strategies are reliable enough for residents to accept and use their results, and whether residents have the knowledge/skills to apply these reports for personal practice improvement.

Next steps in the implementation of resident OPPE reports will be to define learning objectives that address the knowledge, skills, and attitudes needed to understand and use personal performance data, and build curricula to address these objectives. On a national scale, practicing physicians are asked to reflect on and improve their performance based on similar feedback from employers and payers. We believe that having regular and structured access to personal performance data during training is a vital first step to succeeding in this environment.

Because milestones differ across residency programs, curricula and learning objectives will likely vary somewhat by program. Our continued partnership with performance improvement will allow modification of OPPE reports to meet program needs.

This intervention demonstrates the importance of creating infrastructure for quality improvement and patient safety education across training programs. Partnership with institutional stakeholders can lead to shared resources, collaborative curriculum design, and improved alignment between educators and administrators.

Rebecca Jaffe, MD
Clinical Assistant Professor, Department of Medicine, Assistant Patient Safety Officer, Thomas Jefferson University

Gretchen Diemer, MD
Associate Professor, Department of Medicine, Associate Dean for GME and Affiliates, Thomas Jefferson University

John Caruso, MD
Associate Professor, Department of Medicine, and Senior Associate Dean for GME and Affiliates, Thomas Jefferson University

Matthew Metzinger, MBA
Senior Performance Improvement Analyst, Thomas Jefferson University Hospital

Corresponding author: Rebecca Jaffe, MD, Thomas Jefferson University Hospitals, 925 Chestnut Street, Suite 312, Philadelphia, PA 19107, 617.448.3814, rebecca.jaffe@jefferson.edu

A Simulation-Based Resident as Surgical Teacher (RAST) Program

Setting and Problem

The Accreditation Council for Graduate Medical Education (ACGME) considers resident teaching skills to be a core competency. Specifically, in laparoscopy, level 4 milestone attainment is defined as "effectively supervises and educates lower-level residents regarding endoscopy."[1] While many obstetrics and gynecology (ob-gyn) residencies have a "resident as teacher" curriculum, few incorporate formal instruction around surgical teaching or provide standardized assessment. Given decreased resident work hours, the multiple demands of an ob-gyn residency, and the need for residency programs to document the milestone levels for each of their residents, the charge is to develop time-efficient, objective, and reproducible programs to teach and evaluate teaching skills.

Simulation is a time-efficient way to learn and assess laparoscopic surgical skills and has been used to evaluate both resident technical skills through the objective structured assessment of technical skills (OSATS) and general medical teaching skills using a validated tool, an objective structured teaching examination (OSTE). However, there is little information on the use of simulation to master surgical teaching skills or in the use of an OSTE specifically to evaluate resident teaching of ob-gyn procedures.

Intervention

We developed a simulation-based "resident as surgical teacher" (RAST) program to improve and evaluate ob-gyn resident teaching skills in laparoscopic surgery. A modified OSTE was devised to evaluate senior resident teaching skills on a 5-point Likert scale, and an OSATS was devised to evaluate junior resident laparoscopic skills. Resident teacher-learner dyads performed a simulated laparoscopic salpingectomy using a commercially available gynecologic model placed in a Fundamentals of Laparoscopic Surgery (FLS) Trainer

DOI: http://dx.doi.org/10.4300/JGME-D-16-00790.1

TABLE
Difference in Faculty and Junior Resident Rated OSTE Scores of Senior Residents, Predidactic and Postdidactic Teaching Session Using BID Method

OSTE Checklist[a]	Faculty			Junior Residents		
	Pre[b]	Post[b]	*P* Value[c]	Pre[b]	Post[b]	*P* Value[c]
Brief Prior to Exercise:						
1. Teacher stated goals	3.25	4.50	.028	4.12	4.75	.049
2. Teacher explored relevance	2.00	3.25	.019	4.12	4.12	> .99
Intraoperative Teaching During Exercise:						
3. Teacher presented an overview	3.62	4.25	.37	4.75	4.88	.35
4. Teacher broke into stepwise parts	3.62	4.75	.026	4.71	5.00	.36
5. Teacher provided encouragement	4.50	5.00	.10	4.75	4.88	.69
Debrief After Exercise:						
6. Teacher asked for self-assessment	1.43	4.86	< .001	2.75	4.88	.010
7. Teacher gave reinforcing feedback	3.38	4.88	.014	4.75	5.00	.35
8. Teacher gave corrective feedback	3.12	4.88	.009	4.75	5.00	.17
9. Teacher elicited take-home points	2.38	3.88	.014	3.50	5.00	.020
10. Teacher effectively supervised	4.00	4.75	.048	5.00	5.00	> .99
Overall teaching score	3.12	4.35	.006	4.38	4.81	.004

Abbreviations: OSTE, objective structured teaching examination; BID, briefing, intraoperative teaching, debriefing.
[a] Questions for assessment tool of resident surgical teaching.
[b] Prescores and postscores represent mean scores of the 8 junior/senior resident pairs on Likert scale.
[c] *P* value based on paired *t* test.

Box. Each resident pair was evaluated by a faculty observer who rated the senior resident using the OSTE checklist and the junior resident on the OSATS checklist. Each member of the resident pair evaluated the other on the appropriate assessment tool. After a didactic session on the briefing, intraoperative teaching, debriefing (BID) surgical teaching model, the pairs were reevaluated by the faculty and each other. Residents were surveyed pre- and post-RAST workshop on their attitudes around surgical teaching.

Outcomes to Date

Most residents initially felt *comfortable* or *neutral* in their ability to teach surgery and felt *neutral* that they had received instruction on surgical teaching during residency. Postworkshop, residents showed increased confidence in teaching and acknowledged they had received instruction on teaching surgery. Faculty observers noted a 1.3-point increase in the OSTE scores of the senior residents between preworkshop and postworkshop evaluations ($P = .006$). Junior residents noted a 0.43-point increase in teaching scores ($P = .004$; TABLE). Faculty noted a 0.73-point increase in OSATS scores of the junior residents ($P = .004$), compared with a 0.35-point increase noted by senior residents ($P = .10$).

This laparoscopic salpingectomy, simulation-based RAST program provides a time-efficient, reproducible means for residents to learn and practice surgical teaching. This model could be applied to multiple different simulated surgical procedures and provides residents an opportunity for direct faculty feedback on their teaching skills. Residents felt it supplemented previous teaching. Faculty observers noted significant improvement in OSTE scores of senior residents. The smaller improvement noted by the junior residents was largely because they already ranked their senior residents highly on the initial simulation, which supports the high value of resident-to-resident surgical teaching. The greatest improvement in surgical teaching scores occurred in the debriefing section of the OSTE around eliciting self-assessment and development of learning objectives, which underlines the importance of these steps when providing instruction on how to teach surgery. The OSTE checklist for evaluation of surgical teaching is a simple tool that could also be used to evaluate both resident and faculty in vivo intraoperative teaching.

Carey York-Best, MD
Division Director, Obstetrics and Benign Gynecology, and Associate Director, Principal Clinical Experience, Massachusetts General Hospital
Assistant Professor, Harvard Medical School

Joan Bengtson, MD
Associate Residency Director, Brigham and Women's Hospital

Amy Stagg, MD
Associate Residency Director, Vincent Department of

Obstetrics and Gynecology, Massachusetts General Hospital

Corresponding author: Carey York-Best, MD, Massachusetts General Hospital, Department of Obstetrics-Gynecology, 55 Fruit Street, Boston, MA 02114, 617.643.4928, fax 617.726.4267, cyorkbest@partners.org

References

1. Accreditation Council for Graduate Medical Education; American Board of Obstetrics and Gynecology; American College of Obstetrics and Gynecology. The Obstetrics and Gynecology Milestone Project. September 2015. https://www.acgme.org/Portals/0/PDFs/Milestones/ObstetricsandGynecologyMilestones.pdf. Accessed March 2, 2017.

NEW IDEAS

An Interprofessional Multimodal Patient Experience–Focused Curriculum

Setting and Problem

Patient-centered care focuses on the individual patient's needs and concerns, rather than on those of the physician. This shift in approaching patient care has challenged residency programs to create training experiences in which residents are asked to consider social, economic, and organizational challenges that their patients regularly face. Collaborative care is an essential element for delivering high-quality, patient-centered care. Adapting residency curricula to provide interprofessional training related to the *patient experience* remains an area in which best practices are not known.

Intervention

We created a 2-week patient experience rotation for our 12 categorical second-year pediatrics residents that utilized experiential learning, simulation, and didactics focused on patient-centered care. The primary learning objectives were to (1) observe interprofessional collaboration across hospital units; (2) provide communication skills training; and (3) understand patient and family perspectives. A sample schedule is provided (TABLE).

Experiential learning was accomplished by pairing residents with nurses in the inpatient or outpatient setting. Residents also were assigned to a specialty clinic as their core clinical environment and asked to reflect on interprofessional relationships and individual patient experiences. During a night shift, each resident completed a 360-degree patient shadowing experience based on the Institute for Healthcare Improvement framework for observing patient care. Residents were required to follow a patient through every step of his or her admission, from the emergency department to the inpatient unit. Residents were then asked to answer satisfaction of care questions by completing the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey as if they were the patient.

Themed patient-centered didactics took place during the standard noon conference time frame. Topics included (1) pain management; (2) the Language of Caring, a nationally recognized communication skills program; (3) a palliative care patient panel; (4) a patient disabilities simulation; and (5) child life. In addition to interactions with our pain team, palliative care team, patients, and child life experts, residents role played disability scenarios to experience first-hand their potential challenges. The rotation culminated in a 1-hour small group structured debrief with 2 core faculty facilitators.

Outcome to Date

This 2-week interprofessional experience influenced trainees' attitudes about the patient experience. This rotation was feasible by scheduling second-year residents on a 2-week flexible elective to allow for patient experience educational activities. In post-rotation feedback, more than 90% of residents reported that the patient experience rotation was a positive addition to their educational curriculum.

Resident perceptions of a physician's impact in care decreased as a result of the experience. One resident commented:

> "Physicians are only 1 part of an interprofessional team . . . nurses are an integral part of the team and we need to communicate better with them regarding plan of care and ensure they are part of the overall plan discussion."

Residents gained a better understanding of the importance of communication during the admission process. One resident reported:

> ". . . Communication of admission process expectations to family are at times lost . . . There

DOI: http://dx.doi.org/10.4300/JGME-D-16-00732.1