

When Healthcare Professionals Understand Business Fundamentals

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Healthcare workers sometimes struggle with understanding business realities. We offer, as a prescriptive measure, mental accounting, a method of demystifying the recognition of revenues and expenses in healthcare organizations to improve the adoption and successful implementation of information systems. We suggest teaching the “language of business”, to those without a business background, by using a simple mental model explanation of how an organization becomes, and stays, profitable. Such an approach would allow healthcare workers to better understand the “why” of keeping the organization profitable. We offer simple diagrams as a more intuitive way to explain business costs to healthcare workers.

INTRODUCTION

The traditional operating structure of hospitals, nursing homes, and clinics is based on individual business functions (Brown, Patrick, & Pasupathy, 2013). In this context, healthcare business administrators do not assume responsibility for clinical processes or outcomes and avoid interfering with the decision-making of medical staff. Instead, the primary role of healthcare administration is to provide the clinical function with support and resources. Examples of resources include capital, facility construction, maintenance, personnel administration, billing, collections. A limitation of this traditional model of healthcare operations is that the clinical side is unfamiliar or misunderstands the business side of healthcare causing conflict and misunderstanding. The adoption of information technology to streamline or reorganize workflows and business processes further exacerbates this view as the clinical side perceives healthcare becoming business driven.

Many people use heuristics to make financial decisions to keep track of where their or an organizations money is going and how to keep spending under control, many of which are wrong or misinterpreted. Thayer (1999) suggests the normative Mental Accounting Model (MAD) as a rational explanation that regular people use (not business trained), to explain economic decisions that have evolved to economize on time, thinking costs and to deal with self-control problems. Unlike traditional accounting and financial rules that have been codified and taught in textbooks, mental accounting rules must be observed and inferred to learn the rules (Thaler, 1999). It is thought that healthcare has its own mental accounting rules and that there is a need to dispel business myths in the healthcare setting.

Healthcare, as a service industry, differs from product industries in that value comes from the work process and the clinical outcome. Prior to the Patient Protection and Affordable Care Act of 2010, the

financing and regulatory environments were incongruent with the implementation of value-enhancing information technology, like Electronic Healthcare Record (EHR) systems, that are needed to leverage the power of the Internet to improve patient outcomes. In today's healthcare environment, patients, healthcare workers, insurance companies, and the government are working toward an integrated solution to improve healthcare outcomes and lower healthcare costs. In this context, Information Technology (IT) enables profound changes in almost every aspect of how healthcare operates. IT also alters the traditional view of how services and medical information are accessed, received, coordinated, and paid for.

Research into the effect of a health professional's role and relationships in this new environment has found that competition between and among professionals negates or neutralizes the advantages of IT (Currie, Finn, & Martin, 2010). It is believed that a better understanding by healthcare professionals in the areas of how, what, and why their organization generates revenue and consumes resources would improve clinical outcomes and acceptance of IT (Nix & Szostek, 2016). To this end, we offer a simpler, more holistic, explanation of the relationship of revenue and expenses to profit. The proposed model is also congruent with the traditional healthcare professional's view of the business function. Bottom-line, we believe, that if we could disrupt or replace current healthcare mental models with something better, healthcare workers and students on the clinical side would understand business better at some level, and the degree to which they would cooperate with the implementation of information systems and associated changes to business processes they have long struggled with, would greatly accelerate.

We begin with an overview of accounting and profit equations and then discuss an alternative presentation of healthcare revenue and costs. Next, we provide a detailed listing of healthcare revenue streams and costs. We suggest that healthcare workers who better understand the healthcare business structure will be more willing to support structural changes in the organization. Increased employee support should lead to improved business efficiencies and better clinical outcomes.

BACKGROUND

The traditional reimbursement structure of clinical services in most healthcare settings is based on medical specialty and nursing services. In hospitals, these services consist of pediatrics, surgery, internal medicine, among others. Each of these services is organized in hierarchical clinical departments which have dual responsibility and accountability. First, they are accountable to the attending physician and their orders, and secondly, they are accountable to healthcare administration. These traditional autonomous and hierarchical structures are incompatible with the design of electronic information systems and the shift toward outcome-based medicine (Brown et al., 2013). Historically, few clinical professionals understood business concepts or the need to integrate information technology across clinical and business processes. Further, it could be argued that they have no requirement, or at least felt, no need, to achieve this understanding.

The successful implementation of a healthcare information system, in particular, Electronic Healthcare Record Systems (EHR's), is closely tied to a clear strategic direction for the organization and an understanding of which data along the organization's value-chain are needed to deliver a successful outcome. The shift from the traditional funding model in Healthcare to an outcome based model was driven by the passage of the Patient Protection and Affordable Care Act (ACA) of 2010. This Act, by mandating EHR's, directly involves the clinical side of healthcare in the business side of healthcare by requiring healthcare professionals to track patient activities, their own activities, and report the outcomes of medical treatments. To this end, all clinical employees and healthcare professionals must understand the desired business outcomes of the organization and the part they play in achieving the organization's strategic goals.

Business Intelligence (BI) and healthcare analytics are technologies that provide analytical capability to help healthcare organizations improve service quality, reduce costs, and manage risks (Zheng, Zhang, & Li, 2014). The effort to adopt Health Information Technology (HIT) with financial incentives and penalties attached to the Patient Protection and Affordable Care Act (ACA) of 2010 was a step in the right direction, but establishing new policies is far easier than implementing them. The challenge faced by

many healthcare organizations is the lack of technical and organizational infrastructure, and skilled manpower (Lee, Moy, Kruck, & Rabang, 2014).

The Healthcare Leadership Alliance (HLA), a consortium of six major professional membership organizations suggests five competency domains common among all practicing healthcare managers: 1. communication and relationship management, 2. professionalism, 3. leadership, 4. knowledge of the healthcare system, and 5. business skills and knowledge (Stefl & Bontempo, 2008). Skilled manpower exists, but often lacks the understanding of the balance between clinical outcomes and data-driven business decisions. While business training is available for many clinical healthcare professionals, we propose that teaching healthcare workers about the business side of healthcare, using an approach based on the traditional healthcare model using graphics, would lead to a better understanding of business strategy and financial positioning.

The ACA emphasizes outcome based medicine which rewards the clinical side of healthcare for being more entrepreneurial in their approach to generating business income. It would be useful to encourage entrepreneurial thinking by introducing foundational theories and concepts. Labrecque et al. (2010) suggests that knowledge transfer is crucial in the healthcare domain so that all stakeholders adopt a common understanding and language to coordinate their actions and prevent the transference of confusing information. In this context, stakeholders may have different disciplinary backgrounds, and thus have their own languages, interests, and concerns related to how the healthcare business should work.

The clinical side of healthcare has often used cartoons in the role of patient education to influence compliance and prognosis (Delp & Jones, 1996; Green & Myers, 2010). Cartoons require limited demands on the reader's attention, are rich in ideas, simple to understand, and are not time consuming (Labrecque, Coutu, Durand, Fassier, & Loisel, 2016). Importantly, patients prefer receiving health messages in graphic form as they see a representation of themselves (Green & Myers, 2010). It has been shown that reading and showing activate different information processing systems in the brain thus, facilitating greater understanding of the message.

BASIC ACCOUNTING

Business professionals are familiar with the basic accounting equation but the same cannot be said for those who operate outside of business or business education. Knowledge of this equation is considered to be the domain of finance and accounting experts and not the domain of the average clinical healthcare professional. The basic accounting equation, also called the balance sheet equation, represents the relationship between the assets, liabilities, and owner's equity of a business. It is the foundation for the double-entry bookkeeping system (Ferris, Wallace, & Christensen, 2014). For each transaction, the total debits equal the total credits. It can be expressed as:

$$\text{Assets} = \text{Liabilities} + \text{Capital}$$

Every business transaction affects at least two of a company's accounts, the accounting equation stays "in balance," meaning that the left side should always equal the right side. For corporations, the term "capital" is changed to "stockholders' equity." Simply stated, the accounting equation shows the resources owned by the firm (assets) and the amounts of those resources that can be claimed by its creditors (liabilities) or by its owners (stockholders' equity).

Stockholders' equity has two components: contributed capital and earned capital. Contributed (or "paid-in") capital represents the amounts invested in the corporation by its stockholders. Earned capital represents the accumulation of net income and loss the corporation has experienced over its lifetime that have been kept (or retained) by the corporation rather than being distributed to the stockholders as dividends. This component is called "Retained Earnings." Thus, we can also present the accounting equation in this form:

Stockholders' Equity

$$\text{Assets} = \text{Liabilities} + \boxed{\text{Contributed Capital} + \text{Retained Earnings}}$$

This expanded accounting equation shows the two components of stockholders' equity. The amount in retained earnings is made up of three components: revenues (amounts earned), expenses (costs incurred), and dividends. The difference between revenue and expenses produces the firm's net income or loss for the period. Dividends, which are distributions of the firm's earnings to the stockholders, are subtracted directly from retained earnings. Thus, the equation can be expanded even further as follows:

Stockholders' Equity

$$\text{Assets} = \text{Liabilities} + \text{Contributed Capital} + \boxed{\text{Retained Earnings}}$$
$$\text{Assets} = \text{Liabilities} + \text{Contributed Capital} + \boxed{\text{Revenues} - \text{Expenses} - \text{Dividends}}$$

Although the accounting equation is very important, it generally isn't intuitive for most people, and it does little to show the average healthcare professional the role they play in producing revenue for the organization. Also, it doesn't connect well with the traditional view of the business side supporting the clinical side in a healthcare setting.

CALCULATING NET INCOME

It is likely that the average person understands "Income Minus Expenses Equals Profit". Clearly, in order for a business to survive, even a non-profit organization, this equation must result in a positive number. In order to calculate net income, one must find the difference between the revenue earned and the costs incurred by an organization during a specific period of time (Ferris et al., 2014). To properly calculate profit in a healthcare setting, one must have a good understanding of what types of goods and services increase revenues and what the costs to the organization might be while generating those revenues. The implementation of Enterprise Resource Planning (ERP), Customer Resource Management (CRM), Electronic Health Record systems (EHR's) and the like are an effort to better understand and map actual costs.

Total revenue is the sum of the amounts earned by the healthcare organization by selling its products and providing its services. In healthcare these services are the medical specialties, nursing services, drugs, and other medical products that patients purchase. Total expenses can be diverse in nature, but generally include items that are directly involved in the production of the item or service such as materials, shipping costs, and medical fees, along with overhead (indirect) items including office supplies, administrative costs, legal fees, and rent payments.

The net income or loss reported by healthcare organizations represents the results of the organization's operations during a particular time period. Each year, the management team must review these results, along with other information, and determine whether any adjustments to the strategic plan are warranted. They may use the money to re-invest in the business, pay off a loan or simply save it. If the organization has generated a net loss, this means that the organization's expenses exceeded its revenues for that time period. For nearly all businesses, this is something to be avoided. However, at the beginning of a business's life, or after making some significant change in the strategic plan, net losses are sometimes unavoidable.

To determine total revenue, start with the firm's net sales. This is the gross amount earned by the business from providing its goods and services, minus discounts, returns, and allowances for missing or damaged goods. Next, the firm calculates gross profit by subtracting the cost of goods sold (COGS) from

net sales. COGS represents the acquisition cost of the items sold during the accounting period. Although healthcare is primarily a service industry, a provider may keep an inventory of items to sell to its customers. This may include items such as medications or orthopedic accessories. After subtracting COGS from net sales, gross profit represents the amount of profit the organization is able to generate by selling these inventory items. If the organization does not carry inventory, the calculation of gross profit is omitted.

The next step is to subtract all operating expenses from gross profit. These expenses can be described as the costs needed to keep the business running. For a healthcare provider, examples of operating expenses might include employees' salaries, utilities, insurance, bandages, medicines, repairs, and marketing. Operating expenses will also include depreciation and amortization expenses. These amounts represent an allocation of the cost of "long term" assets (e.g., surgical equipment, furniture, patents, or computers) to the time periods in which those assets are used to help generate revenues. Subtracting all of these expenses from gross profit results in the business' operating income (Ferris et al., 2014).

Next, the firm reports its "non-operating" activities. This includes "other" revenues earned and/or expenses incurred that do not pertain to the primary business activity. These can include the sale of tangible assets like equipment, interest earned on a bank account, or the results of a casualty or theft. Finally, after all revenues and expenses have been accounted for, the last step is to report the organizations income tax expense to arrive at net income for the period. Note that taxes may be levied on a business by more than one government entity (for instance, a business may need to pay both state and federal taxes). Additionally, tax rates can vary based on where the company does business and/or legislative changes.

REVENUES AND EXPENSES IN THE HEALTHCARE INDUSTRY

Revenue Sources

A primary source of revenue for healthcare professionals comes from the fees paid to private insurance companies by patients. Insurance companies that provide health care insurance operate on the principle that people be well more often than they are sick. As a result, insurance companies expect that, on average, they will earn far more in premiums than they will eventually pay in benefits. Federal and state governments also pay healthcare providers Medicare fees. These fees come from taxes paid by the public. Federal and state governments also provide some revenue for the health care organizations through subsidies and grants which may pay for research and training opportunities (White & Griffith, 2016).

A significant portion of healthcare revenue comes from out-of-pocket patient expenses. Health care patients generate the majority of revenue for the healthcare industry as they pay for medical services without the help of a third party (i.e., insurance) based on the rates the healthcare facility sets. A small but increasingly important source of revenue comes from private donations. Corporations or individuals may donate funds to healthcare facilities because they believe strongly in the services the facility provides or because they are seeking a tax deduction. Typically, hospital administrators lobby for such donations from the community (Safian, 2014).

Generating Additional Revenue

Healthcare marketing and analysis of data are important and can lead to additional revenue sources. In the past, for example, administrators believed that the emergency room (ER) was the place that uninsured people visited for medical attention when they had no other options. A large part of ER expenses were ultimately unrecovered (Kuo, 2001). As a result, many hospitals moved funding out of the ER and into other areas. The problem with this view is that most referral business actually comes through the emergency room (Karpel, 1993) (Meckstroth, Dore, & Kerr, 2016). Doctors don't send patients to the admission desk if they need assistance during off-hours. Rather, they are sent to the ER for assessment and are then admitted if necessary. This reality shifts the focus of the ER from indigent patients in need of nonemerging care to patients who actually have insurance but who visit the ER at their

physician's request. It is also important to work with the financial team to improve coding, resolve claims wasting away in accounts receivable, and asking patients for upfront payments (Singh, Wheeler, & Roden, 2012).

In an era where healthcare executives are learning to do more with less, there is need to alter services in keeping with a higher need for integration and support of the patient-centric models of healthcare (Meckstroth et al., 2016). This management view requires both increased inclusion and effective communication with key stakeholders. Healthcare executives must work with doctors and nurses to create new services that might generate revenue in the future. Nurturing and developing physician champions and other healthcare leaders enhances the probability of success when altering services and changing procedures (Meckstroth et al., 2016). It is important to coordinate with doctors and staff to agree on common preference items (Herman, 2011, 2012) and identify the most cost-effective, best-value devices, medications and other preference items that can help out profitability. Physicians who understand the relationship between expenses and profit can form physician-led "value analysis committees" can make standardization of products more efficient.

Communicating effectively with healthcare staff is equally important in leading to greater revenue. Clinical side staff can review contracts with eye to better service and efficiencies. Investing in green projects and developing sustainability measures to increase energy savings are more effective if the whole team is aware of the cost savings. Developing process teams to look at operating room, emergency room, and home health arenas for throughput issues can improve patient outcomes but also can lower costs and improve efficiencies. This kind of thinking can be a win-win for both the traditional side of healthcare but also the business side (Herman, 2011). Employees who are knowledgeable about expenses can help find ways to improve efficiencies and patient outcomes at lower costs (Haas, Vlases, & Havey, 2016). Developing an ongoing dialogue between pharmacists and physicians to figure out which drugs are the most effective for clinical purposes and if there is any overlap with generics. Consider mergers and other ways to share resources with other healthcare organizations to lower costs (Blair, Durrance, & Sokol, 2016).

Expenses

Labor Costs are a significant expenditure for healthcare organizations. In 2008, wages and benefits accounted for 59.5% of a hospital's expenditure with other labor costs an additional 10%. Today, it is approximately the same with labor representing up to 60% but benefits and bonuses are no longer assumed (Shinkman, 2015). Data driven measures of productivity and performance determine salaries and benefits. Physicians often receive on-call and other incentive pay. Performance is not just based on patient outcomes but a spectrum of measures across the total delivery of medical services. Better data is not easy to come by and physician labor costs can often impair an institution's financial management calculations (Shinkman, 2015). Once again the importance of gaining the clinical side's cooperation in implementing IT solutions can position the organization in a stronger financial position.

Other expenditures are the costs associated with appropriating state-of-the-art test equipment and information technology. Healthcare providers under the Patient Protection and Affordable Care Act of 2010 are required to modernize and create Electronic Healthcare Records (EHR's) for their patients. These costs come with high upfront costs and long-term Return-On-Investment (ROI) calculations difficult to interpret. Healthcare organizations must also consider the cost of integrating their EHR's with insurance companies, patients, government agencies and the business side supply chain to create a seamless and integrated business model. Healthcare organizations must also pay for Human Resource Management (HRM) activities, the procurement of medical and business supplies, and the maintenance of capital assets (e.g., equipment and computers). In addition, they also provide support for Community groups (Russo, 2016). These costs can include the hours volunteered by healthcare professionals, the use of equipment, and the consumption of medical supplies.

Uncollectible Fees

Healthcare organizations must also consider bad debts. When medical care is needed, there is little time for the prospective patients to conduct a financial analysis to determine where the needed care can be purchased for the least amount of money or whether the cost of care is affordable. Hospital bills can result in surprising charges that many patients are not prepared for or able to pay. Challenges exist in collecting medical fees because: (1) patients normally did not desire to incur the medical charges associated with the care; and, (2) there are no tangible goods that can be repossessed when a patient fails to pay. This leaves the healthcare organization facing a decision. They can either write-off the unpaid charges as charity care, or they can pursue collection attempts and possibly be forced to write-off the costs as bad debts.

NET INCOME FROM THE CLINICAL EMPLOYEES POINT OF VIEW

Calculating an organization's net income is often complex and confusing for healthcare professionals lacking business knowledge. In the traditional view of healthcare administration, the primary role of healthcare administration was to provide the clinical function with support and resources, including capital, facility construction, maintenance, personnel administration, billing, collections, etc. The traditional structure of clinical services in most healthcare settings was based on medical specialty and nursing services. Thus, there was little need for the clinical side to understand the business function. In fact, neither patients nor physicians considered patients to be customers, with the possible exception of elective surgery patients (Mantzana, Themistocleous, & Morabito, 2010; Mazurenko, Zemke, & Lefforge, 2016).

Most Americans are ill informed about personal finances let alone business finances. The Investor Education Foundation of the Financial Industry Regulatory Authority (FINRA) found that a majority of American adults (61 percent) couldn't correctly answer more than three of five fundamental financial literacy questions which is an increase from 58 percent in 2009 (Singletary, 2013). According to Northwestern Mutual, 67 % of Americans consider themselves savers but 54 % have a level of debt that is equal to or greater than their savings. 58 % believe their financial planning efforts need improvement but 34 % have not planned for their financial future (Robaton, 2015). In our dealings with healthcare executives we found many business managers tried to explain their business model in the simplest of terms to very smart healthcare workers trying to find common ground.

Table 1 suggests the traditional view of healthcare administration from the clinical point of view. This traditional view suggests that healthcare administration pays salaries first, followed by benefits and taxes. These are the costs most employees see and care about. Overhead costs and administrative costs associated with a business are considered only after salaries and benefits are paid, if at all. These are fixed costs. These are expenses that are not dependent upon the level of goods and services that are produced by the healthcare organization.

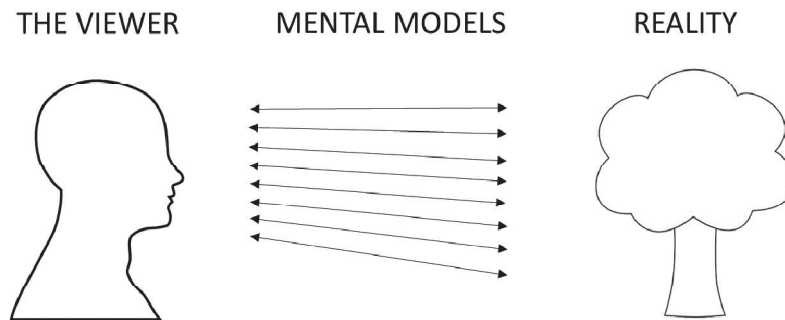
We believe that most healthcare workers have a poor understanding of variable costs. Variable costs are costs that change in proportion to the amount of goods and services a healthcare organization produces. Variable costs are also defined as the sum of the marginal costs over all units produced. This number is reflected in the number of patients seen and the additional goods and services they buy. It is necessary to understand how costs divide between variable and fixed in order to forecast future earnings generated by changes in the number of patients seen.

TABLE 1
BASIC BUSINESS HEALTHCARE EMPLOYEE COSTS

HEALTHCARE EXPENSES (from the Clinical Employee Perspective)	
Basic Salaries	The costs clinical employees typically see and care about. (Fixed Costs)
Basic Salaries + Benefits	
Basic Salaries+ Benefits + Taxes	
Overhead Costs	Firm Infrastructure, Human Resource Management, Technology Development, and Procurement (Fixed Costs)
Administrative Costs	Salaries, benefits, and taxes of administrative support. (Fixed Costs)

This narrow view of business operations by clinical employees may be explained, at least in part, by “mental accounting”(Thayer, 1999). Thayer (1999) defines mental accounting as the set of cognitive processes used by individuals to organize, evaluate, and track financial activities. Figure 1 is a simple graphic that suggests a viewer seeing reality through the lens of multiple mental models. Mental accounting is comprised of multiple components. The first focuses on how individuals perceive outcomes and how decisions are made and later adjusted. From a clinical worker’s point of view, theory predicts that the primary “outcome” would be the individual’s paycheck. Thus, it is possible that financial decisions related to the healthcare organizations would be evaluated in terms of the effects on the salaries and benefits received by the clinical employee. This differs from the view of the business professional who is more likely to evaluate financial decisions based on the effects on the entity’s net income (which includes both revenues and expenses).

FIGURE 1
MENTAL MODEL



Mental models affect the way we see and interpret reality. They are the filters by which we see the world.

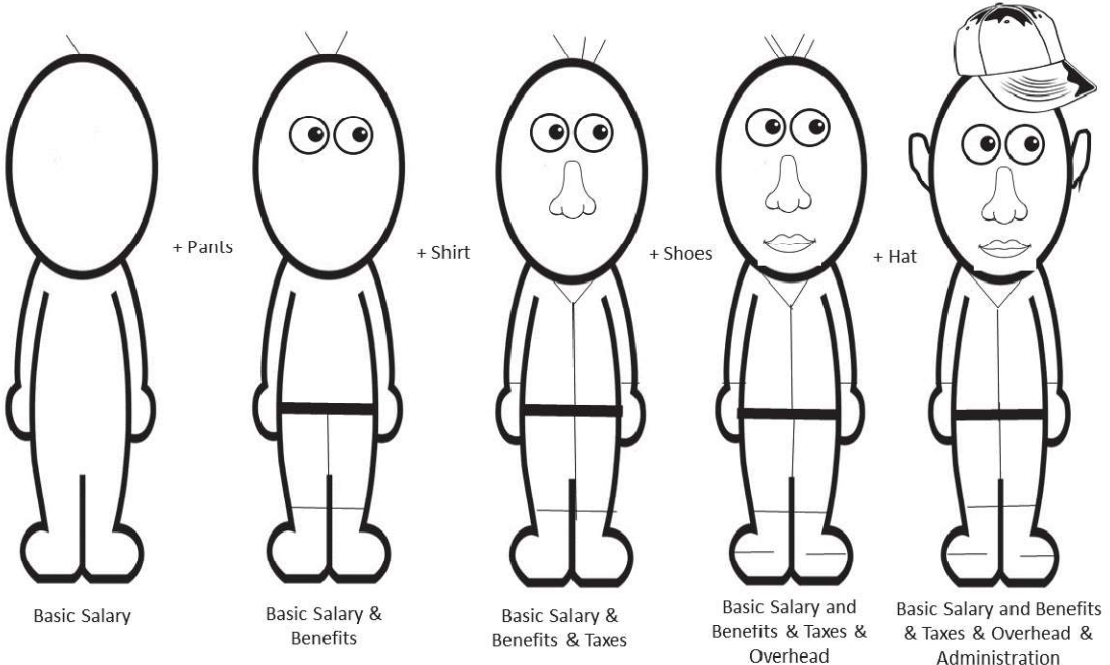
The second component of mental accounting focuses on the assignment of activities to specific accounts. This applies to both sources and uses of funds. Again, in our current context, the clinical employee may create a “source” account such as gross salary, and “use” accounts such as benefits, and taxes. While the business side of the organization views salaries as a “use” of funds, the clinical workers may very well view salaries as “sources” of funds. From a mental accounting perspective, the creation of a model for calculating the entity’s net income focusing on clinical salaries may be helpful in increasing the overall, and more comprehensive, business knowledge of these professionals.

Anecdotally, the CEO of a specialty practice of over 40 doctors explained to his doctors that the income they generate goes first to pay their salaries. The next pot of money pays their healthcare benefits, bonuses, professional travel, and annual training expenses. Next, their federal, state, and local taxes are paid. Finally, the overhead and operating expenses of the specialty practice are paid. This includes staff salaries, legal fees, credentialing, and hospital negotiating costs. Interestingly, most doctors in this practice would have been happy earning just enough to cover their salaries and taxes.

In this particular situation, many of the doctors undervalued the costs of their varied benefits and expertise provided by the CEO and his staff for preparing tax records, credentialing, and other administrative tasks. They had no idea what it took to keep the lights on and to keep the practice running. Thus, from a mental accounting perspective, explaining the calculation of net income to clinical professionals with their salaries as the starting-point may be helpful. Table 1 has the advantage of capturing the business novice at the point they are most likely to understand. By starting with salary and adding the hidden costs that the business must pay.

Yet, we suggest, based on the mental models held by healthcare workers, Table 1 and Figure 2 together, might offer a clearer explanation of how healthcare costs add up. Figure 2 uses stick figures to gradually add hair, facial features, and clothes as we add variable costs to our business model. Such a graphic would aid healthcare workers in understanding the different variable costs that the business incurs but also how they fit in. Stick figures imply people and that business decisions affect people.

FIGURE 2
BASIC BUSINESS HEALTHCARE EMPLOYEE COSTS



The myopic view of expenses held by many clinical professionals may be one of the reasons that more doctors are opting out of private practice and becoming staffers at hospitals. Given their limited view of business operations, a hospital environment allows them to receive their salaries and let the administrators worry about all of the other costs needed to run the business (Morse, 2015). It is predicted that because of financial pressures, a growing number of U.S. doctors will leave private practice for hospital employment, with only one-in-three physicians remaining independent by the end of 2016. The number of independent physicians has declined over the last several years, from 57 percent in 2000, to 49 percent in 2005, to 33 percent in 2012. It is significant that 36% of physicians cited reimbursement pressures; and 23 percent gave overhead costs, as the reason (Morse, 2015). As a result, more than a

quarter of independent doctors, 26 percent, are choosing to opt-out of Medicaid with another 15 % opting out of health exchange plans and 3 % out of Medicare.

Using greatly simplified models as shown in Figure 2 as an example, we propose that teaching healthcare professionals more about where healthcare income comes from and how it affects their salaries, benefits, and taxes will lead to better engagement and cooperation with healthcare administrators. Understanding the effect of variable costs and how variable costs are generated can lead to a better understanding of why healthcare organization seem obsessed with limiting salary increases and improving benefits. Further, it will lead to better implementation of processes and procedures that improve the patient outcomes. A better understanding of basic financial principles by the clinical side of healthcare will increase effectiveness and the efficiency of the clinical as well, leading to improved patient outcomes.

CONCLUSION

The traditional relationship of clinical services and business services within a healthcare organization still exist. The government-mandated decision to automate healthcare records requires clinical workers to acquire business savvy in order to understand the measures by which they are being evaluated. The business side is moving toward Enterprise Resource Planning (ERP) systems in order to provide for a better patient experience while lowering expenses and raising revenues. Organizations that have top management support, effective management of human resources, full involvement of the entire workforce (including physicians), education and training, team working, continuous improvement, a corporate quality culture, customer focus and the use of a combination of management techniques under a quality management system are necessary for a successful implementation of Total Quality Management (TQM). A business-knowledgeable clinical staff member who is familiar with how revenue is generated and, more importantly, how expenses affect the entity's "bottom line" can be an asset to healthcare administrators seeking to improve service quality as well as business performance (Mosadeghrad, 2015). Business education that starts with salary as a focal point for clinical workers may better engage these workers in the "how" and "why" of revenues, expenses, and net income. Future research should focus on how non-business healthcare employees evaluate the entity's financial performance under varying approaches to understanding business concepts.

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