

## Implementing Operational Innovations at Dalton Christian Medical

Established by a major church to extend its mission, Dalton Christian Medical Center is a not-for-profit hospital in a large Midwestern Metroplex experiencing a demographic shift in the patients they serve. It is one of three hospitals in a healthcare system and is located in the middle to southern section of the city. The hospital's goal is to provide quality services to the growing population in the surrounding area. Since its inception, the demographics of those receiving services have shifted increasingly toward an elderly and minority population. As a not-for-profit hospital, patients are received regardless of insured status, income, or ability to pay for services. Approximately 70% of patients have some means of paying, many with Medicare benefits.



The Emergency Department (ED) is a 41-bed facility, and provides services to 63,000 patients each year. Many of its patients have no access to preventative medicine and have not been informed on the effects of how one's

life style can affect health. The hospital is licensed for 241 in-patient beds and routinely has a 75% occupancy rate. It has a fully equipped radiology unit, a cardiac unit with a catheterization lab, ICU, Clinical Decision Unit, OBGYN unit, a surgery floor, and numerous Medical/Surgical units scattered among four towers. Additionally, there are two physicians' office buildings that house a range of primary care and specialist offices.

A study done by a well-respected healthcare consulting firm substantiated the slipping satisfaction levels among all constituencies. It also reported the following facts regarding the growing Emergency Department:

- The level of *Left Without Being Seen* (LWOBS) ran as high as 16%
- Patient arrival time at the (ED) to admissions (for those patients being admitted) ran as high as eight hours
- ED arrival to discharge (for those patients being sent home) ran four to six hours
- The ED does not have a Level 1 trauma certification and transfers patients requiring such care to either its sister hospital which has a Level 2 capability or to the county hospital that has a Level 1 capability as well as a burn unit.
- There is a *fast track* unit within the ED where level 4 and 5 patients are treated representing nearly 40% of the total ED patient load.
- The majority of ED patients are seeking primary care for conditions that should have been treated much earlier

Other performance percentiles, as measured in the study, were equally disappointing (note that percentile rating is a measure of the percentage of hospitals worse than this one):

- Peak time blood sample collection – 20<sup>th</sup> percentile
- Peak time blood sample results available – 32<sup>nd</sup> percentile
- Ventilator ICU length of stay – 24<sup>th</sup> percentile
- Peak room available time – 14<sup>th</sup> percentile
- Patient depart to bed ready – 5<sup>th</sup> percentile
- Peak room available time – <5<sup>th</sup> percentile
- Patient satisfaction (likely to recommend) – 10<sup>th</sup> percentile
- The study resulted in 1,500 action item recommendations including that the consultant doing the study be retained to assist in carrying them out. An internal team was established and charged with creating improvement initiatives. Several were attempted over a 12-month period without measurable results of any substance.

### THE SITUATION

Both the CEO and Emergency Department Director were new and the Vice President of Nursing was leaving soon. Nearly half of the ED nurses were temporary contract workers. Nurses working on the hospital floors were slightly less apt to be temporary employees. Two physician groups were contracted to staff ED and Radiology.

Physician/Hospital relationships were extremely poor to non-existent. Not surprisingly, morale was poor. A number of initiatives had been attempted with no viable metrics to determine the impact. However, the overwhelming consensus was that none of them had had any measurable success.

The new CEO was given a long list of goals including the 1,500 action items from the consultant's study. In an attempt to develop goals and objectives, he held a senior management retreat that resulted in lofty but ill-defined targets. As the result of the management retreat, an Operations Performance Solutions (OPS) department was established with two talented professionals leading ED and In-Patient (IP) teams (their full-time jobs were Director of Radiology and Cardiology, respectively). It was housed in a dedicated suite of offices in one of the two physicians' office buildings with a full-time secretary, telephone lines, and computer links to the hospital's central system.



Dalton's CEO was introduced to Thomas Group via a reference given to the system president. In a series of meetings with the Dalton's CEO, system president, department heads, and the OPS team leaders, a set of deliverables for a prospective Thomas Group engagement was developed.

**THE SOLUTION**

Thomas Group was contracted to spend four months launching specific focused improvement projects that involved mapping out processes and prioritizing metrics-identified improvement actions. Additionally, Thomas Group was directed to streamline and train the already existing improvement teams (ED and IP Leadership Teams) to take the process forward.

**THOMAS GROUP DELIVERABLES**

**Phase I – Planning (4 weeks)**

- Hold leadership workshop for Business Improvement Team (BIT) key players and define baseline, direction, and success
- Identify one ED and one IP initiative to work on during architecture, implementation phase
- Develop communication method to provide project status to stakeholders

**Phase II – Architecture (2-4 weeks)**

- Develop process map for each initiative (identified in Phase I)
- Develop goal w/ metric for each initiative
- Identify and rank barriers to success

**Phase III – Implementation (4-8 weeks)**

- Provide training for each Cross-Functional Team (CFT) and Barrier Removal Team (BRT)
- Achieve mutually acceptable goals for ED and IP initiatives
- Establish a plan to resolve and/or address barriers
- Begin implementation\* on initiatives identified in Phase I

\*Implementation defined as CFT and BRTs convene on a scheduled drumbeat and identify and resolve barriers that are impeding the hospital's ability to achieve its goals.

**Phase IV – Wrap-Up, Education**

- Develop a structured timeline to continue implementation
- Identify a cross-functional work process and develop a process map for this cross-functional work process
- Hospital leaders to develop a process map for the next ED and IP initiative their teams will be addressing to show that they can implement the process methodology utilized above. This was done with support from Thomas Group during their four-month contract and was the final deliverable

The goal was for Thomas Group to coach and guide the OPS leadership in order for them to be able to lead the institution to its realization of the improvement plan. A series of focused action initiative teams (BRTs) were established including:

- **ED POD Team** aimed at creating zones within the ER and associated protocols
- **Guest Relations Team** with a mission to create a communications and counseling process for people waiting for attention in the ER
- **ED Door to Bed Team** to develop and implement a process that promotes efficient throughput and high patient satisfaction
- **ED Computerized Physician Order Entry Team** to create processes and tools to enable quick entry of physician ordered tests
- **IP Bed Assignment Team** to develop and implement a process that will efficiently and effectively manage bed inventory and turnover including establishing a centralized bed management office
- **IP Staffing Team** to develop and implement a process that will manage and track staffing required to support bed availability levels needed to support hospital census
- **Metrics Team** to develop and support process metrics
- **Communications Team** to provide consistent communications to all key stakeholders
- **Rapid Admit Team** to develop and implement a process that will facilitate efficient admission of both ED and direct-admit patients

A team of three senior Thomas Group Results Managers met with the CEO and the two heads of the Leadership Teams to map out an architectural structure. It was agreed that the initial activity would focus on the ED and its intersection with IP with the expectation that other issues would come to light during this initial effort. Rather than conduct formal up-front training, specifics of methodology would be introduced as needed or on a *pull* basis. The goal was to establish the foundation elements of Thomas Group's proprietary methodology, Process Value Management (PVM), as a template for focusing the resources available on the root causes driving the hospital's major dilemmas: poor patient, physician, and staff satisfaction, and the resulting poor reputation in the community. This involved defining the key processes, mapping them, identifying driver

metrics, obtaining baseline data and estimating improvement goals, and agreeing on the top level barriers. Two workshops were held over a two day period with the objective to stimulate interest in the concepts and generate momentum. The workshop involved the following:

- Why are we here?
- Process Value Management methods and techniques
- Mapping concepts and methods
- Walk through the process map straw man, identify three high impact sub processes
- Map 1 of the 3; Brainstorm barriers, identify the top three barriers
- Discuss barrier removal strategies (what functions should be represented on BRTs)

In the ED workshop, a high-level process map was created and a high-level set of barriers agreed upon. While the barriers involved difficult issues, most were process rather than cultural in nature.

- Excessive Door to Bed cycle time
- Batching of physician lab orders
- High levels of anxiety in patient waiting room
- No RN protocols allowing early intervention
- Large physical area with much duplication and lack of organization
- No method to follow-up late lab results
- No clear ED to IP handoff

The IP workshop developed a high-level process map and also identified a high-level set of barriers. While many of the issues mirrored the ED, the IP was a much more complex environment with deeply rooted cultural issues.

- No clear ED to IP handoff
- Poor IP staff management
- No routine, rapid IP bed assignment process
- Admissions process bureaucracy

Membership of the IP and ED Leadership Teams was formalized and a drumbeat meeting schedule was set. The OPS secretary became the permanent team scribe and quickly learned some of the tools of PVM - drumbeat scheduling, charters, agendas, minutes, and managing assigned action tasks (AIPs). A management oversight team (BIT) was chartered which included the hospital CEO and the two Leadership Team leaders. A drumbeat meeting was scheduled for once a week.

It was decided to form BRTs on a rolling basis, taking on the highest impact and most straight forward issues first. (The teams are listed in the Executive Summary). Formal meetings were held weekly with individuals conferring more often as needed.

## THE SUMMARY

From the beginning, there was strong support from the CEO and his direct superior, the healthcare system CEO. Members of the Leadership Teams and the BRTs quickly engaged and worked around issues of work schedules and hospital routines. Originally, the medical head of the ED was very reluctant to embrace this initiative. During the implementation, especially the Computer Physician Order Entry project, he became an advocate and was instrumental in aligning the entire ED medical staff. The head of radiology was also hesitant at the beginning. During the early stage of the project, this had no impact. Later, however, the entire issue of physician relationships with hospital administration was addressed.



By the end of the four month engagement, the following metrics improvements had occurred:

- ED Length of Stay had decreased by 25%
- Bed request to bed assignment went from 2+ hours to an average of five minutes
- ED *Left Without Being Seen* (LWOBS) decreased from a high of 16% to a running average of 7.5% and a single high volume day down to less than 1%
- ED survey response on *Likely to Recommend* went from a low of 62% to a high of 78%

In a medical services delivery environment, there are enormous, deeply rooted cultures. The culture can be influenced by creating process-based improvement teams, providing metrics-driven structure, and focusing on areas that have obtainable early wins. This is largely because these cultural norms are the result of people who are highly skilled and extraordinarily intelligent focusing on their primary mission, curing the sick. When this mentality is exposed to the powerful tools represented by process methodology, the results are dynamic. The key is including input from all stakeholders at the onset, beginning with small changes that have significant impact, and then capitalizing on positive response.

Most importantly, a successful service delivery environment is characterized by improved patient care. Improved care not only draws insurers and other health care purchasers concerned with cost and patient outcomes, it helps to restore trust and confidence in the healthcare system as a whole. And that is something all doctors and health care executives are focused upon. 