

“Page Me if You Need Me”: The Hidden Curriculum of Attending-Resident Communication

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Abstract

Background Discrepancies exist between what resident and attending physicians perceive as adequate supervision. We documented current practices in a university-based, categorical, internal medicine residency to characterize these discrepancies and the types of mixed messages that are communicated to residents, as well as to assess their potential effect on resident supervision and patient safety.

Methods We surveyed residents and attending physicians separately about their current attitudes and behaviors regarding resident supervision. Both groups responded to 2 different measures of resident supervision: (1) 6 clinical vignettes that involved patient safety concerns, and (2) 9 frequently reported phrases communicated by attending physicians to residents before leaving the hospital during on-call admission days.

Results There were clear and substantial differences between the perceptions of resident and attending physicians about when the supervising attending physician should be notified in each of the 6 vignettes.

For example, 85% of attending physicians reported they wanted to be notified of an unexpected pneumothorax that required chest tube placement, but only 31% of resident physicians said they would call their attending physician during those circumstances. Common phrases, such as “page me if you need me,” resulted in approximately 50% of residents reporting they would “rarely” or “never” call and another 41% reporting they would only “sometimes” call their attending physicians.

Conclusions Our study found that attending physicians reported they would want more frequent communication and closer supervision than routinely perceived by resident physicians. Although this discrepancy exists, commonly used phrases, such as “page me if you need me,” rarely resulted in a change in resident behavior, and attending physicians appeared to be aware of the ineffectiveness of these statements. These mixed messages may increase the difficulty of balancing the dual goals of appropriate attending supervision and progressive independence during residency training.

Editor’s Note: The online version of this article contains a table of clinical vignettes and a table of commonly used statements communicated to residents by attending physicians.

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Introduction

Effective July 1, 2011, the Accreditation Council for Graduate Medical Education (ACGME) Common Program Requirements called for enhanced supervision and communication to ensure patient safety while maintaining a humanistic training environment.¹ The ACGME defines “indirect supervision with direct supervision available” as when the supervising physician is not physically present within the hospital or site of patient care but is immediately available by telephone or other electronic modalities.¹ This is probably the most common method of supervision of residents during overnight periods of call. Yet, resident and attending physicians differ on their views about the adequacy and amount of resident supervision necessary to ensure good patient care.^{2,3} Part of this discrepancy may be attributable to the mixed messages attending physicians send to residents that reflect a hidden curriculum of communication.^{4,5} Attending physicians may appear less available during the overnight call period, a vulnerable time

fraught with potential obstacles to communication. We hypothesized that resident perceptions of when to call attendings during on-call nights would differ from attending preferences, as determined by written clinical vignettes and commonly used phrases of communication.

Methods

Survey Development

We administered a survey to both resident and attending physicians at a single internal medicine residency. Residents train at 3 integrated facilities: a university-based, tertiary-care center; a Veterans Affairs hospital; and a county “safety net” hospital. Two chief residents who had completed our internal medicine residency independently developed the clinical vignettes and phrases commonly used at all 3 of the integrated hospitals. Co-authors, including the department chair, reviewed and made modifications to the vignettes and phrases. The final clinical scenarios and phrases selected reflected the common culture of the 3 hospitals and incorporated prior experiences described in the literature.⁸ The questions assessed the current attitudes and comfort of residents in notifying their on-call attending physicians between the hours of 10:00 PM and 7:00 AM.

Questions were divided into 2 groups, the first group consisted of 6 inpatient clinical vignettes that illustrated commonly encountered situations of communication and patient safety within our residency: 3 scenarios dealt with expected or unexpected death; 2 pertained to significant, nonfatal developments in the patient’s condition (pneumothorax and non-ST elevation myocardial infarction); and 1 scenario dealt with a dispute in patient disposition (vignettes provided as online supplemental material).

The second group of questions consisted of 9 phrases our attending physicians commonly use just before leaving the hospital in the evening on admission days to communicate with residents (common phrases provided as online supplemental material). Residents indicated their likelihood of calling their attending physicians on a 5-point Likert scale of “never,” “rarely,” “sometimes,” “mostly” and “always.” In a separate session, using the same Likert scale, attending physicians estimated the likelihood that their residents would call them.

Survey Participants

The 2 chief residents polled all categorical, internal medicine residents on 3 consecutive days during noon conference at each of the 3 institutions. Survey questions were presented in a standardized fashion and residents’ responses were recorded anonymously using an audience-response system. To ensure anonymity, no identifying demographics, including postgraduate year were recorded. Residents were instructed not to discuss the survey questions to minimize

What was known

Residents and supervising faculty disagree about what constitutes adequate supervision.

What is new

A survey of internal medicine residents and faculty produced different responses to clinical vignettes relevant to supervision and patient safety and common use of ambiguous phrases by attendings offering guidance to on-call residents.

Limitations

Single-site, single-specialty study and use of a convenience sample may limit generalizability. Ambiguous terms used may reflect local practice; and the timing of the study in August when residents are less experienced may have influenced the findings.

Bottom line

Internal medicine residents’ and faculty members’ different perceptions about supervision may have consequences for patient safety and resident education.

contamination and to facilitate independent responses. The attending physicians were surveyed separately in a similar fashion but on a single day at a quarterly, departmental, academic affairs meeting. To ensure anonymity, no other identifying demographics were collected.

Survey Analysis

For the first group of questions, comparing responses of residents and attending physicians, the statistical analysis used the χ^2 test or Fisher exact test. For the second group of questions, involving phrases of communication, differences between responses of residents and attending physicians were compared by means and converting the Likert scale to a 1 to 5 response category. An unpaired *t* test was used to analyze this data set. In both analyses, a *P* ≤ .01 was set a priori to adjust for multiple comparisons.

The local Institutional Review Board determined this study was exempt from review.

Results

Ninety percent (79 of 88) of the categorical, internal medicine residents responded to the resident survey. Forty-three percent (35 of 82) of the full-time faculty members responded to the attending survey, and 85% of those faculty members indicated that they had attended on the inpatient ward service at least once in the past year.

Clear differences in the perception of resident supervision were found between resident physicians and attending physicians in 5 of the 6 commonly encountered clinical care situations (83%) that involved serious medical illnesses (TABLE 1). For example, 85% of

TABLE 1

CLINICAL VIGNETTES PRESENTED TO BOTH RESIDENT AND ATTENDING PHYSICIANS ASKING EACH GROUP TO RESPOND TO THE LIKELIHOOD OF THE RESIDENT CALLING THEIR ATTENDING PHYSICIAN

Clinical Vignette	Question	Respondent	Response to Question ^a			P ^b
			Yes, No. (%)	No, No. (%)	Abstain, No. (%)	
A patient with hemorrhagic shock is unresponsive to treatment, and the family wants to change the code status to DNR.	Would you (want your resident to) follow the patient's family wishes and make the patient DNR?	Resident, n = 78	72 (92)	5 (6)	1 (1)	.08
		Attending, n = 34	27 (79)	7 (21)	0 (0)	
	Would you call your attending before changing the code status to DNR?	Resident, n = 78	30 (38)	47 (60)	1 (1)	<.001
		Attending, n = 34	28 (82)	6 (18)	0 (0)	
	The patient expires at 3:00 AM: Would you call your attending to notify them about the death?	Resident, n = 79	40 (51)	37 (47)	2 (3)	<.001
		Attending, n = 34	32 (94)	2 (6)	0 (0)	
A patient with septic shock is intubated and unresponsive to treatment; the family plans on withdrawal of care after all family members arrive.	Would you call the attending after you placed the orders in the chart?	Resident, n = 79	16 (20)	62 (78)	1 (1)	<.001
		Attending, n = 32	21 (66)	11 (34)	0 (0)	
	The attending is now aware of the plan to withdraw care; the patient expires shortly after 11:00 PM after all family members arrive: Would you call your attending?	Resident, n = 79	23 (29)	54 (68)	2 (3)	.31
		Attending, n = 33	14 (42)	19 (58)	0 (0)	
	Would you admit the patient to the general medical ward (yes), or would you call the CCU resident to admit (no)?	Resident, n = 79	16 (20)	57 (72)	6 (8)	.59
		Attending, n = 32	10 (31)	22 (69)	0 (0)	
A patient arrives to the emergency department complaining of persistent nausea; the emergency department physician wants to admit to the general medical ward, but the resident is concerned about cardiac ischemia.	Would you call your attending to inform him or her about your concerns before admitting the patient?	Resident, n = 78	52 (67)	21 (27)	5 (6)	.006
		Attending, n = 34	33 (97)	1 (3)	0 (0)	
	Would you call the attending of the primary team to inform him or her about the death of the patient?	Resident, n = 79	10 (13)	67 (85)	2 (3)	<.001
		Attending, n = 35	16 (46)	19 (54)	0 (0)	
A patient with terminal, metastatic lung cancer expires at 1:30 AM; the patient status is DNR.	Would you call the attending if the patient died at 10:00 PM?	Resident, n = 79	20 (25)	58 (73)	1 (1)	.08
		Attending, n = 35	16 (46)	19 (54)	0 (0)	
	Would you call the attending if the patient died at 5:00 AM?	Resident, n = 79	9 (11)	68 (86)	2 (3)	<.001
		Attending, n = 35	16 (46)	19 (54)	0 (0)	
	Would you call your attending to tell him or her about the pneumothorax?	Resident, n = 78	24 (31)	51 (65)	3 (4)	<.001
		Attending, n = 34	29 (85)	5 (15)	0 (0)	

TABLE 1 CONTINUED

Clinical Vignette	Question	Respondent	Response to Question ^a			P ^b
			Yes, No. (%)	No, No. (%)	Abstain, No. (%)	
A patient admitted with chest pain is diagnosed with acute myocardial infarction, transferred to the cardiac intensive care unit at 3:00 AM, and treated appropriately.	Would you call your attending to inform him or her that the patient has developed an acute MI?	Resident, n = 78	38 (49)	40 (51)	0 (0)	.18
		Attending, n = 35	21 (60)	14 (40)	0 (0)	

Abbreviations: CCU, cardiac intensive care unit; DNR, do not resuscitate; MI, myocardial infarction.

^a Attending physicians were not given the “abstain” option during the survey.

^b In all cases where $P < .01$, the attending physicians would have liked to be called more frequently by their residents than residents actually indicated they would call.

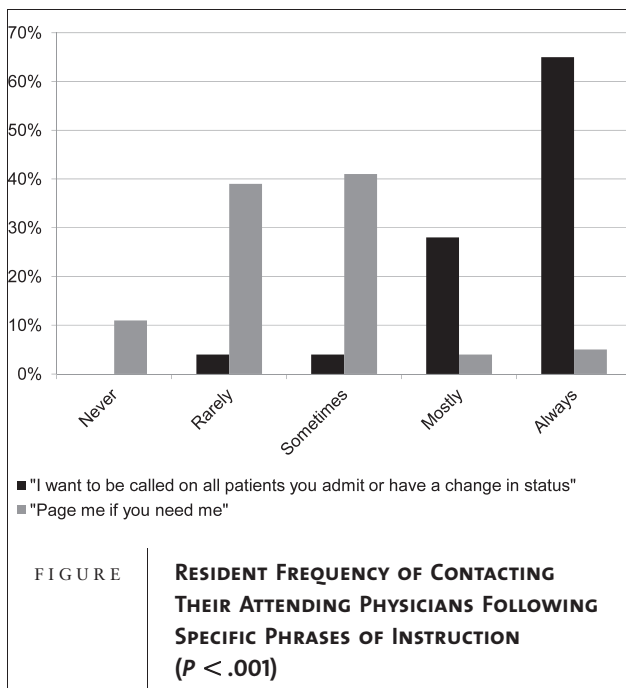
attending physicians reported they wanted to be notified of an unexpected pneumothorax that required chest tube placement, but only 31% of resident physicians said they would call their attending physician. In all

cases where there were differences, attending physician responses indicated they wanted to be called more frequently than residents said they would call their supervising faculty.

TABLE 2 COMMON STATEMENTS MADE TO RESIDENTS BY THEIR ATTENDING PHYSICIANS BEFORE LEAVING ON A CALL EVENING

Faculty Statement to Resident Before Leaving on a Call Day	Response to Statement: Residents Likelihood of Calling Faculty; Faculty Impression Resident Would Call Them ^a		Difference Between Resident and Faculty Responses (P value)
	Mean Response for Resident Physicians	Mean Response for Attending Physicians	
1. “Page me if you need me.”	2.5	2.4	.28
2. “You are a strong senior, but don’t hesitate to call me if you have any questions.”	2.5	2.3	.28
3. “Here’s my cell phone number. Call me if you need me. I will be at a dinner party with my friends.”	2.1	1.9	.31
4. “I don’t have pager coverage. Here’s my cell phone number. Call me if you have any questions.”	2.5	2.7	.21
5. “Here’s my pager, cell phone, and home numbers. My phone is next to the bed and I am a light sleeper, so don’t hesitate to call me.”	3.2	3.3	.14
6. (After being called at 10:00 PM and getting an update): “Alright. Great job. We’ll see you in the morning at 8:00 AM.”	2.1	2.4	.29
7. “Hope you have a good call. I usually sleep from 10:00 PM to 6:00 AM.”	1.6	1.4	.34
8. “I want to be called on all patients you admit or who have a change of status.”	4.5	4.2	.44
9. “I am always available to help you.”	2.8	2.9	.24

^a Both resident and attending physicians’ responses were originally recorded in the 5-point Likert scale, which was then translated into a mean average (never, 1; rarely, 2; sometimes, 3; mostly, 4; always, 5).



Common phrases attending physicians say to residents before leaving on a call day (provided as online supplemental material) illuminated a different problem. Residents do not interpret “page me if you need me” as a mandate for open and frequent communication. On the contrary, many of them understand something that approaches, “Don’t call me unless you really have to,” as indicated by their behavior and response to the survey.

Of significant interest and importance is that attending expectation of getting a call after saying “Call me if you need me” is not different than residents’ action to call. Likewise, there were no statistical differences between attending and resident perceptions about the desired frequency of communication when, before leaving on a call day, the attending physician used other common phrases with the residents (TABLE 2).

We considered “page me if you need me” to be the most common phrase used by our attending staff under these circumstances and a baseline for comparing other statements. Any phrases implying the attending physician might be engaged in other activities (eg, dinner party, sleeping, etc.) after leaving the hospital, only decreased the frequency of calls by the resident physician. Of clinical and educational relevance, only the phrase “I want to be called on all patients you admit or who have a major change of status” significantly changed resident responses from “page me if you need me” (FIGURE).

Discussion

Our results confirm prior studies that attending physicians reported they would like more communication and closer

supervision than was routinely perceived by resident physicians in the same situations.² We build on this existing knowledge by showing that during call days, commonly used phrases by attending physicians thought to enhance communication infrequently improved the reported likelihood of residents contacting their supervising physicians. Only the phrase “I want to be called on all patients you admit or who have a change in status” increased the residents reported likelihood of calling their attending physicians.

Communication between the resident and attending physician is important to ensuring adequate patient safety and appropriate resident supervision.^{3,6,7} However, the hidden curriculum of supervision may praise and reward residents for carrying heavy patient loads without calling for help.⁶ Residents who do call for help from their attending physicians are often perceived as weak.^{4,5,8,9} Early in their training, interns are driven by 2 main influences that minimize notification of their supervising physicians when they are uncertain.^{7,10,11} Making calls, even to the attending physician, interrupts other team members, disrupts the workflow of the team, and decreases team efficiency. In addition, residents want to gain approval from their supervisors. Residents are being evaluated and judged by a process that rewards independent practice and progressively fewer requests for help as they progress through their training.¹² Herein lies the dilemma that learners face throughout their residency. As residents gain mastery of the skills and knowledge leading to expertise, the boundaries of resident supervision collide with the needs to ensure patient safety.^{4,5}

Our study highlights how communication between residents and their attending physicians on call days may contribute to the hidden curriculum and the mixed messages surrounding resident supervision and patient safety. Residents report “page me if you need me” as one of the most common phrases used by our attending physicians when they are leaving the hospital on call days. Following this directive, not only did residents report calling their attending physicians infrequently or rarely but also the attendings reported knowing their residents would call them infrequently or rarely. It appears that both parties recognize this directive as part of the unspoken hidden curriculum in our residency.¹³ Although this verbal communication meets the perceived requirements of resident supervision, in reality it may stretch the limits of patient safety. Perhaps conveniently, it may also minimize disruption to attending physicians’ time. Other attending comments about plans or sleep during certain times at night further minimize call-day communication (TABLE 2).

Of clinical and educational importance, only the phrase “I want to be called on every admission” significantly enhanced the reported communication between residents and their supervising attending physicians.

Limitations of our study include that it was done at a single, academic institution; samples of convenience were surveyed among our resident and attending physicians; and we reported on perceptions of participants, not actual observed behaviors. The clinical vignettes and communication phrases used in our survey may reflect the institutional norms and culture of our own residents and attending physicians. Whether the same results would be found in other residency programs would require further studies, although we suspect our findings may be representative of many other institutions. The survey was also conducted in August, when residents are less experienced. Repeating the survey later in the academic year may produce different results.

In conclusion, words used by attending physicians, such as “page me if you need me,” create confusion and send mixed messages to residents about adequate supervision. We found a disconnect between attending physicians’ stated preferences for communication during on call days and residents’ reported likelihood of actually calling. Clear and unambiguous phrases, such as “I want to be called on every patient admission,” are now incorporated into our own departmental policies designed to achieve the twin goals of improved patient safety and consistent resident supervision.

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