State Public Health Laboratory Billing: Status Report and Recommendations

Laboratory Efficiencies Initiative

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APHL ASSOCIATION OF PUBLIC HEALTH LABORATORIES

LEI LABORATORY EFFICIENCIES INITIATIVE

Transforming to a Sustainable Public Health Laboratory System

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Introduction

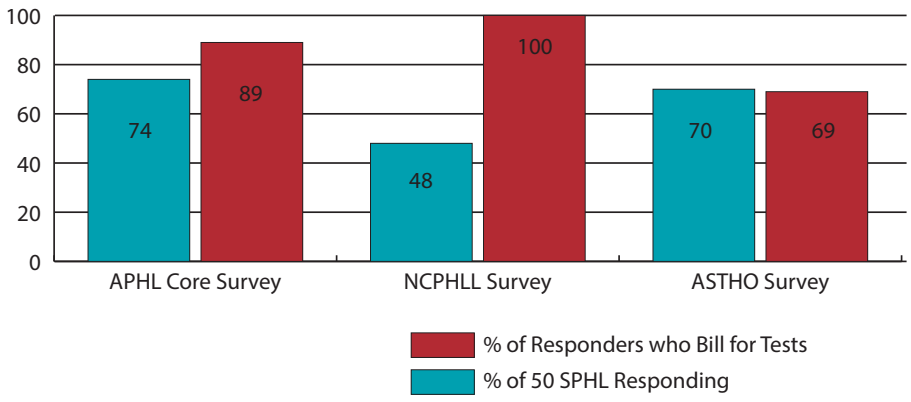
There is increasing pressure on State Public Health Laboratories (SPHL) to bill for their services as a way to replace revenue: many SPHL have seen reduced income from state funds and federal grants. Seeking other sources of income is critical to continued operations of SPHL at their current level. Non-government clinical laboratories have traditionally billed for all tests, and have developed systems and expertise in their billing processes. An overview of current billing processes in use at SPHL was conducted with the goal of determining current billing capacity and sharing expertise in this area. As stated by Charles D. Brokopp, DrPH, MT (ASCP), 2012-13 President of the Association of Public Health Laboratories, "The sustainability of public health laboratories requires enhanced operating efficiencies, sharing limited resources and greater collaboration among all public health laboratories."

Overview of Current SPHL Billing Capacity

Three recent surveys were summarized (Appendix 1) regarding SPHL billing capacity: The APHL Core Survey for Fiscal Year 2010, the APHL National Center for Public Health Laboratory Leadership (NCPHLL) billing survey done in 2011, and the Association of State and Territorial Health Officials (ASTHO) billing survey done in 2012. In addition, data specific to billing were compiled from the APHL Laboratory Director's Listserv and from two APHL targeted surveys (Molecular testing and Workforce).

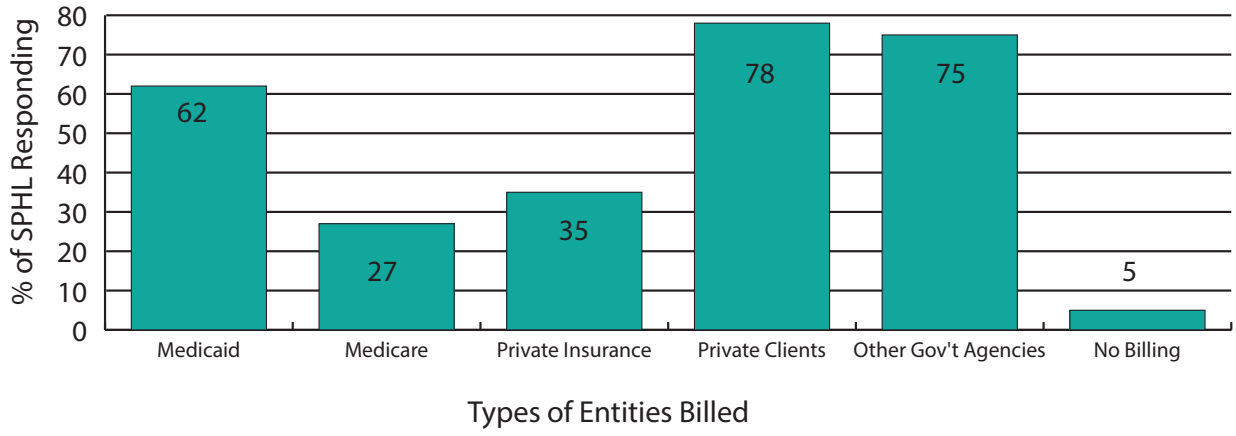
Most SPHL are doing some type of billing. Responses about what tests are billed and what entities are billed were variable. Almost ¾ of the 50 SPHL responded to the APHL Core Survey, and 87% of those laboratories bill for tests (Figure 1). Responses to the ASTHO survey indicated that 69% of SPHL conduct billing, however these responses may not have come from the SPHL Directors since the survey was given to the State Health Officials. In addition, SPHL answered different combinations of the three surveys, with some answering none, one, two or all.

Figure 1: Number of Survey Responses and Percent of SPHL Doing Billing



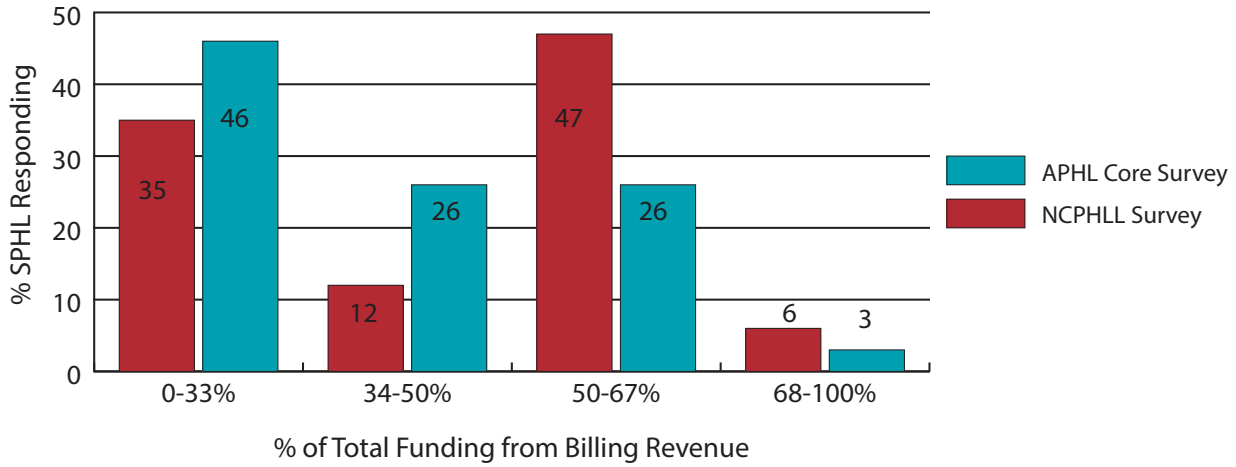
When asked by the APHL Core Survey about the types of entities billed, the majority of SPHL reported that they bill Medicaid, private clients and other government agencies, while only about a third of SPHL bill Medicare and private insurance companies (Figure 2). This may be due to the increased complexity of billing these entities.

Figure 2: Types of Entities Billed by SPHL



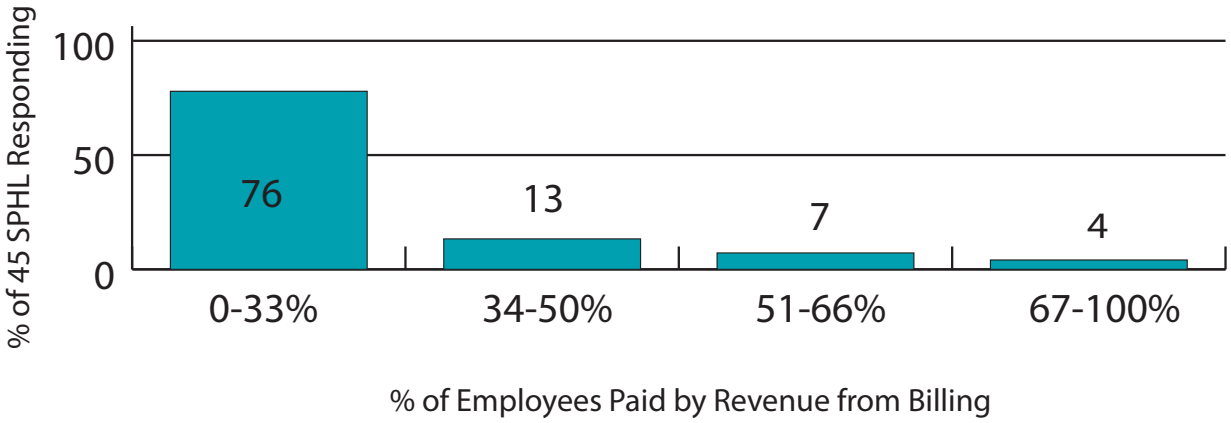
Of the 24 SPHL responding to the NCPHLL Billing Survey, the majority said that billing revenue funded over half of their total laboratory budget. However, using data from the APHL core survey, only 29% of the SPHL fund over half of their total laboratory budget from billing revenue (Figure 3). This discrepancy is likely because of different laboratories answering the two surveys and because the NCPHLL data was in reply to a direct question while the APHL data was calculated from responses to a question on budget sources.

Figure 3: SPHL Revenue from Billing for Tests



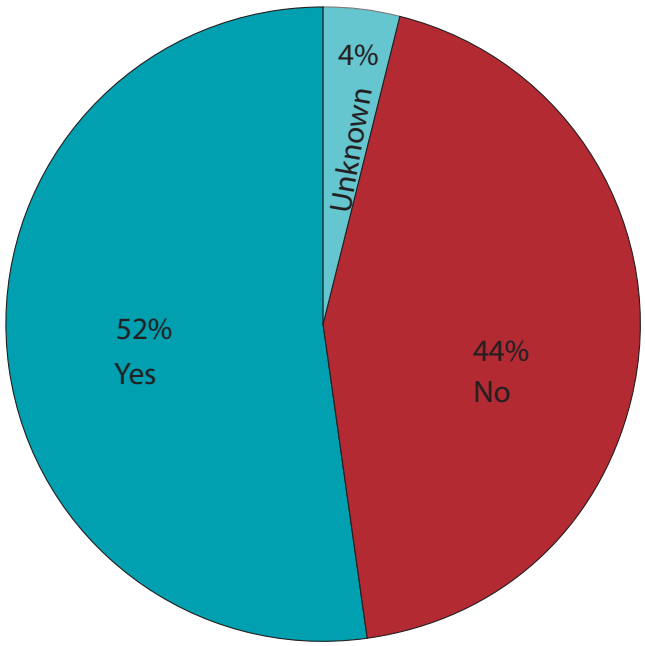
From the targeted Workforce Survey, it was reported that over ¾ of SPHL fund less than 33% of their workforce from billing revenue, indicating that other sources of revenue are mainly used to fund personnel (Figure 4).

Figure 4: Use of Billing Revenue for Personnel by SPHL



From the targeted APHL Molecular Survey, it was reported that about half of the laboratories bill for molecular testing, indicating that state or federal funds pay for about half of this type of testing (Figure 5).

Figure 5: Billing for Molecular Tests by SPHL



Conclusion

While there are some differences among the various surveys in the data regarding SPHL billing, the major conclusions are that most SPHLs are billing some entities for some tests and that less than half of SPHLs are billing Medicare and private insurers. The published report regarding the NCPHLL survey (click here for full report) also identified several obstacles, including restrictive legislation, staffing shortages, inadequate software for billing fee-for-service testing, and regulations on how SPHLs use their generated revenue. Because significant revenue is lost to SPHL coffers due to lack of a billing process for certain entities, there is much to be gained from sharing information about SPHL billing processes. For that reason, eight SPHL that reported significant billing revenue were questioned further about their billing processes. These SPHL reported on their laboratory information systems, their billing systems, and their workflow (Appendix 2). In addition, some billing case studies are described below, as examples of successful billing practices.

Examples of Successful SPHL Billing Processes

Case Study #1: Wisconsin State Laboratory of Hygiene

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Systems used:
Most clinical systems (communicable disease, clinical toxicology, forensic toxicology, newborn screening, and biochemical genetics) use Beaker (Epic Systems) and the remaining (cytology and cytogenetics) use WindoPath (Psyche Systems). Environmental and occupational health systems use Horizon (ChemWare). All billing is done using Reference Lab Billing (Epic Systems) which is part of the Beaker system. Data from non-Epic systems are automatically extracted and imported into the billing system.

Workflow outline:

1. After tests are resulted, the charges from non-Epic systems are extracted into the billing system. Epic and non-Epic charges are reviewed and major errors (unknown procedures or submitters, etc.) are caught in a workqueue to be fixed and resubmitted by the lab. Minor charge errors (missing information or unrecognized diagnostic codes, etc.) are caught in a workqueue to be fixed and resubmitted by the lab. Any manual charges are entered directly into the billing system by the lab.

2. Charges that are to be covered by insurance (Medicaid, Medicare, Private) are batched daily and submitted to a claims clearinghouse (Gateway EDI). Claims that are rejected by the clearinghouse because of missing required information are caught and assigned to an account workqueue to be fixed and resubmitted by the lab. Claims that are denied by the payor are caught and assigned to an account workqueue to be fixed and resubmitted by the lab. Payments from claims that are accepted auto-load daily into the billing system and are distributed (matched) to the correct account charges by the finance office, with help from the lab if needed. Some payments must be manually posted due to insufficient information with the payment.

3. Charges that are not paid by insurance are invoiced monthly on the 1st (clinical), 5th (agencies and contracts) and 10th (all other). Invoices are printed and reviewed by the finance office, with help from the lab if needed. Payments are mailed to a lockbox account or accepted over the phone by credit card. Some checks and prepays for certain services are accepted but this practice is discouraged. Payments are posted by the finance office. Overdue accounts are listed in 30, 60, 90 and 120 day account work queues for working collections. Customers with overdue account balances are sent

statements each month, called by the finance office and sent collection letters. Use of a collection agency is currently being considered.

4. Requests for account adjustments (transfers, credits, refunds, etc.) and requests for new procedures, submitters, accounts, etc. are submitted by the labs to the finance office through a documentation system called FootPrints. This system is also used for IT requests, purchasing requests, facilities management and occurrence management.

5. Accounting pulls data from the billing system directly into the general ledger system (Great Plains) for accounting and generating management and board reports.

What works well and why:

1. Automated charge extraction into a single system for billing is a big time saver and avoids errors due to manipulation of any files during a manual transfer.

2. Use of rule-based work queues to automatically sort data entry or requisition errors for fixing and resubmission is easy to use and keeps things well organized. This also allows for better reports for more transparency of billing.

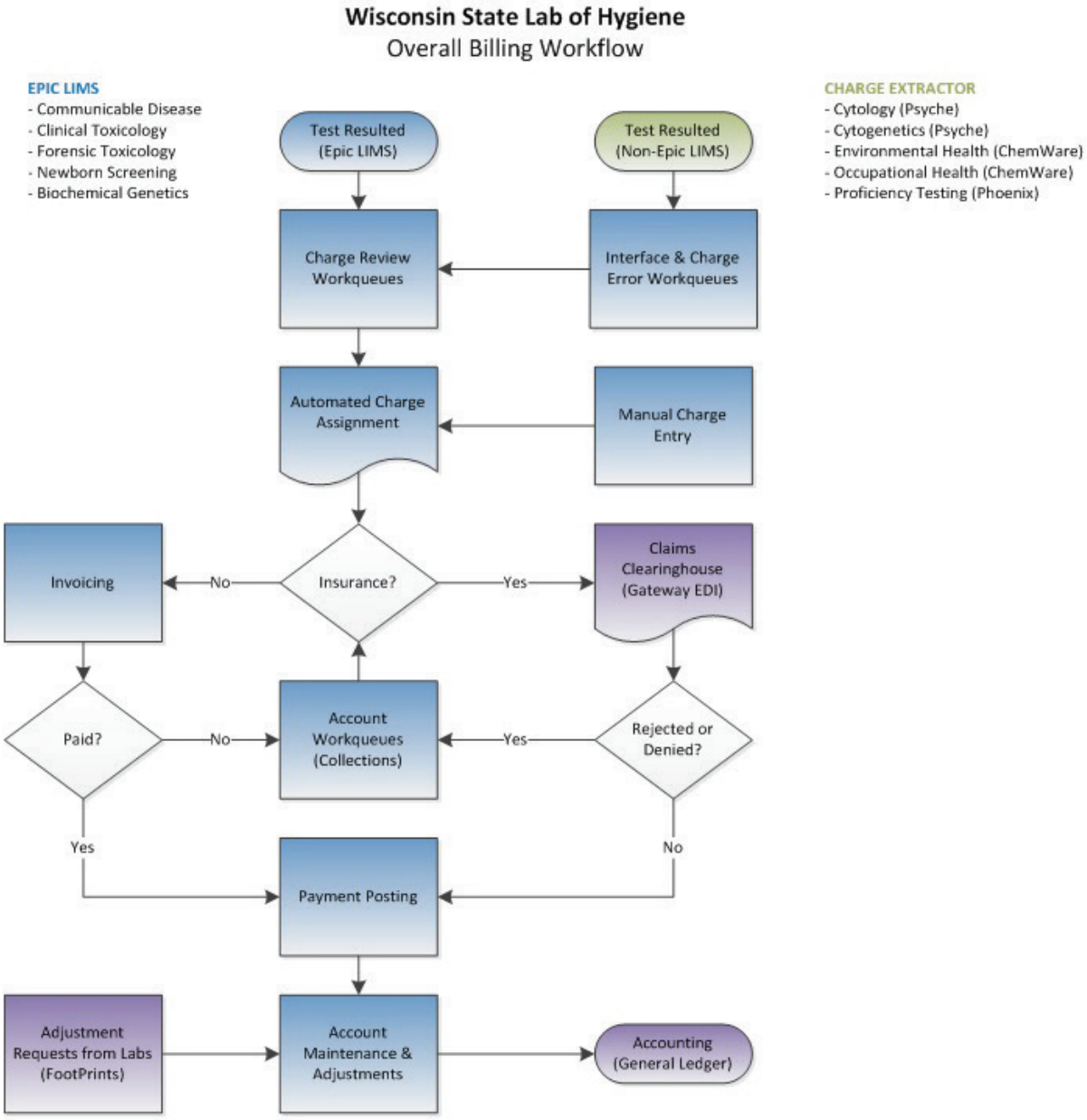
3. WSLH has a dedicated IT shop that maintains the day to day technical operations of all LIMS. With the implementation of new LIMS and billing systems, a "super-user" is identified in each laboratory area. This super-user receives training and performs the actual building of the system in cooperation with IT. These embedded LIMS administrators serve as the experts to work with data management staff in each laboratory on investigating and resubmitting all receivable charge errors, insurance claim rejections and denial reasons that are specific to errors in the laboratory system. Any error or missing data on a test order requisition can only be corrected by laboratory staff in consultation with the submitter of that test order.

What doesn't work well and why not:

1. This system was implemented a year ago (2012), and rules and specific workflows are still being tweaked. Adjusting to the new system (especially the work queues) has been a challenge for lab and fiscal staff.

2. The Epic system's invoicing capability is rudimentary and not very configurable; it is a hospital-based system and not primarily intended for client paper invoicing. This has been problematic and is currently labor intensive.

3. Accepting credit card payments only by phone is labor intensive. Online payment capability is currently being planned.


Wisconsin State Lab of Hygiene
Overall Billing Workflow
EPIC LIMS
- Communicable Disease
- Clinical Toxicology
- Forensic Toxicology
- Newborn Screening
- Biochemical Genetics
CHARGE EXTRACTOR
- Cytology (Psyche)
- Cytogenetics (Psyche)
- Environmental Health (ChemWare)
- Occupational Health (ChemWare)
- Proficiency Testing (Phoenix)
Test Resulted (Epic LIMS)
Test Resulted (Non-Epic LIMS)
Charge Review Workqueues
Interface & Charge Error Workqueues
Automated Charge Assignment
Manual Charge Entry
Invoicing
No
Insurance?
Yes
Claims Clearinghouse (Gateway EDI)
Paid?
No
Account Workqueues (Collections)
Yes
Rejected or Denied?
Yes
No
Payment Posting
Adjustment Requests from Labs (FootPrints)
Account Maintenance & Adjustments
Accounting (General Ledger)

Case Study #2: South Dakota Public Health Laboratory

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Systems used:
The Medical Microbiology (Bacteriology, Serology, and Virology) section uses the LabWare LIMS v6. The billing for medical laboratory testing is done with the Healthpac Computer Systems, Inc., HPlusPRO Practice Management System. The Environmental Chemistry and Forensic sections use the Epic Systems Cohort for its LIMS. The billing for environmental and forensic testing is handled with Epic Systems Resolute.

Note: In the next six months, the South Dakota Public Health Laboratory (SDPHL) plans to convert the Environmental Chemistry and Forensic sections to LabWare LIMS v6 and Healthpac HPlusPRO. Therefore, this document will only address the billing process for the Medical section of the laboratory.

Workflow outline:

1. When testing is completed and results are validated, test results are sent to the submitter. At the same time billing information is passed from the LabWare LIMS to the Healthpac HPlusPRO. This occurs twice daily, at 9:00 am and 5:00 pm. This billing data transfer is performed by passing a .txt file from LIMS to HPlusPRO. Tests performed as part of a panel are automatically given the panel price by HPlusPRO. Healthpac billing is done by the agency fiscal office.

2. The SDPHL submits claims for tests performed to Medicare and Medicaid but not to private insurance companies. The billing data file contains a field indicating if the test is to be billed to Medicare or Medicaid. It also contains a field with the Medicare and Medicaid number. Tests to be billed to Medicare and Medicaid are segregated by HPlusPRO and then submitted monthly to Medicare and semi-monthly to Medicaid for payment. Claim submissions to both Medicare and Medicaid are done by sending electronic claim files directly to the Medicare Intermediary and to the South Dakota Medicaid Program. No clearinghouse is utilized. Electronic remittance advices are received from both Medicare and Medicaid. HPlusPRO automatically posts electronic remittance advice payments to the appropriate individual test charge. The accountant in the agency fiscal office reviews the denied claims, makes corrections as needed and resubmits claims. Tests may be billed back to submitter if not eligible for Medicaid or Medicare.

3. All tests not billed to Medicare and Medicaid are billed either to a South Dakota Department of Health program or back to the submitter. The billing data file contains a

field indicating if the test should be billed to a program, (i.e., HIV, STD, Outbreak). If the field is blank the test is billed to the submitter. Invoices are sent out at the beginning of each month. Credit card payments are accepted. If payment is not received, past due notices are sent at 60, 90 and 120 days. If payment is not received prior to 160 days, the account is turned over to a collection agency. There are currently no plans to bill private insurance carriers.

4. Requests for transfers to another payer account come to both fiscal and laboratory personnel. Fiscal staff will consult with laboratory staff on whether to allow the transfer. Laboratory staff often will consult with Department of Health program personnel regarding transfers.

5. The HPlusPRO system has many canned Monthly Practice Management Reports and an AdHoc Report Generator. Getting data out of HPlusPRO is simple.

What works well and why:

1. The auto process or manual process selection for posting payments. The auto process posts the total to open charges where the manual process allows posting payments to specific charges. This works well because most payments are for the full amount invoiced. In that case, the auto process saves a great deal of time compared to the old system when each item had to be posted one by one. This auto process has significantly cut posting time. It is also a useful tool when posting Medicare and Medicaid remittances.

2. Filing Medicare and Medicaid claims is a very simple and fast process. It allows for reviewing errors before submitting the final claim which reduces denials.

3. There are many standard reports set up and an option to run adhoc reports. The reports can either print to the screen, the printer, or to a .csv file. Having the data go to a .csv file is very useful as most of the reporting is out of Excel. The old system did not have the .csv file capability therefore a lot more data entry into Excel was common.

4. A simple click of a button can run the accounts receivable balance for a specific time frame or for that day.

5. The daily import has been an easy process. It allows for reviewing and correcting errors before importing the data to the system.

6. The work queues are a nice feature because they compile all issues into one screen where different screens can be accessed from that one transaction. Examples are the ledger screen and demographic screen.

What doesn't work well and why not:

1. Medicare and Medicaid claims are filed from the patient's account instead of the submitter's account. There is a letter application in HPlusPRO, but it only sends to the account where the charge is billed. This means that the SDPHL cannot create insurance denial invoices for a list of patients directly out of HPlusPRO to submitters.

2. In order to run a report on the denied claims, an action code must be added to the transaction data. This is a manual process. This report is run to track actions taken regarding Medicare and Medicaid denials. Although this is not the most ideal process, it is much more efficient than the method used with the old system.

3. The episodic account system is a little tedious. It is not possible to look at all charges on one account at the same time. For example, to review a June charge on an account and then look at a charge from April, the June ledger must be closed before opening the April ledger for that account.

Case Study #3: Florida

Contact:
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Systems used:
Clinical Laboratory Information system (LIMS) is LabWare, Newborn Screening LIMS is LifeCycle (Perkin Elmer), Environmental Chemistry LIMS is Sample Manager (Thermo Scientific). The billing software used is Healthpac HPlusPRO.

Clinical Laboratory Billing Workflow outline:

1. Billable services, completed and reported testing services, are exported hourly by the LabWare LIMS as caret delimited multi-segment text files; this operation is performed by a background user. The claim files are moved by the Department's data integration broker (Cloverleaf) to a Bureau of Public Health Laboratories (BPHL) data exchange server's incoming data folder. Each day at 6:00 am, an in-house developed application *LWBillHandler* is executed to transform the claim files from the LabWare text format to Health Level 7 version 2.3 (HL7 2.3) format. The converted data files are saved to the HPlusPRO incoming data folder for manually triggered importation into the HPlusPRO billing system.

2. HPlusPRO validates each new claim. Those that are complete with proper coding and patient/provider/responsible party information are flagged for automated submission; incomplete claims are tagged for manual editing/correction and submission.

3. Each HPlusPRO user having the necessary user rights can trigger creation of X12 837 format claims submission files that are saved to HPlusPRO outgoing folders designated according to the assigned insurer/fiscal agent. For Florida Medicaid claims another in-house developed application *HPPX12ToCLV* renames the files using a standardized naming convention, encrypts the file and places a copy of each in file in the BPHL data exchange server's outgoing folder. The manual processes are performed by laboratory billing staff with the position title of "Senior Clerk" (*see duties for this position below*).

4. Cloverleaf retrieves the Medicaid 837 files and forwards them to the Medicaid fiscal agent. The 837 files for other insurers (non-Medicaid claims) are manually transmitted to other insurers' fiscal agents via secure transfer protocols by authorized HPlusPRO users.

5. Remittance Advice documents are supplied by insurers providing notice of each claim's processing and explanation reasons for payment, adjustment, denial and/or uncovered charges of a medical claim. Electronic Remittance Advice files from

Medicaid, Medicare and commercial billing agents are imported into HPlusPRO and reconciled with outstanding claims through automated and manual processes. The manual processes are completed by laboratory billing staff with the position title of "Fiscal Assistant" (*see duties for this position below*).

6. HPlusPRO examines and validates each claim's remittance data. Paid claims are closed out, unpaid claims are flagged for user follow-up and resubmission if indicated. Follow up is performed by laboratory fiscal assistants.

7. All automated processes are monitored daily by a laboratory management consultant. See flowchart of this process in Appendix 3.

Newborn Screening Billing Workflow outline:

1. Billable services, completed and reported testing services, are extracted from the SpecimenGate/LifeCycle database via a stored procedure executed each morning at 3:00 pm. Records for these claims are accumulated into a BPHL database for further processing.

2. An in-house developed application, *NBSBilling*, is executed each day at 5:00 am. This application creates X12 837 transaction files for services with valid Medicaid billing information; it then encrypts the files and places a copy of each in the BPHL data exchange server's outgoing folder to be picked up by Cloverleaf and processed as described in step four of the clinical billing workflow in Appendix 4.

3. Due to the volume of Newborn Screening Program claims (255,849 claims/2,801,249 services in 2012), non-Medicaid claims and claims having incomplete billing information (52% of all claims) are packaged into a proprietary format file and sent to a contracted fiscal agent for further processing and submission to insurers. This is accomplished by another in-house developed application, *NBSBillingPCG*, which creates the files to be sent and sends same via secure transfer protocol. This application runs weekly on Fridays at 2:00 pm. The contracted fiscal agent provides complete "soup-to-nuts" claim processing including identifying responsible payers, submission of claims and reconciliation/resubmission as required. Recovered reimbursements are deposited into a State of Florida held "drop-box" account. The fiscal agent receives a contingency fee based upon a percentage of the recovered monies. The percentage is based upon a stepped scale, becoming less as the total recovery increases.

4. Monthly BPHL receives a data file containing all pertinent data for all Medicaid eligible births of the previous month. This data is imported and used to update/complete previously unidentified (as Medicaid eligible) claims by matching up several data points (mother's SSN, name, county of residence, phone number, birth hospital, etc.) These claims are then submitted to Medicaid via 837 files and Cloverleaf as described above.

5. All automated processes are monitored daily by a laboratory management consultant. See flowchart of this process in Appendix 3.

What works well and why:

1. The ability to submit claims electronically using a highly automated system, without which the workload would be staggering.

2. The HPlusPRO billing system is very capable and configurable. Though it can be at times daunting, vendor support is quite good. The ability to immediately submit claims having correct procedure codes and insurance information greatly reduces the "clutter" in the active claims workload.

3. HPlusPRO is also used for billing separately funded indigent care public health related tests, water testing and other direct payment services back to the County Health Departments (CHDs). In general it does this efficiently and properly with minimal manual correction.

4. The Cloverleaf integration broker provides a portal for Medicaid submittals and remittances, a single path for interactions with Florida Medicaid.

5. Above all it is the spirit, cooperation and "can do" attitude of everyone involved that makes it work.

What doesn't work well and why not:

1. There is a struggle with missing and incomplete patient identification and billing data. In clinical testing many CHDs send incorrect insurer information such as providing patient's Ryan White, ADAP and even Dental identifier as medical insurance IDs. Additionally the ordering physician may be incorrectly or not specified, creating problems with many commercial carriers. Commercial and other non-Medicaid third party Insurance data received from the LabWare system is input in a "free-text" mode with no established format or guidelines. This results in insurer names and addresses that are a hodge-podge of typos and personally selected abbreviations/contractions/ etc. For example, in the last six months the lab has received over 100 permutations of "Blue Cross/Blue Shield." Deciphering these variants and other claim preparation necessary due to bad insurance data require human intervention creating a labor intensive component within this process.

2. Fitting HPlusPRO into a specimen centric (as opposed to patient centric) world view has presented some challenges. Many have been resolved, some are being worked around, and a few still need a solution. For example, some direct pay and specially funded services print in combination when they should be separately, this requiring manual re-

grouping and in some instances manual creation of an invoice.

3. For the Newborn Screening Program these data quality issues are significant due to the high volume of non-Medicaid claims; 3000 claims/36000 services per week. This was a major consideration in the decision to outsource the billing of other third party claims to a vendor having the needed experience and resources.

Duties and Responsibilities — Senior Clerk:
This position involves accounting principles and practices, arithmetic, office procedures, filing practices and essential computer skills. Performs billing, printing and processing of laboratory documents, as well as research, on various billing and eligibility systems. Reviews laboratory documents for accuracy making corrections as necessary in order to process for billing. Reviews paper claims for system errors. Maintains and processes all incoming correspondence assigned. Corresponds with various facilities requesting additional billing information or responding to questions or concerns from facility billed. Performs clerical duties for all units in this area. Includes, but is not limited to, correspondence, incoming telephone calls, appointments and providing administrative duties and reports.

Duties and Responsibilities — Fiscal Agent:
This position is directly responsible for the daily deposit and posting of all negotiable instruments that are received by the Bureau of Laboratories. This includes posting payments into the MUMPS billing system and being proficient in the use of Microsoft Word, Excel and Access computer applications. Opens, stamps and verifies all incoming mail. Verifies checks and cash received and prepares mail-in-log in Access. Pulls all invoices to match with payments received for Jacksonville, Pensacola, Tampa, Lantana and Miami Laboratories. Posts from remittance voucher payments received from Medicare, Third Party Liability and HMO insurance companies. Posts write offs in the MUMPS billing system for non-billable claims. Collects checks, cash and verifies invoices from the mail-in log received from the Senior Clerks. Maintains paid Medicare, Third Party Liability, HMO files and rotates at the end of Fiscal year. Serves as a back-up in the Porter Lobby on an as needed basis and rotates with coworkers to pick up and verify monies received from the lobby on a daily basis.

Challenging Aspects of SPHL Billing

1. **Will charging fees for SPHL services be viewed as competition for private laboratories?** Probably. However, in this time of cost-containment, it is also viewed as a way to save tax-payer dollars because it is a "user-fee." In addition, it is a way to collect available reimbursement from public and private insurance. While there is competition with other laboratories, ultimately the provider or the consumer will have the choice of where to send laboratory tests.

2. **Where does SPHL billing revenue go?** Ideally, it goes to a "cash account" that is under SPHL control and can be used for laboratory expenses, up to a limit as authorized for spending. If it goes to a state general fund account, it may be authorized for uses other than by the laboratory.

3. **How will billing affect SPHL budget?** Ideally, the SPHL receives authorization to expend the fee revenue it collects for laboratory services. A decrease (or even possible elimination) of state general fund is likely when use of fee revenue is authorized.

4. **How are fees determined for each test?** Ideally, the fees will cover the operating expenses of the laboratory, including personnel, supplies, overhead and equipment replacement. Knowing the cost of each test, or of each group of tests, is critical. Estimating the expected volume of tests is also critical. Setting fees is a balancing act, as increased fees may result in a decreased volume and thus decreased revenue. To the extent that fee revenue is insufficient, other sources of funding must be used to cover the cost of operations.

5. **How does the SPHL get set up to bill?** There are several areas that must be addressed: a) filling out paperwork to be a provider of laboratory services (must be done separately for Medicare, Medicaid, and private insurances); b) installing billing software or a data export to a billing contractor; c) training personnel in billing procedures and in receiving payments; d) updating sample collection forms to include fields for information needed for submitting claims; e) and coordinating with budget and fiscal experts to review monthly, quarterly and annual reports to analyze trends. Each of these areas requires time and expertise.

6. **What must be monitored on an ongoing basis?** Accuracy of billing and deposits, posting of payments to correct accounts, reprocessing of rejected claims, past due receivables, requests for assignment of charges to another account and monthly statements of income.

Basic Billing Processes

1. **Understand justification:** Write business process outline, expected flow of information, and justification for adding or improving the SPHL billing process. If additional software or additional contracts with billing intermediaries is required, write a scope of work document.

2. **Review rules:** Contact either CMS for Medicare, and/or state Medicaid program, and/or private insurance company. Review national rule and local rules as applied in-state. Negotiate to become an in-network provider for private insurance.

3. **Become provider:** Register SPHL as a Medicare provider (Social Security number of a managing employee is required) and as a state Medicaid provider. Medicaid is specific for each state, so services can be provided only to Medicaid-eligible participants who are eligible in-state.

4. **Update forms:** Reformat laboratory test request forms to include data collection of patient's Medicare, Medicaid or insurance identification number, the NPI (National Provider Identifier) number of the medical provider, the CPT (Current Procedural Terminology) code for each test ordered, and the ICD-9 (International Statistical Classification of Diseases and Related Health Problems) or ICD-10 diagnosis code.

5. **Add new data:** Create data fields in laboratory information system to record the third-party payer type, the patient identification number, the NPI number, the CPT code and the ICD-9 code.

6. **Add claims software:** Find provider of local software program to electronically submit claims. Often the state Medicaid program can provide a list of companies who provide these services. These providers will likely also train laboratory personnel regarding billing procedures. It may also be possible to "preprogram" common tests and fees if manual data entry is used.

7. **Export data:** Develop export mechanism to move specific pre-determined data fields from laboratory information system to billing system. Alternatively, the data could be given to a billing intermediary for them to submit claims to specific third-party payers. Either process will require the involvement of experts from computer technology services.

8. **Submit claims:** Submit claims electronically on a pre-determined frequency, weekly, bi-weekly or monthly depending on billing cycle.

9. **Review payments:** When claims are paid, review the EOB (Explanation of Benefits) statement. Record paid claims in billing system. Review unpaid claims, using reason

code on EOB to determine why claim was not paid. Correct errors as needed and resubmit claims. If patient is determined ineligible, repost charge to another account.

10. **Quality review:** Develop system to identify missing payments due to data entry errors and to identify missing claims or duplicate billing due to data export errors. Define system for resubmitting claims for payment and for making claim corrections in case a claim was paid for a service not provided. Update fees and CPT codes as changes are made.

11. **Balance financial reports:** Review weekly or monthly financial reports to determine accuracy of total payments compared to total deposits. Adjust receivable balances to account for reduced revenue due to insurance payment limits for each test. Write off receivables that will never be paid.

12. **Billing of internal programs or other state agencies:** Negotiate fees and test volume expectations with internal health programs such as STD, HIV, and Food Protection; and individually with each agency outside the health agency. Generate monthly invoice using the normal billing software or a word processing document. Payment is generally through and internal state fiscal process. Include these business partners in State Laboratory System Assessments and in ongoing laboratory improvement projects.

Recommendations

1. Maintain standardized APHL survey to collect data on billing revenue and practices, ideally including names of software used for laboratory data and billing. Comparison of this data from year to year will provide an indication of SPHL revenue sources and practices.

2. Develop SPHL "users group" for discussing improvement of billing practices. This group would serve as a collective resource for updating billing processes, including sharing best use of software systems, how key personnel are assigned to accomplish each step of the process, and how cost-saving measures are implemented.

3. Develop and maintain a list of a main billing contact at each SPHL so that information can be shared. This main billing contact may be the lead fiscal officer, the lead administration supervisor, or the Deputy Director.

4. Consider working with a consulting service regarding billing and billing services.

Resources

APHL Consulting: The Association of Public Health Laboratories (APHL) and Labpoint are partnering to provide services to the public health sector involving billing and data messaging.

Cardea: In cooperation with the Oregon Public Health Laboratory has developed a case study on third party billing which highlights the experience of a public health program that has challenges they faced in implementing billing.

eTransX Consulting: eTransX specializes in enabling and facilitating Enterprise Application Integration (EAI) and Health Level 7 (HL7) messaging.

Guide to software systems: CAP Today, an interactive guide to laboratory software systems.

Immunization Billing Examples: Innovative Projects to Improve Reimbursement for Immunization Services in Public Health Department Clinics.

Labpoint Consulting: Labpoint specializes in data integration services, healthcare data exchange, and custom application development. Labpoint is a partner with APHL bringing subject matter expert training and consulting to public health laboratories.

Med-Pro Consulting: Med-Pro focuses on making start up easy and on taking the burden of reimbursement off from staff.

Medicaid billing information: Find Medicaid and CHIP Program information by state.

Medicare billing information: This section is designed to provide Medicare enrollment information for providers, physicians, non-physician practitioners, and other suppliers. Please review the downloadable fact sheets to learn more.

NASTAD Billing Summary: Issue Brief from the National Alliance of State and Territorial AIDS Directors regarding billing by health departments and capacity for third party billing.

NCPHLL Research Paper on SPHL Billing: *Using Fee-for-Service Testing to Generate Revenue for the 21st Century Public Health Laboratory*

STD Billing Resources Guide: The National Coalition of STD Directors (NCSD) has collaborated with key partners to develop a billing resource. This guide is an introduction to what providers need to consider as they approach the decisions surrounding third-party billing.

The use of trade names is for identification purposes only and does not imply endorsement by APHL or CDC.

Billing Survey Data

SPHL in random order	SPHL Bills for Services Y=Yes, N=No, U= Unknown	Source of Information a=ASTHO survey May 2012; b=APHL core survey FY10; c=NCPHLL survey 2011	Bill Medicare	Bill Medicaid	Bill Private Insurance	Bill Providers, Programs, or Clients	Percent Employees funded by fee for service income per APHL Workforce Survey	Percent of revenue from billing per NCPHLL survey	Percent revenue from fees per APHL Core survey*	Has billing software per Listserv Y=Yes, N=No, I=In progress, C=Contracts	Fee Schedule is posted per APHL Core survey Y=Yes, N=No, U= Unknown	Fee for Service for Molecular Tests Y=Yes, N=No, U= Unknown
1	Y	a,b,c	Y	Y	Y	Y	50		56		Y	Y
2	Y	a,b,c	Y	Y	Y	Y	10	<10	12		N	Y
3	Y	b,c	Y	Y	Y	Y	0		0	C	Y	N
4	Y	a,b,c	Y	Y	N	Y	58	>60	57		N	Y
5	Y	b,c	N	Y	N	Y	1	65	65		Y	N
6	Y	a,b,c	N	Y	Y	Y	19	56	37	N	Y	N
7	Y	a,b	Y	Y	N	Y	30		63		Y	Y
8	Y	b	N	N	N	Y			0		Y	Y
9	Y	a,b,c	N	Y	N	Y	12	6	29	C	Y	Y
10	Y	a,b,c	N	N	N	Y	32		48		Y	N
11	Y	b	N	N	Y	Y	37		36		Y	Y
12	Y	a,c	Y	Y	Y	U		>50			U	Y
13	y	a,b,c	N	Y	N	Y	0	80	80		N	N
14	Y	a,b,c	N	N	Y	Y	60	67	59		Y	Y
15	U	none					0			C	U	Y
16	Y	a,b,c	Y	Y	Y	Y	8	>50	26		Y	N
17	Y	a,c	U	U	U	U		59			U	Y
18	U	none					33				U	Y
19	Y	a	N	Y	N	Y	5			C	U	N
20	N	a,b	N	N	N	Y	0		0		N	Y
21	Y	a,b,c	N	Y	N	Y	49	60	49		Y	Y
22	Y	b	N	N	N	Y	9		45		N	Y
23	Y	a,c	N	Y	N	Y	72	65		Y,I	N	Y
24	Y	a,b,c	N	Y	N	Y	25		43	Y	Y	N

APPENDIX 1

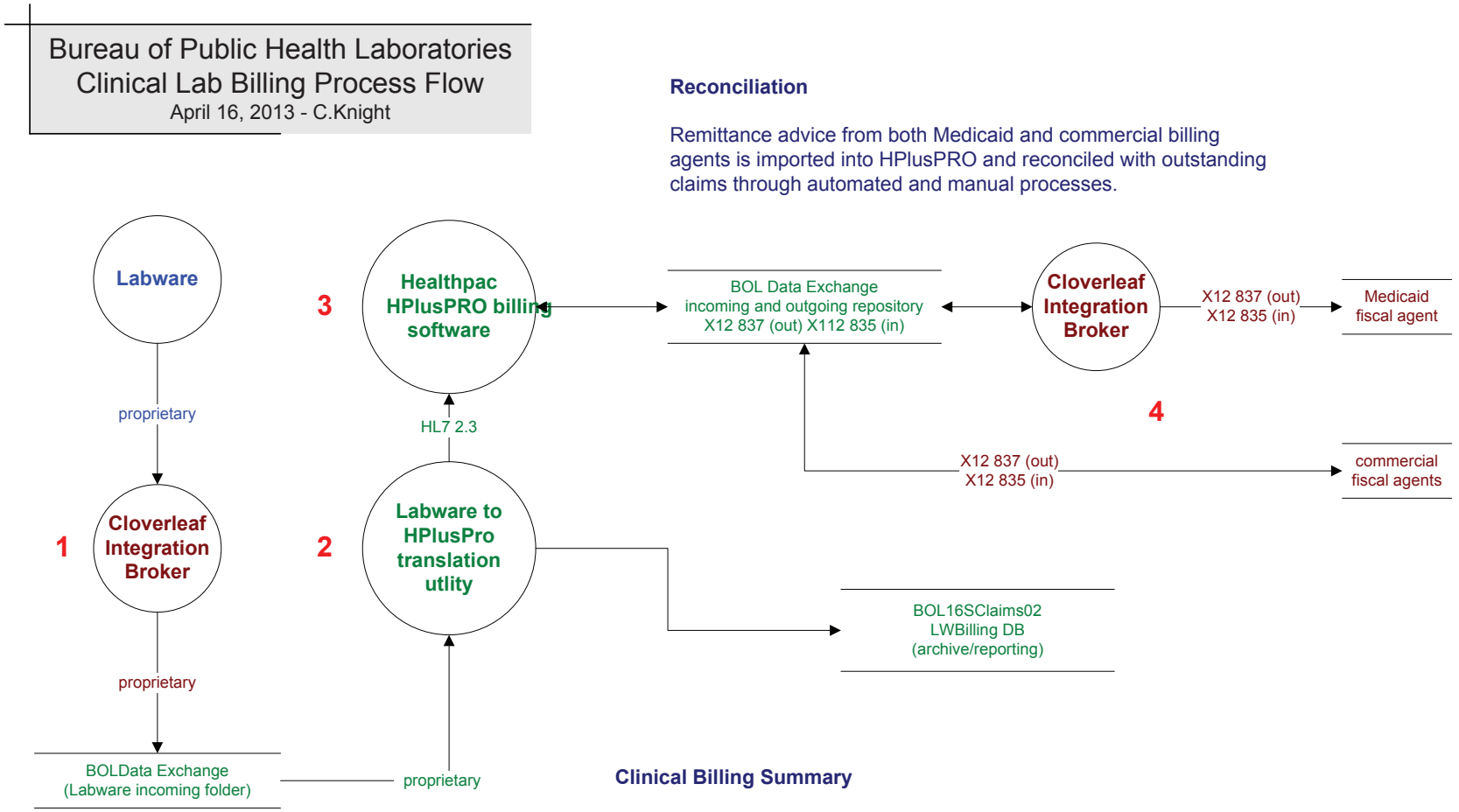
SPHL in random order	SPHL Bills for Services Y=Yes, N=No, U= Unknown	Source of Information a=ASTHO survey May 2012; b=APHL core survey FY10; c=NCPHLL survey 2011	Bill Medicare	Bill Medicaid	Bill Private Insurance	Bill Providers, Programs, or Clients	Percent Employees funded by fee for service income per APHL Workforce Survey	Percent of revenue from billing per NCPHLL survey	Percent revenue from fees per APHL Core survey*	Has billing software per Listserv Y=Yes, N=No, I=In progress, C=Contracts	Fee Schedule is posted per APHL Core survey Y=Yes, N=No, U= Unknown	Fee for Service for Molecular Tests Y=Yes, N=No, U= Unknown
25	Y	a,b	N	Y	N	Y	7		20		N	Y
26	Y	a,b,c	Y	N	Y	Y	10	50	22		N	U
27	Y	b,c	N	N	N	Y	3	24	11		Y	N
28	Y	b,c	N	N	N	Y	15	50	15		Y	Y
29	U	none					33				U	N
30	Y	a,b	Y	Y	Y	Y			19		N	Y
31	Y	b	N	N	N	Y	0		0		Y	N
32	y	a,b	N	Y	Y	Y	0		11	I	N	N
33	Y	b	Y	Y	N	Y	89		61	Y,I	Y	Y
34	Y	a,b	N	Y	Y	Y	15		13		Y	Y
35	Y	a	Y	Y	Y	U	30				U	N
36	Y	a,b	N	N	N	Y	57		61		N	N
37	Y	a,b,c	N	Y	N	Y	0	<10	0		Y	Y
38	U	none					0				U	N
39	Y	a	N	Y	N	U					U	N
40	Y	a	N	Y	N	U	19			Y	U	N
41	Y	b	N	Y	Y	Y	40		46		Y	Y
42	Y	a,b,c	N	Y	N	N	0	1	1		N	N
43	Y	b,c	N	N	N	Y	24	25	20		Y	Y
44	Y	a,b	N	Y	N	Y	0		5	Y,I	N	N
45	N	a	N	N	N	N	0				U	N
46	Y	b	N	N	N	Y	0		43		Y	N
47	Y	a,b	N	Y	N	Y	27		41		Y	Y
48	Y	a,c	N	N	N	Y	5			y	U	N
49	Y	a,b	N	Y	Y	Y	45		64		Y	U
50	Y	a,b,c	Y	Y	Y	Y	34	60	55		Y	Y

Sample State Public Health Laboratory Billing Practices

SPHL	Name of Laboratory Information System (LIS)	Name of billing software	How data are exported from LIS to billing system	Billing process workflow	How payments are received and posted	Quality assurance practices used to assure accuracy
1	Cerner Millemium for Medicare, Medicaid & Private insurance; Promium Element for Environmental	GE Centricity Group Management	Custom Query extracts relevant information	Relevant data (patient info and tests completed) is extracted from LIMS and emailed to the billing contractor along with insurance information submitted on paper.	Many payments received electronically. Checks received are brought back to the lab for deposits.	Billing contractor reviews data and checks whether available insurance information is current and valid. If no insurance indicated, the contractor searched databases for potential insurance coverage.
2	LabWare LIMS v6 for Medicare and Medicaid, Epic Cohort for Environmental	Healthpac HPlusPRO	By passing a csv file on a daily basis from LIMS to HPlusPRO	Patient's ID information is collected on requisition form, entered into LIMS, passed to HPlusPRO, claims are electronically submitted to Medicare and Medicaid	Payments and rejections are received from Medicare via electronic remittance reports and electronically posted into HPlusPRO.	The HPlusPRO system contains edits and reports to ensure all claims are processed and that adjudication occurs.
3	StarLims for Medicaid	Billed from a file out of StarLims	Tests are flagged as completed in StarLims when their report is generated (printed, faxed or e-mailed). An Excel file containing the billing information is generated by StarLims. This file gets deposited in an electronic folder for the Medicaid payment system through a secure portal.	Billing system creates and prints the invoices that are sent to the office for mailing to customers.	Payments are delivered in the daily mail from the state mail service. The checks are totaled and taken to DHHS' cash receipt office. The amounts are verified and entered into billing system using the accounting strings for each section of the laboratory and the funds deposited in the checking account at a local bank.	The monthly export to the Medicaid system is verified against the records in StarLims to make sure the test number and dollar amounts match.

SPHL	Name of Laboratory Information System (LIS)	Name of billing software	How data are exported from LIS to billing system	Billing process workflow	How payments are received and posted	Quality assurance practices used to assure accuracy
4	StarLims for Medicaid and Medicare	In-house system for Patient Tracking and Billing Management	Not exported, a line listing is created and used to identify tests that need to be billed. The patient encounter is created in PTBMIS and the billing is produced in this system.	A line listing is created and used to identify billable tests, lab staff matches the line listing information with patient record. A clerk updates a patient encounter in the billing system to show that the test needs to be billed. The billing system creates the invoice.	Payments are sent electronically to the Department of Health billing office where they are posted in the State Enterprise Financial system.	Manual review of information.
5	Epic (Beaker) and Psyche (WindoPath) for Medicaid, Medicare and Private Insurance, Chemware (Horizon) for Environmental	Epic (Reference Lab Billing)	Epic: directly Psyche: automated overnight charge extractor	See flowchart in Appendix 3	ACH, Lockbox	QA Reports and System Workqueues (charge, claim, account review)
6	Labware (clinical testing) LifeCycle (NBS testing) for Medicaid, Medicare and Private Insurance	Healthpac H+Pro (clinical) In-house systems (NBS)	Proprietary format text file (clinical & NBS)	See flowchart in Appendix 3	X12 835 format files	Billing software contains internal audit and checks, regular data analysis
7	Harvest (Orchard) for Medicaid and Medicare	In-house billing system, then Heath-E-Web (HEW) clearinghouse for claims	Electronically exported to in-house system, then manually entered in HEW.	Print line listing from in-house system, hand enter data into HEW.	Weekly electronic payment to account, download EOB from website	Verify eligibility, review of EOB, correction of errors, resubmit claims
8	Orchard-Harvest, LabWare and Perkin Elmer for Medicaid, Medicare and Private Insurance, PE-LabWorks for Environmental	HealthPac	Billing file generated in LIS and IT staff move to shared server with billing staff; billing staff import file into billing system.	Claims are submitted to correct entity via a claims clearing house.	Have a separate billing group to perform this service.	IT staff have developed program to check the billing file generated in the LIS and the billing system has a separate check that is run on the billing files.

Florida SPHL Billing Flowcharts



Reconciliation

Remittance advice from both Medicaid and commercial billing agents is imported into HPlusPRO and reconciled with outstanding claims through automated and manual processes.

Clinical Billing Summary

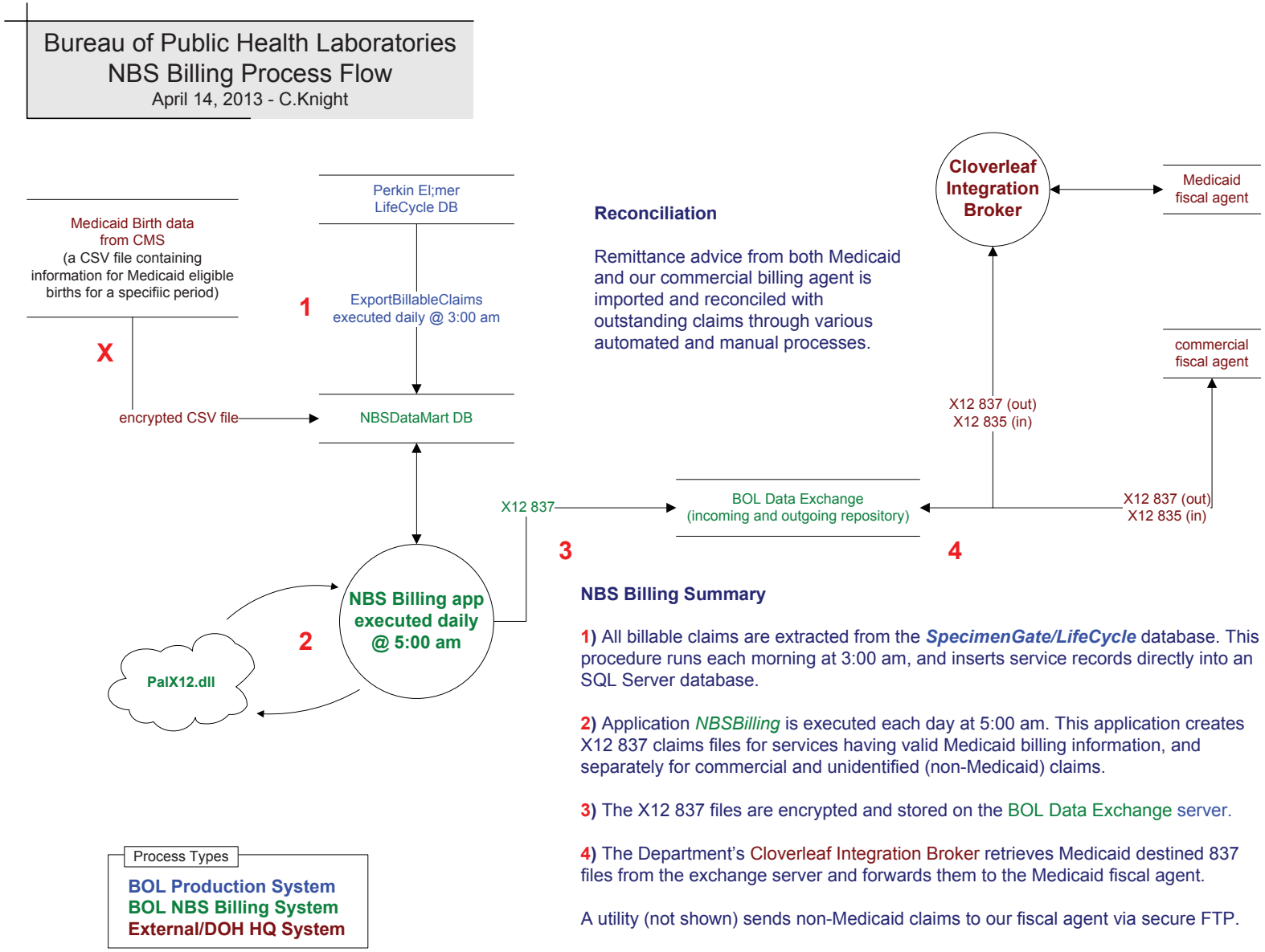
1) Billable claims are exported hourly from the ***Labware*** information system and transferred via *Cloverleaf* to the BOL Data Exchange server.

2) Application *LWBillHandler* is executed each day at 6:00 am on server *BOL16SClaims02*. This application transforms the data from the proprietary format exported by Labware into an HL7 2.3 file for import to the HPlusPRO billing system..

3) HPlusPRO exports X12 837 claims files to BOL Data Exchange repositories.

4) The Department's Cloverleaf Integration Broker retrieves Medicaid destined 837 files from the exchange server and forwards them to the Medicaid fiscal agent. 837 files for non-Medicaid claims are manually transmitted to fiscal agents via secure FTP.

Florida Newborn Screening Billing Flowcharts



Reconciliation

Remittance advice from both Medicaid and our commercial billing agent is imported and reconciled with outstanding claims through various automated and manual processes.

NBS Billing Summary

1) All billable claims are extracted from the ***SpecimenGate/LifeCycle*** database. This procedure runs each morning at 3:00 am, and inserts service records directly into an SQL Server database.

2) Application *NBSBilling* is executed each day at 5:00 am. This application creates X12 837 claims files for services having valid Medicaid billing information, and separately for commercial and unidentified (non-Medicaid) claims.

3) The X12 837 files are encrypted and stored on the BOL Data Exchange server.

4) The Department's Cloverleaf Integration Broker retrieves Medicaid destined 837 files from the exchange server and forwards them to the Medicaid fiscal agent.

A utility (not shown) sends non-Medicaid claims to our fiscal agent via secure FTP.

X) Medicaid ID information from the CMS birth record data is matched up with previously unidentified NBS services, and those denied for having an invalid ID. These are submitted/resubmited as indicated.