Transformation of Transitions of Care in an ACA/ACO Environment

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"A Master's Paper submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Master of Public Health in the Public Health Leadership Program"

Chapel Hill

2014

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Abstract

Narrative Abstract: In the practice of modern emergency medicine (EM), transitions of care (TOC) have taken a prominent role. In this era of health care reform, TOC have become a focal point of improvement initiatives across the continuum of care. This study included a comprehensive examination of various regulatory, accreditation, and policy-based elements with which EM physicians interact in their practice. The content has been divided into five domains, shown in Figure 1 below: The Accreditation Council for Graduate Medical Education (ACGME), The Joint Commission (TJC), The Patient Protection and Affordable Care Act (ACA), National Quality Forum (NQF), and Accountable Care Organizations (ACO). This work is meant to be a manual about TOC, tailored for EM Physicians. It includes:

- "Can't miss" current regulations and standards from a variety of entities that are most likely to impact the day-to-day practice of most EM physicians,
- An examination of consequences of these inputs as well as how they could be used to shape the future of the practice of Emergency Medicine, and
- A comparison of interventions aimed at implementing programs to improve TOC, including evidence from the literature, practical examples, and proposed recommendations.

Emergency Departments must develop, implement, and monitor TOC programs and processes that provide seamless and efficient care as their patients transfer between settings. This work provides a framework for that effort and will help EM physicians continue to take the lead in improving TOC and shape the future of modern EM practice.

In the practice of modern medicine, and especially modern emergency medicine (EM), care transitions have taken a prominent role. The diagnosis and treatment of a patient is increasingly becoming a compilation of the efforts of interconnected care providers, including consults to specialists, admissions to inpatient providers, and handoffs between shifts. This clinical care is then integrated with a multitude of resources, both within and outside the hospital. All of these transitions of care require particular attention to ensure the consistent, accurate exchange of important information. As health care reform aims to provide more effective and efficient care, transitions of care (TOC) have become a focal point of improvement initiatives across the continuum of care.

The movement to improve TOC is particularly relevant to EM. A recent survey of interunit handoffs (one subset of TOC) from EM Physicians to hospitalists or other inpatient physicians in ten U.S hospitals showed, "more than half of the responding physicians reported that their ED [Emergency Department] did not use a standardized handoff".[1] The majority of respondents believed this type of arrangement was either "unsafe/ineffective or only somewhat safe/effective".[2] Overall, this work demonstrated a striking lack of both formal handoff training and handoff proficiency assessment, despite substantial literature and policy that support the establishment of such programs.

When the American College of Emergency Physicians (ACEP) convened a Task Force on Transitions of Care (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."[3] Their report examined TOC within three domains: prehospital-to-ED care, within the ED, and ED-to-Out of Hospital Care. Their work reinforced the important consequences transitions of care have on patient safety and the ability to deliver high-quality health care. They

identified specific information that should be included in transitions and the barriers that inhibit effective TOC. Their characterization of TOC as they relate to the ED laid the foundation for future examinations of TOC in the era of health care reform.

This work intends to continue to examine the changing landscape of TOC, as it relates to the ED, in the context of recent efforts related to health care reform and accreditation processes. To do so, we will apply the following Centers for Medicaid and Medicare Services definition of TOC to ED processes:

> ***Transition of Care: 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.***[4]

This discussion will not cover every initiative that has or will exist to target transitions of care nor detail the exhaustive list of all programs, plans, and interventions that have been designed to enhance the state of transitions of care. Instead, this work is meant to be a manual about TOC, tailored for EM Physicians. It includes:

- "Can't miss" current regulations and standards from a variety of entities that are most likely to impact the day-to-day practice of most EM physicians,
- An examination of consequences of these inputs as well as how they could be used to shape the future of the practice of Emergency Medicine, and
- A comparison of interventions aimed at implementing programs to improve TOC, including evidence from the literature, practical examples, and proposed recommendations for this process.

Through these elements, the authors will confront the question: What is important for EM physicians to consider in the development of their modern practice? This work was conducted

based on the hypothesis that an EM physician, due to a variety of factors, must prioritize improving TOC when practicing modern EM. To assess this, we underwent a comprehensive examination of elements that affect delivery of care in the ED and analyzed the ways in which they characterized TOC. We also consulted with a variety of experts in the fields of Graduate Medical Education (GME), health and health care policy, accreditation, and affordable care organizations (ACOs) to supplement our study of the literature. The following report is a synthesis of these efforts and the resulting analysis of the role TOC currently hold in the practice of EM.

With the intention of understanding what EM physicians need to know about TOC, this study included a comprehensive examination of various regulatory, accreditation, and policy-based elements with which EM physicians interact in their practice. Each of the elements of this discussion could undeniably be a lecture series in and of itself. However these are the fundamental elements that require recognition and integration into an EM practice in this era of health care reform. The content has been divided into five domains, shown in Figure 1 below: The Accreditation Council for Graduate Medical Education (ACGME), The Joint Commission (TJC), The Patient Protection and Affordable Care Act (ACA), National Quality Forum (NQF), and Accountable Care Organizations (ACO).

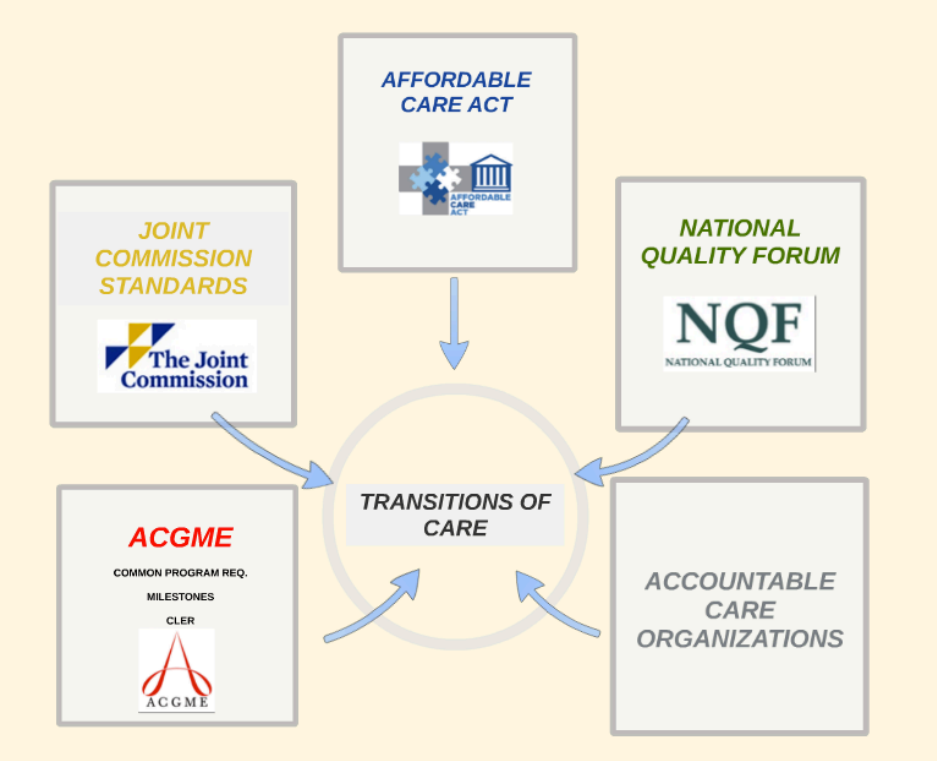


Figure 1:
Conceptual model elements driving improvement of TOC in modern EM practice.

1. ACGME:

Perhaps the most explicit evidence of the need to prioritize TOC comes from the ACGME. This body accredits roughly 9000 programs in over 130 specialties. As of 2014, 164 of these are EM residency programs.[5] In 2011, the ACGME revised its common program requirements, required for all specialties, to include both curricula and assessments in three key components of TOC[6]:

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

Individual programs also have their own specialty-specific requirements. The ACGME Emergency Medicine Milestone Project[78] has been designed as part of the ACGME Next Accreditation System (NAS), with its increased focus on competency-based education. This system provides an architecture to assess resident development within their particular residency program. EM was one of the seven "early adopter" specialties that initiated milestones in July 2013 and one of the first five specialties to report resident progress against milestones to ACGME in December 2013.

These milestones provide a framework "for the assessment of the development of a resident physician in key dimensions of the elements of physician competency in a specialty or subspecialty."[9] Specifically, milestones are "knowledge, skills, attitudes, and other attributes for each of the ACGME competencies".[10] The data from this milestone performance initiative are one of a combination of inputs that ACGME is assessing as elements of the Next Accreditation System. The progress of an EM resident is evaluated according to the following stratification[11]:

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.

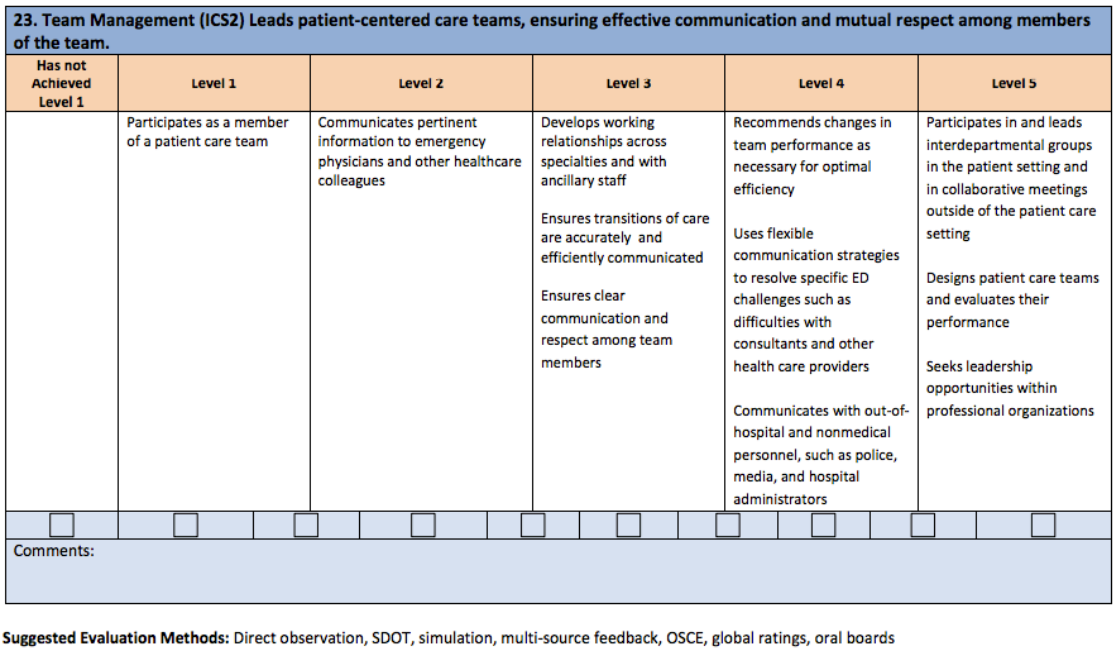
Level 4: The resident has advanced so that he or she now substantially demonstrates the milestones targeted for residency. This level is designed as the graduation target.

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.

Figure 2:
Levels of assessment for ACGME resident milestones.

The milestones are arranged to reflect developmental progress along a continuum of "not yet achieved Level 1 or foundational skills" to aspirational competencies. The final, and thus most advanced, competency explicitly focuses on TOC. EM extensively validated its choice of milestones by surveying the entire EM residency community.[12] EM has explicitly made TOC

part of the 23rd Milestone, which focuses on important elements of team management. The following graphic illustrates the levels of progression for an EM resident, as related to TOC[13]:



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
	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 health care 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:					

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

Figure 3:
The TOC-related Milestone for EM residents.

As milestone data continues to be reported, programs can benchmark their residents' performance to that of EM residents nationally; and ACGME will use the trajectory of resident milestone acquisition as one element in the accreditations of individual programs. At the moment, there is evidence of much to be learned from assessing the level of competency at an individual resident level. A study in July 2012 (pre-milestones) of 161 interns entering 13 EM residencies assessed their knowledge relative to the impending milestones[14]. Skills pertaining to TOC (defined as *disposition:* being able to understand the "basic resources available for care of the emergency department patient, i.e. consultants, social work, [physical therapists/occupational therapists, financial aid, care coordinators) were reported as the competency second least likely to be taught or assessed.

In a separate, yet parallel, NAS effort directed toward *hospitals* in which residency training occurs, the ACGME established the Clinical Learning Environment Review (CLER). This program was created in response to concerns such as those represented by the Institute of Medicine's report on resident work hours and patient safety. CLER aims to better assess the resident learning environment of an *institution*. One of the six CLER focus areas is TOC[15]. Within this focus area have been delineated six "Pathways to Excellence":

- 1: Education on Care Transitions
- 2: Resident/Fellow Engagement in change of duty hand-offs
- 3: Resident/Fellow and faulty member engagement in patient transfers between services and locations
- 4: Faculty member engagement in assessing resident-/fellow-related patient transitions of care
- 5: Resident/Fellow and faulty member engagement in communication between primary and consulting teams
- 6: Clinical site monitoring of care transitions

The ACGME has also established the CLER Evaluation Committee separate from the ACGME Review Committee that evaluates residents according to milestones. Through this mechanism, the ACGME will assess the quality of training at both an institutional (CLER) and individual residency program (Residency Review Committee) level.

Each institution will undergo a CLER Evaluation Committee visit approximately every 24 months. During these visits, the group will meet with residents, program directors, faculty, and the "C suite" to learn about the institution's efforts at addressing TOC (and other focus

areas). They will also share expectations outlined by CLER and provide audience response sessions attended by residents and faculty. They will make "walking rounds" to speak with other members of the health care team and observe what has actually occurred. Corroborating data from their group discussions and these observations will serve to provide aggregate data on the *institution as a whole*.

At this point early in its implementation, the CLER initiative is meant to provide formative feedback. CLER visits are contributing to a rich dataset of how institutions are performing on the various "Pathways" criteria. Eventually ACGME will be able to benchmark where a given institution lies relative to its peers. There has been speculation that these benchmarks could lead to consequences, which may include institutional accreditation, alterations in Federal GME reimbursement structure, and the release of publicly reportable data. Thus, an understanding of ACGME requirements—Common Program Requirements, EM Milestones, and CLER—provides a strong evidence in support of the claim that EM physicians must prioritize TOC in their practice.

2. The Joint Commission:

The next significant influence on the practice of modern EM is The Joint Commission (TJC). TJC's Center for Transforming Healthcare has dedicated a substantial effort towards improving TOC. In August 2009, ten of the Center's collaborating hospitals and health systems began a project focused on hand-off communications. Their report explains that the deficiencies in TOC seem to be common across all health care settings.[16] These include:

- Culture does not promote successful hand-off
- Ineffective communication method
- Inadequate amount of time provided for successful hand-off
- Sender (think EP) provides inaccurate/incomplete information

- Receiver (think other specialist) has competing priorities and is unable to focus on transferred patient

Their report then provided several proposed solutions, each targeted to one of the specific opportunities for improvement listed above.[17] The Center for Transforming Healthcare then used this information to generate a new "customized hand-off communication tool" in 2012.[18] This tool is a "step-by-step process to accurately measure their organization's actual performance, identify their barriers to excellent performance, and direct them to proven solutions customized to address their particular barriers."[19] Developed by the same hospitals that helped identify the consistent problems, the tool is a targeted "compilation of solutions that are linked to specific root causes" of unsuccessful hand-offs.[20] 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 teach.

TJC observed that the participating pilot organizations who had implemented solutions based on SHARE principles demonstrated an "over 50 percent reduction in defective hand-offs…[and] an increase in patient and family satisfaction; staff satisfaction; and successful transfers of patients (reduced bounce backs)."[21]

TJC is beginning the process of incorporating these efforts into their formal evaluation process. A recent article in the journal *ED Management* indicates that TJC hopes to have "new standards and performance measures related to care transitions in place by mid-2014."[22] Although there is at the present time no published record of these measures, it is anticipated

these standards will be based on the SHARE solutions TJC has developed. These standards will apply to hospitals and all health care settings accredited by TJC.

Until then, TJC will assess according to their most recent published standards, which include discussion of TOC with respect to discharge planning, shown in Figure 4:[23]

Provision of Care, Treatment, and Services

1. *Standard PC.04.01.03:* The hospital discharges or transfers the patient based on his or her assessed needs and the organization's ability to meet those…
    a. Includes coordinated communication with place of discharge, arranging appropriate services for after discharge, and conducting re-assessments of its discharge planning process
2. *Standard PC.04.02.01:* When a patient is discharged or transferred, the hospital gives information about the care, treatment, and services provided to the patient and other service providers who will provide the patient with care, treatment or services. Will include the following:
    a. Reason for patient's discharge or transfer
    b. Patients physical and psychosocial status
    c. Summary of care, treatment, and services it provided to patient
    d. Patient's progress toward goals
    e. List of community resources or referrals made or provided to the patient.

Figure 4:
Provision of Care, Treatment, and Services from TJC Hospital Accreditation Standards.

Institutions are audited on whether their actions are effective and sustained in fulfilling these two requirements. These are identified as "Risk" areas, meaning they would be the target of the Focused Standards Assessments conducted by the TJC. In 2013, TJC also included the following general standards, shown in Figure 5:[24]

Medical Staff Requirements:

1. *Standard MS.05.01.01*: The organized medical staff has a leadership role in organization performance improvement activities to improve quality of care, treatment, and services and patient safety.
    a. By this statute, medical staff are responsible for "*leadership* for…improving processes that primarily depend on the activities of…practitioners."
2. *Standard MS.05.01.03:* The organized medical staff participates in organization-wide performance improvement activities, including:
    a. Coordination of care, treatment, and services
3. The two above are related to a requirement for **Performance Improvement:** *Standard PI.03.01.01:* The hospital improves performance on an ongoing basis.

Figure 5:
Medical Staff Requirements from TJC Hospital Accreditation Standards.

Neither handoffs nor consultations are explicitly included in accreditation standards at this time. But the recent TJC emphasis on identifying barriers and developing a tool for effective handoff communication suggests these will be forthcoming and are likely to incorporate TJC Target Solutions Tool for handoffs. Then TJC could assign a quantifiable, auditable measurement to handoff communication. TJC, another significant influence on the practice of EPs today, provides additional evidence supporting the need to prioritize improvement of TOC.

3. The Patient Protection and Affordable Care Act:

Explicitly, The Patient Protection and Affordable Care Act (ACA) passed in 2010 does not mandate anything about TOC. However, inherently it encourages optimizing TOC through its focus on reducing 30-day readmission rates. Title III of ACA (Improving the Quality and Efficiency of Health Care) empowers the Center for Medicare and Medicaid Services (CMS) to act to improve unacceptably high 30-day readmission rates. In particular, Section 3025 of the ACA[25] establishes the Hospital Readmission Reduction Program (HRRP). In addition, the Center for Medicare and Medicaid Innovation was established to choose models that "improve the coordination quality and efficiency of health care services" in this domain.

Abundant evidence points to improved handoffs as a major (perhaps *the* major) source of these rates. A Congressional Research Service (CRS) report entitled "Addressing Medicare Hospital Readmissions" from 2012[26] summarizes research done to identify the causes of hospital readmissions and strategies to prevent re-hospitalizations. Beginning in 2008, the Care Transitions Quality Improvement Organizations Support Center attributed much of the problem to:

- "Lack of standard and known processes among providers for transferring patients and medical responsibility, and

- Ineffective or unreliable sharing of relevant clinical information."

To address these systematic deficiencies, Quality Improvement Organizations (QIOs) in 14 states developed strategies to help clinicians and providers have "necessary, timely information on the patient's condition and need for follow-up care."[27] This is the domain in which improved handoffs, consultation, and coordination of care tools would be involved and where EM physicians could play a significant role.

The consequences of not improving TOC are real. CMS established readmission measures for heart failure (HF), acute myocardial infarction (AMI), and pneumonia (PN), three common Medicare hospitalizations, as quality data in 2009. Beginning in June of that year, data was reported publicly on the Hopsital COMPARE website (http://www.medicare.gov/hospitalcompare/) that "indicates whether a hospital's risk-adjusted relative 30-day hospital readmission rates for Medicare patients initially admitted for HF, AMI, and PN were higher, lower, or no different than the U.S. national average."[28] These data were incorporated into CMS's Inpatient Quality Reporting program. Since then, the amount that a hospital's inpatient payment rate is increased each year could depend upon the quality of its performance, as determined by readmission rates.

By 2012, the inpatient prospective payment system (IPPS) final rule states that CMS adopted these three measures (hospital-specific, risk-standardized, all-cause 30-day readmission rates for patients discharged alive to a non-acute care setting with a principal diagnosis of HF, AMI, and PN) into the HRRP. Hospitals with higher-than-expected readmission costs were penalized starting in 2013. According to the CRS report, "The penalty will be capped at 1% of a hospital's base payments for all its Medicare discharges in FY2013, 2% in FY2014, and 3% in FY2015 and subsequently."[29]

From a broader perspective, the ACA contains the expectation that elements in the medical community, like TJC and the National Quality Forum (discussed below) will develop tools to enact the best standards of care with handoffs (efforts like those mentioned above). As shown earlier, CMS has the ability to oversee adjustment of reimbursement rates for certain models that prove to fulfill the objectives of improving TOC and reducing hospital readmissions. Therefore, it has become an integral part of the EM physician experience to understand, develop, and implement these types of tools to enhance quality.

4. National Quality Forum (and institutions like it):

The National Quality Forum (NQF) is a public-private stakeholder group that has become the consensus body for developing volunteer quality standards since the mid-1990s. Their most recent updated Safe Practices report in 2012 included an extensive discussion of improved communication of patient care information.[30] The fifth chapter, "Improving Patient Safety by Facilitating Information Transfer and Clear Communication," discusses the aim of Safe Practice #12:

> "Ensure that care information is transmitted…in a clearly understandable form to patients and to all of the patient's healthcare providers/professionals within and between care settings."

This section contains specifications for communication of hand-offs, applicability to various clinical care settings, examples of implementation approaches, strategies of progressive organizations, opportunities for family involvement, outcome/process/structure/patient-centered measures, and new horizons/areas for research. We include a discussion of the NQF as an illustration of many similar entities that represent the voice of the consumer or other stakeholders and contribute to the development of policies like those of the ACA. In and of themselves, these bodies neither regulate nor monitor implementation of TOC reform. However, they influence

EM practice by contributing standards and helping to provide directions for policy decisions. An understanding of these elements as an EP is important to understanding policy development and subsequent implementation.

5. Accountable Care Organizations (ACOs):

The development and increasing importance of Accountable Care Organizations (ACOs) dictates that EM physicians focus on improving TOC. There is no uniform structure or focus of ACOs; each needs to be considered on a case-by-case basis. Each will develop its own internal expectations and quality benchmarks they're responsible for maintaining. Each ACO will adopt an evidence-based, financially feasible model that enables improved coordination with providers, alignment of incentives, and measurement of key performance metrics, both clinical and operational. Strategies vary according to populations and settings. There is likely to be considerable overlap with the strategies detailed above from various regulatory, legislative, and accreditation entities.

Currently, ACOs are largely in the process of obtaining more financial information regarding sustainability and cost-effectiveness of these programs. Several ongoing studies of ACOs and models of TOC have been published. One such study, the Brookings-Dartmouth Accountable Care Organization Collaborative, involves four institutions implementing integrated TOC models involving hospitalists and a review of "effective care transitions" in value-based payment-model organizations.[31] These address "care management infrastructure" and their changes could be grouped into three focus areas: implementing care coordination programs, involving hospitalists in care transitions, and developing programs to reduce hospital readmissions.

Future ACO implementations are likely to involve similar categories of infrastructure changes centered on TOC. For example, Dr. David Seaberg and his colleagues at the Emergency Department at the Erlanger Health System in Chattanooga, Tennessee, designed and implemented a program to improve TOC both within the Emergency Department and at hospital discharge. They prioritized the following objectives: patient understanding of the diagnosis/plan, review of medications, identification of primary care services for the patient, and a systematized referral of the patient to community resources. Their efforts were constructed with a keen understanding of the patient population and directed toward what their institution had previously determined were important and achievable. They measured this improvement in the form of reduced ED visits and readmissions, increased percentage of patients who left knowing their medications, improved compliance with primary care and community resource appointments, and overall increase in patient satisfaction. Their exercise in integrating ACO concepts across the spectrum of ED care and beyond further illustrates that EM physicians must possess a keen awareness of the specific requirements of their ACOs as they pertain to their everyday ED practice.

Conclusion:

This examination has confirmed the hypothesis that EM physicians must prioritize TOC in their practice of modern EM. Located at the heart of a staggering number of TOC, the ED is a central and pivotal location for effective programs ensuring the proper communication of patient information with patients and among providers. This position is reinforced by a variety of regulatory and accreditation elements as well as financial incentives and penalties that emphasize the importance of these coordinated, effective TOC. EDs must develop, implement, and monitor TOC programs and processes that provide seamless and efficient care as their patients transfer

between settings. This work provides a framework for the effort that each ED needs to commit to accomplish this aim in their respective institutions. While the development and implementation of TOC programs may vary between institutions, one thing is certain: an era of transformations of transitions of care has begun in earnest. The findings included in this report will help EM physicians continue to take the lead in improving TOC and shape the future of modern EM practice.

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