Establishing a Program to Promote Professionalism and Effective Communication in Radiology

Effective health care delivery systems rely heavily on high degrees of skill in professionalism and communication. These skills are essential to all of the missions of a successful radiology department. Until recently, there was a lack of emphasis on the importance of these issues and a lack of efforts in setting expectations and measuring performance. Herein the authors describe the components of a program implemented to promote professionalism and effective communication in their radiology department.

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There has been a lot of recent focus among the medical community and the media on the concept of professionalism and effective communication among health care workers. Following the Institute of Medicine report noting widespread deficiencies in the quality and safety of care given at U.S. hospitals, multiple initiatives have begun (1,2). The Institute of Medicine committee on the quality of health care has identified six overreaching goals for improving the health care system (2). In these goals, it is stated that optimal health care should be safe, effective, patient-centered, timely, efficient, and equitable. Professionalism and effective communication are essential to achieving all of these goals, particularly that of providing patient-centered care.

In 2002, the Accreditation Council of Graduate Medical Education mandated changes in educational programs for graduate-level medical training to help improve the problems identified in the delivery of health care (3–6). In addition to instruction in cognitive knowledge, which traditionally is the focus of graduate medical education, educational programs are to include initiatives for teaching and evaluation of core competencies, including medical knowledge, patient care, interpersonal and communication skills, professionalism, practice-based learning and improvement, and systems-based learning (3–8). Parallel to this mandate in graduate medical education, a maintenance of certification process has been introduced by the American Board of Medical Specialties to respond to public concerns regarding accountability in health care, and a key component of this process involves demonstrating the listed core competencies, which will affect all certified radiologists (7,8). These mandates have directed further attention to issues of professionalism and effective communication, yet knowledge of how to implement change and assess communication and professionalism is still limited.

In this article, we describe the components of a program implemented to promote professionalism and effective communication in our radiology department. This program is a work in progress, and its components are by no means perfect or universally applicable to all departments. We hope that the description of the components of our program will serve as a template for other departments striving to build programs of their own. This program has been implemented in the pediatric radiology department of our large dedicated children’s hospital. We believe the concepts and components of this program may also be applicable to general radiology departments. We currently perform approximately 180,000 radiologic examinations per year. Our radiology department has 29 clinical faculty members, nine clinical fellows, and six research physicists, and all radiology subspecialties are represented.

Scope of Opportunity

A simple schematic (Fig 1) of what occurs in a radiology department shows that with each task, there are interactions between individuals and interfaces between systems in which there is the potential for a loss or miscommunication of information. In our experience, the majority of the problems that occur in radiology departments are not related to deficient technical skills; rather, they are most commonly related to poor communication. Such failure in communication is often viewed as unprofessional and can occur between multiple parties, including referring physicians and the radiology department, families and the radiology department faculty and staff members, and staff members within the department. These problems often occur despite high levels of clinical competence and motivation among the parties involved.

Although it seems elementary that effective communication skills are key to the successful implementation of any service, there is evidence that communication problems are a major issue of concern in the delivery of health care. Reports have shown that approximately 30% of cases of patient dissatisfaction are attributed to problems related to perceived disrespectful behavior or poor communication between patients and families and their associated health care professionals (9). Effective communication between patients and physicians has been shown to have positive effects on health care outcomes, medical costs, and patient satisfaction (10). In pediatrics, approximately one-third of individuals report that their child’s health care professionals communicate poorly (9,10). In addition, poor communication and unprofessional behavior have been shown to increase the chance of litigation in events of adverse outcomes (9).

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and effective communication are closely linked, and it is difficult to demonstrate the characteristics of one of these attributes without demonstrating the characteristics of the other.

Successful professional behavior and effective communication are founded on a complex set of behaviors with multiple characteristics. However, in our opinion, there are three general attributes that a health care provider must demonstrate to be perceived as professional by patients, referring physicians, and the general public: (a) clinical competence, (b) effective communication, and (c) ability to carry out an ethical decision process in which the patient’s best interest is prioritized (11). The health care provider must exhibit all three of these attributes to be perceived as professional. One can imagine scenarios in which a health care provider who demonstrates two of these attributes—but not the third—is perceived as a suboptimal care provider.

Customer service and satisfaction also are highly dependent on and related to these attributes of professionalism and communication.

In a discipline in which participants have for decades been referred to as health care “professionals” and in an area where the importance of effective communication is obvious, why are there currently such perceived problems of suboptimal professional behavior and suboptimal communication? The answer to this question is most likely multifactorial and complex. Before the 2002 Accreditation Council of Graduate Medical Education mandate for graduate medical education to include instruction in communication, interpersonal skills, and professionalism, these topics were not stressed in medical education. There has not been consistent and dedicated training in professionalism and communication skills.

There is also evidence that successful medical professionals often develop defensive behaviors (12). Because all health care professionals have had to succeed to become physicians, they have rarely experienced failure and thus professionals have a somewhat “brittle” and defensive response when their behavior or performance is criticized (12). Physician trainees often learn from and exhibit these nonoptimal behaviors. The traditional method of teaching professionalism and communication skills has been to have students learn by observing faculty member behavior. The effectiveness of this method is in question.

Creating a Program to Teach Professionalism and Effective Communication

The current program to promote professional behavior and effective communication in our pediatric radiology department is not the result of a systematic program in which all components were simultaneously implemented; rather, it is the result of multiple coordinated but somewhat independent initiatives. We have found a number of parameters to be essential to the successful implementation of the components of this program:

First, effective change begins with the leadership embracing the change and articulating the vision—that is, the resulting benefits of the change. Our department leadership has repeatedly stressed the importance of professionalism and effective communication in the delivery of health care by using multiple communication venues. When interviewing potential faculty members, the leadership discusses the expectations of patient-focused care and the value the department places on professional behavior. Second, we have found defining the behaviors that are expected and those that should be avoided to be very important. Also, because you get what you measure, we have found that it is important to create measures of professionalism and effective communication within our radiology department. Displaying these measures in a transparent way to all employees within our department has been an effective mechanism of communicating the importance of these initiatives. Finally, we have found patient family input to be very helpful in both designing the components of our program and obtaining feedback as to how we are performing. The paragraphs that follow describe the individ-

![Figure 1](image-url)

**Figure 1:** Diagram outlines basic functions of a radiology department, with emphasis on components of clinical care delivery. At all steps, effective communication and professionalism are essential.
ual components of our program for promoting professionalism and effective communication. We will stress the parameters listed above as they apply to the components of this program.

Program Components

Department Mission Statement
To emphasize the importance of and promote optimal professionalism and effective communication, our mission statement includes descriptions of the principles and culture that we believe are essential to achieving our goals. By defining these expectations, the mission statement allows all employees to focus on the goals that ultimately enhance patient care. Culture is defined as the shared values, beliefs, and resulting habits that define a group’s normal behaviors (13). Most of the values in our mission statement that describe the culture we wish to promote are directly related to improving communication and professionalism. These values specifically include effective communication and professionalism, as well as proactivity, positive attitude, teamwork, integrity and trust, and patient- and family-centered care. The mission statement is often discussed in departmental communication venues and is available to our faculty and staff members at our radiology Web site. In addition, our institution has defined service standards for employees. These standards are abbreviated in the acronym “CARES,” which stands for courteous, attentive, respectful, enthusiastic, and safe behavior. These service standards are posted in hallways and elevators throughout the institution and electronically on our institution’s Web site.

Professionalism in Radiology Booklet
To define our expectations as they pertain to the professionalism of our faculty members, trainees, and other employees, the radiology department leadership has created a booklet on professionalism in radiology (Fig 2). The goals of the booklet are to define the expected service standards, provide greater consistency in patient care by defining the professional behavior expected with patients and families, and outline the process and behaviors that complement the missions of our department. By defining the behaviors, we reduce the “hidden curriculum” of professional behavior by setting standards. The defined behaviors to model and avoid were established by using patient and family feedback. A physician service excellence team was established, and its members included parents of patients. Past and particularly recurrent complaints were evaluated and used to design the behaviors to avoid.

The booklet (Fig 2) was organized according to the service standards that we hope to achieve, including courteous, attentive, respectful, enthusiastic, and safe behavior. For each standard, multiple examples of behaviors to model and behaviors to avoid are identified. For example, under family-centered care, a behavior to model would involve the physicians introducing themselves to the patient and relaying their years of training and role(s) in the department. A behavior to avoid would be telling the family how busy you are and implying that you do not have time for a consultation with a parent. Other behaviors to avoid would include talking negatively about referring physicians, hospital systems, or hospital equipment. These booklets have been distributed to our faculty members, rotating residents, radiology fellows, and students. A similar booklet for radiology nurses and technologists that addresses specific issues and interfaces pertaining to their positions also is available.

A series of survey tools has been used to evaluate the performance of faculty members and trainees in terms of their professionalism both before and after the professionalism booklet became available. The surveys include questions such as the following: Did the doctor introduce himself or herself and explain his or her role to you and your child? Did the doctor explain your child’s test or procedure in a way you could understand? Did the doctor treat you and your child with courtesy and respect? Did the doctor adequately address all of your questions and concerns? There have been several interesting aspects of the resulting data: First, all physicians initially scored lower than they anticipated. There has been an improvement in their performance since the advent of the professionalism booklet (J. L. Strife, MD, unpublished data), however. Finally, and perhaps most interesting, in initial measurements of professionalism, radiology residents scored higher than radiology fellows, who scored higher than radiology faculty members. The low performance of the radiology faculty further emphasized the need for both a faculty development program and increased awareness of the professional behavior desired by patients and their families.

Patient and Family Satisfaction Surveys
The patients and families who visit our radiology department are asked to complete family experience surveys. Although these surveys address multiple aspects of our department, such as imaging examination access, flow, and cleanliness, they also include multiple questions regarding professionalism. Such questions are mainly directed at the interactions between patients and families and the radiology department employees with whom they commonly come in contact, such as technologists and front desk personnel. Such questions include the following: Did the person at the front desk treat you with respect? Did the radiology technologist introduce himself or herself to you and explain his or her role to you and your child? Did your child’s radiology technologist treat you and your child with respect and dignity? Did you have confidence and trust in the radiology technologist who worked with your child? The results of these surveys are evaluated quarterly and communicated to the radiology department personnel by means of a department scorecard.

Department Scorecard
Our department collects data on multiple parameters. Many of these parameters are listed on a radiology department scorecard. The parameters are
organized into the following categories: clinical services; education; research; professionalism, communication, and user satisfaction; finance and administration; and staffing. For each parameter, the measurement is defined, the goal is established, current measures are stated, the interval of data collection is defined, and the date the information was last updated is given (Fig 3).

The parameters used to measure professionalism, communication, and user satisfaction are displayed in Figure 3. For parameters in which the goal has been met, the current measure is highlighted in green, and for parameters in which the goal has not been met, the current measure is highlighted in red. Current parameters include the number of parent, physician, and co-worker complaints to the radiologist-in-chief regarding faculty behavior, professionalism, and/or communication. These parameters are recorded and tracked on a complaint tracking system. Any complaints from parents, physicians, or hospital co-workers are investigated. The investigations are led by our department education and compliance officer and the radiologist-in-chief. If the complaints are deemed legitimate and truly related to faculty behavior, professionalism, and/or communication, they are logged. The goal of the department is for each faculty member to have, on average, one complaint or no such complaints per year.

Another parameter is based on the pediatric radiology fellows’ evaluations.
of faculty performance. Biannually, the pediatric radiology fellows evaluate multiple aspects of the faculty’s performance, including the parameters related to professionalism and communication. Each faculty member is graded on a scale of 1–4 in areas such as effective communication skills, being a role model for professionalism, interaction with referring physicians, teamwork, and interaction with patients and families. A mean score for such parameters is calculated for each faculty member, with the aggregate goal being a mean faculty score of 3.7 of a possible 4.0. Having the fellows evaluate the faculty in these areas both emphasizes the importance of these qualities to the fellows and helps them consider who are the ideal role models.

Other posted parameters are related to aspects addressed in the family satisfaction survey process. These parameters include satisfaction with the wait to undergo imaging, the front desk personnel’s treatment of patients and families with dignity and respect, the technologist’s treatment of patients and families with dignity and respect, and the overall experience in radiology. Our current measurements of most of these parameters have been above the goal for the department. To grade the overall experience in radiology, we calculate the percentage of families that give the highest score (ie, 5) on a scale of 0–5. Although our current grade (65.9%) is below the set goal of 70.0%, it is the second highest grade for this parameter of any department or division within our institution. The radiology department scorecard is posted on our institutional intranet and available for review by all radiology employees.

**Radiology Conference Guidelines**

Guidelines for conduct during radiology and interdisciplinary conferences have been defined. In congruence with other efforts, our guidelines document defines both the behaviors that should be modeled and those that should be avoided. Professionalism is stressed. In the document, it is stated that it is not professional to comment negatively about other services whose representatives are not present during a conference. An example of a behavior to avoid is to state “I doubt whether the surgeons actually performed a physical examination.” Respect for other physicians and health care systems is stressed. The document also addresses communication issues such as introducing yourself when leading a conference, because there are often many new visitors to conferences. A template for presenting cases also is described, and issues related to the timeliness of the beginning and the end of conferences are emphasized. These guidelines are shared with the faculty, fellows, and rotating residents.

**Evaluating Faculty Communication Skills and the Quality of Radiology Reports**

Basic to a radiologist’s performance are the quality, accuracy, and timeliness of his or her radiology report (14–16). Several articles describing the usefulness of feedback from referring physicians as part of the global feedback on communication and professionalism have been published. Educational interventions can help radiologists improve their dictations in response to referring physicians. National initiatives, such as the Accreditation Council of Graduate Medical Education Guidelines on Communications Skills (17), have emphasized the ideal of accurate and timely reporting. Our department is currently developing a mechanism to evaluate the quality of reports by using a feedback approach.

**Annual Faculty Evaluation Process**

The faculty members of our radiology department undergo an annual performance evaluation. The format for this evaluation is broken down into six areas. For each of these six areas, the roles and contributions of the faculty

<table>
<thead>
<tr>
<th>Area</th>
<th>Measure</th>
<th>Goal</th>
<th>Current Measure</th>
<th>Interval</th>
<th>Last Updated</th>
</tr>
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<tbody>
<tr>
<td>Professionalism Communication User Satisfaction</td>
<td>1. # Parent/physician/colleague complaints to RIC concerning faculty behavior/professionalism/communication</td>
<td>&lt;1 per faculty per year (26)</td>
<td>5</td>
<td>Annual</td>
<td>July 2004</td>
</tr>
<tr>
<td></td>
<td>2. Fellow Evaluation of Faculty Performance</td>
<td>mean &gt; 3.7/4</td>
<td>3.72</td>
<td>Annual</td>
<td>July 2004</td>
</tr>
<tr>
<td></td>
<td>3. Satisfaction with wait for imaging study</td>
<td>75%</td>
<td>82.8%</td>
<td>Quarterly</td>
<td>July 2004</td>
</tr>
<tr>
<td></td>
<td>4. Front desk treated with dignity/respect – % completely</td>
<td>95%</td>
<td>99%</td>
<td>Quarterly</td>
<td>July 2004</td>
</tr>
<tr>
<td></td>
<td>5. Technologist treated with dignity/respect – % completely</td>
<td>95%</td>
<td>95.6%</td>
<td>Quarterly</td>
<td>July 2004</td>
</tr>
<tr>
<td></td>
<td>6. Experience in Radiology – % excellent</td>
<td>75%</td>
<td>68%</td>
<td>Quarterly</td>
<td>July 2004</td>
</tr>
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</table>
member are defined and the goals for next year are identified. These areas include clinical care, research, administration, education, professionalism and communication, and financial contributions. It is emphasized to faculty members that the area of professionalism and communication is equally important compared with the other areas of the evaluation. In addition, aggregate physician-specific data are culled and tabulated in a performance-based assessment of the clinical faculty scorecard (11). The physician-specific data used for performance-based assessment of the clinical faculty are used in the process of renewing hospital privileges at our institution. The accumulation of physician-specific data is mandated in the 2004 Joint Commission on Accreditation of Healthcare Organizations guidelines (11,18).

The scorecard for the performance-based assessment of a clinical faculty member consists of three categories: clinical judgment and technical skills, professionalism and communication, and education and clinical self-improvement. As on the radiology department scorecard, on the physician-specific scorecard, the definition, goal, current measure, interval, and date of last data collection are defined for each parameter. In the area of professionalism and communication, complaints concerning faculty behavior, professionalism, and communication are evaluated on a physician-specific basis. In addition, the faculty’s performance in professionalism and communication is evaluated by radiology fellows on a physician-specific basis. Therefore, in both evaluation processes, professionalism and effective communication are emphasized as important components of the department mission.

Radiology Updates

Our department currently has a mechanism of communication called radiology updates, in which the radiologist-in-chief meets with the radiology employees and faculty in an open forum to discuss changes within the institution and/or department that might affect our systems and work flow and to receive feedback on several issues. In these addresses, the vision of the department culture is stressed; the measurements of our performance, as demonstrated on the department scorecard, are reviewed; and our successes are celebrated. It is our opinion that this venue is very important in creating a culture of professionalism, effective communication, and patient- and family-centered care within our department.

Conclusion

Effective health care delivery systems rely heavily on high degrees of skill in professionalism and communication. These skills are essential to all of the missions of a successful radiology department. Until recently, there was a lack of emphasis on the importance of these issues and a lack of initiatives for setting expectations and measuring performance. The radiology departments that demonstrate excellence in the delivery of clinical care, research, and education will be those that actively embrace programs to enhance professionalism and communication, as opposed to those that view these programs as new regulatory obstacles (6). Although it is difficult to measure the subjective attributes that constitute excellent professionalism and communication skills and thus result in an outstanding radiologist, in our opinion, those departments that develop programs that stress the importance of these skills and create measures that motivate positive department behavior will be the most successful.

References