Cross-Coverage Care at a Crossroads

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Providing cross-coverage care to patients is a core activity for many residents when on call. There are clinical competencies that are somewhat unique to this role, including assessing an admitted inpatient not previously known to the resident and for whom they may not have received handoff information; communicating with attending physicians and nurses who do not know the resident; and following up on patient outcomes that result from their clinical decisions when they are not caring for the patient on a daily basis. Recognizing the uniqueness of the role, cross-coverage care provision has been proposed as 1 of 30 entrustable professional activities (EPAs) for internal medicine residents.[1] To date, however, cross-coverage has not been widely studied.

In this issue, Heidemann and colleagues use a consensus method to address some of the gaps in our understanding of core cross-coverage activities and expectations around handling them.[2] Engaging 40 medical and surgical physicians (including chief residents and hospitalists) in a Delphi study across 8 academic institutions in the Midwest United States, the authors identified 28 high consensus items for safe and efficient in-hospital cross-coverage care. There was perfect agreement among respondents that residents should evaluate a patient at the bedside when asked to do so by the nurse; documentation should occur for a change in level of care, death, a code, or when the rapid response team is activated; and physician-nurse communication should be respectful and closed loop.

As experienced faculty who also supervise clinical teams with cross-coverage, we agree with these recommendations for the most part. In this commentary, we would like to highlight 2 vital and overlapping areas of cross-coverage pedagogy requiring further exploration. The first addresses the need to integrate consensus perspectives that involve our educational systems and practices with research focused on real-world contexts. The second relates to the need to consider the role of the attending physician in supporting educationally sound cross-coverage.

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Agreeing on what should happen during cross-coverage, as studied by Heidemann and colleagues, is a great start. But, as the Rolling Stones so aptly put it, "you can't always get what you want." While 100% of Delphi participants agreed that residents should evaluate a patient at the bedside when asked to do so by a nurse, this statement fails to take into account the realities of practice. During an on-call period, residents often have multiple competing responsibilities, such as seeing a new consult in the emergency room and being called to the floor to assess a patient.[3] Deciding if both assessments are possible, which one takes precedence, and how to triage the competing responsibilities requires judgment and negotiation rather than simple "rule following." How residents handle such tensions warrants further study to ensure that we are adequately supporting resident development while attending to patient safety.

Chart documentation is another issue at the intersection of consensus perspectives and real-world contexts. Chart documentation is a central component of a team's progressive collaborative refinement of their understanding of the patient's problems and plan for care. This process is impeded by a lack of continuity among care providers and by gaps in communication, as could occur in a cross-coverage system where only serious events were documented.[4] Furthermore, we would argue that patient safety mandates that all cross-coverage decisions should be documented. Imagine a resident holding a patient's insulin overnight because the patient vomited. If this decision were not documented, then insulin might continue to be held while the patient resumed eating the following morning, and consequently the patient could suffer from hyperglycemia. This complication could be preempted if the primary resident and attending physician caring for the patient were aware of the overnight decision.

Areas where consensus has not been achieved may reflect differences in clinical contexts or tensions surrounding educational issues. The decision to call the attending represents a great example of one of these educational tensions. Given Kennedy and colleagues' findings regarding the multiple factors influencing a resident's decision to seek support from faculty,[5] and the influence of feedback culture on behavior,[6] it is not surprising that the Delphi

participants did not achieve high consensus on the issue of residents contacting attending physicians when they had questions or concerns.[2] This lack of agreement does not imply that seeking input from attending physicians is not a critical educational issue. Rather, we suggest it is one that requires further research and thoughtful approaches to supporting residents in navigating its complexity. Recognition of other such tensions, which may be reflected in areas where consensus was not achieved by the Delphi process, offers ripe research opportunities to study how the realities of clinical practice can inform our work-based educational practices.

The role of the attending in supporting educationally sound cross-coverage also requires careful consideration. Cross-coverage supervision largely entails indirect supervision or backstage oversight, with faculty engaging in clinical oversight activities of which the resident may be unaware. Indirect supervision may occur routinely, or in response to a resident or patient issue, and can be an active supervision strategy (eg, checking patient records, seeing patients in the morning).[7] However, in order to contribute to resident education, indirect supervision additionally requires following up with the resident and engaging in a feedback conversation.

Considering competency-based education and EPAs, cross-coverage is a prime example of what might be labeled *entrustment by the system*.[8] In most instances, prior to cross-covering, the resident has not specifically been assessed for their competence in this role. Rather, the resident is providing care because that is how the system works. Moreover, as with other such roles, taking away entrustment would likely only occur following a serious event. This entrustment by the system raises the question of what type of assessments should be taking place prior to taking on cross-coverage responsibilities. It also contributes to our concerns as to the current level of supervision provided to residents during cross-coverage.

In order for cross-coverage to contribute to a resident's growth through the opportunity to care for patients, it is important for residents to be able to follow up on their patient care decisions. Bowen and colleagues identified physician curiosity, whether because of clinical uncertainty, personal attachment to the patient, or a sense of patient vulnerability, as key to following up on a patient's outcome via the electronic health record (EHR).[9] In a secondary analysis of the data, Bowen and colleagues made 3 recommendations regarding follow-up that are very relevant to the cross-coverage context: (1) an EHR that allows the resident to make a list of patients seen during cross-coverage; (2) skills development using the optimized EHR; and (3) dedicated time for conducting follow-up. They also called for engaging physicians and patients in determining guidelines for patient tracking that manage the tension between patient privacy and resident education.[10]

In our current competency-based era, cross-coverage is a prime example of typical clinical work that would benefit from re-examining how to optimize its educational value. As cross-coverage is currently enacted, with minimal direct supervision and indirect supervision compromised by a lack of documentation of overnight decisions, current supervisory strategies may be inadequate to support resident education. Going forward, in addition to agreeing on what residents should do during cross-coverage, we would argue for the need for more strategies to actively support resident learning. Options to consider include buddy call with more senior residents whose responsibility might be to assess and even teach cross-coverage best practices; increased faculty support for residents by checking in regularly, as opposed to waiting for resident-initiated contact; and enlisting nurses or other health professionals in assessing cross-coverage competency, as they are the health professionals who most directly engage with residents during cross-coverage. Residents' documentation of their cross-coverage patient decisions also should be systematic, so that all health care providers are aware of what is happening with the patient. Attending physicians will need to complete their indirect supervision by providing feedback to residents regarding their patient care decisions. Furthermore, we need to foster our residents' curiosity about patient outcomes that result from their cross-coverage decisions, so that they track down patient outcomes and close the loop on their clinical decision-making. Taken together, these and other strategies should be considered to better equip attending physicians and residents as we arrive at the crossroads of current cross-coverage supervisory practice.

References

1. Hauer KE, Kohlwes J, Cornett P, Hollander H, ten Cate O, Ranji SR, et al. Identifying entrustable professional activities in internal medicine training. *J Grad Med Educ*. 2013;5(1):54–59. doi:10.4300/JGME-D-12-00060.1.
2. Heidemann LA, Fitzgerald JT, Hughes DT, Hartley S. Inpatient cross-cover consensus recommendations for medical and surgical residents: a Delphi analysis. *J Grad Med Educ*. 2019;11(3):277–283.
3. Huda N, Faden L, Goldszmidt M. Entrustment of the on-call senior medical resident role: implications for patient safety and collective care. *BMC Med Educ*. 2017;17(1):121. doi:10.1186/s12909-017-0959-3.

4. Goldszmidt M, Dornan T, Lingard L. Progressive collaborative refinement on teams: implications for communication practices. *Med Educ*. 2014;48(3):301–314. doi:10.1111/medu.12376.
5. Kennedy TJ, Regehr G, Baker GR, Lingard L. Preserving professional credibility: grounded theory study of medical trainees' requests for clinical support. *BMJ*. 2009;338:b128. doi:10.1136/bmj.b128.
6. Watling C, Driessen E, van der Vleuten CPM, Lingard L. Learning culture and feedback: an international study of medical athletes and musicians. *Med Educ*. 2014;48(7):713–723. doi:10.1111/medu.12407.
7. Kennedy TJ, Lingard L, Baker GR, Kitchen L, Regehr G. Clinical oversight: conceptualizing the relationship between supervision and safety. *J Gen Intern Med*. 2007;22(8):1080–1085. doi:10.1007/s11606-007-0179-3.
8. Hatala R, Ginsburg S, Hauer KE, Gingerich A. Entrustment ratings in internal medicine training: capturing meaningful supervision decisions or just another rating? *J Gen Intern Med*. 2019 Apr 16. doi:10.1007/s11606-019-04878-y. Epub ahead of print.
9. Bowen JL, Ilgen JS, Irby DM, ten Cate O, O'Brien BC. "You have to know the end of the story": motivations to follow up after transitions of clinical responsibility. *Acad Med*. 2017;92(suppl 11):48–54. doi:10.1097/ACM.0000000000001919.
10. Bowen JL, O'Brien BC, Ilgen JS, Irby DM, ten Cate O. Chart stalking, list making, and physicians' efforts to track patients' outcomes after transitioning responsibility. *Med Educ*. 2018;52(4):404–413. doi:10.1111/medu.13509.

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