Billing/accounts receivable systems

Fighting 'alphabet blight'

Raymond D. Aller, MD

During the past several years, a blizzard of health care payer organizations have spun into existence for what many in the medical community perceive as the sole purpose of reducing payment for medical services. The health care field viewed the introduction of HMOs, PPOs, and IPAs with curiosity and concern, but it was unaware that an "alphabet blight" would soon spread across the country and that an essential tool for fighting this blight would be a well-supported, highly integrated billing software package.

In the early 1980s, I was directing a struggling independent laboratory in Santa Barbara, Calif. The laboratory used an outside billing service for several years, until a cousin of one of the lab's pathologists wrote a billing software program for the lab. Once billing services were brought in-house, requisitions were entered into the lab's commercial laboratory information system, carried to the billing department, and rekeyed into the billing system—and the lab still struggled.

In 1988, the laboratory purchased a commercially supported laboratory billing package and I wrote the interface software to feed transactions automatically from the LIS to the billing system. That year marked a striking change in the laboratory's financial viability—it went from never having the resources to pay for pathologists' time to running significantly in the black *and* paying for pathologists' services. A few years later, the owners of the laboratory were able to justify a lab valuation that resulted in the laboratory being sold for a substantial profit.

But not all billing service efforts have resulted in handsome rewards, as evidenced in another southern California community. The hospital laboratory director in that town was ecstatic that his outreach program, launched 12 months earlier, was already bringing in revenues of $70,000 per month. The lab director, therefore, was dumbfounded when the hospital's chief financial officer requested that the program be terminated because collections were only 20 percent.

Upon investigation, the lab director discovered that the hospital billing office had a long-standing policy of automatically writing off any invoice under $100. The hospital had determined that a $75 residual on a $3,000 hospital discharge bill was not worth pursuing—yet 85 percent of the laboratory invoices were less than $100. The lab director learned the hard way that laboratories can no longer rely on hospital billing offices to charge for outreach lab work.

Pages 53–62 feature 14 billing and accounts receivable software packages. All data presented in the survey have been provided by the vendors. If you are in the market for such systems, verify all pertinent information before purchasing a software package, but do not send a 50-page request for proposal to each vendor. Select only those vendors that appear to match the needs of your practice and ask them for a *complete* list of sites. Call a few of those sites to determine if their software package is meeting their business needs and if their vendor provides reliable service. □

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Part 1 of 5 See accompanying article	Antek Inc. Richard Jefferson rjefferson@labdaq.com 228 Business Center Drive Reisterstown, MD 21136 800-359-0911 daqbilling.com	Clinical Information Systems Inc. Angela Woolley cisbiw@aol.com 18805 Willamette Drive West Linn, OR 97068 800-869-0680/503-699-9745 www.cislab.com
Name of system	DAQbilling	CIS Billing & Accounts Receivable Management Software
First/most recent B/AR* system installation	2000/2001	1988/2001
First lab system installation	1990	1988
Country in which software was developed	USA	USA
No. of contracts for sites operating system	6	93
• No. of contracts signed as of March 1, 2001	1	0
• No. of contracts signed between March 1, 2000–March 1, 2001	6	6
No. of sites operational (HL/IL/PP/PO/OL)**	6 (0/0/0/6/0)	93 (0/87/5/0/1*)
Inpatient invoices handled by installed sites yearly	n/a	10,000–800,000 (ave.: 300,000)
Outpatient specimens handled by installed sites yearly	n/a	10,000–800,000 (ave.: 300,000)
Largest No. of hosp./path. serviced by one B/AR system	n/a	0/4
Percentage of stand-alone B/AR system installations	80%	5%
How data is entered into the system	manual entry, HL7	manual entry, tape load from another system, HL7, ANSI-X12, other (from CISLab)
Staff to develop/install/support/other***		
• In entire company	10/14/14/20	4/6/7/1
• In B/AR systems division	—	—
No. of terminals or workstations in live sites (min.–max.)	1–4	1–40
Ave. No. of terminals in live sites	2	10
• Central hardware	ASP system (no server required)	generic
• Terminals/workstations	any Web-enabled PC	—
• Innovative peripherals	—	image capture, image output
• Operating system(s)	Windows NT	SCO Unix, Windows NT
• Programming language(s)	Delphi	C, C++, Cobol, Delphi, Visual Basic
• Databases and tools used	Oracle	C-Isam, SQL RDBMS
HIS interfaces	none	HBOC, Dairyland, Medical Manager
LIS interfaces	LabDaq	HBOC, Dairyland, CISLab
Features (listed as a percentage of live installations, available but not installed, or not available)		
• Information transfer from lab login	15%	100%
• 1500 claim form generation	100%	100%
• UB-92 claim form generation	—	5%
• Client invoices	100%	100%
• Patient invoices	100%	100%
• Reprints of above on demand	100%	100%
• Electronic data interchange for third-party payers	100%	80%
• Test profile vs. component billing	100%	100%
• Medical-necessity screening for Medicare	—	100%
• Professional component billing	not available	10%
• Auto delete of nonbillable procedures	not available	not available
• Technical component only	—	not available
• Retain demographic data, repeating patients	100%	100%
• Accounts and patient payment posting	100%	100%
• Accounts receivable system	100%	100%
• Discounts	100%	100%
• Automatic balance billing to patients	100%	100%
• Capitation billing plus billable tests	100%	100%
• Utilization reports for managed care	100%	80%
• Services per diem/per discharge	not available	50%
• Global charges for lab tests	not available	100%
• Support unlimited fee schedules	100%	5%
• Track financial classes	100%	100%
• Allow open-item accounting	not available	not available
• User report writer	not available	not available
• Dunning messages	100%	100%
• Store and retain unprinted comments	100%	100%
B/AR system can file electronic claims with major carriers?	yes (Medicare, NDC Trailblazer, MMIC)	yes (can interface with any clearinghouse)
Type of claim data generation	1500	UB-92, 1500
Complete ASP solution for B/AR system?	yes	yes
Method of charging for ASP service	transaction-based	fixed fee, monthly rental
Client software required	requires software be installed on client PC	browser-based, requires software be installed on client PC, uses dumb terminals
ASP information conduit	operates over Internet	operates over Internet
Client contracts supported from data center not operated by client	all	0
How data center is operated	by vendor	—
Software provides indexed field in each test definition for LOINC code?	no	yes
Provide LOINC dictionary for each new installation?	no	no
Journaling?/source code?	yes/escrow	no/escrow
Cost (hardware/software/installation/monthly maintenance)		
• Smallest stand-alone B/AR system	n/a/transaction-based/per day basis/$0	—
• Largest stand-alone B/AR system	n/a/transaction-based/as needed/$0	—
• Smallest B/AR configuration for integrated system	n/a/—/as needed/$0	—
• Largest B/AR configuration for integrated system	n/a/transaction-based/as needed/$0	—
Distinguishing features (supplied by vendor)	• a true ASP-based practice management system providing secure access from any Web-enabled computer • includes automated electronic claim filing • provides the lowest startup and continuing operational cost	• interface with other systems • electronic claim submission and remittance • medical necessity validation; HMO utilization

*   B/AR=billing/accounts receivable
** HL=hospital labs, IL=independent labs, PP=pathology practices, PO=physician offices, OL=other locations
***other=sales, marketing, administration, other company functions

* veterinary laboratory

Tabulation does not represent an endorsement by the College of American Pathologists   Survey editor: Raymond Aller, MD

Billing/accounts receivable systems

Part 2 of 5 See accompanying article on page 53	Computer Service and Support Inc. James T. O'Neill Jr. sales@csslis.com 2106 New Rd., Bldg. E-6 Linwood, NJ 08221 609-653-6444 www.csslis.com	Cortex Medical Management Systems Inc. Stan Gordon sgordon@cortexmed.com 2001 Western Ave., Ste. 410 Seattle, WA 98121 206-812-6981 cortexmed.com	Diamond Computing James T. Campbell jim@diamondcomputing.net 2345 Fourth St. Tucker, GA 30084 770-496-0286
Name of system	A/R 2000	Cortex Windows Billing System	
First/most recent B/AR* system installation First lab system installation Country in which software was developed	1980/2001 1980 USA	1986/2001 1986 USA	1984/2001 1984 USA
No. of contracts for sites operating system • No. of contracts signed as of March 1, 2001 • No. of contracts signed between March 1, 2000–March 1, 2001 No. of sites operational (HL/IL/PP/PO/OL)**	62 6 11 62 (0/60/2/0/0)	12 3 5 12 (1/0/9/0/2*)	18 1 3 18 (8/10/0/0/0)
Inpatient invoices handled by installed sites yearly Outpatient specimens handled by installed sites yearly Largest No. of hosp./path. serviced by one B/AR system Percentage of stand-alone B/AR system installations	— 25,000–1.5M (ave.: 120,000) —/25 100%	— 3,000–100,000 1/12 5%	10,000–200,000 775,000 (max.) 4/— —
How data is entered into the system	manual entry, tape load from another system, FTP or equivalent file transfer from another system, HL7, ASCII file	manual entry, HL7, proprietary format	manual entry, tape load from another system, FTP or equivalent file transfer from another system, HL7, user-defined interface
Staff to develop/install/support/other*** • In entire company • In B/AR systems division	 6/4/5/4 —	 5/3/1/4 2/1/1/2	 — —
No. of terminals or workstations in live sites (min.–max.) Ave. No. of terminals in live sites	4–50 12	1–10 5	6–250 64
• Central hardware • Terminals/workstations • Innovative peripherals • Operating system(s) • Programming language(s) • Databases and tools used	IBM RS/6000 Windows PC, terminals — AIX 4.1.3 C Lab Base	PC server PC — NT/2000 Visual Basic Microsoft SQL server	Intel-based servers Wyse, Intel-based PCs — Unix, Windows NT MUMPS/M —
HIS interfaces LIS interfaces	PCN, Medic, HBOC, CCA, Medical Manager, Conceptual —	HBOC, Meditech Sunquest, Cortex	Cerner, TDS, Meditech, Sunquest Cerner, Meditech, Sunquest
Features (listed as a percentage of live installations, available but not installed, or not available)			
• Information transfer from lab login	100%	90%	100%
• 1500 claim form generation	100%	100%	100%
• UB-92 claim form generation	—	not available	100%
• Client invoices	100%	100%	100%
• Patient invoices	100%	100%	100%
• Reprints of above on demand	100%	100%	100%
• Electronic data interchange for third-party payers	100%	90%	100%
• Test profile vs. component billing	80%	available in June 2001	100%
• Medical-necessity screening for Medicare	100%	available in June 2001	100%
• Professional component billing	20%	100%	10%
• Auto delete of nonbillable procedures	100%	100%	10%
• Technical component only	20%	80%	0
• Retain demographic data, repeating patients	100%	100%	100%
• Accounts and patient payment posting	100%	100%	100%
• Accounts receivable system	100%	100%	100%
• Discounts	100%	80%	100%
• Automatic balance billing to patients	100%	100%	100%
• Capitation billing plus billable tests	100%	100%	100%
• Utilization reports for managed care	50%	20%	100%
• Services per diem/per discharge	20%	not available	—
• Global charges for lab tests	100%	90%	—
• Support unlimited fee schedules	—	100%	100%
• Track financial classes	100%	100%	100%
• Allow open-item accounting	100%	100%	100%
• User report writer	100%	100%	50%
• Dunning messages	100%	100%	100%
• Store and retain unprinted comments	100%	100%	100%
B/AR system can file electronic claims with major carriers? Type of claim data generation	yes (ProxyMed, Web MD) 1500	yes (HBOC, Empire, NDEX, Medtrac) 1500	yes UB-92, 1500
Complete ASP solution for B/AR system? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated	— — — — — —	no — — — — —	— — — — — —
Software provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation?	yes no	no no	— —
Journaling?/source code? Cost (hardware/software/installation/monthly maintenance) • Smallest stand-alone B/AR system • Largest stand-alone B/AR system • Smallest B/AR configuration for integrated system • Largest B/AR configuration for integrated system	yes/yes $7k/$15k/$3k/$.2k $20k/$100k/$15k/$1.5k — —	yes/escrow —/$40k/$6k/$.575k —/$100k+/$6k+/$.575k+ $2.8k (software only) $2.8k (software only)	yes/yes — — — —
Distinguishing features (supplied by vendor)	• reference laboratory billing specialist • electronic remittance Medicare • HIPAA-compliant v. 8.0	• integrated with Microsoft/Great Plains/Solomon Accounting • general ledger, accounts payable, inventory modules • Crystal Report Writer source code for all reports * emergency medicine; Easter Seals	• easy to use; menu driven • interface to spreadsheets • accounting reports

* B/AR=billing/accounts receivable
** HL=hospital labs, IL=independent labs, PP=pathology practices, PO=physician offices, OL=other locations
***other=sales, marketing, administration, other company functions

Billing/accounts receivable systems

Part 3 of 5 *See accompanying article on page 53*	e-Suite Cecelia Parker 101 E. Park Blvd., 12th floor Plano, TX 75074 800-726-8746 www.getesuite.com	Hex Laboratory Systems Susan Bollinger sbollinger@hexlab.com 1042B El Camino Real, Ste. 308 Encinitas, CA 92024 800-729-2085 www.hexlab.com	Medical Data Processing Inc. Tracy Davidson tracydavidson@att.net 524 S. Park St. Kalamazoo, MI 49007 616-381-2742 www.mdp.net
Name of system	e-Financial	Lab/Hex Cash Management	Medsys/3000
First/most recent B/AR* system installation First lab system installation Country in which software was developed	1985/2001 1981 USA	1983/2001 1981 USA	1976/2001 1980 USA
No. of contracts for sites operating system • No. of contracts signed as of March 1, 2001 • No. of contracts signed between March 1, 2000–March 1, 2001 No. of sites operational (HL/IL/PP/PO/OL)**	4 6 10 4 (0/3/1/0/0)	19 2 3 19 (0/16/1/0/2*)	27 1 3 70 (13/26/8/23/0)
Inpatient invoices handled by installed sites yearly Outpatient specimens handled by installed sites yearly Largest No. of hosp./path. serviced by one B/AR system Percentage of stand-alone B/AR system installations	0 90,000–130,000 (ave.: 100,000) 0/2 75%	— 10,000–750,000 (ave.: 200,000) —/20 5%	50,000–1M (ave.: 525,000) 300,000–3M (ave.: 1.65M) 8+/10+ 95%
How data is entered into the system	manual entry, HL7	manual entry, tape load from another system, FTP or equivalent file transfer from another system, HL7, ANSI-X12, modem, NSF	manual entry, tape load from another system, FTP or equivalent file transfer from another system, HL7, ANSI-X12, other
Staff to develop/install/support/other*** • In entire company • In B/AR systems division	220/90/425/161 14/8/15/10	4/4/5/2 —	5/1/5/2 —
No. of terminals or workstations in live sites (min.–max.) Ave. No. of terminals in live sites	4–29 15	1–45 10	5–75+ 12–15
• Central hardware • Terminals/workstations • Innovative peripherals • Operating system(s) • Programming language(s) • Databases and tools used	Compaq Alpha Dell or similar PC VMS Open M Intersystems, M/SQL, DSM	Dell PowerEdge, any Intel PC w/ RAID Intel PCs, Wyse terminals Unix, Linux Thoroughbred Basic Idol IV, 4GL, SQL	HP e3000 series HP terminals, PC workstations w/ Windows MPE/ix Cobol —
HIS interfaces LIS interfaces	— e-Reference Laboratory, Sunquest Commercial Laboratory, Citation	SMS, HBOC, Sunquest, Cerner, Antrim, Experior, Logician, IDX, Medical Manager, Medic, any HL7, proprietary Lab/Hex, AP Easy	HBOC, Sunquest, Meditech, Cerner, SMS HBOC, ALG, Sunquest, Meditech, Cerner, Soft, Cortex, homegrown
Features (listed as a percentage of live installations, available but not installed, or not available) • Information transfer from lab login • 1500 claim form generation • UB-92 claim form generation • Client invoices • Patient invoices • Reprints of above on demand • Electronic data interchange for third-party payers • Test profile vs. component billing • Medical-necessity screening for Medicare • Professional component billing • Auto delete of nonbillable procedures • Technical component only • Retain demographic data, repeating patients • Accounts and patient payment posting • Accounts receivable system • Discounts • Automatic balance billing to patients • Capitation billing plus billable tests • Utilization reports for managed care • Services per diem/per discharge • Global charges for lab tests • Support unlimited fee schedules • Track financial classes • Allow open-item accounting • User report writer • Dunning messages • Store and retain unprinted comments	 100% 100% 0 100% 100% 100% 100% 100% 100% 25% 100% 75% 100% 100% 100% 100% 100% 25% 100% not available 100% 100% 100% 100% available but not installed 100% 50%	 100% 100% 100% 100% 100% 100% 50% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100%	 65% (100% of lab clients) 98% (some do client billing only) 30% 95% (some do patient billing only) 100% 100% 100% 100% 98% 35% 95% 15% 100% 100% 100% 95% 98% 75% 75% 20% 50% 100% 100% 100% 75% 95% 100%
B/AR system can file electronic claims with major carriers? Type of claim data generation	yes (Per Se) UB-92, 1500, custom services per specialized contracts	yes (ProxyMed) UB-82, UB-92, 1500	yes (NEIC, Cydata, ExpressBill, IMS, ProxyMed) UB-82, UB-92, 1500
Complete ASP solution for B/AR system? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated	yes fixed fee based on range of transactions browser-based operates over Internet 7 by vendor or by a third party*	yes fixed fee browser-based, requires software be installed on client PC, uses dumb terminals operates over Internet 3 by vendor	yes transaction-based requires software be installed on client PC, uses dumb terminals operates over Internet or requires use of private, dedicated circuit 6 by vendor
Software provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation?	no no	yes no	yes no
Journaling?/source code? Cost (hardware/software/installation/monthly maintenance) • Smallest stand-alone B/AR system • Largest stand-alone B/AR system • Smallest B/AR configuration for integrated system • Largest B/AR configuration for integrated system	yes/no — — — —	yes/escrow $5k/$9.5k/$5k/$.2k $25k/$65k/$25k/$1.25k $0/$5k/$2.5k/$.1k $10k/$35k/$5k/$.5k	yes/escrow $25k/$35k/incl.*/$.7k $100k/$90k/incl.*/$1.4k $25k/$35k/incl.*/$.7k $100k/$90k/incl.*/$1.4k

Distinguishing features (supplied by vendor)
 	
*   B/AR=billing/accounts receivable
** HL=hospital labs, IL=independent labs,
     PP=pathology practices, PO=physician
     offices, OL=other locations
***other=sales, marketing, administration, other company functions
	• no capital investment; low monthly subscription fee; no hardware obsolescence
	• ASP model is ideal for labs positioning for rapid growth
	• provides the tools to assist with compliance
	
	* data center is hosted by Inflow with e-Suite support staff
		• electronic claims and remittance
		• medical necessity module to ensure accurate filing and prompt payment
		• veterinary labs and hospital outreach
		
		* veterinary and health department
			• extensive amount of information provided to facilitate efficient working of accounts
			• comprehensive yet flexible
			• automatic updates, including back-ups, with 24/7 support
			
			* excludes travel expenses

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SYSTEM REVIEW SERIES

Billing/accounts receivable systems

Part 4 of 5 *See accompanying article on page 53*	Medical Information Technology Inc. **Paul Berthiaume** info@meditech.com **Meditech Circle** **Westwood, MA 02090** **781-821-3000** www.meditech.com	Medical Information Technology Inc. **Paul Berthiaume** info@meditech.com **Meditech Circle** **Westwood, MA 02090** **781-821-3000** www.meditech.com	Multidata Computer Systems Inc. **Michael Slater** mrslater@mul.com **330 Seventh Ave.** **New York, NY 10001** **212-967-6700** www.mul.com
Name of system	Billing/Accounts Receivable (client/server)	Billing/Accounts Receivable (Magic)	MultiTech A/R
First/most recent B/AR* system installation First lab system installation Country in which software was developed	1977/2001 1969 USA	1977/2001 1969 USA	1984/2000 1983 USA
No. of contracts for sites operating system • No. of contracts signed as of March 1, 2001 • No. of contracts signed between March 1, 2000–March 1, 2001 No. of sites operational (HL/IL/PP/PO/OL)**	216 5 70 n/a	1,420 6 40 n/a	33 1 2 33 (2/31/0/0/0)
Inpatient invoices handled by installed sites yearly Outpatient specimens handled by installed sites yearly Largest No. of hosp./path. serviced by one B/AR system Percentage of stand-alone B/AR system installations	n/a n/a n/a 0	n/a n/a n/a 0	n/a 15,000–2.5M (ave.: 250,000) 1/— 20%
How data is entered into the system	manual entry, tape load from another system, FTP or equivalent file transfer from another system, HL7	manual entry, tape load from another system, FTP or equivalent file transfer from another system, HL7	manual entry, tape load from another system, FTP or equivalent file transfer from another system, HL7
Staff to develop/install/support/other*** • In entire company • In B/AR systems division	 1,742 total —	 1,742 total —	 4/2/3/2 2/1/1.5/1
No. of terminals or workstations in live sites (min.–max.) Ave. No. of terminals in live sites	n/a n/a	n/a n/a	4–100+ 15–20
• Central hardware • Terminals/workstations • Innovative peripherals • Operating system(s) • Programming language(s) • Databases and tools used	JJ Wild Inc., Compaq Digital IBM-compatible PCs — Windows NT, 95 Magic C/S SQL server	JJ Wild Inc., Compaq Digital dumb terminals — Magic Magic SQL server, Magic	Intel Pentium compatible, Compaq Alpha, most Unix RISC PC workstation w/WRQ Reflection software, DEC VT series or compatible optional image input/output Windows 2000, NT, Compaq/DEC VMS, Unix, Linux Caché (M), VB6 Caché (M)
HIS interfaces LIS interfaces	Cerner, IDX, McKesson HBOC, others Cerner, 3M, Sunquest, IDX, Antrim, McKesson HBOC, SMS, others	Cerner, IDX, McKesson HBOC, others Cerner, 3M, Sunquest, IDX, Antrim, McKesson HBOC, SMS, others	SMS, CSM Cerner, Psyche, SMS, SCC
Features (listed as a percentage of live installations, available but not installed, or not available) • Information transfer from lab login • 1500 claim form generation • UB-92 claim form generation • Client invoices • Patient invoices • Reprints of above on demand • Electronic data interchange for third-party payers • Test profile vs. component billing • Medical-necessity screening for Medicare • Professional component billing • Auto delete of nonbillable procedures • Technical component only • Retain demographic data, repeating patients • Accounts and patient payment posting • Accounts receivable system • Discounts • Automatic balance billing to patients • Capitation billing plus billable tests • Utilization reports for managed care • Services per diem/per discharge • Global charges for lab tests • Support unlimited fee schedules • Track financial classes • Allow open-item accounting • User report writer • Dunning messages • Store and retain unprinted comments	 100% 100% 100% 100% 100% 100% 85% 100% handled by admissions application 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100%	 100% 100% 100% 100% 100% 100% 85% 100% handled by admissions application 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100% 100%	 75% 100% 10% 100% 100% 100% 100% 100% 100% 40% 100% 20% 100% 100% 100% 100% 100% 100% 100% n/a 80% 100% 100% 50% 25% 100% 100%
B/AR system can file electronic claims with major carriers? Type of claim data generation	yes (can interface with any electronic clearinghouse if communication protocols are met) UB-82, UB-92, 1500	yes (can interface with any electronic clearinghouse if communication protocols are met) UB-82, UB-92, 1500	yes (Envoy) UB-92, 1500
Complete ASP solution for B/AR system? Method of charging for ASP service Client software required ASP information conduit Client contracts supported from data center not operated by client How data center is operated	no — — — — —	no — — — — —	no — — — — —
Software provides indexed field in each test definition for LOINC code? Provide LOINC dictionary for each new installation?	no no	no no	yes optional
Journaling?/source code? Cost (hardware/software/installation/monthly maintenance) • Smallest stand-alone B/AR system • Largest stand-alone B/AR system • Smallest B/AR configuration for integrated system • Largest B/AR configuration for integrated system	yes/yes n/a n/a n/a n/a	yes/yes n/a n/a n/a n/a	optional/escrow $10k/$15k/incl./$.5k $100k/$150k/incl./$2.25k $5k/$15k/incl./$.5k $50k/$150k/incl./$2.25k
Distinguishing features (supplied by vendor)	• flexible billing and collection features • fully integrated with Meditech's cost accounting, general ledger, and A/P applications • produces specialized collection reports	• flexible billing and collection features • fully integrated with Meditech's cost accounting, general ledger, and A/P applications • produces specialized collection reports	• extensive functionality for electronic remittance processing, with rules-based actions for denials/partial payments • automated claims management tools to help resolve missing/incomplete/medically necessary data • system designed for commercial labs

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***other=sales, marketing, administration, other company functions

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Billing/accounts receivable systems

Part 5 of 5 *See accompanying article on page 53*	SCC Soft Computer Ellie Vahman 34350 U.S. Hwy. 19N Palm Harbor, FL 34684 800-763-8352 www.softcomputer.com	Sunquest Information Systems **Odessa Newell** odessa.newell@sunquest.com 4801 E. Broadway Blvd. Tucson, AZ 85711-3609 800-748-9658 www.sunquest.com	Xifin Inc. **Craig Terner** cterner@xifin.com 2233 Faraday, Ste. A Carlsbad, CA 92008 760-804-0770 www.xifin.com
Name of system	Soft A/R	Sunquest Financial	Medical Accounts Receivables System
First/most recent B/AR* system installation **First lab system installation** **Country in which software was developed**	1980/2001 1985 USA	1985/2001 1985 USA	2001/2001 2001 USA
No. of contracts for sites operating system • **No. of contracts signed as of March 1, 2001** • **No. of contracts signed between March 1, 2000–March 1, 2001** **No. of sites operational (HL/IL/PP/PO/OL)****	19 7 5 62 (24/6/10/0/22*)	199 1 4 199 (25/143/29/0/2*)	1 4 3 4 (1/3/0/0/0)
Inpatient invoices handled by installed sites yearly **Outpatient specimens handled by installed sites yearly** **Largest No. of hosp./path. serviced by one B/AR system** **Percentage of stand-alone B/AR system installations**	n/a n/a 13/— 0	0–65,000 (ave.: 3,000) 5,000–144,000 (ave.: 40,000) 5/23 20%	0 20,000–40,000 (ave.: 30,000) n/a 100%
How data is entered into the system	manual entry, tape load from another system, FTP or equivalent file transfer from another system, HL7, ANSI-X12, NSE, customized clearinghouse format	manual entry, FTP or equivalent file transfer from another system, HL7	manual entry, FTP or equivalent file transfer from another system, HL7, ANSI-X12, proprietary
Staff to develop/install/support/other*** • **In entire company** • **In B/AR systems division**	 276/185/147/112 21/16/18/18	 220/90/425/161 14/6/15/10	 — 18/5/4/3
No. of terminals or workstations in live sites (min.–max.) **Ave. No. of terminals in live sites**	1–40 5	16–128 35	ASP model deployment (one PC/user with Internet connection) —
• **Central hardware** • **Terminals/workstations** • **Innovative peripherals** • **Operating system(s)** • **Programming language(s)** • **Databases and tools used**	RISC 6000, HP 9000 dumb terminals, PCs optical storage AIX, HP-UX, Windows NT, 98 C++, PL-SQL Oracle	IBM RS/6000, Compaq Alpha Dell Optiplex or similar PC — AIX, Unix, VMS M, Caché Intersystems M/SQL, Intersystems DSM, Caché	Sun Dell Solaris Java Oracle, BEA Weblogic, Business Objects, See Beyond
HIS interfaces **LIS interfaces**	Quadramed, SMS, IBAX, TDS, IDX, HBOC, Meditech, custom SCC, Soft Lab	Cerner, SMS, HBOC Cerner, SMS, HBOC, Sunquest Flexilab, Sunquest Commercial Lab	n/a Triple G
Features (listed as a percentage of live installations, available but not installed, or not available) • **Information transfer from lab login** • **1500 claim form generation** • **UB-92 claim form generation** • **Client invoices** • **Patient invoices** • **Reprints of above on demand** • **Electronic data interchange for third-party payers** • **Test profile vs. component billing** • **Medical-necessity screening for Medicare** • **Professional component billing** • **Auto delete of nonbillable procedures** • **Technical component only** • **Retain demographic data, repeating patients** • **Accounts and patient payment posting** • **Accounts receivable system** • **Discounts** • **Automatic balance billing to patients** • **Capitation billing plus billable tests** • **Utilization reports for managed care** • **Services per diem/per discharge** • **Global charges for lab tests** • **Support unlimited fee schedules** • **Track financial classes** • **Allow open-item accounting** • **User report writer** • **Dunning messages** • **Store and retain unprinted comments**	 100% 100% available but not installed 75% 50% 100% 50% 100% 100% 50% 100% 100% 100% 50% 50% 100% 100% available but not installed available but not installed — 100% 100% 100% 100% 100% 100% 100%	 available in 2002 94% 23% 100% 94% 100% 78% 100% 84% 67% 100% 17% 70% 100% 100% 100% 94% 33% 78% not available 100% 100% 100% 100% 50% 100% 67%	 100% 100% available in Sept. 2001 100% 100% 100% 100% 100% 100% not available 100% 100% 100% 100% 100% 100% 100% available in Sept. 2001 100% not available 100% 100% 100% 100% 100% 100% 100%
B/AR system can file electronic claims with major carriers? **Type of claim data generation**	yes (MCR, NEIC, MVP, Blue Cross, Envoy) UB-92, 1500	yes (Per Se is preferred, NEIC, Cydata) UB-92, 1500, custom billing services	yes (Envoy, Per Se, ProxyMed) 1500, NY Medicaid
Complete ASP solution for B/AR system? **Method of charging for ASP service** **Client software required** **ASP information conduit** **Client contracts supported from data center not operated by client** **How data center is operated**	yes fixed-fee, transaction-based, negotiable requires software be installed on client PC operates over Internet or requires use of private, dedicated circuit (VPN) 0 by vendor	yes monthly subscription charge browser-based operates over Internet — by vendor	yes transaction-based browser-based operates over Internet or requires use of private, dedicated circuit (option for large customers) 1 by a third-party (S4R)
Software provides indexed field in each test definition for LOINC code? **Provide LOINC dictionary for each new installation?**	yes no	no no	yes yes
Journaling?/source code? **Cost (hardware/software/installation/monthly maintenance)** • **Smallest stand-alone B/AR system** • **Largest stand-alone B/AR system** • **Smallest B/AR configuration for integrated system** • **Largest B/AR configuration for integrated system**	yes/escrow $20k/$50k/$40k/$1k $75k/$250k/$160k/$5k $20k/$50k/$40k/$1k $75k/$250k/$160k/$5k	yes/yes $35k/$72k/$40.8k/$12.96k $74k/$400k/$102k/$72k $0/$72k/$40.8k/$12.96k $74k/$400k/$102k/$72k	yes/yes $0/$1.50 per accession/$20k/$0 $0/$.75 per accession/$20k/$0 n/a n/a
Distinguishing features (supplied by vendor)	• HIS, reference lab, SNF, and ESRD billing options • client-defined and editable billing formats without vendor intervention • multi-tiered pricing options; unlimited billing edits	• very high throughput • integrated medical necessity and procedure code consolidation tools • broad range of client-billed pricing and discounting methods	• comprehensive automation of process and data communication to reduce errors and operational and maintenance costs • compliance logic embedded throughout process to prompt and track potential noncompliant actions by users as well as create and maintain all required audit logs • emphasis on system and resource maintenance

*   B/AR=billing/accounts receivable
** HL=hospital labs, IL=independent labs, PP=pathology practices, PO=physician offices, OL=other locations
***other=sales, marketing, administration, other company functions

* clinics, reference labs   * billing service bureau