Making the Middle Count
Three Tools to Improve Throughput for a Better Patient Experience

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ABSTRACT
This article discusses three ways in which dramatic improvements in middle flow, or examination-to-disposition time, can be driven by emergency department (ED) nursing leadership. By operationalizing a “results pending” area, low-acuity patients who are unlikely to be admitted can await diagnostic results or be actively monitored by a dedicated nurse, ED rooms and beds may be reserved for higher acuity patients. Monthly operational stakeholder meetings can provide a consistent opportunity to track, monitor, and improve flow while also celebrating successes and identifying needed performance improvements based on objective metrics for shared goals. Internal customer rounding is a process that serves as effective follow-up from the stakeholder meeting to ensure aligned behaviors to meet identified goals. Frequency of rounding is identified during the stakeholder meeting. By using these three tools, ED stakeholders can effectively focus on solutions instead of barriers to improving middle flow. Key words: flow efficiency, internal customer rounding, results pending area

With mandatory reporting of emergency department (ED) throughput metrics required by the Centers for Medicare & Medicaid Services (CMS) in 2014, a new era of transparency has arrived. Because patient perception of care is negatively impacted by length of stay (LOS; Horwitz, Green, & Bradley, 2010; Walsh & Knott, 2010), hospitals in some competitive markets are even posting their ED wait times publicly. By implementing best practices to improve throughput and reduce LOS in the ED, organizations can meaningfully improve clinical outcomes and the patient experience as a whole.

In addition, ED performance is expected to drive new CMS reimbursement guidelines by the fourth quarter of 2015. For example, the CMS recently reported that for the period April 1, 2012, to March 30, 2013, the median national wait time for ED arrival to departure for admitted patients (NQF0495) was 275 min and for ED arrival to departure for discharged patients (NQ0496) was 137 min (“Hospital Compare Data,” July 2012–June 2013). Under such a new rule, EDs with longer wait times...
will be penalized whereas those that outperform others will be rewarded through higher reimbursement rates.

Because of these new CMS regulations—as well as the expected 2015 launch of the Emergency Department Consumer Assessment of Healthcare Providers and Systems survey—there is new urgency to hardwire processes and engage staff in the ED to achieve greater efficiency of patient flow. Long wait times also negatively impact the patient experience. In fact, CMS data show that patients with ED wait times of less than 248 min typically rate the hospital a “9 or 10” on the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey, placing them in the upper quartile of all hospitals. However, those who wait 312 min rate the hospital much lower (placing them in the lowest quartile for HCAHPS patient experience of care).

THE OPPORTUNITY TO IMPROVE MIDDLE FLOW

Efficient triage and immediate bedding will effectively solve front-end flow issues by reducing wait times for faster patient care (Baker, Shupe, & Smith, 2013). While back-end flow must be addressed through hospital-wide collaboration, dramatic improvements in middle flow—or examination-to-disposition time—can be driven by ED nursing leadership.

Best practices hardwire efficiency by utilizing both processes and people to create and sustain substantive gains in optimizing flow (Landro, 2011). These include (1) operationalizing a dedicated care management space for patients waiting on results (results pending [RP] area), (2) monthly operational stakeholder meetings, and (3) rounding by ED leaders on ancillary staff.

Operationalizing an RP Area

RP Area Is Not a Patient “Dump Zone”

An effective RP area is a dedicated space that typically depends upon the volume of patients in the ED but, on average, includes six to 12 recliners and both a dedicated nurse and a technician who proactively monitor the clinical status of RP patients for any additional provider consults, tasks needed by ancillary departments, and timely discharge to ensure open seats for new patients. It is the author’s experience that nurses recognized for efficiency and proactive behaviors are best selected over those who are more task-driven to ensure RP area success.

The appropriate size of an RP area can be determined by sampling the busiest times in the ED to obtain a snapshot of the number of patients in the core ED who are awaiting results. The amount of space in the dedicated area is also a consideration. Creative solutions for finding such a space include transforming an adjoining trauma bay with low volumes, or nearby supply closet, or turning two patient treatment areas into a space for six to eight recliners.

Patients may move to this area from the core or intake/procedure area. It is also imperative that the RP area includes a “results sharing” area, a small room where providers can meet privately with patients to discuss test results and discharge instructions. In the occasional case that RP patients need to be admitted, they may be moved from the RP area directly to an open bed on an inpatient floor or to a core bed in the ED until an inpatient bed is available.

Patients Appropriate for an RP Area

Emergency departments that can benefit from an RP area are those with excessive LOS and a large number of Emergency Severity Index (ESI) Level 4 and 5 patients who are unlikely to be admitted. They may also include some patients initially diagnosed with ESI Level 2 but downgraded to Level 3, 4, or 5 (e.g., allergic reaction/mild anaphylaxis that responds to medication/intravenous fluids) and some ESI Level 3 patients (typically vertical; e.g., stable abdominal pain with anticipated workup showing nonsurgical pathology, simple ovarian cyst, mild irritable bowel syndrome, low-risk chest pain, stable musculoskeletal injuries, wound care, back pain).
By moving low-acuity patients who are waiting on diagnostic results or who require further observation to a dedicated space actively monitored by a dedicated nurse, rooms and beds are reserved for higher acuity patients with more emergent needs for faster bed turnover. Patients not recommended for the RP area include those who require isolation (e.g., infection, mental illness, law enforcement watch), those with intoxication secondary to alcohol or drug abuse, those with clinical deterioration, or those with suspected need for upgrade of clinical status. In addition, patients with social/case management or complicated social needs that would prolong their stay for more than 3–4 hr are not recommended for the RP area.

**Other Best Practices With Respect to the RP Area**

Key words with patients are critical to setting expectations at the outset. For example,

We are really working on making our ED more efficient. To ensure you are seen and treated more quickly, we now have a results pending area for you to wait comfortably. Please understand that due to space constraints and privacy issues, we can allow one family member to accompany you. However, family members are certainly welcome to trade off.

It is recommended that family members be offered a folding chair to accompany the patient waiting in the RP area.

Before implementing an RP model, the ED at St. John’s Hospital, affiliated with the HealthEast Care System in Maplewood, MN (annual volume 39,000 ED patients), was ranked below the 50th percentile by patients on most measures of care by its patient satisfaction vendor as compared with peer organizations. “Left without seen” patients were well above the national average at 4.5%, and LOS was high at an average of 259 min. Because it is important to diagnose flow challenges unique to a particular ED before instituting a treatment plan, a flow simulation can be helpful to decide if an RP area will be a beneficial solution. “We used a visual tabletop exercise to simulate patient flow with and without Results Pending based on our own time stamps to assess the value of implementation,” notes Tammy Ducklow, RN, BHS, BCEN, ED clinical director at St. John’s Hospital of HealthEast Care System in Maplewood, MN. “As a result, we set a goal to move 18 percent of patients through RP, but have exceeded that goal by averaging 22 percent of patients discharged home” (The Director of Emergency Services telephone interview, January 24, 2014). (A webinar of a tabletop exercise in progress is available at www.studergroup/HealthEastEDFlow.)

After 19 months of utilizing an RP area, St. John’s Hospital reduced door-to-provider time from 51 to 32 min, door-to-bed time from 47 to 19 min, and left without seen patients by 2.3%, for a total left without seen rate below the 1.8 national average of just 1.25%. Over 2 years, St. John’s Hospital also captured an additional $276,800 in reimbursement by reducing left without seen patients.\(^1\) Length of stay has been reduced from an average of 259 to 198 min.

Initially, St. John’s experienced low utilization of its RP area, with an average utilization of just 12% of patients, well below its 20% goal. Upon analysis, it was determined that this was due to providers not utilizing the RP area early enough in the patient stay. As a result, registered nurses were trained to “pull” patients to the RP area once they identified the end of the acute care treatment phase (e.g., intravenous therapy, medication, medical imaging) until all test results were complete and they had been dispositioned by the provider. Nurses were also trained to begin discharge preparation as soon as the patient arrived in the RP area. For example, a grant from a local Lions Club enabled St. John’s Hospital to share teaching videos via iPad (e.g., crutch training, signs and symptoms of wound infection) while patients awaited discharge.

\(^1\)Based on capturing an additional 692 left without seen patients between 2011 and 2013 at $400 per patient.

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Although St. Johns Hospital now averages 22% of patients moving through its RP area, it continues to work to find ways to increase utilization by providers. In fact, a new improvement team comprising ED nurses and providers will focus primarily on improving RP area utilization and functionality and determining a process for identifying daily potential RP patients early in the day before the RP area opens to maximize functionality.

“The medical director and clinical director need to be aligned with the same goals. They need to own the whole emergency department so they act in the best interest of waiting patients through more efficient treatment for admission or discharge,” adds Ducklow. “Also, ED leaders need to be visible and accessible for support during implementation. Role model team problem-solving to break down silos.” Ducklow also recommends “hardwiring” one new behavior at a time before beginning something new. “One way to address change fatigue is to pace change by spending time celebrating sustained gains rather than moving quickly to the next thing,” she explains (The Director of Emergency Services telephone interview, January 24, 2014).

**Monthly Operational Stakeholder Meeting**

Regardless of how an ED triages flow, true throughput efficiency is dependent upon effective collaboration with all team members, including ancillary staff. One of the best ways to track, monitor, and improve flow is the use of a monthly operational stakeholder meeting. The meeting provides a regular opportunity for the group to celebrate successes, identify needed performance improvements based on objective metrics for shared goals, and discuss the “why” behind changing processes to create shared ownership.

**Structuring the Process**

Typically, such a meeting is cochaired by the ED nursing director and the medical director with a senior sponsor who oversees the ED. Attendees include the assistant medical director, the nursing director/manager, ED charge nurses/ED supervisors, ED frontline staff, several key staff physicians, and key ancillary and support leaders (e.g., Registration, Radiology, Laboratory, Environmental Services, Information Technology, and Security). It is also recommended that the hospital chief executive officer, the chief nursing officer, and the vice president of support services attend at least quarterly to help drive results and accountability.

Stakeholder meetings are held monthly with a formal agenda and typically last 60-90 min (Baker, Shupe, & Smith, 2012). (A sample stakeholder meeting agenda may be viewed at www.studergroup.com/stakeholderagenda.) Initial meetings may run longer as ancillary and support department leaders report out and a work plan is developed. As the team matures, meetings should last no more than 60 min.

Individuals are also assigned follow-up action items with due dates that are documented in meeting minutes, which are received promptly by all participants. As a result, organizations frequently cite the value of this type of structured agenda in achieving goals to ensure efficient meetings result in meaningful outcomes that drive performance (The Director of Emergency Services, telephone interview, January 24, 2014).

**Best Practices for Stakeholder Meetings**

Reviewing performance on key metrics on an ED monthly scorecard (see the Figure) at each meeting aligns all ED stakeholders through a dashboard of shared goals and objective performance targets. Current data are collected to update the dashboard and are shared in advance with all stakeholders for discussion at the meeting.

Typically, barriers to improvement are identified as either “people” (e.g., staff or leaders) or “processes” (e.g., laboratory turnaround time) issues (Baker et al., 2012). In both cases, the meeting agenda provides a framework with objective measures so that the team can work together to increase efficiency without falling prey to the “we/they” syndrome. It also provides a monthly opportunity to reward and recognize those individuals.
ED Monthly Stakeholder Meeting

<table>
<thead>
<tr>
<th>Pillar</th>
<th>Topic</th>
<th>Discussion Leader</th>
<th>Time</th>
<th>Assignments Responsibilities Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service</td>
<td>Welcome/Introductions and Connect to Purpose Moment- Wins</td>
<td></td>
<td>5 min</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review of ED Pillar Dashboard Results</td>
<td></td>
<td>15 min</td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td>Review of ED Report Card – Each group please be prepared to report out your results</td>
<td></td>
<td>10 min</td>
<td></td>
</tr>
<tr>
<td>People</td>
<td>Review of priority employee/physician satisfaction indicators and action steps for improvement</td>
<td></td>
<td>15 min</td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td>Review of clinical quality core measures</td>
<td></td>
<td>10 min</td>
<td></td>
</tr>
<tr>
<td>Finance/</td>
<td>Review of Finance/Growth results</td>
<td></td>
<td>15 min</td>
<td></td>
</tr>
<tr>
<td>Growth</td>
<td>90 Day Plan Development- based on gap analysis to goal.</td>
<td></td>
<td>15 min</td>
<td></td>
</tr>
<tr>
<td>Service</td>
<td>Implementation of action plan and review of responsibilities</td>
<td></td>
<td>5 min</td>
<td></td>
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<tr>
<td></td>
<td>Closing Remarks/Next Steps</td>
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</tbody>
</table>

Figure. Sample ED monthly report card. D/C = discharge; Dispo = disposition; ED = emergency department; LAB = laboratory; LOS = length of stay; pts = patients; Qtr = quarter; TAT = turnaround time.

who demonstrate ownership by addressing is-

Baton Rouge General Medical Center/ General Health System in Baton Rouge, LA (110,000 ED visits annually between two campuses), credits stakeholder meetings as an important tactic for meaningfully reduc-

ing wait times, improving flow, and increasing patient satisfaction. Baton Rouge General’s General Mid-City ED has shaved 53 min off ED arrival to departure for admitted patients, whereas its Bluebonnet campus ED has reduced wait times by 60 min for this metric over the same 12-month period.)

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Jennifer Gilmore, BSN, RN, director of emergency services at Baton Rouge General, recommends that ED leaders implementing stakeholder meetings begin by first meeting with the ED team to establish a vision for the department and then meeting individually with each department to explain what to expect at a meeting: a shared agenda for improving ED performance on front and middle flow. “It’s important to focus the team on the items you can impact in the emergency department and make back-end flow off-limits at first,” explains Gilmore. “You will gain more cooperation from the inpatient side after the emergency department has its own house in order” (The Director of Emergency Services, telephone interview, February 6, 2014).

Initially, the team at Baton Rouge General’s Mid-City ED identified two key barriers to goal-setting for optimal turnaround times: lack of understanding by departments on what constituted best practices (e.g., turnaround times) and lack of automated systems to collect these data. This was addressed through a combination of manually collecting data, obtaining support through a vice president stakeholder in attendance to work through potential solutions, and using best practices at other organizations to set initial goals. The stakeholder team also selected goals as a group to ensure alignment and a focus on common goals.

After several months of working together to identify meaningful data, the team became more comfortable with its accuracy and more adept at presenting it graphically in ways that were easy for both frontline staff and leaders in attendance to interpret. However, when the organization implemented an electronic medical record (EMR), the team had to revert to collecting data manually until new automated solutions were identified. (They also paused the meetings for 3 months during this time- and resource-intensive EMR implementation but continued to collect data until meetings resumed.)

Gilmore also credits the emphasis on structure, transparency, and accountability at the meetings as key to overcoming prior challenges where such meetings did not produce desired outcomes. For example, the stakeholder meeting agenda includes an attendance template to ensure that required departments are represented. Missing departments are highlighted in meeting minutes and shared with the hospital chief executive officer, the chief nursing officer, and department heads monthly and in annual trend reports.

Follow-up items are assigned by name and due date at the meeting and addressed at the next meeting if incomplete. Also, because a senior sponsor from Administration is in attendance, departments are responsive to requests. When it became clear that laboratory turnaround times were a barrier due to outdated equipment, a vice president in attendance was able to advocate for the purchase of new equipment.

**Internal Customer Rounding**

Internal customer rounding is a process that serves as effective follow-up from the stakeholder meeting to build collaboration, strengthen interdepartmental relationships, and create scheduled one-on-one time for the ED leader and the ancillary leader to solve challenges and ensure aligned behaviors toward meeting identified goals (Baker et al., 2013). Rounding by the ancillary leader on the ED leader typically takes just 15 min and includes questions about what is working well in the department, who should be recognized for outstanding work, and suggestions for what the department could do to further improve performance.

During the stakeholder meeting, the group will identify how frequently departments will round on the ED leader and who will initiate the meetings. If a new process in Radiology is being implemented, for example, the Radiology leader might meet with the ED leader 15 min weekly to determine how the new process is working. If the team at the stakeholder
meeting is focused on improving patient perception of care around cleanliness, rounding by the Environmental Services leader would focus on that concern.

Weekly rounding is appropriate for high-priority issues, whereas monthly rounding is adequate for ancillary issues with less pressing challenges. It is also important to harvest information by documenting all findings on a rounding log for follow-up. (See sample rounding log at www.studergroup.com/roundinglog.)

CONCLUSION

With the increasing transparency and scrutiny of ED operations and patient experience, improving middle flow requires efficient collaboration by all ED stakeholders through shared ownership in processes and objective performance metrics that ensure timely delivery of clinical care and a positive patient experience. Operationalizing an RP area can remove critical bottlenecks in middle flow through active care management for waiting patients who are likely to be discharged. Stakeholder meetings and internal rounding by ancillary departments on the ED leader hardwire consistent communication among all ED stakeholders with a focus on solutions to challenges rather than barriers.

References


