

Diagnostic Medical Equipment – New Revenue for Your Medical Practice

Consultant Libby Knollmeyer's Lab Machine Primer Series Part 1: Hematology Analyzers

✘ When laboratories in physician offices move out of the **Waived** category into the **Moderately Complex** category, it is usually because they want to acquire the capability of testing CBCs (Complete Blood Counts). To date, there are no waived hematology analyzers, so to do CBCs in-office, the lab must be at least of moderate complexity.

The major difference between Waived and Moderate Complexity labs is that there is **regulatory oversight** for all non-waived labs (moderate and high complexity), as well as requirements for lab directors, testing personnel, proficiency testing, and biannual inspections that are not present for Waived labs, which all add to the cost of having a laboratory.

In general, however, **CBCs are a profit-generating test** and virtually every medical specialty can make use of hematological testing information. A single physician practice can generate a profit performing a minimum of 5 CBCs/day, even with the added financial burdens of having a non-waived laboratory. Performing CBC tests is a great low-impact way to add revenue to your medical practice with diagnostic medical equipment.

The hematology analyzer analyzes whole blood and counts or calculates the following parameters:

- WBC (white blood count)
- Automated WBC Differential

- RBC (red blood count)
- Hemoglobin
- Hematocrit
- MCV (average red blood cell size)
- MCH (hemoglobin amount per red blood cell)
- MCHC (RBC indices of size and hemoglobin concentration)
- Platelets
- MPV (Mean Platelet Volume)

The list of diagnosis codes that support medical necessity is so long that only the *excluded* codes are listed in the National Coverage Determination guidelines. All the hematology analyzers suitable for a POL are moderately complex and therefore require only a high school diploma and the approval of the lab director for testing personnel.

There are two types of hematology analyzers in common use today: **the 3-part differential analyzer and the 5-part differential analyzer.**

In a 5-part diff, all 5 types of WBCs are differentiated in the counting: neutrophils, eosinophils, basophils, lymphocytes, and monocytes.

In the 3-part diff the granulocytes (neutrophils, eosinophils, and basophils) are grouped into one category rather than being counted individually. The cells in a 3-part differential are reported as GRAN, MID, and LYMPH. In both types of analyzers, counts of WBC cell types are reported as both percentages and absolute numbers, with the absolute number being calculated by multiplying the percentage times the total WBC count.

What are the differences between the two types of analyzers?

Other than the differentials there is basically little difference in the two types of analyzers. They all count all the parameters in a CBC. Some of the more sophisticated instruments count reticulocytes (a form of RBC), but this capability is seldom needed in the Physician Office Lab (POL)

setting.

The analyzers differ from one another primarily by test volume capability (which greatly influences the size), mode of introduction of sample into the analyzer (individually or with an autoloader), by method of determining the automated differential, and most notably by cost.

How do you get test results into the EMR?

Most analyzers (regardless of what tests they perform) do not have the capability of depositing results directly into an EMR and require either a laboratory information system (LIS) or a middleware component (of which there are several available) to transport the data to the EMR. This is because most analyzers produce data in ASCII or ASTM files and the EMRs accept data in HL-7 format.

There are hematology analyzers that come with a small LIS or middleware solution. Some practices have tried manual input of data into the EMR, but this is both fraught with significant error and time consuming. By the time an employee is paid to enter the data in a busy practice, a middleware solution could have been put into place and money saved over time. The other option would be to scan the report into the EMR, but this is also time-consuming. In the end, a middleware solution or inexpensive LIS resolves the issue less expensively than any manual process, and with far less error.

How much room does an analyzer take in a lab?

The size of hematology analyzers ranges from about the size of 2 shoeboxes stacked to 3 feet or more in width, but for the POL, the size is generally small and the analyzer will usually fit on a counter with no more than 1.5 to 2 feet of space required. The only environmental condition requirements are room temperature and humidity and the acceptable range for each is quite wide. Having environmental requirements, while they are easy to meet, requires that room temperature and room

humidity be monitored and recorded on each day of patient testing, but a simple room thermometer with hygrometer (available at most hardware stores) will suffice for this.

What does a lab analyzer cost?


3-part diff analyzers are invariably less expensive (\$9,000 – \$20,000 on average) than 5-part diff analyzers (\$30,000 to more than 6 figures)–both to obtain as well as to operate and maintain.

What consumable supplies are used in analyzers?

All analyzers require reagents for operation (at a minimum a saline diluent and a lysing reagent which gets rid of red cells when white cells are being counted) as well as quality control materials (tested daily) and calibrators (tested twice a year). The 5-part diff analyzers also require additional reagents and stains for the diff, which increases the cost of operation significantly. In reality, most of the time the enumeration of the eosinophils and basophils separately isn't of great importance to maintaining the care of the patient, so physicians should carefully assess their need for this information before purchasing an analyzer. The difference in cost from a 3-part diff to a 5-part diff can be tens of thousands of dollars per year.

How do you choose one analyzer over another?

Regardless of the size and type of analyzer an office is considering, it is imperative to do the due diligence and call a users list to determine how reliable the instrument being considered is, how easy it is to operate and maintain, and most importantly, the question is "would you purchase this analyzer again?"

Consultant Elizabeth "Libby" Knollmeyer, B.S., MT (ASCP)  has over 40 years experience in the laboratory industry and has set up many laboratories! She specializes in financial,

operational management and compliance issues for both hospital and physician office laboratories. Libby has a wide variety of experience with her areas of special expertise including financial review and management, Quality Management protocols, outreach development, compliance and regulatory assistance, lab design and up fitting, lab remodeling, and market research for IVD manufacturers. She works independently and with large consulting groups to provide interim management for hospitals, and serves as adviser to lab equipment and supply distributors. She consults (and enjoys traveling) throughout the US and internationally. She can be reached at (336) 288-5823 or at eknollmeyer@triad.rr.com.

How Much Do Medical Practice Managers Make: A 2011 Update



My post from 2010 on how much healthcare managers make is one of **my most-visited posts ever**. It's time to revisit the data and talk about the direction healthcare jobs are taking.

First, some clarification on Office Manager, Site Manager and Practice Administrator titles and job descriptions.

The **Office Manager** title applies in two situations:

1. The first is the top position in a small medical

practice (three physicians or less) supervising at least two employees. In addition to managerial duties, the office manager often functions in a full-time or part-time staff position, either at the front desk or as a biller. The Office Manager in this situation does just about everything including the three Ps – Payroll, Payables and Purchasing.

2. The second situation is the #2 position in a larger practice. The title could also be **Assistant Administrator** or **Operations Manager**. This person is responsible for all day-to-day operations, human resource functions and all department activities. S/he typically directly supervises all supervisors and leads and/or all staff if no middle management position exists.

A **Site Manager** or **Site Administrator** is responsible for one or more locations of a multi-location practice or a group of hospital-owned practices. S/he has all the responsibilities of an Office Manager for the day-to-day operations of a practice, but typically has a central support system. Duties deferred to the central support may include finance, human resources, billing and purchasing. Policies emanate from central administration, therefore the Site Manager does not have the autonomy of the Office Manager or Practice Administrator.

A **Practice Administrator** (sometimes called **Executive Director**) is not only responsible for the overall management of a practice or group of practices, s/he is also responsible for evaluating revenue and expenses, contracting with payers, strategic planning, provider recruitment and marketing. This person rarely has routine clerical duties, although s/he may coordinate or oversee payroll, payables and purchasing.

2010 Wages for All Ambulatory Medical and Health Services Managers

Hourly Median – \$37.19 (Annual \$77,350)

Hourly Mean – \$42.97 (Annual \$89,390)

The median means that 50% of the jobs surveyed paid less and 50% of the jobs surveyed paid more. The mean is the average of all wages. The Practice Administrator position described above relates most closely to these rates, ranging from \$77K to \$89K, with smaller practices paying and entry-level managers making less, and larger practices paying and experienced managers making more.

The wages above, provided from the United States Department of Labor, include the following categories:

- Offices of Physicians
- Offices of Dentists
- Offices of Other Health Practitioners
- Outpatient Care Centers
- Medical and Diagnostic Laboratories:
- Home Health Care Services
- Other Ambulatory Health Care Services

Keep in mind that independent medical and dental offices often pay less than than hospital-sponsored practices and entities, although work schedules and benefits in private healthcare entities can be significantly better.

My observations on raises for healthcare managers for 2011:

- Most medical practices and hospitals have had a freeze on raises or reduced raise budgets of 2% or less for the

past 2 years. Some hospitals are giving managerial positions a small raise to retain good managers.

- Some private practice managers have had raises or small bonuses based on target metrics, increased responsibilities, mergers and launching of new service lines.
- Some managers will only see increases by changing jobs, which can be risky while the economy is still in recovery.

Observations on healthcare jobs from the Bureau of Labor Statistics

- Ten of the 20 fastest growing occupations are healthcare-related. About 40% are in hospitals; another 21 percent are in nursing and residential care facilities; and 16% are in offices of physicians.
- Healthcare will generate \$3.2M new wage and salary jobs between 2008 and 2018, more than any other industry, largely in response to rapid growth in the elderly population.
- Most healthcare workers have jobs that require less than 4 years of college education, but health diagnosing and treating practitioners are highly educated.
- Management, business, and financial operations occupations account for only 4% of employment in healthcare.
- Wage and salary employment in the healthcare industry is projected to increase 22% through 2018, compared with 11% for all industries combined. Healthcare employment growth is expected to account for about 22% of all wage and salary jobs added to the economy over the 2008-2018 period. Projected rates of employment growth for the various segments of the industry range from 10% in hospitals, the largest and slowest growing industry segment, to 46% in the much smaller home healthcare

services.

- Over the 2008-2018 period, total employment of home health aides is projected to increase by 50%, medical assistants by 34%, physical therapist assistants by 33%, and physician assistants by 39%.
 - Hospitals continue to be the slowest growing segment within the healthcare industry because of efforts to control hospital costs and the increasing use of outpatient clinics and other alternative care sites.
-

Monday Special Part Two: Websites & Blogs for the Medical Practice Manager



Here's a sample of some sites that I follow and I think have high-quality content. These sites would be ideal to start you off on your RSS feed collection. Still don't have your RSS feeds set up? **Click here for Part One to learn how.**

Business:

- All Things Workplace
- The Executive Update
- TechTutorTV

Healthcare:

- MedinnovationBlog
- The Medical Quack
- Wall Street Journal (healthcare)

And, please don't forget the Humor:

- Lol Cats
- Cake Wrecks
- Indexed

How Does One Become A Medical Practice Manager?



Am I the Commissioner of
Baseball?

Most people who ask what I do have never heard of managing medical practices. Many people say “I didn't know there was a job like that.” **Medical Group Management Association's (MGMA)** definition of medical group practice and medical practice management is helpful:

Medical group practice is defined as three or more physicians engaged in the practice of medicine as a legal entity sharing

business management, facilities, records and personnel. This includes single- and multispecialty physician offices, ambulatory surgery and diagnostic imaging centers, hospital-based practices and academic practices. (Medical Practice Managers) ... are part of a large and growing field that requires broad knowledge, skills and experience for long-term success. And the decisions they make directly affect nearly every aspect of a practice's operations, from financial performance to patient care.

The next question many people ask is "How do you learn to do that?" People who do what I do come from lots of different professional backgrounds.

It has been a fairly recent development that there are undergraduate and graduate programs for this field. Many physicians who are business-minded have pursued degrees that allow them to manage their own practices while practicing medicine, or enter the healthcare management field and leave active clinical practice. According to a recent Times article, there are 49 schools that currently offer a dual MD/MBA degree.

Here a few ways other than formal healthcare management training that medical managers enter the field.

Nursing/Clinical: I have known some excellent medical practice managers who have four-year nursing degrees, but I don't know a lot of them. It seems that most nurses want to be nursing, not managing, and that they became nurses to care for patients in a hands-on way. I have observed that some managers with nursing backgrounds are instant fixers, and have trouble taking the contemplative route to problem-solving.

Management Experience: There is no question that private practices are coming late to the business party and that experienced managers bring a lot to the field. It can be hard, however, to jump into managing a practice with no former

healthcare experience because so much is so different. The owners of the business (the docs) are also the ones producing the revenue. As my husband says, the job is very much like being the Commissioner of Baseball.

MBAs: Having a MBA brings a lot of tools and resources to the table, but is not the be-all and end-all, especially when it comes to people-management. The best managers in any field truly like and value people, have time for people, are collaborative with people, and care about people. Can this be learned? I don't know. Probably not genuinely.

Technology: Managers who understand and embrace technology will have the advantage over every other manager. Healthcare and technology are becoming more and more wedded. Every priority technology function that healthcare managers have to outsource is an aspect of the practice that is somewhat out of their control. Think practice management systems, EMR, phones, PACS, email, knowledge management, lab interface, hospital interface, patient communication, etc.

Up through the ranks: Managers who have come up through the ranks have a big plus in their favor and a big minus. The plus is that they understand healthcare, the nitty-gritty functions of the practice, have experience relating to administrative and clinical staff, and know how to network. The minus is that they are usually undervalued due to the lack of formal education, and may also undervalue themselves for the same reason.

In the end, it's not where a person comes from that makes the biggest difference, it's who they are and what they've made of their career. Anyone can enter the field of healthcare management, but I do suggest these three prerequisites:

1. Compassion for patients (compassion for all people)
2. A desire to continuously learn; if you stand still you'll get moldy

3. A sense of humor.

For information on organizations that award credentials click **here**.

Here's an interesting history of the field of medical practice management.

Photo credit: Mary Pat Whaley