Issue Briefs

The CLER Program presents this series of Issue Briefs to supplement the CLER National Report of Findings 2016.

Each issue in the series features one of the focus areas of the CLER Program—supplementing the key challenges and opportunities highlighted in the National Report and enhancing the discussion as to their relevance and potential impact on GME and patient care.

In both the National Report and the Issue Briefs, the findings are based on data collected during the CLER site visits, including responses to closed-ended questions collected via an audience response system, open-ended structured interviews with the clinical site’s executive leaders and leaders in patient safety and health care quality, and information gathered from the many individuals interviewed during walking rounds of the site’s clinical units.

Suggested Citation:
Background

The ACGME established the CLER Program to provide formative feedback that presents graduate medical education (GME) leaders and the executive leadership of the clinical learning environments (CLEs) for GME with information on six areas of focus: patient safety, health care quality, care transitions, supervision, duty hours/fatigue management and mitigation, and professionalism.\(^1\),\(^2\),\(^3\)

The *CLER National Report of Findings 2016*\(^4\) presents information from the first set of CLER site visits to participating sites of 297 ACGME-accredited Sponsoring Institutions of residency and fellowship programs. These visits, conducted from September 2012 through March 2015, focused primarily on teaching hospitals, medical centers, and ambulatory sites that host three or more core residency programs.

In the group sessions conducted during these visits, the CLER teams collectively interviewed more than 1,000 members of executive leadership (including CEOs), 8,755 residents and fellows, 7,740 core faculty members, and 5,599 program directors of ACGME-accredited programs in the group sessions. Additionally, the CLER teams interviewed the CLEs' leadership in patient safety and health care quality and thousands of residents and fellows, faculty members, nurses, pharmacists, social workers, and other health care professionals while on walking rounds of the clinical areas.

**OVERARCHING THEMES OF THE NATIONAL REPORT OF FINDINGS**

The initial visits of the CLER Program revealed a number of findings that appeared to be common across many of the CLEs and six focus areas:

- Clinical learning environments vary in their approach to and capacity for addressing patient safety and health care quality, and the degree to which they engage residents and fellows in these areas.

- Clinical learning environments vary in their approach to implementing GME. In many clinical learning environments, GME is largely developed and implemented independently of the organization’s other areas of strategic planning and focus.

- Clinical learning environments vary in the extent to which they invest in continually educating, training, and integrating faculty members and program directors in the areas of health care quality, patient safety, and other systems-based initiatives.

- Clinical learning environments vary in the degree to which they coordinate and implement educational resources across the health care professions.

In addition to serving as a basis for the overarching themes, the initial CLER visits sought to establish baseline structural and operational characteristics of the clinical sites, as well as their training practices in the six focus areas. In future cycles, the CLER Program will also seek to understand how the sites identify and prioritize areas for improvement and assess progress over time.
A Story From The Field

On walking rounds during a CLER site visit, a chief resident in general surgery described her concern about a patient who was transferred to the hospital and onto her service from a local nursing home. The patient was a 66-year-old man needing abdominal surgery. She stated that she had not been informed that this patient was coming to her team.

In her review of what happened, it appeared that an attending physician on another service had accepted the patient for transfer a day earlier. However, due to difficulties, there were delays in the transfer process. Upon learning of the delays late in the evening, the original attending physician, who was no longer available, contacted the resident’s attending physician who agreed to accept the patient. Although the resident’s attending physician was aware of the transfer, he did not mention it to her.

The night service was very busy, the hand-off of this patient was conducted by phone, and did not include a physical exam of the patient’s abdomen. The nursing home provided little essential information to guide the patient’s care.

The resident noted that, while the patient may have been stable the prior day, at the time of arrival late at night, he had an acute abdomen along with complicated medical and past surgical history. The resident noted her frustration about frequent breakdowns in communication when patients are transferred and said, “I really feel like when this happens patients can and do get hurt.”

This story highlights the complexity of modern patient care management and the numerous transitions that put a patient at risk. Each transition provides an opportunity for management that either enhances or diminishes the quality and safety of patient care. In this story there were failures to communicate: between the nursing home and hospital; between surgical services; between attending and chief resident; and between junior residents. Furthermore, most of the transition of this complex patient was done verbally, and the small amount of information that was provided was reportedly not clinically useful.

While most of the efforts of GME with regard to patient care focus on teaching physicians in training the technical knowledge and skills related to their specialty, it is also essential for physicians to learn important cross-cutting skills associated with continually improving the quality and safety of each patient transfer in which they are involved.

The CLER National Report of Findings 2016 presents data on four major areas of care transitions: alignment of priorities; inpatient transition processes; change-of-duty transitions; and resident and fellow engagement in developing and implementing strategies to improve care transitions. The sections that follow highlight several examples of the detailed information found in the National Report, and expand upon the findings identified to be challenges and opportunities, and enhance the discussion regarding these findings.
Selected Findings

Figures 1 and 2 present data based on group interviews with residents and fellows, and observations of change-of-duty hand-offs.

Figure 1 presents the distribution across CLEs by the percent of residents and fellows within their CLE who reported using both a standardized process and a written template for transitioning care during change-of-duty—a median of 80.0 percent.*

Figure 2 presents the percentage of CLEs with hand-off processes that were standardized across programs (11.0 percent) based on direct observations of resident change-of-duty hand-offs while on walking rounds.

Together, these findings indicate that, while a majority of residents and fellows across CLEs report that they use standardized processes for hand-offs during change-of-duty, most institutions do not appear to have a standardized approach across programs.

As GME and CLEs move forward, the next steps will be to focus on implementing standardized processes and tools consistent with the setting for the purposes of coordinating care and ensuring the continuity and safety of patient care.

*Distribution includes 90% or more of the 297 CLEs.
Challenges and Opportunities

For the National Report, the members of the CLER Evaluation Committee reviewed aggregated data and selected three to four key findings to highlight and discuss. The following section expands upon the information presented in the National Report to include additional selected findings and a more in-depth discussion regarding the potential impact on patient care and resident and fellow education.

In general, CLEs were working to standardize and improve their processes for transitioning patients from the acute hospital setting to post-acute care (e.g., ambulatory, intermediate, or long-term care). Residents and fellows were occasionally engaged in their CLE’s efforts to design these strategies.

- These efforts were generally reported to be driven by regulatory and value-based purchasing incentives and related performance measurement.

Occasionally executive leadership of the CLEs indicated that they were working towards a standardized, organization-wide approach to managing transfers between clinical services assigned to resident and fellow physician teams (e.g., ED to inpatient, OR to ICU, ICU to floor, medicine to surgery).

Across CLEs, executive leadership, quality and patient safety leaders, residents and fellows, faculty members, and program directors varied in the degree to which they were aligned in the transitions in care they identified as vulnerable to patient safety. In many CLEs, residents, fellows, and nurses identified vulnerabilities in care transitions that were not mentioned by the executive leadership.
Most CLEs did not appear to have a standardized approach to facilitating resident and fellow hand-offs at change-of-duty that included the essential elements of safe, reliable transitions of care.

- Responsibility for design and oversight for these transitions was primarily and often exclusively the responsibility of the residency or fellowship program or the related specialty or subspecialty departments, and was not integrated across the Sponsoring Institution and the CLE.

- Across many CLEs, there was very little interprofessional engagement in change-of-duty hand-offs. In particular, few change-of-duty hand-offs involved residents, fellows and nurses.

- Across and within nearly all CLEs, the locations where residents and fellows conduct hand-offs of patient care duties varied from quiet, non-patient areas to noisy environments with frequent interruptions.
  - Across CLEs, most residents and fellows in the group interviews reported that they use a standardized format for face-to-face patient care hand-offs.
  - In many CLEs, use of a standardized format was not confirmed upon direct observation of the patient care hand-off process.

- Across CLEs, there was some use of common templates to facilitate resident and fellow change-of-duty hand-offs. These templates often varied by specialty and subspecialty. A limited number of CLEs were in the process of standardizing templates across specialties.
  - The templates varied from spreadsheets and tables that require a significant amount of manual entry, to templates generated and prepopulated by the electronic health record.
  - Many templates were limited to a list of patient names and room numbers and did not contain columns or fields that prompted standardized exchange of information.

Across CLEs, a limited number of programs appeared to use formal criteria to assess residents’ and fellows’ skills in change-of-duty hand-offs. It was uncommon for programs to consistently engage faculty members in observing resident and fellow hand-offs.
Discussion

The rapidly evolving US health care environment is complex and requires patients to routinely receive care from numerous providers in varying health care environments. For example, a patient hospitalized for routine surgery, such as a knee replacement, will often receive pre-operative care in an ambulatory setting, followed by short-term post-surgery care within an inpatient surgical unit, followed by rehabilitation care in a non-hospital facility, and then outpatient follow-up care that could include home visits. During recovery from the surgery, the patient and his or her family will likely come in contact with numerous health care providers in addition to the surgeon. As front-line care providers, residents and fellows often see firsthand the consequences of ineffective and inefficient care transitions.

Due to the large number of types of transfers and hand-offs in the patient care process, it is difficult to prioritize which transitions should be targeted for large-scale improvement. The current regulatory environment is using incentives to try and improve a few transitions—particularly discharges from the acute care setting. The Centers for Medicare and Medicaid Services has put in place a structure of incentive payments to hospitals to promote work on this transition. This effort is much needed, particularly in light of the high variability in the rate of 30-day readmissions. Still, in any individual hospital or clinical setting, there may be transitions that are more problematic than transfers from the inpatient to the outpatient environment. In these situations, financial incentives associated with regulations, such as accreditation or value-based performance payments, may inadvertently divert attention away from the problem areas that are specific to the CLE.

From the findings, it appears that residents and fellows are very often key implementers of policies and procedures that relate to improving the discharge process. However, the findings also suggest that residents and fellows are not frequently asked to be involved in the strategic planning, development, and design of these policies and procedures. CLEs would benefit from including residents and fellows in strategic planning around transitions of care. When the resident and fellow role in such strategies is limited to implementing changes designed by others, they lose the opportunity to gain experience in developing systems-based approaches to quality improvement.

Additionally, it is essential to include members of the clinical care team (e.g., nurses, pharmacists, social workers) in seeking to improve care transitions, even when it may appear that the transition is primarily between physicians. The other members of the clinical care team often work more closely with the patients, and could provide the residents and fellows with a different and important perspective. In addition, involving patients in these types of improvement efforts may lead to improved outcomes.

There appears to be a common misconception that all aspects of resident or fellow hand-offs between transitions on- and off-service need to be different among clinical specialties. This belief that each service needs a different approach to hand-offs increases the complexity of hand-offs within the CLE, and often comes from the misconception that standardization is the same as uniformity; it is not. Standardization provides the framework by which things are accomplished and allows for specialty-specific tailoring required to provide the patient with the care he or she needs.
There are benefits of standardizing the hand-off process within a CLE, that include having all residents and fellows develop a shared set of expectations as to what defines a successful hand-off; enhancing situational awareness by making sure that both patient issues and other issues in the clinical unit are brought to common consciousness (e.g., issues of nursing staffing, problems with equipment, patient bed availability); reducing the chance of missed information during the transfer of patient care; and improving the ability to provide consistent feedback.

In many CLEs, faculty members and program directors confuse standardizing hand-offs with a request to create a single and uniform “one size fits all” solution. CLEs and their GME community should be encouraged to find solutions that standardize essential properties of the hand-off process while allowing for additional specialty- or unit-specific components as needed. This model will result in greater consistency both within and between clinical services, and make it more likely that effective and clear communication occurs.

Resident and fellow hand-offs of patient care responsibilities is an essential skill—similar to the skills needed to perform a critical clinical procedure. As such, residents and fellows should be formally educated in the skills of care transitions and routinely evaluated for the purpose of continual improvement.

Care transitions are heavily influenced by the CLE and therefore need to be assessed in the context of the CLE. There are no commonly agreed upon instruments to assess the quality of hand-offs and transitions of care. This is due, in part, to how patient care issues differ among CLEs. However, lack of commonly agreed upon instruments does not preclude each Sponsoring Institution from working with its CLE(s) to develop locally appropriate tools for ongoing assessment of transitions of care.

Simulation can be an important tool for improving care transitions and can likely be achieved using low cost programs that can be conducted in the service units, rather than requiring the resources of a high-fidelity laboratory facility. Many CLEs indicated that they have implemented formal programs to improve communication in one or more of their service areas as a way to improve communication among various members of the health care team and enhance the quality of care transitions.
To increase the validity and reliability of care transitions, faculty members also need clear guidance as to what is expected during a transfer. As with residents and fellows, lack of standardization will impair faculty member ability to model the correct approach to such transitions or evaluate and mentor residents' performance in this area. Often faculty members quickly transfer responsibility for teaching and monitoring care transitions to senior residents, while not realizing that senior residents can vary widely in how and what they teach according to what has been modeled to them by their attending physicians.

Moreover, patient hand-offs are an important communication skill that transcends any individual training program. With increasing reliance on electronic communication, CLEs would benefit from greater diligence in assuring that residents and fellows develop the verbal and electronic communication skills that ensure effective hand-offs. Resident and fellow hand-offs should be supervised and evaluated by faculty members in a fashion similar to evaluation of other clinical care and communication competencies. By calling attention to the importance of effective hand-offs, such supervision could promote better care transitions throughout the CLE.

Conclusion and Next Steps

The ultimate goal of GME is to provide resident and fellow physicians with the experiences that they need to be able to provide their patients with consistent, reliable, high quality, and safe transitions in care both during training and throughout their clinical careers.

The findings presented in the National Report indicate that there is interest in improving care transitions—both on the part of CLEs and within the GME community. Therefore, there are likely opportunities for CLEs to enhance their engagement with the GME community to work together to address this common goal.

In order to achieve this, residents, fellows, and faculty members need to be able to work with the other members of the health care team to identity and address challenges to consistent and reliable transitions in care. These practices are essential since health care will likely increase over time in complexity, with more providers and ways in which care is managed for each patient creating even more risks to a patient during transitions unless deliberate actions are taken to mitigate them.

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