



*FINANCIAL
MANAGEMENT
SERIES*

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Cost Per Visit — Measuring Health Center Performance

Everywhere you go these days people are talking about being cost-competitive. Federal agencies are challenging Health Centers to justify their level of cost and be more cost competitive with other healthcare providers. Historically, costs for community based health care providers were analyzed on a cost per visit basis, which was then compared with the cost per visit of other providers in the area.

Cost per visit, however, fails to account for the extent of services provided. Using the cost per visit methodology, a Health Center that offers primary care, specialty care, radiology, pharmacy, optometry services, and a rich case management program cannot be compared with a clinic that provides only primary care. In today's healthcare environment, community-based health care providers need to gain an understanding of what is driving their costs. This can help them identify areas for improvement. All expenses at the organization can be classified into one of these categories:

- ◆ Provider Cost per Visit,
- ◆ Direct Medical Support Cost per Visit,
- ◆ Direct Enabling Cost per Visit,
- ◆ Overhead Cost per Visit, or
- ◆ Ancillary and Other Cost per Visit.

This Information Bulletin looks at different categories of costs and explains factors impacting these different costs. By distinguishing among components of costs per visit, organizations can determine whether they are cost-competitive in the provision of medical services, and the extent to which ancillary and enabling services or programs funded by grants may inflate costs.

COMPONENTS OF COST PER VISIT

Provider Cost per Visit

Provider costs are direct costs incurred by billable providers delivering medical services. Provider cost does not include items such as subscriptions, continuing medical education, or other non-personnel services.

EXAMPLE:

Eastside Family Health Center has eight full-time physicians who are paid combined total salaries of \$900,000. The fringe benefit rate is twenty percent (20%) of total salaries, which is \$180,000 additional cost. The total provider cost including fringe benefits is \$1,080,000 (\$900,000 plus \$180,000). The eight full-time providers generate 26,000 billable visits over the period under analysis. Therefore, the provider cost per visit at Eastside Family Health Center is \$41.54 (\$1,080,000 divided by 26,000 visits).

Direct Medical Support Cost per Visit

Direct medical support costs are costs of staff or items that are directly involved in the delivery of healthcare services to patients. This includes:

- ◆ Nurses (RNs and LPNs), Medical Receptionists, Medical Attendants, and Clinical Managed Care Support;
- ◆ Direct Dental Support includes Dental Assistants and Dental Receptionists.; and
- ◆ Supplies

EXAMPLE:

Eastside Family Health Center has four RNs with combined total salaries of \$150,000, three LPNs with combined total salaries of \$120,000, four Medical Attendants with combined total salaries of \$100,000, and medical supplies for \$50,000. The total combined salaries for these ten staff are \$370,000. Again, the fringe benefit rate is twenty percent (20%) of total salaries, which is \$74,000 of additional cost. Therefore, the total Direct Support Cost including fringe benefits is \$494,000 (\$370,000 plus \$74,000 plus \$50,000 in medical supplies). Again, there were 26,000 patient visits at Eastside Family Health Center. Therefore, the **direct support cost per visit** is \$19.00 (\$494,000 divided by 26,000 visits).

Direct Enabling Cost per Visit

Direct enabling costs are those costs associated with social services or enabling services that are outside of the traditional definition of medical services. In many cases, these services are those that distinguish community-based health care providers from traditional group practice providers and private physicians. These services may include:

- ◆ Outreach programs,
- ◆ Translation services,
- ◆ Child care programs,
- ◆ HIV case management programs, or
- ◆ Other services outside the scope of the delivery of medical services even if these services are considered medically necessary.

It is important to distinguish between direct and indirect enabling costs. **Direct enabling costs** are those costs for services that are directly *provided by staff associated with a specific enabling service*, such as a full-time HIV case manager for patients. Another example of direct enabling costs is a case manager who coordinates referrals to specialists for patients. When the referral service is provided by a registered nurse because the case manager is backed up or upon request from the patient, then it is an indirect enabling cost. **Indirect enabling costs** are those associated with services that are *not provided directly by staff associated with the specific enabling services*. An Indirect Enabling Cost is the cost of informally using an LPN to provide case management services to HIV patients on an ad hoc basis.

EXAMPLE:

Eastside Family Health Center has four social workers, two nutritionists, one translator, three drivers for patient vans, and two HIV case managers. The total cost of direct enabling services including fringe benefits and non-personnel costs is \$300,000.

The **direct enabling cost per visit** is \$11.54 (\$300,000 divided by 26,000 visits).

Overhead Cost per Visit

Overhead costs include:

- ◆ Rent,
- ◆ Administrative and facility staff salaries and fringe benefits,
- ◆ Malpractice insurance,
- ◆ Office supplies, and
- ◆ Other costs not already classified into a category.

It does not include costs of resources attributable to ancillary services and categorically grant-funded programs, since these vary across Health Centers. Overhead costs can be classified into **administrative costs** (office salaries, office supplies, legal/accounting costs, etc.) and **facility costs** (maintenance and housekeeping, utilities, rent, etc.). To avoid duplicating costs in the calculation, it is important to pull out direct medical support staff costs (medical receptionists) and direct enabling staff costs (nutritionists) from office salaries.

EXAMPLE:

Eastside Family Health Center has \$1,400,000 of overhead costs. Therefore, the **overhead cost per visit** is \$53.85 (\$1,400,000 divided by 26,000 visits).

Ancillary and Other Cost per Visit

Ancillary and Other costs are those costs associated with services that are outside of traditional primary or specialty care. Ancillary services include:

- ◆ Pharmacy,
- ◆ Radiology,
- ◆ Optometry,
- ◆ Laboratory, or
- ◆ Other diagnostic or supplemental services.

“**Other costs**” is a catchall term for categorically grant-funded programs such as WIC.

EXAMPLE:

Eastside Family Health Center has a pharmacy and a laboratory. The total costs associated with the two programs are \$400,000. Therefore, the **ancillary and other cost per visit** is \$15.38 (\$400,000 divided by 26,000 visits).

Summary of Components of Cost per Visit

By analyzing the individual components of cost, it is possible to compare the cost-competitiveness between Health Centers and other community-based providers to private physician practices. To evaluate the cost-competitiveness first analyze information on a line-by-line basis. To do this, compare each cost per visit category to national medians, for example, the medians from the American Express Tax and Business Services National Ambulatory Care Database. In evaluating Eastside Family Health Center, it is clear that costs for providers, direct enabling services, and overhead costs are higher than the national medians and need to be evaluated further.

EASTSIDE FAMILY HEALTH CENTER ANALYSIS OF COST PER VISIT

	Total Costs	Visits	Cost per Visit	National Median *
Provider Cost	\$1,080,000	26,000	\$ 41.54	\$ 35
Direct Medical Support Cost	\$ 494,000	26,000	\$ 19.00	\$ 19
Direct Enabling Services Cost	\$ 300,000	26,000	\$ 11.54	\$ 5
Overhead Cost	\$1,400,000	26,000	\$ 53.85	\$ 44
Ancillary and Other Cost	\$ 400,000	26,000	\$ 15.38	\$ 16
Total Cost	\$3,674,000	26,000	\$ 141.31	\$ 119

* Source is American Express Tax and Business Services Inc. (TBS) National Ambulatory Care Database, 2001

Now let's look at Westside Family Health Center.

By excluding the non-applicable costs such as direct enabling services and ancillary and other costs, which private physician practices do not provide, Westside Family Health Center is at the high end of the cost-competitive range of other types of providers. By identifying and excluding costs from ancillary and other services, Health Centers can use this type of analysis to compare different Health Centers that perform a different mix of ancillary and other services.

WESTSIDE FAMILY HEALTH CENTER

Analysis of Cost per Visit	Total Costs	Visits	Cost per Visit	Physician Practice Range	
				Low	High
Provider Cost	\$ 800,000	32,000	\$ 25.00	\$ 17	\$ 30
Direct Medical Support Cost	\$ 420,000	32,000	\$ 13.13	\$ 8	\$ 15
Direct Enabling Support Cost	\$ 500,000	32,000	N/A	-	-
Overhead Cost	\$1,000,000	32,000	\$ 31.25	\$ 10	\$ 25
Ancillary and Other Cost	\$ 650,000	32,000	N/A	-	-
Total Cost	\$3,370,000	32,000	\$ 69.38	\$ 35	\$ 70

PROVIDER COST PER VISIT

Four key factors that impact upon provider cost per visit are:

- ◆ Compensation,
- ◆ Productivity,
- ◆ Non-Clinical Activities, and
- ◆ Provider Staffing Mix.

Provider Compensation and Productivity

The labor market generally determines compensation for providers in private practice or non-Health Center settings. Traditionally, compensation for providers working in Health Centers has been below the market as a result of limited funding and other resource constraints. The Medical Group Management Association (MGMA) publishes comparative data on salaries of physicians in private practice.

	Health Center (1)	Physicians in Private Practice (2)
Average Physician	\$ 111,206	N/A
General and Internal Medicine	\$ 108,782	145,375
Family Practice (3)	\$ 110,404	141,493
Pediatrics	\$ 104,138	142,770
OB/GYN	\$ 178,294	219,022

- (1) TBS National Ambulatory Care Database, 2001
- (2) Medical Group Management Association, "Physician Compensation and Production Survey, 2000 Report based on 1999 Data."
- (3) MGMA data represents Family Practice without OB. Median with OB is \$149,436.

The impact of this compensation gap upon Health Centers is far-reaching. Providers may view themselves as under-compensated compared to the market. Such an impression can manifest itself in reduced productivity and low morale, which is dangerous for Health Centers.

In response to this, many Health Centers have begun to implement **incentive-based provider compensation systems** that reward providers on a variety of measures that hold them accountable to all aspects of service and production. Such a plan rewards productive/effective providers without increasing the Health Center's costs. An incentive compensation plan can be based on one or more of the following criteria:

- ◆ Productivity,
- ◆ Patients/members satisfaction,
- ◆ Quality,
- ◆ Effectiveness at managing utilization,
- ◆ Peer review,
- ◆ Compliance with the Health Center's policies.

The following example illustrates how **total provider cost** relates to compensation and productivity:

EXAMPLE: SOUTHSIDE HEALTH CENTER

Physician Type	FTEs	Total Visits	Visits per FTE
Pediatrician	2.00	8,200	4,100
Internist	1.50	5,700	3,800
OB/GYN	1.50	3,700	2,467
Cardiologist	0.75	2,400	3,200
TOTAL	5.75	20,000	3,478

Next, total visits for the above physician staff mix are linked to compensation costs for the different physician types.

Physician Type	Total Salary Cost	Total Visits	Cost Per Visit
Pediatrician (2 FTEs)	\$250,000	8,200	\$30.48
Internist (1.50 FTEs)	\$150,000	5,700	\$26.32
OB/GYN (1.50 FTEs)	\$250,000	3,700	\$67.56
Cardiologist (0.75 FTEs)	\$100,000	2,400	\$41.67
TOTAL	\$750,000	20,000	Average \$37.50

Total provider cost per visit for the primary care physicians (*i.e.*, the pediatricians and the internists) is below the average, while the total provider cost per visit for specialists is above. The median for OB/GYN cost per visit (\$67.56) in the example above is almost twice the average for all Southside Health Center physicians (\$37.50). One explanation may be that the productivity of the OB/GYNs must take into account the time spent performing deliveries in the hospital.

If visits increased by 15%, then Southside Health Center would have provided 23,000 visits. Assuming that salary costs remained the same, the total provider cost per visit would decrease as follows:

$$\frac{\text{Total physician cost}}{\text{Total medical visits}} = \frac{\$750,000}{23,000} = \$32.60 \text{ per visit}$$

There are several sources of comparative data that Health Centers can use to evaluate their costs, including local averages and industry norms. These include the Medical Group Management Association (MGMA) and the American Medical Association (AMA). MGMA collects and reports data on physician costs, productivity and other measures.

Summary:

- ◆ An increase of 15% in provider productivity results in a decrease of \$4.90 per visit. Clearly productivity is one of the main drivers of provider cost per visit. The more visits a Health Center performs, the greater the portion of costs allocated. Each visit serves to increase the Health Center's contribution margin.
- ◆ As physicians and physician groups continue to compete with Health Centers for Medicaid and other patients, it is imperative that Health Centers begin to benchmark their costs against those of physicians and physician groups.

RVUs measure the intensity and skill level required to provide a service.

Provider Productivity & RVUs

Although productivity can be measured using visits as shown above, a more accurate way to monitor and evaluate productivity and effort is through a Relative Value Unit (RVU) methodology. RVUs measure the intensity and skill level required to provide a service. RVU scales assign numerical values to procedures and services that reflect their intensity.

EXAMPLE: SOUTHSIDE HEALTH CENTER

Physician Type	Average Visits Per FTE	Total Work RVUs Per Visit	Average Work RVUs Per Physician	Average Salary Per FTE	Average Salary Per Work RVU
Pediatrician	4,100	0.78	3,198	\$125,000	\$39.09
Internist	3,800	0.74	2,812	\$100,000	\$35.56
OB/GYN	2,467	2.03	5,008	\$166,667	\$33.28
Cardiologist	3,200	1.87	5,984	\$133,333	\$22.28

Total work RVUs per visit is greatest for OB/GYNs – 2.03 — considering the high intensity of many of the procedures they perform, such as deliveries. In contrast, the Internist provided .74 Work RVUs of service per visit. This difference may be due to the larger number of additional procedures performed by the specialists.

Summary:

- ◆ Average work RVUs per physician is used to evaluate individual physicians. For example, if Dr. Smith provided 3,976 Work RVUs of service in 4,000 Visits, while Dr. Jones provided 2,798 Work RVUs of service in 4,200 Visits, then one could argue that Dr. Smith was more productive than Dr. Jones.
- ◆ Average salary per work RVU measures the cost to the Health Center for one unit of service.

The best source of RVUs for medical procedures is RBRVS — the **Resource-Based Relative Value Scale** used by the Medicare program. The RVUs in the RBRVS system are comprised of three components: Work, Overhead and Malpractice. Work RVUs measure the provider skill level and effort required to complete the service. This will be based on the service intensity, complexity and duration. In many ways, this is a truer measure of provider productivity since it will account for those providers who may see fewer, but sicker, higher-need patients.

In the example above, OB/GYNs have the highest salary with \$166,667. However, this OB/GYN also provides more units of service per visit. In essence, the measure indicates how much the Health Center gets for its dollar! Why is this important? Some payors reimburse Health Centers based on the intensity of the service provided. Thus the lower the salary per work RVU, the higher the return on the Health Center dollar.

Whose Responsibility Is Productivity?

Productivity is an **organizational** issue. At many organizations, senior management monitors productivity on a regular basis. Frequently this information is tracked and reported by the Medical Director. All staff — from senior management to receptionist and from nurses to specialty physicians — are responsible for organizational productivity.

If patients are not being moved efficiently through the Health Center from the front desk to the exam rooms, then they will have longer wait times and providers will not have patients to see. If providers do not have staggered hours, then exam room utilization may become clogged at peak times, while early and late in the day there is excess capacity. If medical records are not pulled the day before for the next-day patients, then charts may not be ready when the providers enter the exam rooms to treat patients. These examples illustrate how nearly everyone at a Health Center impacts upon the number of patients treated in a day.

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Providers and Non-Clinical Activities

When analyzing **provider cost per visit**, it is necessary to also take into account the non-clinical factors related to physician performance, including:

- ◆ **Standard workweek** – The number of hours in the standard workweek needs to be taken into account. If physicians are expected to work 35 or 40 hours, this may impact the number of clinic sessions.
- ◆ **Number of clinic sessions** – As with standard hours, it is necessary to take into account the number of sessions which full-time and part-time providers are expected to work. An organization that only requires eight clinic sessions per week is probably not going to be as productive as one that requires nine or ten sessions.
- ◆ **Inpatient and on-call visits** – Time when primary care physicians visit patients in the hospital or when they answer patient telephone calls should be factored into measurement of their total effort. If inpatient and on-call time reduce the hours required in the Health Center, productivity may be adversely impacted.
- ◆ **Meetings** – Physicians and midlevel providers are required to attend various meetings throughout the workweek, including Clinical, Quality Assurance, Administrative and other meetings. To the extent possible, meetings should not be scheduled at times during which physicians could otherwise see patients.
- ◆ **Peer review** – When do the peer review and continuous quality improvement activities occur during the workday? Are these activities considered “extra-curricular?” How is this time compensated?
- ◆ **Travel time** – How is travel time between sites or to the hospital taken into account in evaluating productivity?
- ◆ **Encounter and other forms** – How much time do providers spend filling out forms? Can the forms be improved? Can automation enhance and reduce administrative effort?
- ◆ **Continuing medical education (CME)** – How much time is devoted to CME?

Provider Staffing Mix

The mix of provider staff should be taken into account when analyzing provider cost per visit. The chart below illustrates why this is important:

	Midlevel	Physician	% Midlevel to Physician
Average Salary	\$ 57,914	\$ 111,206	52.1%
Average Productivity	2,585	3,639	71.0%

In general, while the average midlevel provider earns approximately 52% of the average physician, they provide a higher proportion of physician visits (71%). This indicates that while midlevels cannot provide the full range of services for which a physician is trained to perform, midlevels are an effective tool for increasing visits in a cost-effective manner.

DIRECT MEDICAL SUPPORT STAFF COST PER VISIT

Direct medical support staff are FTEs directly involved in supporting the clinical services provided to patients at the Health Center. They include:

- ◆ Medical support supervisors,
- ◆ Nurses, including Registered Nurses (RNs) and Licensed Practical Nurses (LPNs),
- ◆ Medical attendants and phlebotomists,
- ◆ Medical receptionists,
- ◆ Nurses' aides, and
- ◆ Patient care coordinators (*i.e.*, managed care representatives.)

This list is not exhaustive — there may be other medical support staff positions. The major factors impacting direct medical support (DMS) staff cost per visit include:

- ◆ Productivity,
- ◆ Staffing Mix,
- ◆ Ratio of DMS Staff to Providers, and
- ◆ Compensation.

Productivity and Direct Medical Support Staff

Medical support staff are an integral component of Health Center provider productivity. As described above, **support staff are generally a cost-effective approach to increasing productivity.** By allowing support staff to perform lower level procedures such as weighing patients and taking blood pressure readings, physician time is freed up to perform more complex services. Not only will this benefit the patient population, but also the Health Center by increasing revenues.

The optimal medical support staffing mix should be driven by both function and cost.

Direct Medical Support Staffing Mix

The optimal medical support staffing mix should be driven by both function and cost. Each support staff has unique training and job skills. For example, a Registered Nurse can perform at a higher level than a Licensed Practical Nurse, although RNs earn higher average salaries. Following Medicare reimbursement policy, RNs are allowed to perform a basic office visit for an established (returning) patient (represented by CPT code 99211). Having an RN perform this procedure in place of a physician is a cost-effective approach to serving patients. RNs at Health Centers, earn on average \$33,957* compared to the \$112,000 earned among the average Health Center physician. These office visits performed by LPNs are not reimbursable.

Ratio of Medical Support Staff to Providers

How many support staff a Health Center employs impacts on the direct medical support cost per visit. The average Health Center has 2.39 full time equivalent (FTE) support staff per medical provider FTE*, which includes physicians and mid-level practitioners, and 1.92 support staff per total provider FTE. Therefore, a Health Center with 5.0 FTE total providers may have approximately 9.5 medical support FTEs. In general, based on the results of over 150 Health Centers reporting on productivity and staffing measures, ratios of less than 1.5 medical support staff FTEs per provider can adversely impact upon provider productivity. At the same time, anything above 2.5 support staff FTEs per provider has little marginal value.

*American Express Tax and Business Services, Inc., National Ambulatory Care Database, 2001.

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Compensation

Compensation among medical support staff may vary widely, from a high-salaried, experienced RN to a lower-salaried medical receptionist. The average salary range for medical support staff is between \$30,000 and \$60,000, including fringe bene-

fits. In the example below, Northside Health Center has higher total costs because it has a higher ratio of medical support staff FTEs per provider. Northside has 2.0 FTEs per provider as compared to Family Health Center with 1.5 FTEs per provider.

EXAMPLE: DIRECT MEDICAL SUPPORT STAFF COSTS

	Direct Medical Support Staff FTEs per Provider	Average Salary per Direct Medical Support FTE	Direct Medical Support Cost per Provider
Northside Health Center	2.0 FTEs	\$30,000	\$60,000
Family Health Center	1.5 FTEs	\$30,000	\$45,000

But what about unit cost? How does this data relate to the cost per visit at the two Health Centers?

	Average Provider Productivity	Direct Medical Support Cost per Provider	Direct Medical Support Cost per Visit
Northside Health Center	5,000	\$60,000	\$12.00
Family Health Centers	3,200	\$45,000	\$14.06

Based on the data above, the direct medical support staff cost per visit at Northside is less than the support staff cost per visit at Family, even though Northside has higher total costs. **The higher productivity at Northside more than compensates for its higher costs.**

The ratio of direct medical support staff to providers, staffing mix, productivity, and compensation are the major drivers of direct medical support staff cost per visit, and have a significant impact on Health Center productivity.

ANCILLARY CARE COST PER VISIT

Ancillary services may include laboratory, radiology, vision care, pharmacy services or any other supplementary healthcare services that could be performed on-site or off-site.

The major factors driving the costs of providing ancillary services are:

- ◆ Range of Services Provided and
- ◆ Utilization of Services.

These factors and their impact on the ancillary cost per visit are addressed below.

Range of Services Provided

Ancillary costs will depend upon the services the Health Center chooses to directly provide to patients. Because of wide variations throughout the country, there is no “standard” set of ancillary services available at Health Centers.

A key consideration for Health Centers in a competitive, cost-driven, managed care environment is the identification of cost-effective ancillary services that can be provided on-site.

Ancillary Services

A key consideration for Health Centers in a competitive, cost-driven, managed care environment is the identification of cost-effective ancillary services that can be provided on-site. Those ancillary services that are not cost-effective can be outsourced to local providers, as long as the services provided are of high quality and the Health Center arranges for services to non-insured Health Center patients. Payment for outsourced ancillary services varies among geographic regions and across settings (such as rural vs. urban, hospital-based vs. freestanding).

Availability of Services

Beyond cost, another consideration is the availability of services. Health Centers in rural areas are more likely to provide ancillary services because of the limited availability of off-site providers. Because community Health Centers are mission-driven institutions, ensuring patient access to off-site ancillary providers is a key consideration.

Fixed and Variable Costs

In determining the mix of ancillary services, Health Centers also need to consider the fixed and variable costs of offering individual services. These costs may include equipment purchase costs and depreciation, the cost of space, utility costs, and overhead expense allocations.

Utilization of Services

Another major factor driving ancillary costs is utilization of services. The greater the use of ancillary services by patients, the greater the distribution of costs among patient visits and procedures provided. Utilization has a significant impact on the cost-effectiveness of ancillary services and the decision to provide services on-site or to contract an ancillary service out to local providers.

Calculation of Costs

Steps Health Centers can take to calculate costs per visit for ancillary services and costs per procedure are outlined below. These steps should be performed separately for each individual ancillary unit:

1. Calculate ancillary direct costs, which include salaries, fringe benefits, and direct supply costs;
2. Calculate ancillary direct costs as a percentage of total facility direct costs to determine appropriate overhead allocation;
3. Apply direct costs percentage to total facility overhead costs to determine appropriate overhead costs;
4. Add ancillary direct costs plus ancillary overhead costs to get ancillary total costs; and
5. Divide total ancillary costs by total Health Center visits to determine ancillary costs per visit and divide total ancillary costs by total ancillary procedures to determine ancillary costs per procedure.

EXAMPLE:
EASTSIDE HEALTH CENTER CALCULATES LABORATORY COSTS PER VISIT.

STEP ONE: Calculate Laboratory Direct Costs

Salaries and Wages	
3 Lab Technicians at \$38,000	\$114,000
1 Lab Supervisor at \$46,000	<u>46,000</u>
Subtotal	\$160,000
Fringe Benefits (25% of salary costs)	<u>\$40,000</u>
Subtotal Personnel Costs	\$200,000
Direct Supplies	\$50,000
Total Laboratory Direct Costs	\$250,000

STEP TWO: Calculate Laboratory Overhead Allocation

Total Laboratory Direct Costs	\$250,000	
Total Health Center Direct Costs	\$2,750,000	
Laboratory Overhead Allocation	<u>\$250,000</u>	= 9.09%
	\$2,750,000	

STEP THREE: Determine Laboratory Overhead Costs

Total Overhead Costs	\$1,500,000	
Laboratory Overhead Allocation	9.09%	
Laboratory Overhead Costs	\$1,500,000	x 9.09% =
	\$136,350	

STEP FOUR: Calculate Total Laboratory Costs

Laboratory Direct Costs	\$250,000
Laboratory Overhead Costs	<u>\$136,350</u>
Total Laboratory Costs	\$386,350

STEP FIVE: Calculate Laboratory Costs per Visit and Laboratory Cost per Procedure

Total Laboratory Costs	\$386,350
Total Health Center Visits	50,000
Total Laboratory Procedures	35,000
Laboratory Cost per Visit	$\$386,350 / 50,000 = \7.73
Laboratory Cost per Procedure	$\$386,350 / 35,000 = \11.04

Eastside can also compare the indicators above to national averages to evaluate organizational costs. Data on national averages is available from the Medical Group Management Association, the American Medical Association and other sources.

Quality

With this information, Eastside can compare the costs of providing services on-site (\$11.04 per procedure) to outsourcing laboratory procedures locally. However, Eastside cannot make the decision to contract with an off-site provider based on cost alone. So that quality is not compromised for price, we recommend selecting a high-quality provider whose references have been thoroughly checked.

OVERHEAD COST PER VISIT

Overhead expenses include administrative expenses (*i.e.*, management salaries and office supplies) as well as facility expenses (*i.e.*, rent, housekeeping and maintenance, equipment rental and repairs).

The major factors impacting overhead cost per visit include the following:

- ◆ Productivity
- ◆ Staffing
- ◆ Administrative Staff Compensation
- ◆ Facility Overhead
- ◆ Administrative Overhead

Approximately 70% of Health Center costs are people and personnel-related expenses. Of the 30% of costs remaining, approximately 5-10% are facility costs and 5-10% are fixed costs, which are difficult to reduce (*i.e.*, audit services, equipment, interest expenses). In fact, only 15-20% of non-personnel costs are variable and can be impacted by cost reduction strate-

gies. Such expenses as supplies, telephone, and travel do not represent major cost-reduction opportunities for Health Centers. **The significant opportunities for cost reduction, representing 70% of costs, are with personnel.**

Visit Volume, Productivity and Overhead Cost per Visit

As with most measures associated with cost per visit, productivity has a significant impact on overhead cost per visit. Overhead costs can be categorized as either fixed overhead or variable overhead. **Fixed expenses** will not vary with changes in visit volume and/or staffing. These include:

- ◆ Rental expense,
- ◆ Depreciation expense,
- ◆ Facility insurance,
- ◆ Dues and subscriptions.

Variable expenses may include the following:

- ◆ Office supplies,
- ◆ Utilities,
- ◆ Telephone expense.

These expenses may vary based on the square footage of a facility (*i.e.*, utilities), the number of staff (*i.e.*, telephone expense), or the number of FTEs (*i.e.*, office supplies).

These expenses increase or decrease based on a variety of factors, so that the total level of these expenses is a less significant indicator than the unit cost (*i.e.*, per square foot, per visit). Evaluating services on a unit

basis will permit Health Centers of different sizes and service mixes to compare data with national averages and norms.

As visit volume and productivity increase, the overhead cost per visit should decrease, since the fixed expenses are being allocated over more visits.

Staffing

Staffing represents a real opportunity for cost savings in administrative and facility overhead. The ratio of administrative to facility staff mix is critical to the operations of a Health Center, but there is no single optimal staffing mix. It is important for management to be willing to challenge the administrative and facility staffing mix and make changes if necessary.

- ◆ Consider the differences between Health Centers that contract out for certain facility services, *i.e.*, housekeeping, and Health Centers that directly employ these positions when evaluating staff levels.
- ◆ Take into account the number of administrative supervisory staff and the ratio of supervisors to staff.
- ◆ Categorize office salaries into functional job categories for evaluation, rather than evaluating the total expense alone and use discretion in developing appropriate categories for unique situations. The categories below are only one exam-

ple of functional categorization. Functional categories may include the following:

Executive management, *i.e.*, CEO, COO;

Finance, *i.e.*, CFO, Accountants, Bookkeepers;

Administrative support, *i.e.*, Receptionists, Telephone Operators;

MIS and Billing, *i.e.*, Billing Clerks, Systems Analysts;

Other Administrative, *i.e.*, Marketing, Planning Staff, Medical Record-Keeper, etc.

- ◆ Compare average salaries at a Health Center with local and regional norms.
- ◆ Calculate the percentage of the total budget devoted to administration and to administrative salaries in particular.

Staffing represents a real opportunity for cost savings in administrative and facility overhead.

- ◆ Use administrative support staff ratios to evaluate the efficiency of a Health Center, and for comparative data among Health Centers. The average Health Center has approximately five support staff FTEs per medical provider (1). This figure includes support FTEs directly involved in the delivery of care (*i.e.*, nurses, medical assistants). The table on the right breaks down administrative support staff ratios by major functional areas:

STAFF PER MEDICAL PROVIDER	National Median (1) Ratio
Administrative staff per medical provider FTE	.75 FTEs
Medical records staff per medical provider FTE	.35 FTEs
Billing/ MIS staff per medical provider FTE	.85 FTEs
Facility staff per medical provider FTE	.26 FTEs
Enabling staff per medical provider FTE	.62 FTEs
Other staff per medical provider FTE	.71 FTEs
Direct medical support staff per medical provider FTE (2)	2.39 FTEs
Total support staff per medical provider FTE	5.82 FTEs

(1) TBS National Ambulatory Care Database, 2001

(2) DMS Staff are not usually considered overhead, but can be included in the support staff per provider FTE calculation.

The figures above may be used as benchmarks for comparison with individual Health Center results.

Administrative Staff Compensation

Compensation among administrative staff may vary widely, from a high-salaried, experienced CEO to a lower-salaried receptionist. The average salary range for office staff is between \$18,000 and \$30,000, including fringe benefits.

It is also important to recognize the economies of scale that are possible in larger Health Centers. These larger Health Centers have the opportunity to manage overhead costs due to the increased visit volume. Smaller Health Centers must distribute fixed costs over a smaller base of visits compared with larger Health Centers.

EXAMPLE: EXECUTIVE MANAGEMENT COMPENSATION COSTS

	Northside Family Health Center	Family Health Center
CEO Salary	\$75,000	\$100,000
CFO Salary	\$60,000	\$70,000
CMO Salary (1)	\$75,000	\$75,000
Subtotal	\$210,000	\$245,000
Annual Visits	50,000	100,000
Cost per Visit	\$4.20	\$2.45

(1) The CMO total salary expense is estimated at \$150,000, with 50% of that salary applied as overhead expenses for the administrative component of the position.

In the example above, the executive management team at Northside has lower salaries than Family. However, on a cost per visit basis, the cost at Northside is one and a half times that of Family. This is due to the significantly greater visit volume at Family.

Facility Overhead

Facility overhead can be **fixed**, *i.e.*, rent, or can **vary** based on square footage, *i.e.*, utilities, or other factors.

- ◆ It is important that Health Centers understand the cost per visit for facility overhead as well as total overhead. Then these figures can be compared with local, regional and national norms through various data sources, *i.e.*, NACHC or State PCA data. For example, **the facility overhead at a Health Center is on average between 5% and 10% of total costs.**
- ◆ Certain expenses can be analyzed separately, including rent, transportation, housekeeping/maintenance, and facility insurance. For example, rental costs can be analyzed on a cost per visit basis, but also on a cost per square foot basis. Rental unit costs can be compared with local real estate norms to ensure appropriateness. What factors may influence this figure? For example, is the building publicly owned? Has the building been recently renovated? Is there an opportunity to purchase the building? These issues must be understood in evaluating rental expense appropriately. Because rental costs are fixed, an increase in visits or productivity can reduce the rental cost per visit. Whenever possible, Health Centers should use the best available comparison benchmark data to evaluate facility overhead costs.

Administrative Overhead

Administrative overhead can also be **fixed or variable**.

- ◆ Health Centers should regularly compare administrative expenses with benchmarks to ensure the appropriateness of these expenses. On average, **the percentage of total costs at a Health Center that are accounted for by administrative overhead is between 25% and 40%.**
- ◆ Administrative expenses that can be analyzed separately include office supplies, telephone expenses, marketing and professional services. These expenses can be analyzed on a cost per visit basis as well as a cost per FTE basis to assess reasonableness.
- ◆ Health Centers should ensure that administrative expenses do not grow at an unsustainable rate over time, and that each line item in the administrative budget be closely scrutinized. For example, some Health Centers are conducting RFPs and extended bidding processes for certain types of supplies, equipment and other professional services to reduce expenses and increase quality. Health Centers must be careful to ensure that the effort required in the process will be worth the savings generated.

- ◆ Outsourcing of certain administrative services continues to be one option for Health Centers to consider in the management of overhead expenses. Some Health Centers have service contracts for MIS support services, billing or other functions.
- ◆ Another option that Health Centers across the country have been pursuing is the sharing of administrative services among multiple Health Centers. There are many groups of Health Centers that have come together to share services, including MIS, marketing and other functions. The goal of these arrangements is not only to reduce these expenses wherever possible through group purchasing and other activities, but also to increase the quality of the services provided. **Sharing technology expertise may not generate cost savings immediately, but should improve the quality of data and management reports available, and in the long-run, will probably reduce costs.**

By examining the components of the cost of a Health Center visit, organizations can determine what is driving their costs and compare these costs with other service providers at local, state and national levels.



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