# Sheltering Arms Rehabilitation Hospital – Mechanicsville, VA Weekly Business Drivers – Operating Improvement Process

#### Overview

Sheltering Arms Rehabilitation Hospital is dedicated to helping patients recover from temporary or permanent physical limitations and to regain as much independence as possible following an illness or injury. The organization provides a smooth transition from acute care to coordinated interdisciplinary rehabilitation services. It is comprised of two inpatient rehabilitation hospitals with 68 beds, four physician clinics (two on campus and two off site), and employs eight physician specialists board certified in physical medicine and rehabilitation. In addition, Sheltering Arms provides inpatient and outpatient physical, occupational, and speech therapy at four acute care hospitals owned by the Bon Secours Healthcare System in the Richmond metropolitan area and operates eight outpatient therapy centers in the community.

Sheltering Arms has a history of providing excellent medical rehabilitation services enabling its patients to find the "power to overcome" even the most serious setbacks following illness or injury. Nevertheless, hospital leaders believed that they could provide that excellent level of care more economically and efficiently by managing operations more effectively.

In October of 2007, Sheltering Arms established an Operating Improvement Process (OIP) – a real-time computer-based business intelligence information system that would enable hospital leaders to manage operations, eliminate duplication of efforts, and reduce administrative costs. The hospital implemented a dashboard to monitor and track 40 key business metrics for both inpatient and outpatient services enabling senior management and department managers to monitor key performance metrics in a timely manner. The system was intended to help managers focus on key business drivers which, if managed correctly, would help departments lower their costs and improve efficiencies.

The hospital already had clinical information systems and a wireless network that enhanced documentation, reduced paper records, and allowed clinical staff to easily share information, and improved patient care. The OIP was intended to bring those attributes to the administrative and operational areas as well. Use of the dashboard enables management to pull together and display information on key metrics from several areas in a single easy to review format.

The internally developed dashboard uses familiar software programs like Access to establish a relational database and Excel for reporting and displaying information. Staff felt comfortable using familiar software, thus making it easy to record data and review results.

Senior management identified key business metrics that would demonstrate how the hospital was doing in specific areas. By monitoring these performance indicators, management would know where they needed to improve operations. Indicators included such things as admissions, occupancy, average daily census, length of stay, casemix, therapy visits, units per visit, appointment completion, scheduling efficiency, FTEs worked, overtime hours, and more. Targets were established for each indicator. Department managers are responsible for collecting daily data, and weekly trend reports enable managers to track data against targets. The dashboard displays information in an easy to view format so that variances are easily identified and corrective action can be taken. Trend reports also display data for a 16-week period so that managers can review progress toward targets over time.

It was important to get information on the initiative to staff in a non-threatening way and enlisted support for the program from the top down. There was some difficulty getting staff to report in a timely manner. If data didn't meet targets, managers were trying to figure out why and make adjustments on their own. But over a short time this was corrected, when it was demonstrated that individual departmental reports don't tell the whole story.

Various departments had been routinely collecting data and generating monthly reports for their own use. Therefore, a lot of information was routinely being reported; but, the data collected from multiple sources was not necessarily the data needed to improve operations and support decision making. In addition, data was not being presented in a manner that was easy to read, analyze, and respond to promptly. Under the new OIP system, the dashboard gives everyone access to the same information, and ensures that the right data are being collected. Key indicators are clearly defined so that managers know why select information is collected and what it means. It keeps the organization focused on their goal of improving operations wherever possible. By comparing actual experience to targets, staff can see where they are, where they have been, and where they need to be. It also enables managers throughout the organization to see where they are in relation to what is happening in other areas.

## **Impact**

Since the OIP dashboard was implemented a little over a year ago, improvements have been shown in several areas. Hospital leaders believed that if you're not aware of problems you can't fix them. They welcomed the opportunity to learn where they could do things better.

Through consistent reporting managers became aware of problem areas that could be fixed easily. For example, patients were not showing up for scheduled appointments. Once aware of the magnitude of the problem procedures were put in place that reduced the no show rate from 20 to 8.7 percent, thus diminishing staff downtime, increasing revenue, and reducing the time between scheduling an appointment and seeing a physician or therapist. The fix involved using the hospital's existing telephone system that could be programmed to make reminder calls to patients prior to appointments. The reminder calls reduced the number of missed appointments; and if patients still failed to keep appointments, after the fact calls were made to re-schedule and the business was not lost. This solution was implemented with the assistance of less than one full-time equivalent.

In order to minimize denial of Medicare (CMS) payments, rehabilitation facilities have to manage patient mix to meet the requirements of the CMS 60% Rule. Routine reports showed that the organization was not always meeting those requirements and was admitting patients who did not meet the medical necessity criteria for payment by CMS. Having a central reliable source of data that could be tracked on a daily basis enabled them to implement a process to identify the patients that met the medical necessity criteria and allow those admissions. By more carefully monitoring diagnostic-mix they revised their targets and in working with referring providers they were able to increase the number of admissions of patients with neurologic conditions that met the medical necessity criteria.

Early on, the average daily census data showed that the length of stay was going up, while admissions were down. This represented an undesirable situation. If a patients length of stay exceeds local or regional benchmarks and the patient is no longer showing clinical improvement, a case manager works with the patient and family to move the patient to another more appropriate setting for the level of care needed such as a skilled nursing facility or assisted living facility if the patient cannot go home.

Sheltering Arms had not been managing overtime properly. Tracking overtime showed that a great deal of overtime was being reported. Management put together teams to determine the cause of the overtime and worked with the nursing coordinators and staff to clarify when overtime was appropriate and to focus on getting work done during the normal shift. Overtime has been decreased by more than 50%. Use of agency nursing staff was excessive; at any given time 10 -12 agency staff people were working in the facility. That has been decreased dramatically – by 99%. Currently, they only utilized agency staffing for a few shifts during the past six months.

Inpatients' functional ability is evaluated and measured using a scoring system called functional independence measures (FIM) when they are admitted, throughout their stay, and upon discharge from the hospital with the goal of increasing patient scores during their hospital stay. Patients' scores have increase by 20% since the OIP was implemented. In this instance, hospital leadership believes that the scores had been "excellent" all along, but previously they were not being captured correctly. Today, patients' FIM scores exceed regional and national averages. Data also shows that patients are more likely to return to their own homes, rather than to skilled nursing homes or assisted living facilities than the national average for rehabilitation patients. In addition, overall patient satisfaction scores are pretty good – in the low 90s. But hospital leaders are not satisfied with scores when compared to regional benchmarks. A new tool was recently introduced that will help pinpoint where performance is good and where it can improve.

#### **Future Direction/Sustainability**

Sheltering Arms is becoming a metric driven organization. The use of effective reporting has painlessly demonstrated improved efficiency in operational areas. More recently, another metric reporting system was implemented to monitor revenue cycle indicators – such as inpatient and outpatient volume, billing, collection, revenue by type of service and/or payer, etc. In a relatively short time, this system has helped the accounts receivable department improve cash flow tremendously. Previously it took more than 100 days to receive payment that is now down to 60 days.

### **Challenges and Success Factors**

Initially, hospital leaders had some difficulty getting their hands around what performance metrics were needed to assist in making sound business decisions. They established priority programs that would drive business – increasing utilization (both inpatient and outpatient volume is up) while operating more efficiently (expenses have decreased or are holding). Today, occupancy is 92% at one hospital and more than 80% at the newer hospital. By improving alignment within the organization, staff can tell at a glance what beds are available and where and when one will become available. Likewise they have improved performance in the outpatient centers. The no-show and cancellation rates have been significantly reduced and productivity of individuals has improved.

Sheltering Arms is committed to contributing to the wellness of the community. This commitment does not end when therapy or physician services are complete. Through its Partners for Life program, open to the public, it empowers people of all abilities to embrace a lifetime of fitness. Whether individuals have a particular condition or simply want to maintain good health through regular exercise, Sheltering Arms facilities throughout the Richmond metropolitan region provide a complete range of health and wellness programs aimed at relieving pain, increasing strength and fitness, decreasing stress, and improving overall health and quality of life.

For hospital leaders interested in establishing a dashboard in their organization, Sheltering Arms leaders offer this advice.

- Don't wait to implement a program. Do it now! Identify your key business drivers. Get alignment in leadership and a focus on the key business drivers (metrics). Make sound decisions based on data and not on emotion.
- Don't worry about the systems being perfect. This is a dynamic process. Based on data collection and analysis, problems are identified and changes are made.
- Start reporting metrics to the management team and expect questions to come up follow up, raise questions, hold managers accountable for results and change the metrics as necessary to focus on key performance indicators.

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