Abstract
Introduction: Transitioning from medical student to intern requires individuals to possess medical knowledge, clinical skills, and the ability to communicate with a wide variety of health care professional as well as patients and their families. New doctors may be expected to function within the health care team without having received explicit instruction in communication previously. The materials associated with this publication are intended to be used as resources for small-group education of graduating medical students entering into pediatric, family medicine, or emergency medicine residencies. Methods: Four pediatric cases serve as the focus points for discussion and role-play around calling consultants and discussing difficult news with families and patients. Brief didactics and detailed facilitator notes help prime learning and guide discussion. The included facilitator notes and slide sets are part of the comprehensive materials necessary to implement this 4-hour course at your own institution. Results: This curriculum has been used since 2012 with graduating medical students entering into pediatric, family medicine, and emergency medicine residencies at two institutions within the United States. Feedback has been overwhelmingly positive, and students have reported increased confidence in their ability to communicate with families and other health care providers. Discussion: This publication is the second part of a two-part curriculum but may be used independently of the first part. Although the cases are based on pediatrics, the content regarding communication is universal to many medical specialties.

Keywords
Role Playing, Pediatrics, Cases, Peer Feedback, Consultants, Difficult News

Educational Objectives
By the end of this session, learners will be able to:
1. Describe elements required for communication with families and other medical professionals.
2. Practice communication skills related to communicating with families and other health care professionals while receiving detailed feedback from peers and faculty.
3. Demonstrate self-reflection and the ability to participate in giving and receiving peer feedback.

Introduction
New interns are faced with many new challenges as they quickly transition from the student to the resident role. Physicians who care for children require strong communication skills as well as basic, practical pediatric knowledge. The Association of American Medical Colleges has specifically identified 13 Core Entrustable Professional Activities that all residents should be able to perform on Day One of their internship without direct supervision, regardless of their specialty. This effort came from concerns that many medical student graduates were not adequately prepared to enter into their new roles.

Brief courses targeting key clinical and communication skills have been demonstrated to increase confidence and knowledge for students transitioning into various residencies. Case-based discussions and role-playing can be used to expose participants to real scenarios and help them practice their skills while providing a safe environment without risk to actual patients.
Residents frequently utilize consultation while caring for their patients. Although there is some consensus on key elements required from a team requesting a consultation, consultants reported that they are frequently provided with insufficient information when being asked to help answer a specific question.\textsuperscript{6,7} Targeted trainings for students have been shown to increase appropriate content when asking for consultation.\textsuperscript{8}

Physicians are also frequently faced with discussing difficult news with patients and their families. Topics that may lead to emotional distress vary widely. Many health care workers recognize that potentially life-threatening diagnoses and the possibility of death are difficult topics to discuss. However, other topics, such as diagnostic uncertainty, unexpected outcomes, need for painful procedures, and concern for possible abuse, may also provoke strong responses in patients and caregivers, especially in pediatrics. Students may not have had much experience having difficult conversations prior to graduation but will be expected to step into this role as interns. Residents acknowledge that delivering difficult news is stressful.\textsuperscript{9} Oncology experts designed a six-step protocol to be used when discussing bad news with patients that has also been used to train residents in this skill.\textsuperscript{10,11} This tool can be used in a variety of situations that extend beyond the field of oncology.

This curriculum was designed to help graduating medical students entering into pediatrics, family medicine, and emergency medicine develop skills and language that will facilitate communication with consulting health care professionals, patients, and families. Our goal is to provide specific training using case-based discussions and role-playing in order to help ease the transition from student to resident. The curriculum presented in this publication may be used independently or may be presented in series with other skill training, simulations, or didactics as part of a larger boot camp–style course. For additional curricular materials concerning communication and clinical training around pediatric-related topics, see the first part of this series on MedEdPORTAL.\textsuperscript{12} This curriculum is unique in that it uses pediatric cases as a scaffolding for workshops on both obtaining consultation and discussing difficult news. There are no other pediatric boot camps published on MedEdPORTAL that focus on the medical student as the learner.

**Methods**

This curriculum was developed for a target audience of graduating medical students entering into pediatrics, medicine/pediatrics, and family medicine. However, it would also be appropriate for new interns. Content was identified using feedback from recent medical school graduates and the medical literature.\textsuperscript{13} Curricular design was developed using input from local education experts. The curriculum consists of two individual modules focused on communication skills with both medical professionals and patients/families. The two modules use the same four longitudinal cases for discussion and role-play. The materials provided should be used over the course of 1 day. The same four cases are used for both modules (Appendix A). The Discussing Difficult News module (Appendix D) builds off the cases and concepts presented in the preceding Obtaining a Consult module (Appendix C). Facilitators and learners should be reminded that the primary focus of the course is the practice of communication skills, not the medical content. Specific examples of learner responses are provided in the facilitator notes (Appendix B) as a general guide, but alternate responses may be appropriate as well. Debriefing guides are also included to help facilitators lead discussion and reflection.

**Implementation**

An adequate number of facilitators should be recruited to ensure a small-group size of ideally four students per group. An appropriate location with space for small-group role-play must be secured.

The Obtaining a Consult module takes approximately 2 hours to complete and requires a presenter and small-group facilitator. Materials required include pens, markers, paper, and an easel. Students are given four histories and physicals for patients being seen in the emergency department or urgent care or being admitted to the pediatric service (Appendix A). The instructor provides a brief lecture about how to request a consult (Appendix C). Students then read through Case 1. One student role-plays calling
consultants for the patient using the Obtaining a Consult pages from the facilitator notes (Appendix B) as a guide. The consultant page should be given to the person who is role-playing the consultant. The group discusses each interaction and provides feedback. Repeat for each of the four cases with a new learner taking on the role of the person calling the consultant each time. Debrief as a large group, sharing lessons learned on a large whiteboard or easel.

The Discussing Difficult News module also takes approximately 2 hours to complete and requires a presenter and small-group facilitator. Materials required include computers and a projector. The instructor starts by providing a brief lecture about discussing difficult news (Appendix D). Each student role-plays delivering difficult news using the Discussing Difficult News pages (Appendix B) as guides for both the student role-playing the physician and the student acting as the parent. The physician page should be given to the student discussing difficult news. The parent page should be given to the person role-playing the parent. The group discusses each conversation and provides feedback. Debrief as a large group, sharing lessons learned on a large whiteboard or easel.

Some groups or individuals may need more guidance in providing feedback. All participants should be encouraged to speak up during the small-group sessions in order to provide their insight and ask any questions. Keeping small groups intact throughout all sessions allows groups to build a cohesive context for the cases and encourages learners to maintain primary responsibility for one patient throughout the course.

If possible, recruit presenters and small-group facilitators who have expertise or interest in the topics covered. Send small-group facilitators the materials and objectives at least 2 weeks prior to the course so that they may become familiar with the cases, content, and goals of the sessions in advance. This curriculum may be combined with other boot camp–style modules or training sessions.

Results

This curriculum has been used at two institutions over the past 5 years with groups of fourth-year medical students entering into pediatric, medicine/pediatric, family medicine, and emergency medicine residencies. We have maintained facilitator-to-student ratios of one to three or four, with a total enrollment ranging from six to 16 students per year. Facilitators consistently report improvement in participants’ communication skills, as well as in their ability to give feedback and self-reflect during the sessions. Using pre- and postsurveys, participants have reported statistically significant increases in confidence in their abilities to (a) inquire about the code status of a pediatric patient, (b) deliver news to the family of a patient (such as the new diagnosis of a malignancy), and (c) have a conversation about concern for possible child abuse.14 Using paired t tests to analyze retrospective pre-post surveys (Likert scale: 1 = strongly disagree, 3 = neutral, 5 = strongly agree) from the most recent group of learners (N = 7) demonstrated an improvement in self-reported confidence in ability to ask for a consultation (preintervention mean 2.6 vs. postintervention mean 4.6, p < .01) and identify important pieces of information to provide a consultant (preintervention mean 2.6 vs. postintervention mean 4.7, p < .01.)

Discussion

Our boot camp curriculum is unique in that the primary focus is communication with families and other health care workers, rather than technical skills such as procedures. Regardless of specialty, physicians must communicate effectively with patients, families, and other medical professionals to ensure quality of care. The modules presented within this curriculum may be used as a stand-alone workshop or in conjunction with other components of a pediatric boot camp curriculum (such as the first part of this series15).

A potential limitation to the implementation of this course is that it requires multiple faculty members, which may not be feasible at all sites. Although the medical knowledge is not the primary focus of this curriculum, facilitators should ideally be familiar with the content of the cases in addition to the
educational goals. We have found that students aim to better understand the underlying medicine and clinical care presented in the cases. Facilitators should therefore also be familiar with the basic medical knowledge, current guidelines, and best practices related to the cases.

Evaluation of this curriculum's long-term outcomes is challenging. Participants often complete their internships at other institutions, making it very difficult to assess whether engaging in this curriculum results in quantifiable differences in intern performance or patient outcomes. However, follow-up with past participants during their internships has revealed that they continue to value the experience.

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