

A Study of Patient Clues and Physician Responses in Primary Care and Surgical Settings

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PHYSICIAN: MORE OFTEN THAN not, I will keep patients in after a pacemaker is placed, at least overnight, in order to make certain that the pacemaker is functioning properly.

Patient: Dr Smith told me it'd be 2 days.

Physician: Frequently it is 2 days, but as I say, at least overnight.

Patient: I'm alone.

Physician: And the routine goes like this. We get you to the OR and then we. . . .

In the above dialogue the patient expresses her anxiety about being alone during her recovery, while the physician remains focused on the logistics of the operative procedure and does not take the opportunity to understand the patient's concerns or to express empathy. In routine visits like this one, patient clues offer opportunities for understanding patients' lives and emotions.¹⁻³ We define a *clue* as a direct or indirect comment that provides information about any aspect of a patient's life circumstances or feelings. These clues offer a glimpse into the inner world of patients and create an opportunity for empathy and personal connection. By exploring the meaning of these clues for patients, physicians can deepen the therapeutic relationship⁴⁻⁷ and potentially enhance clinical outcomes.⁸⁻¹⁴

Context Patients often present clues (direct or indirect comments about personal aspects of their lives or their emotions) during conversations with their physicians. These clues represent opportunities for physicians to demonstrate understanding and empathy and thus, to deepen the therapeutic alliance that is at the heart of clinical care. A paucity of information exists regarding how physicians address the psychological and social concerns of patients.

Objectives To assess how patients present clues and how physicians respond to these clues in routine primary care and surgical settings.

Design, Setting, and Participants Descriptive, qualitative study of 116 randomly selected routine office visits to 54 primary care physicians and 62 surgeons in community-based practices in Oregon and Colorado, audiotaped and transcribed in 1994.

Main Outcome Measures Frequency of presentation of clues by patients during office visits, nature (emotional vs social) and content of clues, and nature of physician responses to clues, coded as positive or missed opportunity.

Results Fifty-two percent and 53% of the visits in primary care and surgery, respectively, included 1 or more clues. During visits with clues, the mean number of clues per visit was 2.6 in primary care and 1.9 in surgery. Patients initiated approximately 70% of clues, and physicians initiated 30%. Seventy-six percent of patient-initiated clues in primary care settings and 60% in surgical settings were emotional in nature. In surgery, 70% of emotional clues related to patients' feelings about their biomedical condition, while in primary care, emotional clues more often related to psychological or social concerns (80%) in patients' lives. Physicians responded positively to patient emotions in 38% of cases in surgery and 21% in primary care, but more frequently they missed opportunities to adequately acknowledge patients' feelings. Visits with missed opportunities tended to be longer than visits with a positive response.

Conclusion This study suggests that physicians in both primary care and surgery can improve their ability to respond to patient clues even in the context of their busy clinical practices.

JAMA. 2000;284:1021-1027

www.jama.com

Patients view medical experiences as intertwined with the issues of their everyday lives. Not surprisingly then, patients expect physicians to go beyond merely attending to their biomedical

needs. In fact, many patients view their physicians as individuals whom they can trust with their most intimate information—including the stresses of their daily lives and their personal worries. How-

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The Patient-Physician Relationship Section Editor: Richard M. Glass, MD, Deputy Editor.

ever, patients often do not verbalize their anxieties directly, rather, they raise these issues indirectly by offering clues or hints about these psychological and social concerns.¹⁵

A growing body of literature suggests that outcomes of care are optimal when physicians address patients' emotional and personal concerns in addition to their biomedical problems.¹⁶⁻¹⁹ Patient satisfaction, patient adherence, and biological outcomes can be improved with a patient-centered model of care that demonstrates respect and caring for patients.^{4,20-25} In addition, the demonstration of caring and compassion for patients may potentially prevent malpractice litigation.^{26,27} Yet, despite evidence demonstrating the benefits of understanding patients, there is a paucity of information about how physicians address the psychological and social concerns of patients in the routine practice of medicine and in the surgical disciplines.

How do physicians respond to patients' clues during routine visits? Branch and Malik²⁸ videotaped 5 expert physicians during office visits and described the surfacing of these clues as "windows of opportunity" for physicians to demonstrate empathy and understanding. More recently, Suchman and colleagues¹⁵ studied interactions between faculty or residents and patients and proposed a model describing how patients present "empathic opportunities" and how physicians respond to them. Suchman et al suggested that physicians often "terminate" the empathic opportunity by changing the topic from the patient's emotional concerns to a salient biomedical issue that seems to be a more comfortable topic for physicians. These small studies, done exclusively in primary care settings within academic medical centers, raise important questions about how physicians address patients' emotional and social concerns during routine care: What is the nature of patients' clues and physicians' responses in community-based practice? How do clues arise in specialties other than primary care? Does it take too much time to respond to patients' clues?

This study was designed to explore clues in a large, audiotaped data set of routine visits between community-based primary care physicians and surgeons and their patients. Our specific objective was to examine the nature of clues as presented by patients in the medical encounter, the frequency with which they occur, and how physicians respond to them.

METHODS

Data for this study were collected in 1994 for a larger research project examining the relationship between physician-patient communication and medical malpractice.²⁶ The study included 59 primary care physicians (general internists and family practice physicians) and 65 surgeons (orthopedic and general surgeons), practicing in community non-academic settings in Colorado and Oregon. Physicians were selected based on their malpractice claims history (2 or more lifetime claims vs none). Physicians were primarily male (94%), white (91%), had been in practice at least 7 years, and were in solo (33%) or group (67%) practice. Ten patients per physician were selected sequentially from the office waiting rooms, and visits were audiotaped. Primary care patients were eligible only if they had at least 2 prior visits with the physician. For surgery patients, all patient visits other than those scheduled for a procedure only (eg, suture removal) were included. A research assistant obtained written consent from the patients. The study was approved by the institutional review board of Legacy Good Samaritan Hospital, Portland, Ore.

The majority of the patients were white (88%), had a middle-class income level (60%), were married (71%), and had completed high school or some college education (60%). Their average age was 54 years. The overall percentage of female patients was 54% (primary care patients, 53%; surgery patients, 56%).

The subset of data used for the present study included transcripts of 124 visits, with 1 randomly selected visit per physician. Of the 124 transcripts, 8 were eliminated because of technical difficul-

ties with the tapes (eg, a tape was not clearly audible). The remaining 116 transcripts were reviewed by a team of coders to identify and describe segments of the interview in which there were clues about patients' emotional or social concerns in the visit. Clues initiated by patients were coded for type and timing of the clue and nature of physicians' response. Also coded were physician questions that encouraged the patient to discuss a personal topic; these were called *physician-initiated clues*. The length of interviews was recorded.

The research team comprised 4 members. One member coded all of the tapes in their entirety, 2 coded a 10% sample to assess intercoder reliability, and the senior investigator resolved differences in coding. In addition to reading the transcripts, coders listened to the audiotapes for content and voice tone to determine the types of clues and categories of responses. The research team met regularly to compare independent assessments of the transcripts and to develop a consensus of the coding categories of clues and responses.

Broadly, clues were coded as either emotional or social. Clues were *social* if they provided an opportunity for the physician to learn more about the patient's life but were not associated with an emotion. In particular, such clues pertained to topics of common interest such as sports, weather, and vacations. For example, in the following case, the patient mentioned a possible trip and a discussion related to the patient's family followed:

Patient: For once I'm going to leave the state of Oregon in the rain for a couple of weeks.

Physician: Is that right? Where are you going?

Patient: I'm going to California.

Physician: Good.

Patient: My daughter wants me to come down there, so I'm going to try to . . .

Physician: How long will you be gone?

Patient: A couple of weeks.

Physician: OK . . . enjoy California.

In contrast, clues that were associ-

ated with emotion, or where patients implicitly sought support from physicians, were coded as *emotional*. The following is an example of an emotional clue in which the patient initiates the topic of the death of his wife. The physician confirms that the disease she had was dreadful to cope with and encourages the patient to express his feelings.

Patient: I've enjoyed myself this year, more than I have since the wife died 5 years ago, and of course even before that she was an invalid for many years with Parkinson's.

Physician: Mmmm hmmm, Parkinson's is not a fun disease.

Patient: She had an extremely progressive supranuclear palsy, a real severe . . .

Physician: Yup, that's a toughy.

Patient: It was awful. She was not able to walk for years, and it got to where they had to put a tube in her stomach—she couldn't swallow—yeah, it really was terrible. . . .

Initially, we coded physician responses to emotional clues based on the categories used by Suchman et al.¹⁵ These included empathic response, empathic opportunity continuer, empathic opportunity terminator, and missed empathic opportunity. As the coding progressed, however, we rec-

ognized that the categories did not fully capture the physicians' responses; therefore, the team modified the classification system and developed a new taxonomy of physician responses. When the team identified a type of clue or physician response not adequately fitting into an existing category, a new category was added or an older category was refined to reflect the differentiation. This iterative process was used until the team found that the coding scheme fully captured the clues and responses in the data set.

Physician responses were separated into 2 broad categories: positive responses and missed opportunities, with subcategories for each. A *positive response* was one that generally supported or encouraged patients to express their personal, psychological, or family-related concerns. Types of positive responses coded were sorted into 3 categories including direct acknowledgment of patients' feelings; encouragement, praise or reassurance; and supportive statements. Clues were coded as *missed opportunities* if physicians did not support or encourage the discussion about emotional concerns, or if they avoided the subject. Categories of missed opportunities included inadequate acknowledgment, inappropriate humor, de-

nial of concerns, and termination of the discussion (TABLE 1).

After a training period, coders had perfect agreement on the presence or absence of clues in the transcripts, timing in the interview, and content of clues. Differences in categories in physician responses were reconciled at regular investigator meetings.

RESULTS

Clues occurred in 28 (52%) of 54 primary care visits, and 33 (53%) of 62 surgical visits (TABLE 2). Of those visits with clues, the mean number of clues was 2.6 clues per visit in primary care and 1.9 clues per visit in surgery. Patients initiated 51 (71%) of the 72 clues in primary care and 43 (69%) of the 62 clues in surgery, and physicians initiated the remaining 21 (29%) in primary care and 19 (31%) in surgery. Of the patient-initiated clues, 76% in primary care and 60% in surgery were emotional, and the remainder were social clues.

The nature of the clues differed between surgery and primary care (TABLE 3). In surgery, 70% of emotional clues related to patients' feelings about their medical condition. In contrast, in primary care, 20% of emotional clues pertained to a biomedical condition, and 80% related to psychological concerns, family, and life stresses

Table 1. Types of Physician Positive Responses and Missed Opportunities

Type of Response	Definition	Example
Positive Response		
Acknowledgment	Physician names patient's feelings or acknowledges life concerns	Ph: I'm very frustrated, so I'm sure that your frustration is much more than mine. . . .
Encouragement, praise, reassurance	Physician encourages, praises, or offers reassurance	Ph: I think people like you, who care enough about your diabetes control, that you'll hang in there. . . .
Supportive	Physician is supportive of patient's concerns	Ph: I think it's really important you get second opinions for the complicated problems . . . you want the best for yourself
Missed Opportunity		
Inadequate acknowledgment	Physician acknowledges clue, but does not respond to patient's underlying concerns	Pt: I just am so tired. . . . Ph: I would like you to do as much as you feel like doing . . . I used to encourage you to get out and walk, I can't really tell you anymore, you know. . . .
Inappropriate humor	Physician jokes or laughs inappropriately	Ph: I guess, we're just gonna have to, you know . . . you're getting so old . . . we're gonna have to shoot ya . . . that's all there is to it
Denial	Physician denies patient's concerns	Ph: This really isn't a big deal.
Terminator	Physician terminates discussion of emotions	Pt: Hhhh, I'm a wimp, heh heh, I'm imagining. . . . Ph: All right . . . We'll see you Friday, do you have any questions?

*Ph indicates physician; Pt, patient.

Table 2. Frequency and Types of Clues in the Medical Visit

Interviews and Clues	Primary Care	Surgery	Total
No. of interviews	54	62	116
Interviews with clues, No. (%)	28 (52)	33 (53)	61
Total No. of clues (mean No. of clues per interview with clues)	72 (2.6)	62 (1.9)	134
Patient-initiated clues, No. (%)	51 (71)	43 (69)	94
Emotional	39	26	65
Social	12	17	29
Physician-initiated clues, No. (%)	21 (29)	19 (31)	40
Emotional	12	8	20
Social	9	11	20

Table 3. Categories of Emotional Patient-Initiated Clues in Surgical and Primary Care Visits

Types of Patient-Initiated Clues	Primary Care	Surgery	Total
Feelings related to			
Biomedical condition (eg, frustration, fear, and/or guilt)	8	18	26
Aging	9	0	9
Stress (eg, work related, other global life concerns)	5	1	6
Loss of family member	3	2	5
Concerns about life changes (eg, last child to college, wife in nursing home, all friends have died, retirement, and probation ending)	3	0	3
Feeling depressed	6	0	6
Other	5	5	10
Total	39	26	65

such as aging, loss of a family member, and major life changes.

Most often, emotional clues were embedded in a biomedical discussion or surfaced during the physical examination (eg, during pauses in measurement of blood pressure). Typically, such clues were raised indirectly when the conversation touched on an emotional issue. In the following encounter, the patient's clue—worry about her sister's injury and the possibility of it affecting her blood pressure—emerges during part of her examination.

Physician: Your blood pressure is looking good; 140 over 75, pretty good.

Patient: My sister was in a car accident 4 weeks ago, and she's been. . . .

Physician: How's she doing?

Patient: She's been staying with me, she's doing better, she gets dizzy a lot.

Physician: Dear me, any neck injuries?

Patient: I know they checked her, and they said it was OK.

Less often, the patient raised a concern directly with statements such as, "I need to talk to you about some other

stuff, too." In some visits (n=6), patients gave signals of distress or "cries for help" that seemed to require immediate physician attention. In the following example, the patient repeatedly expresses his desperation when the physician inquires about his sleep disturbances.

Physician: Yeah, what's keeping you awake?

Patient: I don't know, I'm not worrying about anything—things are going pretty well, Kathy's taking wonderful care of me, I just, I just, frankly want to die. . . .

Physician: Well, I don't think we can arrange that.

Patient: No. . . .

Physician: Heh heh, heh heh. . . .

Patient: I realize that.

Physician: Yeah, that's good, yeah.

Patient: But I am so discouraged and so desperate. . . .

The above interchange is also a poignant illustration of the extreme contrast between the patient's profound feelings and the physician's dismissive response.

While patients most frequently initiated clues, 30% of clues were physi-

cian initiated. They often did this by asking open-ended questions, and patients responded with information about salient life events that were usually emotional in nature. Some examples of open-ended questions used by physicians are "In general, over the past year, would you say it's been a good year, bad year. . . ?" Or, "How's everything else going on?" Another way physicians encouraged these discussions was by initiating social questions about family, travel, or leisure activities that provided an opportunity for the patient to talk about a personal topic. While most of these conversations remained social in nature, some resulted in the patient bringing up a latent emotional concern.

Physician: What'd you do for Thanksgiving?

Patient: Went to my daughter's. . . well I told you I hadn't spoken to my daughter for 10 years. . . .

In the above example, a social question initiated by the physician led the patient to express her feelings about re-establishing a relationship with her estranged daughter.

Another strategy used infrequently by physicians was soliciting emotions directly, as in the following example:

Physician: And it's really annoying to you, isn't it?

Patient: Well, yes. I tell you what's the most annoying about it is that. . . .

Physician Responses

Physicians responded positively to 10 of 26 emotional clues (38%) in surgery and 8 of 39 (21%) in primary care (TABLE 4). In both specialties, the most frequent positive response was acknowledgment. In the following example, the surgeon acknowledges the patient's frustrations by sharing his own frustration with the patient's slow recovery.

Patient: Yeah, it just gets real frustrating.

Physician: Oh, uh.

Patient: I used to walk 7 to 8 miles a day, and now I'm down to. . . .

Physician: I'm very frustrated, so I'm sure that your frustration is much more than mine, but I sure would like to see

you come out of this without any pain.

In an example from a primary care visit, the physician acknowledges the patient's feelings about trying to manage a work and home life.

Patient: I moved to the day shift, so we will have a normal life together, hhh, umm, so you sacrifice one for the other.

Physician: Right, right, oh yeah, you have to do something, you're trying to have some kind of quality time together.

However, more frequently physicians missed the opportunities to respond to patients' clues (missed opportunities: 79% primary care, and 62% surgery). There were 47 missed opportunities identified including failure to adequately acknowledge patients' feelings (36), inappropriate humor (3), terminating the topic (5), and denial of patient emotion (3) (Table 4). In cases of inadequate acknowledgment, approximately 75% of the time the physicians said something about the topic raised by the patient but did not respond to the patient's feelings. In the following example, the patient articulates her worry about her weakness and the surgeon confirms her limitation, but he does not directly address the emotional concerns.

Patient: I know you told me to (be more active), I just am so tired, and. . .

Physician: I would like you to do as much as you feel like doing, I can't really tell ya anymore, you know. I used to encourage you to get out and walk. . .

Patient: I can't do those things (anymore).

In a smaller number of situations, physicians used inappropriate humor, denied the patient's feelings, or terminated the discussion. In 1 case, for example, a patient articulates his apprehension about a future surgery, but the physician focuses on the details of where the surgery is to be performed.

Patient: I always think of all the stuff I wanna be doing, see, and I can't . . . I didn't wanna take a month out again (for the surgical removal of pins and plates).

Physician: Yeah. . .

Table 4. Frequency of Physicians' Responses to Patient-Initiated Emotional Clues*

Response	Primary Care	Surgery	Total
Total No. of patient-initiated emotional clues	39	26	65
Positive, No. (%)	8 (21)	10 (38)	18 (28)
Acknowledgement	4	4	8
Encouragement, praise, reassurance	1	3	4
Supportive	3	3	6
Missed opportunities, No. (%)	31 (79)	16 (62)	47 (72)
Inadequate acknowledgment	24	12	36
Inappropriate humor	2	1	3
Denial	2	1	3
Terminator	3	2	5

*Data are presented as number unless otherwise indicated.

Table 5. Length of Visits

Type of Interview	Primary Care		Surgery	
	No.	Mean Length (Range; SD), min	No.	Mean Length (Range; SD), min
Without any clues	26	15.7 (4-54; 10.1)	29	10.5 (1-27; 6.7)
With 1 clue	7	12.7 (7-18; 3.7)	9	10.6 (6-21; 4.8)
With ≥1 missed opportunity	16	20.1 (7-38; 8.8)	9	14.0 (6.5-29; 6.8)
With ≥1 positive response	5	17.6 (12-25; 6.1)	7	12.5 (7.5-21; 4.6)
With repetition of clue after a missed opportunity	8	18.4 (8-33; 8.2)	5	15.5 (9-29; 8.2)

Patient: Like all summer long I've been having fun with my . . . uh, ridin' my horses, and, 'course I still like to do that so, but uh, that will be . . . I, I'll be out of that for a month.

Physician: Do you have to go to (X hospital)? You went (there) last time.

In 25 interviews in which physicians missed opportunities, half of the patients brought up the same issue a second or third time. In all of the examples in which repetition occurred, the physician missed subsequent opportunities to respond. In 1 primary care visit, the patient repeatedly mentions retirement, and the doctor repeatedly returns to discussing the biomedical topic:

Physician: I mean you can't stay off permanently for the. . .

Patient: Oh, I know that, I don't want to, but at least, uh, hhh, I have to take some of it off. I'm gonna retire in 3 months anyway.

Physician: I know that, 'kay, let me listen to your heart first (time lapsed, 1.75 minutes).

Patient: I have about 4 more months to go, and then I'm gonna retire.

Physician: I know. And what was the other thing? Your blood pressure?

Timing of Clues and Length of Visits With and Without Clues

Clues were found throughout the interview, from the opening to the closing minute. In primary care visits that included at least 1 clue, visits were longer when there was a missed opportunity compared with visits in which physicians demonstrated a positive response (mean time, 20.1 minutes vs 17.6 minutes). A similar trend was present in surgery (14.0 minutes vs 12.5 minutes) (TABLE 5). In addition, primary care visits in which patients repeatedly brought up emotional issues after the physician missed an opportunity were longer than visits in which physicians made at least 1 positive response (18.4 vs 17.6 minutes). We observed the same trend in surgical visits (15.5 vs 12.5 minutes). It is noteworthy that the visit length both in primary care and surgery was shortest when physicians made at least 1 positive response compared with when they missed the opportunity or when the patient repeatedly brought up the clue.

COMMENT

Clues about patients' worries appear in more than half of routine office visits in both surgery and primary care practice. We found that patients usually initiate clues in subtle ways. Clues were typically embedded in the context of a discussion about a health problem. For example, a primary care patient might allude to a stressful life event when a physician comments on an elevated blood pressure reading. This subtle, nonovert nature of clues has important implications for physicians. Since these clues are hidden in the fabric of discussion about medical problems, physicians who are busy attending to the biomedical details of diagnosis and management may easily miss them.

When should physicians respond, or not respond, to patient clues? Medical encounters are complex, and, at each branch point in a medical interview, physicians may lead the discussion in different directions. We do not believe it is essential, nor is it practical, for physicians to respond to emotional issues each time they are presented. In some cases, physicians may choose not to pursue a line of questioning, and it may have no consequences for the interview. In other cases, similar to the findings of Suchman et al,¹⁵ a patient brings up the same emotional topic a second time during the encounter when the physician failed to address it on the first occasion. This allows a physician a second chance to discuss an emotional topic of importance to the patient.

We found that the majority of the time physicians pass up opportunities presented by patients. Furthermore, when physicians notice the clues, they often fail to explore the deeper feelings behind the clue. Physicians may avoid pursuing clues about emotional issues for several reasons. Some physicians may feel uncomfortable responding because they may perceive that they do not have the ability to fix or cure patients' emotions. While nursing, psychology, and psychiatry training often emphasize skills of acknowledging patients' feelings,²⁹⁻³⁵ medical

education provides relatively little training for physicians in this area. In addition, in the present managed care environment with heightened pressure on clinical productivity, physicians may be particularly worried that addressing patients' emotional issues may increase the length of the interview.^{26,36,37} It is likely that, in the current practice environment, physicians may be even less likely to pursue clues than they were in visits during 1994. While our sample is small and no causal association can be determined, we do not find evidence that responding to clues lengthens visits. In contrast, we noted that visits in which a physician responded positively to a patient clue tended to be shorter than those in which the physician missed the opportunity.

Occasionally, clues appeared to be a "cry for help." In 6 cases, patients seemed markedly distressed, and their comments begged for acknowledgment by physicians. For example, 1 patient in the study expressed feelings of desperation such as "Frankly, I want to die." These cries for help are consistent with the medical literature that demonstrates that patients often view primary care physicians as their access to care for psychiatric problems like depression.³⁸ Physician recognition of these "cries for help" is critical since these clues may provide the sole opportunity to help patients seek appropriate care.

Some stereotypes of surgeons suggest that they are "business-like" physicians who prefer to "cut it out," rather than spend time talking to patients. Often surgeons are portrayed as lacking empathic skills compared with their primary care colleagues. In contrast, we found that surgeons resembled primary care physicians in their responses to patient clues. While both physicians and surgeons missed opportunities to respond to clues more than half of the time, surgeons were as likely to respond positively as their primary care colleagues. Further research is needed to study patterns of communication in surgical disciplines to form a basis for education tailored for surgical specialties.

This study has several limitations. First, the sample included mainly male physicians who were selected based on their malpractice claims history,²⁶ and this may not be generalizable to the entire physician population. However, 43% of physicians in our sample had no claims. Second, our analysis was limited to verbal communication, and nonverbal clues that might have been detected on videotape were unavailable. It is possible that physicians expressed empathy in nonverbal ways by touching a patient or handing a patient a tissue.^{39,40} Third, the study did not directly address the relationship between how physicians address or miss clues and patient outcomes. We cannot assess the consequences of either positive responses or missed opportunities.

In summary, we found that patients offer clues that present opportunities for physicians to express empathy and understand patients' lives. In both primary care and surgery, physicians tend to bypass these clues, missing potential opportunities to strengthen the patient-physician relationship. Research on teaching communication skills demonstrates that physicians can learn to modify their communication style.⁴¹⁻⁴³ We propose that these 2 aspects of the medical encounter—patient clues and physician responses—be recognized as being interdependent and a key to building a trusting patient-physician relationship, thus ultimately improving the outcome of care.

Funding/Support: This work was supported in part by the Agency for Health Care Policy and Research RO1 grant HS07289, Kenneth B. Schwartz Center, and Arthur Vining Davis Foundation.

Acknowledgment: We thank Jeannie Farnan for her help with coding and Nicholas Christakis, MD, PhD, for his suggestions during manuscript preparation.

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In art, truth is a means to an end; in science, it is the only end.

—William Whewell (1794-1866)