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# INSIGHTS

## FINANCIAL “CHECK-UP”: Maximizing Revenue in the Laboratory

by *Tim Dumas, CLS*  
*Tim Dumas Consulting*

As a young lab student at a major training hospital in Washington, DC, I was fortunate to have a lab director who required us to review two case studies per month. It was a great way to show us what part the lab played in the big picture. With this, I became familiar with the SOAP note physicians use for the medical assessments. As a lab manager and consultant, I have found the SOAP note to give continuity and organization to my lab “check-ups.”

I have written this procedure using the SOAP note as guide. Just like tracking a patient’s health, it can be used year to year to measure and compare your lab’s effectiveness, efficiency, and financial health. We will start with **Subjective** to reveal any obvious problems. The **Objective** section is where financial analysis begins and will be the majority of the work. **Assessment** is the summary of lab performance and will identify what is working, what is not, and why. **Plan** will set a positive prognosis for the future of your lab. It allows you to specifically address each lab department that may need to improve and determine how those improvements will be implemented.

A medical office that I recently “treated” was considering closing their lab because they felt they were losing revenue. My initial examination showed indications of an unhealthy laboratory, but with proper treatment, the lab could easily maximize revenue. The lab is referred to as “ECP.” We will review their actual case study using the SOAP note as a reference. The notes have been edited due to space and will not use specific brand names.

### S – Subjective

Does the lab appear to be healthy or does it seem to be ailing? What is the general impression from the medical staff, laboratory staff, and the billing department? Gather their subjective observations as well as your own by asking:

- Is the laboratory a productive ancillary service or a financial drain?
- Is the staffing adequate?
- Are the analyzers appropriate? Are they out dated or worn out?
- Are we capturing all potential reimbursement revenue?
- Is there appropriate square footage and utilization of counter space?

After performing this short subjective survey, continue with the Objective phase to reveal underlying problems. Be sure to make any negative responses first priority.

Here is the ECP Case Study **Subjective** Summary:

- Management’s general impression was the lab was losing money, and closing it was considered.
- Staffing appeared adequate, although administration complained of paying too much overtime.
- The hematology analyzer seemed to be appropriate.

*Continued on page 3*



## FINANCIAL "CHECK-UP"

**FROM THE CHAIR** I would like to take this opportunity to wish all of you a very happy and prosperous New Year. I believe 2008 is going to present some unique and challenging financial issues for laboratory medicine. Along with these challenges, I believe that there will be tremendous opportunities for growth and positive change.

In this issue of *Insights*, you will find the article *Financial "Check-up": Maximizing Revenue in the Laboratory*. What's a better time than the beginning of a new year to examine the financial health of your laboratory? The "Check-up" provides the steps needed to assess your lab's gross and net revenue, as well as providing some additional cost saving tips to assist you in assuring that your lab is financially healthy in 2008.

The competitive bidding demonstration scheduled to begin in July of 2008 will change the face of reimbursement as we now know it. This issue also features an article on the Demonstration Project, providing valuable resource information to assist you in learning more about it and how it will impact your laboratory.

Despite the changes we are facing, COLA's vision to support physicians in their pursuit of excellence in patient care, clinical practice, and laboratory testing remains the same.

The upcoming COLA Symposium for Clinical Laboratories in St. Louis, MO, May 14 -17, 2008 is a continuation of our commitment to the vision as we present new ideas for laboratory excellence for the New Year.

**Donna E. Sweet, MD, MACP**  
Chair, COLA Board of Directors

## COMPETITIVE DEMONSTRATION PROJECT

The Centers for Medicare and Medicaid (CMS) has selected the San Diego, Carlsbad, and San Marcos metropolitan area as the first location for the Competitive Bidding Demonstration scheduled to begin in July 2008. To address questions and concerns about the demonstration and review the final bidder's package, CMS and the project contractor RTI International held a bidder's conference on December 5, 2007 for San Diego area laboratories that are required bidders. (Note: *The final bidder's package must be submitted to CMS by February 15, 2008.*) Due to the volume of questions at this conference, CMS provided additional information to help clarify any remaining confusion.

*Excerpt from CMS Competitive Bidding Demonstration Follow-up to 12/5/07 Bidder's Conference:*

**Question 4:** Are hospital laboratories required to bid under the demonstration if the hospital is a foundation where the parent organization provides the facilities and staff for the clinics (including laboratory services)? What if the laboratory is licensed as an independent laboratory but the medical director(s) of the laboratories are part of a medical group?

**Answer 4:** Laboratories that are enrolled with a Medicare carrier, intermediary, or A/B MAC and perform Part B clinical laboratory services as an independent laboratory or a hospital laboratory performing "nonpatient" services are subject to the demonstration regardless of their affiliation with other entities. Under the demonstration, a hospital laboratory would continue to submit "nonpatient" Part B claims either to its fiscal intermediary (using a 14X Type of Bill) or an A/B MAC. An individual who is seen by hospital personnel on a day only for the sole purpose of specimen collection for clinical laboratory testing (whether on hospital premises or off-site) is considered a "nonpatient."

For additional information about the Competitive Bidding Demonstration, please visit the Demonstration Project website at <http://www.cms.hhs.gov/>. Click the Medicare link, then the Demonstration Projects Evaluation Reports link.

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Financial "Check-up"—continued from front cover

- Chemistries are being performed on a waived analyzer.
- The immunoassay analyzer appeared to be too large in size and function for the test volume.
- There is no audit system in place to compare actual billable tests performed with reimbursement.
- The lab appears overcrowded and overheated by the equipment.

**O – Objective:**

Here is a short list of measurable items to be examined:

- Gross and Net Revenue.
- Are the results reliable? How many repeats to confirm questionable results?
- Timeliness: What is your turn-around-time?
- Are the tests cost effective? Would a particular test be better sent out?

In keeping with the financial focus of this article, I will spotlight the calculations needed to assess your gross and net revenue. There are key terms and numbers we need to know to do an accurate assessment:

1. Number of Billable Tests Performed – In other words, how many tests do you perform in-house? How many are sent out? If your lab is equipped with a Laboratory Information System (LIS), it is easy to obtain the number of each test performed. Some analyzers will keep track of tests performed, but they usually include repeats and controls. We only want to count tests we get paid for. The other method is to review your daily accession logs and manually count the tests performed. Count at least two months, average them, and then multiply by 12 for an annual total.
2. Reimbursement for the Test – Generally the Medicare fee is used as a standard reference.
3. Cost Per Reportable Test – Ask your sales rep to give you the cost per reportable test. Then confirm with your lab manager that all costs and variables are accounted for.

Using these three numbers, we can now lay out a spread sheet that looks like this:

- X = # of billable tests performed per month
- Y = reimbursement per test
- Z = cost per test

The following is an example using a "CBC" test procedure:

| # of Tests performed/month | Reimbursement per Month    | Cost of Test per Month  | Gross Monthly Revenue                    | Gross Annual Revenue    |
|----------------------------|----------------------------|-------------------------|--|-------------------------|
| CPT CODE 85025 "CBC"       | (X x Y)                    | (X x Z)                 | [X x Y] - [X x Z]                        | \$2440.00 x 12          |
| X = 250 tests/month        | 250 x \$10.86 = \$2,715.00 | 250 x \$1.10 = \$275.00 | \$2715 - \$275 = Profit/month \$2,440.00 | Profit/year \$29,280.00 |

To determine the gross revenue for the entire lab, perform this analysis for each test you are currently doing in the lab or for any test you wish to bring in-house. Refer to **Table 1** on page 4.

Continued on page 4

Financial "Check-up"—continued from page 3

**TABLE 1** Spread Sheet from ECP Case Study:

| Lab Test | # of Tests per Year | Reimbursement per Year | Cost of Test per Year | Gross Annual Revenue |
|----------|---------------------|------------------------|-----------------------|----------------------|
| CBC      | 3335                | \$ 36,218.10           | \$ 2,834.75           | \$ 33,383.35         |
| PT       | 1245                | \$ 23,655.00           | \$ 6,225.00           | \$ 17,430.00         |
| UA       | 376                 | \$ 1,312.24            | \$ 282.00             | \$ 1,030.24          |
| A1C      | 962                 | \$ 13,035.10           | \$ 7,215.00           | \$ 5,820.10          |
| LIPID    | 3026                | \$ 56,646.72           | \$ 27,234.00          | \$ 29,412.72         |
| PSA      | 270                 | \$ 5,375.70            | \$ 2,025.00           | \$ 3,350.70          |
| TSH      | 2899                | \$ 74,504.30           | \$ 13,045.50          | \$ 61,458.80         |
|          | <b>Sub-total</b>    | <b>\$ 210,747.16</b>   | <b>\$58,861.25</b>    | <b>\$ 151,885.91</b> |

Each column's sub-total has a purpose for auditing:

- **Cost of Testing** should be close to what it costs, in lab supplies, to run your lab.
- **Reimbursement** should closely match the dollar figure your billing department bills and receives in lab revenue.
- **Gross Revenue** will be used to estimate the Lab Net Revenue.

To calculate the Net Revenue, there are other fixed expenses in the lab that need to be subtracted from the Gross Revenue. Fixed expenses may include:

- Analyzer and service cost per year
- CLIA/COLA fees
- Proficiency Testing
- Computer, LIS, and contract fees
- And the big one - Salary  
If you employ a full time person who works in the lab part-time, then use the percentage of the salary equal to the amount of time spent in the lab for that person.
- Check with your lab manager for other costs that might be hiding.

Subtract the **Total Fixed Expenses** from the **Gross Revenue** (Reimbursement minus Cost per Test). This will give you your **Lab Net Revenue**. Refer to **Table 2** for our case study example. You now have a process for determining and monitoring your lab's financial health.

**TABLE 2** Fixed Lab Expenses and Net Revenue from ECP Case Study:

| Fixed Lab Expenses                |                      |
|-----------------------------------|----------------------|
| Lease                             | 0                    |
| CLIA/COLA                         | \$ 1,000             |
| Service contracts                 | \$ 8,000             |
| Salaries                          | \$ 35,000            |
| <b>Total Fixed Expenses</b>       | <b>\$ 44,000</b>     |
| <b>Gross Revenue</b>              | <b>\$ 151,885.91</b> |
| Minus <b>Total Fixed Expenses</b> | <b>\$ 44,000</b>     |
| <b>Equals Lab Net Revenue</b>     | <b>\$ 107,885.91</b> |

### The Objective Summary for the ECP Case Study:

- Revenue analysis shows a potential net profit of \$107,865 for the year.
- There is excessive paper work. Lab tech is working over time to complete daily paper work.
- Retrieving lab results is time consuming and difficult.
- Lipids are performed using a waived analyzer- test volume is too high for this method and cost is excessive.
- A1c testing is done on a waived analyzer. OK for now.
- A hospital size analyzer is being used for TSH and PSAs. Too big and not effective.

In the Assessment section we can address the issues from the Objective section in more detail.

### A – Assessment:

- Specify the areas that are generating or losing revenue. Each lab department will vary on the revenue generated. Some tests break even but allow for a quick diagnosis. A certain test may cost more to run but saves money by being convenient.
- Identify weaknesses and failures. Each procedure should have a reason it is done a certain way. Not because "we've always done it that way."
- Describe why a test or procedure may not be working.
- Examine areas that could be updated to be more productive, safer, or to generate more revenue. Attend at least one lab conference per year. Read periodicals to stay current. Check with your lab vendor to see what's new.
- What did the audit reveal about the number of tests performed versus the number of tests billed? If the lab does 500 patient CBCs per month, you should confirm that billing collected for about 500 CBCs that month. A one or two percent difference for tests performed versus tests billed is acceptable, but a 15% difference is not.

### The Assessment Summary for the ECP Case Study:

- The lab is indeed profitable. No need to close.
- Hematology analyzer is working well, no need to change.
- Overtime is due to excessive paper work in the areas of QC/QA as well as dictating and reporting results. The tech needs more time in the day or more help with non-technical duties. Possible solution is an LIS.
- Lipid profiles (CHOL, TRIG, HDL) are done on the waived analyzer. Easy to perform, but time consuming and costly for the test volume. At the current 10 minutes and about \$9 per profile, it would be more effective to do them on a chemistry analyzer.
- A1C's done on waived analyzer. OK for now.
- The immunoassay analyzer takes up too much floor space. Requires too much maintenance and also is causing the room temp to increase to unacceptable levels. Cost per test is OK.

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Financial "Check-up"—continued from page 5

**TABLE 3** Plan for the ECP Case Study:

| Problem or Issue     | Recommended Solution | Benefits   | Cost and ROI   | Dead Lines and Updates            |
|----------------------|----------------------|--|--|-----------------------------------|
| Excessive paper work | Purchase an LIS      | <ul style="list-style-type: none"> <li>- Reduce paper reports, find past results faster</li> <li>- Automate QC</li> <li>- Interface with EMR</li> <li>- Track and archive results</li> </ul> | <p><b>Cost</b>-\$15k with EMR interface.</p> <p><b>ROI</b>-saves about \$25k/yr in labor cost.</p> | <p>Priority #1</p> <p>30 days</p> |

Now we can set in motion some actions that will correct any problems found.

**P – Plan:**

- Describe what changes or corrections are needed. Be sure to detail why these changes need to be implemented.
- Explain the desired outcome of the change. List all the benefits of the change, in particular to the patient, lab, billing, physicians, and revenue.
- Designate who will be responsible for the changes.
- List the cost to achieve success and the ROI.
- Set a deadline for each step in the process.
- Schedule monthly meetings to discuss details and progress.

- Replace the current waived Lipid system. Switching to a Chemistry analyzer will reduce cost of testing from \$9.00 per profile to \$1.50, a savings of \$7.50 per test. We can then add DLDL to the profile giving better patient care and further increasing revenue. We can also switch A1Cs to that analyzer, reducing cost from \$8/test to about \$3/test.

The laboratory can be a great revenue generator, and as such, it requires some investment of time and/or money. Re-examine the SOAP check-up process at least once per year to continue maximizing lab profits. The overall process is time consuming and may take some research, but I believe the pay off is well worth it. If it seems that your office is already too busy to take on this task, you may consider a lab consultant.

The **Plan** Summary for the ECP Case Study:

- No changes for Hematology.
- Purchase LIS to interface with EMR. Will reduce paper work and cut overtime. Cost would be about \$15k, savings in labor about \$25k per year.
- Replace the big floor analyzer with a bench top analyzer. This will decrease maintenance time, decrease cost per test, and create room to build more counter space for the new bench top chemistry analyzer.

Here are some guidelines when hiring a consultant:

- Check relevant experience. Get references, if possible.
- Try to find an independent consultant who is not trying to sell you something other than their service.
- Have them work closely with your lab manager.

Here are a few additional cost saving tips:

- Consider using off-brand reagents. Ask your vendor about this option.
- The biggest time saver is implementation of an LIS. Decreases tech time by reducing paper documents, automating QC duties, and organizing QA activities.
- Consider adding tests to your current lab menu. The same time a tech spends processing samples to send out could be spent running tests in-house, generating revenue and enhancing patient care.

For the best financial "health," schedule a "check-up" at least once per year for maximized revenue. When I consulted for the ECP lab presented in this Case Study, they were considering closing their lab because they thought it was not profitable. After their initial check-up, with some changes and updates, the lab now nets over \$200,000 per year. *Is your lab due for a check up?*

*Tim Dumas, CLS of Tim Dumas Speaking and Consulting, Raleigh, NC, www.timdumas.com. As a laboratory consultant, Tim works with POLs on technical and financial issues, and consults for equipment distributors, medical sales groups, and LIS manufacturers. Tim is a certified member of the National Speakers Association, and uses his speaking skills to encourage others to "Imagine the Impossible . . . Find a Way to Do it!" Hear Tim at the Symposium.*

## COLA PATIENT SAFETY GOAL FOR 2008: What is the Cost of Quality?

Every laboratory can benefit by establishing and implementing a program aimed at preventing errors. One of the most frequently documented failures in the pre-analytic phase of the laboratory path of workflow is the failure to properly identify patient specimens.

In addition to impacting patient outcomes, specimen identification errors also affect the laboratory's bottom line. Lucia Berte of Laboratories Made Better! reminds us that "Poor quality is NOT free! Every time work is redone, the cost of quality increases. "

The COLA Patient Safety Goal for 2008 is:

*PRE 16: Prior to collection of a patient's specimen, is the patient's identity verified using two separate identifiers?*

What level of attention does your staff place on the specimen collection process? If the laboratory lacks a "culture of quality" this may result in additional pre-analytic expenses. Patient safety may be compromised if a systematic approach to quality is not infused throughout all practice services.

For each improper specimen collection, consider both the direct and indirect costs you may incur to remedy the situation:

- Value of lost time for personnel to:
  - Identify the error
  - Contact the patient to return for the recollection
  - Collect second specimen

- Cost of a second set of recollection supplies
- Expense of disposing unusable specimens
- Potential expense of malpractice and risk exposure
- Repercussion on the practice's reputation

If you are unsure of your laboratory's level of compliance with PRE 16, design a quality assessment review. Perform the assessment now to determine current performance. Perform the same assessment throughout the year to keep the focus on this critical component. Collect and evaluate data as part of each assessment to understand the lab's level of performance.

The QA review helps you identify the true cost of non-compliance. Assess employee performance in this activity, and be clear about the importance of following your organization's specimen collection process.

Accurate patient identification is the key to quality throughout the laboratory path of workflow. Take time to identify whether you have a potential non-compliance in your practice before it becomes a serious incident that has an unfortunate outcome for a patient. It's your job to improve the health and safety of the patients you serve. Get on board with COLA's Patient Safety Goal!