REGIONAL MEDICAL; AN ENVIRONMENTAL ANALYSIS

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ABSTRACT

This discussion addresses several specific items, processes and funding sources that impact American health care costs. Regional Medical is used to illustrate the impact of these items. The discussions range from the 2010 Health Care Bill to billing practices, staffing concerns, inventory control procedures and economic issues.

INTRODUCATION

With all the complaints about high costs of health care circulating in the media and other communication avenues, there needs to be some understanding of the source of these costs. In the United States, we have multiple factors that set the US health care at a higher quality and efficiency, and thus a higher price. These factors include the higher priced medical care where patients are offered multiple treatments and pay our doctors, hospitals, equipment and pharmaceutical company's higher amounts than in other countries (MacGillis 2010). Americans have access to facilities, like Regional Medical, with beautiful architecture, marble floors, and comfortable rooms that contain art work and plants. These benefits come at a cost to the patients aNd could be a factor influencing the high costs of health care.

HEALTH CARE BILL

The Health Care Bill signed in March 2010 introduces a comprehensive health insurance reforms that will be put into effect gradually with some provision implemented immediately but with most changes taking place by 2014 (HealthCare, 2011). Focusing less on reforming health care, the bill puts a spotlight on and changes how health care is financed. The bill raises Medicaid payment rates as well as Medicare payment rates for primary care providers (HealthCare, 2011). Additional benefits to the bill include patients under 26 that can be included on their parents insurance and the attention to insurance fraud (HealthCare, 2011).

Because the inclusion within the legislation of the third party reimbursement system reform, insurance providers will have requirements on how their profits are utilized which will reduce the amount spent on advertising and overhead costs while saving more money for paying client's health care costs (HealthCare, 2011). Under this legislation, insurance providers will not be able turn away patients due to pre-existing conditions (MacGillis 2010). In addition, senior citizens under Medicare Part D will get substantial discounts on their medication when they reach their *donut hole* (HealthCare, 2011).

Under the 2010 health care act, more than 32 million Americans will now have access to affordable health care coverage. Having better preventative care should improve the overall health of Americans. This should benefit Regional Medical substantially because less than 1 percent of the 2010 service costs were recovered from uninsured, self-paying patients. Given the anticipated ability of Regional Medical to avoid these extensive service write-offs, Regional Medical operating income should stabilize or improve over the next few years.

Despite the numerous anticipated benefits from the new 2010 health care bill, there are many concerns. The question becomes where the government is going to acquire the resources to fund the provisions for urban centers as well as increase the amount of support for rural hospitals.

DIAGNOSIS RELATED GROUP (DRG) ISSUES

The diagnosis-related group (DRG) is a system used by Medicare and private insurers to classify patients based on their diagnoses (Zeldman et al 2009). DRG charges represent the average resources needed to treat patients in that DRG group based on a national average (Zeldman et al 2009). Currently approximately 1,000 DRGs are used by Regional Medical and other hospitals and health care providers to bill for their services.

DRGs are fixed fees determined by Medicare based on the actual procedures, expected length of stay, age of patient, and the principal diagnosis. They are then assigned *weights* that are used by third-party insurance to provide a reimbursement allocation. The Medicare system then uses these relative weights to determine case rate mix, and ultimately hospital reimbursement (Zeldman et al 2009). DRGs are in reality a negotiated amount that is not affected by actual hospital costs.

Regional Medical works very hard to control costs, but because of the economy and other factors, most procedures do not generate net income. The DRGs are not affected by the severity of the illness, the difficulty of treatment, the prognosis, or the effort involved by the medical staff. It is in

Regional Medical's best interest to utilize resources to match the DRG payments while giving the patient the appropriate care. For example, a hip replacement surgery typically has a hospital stay of five days covered by DRGs. A longer stay is not reimbursed, so unless the patient must stay longer for medical reasons, it is in the best interest for Regional Medical to prepare the patient for release on the 5th day or sooner. If the patient needs more time, a transfer to a rehab facility is the best solution rather than continuing to incur very expensive inpatient costs.

Regional Medical is preparing for a new Medicare reclassification. One of the effects of the new Health Care Bill is that the Medicare DRG payments will increase, giving the hospitals more reimbursements to offset the costs (HealthCare, 2011). The effect of the reimbursement increase has yet to be determined. However, since Medicare and Medicaid patients represent 49 percent of Regional Medical's patient base in 2010, any additional reimbursement should be substantial.

UNEMPLOYMENT IMPACT ON HEALTH CARE

Millions of workers have become unemployed since the economic downturn began in 2007. With the loss of employment comes the loss of health insurance. Weighing the options between going without insurance, qualifying for governmental support, or paying for unrealistically high third party insurance, the health care options are devastating. Research estimates that for every one percentage point increase in unemployment, the number of uninsured people increases by 1.1 million (FamiliesUSA, 2009).

The effects of unemployment are becoming more obvious to Regional Medical. The percent of charges recouped by uninsured/self-pay patients for 2010 was less than one percent or .957 percent compared to 2009 recovery of 1.310 percent. Converting the uninsured/self-pay into revenue numbers, the 2009 unrecovered service revenue was \$29 million compared to \$34 million in 2010. As a not-for-profit, Regional Medical recognized these losses as charity to support its not-for-profit status even though the amounts exceed the requirement needed to maintain the status. There is also the negative effect of patients cancelling elective services and surgeries because they cannot afford the procedure. These specialized procedures tend to bring in more revenue than the basic preventative care; so again, Regional Medical suffers a loss.

INSURANCE COVERAGE CONCERNS

As a non-profit health care provider, Regional Medical's main goal is to provide an unmatched spirit of excellence to the art and science of health care as well as to improve the quality of life for people and communities of the area (Regional, 2011). To accomplish this goal, Regional Medical requires prudent financial leadership even though obtaining a profit is not its main goal. Self-pay patients have a very low payment rate of one percent, so those are costs that Regional Medical must address. The revenue that Regional Medical gets from the federal government is Medicare and Medicaid. RDG payments do not cover the Medicare and Medicaid patient costs, so in order to be financially healthy Regional Medical must rely on the higher reimbursements from third party payers.

Regional Medical cannot operate without the money received from these third party payers. The main third party payer to Regional Medical is Blue Cross and Blue Shield of Texas (BCBS). Only 13 percent of the 2010 patient mix had BCBS but the BCBS payments accounted for \$30 million above cost which offset some of the \$74 million of the loss resulting from self-pay, Medicare, and Medicaid patients.

Every so often, insurance companies audit their reimbursements to hospitals, and like the DRGs for Medicare, the companies reclass what they will pay the hospitals as reimbursement for services. In June of 2010, BCBS completed an audit and drastically cut Regional Medical's reimbursement rates. Inpatient payments were the most impact by the audit and subsequent reclass. Before the reclass, Regional Medical was receiving \$15,545 per inpatient but after the audit the amount was reduced to \$4,584 per inpatient.

The reclass has been detrimental to Regional Medical because rather than making a profit from patient payments, an amount less than operating costs is being received. This reclass has caused a relatively healthy hospital into drop into an unhealthy financial downward spiral. As a result, radical cost-saving efforts throughout the system are being identified and employed.

STAFFING CONCERNS AND ISSUES

The Medicare statute requires that per-discharge payments to hospitals in the inpatient prospective payment system (IPPS) reflect geographic differences in the cost of labor. As a result, Medicare's IPPS payments are adjusted by a hospital wage index that seeks to reflect the average price of labor at each hospital. To construct the index, Medicare clusters hospitals into metropolitan statistical areas (MSAs) and residual areas (balance-of-state or rest of state). These geographical areas approximate hospital labor markets, and average wages are calculated for each using wage data from an annual survey of IPPS hospitals' labor costs (CMS, 2011).

The occupational mix stems from the hospital IPPS. The IPPS is designed to standardize payments for inpatient care where there is a base and capital

payment for each Medicare case. The base operating payment contains two components; a labor-related amount which is essentially the labor costs and a non-labor related amount. These amounts are then submitted by the annual cost report to Medicare which adds the market rate of labor to the DRG calculation (Holmes et al 2006).

This occupational mix calculation began in 2003 and occurs every 3 years (CMS, 2011). This year, Regional Medical is currently going through an occupational mix review. Three years ago the mix calculation and found many flaws in Regional Medical's staffing configuration. Regional Medical had nursing departments where in one nursing unit, there were 4 managers and 5 employees, whereas the national average is 1 manager to 4 employees. This was helpful because Regional Medical leadership provided the management of affiliated units to illustrate how Regional Medical was receiving less funds from Medicare because of the inefficient staff mix. Over the past few years improvements have been made to the occupational mixes, but there is still excessive overhead at Regional Medical to be cost efficient.

NATURAL DISASTER PREPARATION

One of the most difficult situations that a health care organization has to deal with is the aftermath of a natural disaster. Such disasters include earthquakes, tsunamis, floods, hurricanes, tornados, epidemic disease outbreaks, and just severe weather changes (Morgan, 2010). Following these emergencies, there would be a substantial need of emergency treatment for the influx of patients needing critical care. The large numbers of suddenly ill or injured patients can easily exceed the capacity of the health care provider that forces the provider to accommodate the extra people in any way possible. Usually after a major disaster, hospitals and the area receive help from organizations such as the Red Cross. However, this aid usually takes a few days to organize so the first action needs to come directly from the health care facilities (Rottman and Shoaf, 2002). It is the hospital's social responsibility to treat the additional patients while at the same time care for current patients, doctors and staff. The strain that results from disasters comes from multiple factors including damage to facilities, unpreparedness, and treatment availability.

The most immediate effect of natural disasters is the direct damage to the facility and the strain on the facility during recovery. Depending on the nature of the disaster, damage to the health care facility could render equipment or areas of the hospital unsafe or unusable.

For Regional Medical, the ability to cope with a natural disaster would be location dependent. Having a disaster that wiped out the main trauma facility would be far more destructive than a disaster that wiped out a smaller entity in

the system. This is because Regional Medical's primary trauma facility can handle the support of another facility while it will be more difficult for another facility to support the primary facility. For this reason, Regional Medical makes sure that every entity is prepared in at least some way for a disaster whether it is extra supplies, training, or on-call specialists. For all of Regional Medical's RHCs, the ability to handle a natural disaster would be very low because they do not have the direct resources to handle the disaster. Low income hospitals could give the basic care, but the specialty treatments such as advanced surgeries would not be possible. The benefit of being part of a RHC system is that Regional Medical has locations all over the area. If a location was hit with a disaster, many of the facilities could have easy access to assistance with the larger facilities. Regional Medical could use the helicopter support and emergency medical support (EMS) on alert when word of a disaster is imminent. This is a cost effective and reliable way to address the need for assistance immediately.

DRUG AND SUPPLY COSTS

Some of the oldest and least expensive drugs on the market are now becoming very expensive. For example, a potassium supplement containing 500 doses costs \$40 ten years ago. Today, the rate for this once inexpensive drug is over \$200 (FDA, 2011). This increase in price harms not only the consumer, but the health care provider as well. In the past, hospital pharmacies were considered to be a revenue source. Now with the government and other third party payers setting the reimbursement for services, the pharmacy is treated as a cost center. While the cost to provide pharmaceuticals and services increases, the reimbursement received remains constant (FDA, 2011). As previously discussed, based on the procedures and primary diagnosis of patients coming through Regional Medical, the payments that are received from the CMS is a set price; Regional Medical cannot ask CMS for money just to recover the increased cost in pharmaceuticals.

For a health care provider that is cost conscious, having an extensive inventory of medical pharmaceuticals and medical supplies is a very involved process. Hospitals work under a different type of costing compared to pharmacies and drug companies that receive preferential costing based on the desired quantity. This is incredibly beneficial for a hospital because the savings can be passed on to the patients and the financial stability of the hospital. Unfortunately, drug costs have significantly increased over the past decade, and are expected to increase even more based on factors such as advertising, FDA regulations, and R&D costs, more prescriptions are being written, and higher priced drugs replacing existing drugs (FDA, 2011).

Regional Medical, along with most health care facilities have a pharmacy and therapeutics group called Drug Formularies, where a group of pharmacists and specialists get together to determine which drugs to acquire for the hospital. For example, there may be dozens of drugs available to treat cholesterol, but the Formularies will pick what they believe to be the best 1 or 2 cholesterol drugs to have in stock at the hospital. These drugs are then approved to be medical costs. Having these formularies can greatly affect the costs of pharmaceuticals on the hospital because they decide what to buy. Having a knowledgeable group could easily save the hospital millions of dollars a year just by analyzing what drugs to stock. Also, keeping an eye on the amounts supplied is also critical to cost savings. Regional Medical has crash carts or emergency carts throughout the hospital filled with drugs that might be needed. A lot of the time these drugs will expire, rendering them useless. Regional Medical uses a reverse wholesaler that will let the hospital recoup a small portion of the costs, but not a significant amount. Keeping an eye on the supplies needed and avoiding overstocking is another way to save costs for the hospital.

A drug cost increase for Regional Medical and other health care providers is the new FDA regulation that disallows all medications that are not FDA approved. The FDA Food Safety Modernization Act (FSMA) became law in January 2011. Its main purpose is to ensure the U.S. food supply is safe by shifting the focus of federal regulators away from responding to contamination, to preventing it (FDA, 2011). While this is beneficial for the safety of the patients, this is removing a lot of the less expensive drugs from the pharmaceutical market. With these drugs gone, the competition will be far less and in a typical economic competition fashion, the costs of the FDA approved drugs will increase since they is an inelastic demand for the drug.

IMPACT OF AREA DEMOGRAPHICS

Regional Medical is located in a area that is becoming more populated, diverse, and skilled due to its educational and health care based economy (TEDC, 2011). The effects of the economic downturn have substantially affected Regional Medical but not as much as other health care providers in the state. This is due to the lower area unemployment rates of 7.2 percent as opposed to the national average of 10.5 (TEDC, 2011).

The area offers many financial advantages as well. Sales tax is levied only on non-essential items, there is no state income tax, and property taxes are lower than the state and national average for mid- to large-sized cities (TEDC 2011). The area consistently ranks below the national average in cost of living according to the American Chamber of Commerce Researcher's Association and meets high standards for retiree living, such as low crime rate, affordable

housing, quality health care, abundant recreation, and educational opportunities (TEDC, 2011). The area is 16th in the nation for cost of living in Retirement Places Rated. The area Council of Governments has qualified a local city as the first Certified Retirement City in the state (TEDC, 2011).

A demographic concern for Regional Medical and the surrounding area is the number of undocumented workers. These people need medical treatment even though they cannot get insurance, so they turn to Regional Medical. Most of the time Regional Medical provided free treatment as Regional does not turn away patients. Since the state has one of the largest populations of undocumented workers (12 percent), this is a significant toll on the Regional Medical (TEDC, 2011). Typically when these patients come in for treatment, Regional Medical writes their charges off to charity, which aides in the notfor-profit status. Regional Medical can generally identify those who are undocumented because they have no medical information when they seek service. Regional Medical records their names and ages, but the prospective patient has no social security number, medical records, or any formal documentation. Over the past 10 years, the quantity of these undocumented patients has almost doubled. This spurs social conflict because it is hard for people to give money to the government just to have that money given to hospitals to reimburse these costs. This is not a solution that Regional Medical elects to implement.

Regional Medical has experienced an increase in Medicaid patients over the past year. Since 2009, there has been an approximate 11 percent increase in Medicaid patients. This is a loss for Regional Medical. Also regarding Medicaid, there is a demographic issue of high birth rates of women on Medicaid. Due to a flaw in the Medicaid system, the more children a woman on Medicaid has, the greater the amount of Medicaid and welfare support they will receive. The quantity of children per family is substantially more on Medicaid patients than on any other due to this despite the fact that preventative drugs are readily available through Medicaid. As a percentage of cost coverage, Medicaid patients are the lowest besides self- pay. In 2010 alone, Regional Medical suffered an operating loss of \$900 per Medicaid patient.

FINANCIAL CONSTRAINTS

Regional Medical's financial balance sheet displays an 8 percent asset growth due to the increase in fixed assets and cash equivalents. However the liabilities increased by 10 percent over the same time period due to new debt obligations and other current liabilities. Given the current projected decrease in future year's net income, long-term debt and lease obligations could consume more than ten percent of net income which is considered a fiscal red

flag. Labor and benefit cost represent the largest portion of Regional Medical's expenses. Extensive cost containments are currently under way in to achieve labor efficiencies and supply cost reductions.

Analysis of Regional Medical's ratios indicates that although there are multiple fiscal constraints, the majority of the ratios are favorable. Based on ratios, the organization is highly liquid. The activity and capital structure ratios are favorable but decreasing. The profitability ratio return on net asset is the only measure that is unfavorable in its relationship with national norms (Stanko 2011).

Overall, the profitability ratios are low that indicate that Regional Medical is dependent on patient revenue. Since patient revenue is the main source, Regional Medical is initiating expense and economies to improve the performance measure. Although the salary and benefit expense as a percent of operating expense is much less than the national norm, it is comparable to area salary and benefits packages paid by other area health care providers.

CONCLUSION

Regional Medical is going through a very difficult time, struggling to make ends meet in a poor economy where challenges are being presented from many directions. These challenges include payer reclassification, governmental regulation, hospital, payer mix that affect payments, and budget cut to gain efficiencies. Even with these challenges, Regional Medical continues to be one of the leading health care providers in the area and prides itself in providing the highest quality of patient care. Although it will take some time to adjust to the new environment and the changing health care industry, Regional Medical continues to focus on the patients first and attempts to keep the area healthy.

References, financial data and analysis is available upon request to M. Fischer