

ASSET STEWARDSHIP AND THE BOARD'S TOOLS FOR UNDERSTANDING AND IMPROVING OPERATIONAL EFFICIENCY*

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Asset stewardship has long been a key board responsibility. As fiduciaries of a health care organization's assets, governing boards are required to act in the best interest of the organization, ensuring that resources are used in a reasonable, appropriate and legally accountable way to meet community health care needs. However, ensuring the best use of the organization's human, financial, physical and other resources is becoming more complex. Today's hospitals face conflicting pressures that call for boards to effectively balance stewardship of existing assets with the need for appropriately investing in new resources to meet future challenges.

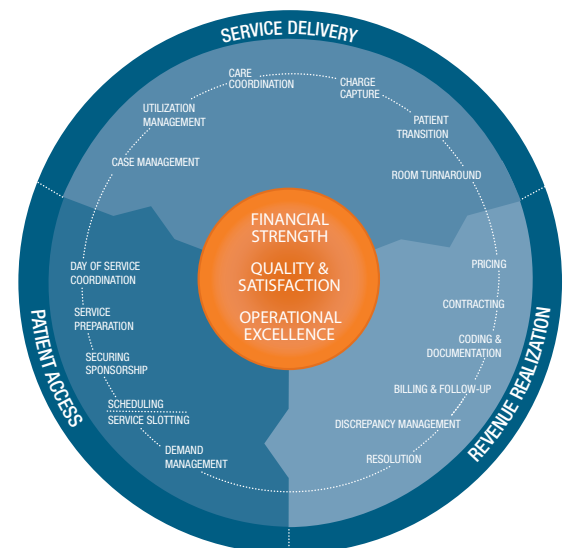
Capacity that falls short of demand for care and service, declining reimbursement from key payers, an expanding uninsured population and increasing consumer choice are just a few of the trends that make asset stewardship a challenging, yet critical, governance responsibility. To adequately discharge this responsibility, today's boards need information and tools to help them understand how effectively existing assets are being used. With this knowledge, boards can then act as prudent fiduciaries, authorizing strategic investments in the additional resources their organizations need to meet their missions while assuring existing resources and investments are optimized.

The core business of hospitals is delivering care. Efficient, effective patient flow is the engine that drives optimal care delivery and supports achievement of strategic goals, such as strong financial performance, high quality care, patient satisfaction and operational excellence. The goal of efficient and effective patient flow is not to move patients through their hospital stay more quickly. It is to deliver the appropriate care to a patient at the right time and in the right setting. This assures quality services, positive outcomes and best use of health care resources.

The Health Care Operating Cycle™ (figure on the right) can help boards understand where existing assets are primarily deployed in hospitals. The Cycle identifies the processes health care organizations conduct to help patients gain access to care, provide needed care and services, and realize associated revenue. Ensuring that assets are being most productively utilized to support patient access and service delivery processes maximizes the margin hospitals can achieve from revenue realization, building a solid foundation for long-term success.

The Cycle begins with "Patient Access". This includes processes involved in managing demand, patient arrival and referral, service scheduling, securing financial sponsorship, and coordination of activities on the day of service. Next, "Service Delivery" involves placing patients, case management, care coordination, utilization management, capturing all charges associated with a patient's care, transitioning patients throughout their stay and discharge, and preparing a room to receive the next patient. "Revenue Realization" includes activities such as care and service pricing, contracting, coding and documentation of care and services delivered, billing and follow-up, managing payment discrepancies and account resolution.

The Health Care Operating Cycle™



Challenges With Patient Flow Metrics

Because Service Delivery is the heart of the Health Care Operating Cycle, boards need to understand how efficiently care and services are delivered to patients. This requires boards to understand the patient flow and bed management processes involved and to evaluate their effectiveness over time. However, many boards today lack the measures and available reporting of patient flow performance they need to discharge their asset stewardship responsibilities effectively. While some readily available measures, such as length-of-stay (LOS) or diversion time, are used to indicate operational efficiency, they typically lack the specificity and context needed to provide an accurate picture of current performance, much less enable boards to offer useful direction about where performance should be heading and how to reach performance goals. Without a clear understanding of what is contributing to current performance metrics, boards will not be able to evaluate whether their organizations have the right people, processes and tools in place; whether these assets are performing at peak; and if not, where the highest leverage opportunities exist for improving performance.

In addition, interpreting patient flow metrics depends on their context. For example, consider diversion time. Understanding what is really driving time on diversion, and its impact on hospital patient flow, requires considering a wide array of factors. These include local emergency response and trauma processes, the procedures a hospital uses to go on and to come off of divert status, Emergency Department (ED) flow, transition of patients from the ED to inpatient care units, types of divert status used (such as medical-surgical, intensive care, obstetric) and the number of patients that are actually sent elsewhere for service while a hospital is on divert. Without considering these factors, a diversion time measurement alone will not provide real insight about whether a hospital is experiencing diversion issues that need to be addressed.

It is important for a board to monitor a set of patient flow metrics that balance one another. Viewing patient flow performance as an end-to-end business process is crucial so that any one aspect of flow is not over emphasized or left unattended. Unless all key aspects of patient flow are integrated, unintended negative impacts will occur and the desired performance improvements will not be reached and sustained. It is possible to excel at one patient flow metric while causing delays or unintended impact on care processes in other parts of the Health Care Operating Cycle. For example, a hospital may do a very good job of getting ED patients to inpatient beds in a timely manner. However, by expediting placement, some patients might be sent to a unit that does not specialize in the type of care that they need. Assume that a patient could safely wait in the ED and receive any immediately needed treatment. In the overall picture of the patient's care, waiting another hour for a bed to be free on the appropriate unit might be the best decision to ensure quality care. Only by considering metrics that balance one another, such as time to a bed from the ED and how often patients are not placed on the target unit (off-service placement rate), can a board see a picture of patient flow that is broad

enough to avoid too much focus on one aspect of patient flow to the detriment of others.

Patient Flow Metrics for Boards

Boards should expect to be given the metrics needed to monitor patient flow and effectively carry out their fiduciary duties. The patient flow metrics shown in the "Patient Flow Performance Trend Report" on page 3 should be reviewed monthly at the board committee level and at least quarterly by the full board. For each metric, recent performance, the performance goal and performance trends should be provided, as well as explanations of any significant changes in performance that may have occurred. These metrics are further discussed in "Sample Patient Flow Metrics" on page 4.

Ensuring Peak Patient Flow Performance

Because of the complex interactions between patient flow metrics and the difficulty of determining which actions will best improve performance, hospitals should conduct periodic, detailed assessments to ensure peak patient flow performance. Such assessments will provide greater insight into the factors driving each of the metrics the board has been routinely reviewing. Assessment results will also help the board determine whether the organization is addressing the right issues to gain the largest improvements possible in patient flow and bed management.

A detailed assessment should be conducted at least annually, especially if ongoing monitoring of patient flow performance shows downward trends. The assessment should examine:

- Information about hospital operations, environment, organization structure and strategies for growth.
- Reporting and metrics from areas such as Nursing, Environmental Services, Patient Placement and Case Management to assess performance.
- Statistics from recent patient discharges such as LOS, admit and discharge time, patient type, disposition codes, payment denials and discharge delays.

In addition to reviewing the above information, the assessment should include:

- Conducting interviews with key executives and operations staff.
- Observing discharges in patient care areas and patient flow processes throughout the hospital, including areas such as Nursing units, Emergency Department, Environmental Services, Patient Placement and Case Management.
- Reviewing available automated systems and how they are used for documentation and to generate performance reports.

A Tool for Improving Patient Flow Performance
















The "Patient Flow Performance Summary" on page 3 presents the results of an in-depth assessment. This summary provides a thumbnail sketch of overall performance in patient flow as well as in several key functional areas that drive this overall performance. The summary also identifies action steps for performance improvement in each area. The board can use this report to monitor the orga-

Patient Flow Performance Trend Report

METRIC	GOAL	Month											
		1	2	3	4	5	6	7	8	9	10	11	12
Bed Use													
Total Average Occupancy	87%	80	80	84	81	80	81	80	80	79	80	80	80
ICU Average Occupancy	94%	95	97	100	96	94	97	93	95	95	96	97	96
Med-Surge Average Occupancy	86%	75	74	78	77	77	75	77	76	74	74	73	74
Bed Management													
Bed Turnaround Average	45 minutes	48	48	50	49	47	44	45	45	46	45	44	45
Off-Service Placements	15%	27	22	30	24	25	24	27	22	23	25	28	22
Capacity-Related Redirects/Cancel	10 patients/month	30	29	38	32	26	29	22	26	25	29	34	27
Case Management													
Actual/Expected Length of Stay Ratio	1 or less	1.08	1.06	1.02	1.05	1.1	1.07	1.05	1	1.01	1.03	1.02	1.01
Utilization Review Criteria Not Met	5% or less	3	3	2	2	1	0	2	1	0	3	2	2
Predicted Discharge Accuracy	40% or greater	30	32	35	37	40	35	34	30	29	34	32	32

Patient Flow Performance Summary



Focus Area	Process	Tools	Org./ Culture	Improvement Opportunities
Overall Patient Flow Performance				Available automated tools are not being used consistently or correctly. These investments are not being optimized, causing patients to be turned away when beds are available. New leadership in several departments are committed to staff training and use of metrics to improve performance.
Patient Placement				<p>Analysis: The automated bed board tool is not being used well, over 50% of the data is falling outside normal parameters of 60-minute response time and 120-minute clean time; staff can't rely on the information in the bed board to understand house status.</p> <p>Action Step: Retrain nursing unit, Environmental Services and Transportation staff in bed board tool use and reporting by (set date). Establish accountability expectations for all users. Provide follow-up training 30 days later.</p>
Care Coordination				<p>Analysis: Staff are not entering anticipated discharges after the daily care coordination meetings. Goal of 40% prediction has only been met once in the last 12 months.</p> <p>Action Step: Complete training on discharge planning online documentation by (set date).</p>
Case Management				<p>Analysis: CM staff are not using the utilization review criteria accurately. Patients are often not meeting criteria for ICU beds although the data reported shows that the 5% or less goal is consistently met.</p> <p>Action Step: Retrain CM staff and intensivists on ICU criteria and conduct quality review of CM work for 1 month. Involve CM Physician Advisor in discussion with physicians whose patients do not meet ICU criteria.</p>
Bed Turnaround				<p>Analysis: See comments in Patient Placement.</p> <p>Action Step: Retrain staff immediately on automated system use. Provide EVS staff with daily reports showing data entry that does not fall within parameters.</p>

nization's progress toward implementing steps for improved patient flow and to allocate the resources necessary to accomplish them.

Key areas and functions that the Patient Flow Summary should address include:

- **Patient Placement:** assigning patients to care areas, divert approach, escalation processes when demand exceeds beds.
- **Care Coordination:** interdisciplinary collaboration and communication, assuring timely provision of appropriate care, inclusion of patients and families in their plan of care.
- **Case Management:** complex discharge planning, utilization review with payers, internal utilization management, facilitation of patient transitions between levels of care.
- **Bed Turnaround:** notification of vacant beds; participation of housekeeping in rapid preparation of beds; participation of transportation staff in vacating beds and providing final customer service contact.

The case study on page 5 illustrates how a detailed assessment can help a hospital and its board understand and address the root causes of patient flow problems.

Conclusion

Ensuring that hospital assets are being used most effectively is one of the board's most important fiduciary duties. Boards need performance information and reporting on how key assets are being used to be effective stewards of organizational resources. Monitoring patient flow performance provides boards with an understanding of current asset productivity, and can help them make decisions about reallocating current resources or, if necessary, adding the right type and level of resources needed for the hospital to achieve its goals.

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About Stockamp

Stockamp & Associates is a leading national provider of performance improvement solutions for hospitals and health systems. Since 1990, Stockamp has helped high-performing hospitals reach the pinnacle of financial and operational excellence, and generate billions of dollars of benefits as well as significant patient service and employee satisfaction improvements.

Sample Patient Flow Metrics

Bed Use

Total Average Occupancy – can be based on beds in a hospital or across a system if the board is responsible for a multi-facility system. Understanding bed utilization across a system can help a board see opportunities to aggregate patients differently or to assign beds on a system-wide basis in times of very high occupancy to keep patients within the system.

Average Occupancy by ICU or Other Specialty Bed Type – it is often beneficial to understand the occupancy level of different types of beds. Intensive care beds in particular are often constrained resources which can create bottlenecks for patients coming out of surgery or patients presenting for trauma care. If a hospital was developing an Oncology Center of Excellence, the board might want to see occupancy statistics for the surgical oncology and hematology-oncology beds. Understanding the use of different bed types can also assist a board with new facility planning.

Average Medical-Surgical Occupancy – medical-surgical beds are the most flexible bed type within a hospital. Often, patients with a variety of needs can be cared for safely on several medical-surgical units. This metric helps boards understand what beds are available to meet the needs of a variety of patients.

Bed Management

Bed Turnaround Time – the amount of time that it takes from the time a housekeeping staff member is notified that a vacant bed needs cleaning until the bed is clean and ready for the next patient.

Off Service Placement Rate – This statistic monitors how often a patient is placed on a unit that is not the first choice for that patient's treatment. While there may be many safe places for a patient to receive care in a hospital, there is typically a unit where the staff specialize in the type of care the patient needs.

*Capacity Related Redirects/Cancel*s – Measuring when patients are not granted access for service due to capacity issues helps hospitals identify potentially preventable service denials. Patients are appropriately redirected when the service they need is not provided by a hospital. However, if a patient is turned away because the facility could not accurately tell the admitting physician when a bed would be available, that is a preventable redirect.

Case Management

Ratio of Observed to Expected LOS – Looking at patient length of stay (LOS) alone is not sufficient. LOS can decrease with no change in patient management if patient acuity has decreased. Such a decrease would be an expected change in LOS. Evaluating the observed or actual LOS, compared to the expected LOS, which factors in patient acuity, helps determine when LOS reduction was due to efficiency gains rather than acuity changes.

Utilization Criteria Not Met – Understanding whether patients are in the appropriate bed type is critical to making the best use of available resources. Inpatient beds are not put to best use when patients who could safely receive care in an outpatient setting are admitted. Evaluating when intensive care or telemetry beds are needed is another example of assessing the appropriate level of care.

Predicted Discharge Accuracy – The ability to predict when a patient will be going home, at least a day in advance, is very helpful on several fronts. First, the care team all understands the plan and can work together toward a target discharge date. Second, communication can be provided to the patient and family so they can plan for the discharge and make appropriate transportation and other arrangements. Third, information about when beds will become available can be used by the patient placement team to best allocate incoming patients to beds and to make decisions about when patients can no longer be accommodated.

Case Study: Using Patient Flow Metrics to Improve Performance

Assume that your board is presented with the patient flow and bed management metrics in the “Patient Flow Performance Trend Report” on page 3. Management reports that overall occupancy is not as high as it needs to be while the use of intensive care beds is very high and medical-surgical occupancy is below goal. Management suggests issues that may be contributing to these occupancy problems include:

- Clinical staff are not doing a good job communicating when patients will be discharged and their beds will be available for other patients, including those transferring from the intensive care units.
 - Too many patients are being placed on units that are not the first choice for where they should receive their care, slowing down care processes.
- The most troubling aspect of the data is that despite low occupancy rates, as

many as 38 patients a month have been turned away due to capacity related issues. On the bright side, length of stay looks close to the desired target and the data suggest that the right types of beds are being used and that environmental services staff are doing a good job of turning around beds in a timely manner.

Where should the board help the organization direct its limited resources to improve performance and serve more patients?

In this situation, a detailed assessment was conducted to understand the issues that should be addressed to best improve performance. The results of this assessment are included in the “Patient Flow Performance Summary” on page 3. The report identifies strengths and opportunities for improvement, with specific action steps for each performance area. The report points out that

while environmental services and bed utilization metrics look satisfactory, actual performance is not. Management explains that the Environmental Services staff were observed responding to requests rapidly. However, they are not entering the status of many beds or not entering data into the system in a timely way. This causes beds to appear occupied or dirty when they are actually vacant and possibly clean and ready for the next patient. The Patient Placement staff are turning away patients unnecessarily because they don't think beds are available. Another finding of the detailed assessment is that Case Management staff are not applying utilization review criteria correctly. Many patients in ICU beds could appropriately be placed on the medical-surgical units. Both of these issues can be easily addressed so that more patients will be served in a timely manner at the level of care appropriate for their situation.

This performance summary and action plan provide the board with a detailed road map for how management intends to allocate resources and improve performance. The board can use this report to:

- Clarify management's approach by asking questions such as: Why did you select the action steps included in the report and what other alternative steps did you consider? How will physicians be involved in implementing the action plan? When the action plan is completed, what level of overall patient flow performance improvement do you anticipate?
- Regularly monitor progress on accomplishing the action plan through the board's committee structure and at full board meetings.
- Ensure that patient flow improvement becomes a reality.