.05k–\$30k	\$30k–\$75k/\$0.5k–\$2k
• Basis for increasing fees as physician's offices are added	based on No. of practices/groups	no increase
• Situations where fees increase with additional services	if special billing functions are added; charge for Rx feature	if order entry is added to result transmission or vice versa
System priced on a cost-per-transaction basis?	no	no
Distinguishing product features (supplied by vendor)	<ul style="list-style-type: none"> • universal connectivity for vendors and hospitals/labs • e-prescribing software fully integrated into same Web portal as laboratory and other ambulatory services • other ordering and reporting modalities available for hospitals, such as radiology, transcription, cardiology, admission and discharge summary reports 	<ul style="list-style-type: none"> • product branded for the client • customized, user-defined reporting templates provided • optional virtual lab tools for pathology (flow, FISH, IHC, etc.)
*no other modules installed by vendor in institution		
**other=sales, marketing, administration, other company functions		
***POPMS=physician office practice management systems		

Laboratory-provider links software

Part 5 of 11	Fletcher-Flora Health Care System Terry Watson terryw@fletcher-flora.com 1580 Orangethorpe Way Anaheim, CA 92801 800-777-1471 www.fletcher-flora.com	4medica Ron Ramsey rramsey@4medica.com 100 Corporate Pointe, Suite 200 Culver City, CA 90230 310-695-3300 www.4medica.com
<i>See accompanying article on page 70</i>		
Name of laboratory-provider links (LPL) software/system	FFlex eClinic	4medica Laboratory Suite (Lab4/Path4)
First ever/most recent installation of LPL software (based on Feb. 2008 survey deadline)	2006/February 2008	1998/February 2008
No. of host or central labs using software clinically	10	100+
• No. of host labs that electronically transfer orders from physician's office to LIS	9	82
No. of satellite locations installed/non-U.S. host installations (In what countries?)	37/0	21,000+/0
No. of contracts for host labs signed in calendar year 2007	13	—
Percentage of installations that have stand-alone LPL systems*	0	90%
Staff to develop—install & support—other** in entire firm/in LPL software division	11-17-17/—	40-24-18/32-24-18
National commercial labs that use LPL software	none (multi-site labs serving a state or city)	Quest Diagnostics, LabCorp
Average time to install, build files, train office staff in a typical physician's office	varies	less than 1 hour
LIS, HIS, other interfaces (other than company's own products)	Tech Time, IDX, CPSI, Dairyland, QSI, Experior, Imedica, others	Sunquest, Cerner, Cortex, Impac, Meditech, SCC Soft Computer, Hex, McKesson, others
Software modifications or modules required on host LIS to interface?	no	yes (HL7)
POPMS*** used to transfer patient demographics and billing info. to LPL system	eClinicalWorks, Medical Manager, NextGen, Millbrook, MedicaLogic, IDX, PyraMed, Emdeon, others	eClinicalWorks, Misys, Medical Manager, Logician, A4, Acermed, Medic, Lytec, HealthPro, Allscripts, GE, others
How demographics and billing information are transferred from POPMS at physician's office or clinic to LPL system	POLL provides patient ID to POPMS and POPMS replies in real time	one-time batch download/file transfer, daily update of demographics, more frequent automatic update of all demographics that have changed, POLL provides patient ID to POPMS and POPMS replies in real time
External software tools or vendors used to transfer data from POPMS to LPL system	none (Fletcher-Flora integrated interface engine)	none (4medica Practice Solutions Division products)
Test directory stored on physician's office system?	no	no
How results are returned to physician's office	PDF	block of text, PDF, individually segmented fields
Data interface standards supported	ASTM 1238, HL7 2.x, XML, custom when required	HL7 2.x, HL7 3.0, XML, custom when required
System supports LOINC for identifying lab result database elements?	no	yes
System architecture or functionality	thin proprietary client, standard Web browser (Internet Explorer)	standard Web browser (Internet Explorer)
Patient order and result database maintained on local PC?	no	no
• Software displays results and allows orders to be entered in an offline mode?	no	no
Online connections between physician's office and central or host system	leased line, VPN, public Internet connection (DSL/cable modem required)	public Internet connection
Complete ASP solution for LPL software?/method of charging for ASP solution	no/—	yes/transaction based
Features (listed as a percentage of live installs or based on availability)		
• Order entry		
- Medicare compliance checking using carrier-specific rules	100%	100%
- Advanced beneficiary notice printed if medical necessity criteria not met	25%	100%
- Local medical review policies can be viewed	25%	100%
- Automatic routing of an order to different labs according to payer rules	available in third quarter 2008	100%
- Printing of lab's requisitions	50%	100%
- Printing of requisitions for other lab providers	available in third quarter 2008	80%
- Duplicate order checking	available in 2008	100%
- Physician office-specific panels	100%	100%
• Electronic order entry (from physician's office to host)		
- Transfer of patient demographics or insurance	100%	75%
- Automatic handling of scheduled or standing orders	available in 2008	70%
- Automatic routing of orders to hospital or commercial labs depending on payer rules	available in 2008	60%
• Bar-code collection label printing	100%	90%
• Two-dimensional bar code on printed requisition	0	25%
• Software adapted for use in phlebotomy or collection stations	75%	65%
• Result receipt		
- Stored as a block of text	0	20%
- All items (result, reference range, units) stored as individual data elements	100%	90%
- Automatic parsing of report pages to extract results	not available	100%
- Inquiry mode that allows physician's office to check status of specimens with host	100%	100%
• Reporting		
- In exact format received from host lab	100%	95%
- Cumulative	100%	85%
- Integration of host and physician's office lab results	100%	20%
- Display of new results for patient and/or clinic	100%	100%
- Remote access available to on-call physicians	100%	100%
- Unattended printing of reports	100%	100%
- Display current report with historical data on same screen	100%	100%
- Graph historical results with current results for trend analysis	available in 2008	100%
• Physician can electronically sign reports to confirm review	not available	100%
• Physician can compose and send secure electronic messages to patients	not available	available but not installed
• User-defined rule-based system and alerts in physician's office module	100%	70%
• Electronic transfer of data to another physician's office	100%	100%
- E-mail/encrypted e-mail	not available/not available	not available/available but not installed
- Web reference or pointer to Web site	not available	available but not installed
- Fax	50%	available but not installed
• Physician's office orders supplies from host lab	not available	10%
- Specimen pickup or courier requests to host lab	not available	100%
• Financial		
- Billing, collections, accounts receivable	not available	available but not installed
- Electronic claims transfer/interfaces to billing systems	not available/available	available but not installed/65%
• Electronic medical record interface	75%	20%
• Interfaces to physician's office lab instruments	80%	5%
• Entry of physician's office lab results with edit checks	available in 2008	installed
System cost: one-time or initial charges/monthly or subscription fees	\$2.5k+ (depends on No. of instruments at remote location)/—	variable/variable
• Basis for increasing fees as physician's offices are added	based on No. of practices/groups	transaction charges only, no user fees
• Situations where fees increase with additional services	no increase	no increase
System priced on a cost-per-transaction basis?	no	yes (cost variable)
Distinguishing product features (supplied by vendor)	<ul style="list-style-type: none"> integrates multiple sites, systems, and devices seamlessly, securely, and in real time proven Web-based technology that can be scaled from small POLs to the largest independent labs 30 years in LIS industry with more than 1,500 LIS customers and more than 60 host system vendor partners 	<ul style="list-style-type: none"> unique, easy to use, intuitive user interface complete integration with practice systems, registration to billing systems simplified pricing structure; flexible configurations
*no other modules installed by vendor in institution		
**other=sales, marketing, administration, other company functions		
***POPMS=physician office practice management systems		

Laboratory-provider links software

Part 6 of 11	Impac Medical Systems Julie DeSantis jdesantis@impac.com 100 Mathilda Place, 5th floor Sunnyvale, CA 94086 408-830-8083 www.impac.com	Lifepoint Informatics (formerly Labtest.com) Jack Redding jredding@labtest.com 1360 Main St. Hellertown, PA 18055 866-522-8378 www.lifepoint.com
<i>See accompanying article on page 70</i>		
Name of laboratory-provider links (LPL) software/system	IntelliLab Passport	Labtest.com (and sponsor lab branded)
First ever/most recent installation of LPL software (based on Feb. 2008 survey deadline)	2001/February 2008	2000/2008
No. of host or central labs using software clinically	66	138
• No. of host labs that electronically transfer orders from physician's office to LIS	66	117
No. of satellite locations installed/non-U.S. host installations (In what countries?)	120/0	35,000+/1 (Canada)
No. of contracts for host labs signed in calendar year 2007	7	16
Percentage of installations that have stand-alone LPL systems*	0	—
Staff to develop—install & support—other** in entire firm/in LPL software division	130-160-200/4-2-3	14-7-9/14-7-9
National commercial labs that use LPL software	n/a	Medical Diagnostic Laboratories, Blood Center of Wisconsin, Dominion, Aurora Diagnostics
Average time to install, build files, train office staff in a typical physician's office	8 hours	less than 1 hour
LIS, HIS, other interfaces (other than company's own products)	Siemens, IDX, Medical Manager, others	SCC Soft Computer, Misys, Meditech, Cerner, Fletcher-Flora, Psyche Systems, McKesson, Seacoast, Impac, Antek, Orchard, others
Software modifications or modules required on host LIS to interface?	no	no
POPMS*** used to transfer patient demographics and billing info. to LPL system	Siemens, Dairyland, IDX, NextGen, Medent, Infocure, Medical Manager, Allscripts	Practice Partners, Misys, Allscripts, eClinicalWorks, Healthmatics, MedAxxis, MDLand, Micro4, NextGen, Visionary, others
How demographics and billing information are transferred from POPMS at physician's office or clinic to LPL system	one-time batch download/file transfer, daily update of demographics, more frequent automatic update of all demographics that have changed	one-time batch download/file transfer, daily update of demographics, more frequent automatic update of all demographics that have changed, POLL provides patient ID to POPMS and POPMS replies in real time
External software tools or vendors used to transfer data from POPMS to LPL system	none	Elkay, Hilgraeve
Test directory stored on physician's office system?	yes	yes
How results are returned to physician's office	block of text, PDF	block of text, PDF, individually segmented fields
Data interface standards supported	HL7 2.x	ASTM 1238, HL7 2.x, HL7 3.0, ANSI X12, XML, custom when required, RTF and PDF extraction
System supports LOINC for identifying lab result database elements?	no	yes
System architecture or functionality	thick client, PC, while connected to lab host; modified Web browser	thin proprietary client, all standard Web browsers
Patient order and result database maintained on local PC?	no	no
• Software displays results and allows orders to be entered in an offline mode?	—	no
Online connections between physician's office and central or host system	dial-up modem to private phone No., leased line, VPN, public Internet connection (dial-up sufficient)	dial-up modem to private phone No., leased line, VPN, public Internet connection
Complete ASP solution for LPL software?/method of charging for ASP solution	no/—	yes/fixed monthly fee
Features (listed as a percentage of live installs or based on availability)		
• Order entry		
- Medicare compliance checking using carrier-specific rules	100%	100%
- Advanced beneficiary notice printed if medical necessity criteria not met	100%	100%
- Local medical review policies can be viewed	100%	100%
- Automatic routing of an order to different labs according to payer rules	100%	100%
- Printing of lab's requisitions	100%	100%
- Printing of requisitions for other lab providers	100%	45%
- Duplicate order checking	100%	100%
- Physician office-specific panels	100%	100%
• Electronic order entry (from physician's office to host)		
- Transfer of patient demographics or insurance	100%	100%
- Automatic handling of scheduled or standing orders	100%	35%
- Automatic routing of orders to hospital or commercial labs depending on payer rules	100%	70%
• Bar-code collection label printing	100%	100%
• Two-dimensional bar code on printed requisition	not available	45%
• Software adapted for use in phlebotomy or collection stations	100%	75%
• Result receipt		
- Stored as a block of text	not available	100%
- All items (result, reference range, units) stored as individual data elements	100%	100%
- Automatic parsing of report pages to extract results	not available	100%
- Inquiry mode that allows physician's office to check status of specimens with host	100%	100%
• Reporting		
- In exact format received from host lab	100%	100%
- Cumulative	100%	100%
- Integration of host and physician's office lab results	100%	20%
- Display of new results for patient and/or clinic	100%	100%
- Remote access available to on-call physicians	100%	100%
- Unattended printing of reports	100%	100%
- Display current report with historical data on same screen	100%	100%
- Graph historical results with current results for trend analysis	100%	100%
• Physician can electronically sign reports to confirm review	not available	100%
• Physician can compose and send secure electronic messages to patients	not available	100%
• User-defined rule-based system and alerts in physician's office module	100%	100%
• Electronic transfer of data to another physician's office	100%	10%
- E-mail/encrypted e-mail	100%/installed	installed/installed
- Web reference or pointer to Web site	100%	installed
- Fax	100%	installed
• Physician's office orders supplies from host lab	not available	80%
- Specimen pickup or courier requests to host lab	not available	65%
• Financial		
- Billing, collections, accounts receivable	100%	not available
- Electronic claims transfer/interfaces to billing systems	100%/100%	not available/15%
• Electronic medical record interface	80%	100%
• Interfaces to physician's office lab instruments	installed	not available
• Entry of physician's office lab results with edit checks	100%	15%
System cost: one-time or initial charges/monthly or subscription fees	licensing fee per concurrent user	\$5k-\$75k/ \$2k-\$11k
• Basis for increasing fees as physician's offices are added	based on user licenses	no increase or based on No. of practices/groups or contract dependent
• Situations where fees increase with additional services	no increase	with additional ancillary services
System priced on a cost-per-transaction basis?	no	no
Distinguishing product features (supplied by vendor)	<ul style="list-style-type: none"> • same user interface for functionality shared with the full IntelliLab license used by host lab • advanced order-entry process • designed for secure use on the Internet 	<ul style="list-style-type: none"> • extensive EMR/PMS library with rapid installation • supports additional ancillaries, such as radiology and discharge summary • no offshore programming
*no other modules installed by vendor in institution		
**other=sales, marketing, administration, other company functions		
***POPMS=physician office practice management systems		

Laboratory-provider links software

Part 7 of 11	<p>McKesson Joseph R. Stabile joseph.stabile@mckesson.com 5995 Windward Parkway Alpharetta, GA 30005 404-338-4363 www.mckesson.com/laboratory</p>	<p>Mitem Corp. Larry White lwhite@mitem.com 640 Menlo Ave. Menlo Park, CA 94025 650-323-1500 www.mitem.com</p>
See accompanying article on page 70		
Name of laboratory-provider links (LPL) software/system	Horizon Outreach for Lab	Blue Iris eLaborate
First ever/most recent installation of LPL software (based on Feb. 2008 survey deadline)	1999/2007	2005/February 2008
No. of host or central labs using software clinically	17	20
• No. of host labs that electronically transfer orders from physician's office to LIS	17	12
No. of satellite locations installed/non-U.S. host installations (In what countries?)	1,000+/-0	200+/-0
No. of contracts for host labs signed in calendar year 2007	15	4
Percentage of installations that have stand-alone LPL systems*	0	100%
Staff to develop—install & support—other** in entire firm/in LPL software division	32,000 total/—	—
National commercial labs that use LPL software	none	Focus Diagnostics
Average time to install, build files, train office staff in a typical physician's office	1 hour	2 hours
LIS, HIS, other interfaces (other than company's own products)	under development	Cerner, Meditech, Misys, Psyche Systems, SGC Soft Computer, Sunquest, GE, McKesson, others
Software modifications or modules required on host LIS to interface?	no	no
POPMS*** used to transfer patient demographics and billing info. to LPL system	SRS Software, TurboDoc, Logician, NextGen, IDX, Misys, others	eClinicalWorks, IDX, Logician, NextGen, Medent, Misys, McKesson, others
How demographics and billing information are transferred from POPMS at physician's office or clinic to LPL system	POLL provides patient ID to POPMS and POPMS replies in real time	one-time batch download/file transfer; daily update of demographics, more frequent automatic update of all demographics that have changed
External software tools or vendors used to transfer data from POPMS to LPL system	Boston Workstation, Data Innovations	none required
Test directory stored on physician's office system?	no	no
How results are returned to physician's office	individually segmented fields	PDF, individually segmented fields
Data interface standards supported	HL7 2.x	HL7 2.x, XML, custom when required, 3270, VT100, others
System supports LOINC for identifying lab result database elements?	yes	no
System architecture or functionality	standard Web browser (Internet Explorer)	all standard Web browsers
Patient order and result database maintained on local PC?	no	no
• Software displays results and allows orders to be entered in an offline mode?	—	—
Online connections between physician's office and central or host system	VPN, public Internet connection (dial-up sufficient)	VPN, public Internet connection (DSL/cable modem required)
Complete ASP solution for LPL software?/method of charging for ASP solution	no/—	yes/fixed monthly fee
Features (listed as a percentage of live installs or based on availability)		
• Order entry		
- Medicare compliance checking using carrier-specific rules	installed	100%
- Advanced beneficiary notice printed if medical necessity criteria not met	installed	100%
- Local medical review policies can be viewed	not available	100%
- Automatic routing of an order to different labs according to payer rules	installed	installed
- Printing of lab's requisitions	installed	100%
- Printing of requisitions for other lab providers	installed	15%
- Duplicate order checking	installed	100%
- Physician office-specific panels	installed	installed
• Electronic order entry (from physician's office to host)		
- Transfer of patient demographics or insurance	installed	50%
- Automatic handling of scheduled or standing orders	installed	installed
- Automatic routing of orders to hospital or commercial labs depending on payer rules	installed	installed
• Bar-code collection label printing	installed	75%
• Two-dimensional bar code on printed requisition	not available	75%
• Software adapted for use in phlebotomy or collection stations	installed	installed
• Result receipt		
- Stored as a block of text	not available	100%
- All items (result, reference range, units) stored as individual data elements	installed	100%
- Automatic parsing of report pages to extract results	installed	25%
- Inquiry mode that allows physician's office to check status of specimens with host	installed	100%
• Reporting		
- In exact format received from host lab	installed	100%
- Cumulative	installed	100%
- Integration of host and physician's office lab results	not available	100%
- Display of new results for patient and/or clinic	installed	100%
- Remote access available to on-call physicians	installed	100%
- Unattended printing of reports	installed	10%
- Display current report with historical data on same screen	installed	100%
- Graph historical results with current results for trend analysis	installed	100%
• Physician can electronically sign reports to confirm review	installed	available in May 2008
• Physician can compose and send secure electronic messages to patients	available in summer 2008	not available
• User-defined rule-based system and alerts in physician's office module	installed	available in December 2008
• Electronic transfer of data to another physician's office	available in summer 2008	available in May 2008
- E-mail/encrypted e-mail	—	not available/not available
- Web reference or pointer to Web site	—	100%
- Fax	—	not available
• Physician's office orders supplies from host lab	not available	100%
- Specimen pickup or courier requests to host lab	not available	100%
• Financial		
- Billing, collections, accounts receivable	available but not installed	available in December 2008
- Electronic claims transfer/interfaces to billing systems	available but not installed/installed	not available/installed
• Electronic medical record interface	installed	25%
• Interfaces to physician's office lab instruments	not available	available but not installed
• Entry of physician's office lab results with edit checks	not available	available in August 2008
System cost: one-time or initial charges/monthly or subscription fees	—	—
• Basis for increasing fees as physician's offices are added	—	—
• Situations where fees increase with additional services	—	—
System priced on a cost-per-transaction basis?	no	—
Distinguishing product features (supplied by vendor)	<ul style="list-style-type: none"> • instrument-ready label generation in physician office, removing potential labeling errors • true integration (not interface) with Horizon Lab LIS • reverse auto-registration with certain hospital information systems for billing purposes 	<ul style="list-style-type: none"> • enterprise quality and performance for mission-critical integration of EMRs to HL7-enabled and non-HL7-enabled systems • end-to-end complete solution from single vendor for bidirectional POLL • complete outreach solution for Meditech Magic hospitals with no modifications to Meditech and no requirements for any other modules
*no other modules installed by vendor in institution		
**other=sales, marketing, administration, other company functions		
***POPMS=physician office practice management systems		

Laboratory-provider links software

Part 8 of 11	Multidata Computer Systems Michael Slater mrs Slater@mul.com 160 Broadway, Suite 1010 New York, NY 10038 212-967-6700 www.mul.com	Multidata Computer Systems Michael Slater mrs Slater@mul.com 160 Broadway, Suite 1010 New York, NY 10038 212-967-6700 www.mul.com
<i>See accompanying article on page 70</i>		
Name of laboratory-provider links (LPL) software/system	MultiLink	MultiWeb
First ever/most recent installation of LPL software (based on Feb. 2008 survey deadline)	1996/2008	1996/2007
No. of host or central labs using software clinically	9	3
• No. of host labs that electronically transfer orders from physician's office to LIS	7	0
No. of satellite locations installed/non-U.S. host installations (In what countries?)	350+/0	200+/0
No. of contracts for host labs signed in calendar year 2007	0	1
Percentage of installations that have stand-alone LPL systems*	10%	0
Staff to develop—install & support—other** in entire firm/in LPL software division	4-5-2/1.5-1.5-1	4-5-2/1.5-1.5-1
National commercial labs that use LPL software	—	—
Average time to install, build files, train office staff in a typical physician's office	4 hours	1 hour
LIS, HIS, other interfaces (other than company's own products)	Diamond	—
Software modifications or modules required on host LIS to interface?	no	no
POPMS*** used to transfer patient demographics and billing info. to LPL system	VitalWorks, NextGen, Medical Manager, others	eClinicalWorks, Medical Manager, others
How demographics and billing information are transferred from POPMS at physician's office or clinic to LPL system	one-time batch download/file transfer, daily update of demographics, more frequent automatic update of all demographics that have changed, POLL provides patient ID to POPMS and POPMS replies in real time	one-time batch download/file transfer, daily update of demographics, more frequent automatic update of all demographics that have changed
External software tools or vendors used to transfer data from POPMS to LPL system	LinkTools for HL7 socket connection	LinkTools for HL7 socket connection
Test directory stored on physician's office system?	yes	no
How results are returned to physician's office	individually segmented fields	PDF, individually segmented fields
Data interface standards supported	ASTM 1238, HL7 2.x, custom when required	ASTM 1238, HL7 2.x, custom when required
System supports LOINC for identifying lab result database elements?	yes	yes
System architecture or functionality	thick client, PC, while not connected to lab host	all standard Web browsers
Patient order and result database maintained on local PC?	yes	no
• Software displays results and allows orders to be entered in an offline mode?	yes	—
Online connections between physician's office and central or host system	dial-up modem to private phone No., VPN, public Internet connection (dial-up sufficient)	public Internet connection (dial-up sufficient)
Complete ASP solution for LPL software?/method of charging for ASP solution	no/—	yes/fixed monthly fee
Features (listed as a percentage of live installs or based on availability)		
• Order entry		
- Medicare compliance checking using carrier-specific rules	95%	available but not installed
- Advanced beneficiary notice printed if medical necessity criteria not met	25%	available but not installed
- Local medical review policies can be viewed	95%	available but not installed
- Automatic routing of an order to different labs according to payer rules	60%	not available
- Printing of lab's requisitions	95%	available but not installed
- Printing of requisitions for other lab providers	60%	available but not installed
- Duplicate order checking	95%	available but not installed
- Physician office-specific panels	95%	available but not installed
• Electronic order entry (from physician's office to host)		
- Transfer of patient demographics or insurance	95%	available but not installed
- Automatic handling of scheduled or standing orders	25%	not available
- Automatic routing of orders to hospital or commercial labs depending on payer rules	not available	not available
• Bar-code collection label printing	95%	available but not installed
• Two-dimensional bar code on printed requisition	available but not installed	not available
• Software adapted for use in phlebotomy or collection stations	5%	not available
• Result receipt		
- Stored as a block of text	not available	not available
- All items (result, reference range, units) stored as individual data elements	100%	100%
- Automatic parsing of report pages to extract results	not available	not available
- Inquiry mode that allows physician's office to check status of specimens with host	100%	100%
• Reporting		
- In exact format received from host lab	100%	100%
- Cumulative	100%	100%
- Integration of host and physician's office lab results	not available	not available
- Display of new results for patient and/or clinic	100%	100%
- Remote access available to on-call physicians	installed	100%
- Unattended printing of reports	100%	not available
- Display current report with historical data on same screen	100%	100%
- Graph historical results with current results for trend analysis	100%	100%
• Physician can electronically sign reports to confirm review	not available	not available
• Physician can compose and send secure electronic messages to patients	not available	not available
• User-defined rule-based system and alerts in physician's office module	50%	available but not installed
• Electronic transfer of data to another physician's office	not available	not available
- E-mail/encrypted e-mail	—	—
- Web reference or pointer to Web site	—	—
- Fax	—	—
• Physician's office orders supplies from host lab	25%	not available
- Specimen pickup or courier requests to host lab	25%	not available
• Financial		
- Billing, collections, accounts receivable	not available	not available
- Electronic claims transfer/interfaces to billing systems	not available/not available	not available/not available
• Electronic medical record interface	not available	not available
• Interfaces to physician's office lab instruments	not available	not available
• Entry of physician's office lab results with edit checks	not available	not available
System cost: one-time or initial charges/monthly or subscription fees	\$25k-\$50k/none	\$10k-\$50k/\$2k-\$10k
• Basis for increasing fees as physician's offices are added	based on No. of practices/groups	no increase
• Situations where fees increase with additional services	if order entry is added to result transmission or vice versa or if report generator or scheduling modules are added	if order entry is added to result transmission or vice versa
System priced on a cost-per-transaction basis?	no	no
Distinguishing product features (supplied by vendor)	<ul style="list-style-type: none"> • capable of interoperation with browser/Internet application (MultiWeb) for hybrid approach • multi-user version can be implemented across LAN/WAN for large medical facilities • custom functionality can be implemented for special clinics/settings 	<ul style="list-style-type: none"> • capable of interoperation with thick client PC application (MultiLink) for hybrid approach • tiered access/security control for large multi-facility/multi-site enterprises • fast and simple implementation for unidirectional (results-only) modality
*no other modules installed by vendor in institution		
**other=sales, marketing, administration, other company functions		
***POPMS=physician office practice management systems		

Laboratory-provider links software

Part 9 of 11	Orchard Software Kerry Foster sales@orchardsoft.com 701 Congressional Blvd., Suite 360 Carmel, IN 46032 800-856-1948 www.orchardsoft.com	Orchard Software Kerry Foster sales@orchardsoft.com 701 Congressional Blvd., Suite 360 Carmel, IN 46032 800-856-1948 www.orchardsoft.com
<i>See accompanying article on page 70</i>		
Name of laboratory-provider links (LPL) software/system	Orchard Copia	Orchard Harvest Webstation
First ever/most recent installation of LPL software (based on Feb. 2008 survey deadline)	2000/February 2008	2000/January 2008
No. of host or central labs using software clinically	46	291
• No. of host labs that electronically transfer orders from physician's office to LIS	30	222
No. of satellite locations installed/non-U.S. host installations (In what countries?)	not tracked/0	1,500+/0
No. of contracts for host labs signed in calendar year 2007	13	56
Percentage of installations that have stand-alone LPL systems*	5%	0
Staff to develop—install & support—other** in entire firm/in LPL software division	34-63-48/34-63-48	34-63-48/34-63-48
National commercial labs that use LPL software	ProLab Pathology Services, Nextwave, ViraCor, DCL Medical Laboratories, NorDx	none (small regional reference labs)
Average time to install, build files, train office staff in a typical physician's office	1–2 hours	1 hour
LIS, HIS, other interfaces (other than company's own products)	SCC Soft Computer, Misys, Healthpac, Medical Manager, Affinity, Telcor	GE, Millbrook, Misys, others
Software modifications or modules required on host LIS to interface?	no	no
POPMS*** used to transfer patient demographics and billing info. to LPL system	Logician, Medical Manager, NextGen, IDX	Medical Manager, Clinitek, GE, MedicaLogic, NextGen, Medigate, Misys
How demographics and billing information are transferred from POPMS at physician's office or clinic to LPL system	one-time batch download/file transfer, daily update of demographics, more frequent automatic update of all demographics that have changed, POLL provides patient ID to POPMS and POPMS replies in real time	one-time batch download/file transfer, daily update of demographics, more frequent automatic update of all demographics that have changed, POLL provides patient ID to POPMS and POPMS replies in real time, others none needed (native embedded solution)
External software tools or vendors used to transfer data from POPMS to LPL system	Hilgraeve, Eilkay Bridge	
Test directory stored on physician's office system?	no	no
How results are returned to physician's office	PDF, individually segmented fields	PDF, HTML
Data interface standards supported	HL7 2.x, physician's LIS	HL7 2.x
System supports LOINC for identifying lab result database elements?	yes	yes
System architecture or functionality	all standard Web browsers	thick client, PC, while connected to lab host; thin proprietary client; all standard Web browsers
Patient order and result database maintained on local PC?	no	no
• Software displays results and allows orders to be entered in an offline mode?	—	—
Online connections between physician's office and central or host system	public Internet connection	public Internet connection
Complete ASP solution for LPL software?/method of charging for ASP solution	no/—	no/—
Features (listed as a percentage of live installs or based on availability)		
• Order entry		
- Medicare compliance checking using carrier-specific rules	80%	100%
- Advanced beneficiary notice printed if medical necessity criteria not met	80%	100%
- Local medical review policies can be viewed	installed	installed
- Automatic routing of an order to different labs according to payer rules	70%	100%
- Printing of lab's requisitions	80%	100%
- Printing of requisitions for other lab providers	installed	100%
- Duplicate order checking	installed	100%
- Physician office-specific panels	80%	100%
• Electronic order entry (from physician's office to host)		
- Transfer of patient demographics or insurance	40%	100%
- Automatic handling of scheduled or standing orders	40%	100%
- Automatic routing of orders to hospital or commercial labs depending on payer rules	40%	100%
• Bar-code collection label printing	installed	30%
• Two-dimensional bar code on printed requisition	installed	100%
• Software adapted for use in phlebotomy or collection stations	70%	100%
• Result receipt		
- Stored as a block of text	100%	100%
- All items (result, reference range, units) stored as individual data elements	100%	100%
- Automatic parsing of report pages to extract results	installed	100%
- Inquiry mode that allows physician's office to check status of specimens with host	installed	100%
• Reporting		
- In exact format received from host lab	installed	100%
- Cumulative	installed	100%
- Integration of host and physician's office lab results	installed	100%
- Display of new results for patient and/or clinic	100%	100%
- Remote access available to on-call physicians	installed	100%
- Unattended printing of reports	installed	100%
- Display current report with historical data on same screen	installed	100%
- Graph historical results with current results for trend analysis	installed	100%
• Physician can electronically sign reports to confirm review	installed	100%
• Physician can compose and send secure electronic messages to patients	not available	not available
• User-defined rule-based system and alerts in physician's office module	installed	100%
• Electronic transfer of data to another physician's office	90%	100%
- E-mail/encrypted e-mail	10%/10%	10%/10%
- Web reference or pointer to Web site	installed	50%
- Fax	80%	100%
• Physician's office orders supplies from host lab	not available	not available
- Specimen pickup or courier requests to host lab	not available	not available
• Financial		
- Billing, collections, accounts receivable	not available	not available
- Electronic claims transfer/interfaces to billing systems	not available/60%	not available/100%
• Electronic medical record interface	60%	not available
• Interfaces to physician's office lab instruments	not available	not available
• Entry of physician's office lab results with edit checks	installed	not available
System cost: one-time or initial charges/monthly or subscription fees	\$25k–\$250k/\$1k–\$20k (monthly support)	\$7.5k–\$15k/—
• Basis for increasing fees as physician's offices are added	no increase	as concurrent user licenses are needed
• Situations where fees increase with additional services	if additional host interfaces to other systems are added	no increase
System priced on a cost-per-transaction basis?	no	no
Distinguishing product features (supplied by vendor)	<ul style="list-style-type: none"> • unparalleled service and support • very flexible, easy to use, rules/decision support • pricing model not subscriber based or increased as users are added 	<ul style="list-style-type: none"> • cost effective • diagnosis code screening and destination filters • order entry/results retrieval for reference lab testing
*no other modules installed by vendor in institution		
**other=sales, marketing, administration, other company functions		
***POPMS=physician office practice management systems		

Laboratory-provider links software

Part 10 of 11	PathLogix Corp. Jerry Grayson jerry@pathlogix.com 470 Nautilus St., Suite 306 La Jolla, CA 92037 858-454-8030 www.pathlogix.com	SCC Soft Computer Ellie Vahman ellie@softcomputer.com 5400 Tech Data Drive Clearwater, FL 33760 727-789-0100 www.softcomputer.com
<i>See accompanying article on page 70</i>		
Name of laboratory-provider links (LPL) software/system	InterPath	SoftWeb
First ever/most recent installation of LPL software (based on Feb. 2008 survey deadline)	2002/2007	2003/November 2007
No. of host or central labs using software clinically	5	17
• No. of host labs that electronically transfer orders from physician's office to LIS	5	not tracked
No. of satellite locations installed/non-U.S. host installations (In what countries?)	unknown (client/browser based)/0	not tracked/0
No. of contracts for host labs signed in calendar year 2007	1	8
Percentage of installations that have stand-alone LPL systems*	0	0
Staff to develop—install & support—other** in entire firm/in LPL software division	2-1-1/2-1-1	725-304-224/45-3-5
National commercial labs that use LPL software	—	confidential
Average time to install, build files, train office staff in a typical physician's office	6–8 hours	50 hours
LIS, HIS, other interfaces (other than company's own products)	GE	GE, QuadraMed, McKesson, Keane, Perot, CPSI, Custom Software Solutions, Siemens, Epic, Cerner, Eclipsys, Meditech, others
Software modifications or modules required on host LIS to interface?	no	no
POPMS*** used to transfer patient demographics and billing info. to LPL system	Medical Manager	Medical Manager, Healthworks, Alliance-Plus, TrizeHQ, Epic, Misys, GE, others
How demographics and billing information are transferred from POPMS at physician's office or clinic to LPL system	more frequent automatic update of all demographics that have changed, POLL provides patient ID to POPMS and POPMS replies in real time	one-time batch download/file transfer, daily update of demographics, more frequent automatic update of all demographics that have changed, screen scraping technology
External software tools or vendors used to transfer data from POPMS to LPL system	BizTalk server	client choice of vendor or tool(s)
Test directory stored on physician's office system?	no	no
How results are returned to physician's office	PDF, individually segmented fields	block of text, PDF, individually segmented fields
Data interface standards supported	HL7 2.x, HL7 3.0	HL7 2.x, XML
System supports LOINC for identifying lab result database elements?	yes	no
System architecture or functionality	thick client, PC, while connected to lab host; standard Web browser (Internet Explorer)—but neither to print specimen labels	thick client, PC, while connected to lab host; thin proprietary client
Patient order and result database maintained on local PC?	no	no
• Software displays results and allows orders to be entered in an offline mode?	—	—
Online connections between physician's office and central or host system	VPN, public Internet connection (DSL/cable modem required)	leased line, VPN, public Internet connection
Complete ASP solution for LPL software?/method of charging for ASP solution	no/—	yes/fixed monthly fee
Features (listed as a percentage of live installs or based on availability)		
• Order entry		
- Medicare compliance checking using carrier-specific rules	not available	installed
- Advanced beneficiary notice printed if medical necessity criteria not met	not available	installed
- Local medical review policies can be viewed	not available	installed
- Automatic routing of an order to different labs according to payer rules	not available	installed
- Printing of lab's requisitions	100%	installed
- Printing of requisitions for other lab providers	100%	installed
- Duplicate order checking	100%	installed
- Physician office-specific panels	100%	installed
• Electronic order entry (from physician's office to host)		
- Transfer of patient demographics or insurance	100%	installed
- Automatic handling of scheduled or standing orders	100%	available in 2008
- Automatic routing of orders to hospital or commercial labs depending on payer rules	not available	installed
• Bar-code collection label printing	100%	installed
• Two-dimensional bar code on printed requisition	100%	available but not installed
• Software adapted for use in phlebotomy or collection stations	not available	installed
• Result receipt		
- Stored as a block of text	not available	installed
- All items (result, reference range, units) stored as individual data elements	100%	installed
- Automatic parsing of report pages to extract results	100%	installed
- Inquiry mode that allows physician's office to check status of specimens with host	100%	installed
• Reporting		
- In exact format received from host lab	100%	installed
- Cumulative	not available	installed
- Integration of host and physician's office lab results	100%	installed
- Display of new results for patient and/or clinic	100%	installed
- Remote access available to on-call physicians	100%	installed
- Unattended printing of reports	not available	installed
- Display current report with historical data on same screen	not available	installed
- Graph historical results with current results for trend analysis	not available	installed
• Physician can electronically sign reports to confirm review	100%	installed
• Physician can compose and send secure electronic messages to patients	not available	not available
• User-defined rule-based system and alerts in physician's office module	not available	installed
• Electronic transfer of data to another physician's office	not available	installed
- E-mail/encrypted e-mail	—	installed/not available
- Web reference or pointer to Web site	—	installed
- Fax	—	installed
• Physician's office orders supplies from host lab	not available	available in June 2008
- Specimen pickup or courier requests to host lab	not available	available in June 2008
• Financial		
- Billing, collections, accounts receivable	not available	installed
- Electronic claims transfer/interfaces to billing systems	100%/not available	installed/installed
• Electronic medical record interface	100%	installed
• Interfaces to physician's office lab instruments	not available	not available
• Entry of physician's office lab results with edit checks	100%	not available
System cost: one-time or initial charges/monthly or subscription fees	\$3.75k–\$6k/—	\$15k–\$150k/ \$1.5–\$5k
• Basis for increasing fees as physician's offices are added	no increase	no increase
• Situations where fees increase with additional services	if order entry is added to result transmission or vice versa or if special billing functions are added	no increase
System priced on a cost-per-transaction basis?	no	no
Distinguishing product features (supplied by vendor)	<ul style="list-style-type: none"> • special architecture gives physicians access to results from any Web-enabled location using secure log-on • digital document/PDF results generation ideal for EMR/EHR/practice management digital storage • system can be adapted to user entry needs, reporting requirements 	<ul style="list-style-type: none"> • robust rules, logic, and user preferences to simplify patient registration, order entry, compliance, and specimen processing • physician practice specific; customizable dashboard views for quick results query • levels of security permission for viewing results and on-demand/scheduled, collated, chartable results reports
*no other modules installed by vendor in institution		
**other=sales, marketing, administration, other company functions		
***POPMS=physician office practice management systems		

Laboratory-provider links software

Part 11 of 11	Sunquest Information Systems Sylvia Rothrock sylvia.rothrock@sunquestinfo.com 250 S. Williams Blvd. Tucson, AZ 85711 520-570-2000 www.sunquestinfo.com	Telcor Mitch Fry mitch.fry@telcor.com 1560 S. 70th St. Lincoln, NE 68506 402-489-1207 www.telcor.com
<i>See accompanying article on page 70</i>		
Name of laboratory-provider links (LPL) software/system	Sunquest Encompass	Quick-Req/Quick-Results
First ever/most recent installation of LPL software (based on Feb. 2008 survey deadline)	2000/January 2008	2002/December 2007
No. of host or central labs using software clinically	21	15
• No. of host labs that electronically transfer orders from physician's office to LIS	—	8
No. of satellite locations installed/non-U.S. host installations (In what countries?)	—/0	1,326/0
No. of contracts for host labs signed in calendar year 2007	—	5
Percentage of installations that have stand-alone LPL systems*	0	100%
Staff to develop—install & support—other** in entire firm/in LPL software division	410-270-80/230-250-80	15-16-24/ 8-9-4
National commercial labs that use LPL software	none	none
Average time to install, build files, train office staff in a typical physician's office	16 weeks	1.5 hours
LIS, HIS, other interfaces (other than company's own products)	—	Misys, Siemens, Novius, Aspyra, Meditech, Cerner, McKesson, others yes (must purchase host interface capability from host)
Software modifications or modules required on host LIS to interface?	—	DigiChart, Gamewood, eClinicalWorks, Practice Partners, Advantx, MediSoft, Athena, CPSI, others
POPMS*** used to transfer patient demographics and billing info. to LPL system	—	
How demographics and billing information are transferred from POPMS at physician's office or clinic to LPL system	one-time flat-file download via an automated script that periodically picks up data from flat file or through a real-time demographic interface through a third-party vendor	one-time batch download/file transfer, daily update of demographics, more frequent automatic update of all demographics that have changed, POLL provides patient ID to POPMS and POPMS replies in real time none (Telcor performs service)
External software tools or vendors used to transfer data from POPMS to LPL system	Hilgraeve	
Test directory stored on physician's office system?	yes	yes
How results are returned to physician's office	individually segmented fields	block of text, PDF, individually segmented fields
Data interface standards supported	HL7 2.x	HL7 2.x, HL7 3.0, ANSI X12, XML, custom when required
System supports LOINC for identifying lab result database elements?	yes	no
System architecture or functionality	standard Web browser (Internet Explorer)	thick client, PC, whether or not connected to lab host; thin proprietary client and standard Web browser (Internet Explorer) to view results
Patient order and result database maintained on local PC?	no	yes
• Software displays results and allows orders to be entered in an offline mode?	—	yes
Online connections between physician's office and central or host system	VPN, public Internet connection	VPN, public Internet connection
Complete ASP solution for LPL software?/method of charging for ASP solution	no/—	yes/fixed monthly fee
Features (listed as a percentage of live installs or based on availability)		
• Order entry		
- Medicare compliance checking using carrier-specific rules	5%	installed
- Advanced beneficiary notice printed if medical necessity criteria not met	100%	installed
- Local medical review policies can be viewed	80%	installed
- Automatic routing of an order to different labs according to payer rules	0	installed
- Printing of lab's requisitions	100%	installed
- Printing of requisitions for other lab providers	5%	installed
- Duplicate order checking	not available	installed
- Physician office-specific panels	installed	installed
• Electronic order entry (from physician's office to host)		
- Transfer of patient demographics or insurance	5%	installed
- Automatic handling of scheduled or standing orders	installed	installed
- Automatic routing of orders to hospital or commercial labs depending on payer rules	not available	installed
• Bar-code collection label printing	100%	installed
• Two-dimensional bar code on printed requisition	not available	installed
• Software adapted for use in phlebotomy or collection stations	installed	installed
• Result receipt		
- Stored as a block of text	0	installed
- All items (result, reference range, units) stored as individual data elements	100%	installed
- Automatic parsing of report pages to extract results	0	not available
- Inquiry mode that allows physician's office to check status of specimens with host	100%	installed
• Reporting		
- In exact format received from host lab	0	installed
- Cumulative	installed	installed
- Integration of host and physician's office lab results	not available	installed
- Display of new results for patient and/or clinic	100%	installed
- Remote access available to on-call physicians	100%	installed
- Unattended printing of reports	0	installed
- Display current report with historical data on same screen	100%	installed
- Graph historical results with current results for trend analysis	not available	installed
• Physician can electronically sign reports to confirm review	100%	not available
• Physician can compose and send secure electronic messages to patients	not available	not available
• User-defined rule-based system and alerts in physician's office module	not available	installed
• Electronic transfer of data to another physician's office	not available	installed
- E-mail/encrypted e-mail	not available/not available	installed/not available
- Web reference or pointer to Web site	not available	not available
- Fax	not available	installed
• Physician's office orders supplies from host lab	not available	installed
- Specimen pickup or courier requests to host lab	not available	installed
• Financial		
- Billing, collections, accounts receivable	not available	installed
- Electronic claims transfer/interfaces to billing systems	not available/not available	installed/installed
• Electronic medical record interface	not available	installed
• Interfaces to physician's office lab instruments	not available	not available
• Entry of physician's office lab results with edit checks	not available	not available
System cost: one-time or initial charges/monthly or subscription fees	\$30k-\$300k/\$5.4k-\$54k	\$60k-\$500k/—
• Basis for increasing fees as physician's offices are added	based on No. of physicians of record	based on No. of workstations
• Situations where fees increase with additional services	if order entry is added to result transmission or vice versa	if order entry is added to result transmission or vice versa, special billing functions are added, others
System priced on a cost-per-transaction basis?	no	no
Distinguishing product features (supplied by vendor)	<ul style="list-style-type: none"> learning logic and action centers specific to provider provider can have a longitudinal view of patient's lab work from a hospital stay or an office visit office-generated labels are instrument ready 	<ul style="list-style-type: none"> integration with Telcor billing information system improves overall efficiency and profitability uses Internet for data transport with Quick-Req entry at office uses new technology, Microsoft .Net, SQL server
*no other modules installed by vendor in institution		
**other=sales, marketing, administration, other company functions		
***POPMS=physician office practice management systems		