

The Medium Is the Message: Communication and Power in Sign-outs

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0196-0644/\$-see front matter
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doi:10.1016/j.annemergmed.2009.03.013

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[Ann Emerg Med. 2009;54:379-380.]

The adage “It’s not what you say, but how you say it” encapsulates the idea that communication in social systems involves 2 orthogonal dimensions: content and relational.¹ The content dimension speaks to the “data” aspect of communication—it is the “what” that is being said. The relational dimension speaks to the relationship between the communicating parties—it is the “how” of that which is being said. These 2 dimensions are inseparable and always present in every communicative act. For example, when a parent tells a child to clean his room, the content of the message is that the room must be cleaned, whereas the relational dimension demonstrates power and status, in that the parent has the standing to tell the child to clean the room. And the way in which the parent delivers this message (eg, loud voice, declarative stance versus soft voice, pleading stance) affects how both parent and child perceive the power in this relationship.

In this issue of *Annals*, Horwitz et al² report on the effect of changing the form of communication between emergency physicians and internists at admission. Their intervention involved, in part, shifting from synchronous (telephone or face to face) to asynchronous (voicemail) communication. The goal was to provide a more standard, efficient, and accurate sign-out. Their results were rather mixed, with different levels of enthusiasm, appreciation, and usage reported from the emergency physicians and the internists.

Before the intervention, both emergency physicians and internists thought the voicemail system would be a bad idea (which raises interesting questions, not explored here, about why the organization went ahead with it and who is empowered to make those decisions). But after experiencing the new system, the emergency physicians were generally more positive about it than the internists.

The shift from a synchronous to an asynchronous medium is a change in the “how” of communication and so has relational consequences for the parties involved. The traditional, synchronous process bespoke a collaborative relationship—a

negotiation—in which each party had the opportunity to influence the direction of patient care. The relational power was vested more heavily in the internists because they had alternatives to arriving at an agreement.³ Emergency physicians played a supplicant role; they would page (petition) the internists and then wait for their response to begin negotiating about a possible admission.

The asynchronous system inverted this power relationship. In the new system, the emergency physicians are in complete control of the timing, content, and decisionmaking involved. If the internists have questions or need more information, now they must take the initiative to contact the emergency physicians and wait for them to call back to ask. There is no more negotiation, but rather the announcement of *faits accomplis*. Not surprisingly, the emergency physicians reported that the voicemail system was much easier to use and improves workflow. Conversely, the internists expressed concerns about the lack of interaction and ability to influence the course of care. Somewhat surprisingly, in 30% of cases, the internists completely opted out of the new system, never listening to the voicemail, but rather starting their assessment of a new admission with no input from the emergency physician at all (although in some of these cases, a synchronous conversation may have occurred after the initial dictation but was unknown to the investigators). So, although the asynchronous format grants power to the emergency physicians, ultimately the internists can exercise some degree of control over the exchange by choosing not to listen.

An additional component of the intervention in this study was the implementation of a “structured sign-out.” Calls for better structuring of care transitions are common in health care^{4,5}; they are almost invariably limited to standardizing and organizing the data (other possible modes of structuring are not considered⁶). They tend to be imbued with a magical quality: applying “structure,” like applying fairy dust, will automatically make things better. However, the Horwitz et al² results suggest that this standardization could have impeded, rather than facilitated, communication. Internists complained that the new sign-outs sometimes provided a “litany of . . . irrelevant facts instead of a synthesis” that allowed participants to develop a shared mental model of the patient.²

The best communication occurs in recognizable patterns, aided by a sort of “punctuation,” a grouping or ordering of elements in an interaction to show relationships among them.^{1,7} But, because “humans are story-telling animals,”^{8,9} punctuation is only part of the process; once important elements have been named and grouped, they must be “connected” in a meaningful way. Just as a well-designed graph is easier to understand and remember than the numbers it represents so also a narrative is more memorable and comprehensible than a list. Thus, moving to a more list-like sign-out by inserting into it more and more “essential elements” will not necessarily make it better. Completeness is not as important a property of a sign-out as is coherence, or salience. Sometimes communication is improved by leaving things out.

The authors observed many of these concerns, and in accepting the tradeoff between increased efficiency and decreased interaction, they point out accurately the problems of synchronous communication: interruptions leading to task failures; telephone tag; and vulnerability to “conflict, competition, hierarchy, peer pressure, deference, role expectations, and other factors.”² But asynchronous communication is not without performative, political, and relational implications as well, and if done well, interruptions and conflict can sometimes be welcomed as factors bringing in new perspectives.^{10,11} So, rather than trying to eliminate the vulnerabilities of interaction by eliminating the interaction, perhaps we should instead try to learn more about how to transform and facilitate these dialogues.

Finally, there was no apparent change in the rate of adverse events after the intervention, even though 30% of the patient transfers occurred with no actual sign-out at all. Does this mean that communication and sign-outs are irrelevant? Hardly, but this finding illustrates the problem of equifinality in sociotechnical systems. Equifinality means that the same end state can be reached by many paths,¹² that “there are more ways to the woods than one.”¹³ Internists performing initial assessments on new admissions likely perform those assessments differently when they have no previous knowledge of the patient’s problem or emergency department course to try to compensate for missing information. Somewhat like homeostasis in physiologic systems, equifinality here results from a system adapting to a stimulus (eg, an intervention) to maintain a steady state.

But equifinality makes outcomes very blunt and insensitive measures of performance. In such situations, knowing what the outcome was (did system A work better than system B?) may not be as important as understanding how and under what circumstances it was achieved.^{14,15} The implication here is that instead of trying to establish the “one best way” of doing sign-outs, we should begin to recognize that a number of paths—synchronous, asynchronous, both, or neither—might serve the same goal: a safe and efficient transfer of care.

Supervising editor: Michael L. Callahan, MD

Funding and support: By *Annals* policy, all authors are required to disclose any and all commercial, financial, and other relationships in any way related to the subject of this article that might create any potential conflict of interest. The authors have stated that no such relationships exist. See the Manuscript Submission Agreement in this issue for examples of specific conflicts covered by this statement.

Publication date: Available online April 11, 2009.

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