
Transitions of Care in an Era of Healthcare Transformation

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EXECUTIVE SUMMARY

In the practice of modern emergency medicine (EM), transitions of care (TOC) have taken a prominent role, and during this time of healthcare reform, TOC has become a focal point of improvement initiatives across the continuum of care. This review includes a comprehensive examination of various regulatory, accreditation, and policy-based elements with which EM physicians interact in their daily practice. The content is organized into five domains: Accreditation Council for Graduate Medical Education (ACGME), The Joint Commission, Affordable Care Act, National Quality Forum (NQF), and accountable care organizations. This review is meant to be a synthesis of TOC material, tailored for EM physicians and the teams that make these departments run. We include (1) relevant current regulations and standards from various entities that are most likely to affect the day-to-day practice of EM; (2) examination of the consequences of these regulations and standards and how they can be used to shape EM practice and clinical decision making; and (3) comparison of interventions aimed at improving TOC, including evidence from current literature, practical examples, and proposals. Emergency departments must develop, implement, and monitor TOC programs and processes that can facilitate seamless and efficient care as patients transfer between settings. This report provides a framework for that effort and is designed to help EM physicians continue to take the lead in improving TOC to help shape the future of modern practice.

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INTRODUCTION

In the practice of medicine, and especially emergency medicine (EM), care transitions have taken a prominent role in everyday hospital management. The diagnosis and treatment of a patient is increasingly becoming a compilation of efforts—such as consults with specialists, admissions to inpatient providers, and handoffs between shifts—of interconnected care providers. Clinical care is integrated with a variety of resources, both in and outside the hospital. All of these transitions of care (TOC) require attention to ensure a consistent and accurate exchange of important information. As healthcare reform aims to provide more effective and efficient care, TOC has become a focal point of improvement initiatives across the continuum of care.

A recent survey of interunit handoffs (one subset of TOC) from EM physicians to hospitalists or other inpatient physicians in 10 U.S. hospitals found that more than half of responding physicians reported that their emergency department (ED) did not use a standardized handoff (Kessler et al., 2014). The majority of respondents believed this type of arrangement was either “unsafe/ineffective” or only “somewhat safe/effective.” The survey findings illustrate a striking lack of both formal handoff training and assessment of handoff proficiency, despite substantial literature and policy that support the establishment of such programs.

When the American College of Emergency Physicians (ACEP, 2012) convened a task force on TOC in 2012, it concluded that a failure to execute transitions of care successfully serves to

“increase costs, diminish quality, and increase the likelihood for adverse outcomes.” The report examined TOC within three domains (i.e., prehospital-to-ED care, within the ED, and ED-to-out-of-hospital care) and emphasized the consequences of effective TOC on patient safety and the ability to deliver high-quality healthcare. The task force identified specific information that should be included in transitions, as well as the barriers that inhibit effective TOC. The task force’s characterization of TOC as it relates to the ED laid the foundation for future examinations of TOC in the era of healthcare reform. In this report, we examine the changing TOC landscape in the ED by reviewing and comparing recent efforts pertaining to healthcare reform and accreditation practices. We use the following definition of TOC: the movement of a patient from one setting of care (hospital, ambulatory primary care practice, ambulatory specialty care practice, long-term care, home health, rehabilitation facility) to another (Centers for Medicare & Medicaid Services [CMS], 2013).

This review does not cover every initiative that exists or will exist to target TOC, nor does it detail the exhaustive list of programs, plans, and interventions that have been designed to enhance TOC. Instead, this review is meant to be a practical reference about TOC, tailored to EM physicians and the teams that make ED departments run. Compiled from expert opinion and publications in the field, this report includes the following:

- Relevant current regulations and standards from a variety of entities

that are most likely to affect the day-to-day practice of EM

- Examination of consequences of these regulations and standards, as well as how they can be used to shape the future of EM practice
- Comparison of interventions aimed at improving TOC, including evidence from the literature, practical examples, and proposed recommendations for this process

We confront this question: What is important for EM physicians to consider in the development of their practice?

This overview of relevant policies reflects best practices that could affect TOC for all specialties, with recommendations most relevant for the ED. Because of a variety of factors, the EM provider must place a high priority on improving TOC. To supplement our study of the literature, we consulted a variety of experts with diverse experience in graduate medical education (GME), health and healthcare policy, accreditation, and accountable care organizations (ACOs). We organized the content according to the following five entities, on the basis of their influence on physicians and clinical practice: Accreditation Council for Graduate Medical Education (ACGME), The Joint Commission (TJC), Affordable Care Act (ACA), National Quality Forum (NQF), and ACOs.

ACGME

Perhaps the most explicit evidence of the need to place a high priority on TOC comes from the ACGME. This body accredits roughly 9,000 programs in more than 130 specialties. As of 2014,

EM programs made up 164 of the 9,000 U.S. residency programs (ACGME, 2014b). In 2011, ACGME (2013) began to revise its common program requirements, applicable to all specialties, to include both curricula and assessments in three key components of TOC:

- Programs must design clinical assignments to minimize the number of transitions in patient care.
- Sponsoring institutions and programs must ensure and monitor effective, structured handover processes to facilitate continuity of care and patient safety.
- Programs must ensure that residents are competent in communicating with team members in the handover process.

Individual specialties also have their own specific requirements. The ACGME Emergency Medicine Milestone Project (Beeson et al., 2013) was designed as part of the Next Accreditation System (NAS) and shares its focus on competency-based education. This system provides an architecture for assessing residents' development in their particular residency programs. EM was one of the seven early adopter specialties that initiated milestones in July 2013, and in December of that year it was one of the first five specialties to report to ACGME residents' progress against milestones.

These milestones provide a framework for assessing the development of a resident physician in key dimensions of competency in a specialty or subspecialty (ACGME and American Board of Emergency Medicine, 2015). Specifically, these milestones are "knowledge, skills,

attitudes, and other attributes for each of the ACGME competencies” (2012, p. iii). The data from this milestone performance initiative are one of the inputs that ACGME is assessing as elements of the NAS. Figure 1 presents the levels of assessment with respect to resident milestones.

The milestones are arranged to reflect developmental progress along a continuum ranging from “has not achieved Level 1” or foundational skills to “demonstrating aspirational goals” (Level 5). The final, and most advanced, competency explicitly focuses on TOC. The milestones developed by the EM Milestones Working Group were validated by means of a survey administered to the entire EM residency community (Kore et al., 2013). ACGME and the American Board of Emergency Medicine made TOC an explicit part of the 23rd milestone, which focuses on important

elements of team management. Figure 2 illustrates the levels of progression for an EM resident as related to TOC.

As milestone data are reported, programs can benchmark their residents’ performance to that of EM residents nationally. ACGME is using the trajectory of resident milestone attainment as one element in the accreditation of individual programs. To date, evidence shows that much is to be learned from assessing competency at an individual resident’s level. Santen et al. (2013) reported that 113 interns entering 13 EM residencies responded to a survey asking if they had been taught and assessed on the Level 1 milestones. Skills pertaining to TOC were defined as *disposition*: the basic resources—such as consultants, social work, physical therapists/occupational therapists, financial aid, and care coordinators—available for care of the

FIGURE 1
Levels of Assessment for ACGME Resident Milestones

- Level 1:** The resident demonstrates milestones expected of an incoming resident.
- Level 2:** The resident is advancing and demonstrates additional milestones, but is not yet performing at a mid-residency level.
- Level 3:** The resident continues to advance and demonstrate additional milestones; the resident demonstrates the majority of milestones targeted for residency in this sub-competency.
- Level 4:** The resident has advanced so that he or she now substantially demonstrates the milestones targeted for residency. This level is designed as the graduation target.
- Level 5:** The resident has advanced beyond performance targets set for residency and is demonstrating “aspirational” goals which might describe the performance of someone who has been in practice for several years. It is expected that only a few exceptional residents will reach this level.

Source. Copyright 2012 from the Accreditation Council for Graduate Medical Education (ACGME) and the American Board of Emergency Medicine (2015, July).

FIGURE 2
The Transitions of Care—Related Milestone for Emergency Medicine Residents

23. Team Management (ICS2) Leads patient-centered care teams, ensuring effective communication and mutual respect among members of the team.					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
<input type="checkbox"/>	Participates as a member of a patient care team	Communicates pertinent information to emergency physicians and other healthcare colleagues	Develops working relationships across specialties and with ancillary staff Ensures transitions of care are accurately and efficiently communicated Ensures clear communication and respect among team members	Recommends changes in team performance as necessary for optimal efficiency Uses flexible communication strategies to resolve specific ED challenges such as difficulties with consultants and other healthcare providers Communicates with out-of-hospital and nonmedical personnel, such as police, media, and hospital administrators	Participates in and leads interdepartmental groups in the patient setting and in collaborative meetings outside of the patient care setting Designs patient care teams and evaluates their performance Seeks leadership opportunities within professional organizations
Comments: <input type="checkbox"/>					

Suggested Evaluation Methods: Direct observation, SDOT, simulation, multi-source feedback, OSCE, global ratings, oral boards

Source: Copyright 2012 from the Accreditation Council for Graduate Medical Education (ACCGME) and the American Board of Emergency Medicine (2015, July).

ED patient (ACGME and American Board of Emergency Medicine, 2015). Santen et al. (2013) reported that disposition was the second least likely competency to be taught or assessed.

In a separate, yet parallel, example, NAS directed efforts toward hospitals in which residency training occurs, and ACGME also established the Clinical Learning Environment Review (CLER). This program was created in response to concerns, such as those raised in the Institute of Medicine's (2008) report on resident work hours and patient safety (Weiss et al., 2013). CLER aims to better assess the resident learning environment in academic-affiliated hospitals. TOC is one of the six CLER focus areas. Within this focus area are six pathways to excellence (ACGME, 2014a):

- Education on care transitions;
- Resident/fellow engagement in change-of-duty handoffs;
- Resident/fellow and faculty member engagement in patient transfers between services and locations;
- Faculty member engagement in assessing resident- and fellow-related patient TOC;
- Resident/fellow and faculty member engagement in communication between primary and consulting teams; and
- Clinical site monitoring of care transitions.

The ACGME has also established the CLER evaluation committee (separate from the milestone-focused ACGME review committee), through which it will assess the quality of training at both an institutional (CLER) and individual

residency program (residency review committee) level.

Each institution receives a visit by the CLER evaluation committee approximately every 24 months. During these visits, the group meets with residents, program directors, faculty members, and members of the C-suite to learn about the institution's efforts at addressing TOC (and other focus areas). The committee also shares expectations outlined by CLER and holds audience response sessions attended by residents and faculty members. Committee members perform walking rounds to speak with other members of the healthcare team and make their own observations. Conclusions established from these discussions along with strong evidence provide aggregate data about the institution as a whole.

The CLER initiative is meant to provide formative feedback. CLER visits are contributing to a rich data set of institutions' performance on the pathways criteria. Eventually, ACGME will be able to benchmark where an institution lies relative to its peers. Some have speculated that these benchmarks could lead to certain consequences, such as loss of institutional accreditation (Weiss et al., 2013), alterations in the federal GME reimbursement structure, and the release of publicly reportable data.

In summary, ACGME requirements—common program requirements, EM milestones, and CLER—emphasize the importance of placing a high priority on TOC in EM practices.

T J C

TJC is influential with regard to the practice of EM, and TJC's Center for

Transforming Healthcare has committed to improving TOC. In August 2009, 10 of the center's collaborating hospitals and health systems began a project focused on handoff communications. The center reports that the TOC deficiencies seem to be common across all healthcare settings (Joint Commission Center for Transforming Healthcare, 2014). These deficiencies include the following:

- Culture does not promote successful handoffs
- Ineffective communication method
- Inadequate amount of time provided for successful handoffs
- Sender (e.g., emergency physician) provides inaccurate or incomplete information
- Receiver (e.g., other specialist) has competing priorities and is unable to focus on the transferred patient

The report includes several proposed solutions, each targeted toward one of the above deficiencies. TJC Center for Transforming Healthcare then generated a customized handoff communication tool (Zhani, 2012) for organizations to use to measure their organization's actual performance and identify barriers to excellent performance, as well as to direct them to proven solutions to address their unique barriers (Joint Commission Center for Transforming Healthcare, 2014). Developed by the hospitals that helped identify the persistent problems, the tool is a targeted compilation of solutions linked to specific root causes of unsuccessful handoffs. The tool uses the acronym SHARE:

- S: Standardize critical content
- H: Hardwire within your system

- A: Allow opportunity to ask questions
- R: Reinforce quality and measurement
- E: Educate and coach

TJC observed that the pilot organizations that implemented solutions based on SHARE principles demonstrated the following: a greater than 50% reduction in defective handoffs and an increase in patient and family satisfaction; staff satisfaction; and successful transfers of patients (reduced "bounce backs") (Joint Commission Center for Transforming Healthcare, 2014). To date, TJC is beginning to incorporate these efforts into their formal evaluation process. According to Clark and Duco (2012), TJC hoped to have "new standards and performance measures related to care transitions in place by mid-2014." Although we could find no published record of these measures, which will apply to hospitals and other healthcare organizations accredited by TJC, we anticipate that they will be based on the SHARE solutions. Until then, TJC (2013) will continue to make assessments on the basis of its most recently published standards (PC.04.01.03 and PC.04.02.01), which include a discussion of TOC with respect to discharge planning.

TJC determines whether the actions of the audited institutions are effective at fulfilling and sustaining these two requirements, which are identified as risk areas and form the basis for the focused standards assessments conducted by TJC. In addition, TJC's medical staff requirements (MS.05.01.01 and MS.05.01.03) ensure involvement in leadership roles and organization-wide activities that could help fulfill the needs

of the targeted risk areas and improve organizational performance.

Neither handoffs nor consultations are explicitly stated in accreditation standards, but TJC's recent emphasis on identifying barriers and developing a tool for effective communication suggests these will be forthcoming and likely to incorporate TJC's target solutions tool for handoffs. TJC might then assign a quantifiable, auditable measure for handoff communication. Thus, through the Center for Transforming Healthcare and other initiatives, TJC provides additional evidence of the need to prioritize improvements in TOC.

ACA

The ACA, enacted in 2010, does not include any explicit TOC mandates. However, it implicitly encourages optimizing TOC through its focus on reducing 30-day hospital readmission rates. Title III of the ACA empowers CMS to act to improve unacceptably high 30-day readmission rates. In particular, Section 3025 (Affordable Care Act, 2010) established the Hospital Readmissions Reduction Program (HRRP). In addition, the Center for Medicare and Medicaid Innovation was established to test models that improve the quality and efficiency of healthcare services.

Abundant evidence points to improved handoffs as a major (perhaps *the* major) reason for the reduction in readmission rates (Solet, Norvell, Rutan, & Frankel, 2005; Date, Sanfey, Mellinger, & Dunnington, 2013; Horwitz, 2013; Warrick et al., 2015). A U.S. Congressional Research Service (CRS) report titled *Addressing Medicare Hospital Readmissions*

summarizes research conducted to identify the causes of hospital readmissions and strategies to prevent rehospitalizations (Tilson & Hoffman, 2012). Beginning in 2008, the Quality Improvement Organizations (QIOs) Support Center attributed much of the problem to (1) a lack of standard and known processes among providers for transferring patients and medical responsibility; and (2) ineffective or unreliable sharing of relevant clinical information.

To address these systematic deficiencies, QIOs in 14 states developed strategies to help clinicians and other providers have necessary and timely information about the patient's condition and need for follow-up care. Improved handoffs, consultation, and coordination of care tools are in this domain, and EM physicians could play a significant role.

The financial consequences of not improving TOC are real. In 2009, CMS established readmission measures for heart failure (HF), acute myocardial infarction (AMI), and pneumonia (PN), three common conditions covered by Medicare. Beginning in June of that year, CMS reported data publicly on the Hospital Compare website (<http://www.medicare.gov/hospitalcompare/>); the data indicate whether a hospital's risk-adjusted relative 30-day hospital readmission rates for Medicare patients were higher, lower, or no different from the U.S. national average (Tilson & Hoffman, 2012), and these data are incorporated into CMS's Inpatient Quality Reporting program. The amount that a hospital's inpatient payment rate is increased each year could depend on

the quality of its performance, as determined by readmission rates.

The Inpatient Prospective Payment System's final rule states that by 2012, CMS will have adopted these three measures (i.e., hospital-specific, risk-standardized, all-cause 30-day readmission rates for patients discharged to a non-acute care setting with a principal diagnosis of HF, AMI, and PN) into HRRP. Starting in 2013, hospitals with higher than expected readmission costs have been penalized. According to the CRS report, the penalty is capped at 1% of a hospital's base payments for all of its Medicare discharges in fiscal year (FY) 2013, 2% in FY2014, and 3% in FY2015 and beyond.

From a broader perspective, the ACA contains the expectation that organizations in the medical community, such as TJC and the National Quality Forum (NQF), will develop tools to enact the best standards of care with respect to handoffs (such as those discussed earlier). CMS oversees adjustment of reimbursement rates for certain models that fulfill the objectives of improving TOC and reducing hospital readmissions. Therefore, the ACA has become an integral part of EM with regard to understanding, developing, and implementing tools to enhance quality.

NQF

The NQF (2010) is a public-private stakeholder group that has been the consensus body for developing volunteer quality standards since the mid-1990s. The NQF's most recent safe practices report included an extensive discussion about prioritizing and improving communication of patient

care information. The aim of safe practice no. 12 is to "ensure that care information is transmitted . . . in a clearly understandable form to patients . . . and to all of the patient's health-care providers/professionals, within and between care settings" (NQF, 2010, p. 177).

This section of the safe practices report contains specifications for communication of handoffs, applicability to various clinical care settings, examples of implementation approaches, strategies of progressive organizations, opportunities for family involvement, various measures, and new areas of research. Like similar organizations, the NQF contributes to the development of policies such as those in the ACA. It is important to note that these bodies neither regulate nor monitor implementation of TOC reform. However, they influence EM practice by contributing standards and directions for policy decisions.

ACOs

The development and increasing importance of ACOs dictates that EM providers focus on improving TOC. No uniform structure exists for ACOs, and each will adopt an evidence-based financially feasible model that allows improved coordination among providers, alignment of incentives, and quantification of key clinical and operational performance metrics.

Several studies of ACOs and models of TOC have been published. One such study, the Brookings-Dartmouth Accountable Care Organization Collaborative, consisted of four provider organizations that implemented

integrated TOC models involving hospitalists. The study also included a review of effective care transitions in value-based payment-model organizations (Larson et al., 2012). These models addressed care management infrastructure and can be grouped into three areas: implementing care coordination programs, involving hospitalists in TOC, and developing programs to reduce hospital readmissions.

Future ACOs are likely to incorporate similar infrastructure changes centered on TOC. Dr. David Seaberg (one of the authors) and colleagues at the Erlanger Health System in Chattanooga, Tennessee, designed and implemented a program to improve TOC in the ED and at hospital discharge. They prioritized the following objectives: patient's understanding of the diagnosis and treatment plan, review of medications, identification of primary care services, and a systematized referral of the patient to community resources. These clinicians had a keen understanding of the patient population and directed their efforts toward what the institution had determined was important and achievable. They measured improvement on the basis of reduced ED visits and readmissions, increased percentage of patients who were knowledgeable about their medications, improved compliance with primary care and community resource appointments, and overall increase in patient satisfaction. This program, in which ACO concepts were integrated across the spectrum of ED care and beyond, illustrates why EM physicians must be aware of their ACO's specific requirements as they pertain to everyday ED practice.

CONCLUSION

We have reviewed the policies that EM providers must understand to improve TOC. Located at the center of a staggering number of TOC episodes, the ED is a pivotal place for programs that ensure the proper communication of patient information with patients and among providers. In addition, a variety of regulations and accreditation requirements, as well as financial incentives and penalties, reinforce the importance of coordinated and effective TOC. This review also provides a framework for EDs to use in developing, implementing, and monitoring TOC programs with the aim of providing efficient and safe care to patients as they move between settings. The era of TOC transformation has begun in earnest. Our findings will help leaders in EM continue at the forefront of improving TOC and shaping the future of EM.

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PRACTITIONER APPLICATION

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Healthcare in the United States is fragmented between clinics, emergency departments (EDs), acute care hospitals, skilled nursing facilities (SNFs), assisted living communities, and home-based care, necessitating frequent patient handoffs. The significant transaction costs, waste, and risks accompanying these transitions of care (TOC) have recently come under scrutiny. Most providers deliver only one or two levels of care in their system, and each transition means a handoff to a new caregiver. Each TOC presents a risk of miscommunication, inefficiency, and waste. Individual departments and providers primarily focus on their own roles without considering the longitudinal patient experience. As Kessler et al. note, physicians and other caregivers historically have been trained according to this philosophy, with TOC-related competencies among the least likely to be taught in residency programs.

In their review, Kessler et al. focus on a key link in this TOC continuum, the physician trained in emergency medicine (EM). While the vast majority of TOCs occur outside the ED environment, ED TOCs carry considerable risk. First, the 24-hour ED environment means most patients experience TOCs when destination services are minimally staffed or closed. Second, tremendous variation exists between ED settings regarding internal support expediting TOCs and external resources at destination TOCs. Third, cultures of collaboration and compliance by families and patients vary widely. Finally, communication formats, protocols, and processes vary significantly, placing a substantial coordination and management burden on EM providers, who are stressed by severe resource and time constraints. The information needs of sending and receiving departments are seldom established collaboratively. In addition, insurers typically place no value on care coordination in EDs or elsewhere, compromising consistent adoption of better practices.

The authors appropriately encourage standardizing many key aspects of TOC. Without significant gains in this area, meaningful improvement will be elusive. The focus on creating standard work that enhances EM providers' competencies in leading internal TOC processes and influencing external TOC processes is helpful and timely. The authors' recommendations are also within the ability of teaching

programs to implement. Unfortunately, beyond residency training, the current system does not reward EM practitioners for either developing the needed skill set or delivering improved TOC outcomes. This is especially true in systems in which the ED provides care outside of an integrated medical group that is responsible for population care and costs.

At Holy Family Memorial in Manitowoc, Wisconsin, we are improving ED TOC in four ways: (1) maintaining our Lean culture; (2) training staff and physicians in communication and leadership styles and tools (including DISC psychometric assessment, Personality Profile Solutions, LLC); (3) co-creating the Lakeshore Community Health Clinic in Sheboygan, Wisconsin; and (4) embedding full primary care outpatient clinics on the campuses of the largest SNFs in our market. Our Lean culture drives standardized work internally and externally to improve TOC. Communication competencies help clinical and support staff members focus on the patient and minimize conflict and rework. Embedding clinics in SNFs has decreased ED transports by 63%, and the community health clinic has reduced ED visits among low-income patients by nearly 20% during the past 3 years. In addition to process improvement, avoiding the need for a TOC in the first place is always a systematic way to improve safety, quality, and patient experience.