

Program Director Perceptions of Subspecialty Tracking in Obstetrics and Gynecology Residency

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ABSTRACT

Background Residency programs have experienced a trend toward decreased work hours and case volumes, negatively affecting the perception of graduating residents' competence. Subspecialty tracks have been proposed to help address these issues.

Objective We evaluated the perceptions of obstetrics and gynecology (ob-gyn) residency program directors (PDs) on subspecialty tracking during training.

Methods In 2017, a web-based, anonymous survey with Likert scale and open-ended items was e-mailed to US ob-gyn PDs.

Results Of 250 PDs surveyed, 169 (68%) responded. More than half (54%) reported tracking would positively affect training of future ob-gyn physicians; 80% agreed it would increase resident preparedness for fellowship. Nearly half (49%) indicated it should be available for interested residents. However, some respondents expressed concerns this would negatively affect resident training (38%) and could decrease the number of ob-gyn generalists (50%). Most (88%) believed that tracking, if implemented, should not be mandatory, and 84% agreed that a tracking curriculum should be accompanied by Accreditation Council for Graduate Medical Education (ACGME) and American Board of Obstetrics and Gynecology changes. Only 31% of PDs felt tracking could be successfully implemented in their programs. Barriers to implementation included too few residents to divide into tracks, challenging administrative logistics, and concerns about meeting ACGME case volume requirements.

Conclusions PDs have defined but diverse opinions on the implementation of tracking in ob-gyn. Slightly more than half of responding PDs reported tracking would positively affect the training of future ob-gyn physicians, and less than one-third indicated that their program could successfully implement tracking.

Introduction

US residency programs have experienced a trend toward reduced work hours and case volumes,¹ while governing bodies have concurrently moved toward competency-based performance metrics.² This has affected perceptions of graduating residents' competence. Fellowship program directors (PDs) have expressed concern that fellows are less prepared due to lower case volumes during residency.³

Similar to trends in other specialties, the number of residency graduates entering fellowship in obstetrics and gynecology (ob-gyn) has nearly tripled, from 7% in 2000 to 19.5% in 2012.^{4,5} Prior literature demonstrated that fellowship directors across several subspecialties had significant concerns about the technical abilities of incoming fellows, particularly in gynecologic oncology.^{6,7} Recent data suggested 40% of all ob-gyn graduates apply for fellowship,⁸ making it unclear if the traditional generalist-oriented ob-gyn residency program experience is appropriate for fellowship-bound residents. Some may argue that this traditional generalist-oriented ob-gyn residency

model may be more than what is needed for fellowship-bound residents, yet not sufficient for individuals bound for general practice. Subspecialty tracking may also promote competency among residents who do not pursue fellowship training, with residents entering generalist practice likely to benefit from performing vaginal hysterectomies that a gynecologic oncology-bound resident is unlikely to need.

To address similar concerns in general surgery, where more than 80% of residents pursue additional training,⁹ the American Board of Surgery has allowed residents to track into subspecialty fields to complete more rotations in their area of interest.¹⁰ Evidence suggests that tracking improves residents' operative experience (particularly for complex procedures), is valued by residency PDs and residents, and does not appear to negatively affect residents who do not enter subspecialty training.^{11–13} To date, 1 ob-gyn program has implemented tracking.¹⁴

Our study seeks to assess the perceptions of ob-gyn PDs toward subspecialty tracking, as they likely will be at the forefront of overseeing such implementation.

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Methods

We created a survey to evaluate ob-gyn PD perceptions on the feasibility and benefits of subspecialty tracking. The survey consisted of 12 multiple-choice questions and space for free-text responses to report perceptions of benefits, drawbacks, and logistics of implementing tracking in ob-gyn programs. It was developed by 5 ob-gyn residents and an associate PD, tested with residents and academic faculty at our institution, with revisions made for content and clarity. The final survey was distributed by e-mail and used SurveyMonkey (SurveyMonkey Inc, Palo Alto, CA).

An e-mail list of PDs for all 256 Accreditation Council for Graduate Medical Education (ACGME) accredited ob-gyn residency programs was created using information from the American Congress of Obstetricians and Gynecologists (ACOG), Association of Professors of Gynecology and Obstetrics, and ACGME web pages as of December 2016.^{15–17} The survey was distributed via e-mail on February 8, 2017, and data collection ended March 20, 2017. PDs were contacted 3 times with a request to complete the survey. Data were analyzed in Microsoft Excel 2008 (Microsoft Corp, Redmond, WA). *P* values were calculated using chi-square tests, with Likert scale responses collapsed into binary *agree* or *do not agree*. When performing *t* tests, neutral responses were included in the *do not agree* category, and a *P* value of .05 was considered statistically significant.

Free-text responses were reviewed for content and classified into themes by 3 authors. Identified themes were reviewed and revised until consensus was reached.

National demographic data for ob-gyn residency programs were compiled using programs' self-reported information on the American Medical Association's Fellowship and Residency Electronic Interactive Database (FREIDA).¹⁸ Program class size was calculated by the number of first-year positions available.

This study was reviewed and declared exempt by the Partners HealthCare Institutional Review Board.

Results

Of the 256 e-mails sent to PDs, 5 were not deliverable, and 1 PD declined to participate because the program did not yet have residents. Of the 250 e-mails delivered to PDs with active residents, 169 (68%) responded.

Respondents spanned all 5 ACOG regions, and the majority (63%, 74 of 118) were from university programs. Thirty-one percent (36 of 118) had been PDs for less than 3 years, while 15% (18 of 124) had served more than 10 years. Most respondents (79%,

What was known and gap

Residency programs and trainees are facing reduced operative volumes, and subspecialty tracks have been proposed to address this problem.

What is new

A survey of obstetrics and gynecology program directors elicited their opinions on the benefits of and barriers to tracking residents in this specialty.

Limitations

Survey responses may be at risk for social desirability responding; survey instrument without validity evidence.

Bottom line

Slightly more than half of responding programs reported tracking would have a positive effect, and less one-third reported their program could successfully implement tracking.

98 of 124) oversaw programs with 4 to 8 residents per class. The demographics of respondents were largely representative of the national population of ob-gyn programs.

Opinions in Favor of Tracking

Among respondents, 54% (91 of 169) agreed that tracking would have a positive impact on training, and reported it would increase residents' preparedness for fellowship (80%, 135 of 169) and their future careers (50%, 80 of 160; see the TABLE). Nearly half (49%, 82 of 169) thought tracking should be available to interested residents. Directors of programs where more than half of residents applied for fellowship were more likely to think that tracking would better prepare residents than programs where less than half of residents applied (76% [13 of 17] versus 44% [45 of 102], *P* = .013).

The open-ended responses mentioned that the common goals of ob-gyn residency programs may no longer entail training residents as generalists, if those residents do not plan to have a future generalist career (see the BOX). Instead, respondents felt residency training should be tailored to individual career goals, noting that a resident who plans to pursue maternal-fetal medicine needs less experience with laparoscopies than one planning to be a generalist. Despite these positive perceptions, the majority of respondents (88%, 146 of 166) reported tracking should not be mandatory.

Opinions Against Tracking

Despite many positive responses, there were some common and strongly worded responses against tracking. Among respondents, 37% (63 of 169) indicated tracking would have a negative impact on the specialty, and 50% (84 of 169) mentioned

TABLE

Program Director Perceptions of Tracking in Residency

Survey Item	Program Director		
	Strongly or Somewhat Agree, n (%)	Strongly or Somewhat Disagree, n (%)	Neutral, n (%)
I believe tracking will positively impact the training of future ob-gyns.	91 (54)	42 (25)	35 (21)
I believe tracking will negatively impact the training of future ob-gyns.	63 (37)	67 (40)	37 (22)
I believe tracking will increase resident preparedness for fellowship.	135 (80)	16 (9)	18 (11)
I believe tracking will decrease the number of ob-gyn generalists.	84 (50)	57 (34)	26 (15)
I believe tracking should be available for all residents who want to track.	82 (49)	54 (32)	33 (20)
I believe tracking should be mandatory for all residents.	6 (4)	146 (88)	14 (8)
I believe tracking should be mandatory for all residents applying to fellowship.	30 (18)	114 (67)	24 (14)
I believe tracking could be successfully implemented in my residency program.	50 (30)	95 (59)	17 (10)
I believe that my residents would be receptive to tracking being implemented at our program.	83 (52)	43 (27)	34 (20)
I believe that tracking would better prepare my residents for their future careers.	80 (50)	48 (30)	32 (19)
I believe that implementing a tracking curriculum needs to be accompanied by ACGME changes in the way that residency graduates are evaluated.	135 (84)	10 (6)	15 (9)

Note: N varies from 160 to 169. Data are presented as fraction (%) agreeing with survey item.

Abbreviations: ob-gyn, obstetrics and gynecology; ACGME, Accreditation Council for Graduate Medical Education.

concerns it could reduce the number of ob-gyn generalists (see the TABLE). Nearly one-third of respondents (32%, 54 of 169) indicated tracking should not be used at all. PDs who oversaw 3 or fewer residents per class were less likely to report tracking would increase resident preparedness for fellowship (55% [6 of 11] versus the remainder of the group 82% [93 of 113], $P = .029$), and this group was also more likely to believe tracking would have a negative impact on the training of future ob-gyn physicians (64% [7 of 11] versus 37% [41 of 111], $P = .08$).

Themes from the free-text responses noted that tracking would fracture the specialty since some subspecialties could be absorbed into other disciplines such as urology or general surgery; that residents would be unprepared for generalist work, which could have significant negative consequences for those who did fail to obtain fellowships and had to enter generalist practice; and that it would be logistically challenging to implement (see the BOX).

Barriers to Tracking

Fifty-two percent (83 of 160) of PDs felt that their residents would be receptive to the implementation of

a tracking program, although only 30% (50 of 169) thought that tracking could be implemented successfully in their program. PDs identified a number of barriers to tracking, including not having enough residents to divide into tracks (32%, 42 of 130), its administrative complexity (19%, 25 of 130), and the lack of resident interest (7%, 9 of 130) and departmental support (6%, 8 of 130).

Respondents also were concerned with perceived negative impact on the training of ob-gyn generalists and the challenge of ensuring that all residents, regardless of tracking status, could meet minimum case requirements. Eighty-four percent (135 of 160) of respondents agreed that implementing a tracking curriculum would need to be accompanied by changes in the way ob-gyn graduates are evaluated.

Directors of programs in which more than half of residents applied for fellowship were more likely to respond that tracking could be implemented successfully (53% [9 of 17] versus 25% [26 of 102], $P = .021$).

Discussion

To our knowledge, this study is the first to assess the perceptions of PDs on subspecialty tracking in ob-gyn

Box Themes Identified From Open-Ended Responses**Program Directors: Arguments in Favor of Tracking**

"It doesn't make sense to have future MFMs doing 150 laparoscopic hysterectomies or to have future oncologists spend 30% of their time managing complicated pregnancies because unlike internal medicine and their fellowships, our fellowships have little to no overlap. We need to train residents and empower them to excel in fellowship and their careers, not to have a broad base of skills that they will not need or ever use again."

"This is long overdue. If general surgery programs have been able to do it for vascular, plastics, etc, we can do it too . . . We don't need to train everyone in everything to keep all doors open . . . We need to better utilize our residents and train them to their future careers, not a basic learning of everything to do with a woman's health."

Program Directors: Arguments Against Tracking

"I do not feel this would be beneficial. Fellowship exists to train generalists more appropriate in their subspecialty of choice. Tracking would essentially start fellowship early, and lead to less of a firm foundation in the general topics of ob-gyn."

"Would not endorse it unless many changes were made from ACGME and ACOG expectations. It would also change the culture of our residency and can't be sure if that is better or not."

Program Directors: Barriers to Tracking**Administrative/logistical burden, impact on smaller residency programs**

"Clinical volume especially in the subspecialties is limited and thus only by having all residents go through the process is there enough to give adequate exposure to all aspects of our discipline."

"Small residency program. Not enough faculty support in terms of numbers. Subspecialty support is minimal."

Issues with case volume and ACGME minimums

"A program would need to have enough procedures to allow residents to miss rotations, but still meet minimum numbers. If the mandatory requirements are abandoned how do we guarantee that [the] resident is qualified to be a generalist when they don't get the fellowship they prepared for?"

"Minimum number expectations, complexity of coverage, unfair burdens for some residents and not others. Don't have the subspecialty ability to serve all residents and those being tracked and fellows."

Negative impact on future generalists, field of obstetrics and gynecology

"... We start taking away resources for the generalist training by diverting attendings and money for a track program, the generalist training will suffer."

"This may break up the specialty as many of the other subspecialty areas can easily be absorbed into other disciplines (ie, surgical oncology, urology/general surgery). The only remaining one would be MFM."

Fellowship matching, impact on residents who don't match into fellowship

"There are no guarantees that any given resident would match in a fellowship of their choice; what would happen to those that fail to match? They may not have adequate experience to be a generalist."

"If a resident in a specific track did not match into their subspecialty choice, I feel they would be unprepared to be a generalist."

Abbreviations: MFM, maternal fetal medicine; ACGME, Accreditation Council for Graduate Medical Education; ACOG, American Congress of Obstetricians and Gynecologists.

residency programs. More than half of responding PDs stated that tracking would increase resident preparedness for fellowship and future careers, consistent with findings on the impact of tracking in surgery, the other surgical specialty that has formally examined tracking.^{12,13}

However, less than one-third of respondents indicated that they could successfully implement tracking in their residency programs, and others expressed concern that it would negatively impact the competency of graduates to practice general ob-gyn. In nonsurgical specialties, tracks have helped prepare trainees for broader practice. Residents in internal medicine women's health tracks reported feeling more comfortable providing comprehensive ambulatory women's health care without compromising their knowledge of other medical topics.¹⁹ Psychiatry residents who trained in integrated psychiatry-

primary care tracks were more comfortable addressing medical issues in patients, promoting care of the whole patient.²⁰

Nearly all respondents indicated tracking must be voluntary and accompanied by ACGME and ABOG changes, in part due to the concern that tracked residents may not meet case volume requirements outside their track. Of note, the ACGME has not altered case volume requirements for general surgery residents who participate in tracking,^{10,21} and tracking has not impacted surgical trainees' ability to meet or exceed case minimums in essentially all categories.¹¹ Although further study on the long-term benefits of tracking and its implications for patient safety are warranted, ob-gyn programs likely will continue to explore and possibly implement tracking programs.

Limitations to our study include response bias, since those who are interested in the topic are more

likely to respond than those who are not, and limited demographic information for respondents, as not all PDs completed this information. Small numbers in some categories may have limited the power to detect differences between groups.

Further research should focus on the logistics (including cost and full-time equivalents) of implementing a tracking program, and study of the outcomes of graduates of programs with tracking.

Conclusion

The findings highlight the diverse range of PD opinions on tracking, suggesting that more than half of PDs believe tracking would improve the training of ob-gyn physicians and increase preparedness for fellowship. Respondents said they believe tracking is likely to be successful when voluntary, and when introduced in programs with high case volumes and strong fellowship match rates. Successful implementation of tracking programs likely also will require an approach that tailors residents' curricula with support from accrediting and certifying organizations.

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