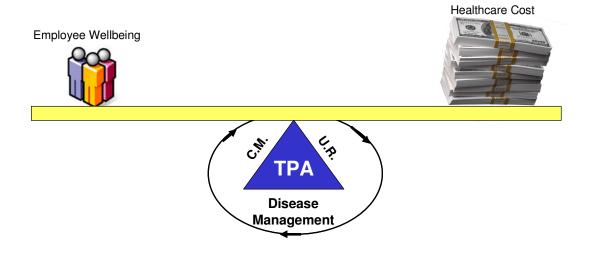
Chapter Four

Which Key Performance Indicators to Use?

As documented earlier, the primary issues are quality, cost and availability of service. According to Midwest Business Group, poor quality health care results in \$2,000 annual cost to employers per insured worker. So if you have 1,000 employees, the result is \$2,000,000 additional annual cost due to poor quality.

There is a balance of employee quality of life and the cost involved. The best quality health care at the earliest point of intervention will ultimately result in the lowest cost.

Figure 10: Health Care Balance



C.M. is Case Management, U.R. is Utilization Review, TPA is Third Party Administrator

What makes medicine complex is the number of players in it. There are hospitals, physicians, allied medical professionals, that are providers of health care. Next there are the insurance professionals, the Broker, Insurance Provider, Third Party Administrator and Preferred Provider Organization.

Just as you would develop measurements and a scorecard to run various elements of your business, you can also develop one for your health care plan. We will take you through the process, identifying the Key Performance Indicators (KPI's) and how to get them.

Set Up Your Medical Management Dashboard

In order to control costs for any area of business it is necessary to convert those vital few critical success factors into Key Performance Indicators (KPI's).

Step 1: Predictive Modeling

Start with a baseline for your employees and their families. By this we mean, do an advanced health assessment of your employees by using advanced predictive modeling software. The insurance company, or medical management company, should have access to this type of software.

The benefit to the employer is that this software will forecast potential cost impacts to the health plan.

The way that this works is artificial intelligence software is utilized to assess the past two years of medical records and predict candidates for...

- I. Health Promotion, or "Keeping low risk people healthy"*
- 2. Condition Management "Just don't get worse"*
- 3. Medical care management for advanced cases using Case Management, Disease Management and Utilization Review.

*Dee Edington, University of Michigan

Although most insurance carriers claim to use software of this nature, few have the trained staff to accurately set up the scripts to clearly identify the majority of people who are at risk. Also, there is a great variation in the predictive modeling software available today.

Step 2: The True Key Performance Indicators

KPI I: Utilization Review

The Key Performance Indicator for Utilization Review is <u>Patient Days per 1,000</u>. Utilization Review combines <u>the Admissions Rate per 1,000</u> with <u>Length of Stay per 1,000</u>, to give a true indicator of hospital usage by patients, i.e. by employees and their dependents.

This is designed to control the use of acute care services. Inpatient stays are pre-certified, hospital stays are reviewed, and alerts for Case Management are generated in order to ensure the right care for quality of life. As a result, cost is also reduced by providing the right care at the right time.

It's more than watching the numbers. Done right, it is the monitoring the treatment plan and the patients compliance to their plan, that produces results.

In our experience, by treating patients like family members, the quality of life for the patient is improved and a byproduct is reduced cost impact to the plan.

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KPI 2: Case Management

The Key Performance Indicator for Case Management (CM) is savings derived by managing the patient. The savings derived by Case Management is divided by the cost of that patient's specific case. A typical return is a ratio of 10:1, or \$10 in savings for every \$1 spent on CM.

Case Management (CM)

Total Savings

Total Cost of Case

Case Management is used when patient's condition is severe, and as a result has the potential for a significant expenditure of health care plan dollars.

The objective of medical case management is to evaluate the patient's medical condition and develop and implement health care planning for the patient that coordinates medical resources communicates with the patient and monitors the patient's progress.

When done correctly, the result is improved patient health and healing. When combined with predictive modeling, "actuarial events" can be avoided and therefore costs to the plan are reduced while increasing patient's quality of life.

KPI 3: Disease Management

The Key Performance Indicator for Disease Management (DM) is once again, Return on Investment.

Disease Management (DM) = _____

Total Cost of Case

A good program can produce a return of anywhere from 3:1 to 6:1. This variation in ROI is due to whether on not, a *Wellness Program* is integrated into DM.

The objective of disease management is to improve the quality of life and cost of management of the most prevalent and major cost diseases.

The idea behind a disease management program is to focus on a set of chronic illnesses that are most amenable to management control. Some chronic diseases that lend themselves to cost management are as follows.

- Asthma
- COPD
- Diabetes
- Hypertension
- Hyperlipidemia (high cholesterol)
- Coronary Artery Disease
- Congestive Heart Failure
- Coronary Vascular Disease
- Obesity

Medical management companies may monitor different diseases, but these are the most common in our opinion.

A strong emphasis is placed on preventive care. As an employer, make sure that your employees are getting regular screenings, tests, such as PSA's mammograms, colon cancer, diabetes, blood pressure, etc. to ensure that they are in the low risk category.

KPI 4: Cost Per Member Per Month

The last Key Performance Indicator is the one that almost all employers are tuned into, the Cost Per Member Per Month (PMPM).

This KPI is actually the result of monitoring and managing the other KPI's.

The Cost per member per month is usually provided by the insurance provider.

In our dashboard both health care plan PMPM and pharmaceutical PMPM are one consolidated number representing the total cost per member per month.

The Medical Management Dashboard

The following figure shows how the above mentioned KPI's work together, and compares HSR's key metrics for all clients to the U.S. average.

Metrics			Performance		
		U.S.	HSR	HSR improvement over US average	
Utilization Review	Admissions / 1000	62	48	22.6%	
	Days / 1000	252	187.2	25.7%	
	Length per stay	4.1	3.9	4.9%	
Case Management		10:1	30:1	300%	
Disease management		3:1	5:1		
Health Care spend pmpm*		\$289	\$225	22.1%	

Table 2: Medical Management Dashboard

*pmpm = Cost per member per month

These metrics form the dashboard for measuring medical management performance. And as stated earlier, medical management is a major opportunity for mitigation of cost to any health plan.

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When large Case Management with Predictive Modeling, Utilization Review and Disease Management are combined, the result is a substantial cost control benefit to the employer.

Use this dashboard to compare to how your plan is performing today.

Your broker should be able to provide you with the data for each of the metrics.