

Effective Discharge Begins at Admission

A Patient Flow Logistics Coordination Model

*Prepared by Ben Sawyer
Patient Placement Systems*

Executive Summary

The claim that patient care suffers because of the fragmentation of healthcare delivery is not new. In 1994, the US Primary Care Policy Fellowship observed that “fragmentation of care” was a significant barrier to health care for vulnerable populations.

The Institute of Medicine more recently noted:

“Health care is characterized by fragmentation — among disciplines, among departments, among organizations, and among geographic locales — while those it serves depend on coordinated effort. The system propagates waste: waste of time, resources, and good will.”

No one understands fragmentation in healthcare better than Case Managers and Social Workers. These front-line professionals serve at the epicenter of the fragmented delivery system. They are engaged with the patient’s progression of care from admission to the hospital through discharge, up to and including facilitating post-hospital care. As a result, they have first-hand experience dealing with patient flow disconnects and bottlenecks. These constraints compromise the patient care experience, and contribute to diversions, LOS delays, and poor financial performance.

However, if Case Managers and Social Workers are addressing these challenges every day, then why does patient flow fragmentation persist in the care coordination and discharge planning process?

Fragmentation persists primarily as a result of three (3) concurrent operational challenges:

1. The disparate ‘islands of excellence’ culture of the healthcare system, including the lack of coordination between hospitals and post-hospital care providers;
2. The many ‘moving parts’ of the healthcare delivery process adding complexity to patient care coordination and discharge planning;
3. The limited incorporation of the necessary patient flow logistics technology to address a problem of this magnitude.

Case management efforts alone, without full system collaboration and patient flow logistics technology to support those efforts, is akin to putting out a house fire with a garden hose. It represents a gallant effort but does not solve the problem.

W. Edwards Deming, considered the father of statistical process control, describes unit-centric cultures as lacking “system aim.” A system, he contends, is a “network of interdependent components that need to work together to accomplish the aim of the system.” If the aim of the system is excellent patient care and efficient throughput, then collaboration across the various involved departments and organizations becomes critical. Because of the number of ‘moving parts’ in healthcare delivery, leveraging technology also becomes a requisite in order to provide a ‘system aim’ view of the patient flow process, and to coordinate the necessary resources for effective patient flow.

Nowhere is there a more classic display of interdependent components lacking ‘system aim’ than in discharge planning and placement.

Delayed discharges are particularly problematic because of their significant impact on hospital admissions and patient throughput. As a result of delayed discharges, bed control does not have enough bed options to meet incoming demand. Critical care units become challenged with moving patients into step-down areas, which then directly impacts inpatient admissions from the Emergency department. Perioperative services also experiences back-ups in the PACU, waiting for beds to become available.

In effect, discharge delays create an upstream tidal wave of patient flow constraints which negatively impacts patient satisfaction, safety, hospital capacity, and financial performance.

A large contributor to delayed discharges is the challenge of coordinating post-hospital care. Researchers from the Center for Injury Sciences at the University of Alabama reported that the main cause of delayed discharge for their organization was limitations in post-hospital care. (*Thomas S, McGwin G, and Rue L, 2005*). The authors suggest that “strategies must be identified to reduce the barriers to post-hospital care, in order to reduce delays in discharge, and lower unnecessary hospital costs”.

Eliminating fragmentation in the post-hospital care environment, so that available resources are transparent to hospital Case Managers and Social Workers, then becomes an important ‘system aim’ objective.

This white paper proposes a Patient Flow Logistics Coordination Model to address these challenges.

By leveraging technology to provide a ‘system aim’ view and coordination of the patient flow process, effective discharges can begin upon patient admission; giving Case Managers and Social Workers the necessary tools to turn ‘hand-offs into handshakes’ for improved throughput performance.

Culture of ‘Islands of Excellence’

Hospitals generally pride themselves on being “centers of excellence,” always striving to uphold high standards of patient care and throughput and, as much as possible, being on the forefront of technology and treatment protocols. The reality is often different.

The typical hospital comprises many “islands of excellence,” individual departments and providers across the healthcare continuum that work to meet or exceed patient care standards for their particular discipline.

While this can be an admirable goal, there is one serious unintended consequence: a unit or provider-centric paradigm which emphasizes performance standards in specific areas, often at the expense of interdepartmental or system-wide cooperation and coordination. Case managers experience first-hand these hand-off challenges when attempting to manage the progression of the patient’s care from admission to discharge, and into the post-hospital care environment.

It is not that hospital leaders are unconcerned about overall patient throughput and performance. They are. However, a department-centric organizational structure, with departmental directors reporting to divisional vice presidents or assistant administrators, constricts the scope of the organization’s vision. As a result, the focus is on individual areas of operation, with deference to other departmental colleagues who are similarly managing their “own” operations, becoming the unstated rule.

W. Edwards Deming, considered the “father” of statistical process control, refers to this department or provider-centric culture as a lack of “system aim.” A system, he contends, is a “network of interdependent components that need to work together to accomplish the aim of the system.”

Management of a system, according to Deming, “requires the constant facilitation of the interrelationships between all of the components within the system and of the people working in it.”

Across the hospital departments and providers, the lack of system aim leads to disconnected ‘islands of excellence’, which are manifested in three primary ways:

1. **Cross-vertical handoffs do not occur seamlessly.** Ideally, the movement of patients from admission through diagnostics, treatment, nursing units, to day of discharge, and on to post-hospital placement as necessary, should occur without significant delays. In the department or provider-centric environment, however, one area’s needs are not necessarily compatible with another area’s priorities. For instance, nurses on a med/surg unit may not notify bed management — or they do so only after a substantial delay — that a bed has been vacated. Consequently, there are vacant beds that could be occupied by revenue-generating patients — who are kept waiting somewhere else.
2. **Inputs and outputs are controlled at a unit, not system, level.** Unless the hospital is on diversion, the usual patient entry points (i.e., admissions and the ED) have little or no control over their inputs. In other words, they are expected to accommodate all comers. Problems arise when other departments, such as nursing units, limit their inputs, causing a backlog of patients and making it difficult to deliver patient care according to prescribed protocols. As indicated in the previous paragraph, these input obstacles are not intentional.

3. Rather, they reflect the exercise of unit priorities over system aim. The same is true with discharge outputs to post-hospital care providers. The post-hospital care provider completely controls their own inputs, and without a system aim agreement and view, they may not accept a patient that they could have accommodated, resulting in delayed discharges.
4. **Efficiencies gained in one area do not necessarily contribute to system-wide patient flow.** It's quite common for individual units to undertake efficiency improvement initiatives. Frequently, however, the efforts of one unit are not synchronized with those of others, and overall patient flow remains unchanged. If, for example, the transport department boosts its efficiency, but it is not coordinated with a similar endeavor in a procedural area, patients will find themselves in that age-old predicament of "hurry up and wait."

Discharge Planning Process Challenges

Prospective payment has accelerated much of the care within the hospital, necessitating earlier discharge planning assessment, intervention, and community contact.

Even under the best of circumstances, the discharge-planning process in hospitals is inherently complex with lots of 'moving parts'. Information from many sources must be gathered, including patient-specific information regarding functional status and patient and family preferences, as well as information about available community resources. Alternatives have to be generated based on the information gathered, and one alternative must be selected and implemented. This selection involves trading off factors - which patients, their families, and health care providers may value differently.

Added to this complexity is the environment in which these decisions are made, which is often one of time constraints and emotional distress. Hospital discharge planners generally recognize variations in patient characteristics when making their recommendations. Factors which discharge planners must consider include the availability of caretakers at home, age, multiple diagnoses, previous hospitalizations, and equipment dependence. Also, patients waiting for a place in their first choice of Nursing Home care to become available, and/or patients who did not have a family to assist them home are likely to be delayed. It is a combination of these individual, medical and organizational challenges that interact to put people at risk of delayed discharge.

What then contributes the most to delayed discharges? The answer, researchers have found, is how organizations manage patient care (Hubbard, Huby, et. al.).

"It is not the clinical condition per se which causes the delay, but how organizations are managing services to care for people with these clinical conditions that cause the greatest delays".

Effective Discharge Begins at Admission

Ideally the determination of the patient's discharge plan begins upon their admission to a hospital. Based upon their presenting condition, physician order set, severity of illness or injury (SI), and the intensity of services required (IS) a resource plan of care and discharge plan can be identified up front for each patient. This would include the type of room or bed the patient may need, the anticipated equipment, diagnostic technology, and staff required for an effective patient flow

experience at the hospital, and all necessary post-hospital care resources. The effective orchestration of these resources from admission through discharge facilitates a more efficient length of stay (LOS) and post-hospital care experience - directly impact patient satisfaction and hospital capacity management.

When there is synchrony between the clinical and resource plan of care, patients receive the right services at the right time. For example, a patient will receive a prompt bed assignment, avoiding unnecessary delays. Or a patient gets transported in a timely fashion to diagnostics, and does not have to wait a significant period of time before being seen. Tests and results are processed efficiently, so that hours or days do not pass before results are back. Day of discharge and placement tasks can be coordinated to allow for a smooth hospital exit to post-hospital care as necessary.

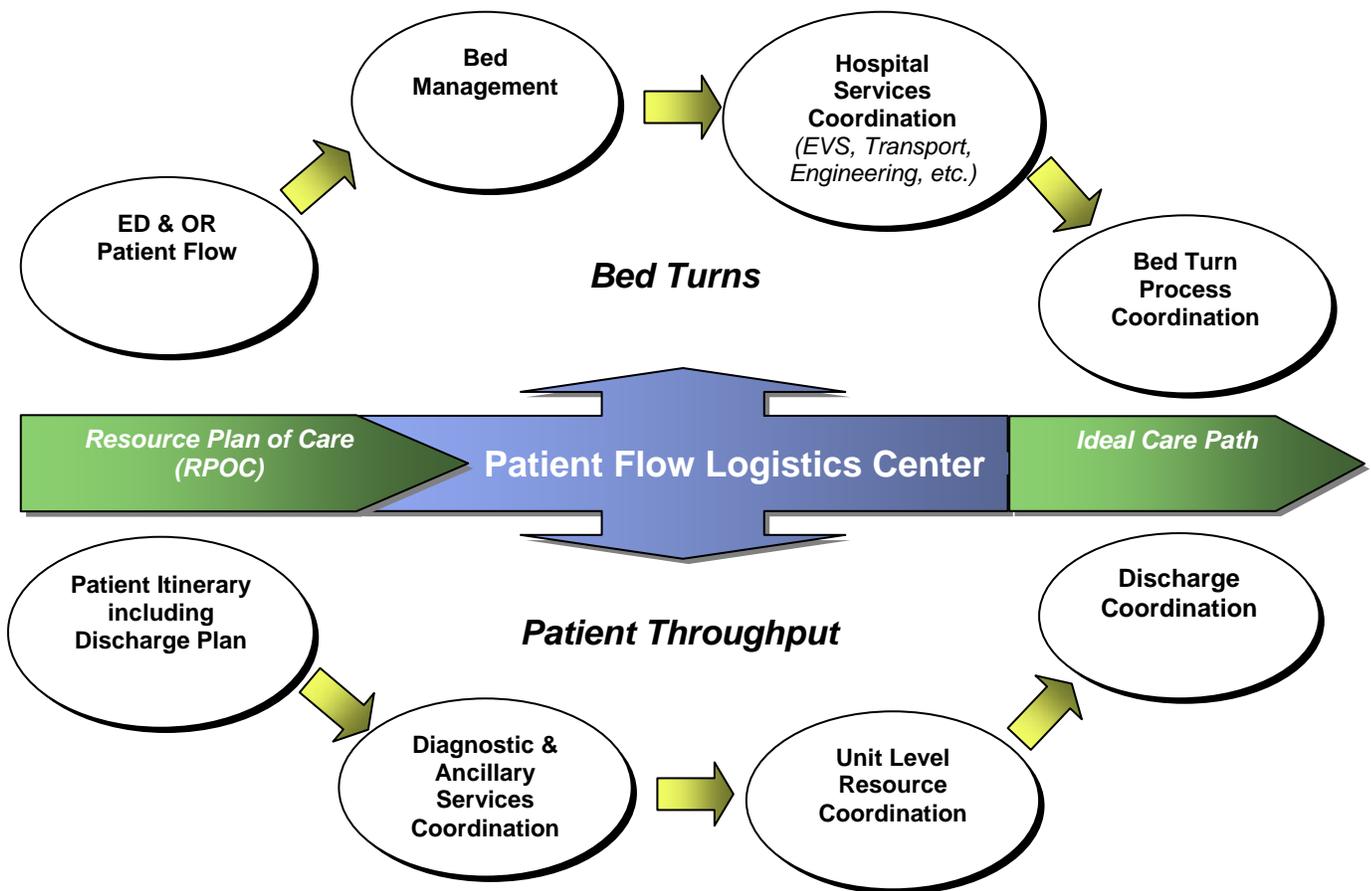
Coordinating the resource plan of care involves sequencing the anticipated services and procedures so that they are delivered in an efficient and timely fashion.

Ultimately, the patient's clinical plan of care and resource plan of care need to function in synchrony for effective care delivery. A helpful metaphor is the parallel tracks required to effectively move a train to its destination. You can have an excellent conductor and crew, and a superb engine, but without both tracks laid out side-by-side the train will be derailed.

Patient Flow Logistics Coordination Model

The concept of using technology to improve patient flow is not new to healthcare. However, until recently, the application of these technologies has been limited to performance improvement within individual departments.

Today, there is a pressing need to take this technology to the next level: system-wide patient flow logistics coordination, including post-hospital discharge coordination. (See Figure 1 below)



In the Patient Flow Logistics (PFL) Coordination model, an initial *resource plan of care* is determined for each new patient admitted to the Hospital, factoring in the following seven (7) variables at minimum:

1. Presenting condition(s);
2. Physician order set;
3. Severity of illness, and the intensity of service (SI/IS) required. (For example critical care versus general medical / surgical care);
4. Status (*Inpatient or Observation*);
5. Appropriate bed placement;
6. Anticipated course of treatment, and required resources;
7. Preliminary D/C plan.

The early identification of these resource plan of care variables, allows Bed Coordinators and Case Managers to use patient flow logistic technology to map out an *ideal care path* for each patient. This would ensure the best bed placement decision, and creates a patient itinerary against which patient flow performance can be measured in real-time over the patient's length of stay (LOS). The admitting nurse's initial assessment, combined with the assessments from the other services then refines the patient's *resource plan of care* and *ideal care path*.

Any modifications can be effectively incorporated into the patient's daily itinerary within the PFL technology application. Prioritized task queues by role and by area, as well as real-time dashboards, coordinates the efforts of all personnel responsible for safe and effective patient care. Each participant can see the patient's itinerary and their role in the patient's ideal care path. Day of discharge tasks, and post-hospital care coordination can also be anticipated and effectively coordinated for improved discharge performance. As a result, bed turns and patient throughput increase. Patient satisfaction will also improve as waiting is minimized, and staff collaboration is enhanced.

A central location for Patient Flow Logistics coordination is not required. Web-based patient flow logistics technology easily accommodates staff working in multiple locations.

Discharge Coordination – Leveraging Technology

Effective discharge coordination compares a patient's profile with appropriate post-hospital providers so that they can be matched to the best possible extended care environment. Unfortunately, the typical process is extremely labor intensive, requiring multiple phone calls and faxes to find the provider with the right capability and capacity.

Web-based discharge and placement technology now exists that automatically compares the patient's profile with a network of available post-hospital care providers. It eliminates duplicate information entry and communication redundancy, while increasing accuracy, and improving efficiency. Electronic transfer of patients' medical records keeps confidential patient data secure, and HIPAA compliant. It also means that the patients' care history can be easily accessible to post-hospital providers.

This type of electronic referral management system for the post-hospital care provider can reduce fragmentation in their care delivery model as well. They can capture and manage all inbound patient referrals and medical records across their own facilities, further decreasing fragmentation in the post-hospital care environment.

Summary

Effective discharges can begin upon patient admission by implementing a Patient Flow Logistics Coordination Model and leveraging the requisite technology to provide a 'system aim' view and coordination of the patient flow process. This gives Case Managers and Social Workers robust and sustainable workflow tools to turn 'hand-offs into handshakes' for improved throughput performance in the hospital and in the post-hospital environment. This approach can:

1. Bridge the disparate 'islands of excellence' that exist within the healthcare system, improving coordination across the hospital, and with post-hospital care providers;
2. Connect the many 'moving parts' of the healthcare delivery process and better manage the complexity for improved patient care coordination and discharge planning;

The net result will be improved patient satisfaction, patient throughput, hospital capacity, and financial performance.

About the Author

Ben Sawyer, Executive Vice President of Market and Client Development for Patient Placement Systems, possesses an extensive and distinguished career in the healthcare sector. His previous positions include Director of Performance and Process Improvement (PI) at St. Mary's Health Care System in Athens, GA, where he facilitated more than 30 PI teams and developed an effective PI infrastructure. Prior to that, he served as Clinical Director in two hospital systems and as Director of Planning and Development for two healthcare corporations.

For information about discharge and placement technology, visit www.patientplacement.com, or call Patient Placement Systems at 800-832-8397.

Patient Placement Systems
3650 Mansell Road, Suite 300
Alpharetta, Georgia 30022
800.832.8397
www.patientplacement.com