2019

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Recommended Citation
Anderson, Robert; Anderson, Molly; Babine, Rhonda; Feghali, Farid; Dunstan, Elizabeth; Glazer, Matthew; Horton, Susan; O'Brien, Stephanie; Pontius, Elizabeth; Smith, David; Viens, Megan; and Williams, Heather (2019) "Bringing Upstairs Care Downstairs; Integration of Rehabilitation Medicine, Care Management, and the Hospital Elder Life Program (HELP) into an Emergency Department.," Journal of Maine Medical Center: Vol. 1 : Iss. 1 , Article 8.

Available at: https://knowledgeconnection.mainehealth.org/jmmc/vol1/iss1/8 https://doi.org/10.46804/2641-2225.1008

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Bringing Upstairs Care Downstairs; Integration of Rehabilitation Medicine, Care Management, and the Hospital Elder Life Program (HELP) into an Emergency Department.

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This innovation highlight is available in Journal of Maine Medical Center: https://knowledgeconnection.mainehealth.org/jmmc/vol1/iss1/8
INNOVATION HIGHLIGHT

Bringing Upstairs Care Downstairs; Integration of Rehabilitation Medicine, Care Management, and the Hospital Elder Life Program (HELP) into an Emergency Department.

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Introduction: Services such as physical therapy (PT), occupational therapy (OT), speech-language pathology (SLP), social work (SW), care management, and elder life specialists are an established part of care for patients admitted to Maine Medical Center (MMC) but not for patients seen in the Emergency Department (ED).

Methods: Driven in part by changes in Medicare reimbursement models, care management established a presence in the ED in 2003, focusing on care planning and cost avoidance. In recent years, PT, OT, SLP, SW, and the Hospital Elder Life Program (HELP) have increased their involvement in the ED substantially. These services support care management decisions and have become an invaluable part of the ED team. In this report, we describe the timing, staffing models, and roles of these interprofessional services in the ED at MMC.

Discussion: There was strong leadership support to create these positions in the ED. The increase in patient volume hospital-wide has required staffing flexibility. Initial concerns for slowing the ED were anecdotally resolved. Other hospitals in our system are interested in this approach.

Conclusions: While the value of this work seems self-evident and is already established for admitted patients, descriptive and outcome-oriented studies for ED patients would be informative.

Keywords: emergency department, care management, rehabilitation medicine, social work, Hospital Elder Life Program

Historically, the Emergency Department (ED) at Maine Medical Center (MMC) had not established programs for rehabilitation medicine [e.g., physical therapy (PT), occupational therapy (OT), speech-language pathology (SLP)], care management [e.g., registered nurses (RNs), social workers (SWs)], and delirium prevention. With the exception of PT, these interventions are newly described in the medical literature. For example, while early dysphagia screening by SLP improves outcomes,1,2 it has been understudied in the ED. The impact of care management on high utilizers in the ED has been described,3 but studies outlining their comprehensive role are lacking. Finally, expansion of a Hospital Elder Life Program (HELP) has been suggested in the literature,4 but it has not yet been described in the ED.
Care management at MMC, prompted by changing regulations and reimbursement models, led the way. By 2010, it was present in the ED 40 hours per week. Notably, however, the collective involvement of all the services has become much higher. Currently, there are 321 combined hours per week of either in-person service or dedicated on-call coverage (Table 1).

METHODS AND RESULTS

Integrating these services into the ED has led to new workflows and system changes, including updates to the daily provider directory, added computers and phones, and dedicated space for providers. Departmental leadership understood the potential to improve the patient experience and increase throughput. The following is a description of the approaches that brought these services to their current involvement in ED.

Rehabilitation Medicine (PT/OT/SLP)

In June 2016, MMC committed to increase availability of rehabilitation services for ED patients. Prior to that, rehabilitation coverage and response was sporadic and rare. Not surprisingly, established ED PT programs are rare and poorly understood.\(^5\)\(^,\)\(^6\)

Using evidence from other hospitals of similar size in the United States and abroad,\(^5\)\(^,\)\(^6\)\(^,\)\(^8\) the decision was made to increase rehabilitation presence and rank these referrals as a high priority. To fulfill this commitment, each rehabilitation discipline was assigned to carry a dedicated pager. ED providers and nurses were educated on the initiative and referral cards were placed throughout. Within two months, a part-time commitment of a single physical therapist grew into a full-time position, and there was also an increased utilization of occupational and speech therapists. Current levels of staffing allocation are listed in Table 1.

During monthly Geriatric Emergency Medicine Leadership meetings, rehabilitation leadership evaluated the progress of the initiative. It was rapidly recognized that the practice of rehabilitation medicine often requires a different skill set in this setting. The work up, diagnosis, and treatment of patients can be done with the ED provider rather than in sequence. Physical therapists upstairs traditionally work with patients with a diagnosis, an activity order, and a weight-bearing order. However, physical therapists in the ED downstairs often practice without this information, and the findings of their evaluations can help medical decision-making.

For ED patients requiring admission, therapist involvement offers an opportunity to improve systems-based care and reduce cost. Early therapy evaluation yields a more complete snapshot of the patient’s overall clinical presentation. Rehabilitation recommendations made early in the admission allow for care management to initiate early and accurate planning, which may expedite discharge to the appropriate level of care.

For ED patients with an unclear disposition, therapy’s role in the ED has been critical in improving patient safety. On a daily basis, ED providers and care managers rely on these expert evaluations to identify the safest disposition plan. Can the patient fulfill activities of daily living at home? Does the patient need acute rehabilitation, skilled nursing, or home services? Would the patient benefit from further evaluation in the hospital? Is there a new orthotic device that requires patient and family education for success at home? For years, such evaluations have been the cornerstone of discharge planning for admitted patients. Without the ED being involved in rehabilitation services, safe discharge planning and appropriate care coordination would be significantly limited.

Care Management

Care management was initially started in the ED with one RN attempting to get an early start on admitted patients to shorten the length of their hospital stay in acute care. However, as Medicare reimbursement evolved with a focus on readmissions and an appropriate level of care, it became clear that one care manager was not enough to handle the volume of a 60-bed department. Currently, the care-management team in the ED at MMC is composed of two full time RN’s, two full time SW’s, and two per-diem RN’s covering the ED seven days a week (Table 1).

Care managers are physically in the ED and have dedicated work spaces. They perform face-to-face consults, are available by a direct phone, and proactively screen ED patients. They communicate closely with ED providers, nursing, and rehabilitation services to coordinate the care of patients to reduce unnecessary admissions, ensure community supports for discharged patients, and admit patients directly from the ED to a rehabilitation or skilled
| Service or Department | 2015 Staff Allocation | 2018 Staff Allocation | Key Interventions and Outcomes |
|-----------------------|-----------------------|-----------------------|-----------------------------|
| Physical Therapy      | Inconsistent          | • One FTE assigned to ED, flexibility for more based on referral volume or boarders |
|                       |                       | • Monday–Friday, 10 hours/day (9:00am–7:00pm) |
|                       |                       | • Saturday–Sunday, 8 hours/day (7:30am–3:30pm) |
|                       |                       | • ED-assigned therapist carries a designated phone allowing direct communication without the need for call back, number listed on daily call sheet |
|                       |                       | Evaluation and treatment: |
|                       |                       | • Acute back pain |
|                       |                       | • Vertigo |
|                       |                       | • Stroke |
|                       |                       | • Assistive devices |
|                       |                       | Disposition decisions: |
|                       |                       | • Safety |
|                       |                       | • Mobility |
|                       |                       | • Home, admission, or rehabilitation facility recommendations |
| Occupational Therapy  | As needed for orthotic placements | • One FTE assigned to ED, flexibility for more based on referral volume or boarders |
|                       |                       | • Sunday–Saturday, 8 hours/day (7:00am–3:00pm) |
|                       |                       | • Available by pager, number listed on laminated cards at computer stations |
|                       |                       | Evaluation and treatment: |
|                       |                       | • Orthotics |
|                       |                       | • Stroke |
|                       |                       | • Cognitive evaluations |
|                       |                       | Disposition decisions: |
|                       |                       | • Safety |
|                       |                       | • Mobility |
|                       |                       | • Home, admission, or rehabilitation facility recommendations |
| Speech Therapy        | As needed for swallow evaluations | • One FTE assigned to ED, flexibility for more based on referral volume or boarders |
|                       |                       | • Sunday–Saturday, 9 hours/day (7:00am–4:00pm) |
|                       |                       | • Available by pager |
|                       |                       | Evaluation and treatment: |
|                       |                       | • Swallowing |
|                       |                       | • Stroke, focus on communication |
|                       |                       | Disposition decisions: |
|                       |                       | • Diet recommendations |
|                       |                       | • Safety |
|                       |                       | • Home, admission, or rehabilitation facility recommendations |
### Table 1: Emergency Department Staffing Innovations (continued)

| Care Management | Hospital Elder Life Program (HELP) |
|----------------|-----------------------------------|
| • Two FTEs, RNs  
  • One FTE, SW  
  • Four FTEs; two RNs and two SWs  
  • Monday–Friday, 14 hours/day (8:00am–10:00pm)  
  • Saturday–Sunday, 12 hours/day (8:00am–8:00pm)  
  • Monday–Friday: Always an RN and SW physically present in the ED and available by direct phone  
  • Saturday–Sunday: Either an RN or a SW physically present and available by direct phone | None  
  • All ED-admitted and boarded patients are screened by HELP team and enrolled in the program; screening and admission is time-sensitive  
  • Sunday–Friday, 8.5 hours/day (7:00am–3:30pm)  
  • Order in the EHR under “Hospital Elder Life Program” |
| • Coordination of care  
  • Ensuring safe discharge plan  
  • Referrals to community resources  
  • Admission to an outside facility directly from the ED  
  • Working to reduce readmissions and length of stays for admitted patients  
  • Communicating results and treatment plans with patients and families | • Early HELP enrollment for admitted patients is crucial for delirium and preventing functional decline |

EHR, electronic health record; FTE, full-time equivalent; RN, registered nurse; SW, social worker.

nursing facility. For admitted patients, early care management can also reduce the work of inpatient care managers, directly reducing the overall length of stay.

This important work is labor intensive and requires a detailed knowledge of both national and local regulations and resources. Care managers have a working knowledge of admission criteria, insurance coverages, regulations for home care and hospice services, and local resources, as well as available local home services, nursing homes, and rehabilitation/skilled nursing facilities. After identifying a patient’s needs, they spend significant time gathering physician recommendations, test results, and PT/OT assessments, and then coordinating the patient’s care to develop their safe and appropriate disposition from the ED.

### Delirium Prevention

The Hospital Elder Life Program (HELP) is an interprofessional and evidenced-based program that is aimed at preventing delirium and functional decline in hospitalized older adults by using specially trained volunteers. The HELP team generally consists of an elder-life specialist, an elder-life nurse specialist, and a geriatrician or other physician. Patients over the age of 70 are assessed for six modifiable delirium risk factors including sensory impairment, baseline cognitive impairment, dehydration, malnutrition, sleep impairment, and functional disability. Based on these risk factors, the HELP team develops patient-care plans that are implemented. While historically not included in the HELP model, ED-based interventions have been suggested.

In June 2018, in response to the number of boarders in the ED, the HELP team initiated purposeful screening of all patients over the age of 70 years boarding in the ED. On average, the HELP team enrolls approximately 50 patients per week, and 20% of these patients are now evaluated while in the ED. Volunteer visits are initiated soon after patient enrollment into the program. On average, the HELP at MMC prevents delirium in 95–97% of patients enrolled in the program.
DISCUSSION

In many ways, integration of the above services into this ED has been a natural expansion of care already offered for admitted patients. However, this expansion would not have been possible without the vision of MMC leadership and the enthusiasm of the first wave of therapists, care managers, and HELP volunteers. The various department leaders reviewed staffing levels regularly, noted the value of this work, and secured additional full-time staff. Current staffing levels are challenged by high patient volumes hospital-wide, which often requires therapists and care managers to shift between different units.

Anecdotally, there were some initial concerns that additional evaluations would increase length of stay and slow down the ED. However, ED providers quickly noticed the value of parallel evaluation. In addition, representatives from other Maine Health hospitals visited MMC to learn more about this initiative.

CONCLUSION

There are several areas for future studies. First, and somewhat surprisingly, there are descriptive deficits. The volume of patients evaluated by rehabilitation medicine and/or care management in the ED is unknown. While rehabilitation consults are trackable in the electronic health record, identifying whether or not the consults occurred in the ED is not an easy task. Collaboration with information services to create reports is needed. Tracking care management involvement is even more challenging because their work is not triggered by a consult in the electronic health record, but rather a phone call or direct communication. Furthermore, mechanisms are needed to track the wide variety of tasks they complete.

The second avenue for further studies might strive to answer the question, “Are we making a difference?” While day-to-day outcomes seem self-evident to providers on the ground, capturing the data is an important next step. Patient-centered outcomes might include greater satisfaction and reduced rates of pneumonia, pressure ulcers due to earlier mobilization, injuries from falls, delirium rates, and length of stay. Metrics-centered outcomes might include reduced readmission rates, length of stay, and rates of in-hospital falls, as well as increased disposition rates directly to another facility from the ED.

Conflicts of Interest: None

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