

## 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.<sup>1-8</sup> 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.<sup>9</sup> 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.<sup>10</sup> 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 chal-

lenged medical schools to augment the curriculum and improve evaluation of this set of skills.<sup>11-12</sup> The Clerkship Directors in Internal Medicine association identify competence in communication as a basic requirement.<sup>13</sup> 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.<sup>14</sup> Called The Macy Initiative in Health Communication, the project focuses on improving the curriculum for medical students during the critical clinical clerkship years.<sup>15</sup> 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.<sup>16</sup> 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.<sup>17</sup> 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.<sup>18</sup> 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<sup>19</sup> 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

**Table 1: Curriculum Goals and Objectives for Each Session**

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/Assist-Monitor model.	O'Connor PG, et al. "Patients with Alcohol Problems" <sup>23</sup> Fiellin DA, et al. "Outpatient Management of Patients with Alcohol Problems" <sup>24</sup> NIAA "The Physicians Guide to Helping Patients with Alcohol Problems" <sup>25</sup>
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" <sup>26</sup> Johnson, TM, et al. "Cultural Factors on the Medical Interview" <sup>27</sup>
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" <sup>28</sup>
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" <sup>29</sup>

**Table 2: Outline of a Typical Session**

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**Discussion of topic: 30 minutes**

Example: Session No. #1-Problem Alcohol Use

- ◆ Talk about student's experience with the issue (Do you ask patients about alcohol use? How do you approach this? Does anything get in your way of talking about the subject?)
- ◆ Outline key clinically relevant points (Define problem drinking, Stages of Change model of behavior change, screening questions, and brief intervention)
- ◆ Use role play to present common challenges and necessary skills for effective communication (Ask CAGE questions or employ good interview technique)

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**Set up bedside interview: 15 minutes**

- ◆ Choose a patient and a student to conduct the interview
- ◆ Have student present a brief patient history to group
- ◆ Ask student to define the goals of interview
- ◆ Decide what role other students and faculty member will play

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**Interview Patient: 15 minutes**

- ◆ Ask patient permission
- ◆ Set-up interview (interviewer to sit down, others to gather around)
- ◆ Introductions
- ◆ Interview (allow student to conduct majority of interview, other students and faculty member may ask additional questions at end)
- ◆ Invite the patient to offer feedback or advice to the students about communicating with patients.

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**Debrief: 30 minutes**

- ◆ Ask student who interviewed how it went (encourage specifics)
  - ◆ Invite other students to discuss what they observed (both from interviewer and patient)
  - ◆ Make any arrangements for follow-up (with patient or student)
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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 can not 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.

vanced stage ovarian cancer. She requested the students to join hands as she prayed that they would “have the strength and wisdom to listen to patients’ suffering and provide comfort.” The group was visibly moved.

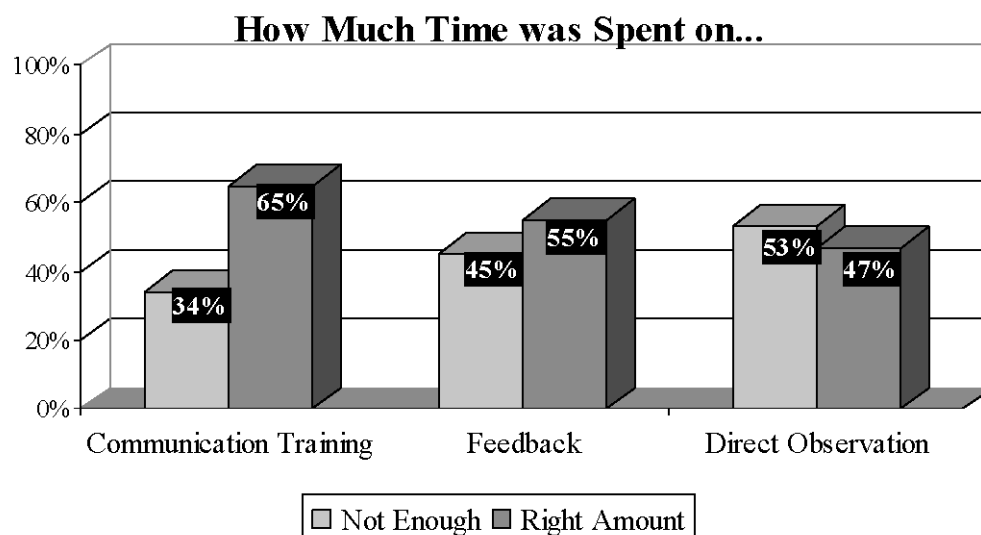
Medicine Clerkship that most students found rewarding. They reported that they valued the clear learning objectives, the chance to practice with feedback, the clinically integrated discussion afterwards and perceived that the program improved their knowledge and skills.

**Discussion**

We developed and introduced a clinically integrated communication skills curriculum into the core Internal

The curriculum also offered an opportunity to train a group of faculty in conducting bedside rounds focused on communication skills. Training focused on techniques

**Figure 1: Students’ perceptions of time and effort spent on communication activities (N=75)**



**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

shown to improve the ways students learn to communicate<sup>20,21</sup> and on effective bedside teaching.<sup>22</sup> 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.

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.

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### Correspondence

Regina Janicik, MD  
New York University School of Medicine  
Division of Primary Care  
550 1<sup>st</sup> Ave, Old Bellevue D401  
New York, NY 10016  
Email: [regina.janicik@nyumc.org](mailto:regina.janicik@nyumc.org)