Using Bedside Rounds to Teach Communication Skills in the Internal Medicine Clerkship

Regina Janicik, MD; Adina L. Kalet, MD, MPH; Mark D. Schwartz, MD; Sondra Zabar, MD; Mack Lipkin, MD

Section of Primary Care
Division of General Internal Medicine
Department of Medicine, New York University School of Medicine

Abstract:

Background: Physicians’ communication skills, which are linked to important patient outcomes, are rarely explicitly taught during the clinical years of medical school. This paper describes the development, implementation, and evaluation of a communication skills curriculum during the third-year Internal Medicine Clerkship.

Methods: In four two-hour structured bedside rounds with trained Internal Medicine faculty facilitators, students learned core communication skills in the context of common challenging clinical situations. In an end-of-clerkship survey students evaluated the curriculum’s educational effectiveness.

Results: Over the course of a year, 160 third-year students and 15 faculty participated. Of the 75/160 (47%) of students who completed the post-clerkship survey, almost all reported improvement in their communication skills and their ability to deal with specific communication challenges.

Conclusions: The curriculum appears to be a successful way to reinforce core communication skills and practice common challenging situations students encounter during the Internal Medicine Clerkship.

Keywords: Bedside Teaching, Communication Skills, Medicine Clerkship

Each day, clinical clerkship students in Internal Medicine face the complex challenge of working in an intense setting with a diverse group of patients who include adults from different cultures, difficult patients, dying patients, and those ill from substance abuse. These patients require from the students not only diagnostic acumen, but also well-honed communication skills, a sense of humanity, and the ability to reach out on a personal level. The link between a physician’s ability to communicate with a patient and the outcome of treatment (including satisfaction, compliance, clinical markers and malpractice claims) has been well documented.1–8 Although courses in communication have been part of the medical school curriculum for the past 20 years, they are typically taught during the first or second year.9 Also, the interpersonal skills of students have been shown to decline during the clerkship years, just when students most need to grapple with the practical aspects of communicating with patients.10 All this makes a good argument for integrating the teaching of communication skills into the clinical rotations.

As is happening in other countries, major U.S. academic organizations (i.e. LCME, ACGME) have challenged medical schools to augment the curriculum and improve evaluation of this set of skills.11–12 The Clerkship Directors in Internal Medicine association identify competence in communication as a basic requirement.13 Despite many reasons to incorporate communication skills teaching in the clinical years, most medical schools do not provide adequate training in this area during clerkships. Barriers to this integration include a lack of sufficient direct observation and feedback, limited time for interaction with patients, rounds that focus on proficiency in biomedical knowledge, and lack of faculty interest.

Aim

To address this issue of great importance to patients, the Josiah Macy Jr. Foundation funded a three-school collaborative project that involved Case Western Reserve University, New York University, and the University of Massachusetts.14 Called The Macy Initiative in Health Communication, the project focuses on improving the curriculum for medical students during the critical clinical clerkship years.12 New York University School of Medicine (NYU) approached this challenge by integrat-
ing communication skills activities into each of the seven clerkships required of third-year students. A controlled, performance-based assessment of the effectiveness of the curriculum demonstrated significant improvements in critical communication skills among students participating in the new curriculum compared to students in traditional clerkships. In this article we describe the innovative Internal Medicine clerkship curriculum in clinical communication skills and its evaluation by the students.

Setting

In the United States, third-year medical students typically rotate through five to seven core specialties. At NYU, students spend 10 weeks on the Internal Medicine clerkship, five weeks at Bellevue Hospital Center and five at other sites. During the clerkship, students join ward teams where they take part in all team activities. They also participate in a variety of group sessions that are part of a formal clerkship curriculum, including rounds with an attending physician, core conferences, clinical pathological conferences, and humanistic medicine rounds. Attending physicians, who consider recommendations of the house staff, evaluate the students based on their presentations, patient write-ups, an essay, and a written exam consisting of multiple-choice questions.

Although the clerkship is intellectually rigorous, before the new curriculum took effect it included no explicit training in communication skills outside of “taking a history”. Even there, few faculty members could observe this process; they evaluated a student’s ability from data presented on rounds. Direct observation of clinical skills was an important goal, but changes in the structure of the residency, the hospital system, and limited availability of attending physicians made this a difficult task. In addition, patients with complex problems presented communication challenges for which students were not prepared. For all these reasons, the goals of the new curriculum for the medicine clerkship included direct observation of the interaction of students with patients, instruction and feedback about communication skills, and information about working with patients who present complex communication challenges.

Program Development

Along with clerkship leadership, we developed a series of pilot sessions that dealt with these issues and identified four clinical situations that commonly challenged and frustrated the clinical clerks. These included dealing with patients who had alcohol and substance abuse problems, talking to patients from other cultures, dealing with difficult patients, and discussing end-of-life issues with terminally ill patients. We decided on a format modeled on traditional bedside rounds and sought internists known for their teaching and communication skills to conduct these doctor-patient rounds.

Table 1 summarizes the goals and objectives for each of the four sessions. Objectives for each session balanced content knowledge and relevant interviewing skills. All sessions reinforced core communication skills, based on the conceptual models of doctor-patient communication developed for the Macy Initiative and used in all communication skills curriculum at NYU School of Medicine. Each small group session ran two hours with four to five students and one teacher. At each session, students were asked to identify one of their patients which they would then interview. One student would volunteer to complete the interview while the others observed. Table 2 outlines the format of a typical session.

Before entering the patient’s room, the group discussed the issues and then went to the bedside for the interview. The group then returned to the conference room to debrief the interview. While each session had a predetermined theme, the content of the interview depended on the patient’s clinical and personal issues and on the students’ goals. Faculty often assisted students in applying what they learned to care for the patient.

Initial teachers included a core group with extensive experience in conducting similar activities with housestaff or nationally through the American Academy on Physician and Patient. Additional faculty members were trained by co-facilitating with a member of the core faculty. In this model the trainee faculty member would commit to having a preparatory and debriefing discussion around each session to develop facilitating skills and deepening understanding of the Macy Model of Doctor-Patient Communication and would take increasing amounts of leadership in facilitating the group. The co-facilitators exchanged teaching strategies and content expertise. In this faculty preparation we emphasized small group facilitation skills, making behaviorally specific observations, and giving effective feedback. Comprehensive faculty notes were developed for each session. We trained 15 faculty members to conduct these sessions.

Program Evaluation

We evaluated the curriculum at NYU using an anonymous survey administered at the end of each clerkship rotation following the final written exam. The major questions we sought to answer were these:
1. To what extent did the curriculum meet students’ needs with respect to communication skills training, time for feedback and direct observation, and quality of teaching?

2. How much did the new training activities change students’ self-perceived communication skills?

Subjects were all students in the NYU class of 2002 during their clinical clerkship year. This class was the experimental cohort for the controlled trial of the Macy Initiative intervention. This was the first year of implementation for the clerkship curriculum.

A three-page questionnaire included questions and scales selected to determine general communication

| Topic                                      | Goal                                         | Objectives                                                                 | Readings                                      |
|--------------------------------------------|----------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------|
| Patients with alcohol-related problems     | Identify and intervene to change behavior    | Identify problem drinkers. Assess degree of risk. Develop strategies to work with these patients. Use the Ask-Assess Advise/Audit-Assist-Monitor model. | O’Connor PG, et al. “Patients with Alcohol Problems”23 Fiellin DA, et al. “Outpatient Management of Patients with Alcohol Problems”24 NIAA “The Physicians Guide to Helping Patients with Alcohol Problems”25 |
| Patients from different cultures           | Improve communication between doctor and patient | Learn how culture influences health behavior. Develop strategies to establish rapport. Elicit patient’s explanation for illness. Arrive at a mutually agreeable plan for testing and treatment. | Carillo JE, et al. “Cross-Cultural Primary Care: A Patient Based Approach”26 Johnson, TM, et al. “Cultural Factors on the Medical Interview”27 |
| Difficult patients                         | Work effectively with patients who have different personality styles | Learn how personality can influence diagnosis and treatment. Develop strategies to work with particular styles. Recognize personal feelings elicited by difficult patients. | Putnam SM, et al. “Personality Styles”28 |
| Terminally ill patients                    | Improve ability to communicate with terminally ill patients | Understand doctor’s role in end-of-life care. Elicit patient’s understanding of condition and assess desire to know details. Ask about concerns and identify helpful resources. Recognize and reflect on personal feelings. | Steinhauser, KE, et al. “In Search of a Good Death: Observations of Patients, Families, and Providers”29 |
competencies and the clerkship-specific competencies described above. The NYU Institutional Review Board exempted the clerkship evaluation from informed consent.

In the first year of the new curriculum, 160 students attended a total of eight hours over four afternoons of doctor-patient communication rounds while on the clerkship. Table 3 presents an example of one of the sessions, which was drawn from notes taken by a faculty member.

Seventy-five students completed the post-clerkship surveys following five rotations of the Internal Medicine clerkship. Because the survey was anonymous, we cannot compare characteristics of those who did not respond with those who did. When asked about the time and effort spent on communication skills, most students felt they received the right amount of training (65%). However, a substantial minority reported they still wanted more feedback (36%) and direct observation (46%) by attending physicians (Figure 1).

Students reported that their general and clerkship-specific communication skills improved as a result of the training (Tables 4 and 5). On a five-point scale from 1 = “declined greatly” to 5 = “improved greatly,” the mean score across all eight general communication skills was 4.2 (SD=0.49). Almost 90% felt their communication skills improved somewhat or greatly as a result of the clerkship. Greatest improvements in general skills were reported in communicating with patients, assessing the patient’s problem, and developing relationships with patients.

Seven items pertained to the quality of the teaching. Participants rated these on a 4-point scale from 1 = “poor” to 4 = “excellent.” The mean rating was 3.4 (SD=0.68) with 84% indicating good or excellent (Table 6). The students gave highest rating to the qualities of the teaching faculty and the lowest rating to written materials.

From debriefing of students and faculty we learned that despite initial reluctance, students appreciated the bedside format as they found the rounds often had a significant impact on the care they could render to patients (e.g., important information revealed, improved relationship, change in management). We also found, as have others, that patients appreciated the opportunity to contribute to the education of students and often made poignant and powerful teaching points. For example, at the conclusion of one bedside discussion we asked for feedback from the patient, a Jamaican woman undergoing treatment for ad-
Table 3: Example of an Actual Session

Mr. G, a 42-year-old unemployed homeless man, was admitted to the hospital for treatment of pneumonia. The police brought him to the emergency room because he had been found sleeping in the snow. He complained of fever and a cough. The students knew him only through comments of the house staff, who spoke only of his resolving infiltrate on CXR and his multiple past admissions for infections and impending delirium tremens.

During the interview, the students discovered that Mr. G:

♦ was despondent about his inability to control his drinking
♦ had been sober in the past for as long as one year during which he held down a job as a construction worker and reestablished a relationship with his children
♦ was motivated to quit drinking and aware of what he needed to do and the potential difficulties he would face.
♦ When asked for feedback Mr. G thanked the group for listening to him, and said “alcohol is a demon… don’t give up on us drinkers…the doc has got to push a lot.”

Following the interview:

♦ the student interviewer learned that a structured approach to problems with alcohol improved his ability to obtain basic facts and establish rapport with a patient he didn’t know well
♦ the faculty member reviewed the relevant communication competencies, such as screening with CAGE questions, NIAA diagnostic categories of alcohol problems, and Prochaska/Diclemente Stages of Behavioral Change.
♦ the students discussed their reasons for thinking that Mr. G’s social and economic problems were too great to overcome and went on to talk about whether Alcoholics Anonymous could help him.

Discussion

We developed and introduced a clinically integrated communication skills curriculum into the core Internal Medicine Clerkship that most students found rewarding. They reported that they valued the clear learning objectives, the chance to practice with feedback, the clinically integrated discussion afterwards and perceived that the program improved their knowledge and skills.

The curriculum also offered an opportunity to train a group of faculty in conducting bedside rounds focused on communication skills. Training focused on techniques...
shown to improve the ways students learn to communicate and on effective bedside teaching. This training also prepared the faculty for similar activities with housestaff and in Continuing Medical Education activities, providing them with an effective model to teach communication skills and other aspects of professionalism. Informal conversations with faculty revealed increased confidence in their bedside teaching skills, many reported witnessing key moments of students’ development and that they could better objectively evaluate students’ communication skills.

We did encounter several barriers. The most significant was the amount of faculty time that these activities required. Though we addressed this with some small honoraria and recognition letters from the Department Chairman, this continues to present an important barrier. In addition, some housestaff were poor role models and undermined the effectiveness of our formal teaching by making it seem unrealistic in day-to-day clinical work. To counteract this hidden curriculum we introduced resident-as-teacher activities and plan more this year to improve the attitudes, knowledge, and skills of housestaff. However, even the best resident teaching should be supplemented with the attention of experienced faculty. We are now working on a project that will increase the number of faculty trained to teach these sessions and will extend doctor-patient rounds to house staff (The Merrin Bedside Teaching Program of the Department of Medicine, New York University School of Medicine).

Ultimately we will need to assess the value of spending this amount of time and energy teaching communication skills during the clerkship. We need to evaluate this curriculum even further to see whether students will continue to employ these skills beyond that in other clerkships and residency and after they earn their M.D. degrees. We believe that involving so many role models in our program and integrating the communication skills learning into the core clinical curriculum explicitly emphasizes the value of such skills to medical practice.

### Table 4: Change in student’s self-perceived core communication skills.

| Core Communication Skills                                      | % Improved Somewhat or Greatly (N=75) |
|                                                               |                                        |
| Communicate with patients in general                          | 91                                     |
| Assess a patient’s problem and situation                       | 89                                     |
| Develop and maintain a relationship with a patient            | 88                                     |
| Give an oral presentation                                     | 87                                     |
| Complete a patient write-up                                    | 85                                     |
| Educate and counsel a patient                                  | 84                                     |
| Organize an interview and manage time                         | 77                                     |
| Negotiate and share decision-making with a patient            | 72                                     |

### Table 5: Change in student’s self-perceived clerkship-specific communication skills.

| Clerkship-Specific Communication Skills                        | % Improved Somewhat or Greatly (N=75) |
|                                                               |                                        |
| Ask a patient about their understanding of their illness       | 80                                     |
| Recognize and identify my own reactions elicited by difficult patients | 77                                     |
| Elicit a patient’s explanatory model of his/her illness        | 69                                     |
| Elicit a terminally ill patient’s goals and concerns at the end of life | 63                                     |
| Identify common personality styles among my patients          | 63                                     |
| Identify problem drinkers among my patients                    | 61                                     |
| Establish rapport with patients from a culture different from mine | 56                                     |
| Negotiate a mutually agreed upon plan of action with a patient from a different culture | 55                                     |
| Use the Prochaska/DiClemente model of behavioral change to develop strategies for helping problem drinkers | 54                                     |

### Table 6: Student perceptions of quality of teaching activities

| % Good or Excellent (N=75) |
|---------------------------|
| Teachers prepared          | 97 |
| Teachers enthusiastic      | 97 |
| Goals clear                | 89 |
| Teaching organized         | 88 |
| Activities integrated into clerkship | 80 |
| Activities met my needs    | 72 |
| Written materials helpful  | 64 |
The evaluation is limited in that the data reflect the views of only 47% of the students who participated. We also did not collect descriptive information about the responders on the survey. For these reasons, we cannot directly assess the extent to which this evaluation reflects the feelings of the non-responders.

We have shown it both possible and rewarding to integrate communication skills teaching into traditional clinical teaching in a rigorous Internal Medicine clerkship in a way that may improve student competence and patient care.

Acknowledgments

We would like to thank Drs. Anthony Grieco, Ellen Pearlman and Allison Schacter for their support in developing and implementing the curriculum. Also, thanks to Nissa Simon for her invaluable help in editing the paper and Amy Hsieh for revising and coordinating manuscript production.

Grant Support

This project was funded by a grant from the Josiah Macy Foundation

This project was presented as a poster at the 2002 National SGIM Meeting in San Diego and published as an abstract (Janicik RW, Kalet A, Schwartz M, Lipkin, M, Zabar S. Using bedside rounds compared with other methods to teach communication skills in clinical clerkships. J Gen Intern Med. 2002; 17(1): 228.)

References

1. Levinson W, Stiles WB, Inui TS, Engle R. Physician frustration in communicating with patients. Med Care. 1993;31: 285-95.

2. Stewart MA. What is a successful doctor-patient interview: A study of interactions and outcomes. Soc Sci Med. 1984;19:167-75.

3. Eisenthal S, Koopman C, Stoeckle JD. The nature of patients’ requests for physicians’ help. Acad Med. 1990;65:401-5

4. Kaplan SH, Greenfield S, Ware JE Jr. Assessing the effects of physician-patient interactions on the outcomes of chronic disease. Med Care. 1989;27(3 Suppl):S110-27.

5. Rost KM, Flavin KS, Cole K, McGill JB. Change in metabolic control and functional status after hospitalization. Impact of patient activation intervention in diabetic patients. Diabetes Care. 1991;14:881-9.

6. Mumford E, Schlesinger HJ, Glass GV. The effects of psychological intervention on recovery from surgery and heart attacks: an analysis of the literature. Am J Public Health. 1982;72:141-51.

7. Fallowfield LJ, Hall A, Maguire GP, Baum M. Psychological outcomes of different treatment policies in women with early breast cancer outside a clinical trial. BMJ. 1990;301:575-80.

8. Levinson W, Roter DL, Mullooly JP, Dull VT, Frankel RM. Physician patient communication: the relationship with malpractice claims among primary care physicians and surgeons. JAMA. 1997;277:553-9.

9. Novack DH, Volk G, Drossman DA, Lipkin M Jr. Medical interviewing and interpersonal skills teaching in US medical schools. Progress, problems, and promise. JAMA. 1993;269:2101-5.

10. Pfeiffer C, Madray H, Ardolino A, Willms J. The rise and fall of students’ skill in obtaining a medical history. Med Educ. 1998; 32:283-8.

11. Association of American Medical Colleges. Medical school objective project, report III, contemporary issues in medicine. Washington DC: The Association; 1999.

12. ACGME Outcomes Project [homepage on the Internet]. Chicago (IL): The Association; c2006 [cited]. Available from: http://www.webcitation.org/5MBg9P4rU

13. Clerkship Directors in Internal Medicine Website [accessed on line January 15, 2007]. http://www.webcitation.org/5MBgFRPyl.

14. Macy Initiative in Health Communication [homepage on the Internet]. New York: New York University; c2001 [accessed on line January 15, 2007]. Available from: http://www.webcitation.org/5MBgMEY0k

15. Kalet AL, Pugnaire MP, Cole-Kelly K, Janicik R, Ferrara, E, Schwartz MD, et al. Teaching communication in clinical clerkships: models from the macy initiative in health communications. Acad
Janicik R, Kalet AL, Schwartz MD, Zabar S, Lipkin M. Using bedside rounds to teach communication skills in the internal medicine clerkship. Med. 2004;79:511-20.

16. New York University Macy Initiative in Health Communications [homepage on the Internet]. New York: New York University; c2001 [accessed on line January 15, 2007]. Available from: http://www.webcitation.org/5MBgPI57g

17. Yedidia MJ, Gillespie CG, Kachur E, Schwartz MD, Ockene J, Chepaitis AE, et al. Effect of communications training on medical student performance. JAMA. 2003; 290:1157-65.

18. American Academy on Communication in Healthcare [homepage on the Internet]. Chesterfield (MO): The Academy; c2005-2006 [cited]. http://www.webcitation.org/5MBgV31X3

19. NYU Macy Initiative on Health Communication. Overview of the Structure and Sequence of Effective Doctor Patient Communication [homepage on the Internet]. New York: New York University; c2001 [cited]. Available from: http://www.webcitation.org/5MBgaP1GJ

20. Aspegren K. BEME guide No. 2: teaching and learning communications skills in medicine—a review with quality grading of articles. Med Teach. 1999;21:563–70.

21. Losh DP, Mauksch LB, Arnold RW, Maresca TM, Storck MG, Maestas RR, et al. Teaching inpatient communication skills to medical students: an innovative strategy Acad Med. 2005; 80:118-24.

22. Janicik RW, Fletcher KE. Teaching at the bedside: a new model. Med Teach. 2003;25: 127-30.

23. O’Connor PG, Schottenfeld RS. Patients with alcohol problems. N Engl J Med. 1998; 338:592-602.

24. Fiellin DA, Reid MC, O’Connor PG. Outpatient management of patients with alcohol problems. Ann Intern Med. 2000; 133:815-27.

25. National Institute on Alcohol Abuse and Alcoholism. The physicians’ guide to helping patients with alcohol problems. Bethesda (MD): National Institutes of Health; 1995. (NIH Publication No. 95-3769.)

26. Carillo JE, Green AR, Betancourt JR. Cross-cultural primary care: a patient-based approach. Ann Intern Med. 1999; 130:829-34.

27. Johnson TM, Hardt EJ, Kleinman A. Cultural factors in the medical interview. In: Lipkin M, Putnam SM, Lazare A, editors. The medical interview: clinical care, education, and research. New York: Springer Press; 1995. p.153-162.

28. Putnam SM, Lipkin, Jr. M, Lazare A, Kaplan C, Drossman DA. Personality styles. In: Lipkin M, Putnam SM, Lazare A, editors. The medical interview: clinical care, education, and research. New York: Springer Press; 1995. p.251-274.

29. Steinhauer KE, Clipp EC, McNeillly M, Christakis NA, McIntyre LM, Tulsky JA. In search of a good death: observations of patients, families, and providers. Ann Intern Med. 2000; 132:825-32.

Correspondence

Regina Janicik, MD
New York University School of Medicine
Division of Primary Care
550 1st Ave, Old Bellevue D401
New York, NY 10016
Email: regina.janicik@nyumc.org