

# Returning Inactive Obstetrics and Gynecology Physicians to Clinical Practice: The Drexel Experience

NIELUFAR VARJAVAND, MD; NIGEL PEREIRA, MD; DIPAK DELVADIA, DO

**Introduction:** Physicians returning to clinical practice after inactivity may face many challenges. Few programs provide reeducation, and data are limited about these experiences. We describe the physician refresher/reentry program at Drexel University College of Medicine, Philadelphia, and the lessons learned in our efforts to facilitate obstetrician-gynecologists' clinical reentry.

**Methods:** In 2006, Drexel relaunched the Medical College of Pennsylvania's physician reentry course. This structured yet individualized program provides reeducation and assessment for physicians who have left clinical medicine for any reason and are hoping to return. We report the results achieved for 9 obstetrician-gynecologists who successfully completed Drexel's course between November 2006 and November 2012.

**Results:** The 6 men and 3 women had left their practices for different reasons. Seven were reentry candidates, and 2 were remediating; none had left practice for medical negligence. Of the reentering physicians, 5 achieved their goal within 1 month. Of the remediating physicians, 1 achieved his/her goal.

**Discussion:** Through continual self-assessment and participant feedback, we have learned to expand our staff and faculty career advisory roles and seek specialty-specific assessment. Despite our small sample size, Drexel's experience may provide guidance to the growing field of obstetrician/gynecologist reentry in the United States.

**Key Words:** career transitions, physician assessment/remediation, physician reentry, problem/dyscompetent physicians, physician reeducation, physician refresher

## Introduction

Clinically inactive physicians' return to practice is challenging for both the reentering physician and for reeducation programs in obstetrics and gynecology.<sup>1,2</sup> In 2012, the American Congress of Obstetricians and Gynecologists<sup>3</sup> deemed reentry the "issue of the year." Physicians leave practice for many

reasons, including illness, family care obligations, military service, financial reasons, or license suspension/revocation.<sup>4</sup> Upon seeking return, physicians face numerous burdens: meeting licensing, medical, and credentialing requirements; finding appropriate educational programs to become up-to-date in current practice; paying for the program; and overcoming personal obstacles.<sup>2,5</sup> Similarly, educational programs face financial costs of development and maintenance of refresher programs, clinical site recruitment, faculty time and investment, and staff resources for emotional counseling and career guidance.<sup>2</sup> Despite these challenges, several programs are committed to reeducating and helping clinically inactive physicians refresh their skills for workforce reentry,<sup>2</sup> tasks that have assumed even greater importance given the looming shortage of physicians.

Three papers have described US reentry programs for obstetricians and gynecologists, with samples of 2, 3, and 6 physicians in Los Angeles,<sup>6</sup> Oregon,<sup>7</sup> and Arizona,<sup>8</sup> respectively. To add to this limited experience, we report on a refresher program at Drexel University College of Medicine in Philadelphia that facilitates obstetrician-gynecologists' return to clinical practice. We describe our program, our trainees' demographics and outcomes, the lessons we have learned, and how the program has evolved over time. We

Disclosures: The authors report that Dr. Delvadia has an agreement with Merck to do Implanon/Nexplanon training for physicians, which Dr. Delvadia believes is not in any direct conflict with this article. Neither of the other authors has any conflicts of interest to disclose.

*Dr. Varjavand:* Department of Internal Medicine, Drexel University College of Medicine; *Dr. Pereira:* Clinical Fellow, The Ronald O. Perelman and Claudia Cohen Center for Reproductive Medicine, Weill Cornell Medical College; *Dr. Delvadia:* Assistant Professor of OB-GYN, Department of Obstetrics and Gynecology, Drexel University College of Medicine.

*Correspondence:* Nielufar Varjavand, Drexel University College of Medicine, 2900 Queen Lane, Medical Education Room 221, Philadelphia, PA 19129; e-mail: Nielufar.Varjavand@drexelmed.edu.

© 2015 The Alliance for Continuing Education in the Health Professions, the Society for Academic Continuing Medical Education, and the Council on Continuing Medical Education, Association for Hospital Medical Education • Published online in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/chp.21264

also suggest future directions for similar physician refresher programs.

### How We Facilitate Physician Reentry

In 1968, the Medical College of Pennsylvania (as Drexel was once known) initiated a refresher program for nonpracticing physicians returning to clinical practice.<sup>9,10</sup> Though successful, with more than 400 trainees, the program ceased in 1993 when the hospital closed. In 2006, this program was reinstated, enhanced, and renamed the Drexel Medicine Physician Refresher/Reentry Program. Drexel's continuing medical education office provides administrative support and help with housing, financial resources, and support and follow-up on program completion. The program director oversees the refresher/reentry program, while each department has a dedicated preceptor who provides one-on-one education and mentoring. Important components of the returning physician's education include self-paced review of current medical knowledge, on-site assessment of knowledge and skills, clinical preceptorship (structured yet individualized), and directions for lifelong learning.

To individualize the participant's curriculum and its duration, Drexel uses the physician's self-assessment information, experiences, future practice needs, suggestions from the referring groups (boards of medicine, hospital credentialing authorities, or employers), and independent assessment tools. Upon initial contact, the physician and program director discuss the physician's career background, reasons for leaving and returning to medicine, whether any organization has required a refresher course, anticipated future practice scope, and specific goals for the refresher course. If both parties determine that Drexel's program is a right match, a preceptor from Department of Obstetrics and Gynecology then reviews the application and has a phone conversation with the physician trainee. Drexel's refresher committee, consisting of associate deans of education, also does a review. If the decision is to proceed, physicians enroll in 6-week blocks for 6 or 12 weeks, depending on goals and recommendations; each block costs \$7500. Because they are not practicing, physicians do not need personal malpractice insurance.

Next, the program director, preceptor, physician trainee, and program coordinator together develop an individualized curriculum. This process is informed by an initial needs assessment that includes several performance assessments including National Board of Medical Examiners (NBME) multiple-choice examinations, multiple standardized-patient evaluations, and oral discussions of clinical scenarios and their documentation. The preceptor and physician together review evaluation forms, which provide information on strengths and weaknesses. These forms, also used for assessing students and residents' performance, use Likert scales. The preceptor and physician trainee together observe the

physician's recorded interactions in standardized patient scenarios to provide formative and summative evaluations using a standardized communication skill and medical content checklist. The checklists, standardized and used for students' and residents' evaluations, employ a 100-point scale, with 70 as passing. The physician also completes a clinical interest survey to determine what specific clinics the physician wants to attend. If indicated, the program director communicates with any referring group and reviews supporting documents to further identify goals for the physician's individualized reeducation.

We use all of these sources as a needs assessment to develop an individualized program of study for the trainee. Components of the program typically include:

- *Web-based modules.* The participant completes assigned modules based on his/her individual curricular regimen. Resources used include doc.com, DxR, and MedU, which can be used to enhance trainees' communication skills, clinical reasoning, and medical knowledge. DocCom (<http://webcampus.drexelmed.edu/doccom/user/>), for example, uses annotated videos to enhance learners' ability to deal effectively with complex communication challenges. DxR (<http://urse.dxrclinician.com/dxrElem/tutorialLink.html>) and MedU (<http://www.med-u.org/>) provide virtual patient cases to improve skills in evaluation, diagnosis, and management, as well as providing participants with assessment and feedback. While all modules are based on specific clinical scenarios, the evaluation approach used varies. Some include multiple choice or short-answer exam questions. Documentation of diagnoses, hypotheses, and tests may also be used to evaluate the trainee. Each module provides the participant with feedback on their performance, providing the correct answers with explanations to facilitate increased learning.
- *Practice in medical documentation.* To reinforce up-to-date medical documentation skills, trainees practice using the university's electronic health records, write medical notes, and keep case logs, which they review weekly with their preceptor.
- *Preceptorship.* During the preceptorship, trainees participate in both inpatient and outpatient settings, as well as core conferences, each individually assigned to meet the trainee's needs. Trainees learn with the entire Drexel obstetrics and gynecology faculty, including midwives and residents, and work closely with faculty with whom their clinical interests match. Each physician also regularly meets one-on-one with a designated obstetrics mentor in the clinical office, operating department, and skills laboratory for further individualized learning. These meetings include oral presentation and discussion of clinical scenarios/patient cases and evaluation of daily performance. Throughout the course, the mentor reviews, teaches, and provides formative assessment on basic and surgical obstetrics and gynecology skills using models (vaginal operative delivery, shoulder dystocia maneuvers, breech delivery, repair of perineal laceration, basic laparoscopic skills on a trainer, basic hysteroscopy skills and setup, postpartum hemorrhage drill, use of the B-Lynch procedure, and others) as appropriate (see APPENDIX).

- **Simulations.** We have added multidisciplinary simulations to our teaching and assessment curricula, where obstetrics and gynecology trainees participate in simulated scenarios alongside nurses, anesthesiologists, and other health care providers. To contain costs for trainees, instead of high-fidelity simulations, we use the same low-fidelity simulations that we use to teach our obstetrics and gynecology residents (eg, a bony pelvis with a mannequin baby to show normal and operative deliveries). Our department uses a “homemade” B-Lynch model (made from pantyhose stuffed with old pillow filling) to simulate postpartum hemorrhage management. With a laparoscopic “box trainer,” we demonstrate and practice surgical skills. We have created other simulation models, such as the “beef tongue episiotomy model,” as needed. A trainee will participate in prompt drills on the labor and delivery floor if they occur during his/her rotation.
- **Computer searches and critical appraisal training.** Returning physicians often identify computer skills and evidence-based literature searches as areas of deficiency; thus, Drexel’s program offers information technology skills sessions and faculty-guided, evidence-based medicine teaching to strengthen computer and scholarly skills.
- **Advocacy and support.** Drexel’s obstetrics and gynecology department and refresher staff/faculty together make a significant investment in each physician-trainee. Most returning physicians confront numerous barriers (career, personal, emotional, and financial) when seeking to return to practice. We provide hours of career and emotional support before, during, and after our program. We advocate on trainees’ behalf by writing letters, providing networking and employment introductions, brainstorming regarding future options, and speaking to committees/employers.
- **Performance evaluation.** To ensure that trainees are achieving their individual learning goals, we regularly seek the trainee’s verbal and written feedback, review gaps immediately, and adjust schedules as needed. Similarly, faculty provide summative and formative assessment and feedback regularly on the trainees’ history taking, communication skills, professionalism, clinical reasoning, knowledge, and skills. During the preceptorship, trainees maintain a portfolio of their learning and assessments. Upon course completion, they receive a certificate and a detailed letter listing their accomplishments, assessments, and faculty feedback.

### Our Experience Working With Trainees

In this section, we describe our experience working with trainees over a 6-year period. The data reported here and the methods used to collect and report them were reviewed by the Drexel institutional review board, which declared this project exempt.

Nine returning physicians completed the Drexel obstetrics and gynecology physician refresher/reentry preceptorship between November 2006 and November 2012 (TABLE 1). These 6 men and 3 women ranged in age from 31 to 66 years and had been away from clinical medicine for a mean of 5 years (range .5–12 years). Their reasons for leaving and now

TABLE 1. Main Reasons Physicians Originally Left Clinical Medicine ( $n = 9$ ) (Drexel University College of Medicine Physician Refresher/Reentry Course)

Financial	3
Medical disability	2
Licensure	2
Relocation	1
N/A (completed only 1 year of residency)	1

returning to clinical medicine varied (TABLE 1). Three left their obstetrics practice for financial reasons. All 3 missed their work as obstetricians and were seeking hospital obstetrics privileges after a sole gynecology practice (2) and a stint in administration (1). Another physician had retired for medical reasons (foot surgery) and needed license reinstatement. Another was an American physician who was clinically active in a volunteer medical practice internationally but needed US experience in order to practice in the United States again. Two had suspended licenses, 1 owing to substance use and another for professionalism/boundary violations. Another physician was seeking a license owing to relocation. Another had halted residency (to switch from obstetrics and gynecology to a primary care residency) and now wished to switch back. This candidate was seeking a refresher before applying for a postgraduate year 2 obstetrics position.

According to the American Medical Association definitions for “returning physicians,”<sup>a</sup> 7 physicians among our cohort were “reentry” candidates and 2 were “remediating”; none had left practice for medical negligence. Participants had been referred to a refresher/reentry program from various sources: state medical boards, hospital credentialing committees, locum tenens agency, university residency program, or self-referral.

After completion of the course, we requested follow-up with trainees to determine whether they had accomplished their main goal. More than half ( $n = 6$ , 67%) stated they achieved their main goal (TABLE 2); 3 (34%) did not. Of the reentering physicians, 71% (5 of 7) said they achieved their goal within 1 month of course completion. Of the remediating physicians, 1 (50%) achieved his/her goal. One did not obtain a postgraduate year 2 residency spot that year and switched careers; another did not immediately apply for

<sup>a</sup> According to the AMA,<sup>11</sup> *career reentry* is returning after an extended time away to a professional activity for which one has been trained or certified. Return may also entail *retraining*—moving into a new clinical area or augmenting prior professional skills. For some, returning may require *remedial* education, also known as focused education or personalized physician enhancement. Physician *remediation* is “the process whereby deficiencies in physician performance identified through an assessment system are corrected.”

TABLE 2. Main Goals and Outcomes for Trainees Who Completed the Drexel University College of Medicine Physician Refresher/Reentry Course ( $n = 9$ )

Goal	<i>n</i>	Outcome	<i>n</i>
Medical license	3	Medical license reinstated	2
Refresh and return to clinical practice	3	Refreshed and practicing	2
Obtain obstetrics hospital privileges	2	Hospital privileges gained	2
Residency	1	Residency	0
		<i>Goals still pending</i>	3
		<i>Goals achieved</i>	6

licensure and was lost to follow-up (this candidate did not return our e-mails/messages and we could not find evidence of license reinstatement online). Another did not obtain desired employment within 6 months and stopped searching.

## Discussion

Returning physicians bring their unique backgrounds, skills and knowledge, future career needs, reasons for leaving medicine, and reasons for returning. Refresher programs must provide flexible reeducation for these varying needs. We often see physicians, who may be perfectionists by nature and training, who have lost their self-confidence because of inactivity. This can translate into less-than-perfect interviews and job attainment, which then worsens the candidate's finances. Meanwhile, as length of clinical inactivity continues, return to work becomes increasingly difficult. The initial trigger for inactivity (family care, costly overhead, medical disability, misjudgment) becomes largely irrelevant; the result and burdens of returning to medicine are the same.

Although 6 years of experience in a northeastern university hospital with 9 graduates of differing backgrounds and durations of inactivity does not represent all returning physicians' needs or all reentry programs across the United States, Drexel's approach and our practical experience, viewed alongside work done by other programs,<sup>2,6-8,12-14</sup> can provide an initial guide for the growing field of obstetrics-gynecology physician reentry in the United States.

We believe that to ensure quality, reeducation is best rendered by clinician-educators—faculty who are not only up to date clinically but are also at the forefront of education.<sup>2</sup> Academic clinician-educators train those seeking undergraduate and graduate medical education. We believe the same must hold true for the reeducation of returning physicians.

We also believe that reeducation is best among a community of learners. Because Drexel provides undergraduate and graduate medical education, physician reentry trainees

learn alongside students, residents, and fellows. We are cognizant of the challenge of not diluting other learners' education. Anecdotally, we have found that rather than impeding other learners' progress, refresher trainees bring with them "real-world" experience that benefits junior learners. While reentry candidates learn, they also teach others. In addition to informal teaching on rounds/clinics, we ask that trainees provide a departmental grand rounds presentation highlighting their past expertise and 1 formal didactic session. Currently, we are surveying faculty, administration, and all learners in the obstetrics and gynecology department to elucidate the impact of returning physicians' training on our department.

We believe in the importance of continuous evolution and improvement. Our committee meets monthly to reevaluate and discuss potential improvements for our course. We seek trainees' thoughts for improvement informally and formally. We have expanded use of simulations. We will soon begin asking trainees to maintain a case log to ensure a broad range of experiences for trainees' specific needs. We are organizing a formal alumni association for continued support after graduation.

We have expanded our staff and faculty career advisory roles because we have learned that not only do trainees need direction before embarking on a reeducation program, they also return for advice, networking, and recommendations long after graduation. Commonly, the returning physician does not know how to navigate the myriad requirements and contacts needed to return to practice. Prior to the course, we help trainees understand choices available to them and obstacles they face. After hours of career and personal counseling, some opt not to pursue reentry. During the course, we work closely with trainees providing encouragement and guidance. Upon completion of the course, most trainees remain in close contact with us, for continued encouragement, mentoring, and career guidance.

Based on feedback from trainees seeking specialty-driven assessment, we changed our multiple-choice assessment from the broadly comprehensive NBME Comprehensive Clinical Medicine Self-Assessment (CCMSA) Step 3 to specialty- and topic-focused examinations given by the Federation of State Medical Boards/NBME's Post Licensure Assessment System (PLAS) focusing on obstetric and gynecologic examinations only. We use this examination to assess physicians' medical knowledge at the beginning of the preceptorship to guide their education and at the end to assess learning. We initially chose the CCMSA, which evaluates general knowledge, for its significantly lower cost. PLAS provides specialty- and topic-specific examinations, best for assessing individual needs. Furthermore, for returning physicians, other assessment centers use PLAS; we want to establish consistency. In addition to NBME's guidance and expertise, our faculty reviewed each examination to ensure appropriateness for Drexel's reeducation program.

A common belief may be that physicians leave medicine due to a legal or ethical problem. However, at least in our limited experience and sample of 9, only 2 (22%) were remediating; neither was due to negligence. Though participants had left for a variety of reasons, the most common was the financial burden of obstetrics practice. What was driving them back, despite numerous hurdles, was not finances, but rather their interest in obstetrics. We see this as quite telling. Our impression of physicians in the Drexel program is that they are eager to learn and regain their currency and proficiency, despite the challenges. Most graduates of our reentry program have succeeded in achieving their goal within a month of completion. Institutions that commit to facilitating reentry help not only these individual physicians but also their communities, especially those affected by the physician shortage.

#### *Areas for Continued Research*

Although a few studies have been published on physician reeducation,<sup>2,6-8,12-15</sup> none provides long-term follow-up of physicians who have completed these programs. Nor have any studies reported on physicians' perspectives about these programs or their assessments of whether the programs prepared them for returning to clinical practice. These questions and the impact of returning physician learners on other learners' education are key areas for further investigation. We do not know the impact of returning physician learners on other learners' education. Are junior learners positively affected by the experience of physicians who have performed nonclinical medicine and are returning to learn with new vigor, or are junior learners hampered by resource competition? Anecdotally, we believe the experience is positive for all; this merits investigation as well.

#### **APPENDIX 1. Reported Clinical Activities Attended (Partial List)**

- Outpatient clinics—ambulatory obstetrics and gynecology resident clinic and private office, colposcopy clinic, high-risk pregnancy clinic (maternal-fetal medicine), HIV and pregnancy clinic, family planning clinic, general HIV clinic, obstetrics and gynecology infectious disease clinic, gynecologic oncology clinic, genetic counseling session, and outpatient obstetrical ultrasound clinic.
- Obtained histories from patients in the clinical setting.
- Inpatient rounds on labor and delivery floor, gynecology and gynecologic oncology services.
- Office procedures—intrauterine device placement, etonogestrel implant placement and removal, manual uterine aspiration, colposcopy with biopsy.
- Labor and delivery scenarios—induction of labor, artificial rupture of membranes, insertion of intrauterine pressure catheter, fetal scalp electrode application, normal and operative vaginal deliveries, perineal tear repair, cesarean delivery (planned and emergent), labor and delivery drills, management of postpartum

hemorrhage, ultrasound dating scans and bedside ultrasounds for cervical length and fetal position, triage of patients presenting to labor and delivery.

- Labor and delivery operating department—cesarean delivery of both primary and repeat (scheduled and emergent), dilation and evacuation for retained products or postpartum hemorrhage control, tubal ligation (modified Pomeroy and Uchida techniques).
- Gynecologic surgeries—hysteroscopy with dilation and curettage, operative hysteroscopy, endometrial ablation, diagnostic and operative laparoscopy, vulvoplasty, myomectomy, hysterectomy (robotic, laparoscopic, or abdominal).
- Gynecology-oncology robotics staging—total abdominal hysterectomy with bilateral salpingo-oophorectomy.
- Maintenance of electronic medical records.
- Maintenance of case log.

#### *Workshops and Conferences Attended (Other Than the Departmental Grand Rounds)*

(Typical conferences and lectures attended by our recent refresher physician candidates. Specific conferences attended vary based on availability.)

- Ultrasound training for obstetrics and gynecology residents.
- Annual women's health seminar series ("Personalized Medicine for Girls and Women").
- "Affordable Care Act: Impact on Women's Health."
- Multidisciplinary women's health conference.
- Discovery Day (Research Day) with poster and platform presentations and lectures.
- American College of Obstetricians and Gynecologists districts II and III Joint Annual Meeting ("Reducing Risks, Improving Patient Outcomes," a 3-day course with lectures by experts in various aspects of obstetrics and gynecology, resident research papers, and simulation sessions).
- American College of Obstetricians and Gynecologists Junior Fellow Day—participated in simulations of obstetrics and gynecology procedures.

#### *Weekly Scheduled Didactics.*

- Monday morning—report on labor and delivery; review and discussion of "Green Journal" article.
- Tuesday—departmental Grand Rounds, morbidity and mortality review, Journal Club.
- Tuesday—resident lectures.
- Tuesday—gynecology preoperative conference.
- Tuesday—gynecology-pathology conference.
- Tuesday—brown bag noon conferences at Women's Care Center.
- Wednesday—maternal-fetal medicine journal review.
- Wednesday—colposcopy case reviews.
- Thursday—fetal monitor strip rounds.
- Friday—reproductive endocrinology/fertility rounds and resident lectures.
- Friday afternoon—gynecology-oncology pathology conferences.

### Lessons for Practice

- Though a small field, physician reentry is becoming noteworthy, especially in OB-GYN.
- Physician reentry trainees merit individualized training in a structured setting to become up-to-date.
- Physician reentry trainees have a dedicated obstetrics preceptor for education, feedback, and guidance.
- Physician trainees often remain in touch long after graduation for continued support.
- There is a need for further research regarding impact on other learners, trainees' perspectives, and with larger cohorts for longer periods of evaluation.

### Assignments.

- History and physical write-ups.
- Clinical skills assessment with standardized patients, including assessment of history-taking skills, physical examination skills, interpersonal and communication skills.
- HIPAA (Health Insurance Portability and Accountability Act) course.
- Workplace harassment course.
- Interactive virtual patient diagnostic exercises (Simulated Internal Medicine Patient Learning Experience—SIMPLE).
- Physician-patient communication skills online modules, designed to enhance clinical skills during complex communication and relationship challenges (Doc.com).
- Web-based virtual patient simulation cases (DxR) conducting a simulated history and physical examination, ordering laboratory tests, deriving a differential diagnosis, specifying a working diagnosis, and recommending a treatment plan.

### Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher's web site:

APPENDIX S1: Reported clinical activities attended (partial list)

As a service to our authors and readers, this journal provides supporting information supplied by the authors. Such materials are peer reviewed and may be reorganized for online delivery, but are not copy edited or typeset. Technical support issues arising from supporting information (other than missing files) should be addressed to the authors.

### References

1. After a break from practice, returning not easy. *ACOG Today*. 2006;50(8):1. <http://www.acog.org/~media/ACOG%20Today/acogToday0906.pdf?dmc=1&ts=20140324T1201517104>. Accessed April 18, 2014.
2. Varjavand N, Novack DH, Schindler BA. Returning physicians to the workforce: history, progress, and challenges. *J Contin Educ Health Prof*. 2012;32(2):142–147.
3. Re-entering the practice of obstetrics and gynecology. Committee Opinion No. 523. American College of Obstetricians and Gynecologists. *Obstet Gynecol*. 2012;119(5):1066–1069.
4. Martin JN Jr, Scarrow PK. Reentering obstetrics and gynecology. *Obstet Gynecol*. 2012;120(2 Pt 1):217–218.
5. Kenagy GP, Schneidman BS, Barzansky B, Dalton CE, Sirio CA, Skochelak SE. Physician reentry into clinical practice: regulatory challenges. *J Med Regul*. 2011;97(1):10–15.
6. Cass I, Gordon LA, Kilpatrick S. Lessons learned in physician reentry. *Obstet Gynecol*. 2012;120(2 Pt 1):360–364.
7. Adams KE, Allen R, Cain JM. Physician reentry: a concept whose time has come. *Obstet Gynecol*. 2008;111(5):1195–1198.
8. Manriquez M, Cookingham LM, Coonrod DV. Reentry into clinical practice in obstetrics and gynecology. *Obstet Gynecol*. 2012;120(2 Pt 1):365–369.
9. Raub AC, Bowler FL, Escovitz GH. A physician retraining program. *JAMA*. 1982;248(22):2994–2998.
10. Villaneuva AM, White BG, Donoghue GD. A quarter-century of experience with career change education: an option for turning specialists into generalists. *Acad Med*. 1995;70(1 Suppl):S110–S116.
11. American Medical Association Report of the Council on Medical Education CME Report 6-A-08. Available at <http://www.ama-assn.org/ama/pub/about-ama/our-people/ama-councils/council-medical-education/reports.page?>. Accessed October 2014.
12. Varjavand N, Greco M, Novack DH, Schindler BA. Assessment of an innovative instructional program to return non-practicing physicians to the workforce. *Med Teach*. 2012;34(4):285–291.
13. Grace ES, Korinek EJ, Weitzel LB, Wentz DK. Physicians reentering clinical practice: characteristics and clinical abilities. *J Contin Educ Health Prof*. 2011;31(1):49–55.
14. Bower EA, English C, Choi D, Cedfeldt AS, Girard DE. Education to return nonpracticing physicians to clinical activity: a case study in physician reentry. *J Contin Educ Health Prof*. 2010;30(2):89–94.
15. Mark S, Gupta J. Reentry into clinical practice: challenges and strategies. *JAMA*. 2002;288(9):1091–1096.