

DISCHARGE FOCUS PUTS HOSPITAL CAPACITY ISSUE TO BED

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The exploding demand for healthcare in the U.S. is nothing new. But the growing critical shortage of staffed hospital beds, fueled primarily by the historic growth of an aging population that requires increasing hospitalization, is clearly looming as the next crisis.

Previews of the overburdened hospital system are played out every day in emergency departments across the country. Nearly 62 percent of all hospitals, as well as three out of every four urban hospitals, report their ED at or over capacity. In many parts of the south, 70 per cent of hospitals are finding capacity problems even in the heat of summer, traditionally their slow period. That makes the winter months even that much more worrisome for hospital managements in those areas.

Without a doubt, the nation faces a growing hospital capacity problem and it's a problem with a blind eye toward the patient's insurance status.

Solving the problem is complicated. Many hospitals that are overcrowded today still operate below their effective capacity. In fact, due to the complexity of the problem, some administrators consider their institutions to be at full capacity when their census is 85% of staffed beds. So, for many

the looming bed crisis is not necessarily insufficient capacity, but inadequate patient management systems.

Managing beds in a hospital is not as clear as, say, managing furnaces in steel manufacturing or coordinating the logistics of automobile assembly, even though many solutions often treat them the same way.

The difference lies in the environment. Hospitals are subject to extraordinary variation not seen in most industries. They rely on departments that are both autonomous yet interdependent. They deal with several types of people, with several types of conditions through several modes of entry, including EDs, regular admissions, and elective surgeries. Multiple decision-makers – nurses, physicians, hospital administrators, share responsibility for patient care. Patients and families bring a spectrum of expectations to their hospital experience. And then there is the complexity of the many payment methods with their attendant mountains of paperwork.

The result is a big problem for hospitals; lack of bed capacity can be costly for hospitals, whether they are for-profit or nonprofit. Hospitals lose revenue opportunity when they lose the opportunity to care for more patients with existing resources and much of that is strictly capacity-related. Capacity oriented revenue losses can easily run over \$10 million for a medium size (225 bed) community hospital.

Managing bed capacity is like managing a complex and dynamic logistics system and it must be approached that way. It requires a fundamental change in how a hospital looks at managing patients and a comprehensive bed strategy around which an effective management system can be constructed.

Admission vs. Discharge

Operationally, most hospitals are organized around admissions and accommodating patients as they arrive. The priorities, the infrastructure, the processes, the measures, the staffing levels, the training and even the attitude and culture of the hospital are biased toward getting patients admitted and moved into a bed.

The processes work effectively, when there are beds clean and ready. But these are passive management systems, reacting to situations. In almost every hospital in the USA, the processes for handling patients change when there is a shortage of available beds. Often when there are patients waiting for beds, a crisis mode is put into place. The hospital's management team at even the CEO level will begin to "fix the bed problem" by doing special rounds, calling physicians and using their authority to move patients forward. They investigate, expedite and firefight instead of working through a comprehensive management system. They in effect "violate the process" in order to resolve the latest crisis.

In the short term, the expediting pays off: the bed crisis is usually resolved, a patient is discharged, a hidden bed uncovered, or a physician contacted, among other solutions. However, the core problems remain and the "expediting" culture eventually becomes institutionalized, breeding inefficiency, weak accountability, bureaucracy and more trouble. Day-to-day operation becomes less rigorous and more of a function of "Who is working today?" or "Is the ED holding?" Eventually, without leadership,

individual attitude and unconventional practices causes the environment to be even more unpredictable and unmanageable. Added variation into an already complex system inevitably creates tension, confusion and frustration for both the hospital staff and the patients. *This is the root cause of lost bed capacity.*

Change the focus—Change the environment

The most effective step in freeing up bed capacity is to change the focus from *admission to discharge*. By doing so, hospitals can actively work toward preventing many of the problems they face. In fact, much of the overload condition can be avoided simply by moving patients through the hospital more expeditiously.

By focusing on discharge, we mean that the entire hospital is organized and geared toward anticipating discharge and proactively moving patients along consistently and safely, with the anticipation of discharge as a force in decision making. Every patient that meets criteria for lower level of care is moved to that level, including discharge from the hospital. This approach will free up bed capacity before it is needed, and smooth out the workflow.

The best way to prevent an overload condition is to have clean available beds. This kind of improvement happens not just by management edict but with the development of new competencies. For example, an essential competency is the capability to anticipate patient flow, especially the capability to anticipate discharge. A “focus on discharge” means that work

priorities and schedules include a view of the patients likely to be discharged.

Changing hospital orientation to discharge is often a matter of changing the soft hospital infrastructure: people and culture. Much can be done with the existing information tools. For example, using the hospital's ADT records, statistical analysis provides a reasonable forecast of likely day of discharge, given a certain complaint/physician. Using this kind of forecast, the hospital can do a better job of organizing for discharge and guide other decisions around staffing and scheduling.

Start with a Comprehensive Bed Strategy

There are three key elements to developing an effective bed strategy.

The first is a complete operational analysis of the internal and external hospital environment. This analysis must employ statistical tools that include simulation modeling in order to foster a deep understanding of all the interactions that influence the hospital's ability to care for patients. This is a very complex and involved step because of the incredibly high levels of variation in the hospital environment.

The analysis requires careful consideration of numerous aspects of the hospital business, including area demographics, patient mix, processes, human resources, information flow, technology, policies/algorithms and the business and marketing plans. The goal is to identify and set priorities for addressing the critical processes and variables that will enable maximum

utilization of bed capacity. The analysis should include existing conditions along with several practical scenarios to ensure that all points are considered. The analysis is complete only when there is a clear understanding of the gaps between the existing capability and the required capability.

The second element is an implementation plan, which is a blueprint for changing the hospital processes to support the maximum utilization of staffed beds. Each part of the plan highlights objectives, deliverables, timing, benefits and costs. In addition, the new plan should include a framework for controlling the new processes to insure consistency across autonomous shifts and departments. And, finally, the plan must consider the hospital culture and put implementation strategies in place that foster the adaptation necessary to make the project successful.

The last element of an effective bed strategy is a benefits case, which provides the entire hospital with the motivation to actively participate in the implementation plan. Typically, the development of the benefits case and the implementation is an iterative process that works to sequence the implementation, minimize cash requirements, minimize risk, and maximize the likelihood that the hospital culture will accept and adopt the changes required by the new bed strategy.

The result is a presentation of the implementation plan in clear terms that outline both the qualitative and quantitative benefits, including the investments in time and money required to attain these benefits. The

benefits case must be compelling and motivational for every level of the hospital staff.

A successful bed strategy requires simple concepts and consistent execution based on operational excellence.

Seven Reasons for Building a Bed Strategy Today

In short, there are seven important reasons for building a bed strategy. Each of these represents areas where most hospitals want and need improvement.

1. Patient and Physician Satisfaction

Lengthy waiting time for a hospital bed is among the top three complaints cited in the typical patient satisfaction survey.

Physicians are frustrated because they don't have bed capacity at their hospitals to support the patient load. Not only does this disrupt care, it jeopardizes market share.

2. Staff Efficiency and Effectiveness

Nearly every hospital has a bed hunting ritual for finding beds and placing patients. It entails calling the units repeatedly, walking the floors, searching for housekeepers and looking for creative ways to keep patients moving. Some hospitals have even added to their

administrative overhead by hiring bed “czars” to help reduce or eliminate bed capacity problems.

This constant urgent activity is an ineffective use of expensive resources and is a constant source of organizational stress. Focusing on discharge means that patient and bed information is reliable, allowing managers to be more effective and eliminate time lost to expediting.

3. Misdirected Technology Projects

Adding information technology alone is not a bed strategy. In fact, over 60 percent of technology projects fail to deliver promised benefits, primarily because they don’t address the underlying problems. Worse, many healthcare applications are difficult to use and rarely integrated into the actual processes, so they are seldom used consistently by a frustrated staff, who see them as added complexity and inefficiency.

4. Nursing Effectiveness

With the chronic nursing shortage, it is critical to protect nursing capacity, which is the cornerstone for throughput because it affects both admission and discharge processes. Yet, when there is a bed crunch, nursing is bombarded with questions on patient status, physician status, family status and so on, all of which take nurses away from their primary function, which is patient care.

5. Wasted Capacity

Hospitals lose millions of dollars when they hold admitted patients in the ED or the PACU or in the hallway while patients who meet discharge criteria continue to occupy beds. Beyond the financial consequences, the lost ED visits, lost surgeries, and lost market share quickly translate into frustrated physicians, patients without care, and nursing turnover. As the cost of healthcare continues to climb even before the baby boomers retire, wasted healthcare capacity is part of the national healthcare crisis. Better capacity utilization is a powerful tool irrespective of the hospital environment.

6. Resource Allocation Decisions

During the bed hunt, hospital decision-makers are often forced to make a decision quickly and without complete information. In that case speed is the name of the game. Unfortunately, the best decision is not always the one that can be made quickly. Without a solid management system, it is unreasonable to expect that decisions made in the heat of the moment are optimum. An improvement in bed strategy can increase the chances of making the best decision.

7. Fragmented Improvement Projects

Without a comprehensive bed strategy, managers tend to take on improvement projects limited by their own experience, hunches and even politics. Often the result is an investment to increase capacity in

one area of the hospital, but these decisions can have an impact on the overall volume of patients. True improvement requires a careful assessment and understanding of the many complex variables that hospitals face, how they interact and setting priorities to determine which improvements will have the most impact, which is the essence of a good bed strategy.

And implementation can take many forms ranging from the installation of a stand alone computerized hospital management system that will alert administrators and floor nurses to the tasks necessary to ensure timely patient discharge, to full intervention wherein the hospital's processes and culture is changed -- with or without additional software -- to accomplish the same objective.

In all cases the solution will be customized to fit the characteristics and needs of the specific institution.

The Results

Implementing a discharge-focused bed strategy can increase in-patient volume without a subsequent increase in cost to the hospital. By defining a goal for increasing daily patient discharge, a hospital can quickly calculate the ROI potential for the new bed strategy. The numbers can mean a substantial improvement to a hospital's bottom line.

At three different hospitals where this strategy actually was implemented, the results have been startlingly successful. One Midwest hospital was

experiencing over 100 days of ambulance diversion or restriction each year. With the bed strategy initiative in place, those incidents were nearly eliminated during the following two years.

At a 200-bed Texas hospital where overcrowding was extremely serious, especially in the ER, the improvement was calculated at 15% or \$28 million a year after the strategy was in place. This widely outpaced original projections of 2.1 percent or \$4 million in savings annually.

And finally, length-of-stay averages at a 225-bed hospital in the Southeast, dropped from 5.49 to 4.5 days once the bed strategy was implemented.

At average net cash collected of \$6,000 per patient, a 350-bed hospital would be able to free up capacity to care for another 3-5 patients per day and potentially collect an incremental \$5-10,000,000 in top line revenue with only a 4-7% increase in throughput.

Now that's something the nation's cash-strapped hospitals can and should do to cure their ailing bottom lines.