

“Everything new is happening all at once”: a qualitative study of early career obstetrician and gynaecologists’ preparedness for independent practice

« Toutes les nouveautés arrivent en même temps » : étude qualitative de la préparation des obstétriciens et gynécologues en début de carrière à une pratique indépendante

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Abstract

Background: The transition from residency training into practice is associated with increasing risks of litigation, burnout, and stress. Yet, we know very little about how best to prepare graduates for the full scope of independent practice, beyond ensuring clinical competence. Thus, we explored the transition to independent practice (TTP) experiences of recent Obstetrics and Gynaecology graduates to understand potential gaps in their perceived readiness for practice.

Methods: Using constructivist grounded theory, we conducted semi-structured interviews with 20 Obstetricians/Gynaecologists who graduated from nine Canadian residency programs within the last five years. Iterative data collection and analysis led to the development of key themes.

Results: Five key themes encompassed different practice gaps experienced by participants throughout their transition. These practice gaps fit into five competency domains: providing clinical care, such as managing unfamiliar low-risk ambulatory presentations; navigating logistics, such as triaging referrals; managing administration, such as hiring or firing support staff; reclaiming personhood, such as boundary-setting between work and home; and bearing ultimate responsibility, such as navigating patient complaints. Mitigating factors were found to widen or narrow the extent to which new graduates experienced a practice gap. There was a shared sense among participants that some practice gaps were impossible to resolve during training.

Conclusions: Existing practice gaps are multi-dimensional and perhaps not realistically addressed during residency. Instead, TTP mentorship and training opportunities must extend beyond residency to ensure that new graduates are equipped for the full breadth of independent practice.

Résumé

Contexte : Le passage de la résidence à la pratique est associé à des risques croissants de litiges, d'épuisement professionnel et de stress. Pourtant, nous savons très peu de choses sur la meilleure façon de préparer les diplômés à l'ensemble du champ d'application d'une pratique indépendante, au-delà de veiller à la compétence clinique. Nous avons donc exploré les expériences de transition vers la pratique indépendante de récents diplômés en obstétrique et gynécologie afin de comprendre les lacunes potentielles dans leur perception de leur préparation à la pratique.

Méthodes : En utilisant la théorie constructiviste ancrée, nous avons mené des entrevues semi-structurées avec 20 obstétriciens et gynécologues diplômés de neuf programmes de résidence canadiens au cours des cinq dernières années. La collecte et l'analyse itératives des données ont permis de dégager des thèmes clés.

Résultats : Cinq thèmes clés englobaient différentes lacunes dans la pratique rencontrées par les participants tout au long de leur transition. Ces lacunes s'inscrivent dans cinq domaines de compétences : la prestation de soins cliniques, comme la gestion de modes de présentation ambulatoires peu familiers et à faible risque; la gestion de la logistique, comme le triage des demandes de consultation; la gestion de l'administration, comme l'embauche ou le licenciement du personnel de soutien; la récupération de l'identité personnelle, comme l'établissement de limites entre le travail et la maison; ainsi que le fait d'assumer la responsabilité ultime, comme la gestion des plaintes des patients. On a constaté que certains facteurs accroissaient ou réduisaient la perception des nouveaux diplômés d'une lacune dans leur pratique. Les participants étaient tous d'avis qu'il était impossible de combler certaines lacunes dans la pratique au cours de la formation.

Conclusions : Les lacunes existantes dans la pratique sont multidimensionnelles et ne peuvent peut-être pas être comblées de manière réaliste pendant la résidence. Les possibilités de mentorat et de formation en ce qui a trait à la transition vers la pratique doivent plutôt s'étendre au-delà de la résidence afin de veiller à ce que les nouveaux diplômés soient préparés à tous les aspects d'une pratique indépendante.

Introduction

While most transitions along the path to clinical independence tend to be challenging or stressful, the transition to independent practice (TTP) is perhaps the most high-stakes transition. Newly independent physicians must deliver high-quality care, establish patient safety, preserve their own well-being, and maintain a sustainable practice among other priorities. Unsurprisingly, the first few years after graduation correlate with an increased risk of regulatory college complaints due to practice management challenges.¹ Therefore, residency training must be tasked with preparing graduates for both clinical and non-clinical aspects of practice to ensure an uneventful transition.

Recent graduates report feeling most prepared to assume the role of ‘medical expert’, due to adequate experiences learning the essential medical skills and knowledge during training.²⁻⁷ However, new-to-practice physicians from a wide range of specialties, including Medicine, Surgery, Anesthesia, Obstetrics & Gynaecology (OB/G), Paediatrics, and Radiation Oncology, believe that they lack training in ‘non-clinical’ skills.^{2,6-12} These skills include managing finances, supervising trainees, running an office practice, communicating with patients, and addressing conflicts.^{2,4,6-9,12} Providers who feel less prepared to execute ‘non-clinical’ tasks are more likely to experience emotional exhaustion.^{4,6} Thus, there is a clear need to better integrate practice management skills with clinical knowledge and expertise throughout residency training to facilitate an easier transition and decrease the likelihood of provider stress and burnout.

The Royal College of Physicians and Surgeons of Canada began implementing Competence by Design (CBD) for residency cohorts starting in 2017 to enhance resident education and ensure readiness for independent practice.¹³ Across Canada, all OB/G programs were expected to start the transition to the CBD model of residency training as of 2019.¹³ OB/G residents are required to demonstrate proficiency with competencies that encompass several practice tasks and fall under the CanMEDS roles: Medical Expert, Communicator, Collaborator, Leader, Health Advocate, Scholar, and Professional.¹⁴ Within the field of OB/G, graduating Canadian and American residents express a lack of comfort with performing many surgical procedures at the completion of residency training.^{15,16} There exists a paucity of research in the Canadian OB/G context regarding residents’ preparedness for practice beyond their level of

comfort with technical competencies.¹⁵ A qualitative research study examining the multifaceted nature of the TTP, including clinical and non-clinical components of practice, will offer more clarity into the successes and shortcomings of current training programs. With this in mind, the purpose of our study was to explore the TTP experiences of recent Canadian OB/G graduates who trained in the traditional residency model in hopes that this may help inform the dedicated TTP training within the contemporary CBD models.

Methods

As the TTP is fundamentally a social process, we undertook a Constructivist Grounded Theory (CGT) approach to qualitative research when exploring the experiences of recent Canadian OB/G graduates.¹⁷ Recruitment, data collection, and analysis occurred between September 2020 and July 2021.

Study context

Each of our participants had completed a five-year residency training program in OB/G at a Canadian institution. All participants were within their first five years of practice after having graduated within the traditional time-based training model. Competency-based training was implemented in Canadian OB/G programs beginning with the 2019 cohort.

Data collection and analysis

Following CGT methodology, we conducted data collection iteratively with analysis.¹⁷ Participants were recruited via word of mouth, social media (Facebook and Twitter) advertisements, and email invitations sent to all Canadian OB/G residency program directors. Participation in the study was voluntary and not compensated. We began with convenience sampling, whereby those who responded to our invitation and met the inclusion criteria were interviewed. Individual, semi-structured interviews were conducted primarily by NW over the telephone or using a web-based platform (Microsoft Teams) at the participant’s convenience. TT and AH conducted a few interviews as a check-in to ensure that participants were not noticeably less candid when interviewed by NW, a more junior colleague. Interviews were audio-recorded and transcribed verbatim, then anonymized and assigned a de-identified participant code. The average length of the interviews was 40 minutes.

We began the analysis of the initial transcripts with coding using gerunds (e.g. ‘teaching for TTP during residency,’ ‘underestimating the challenge’) to remain open to and

grounded in the data as well as ensure active interpretation.¹⁷ NW and AH led the initial inductive approach to coding and met regularly with TT for discussion. We conducted constant comparative analysis amongst codes within and between transcripts. The analysis also incorporated memos and field notes written by NW. Based on these steps, initial codes were coalesced into larger categories and ultimately higher order themes that captured the relationships between categories. We used an iterative process of data collection and analysis applying this constant comparative method, which led to the final conceptual coding framework. We used the qualitative analysis software NVivo Version 20 (QSR International [Americas] Inc., Burlington, MA, USA) to organize and support the coding process. This study was approved by the study institution's research ethics board (ref. 116409). Written informed consent was obtained from all participants.

As our analysis evolved from the initial codes and iterative data analysis, we revised our interview guide successively to incorporate new insights from the analysis (Appendix A). The revised guide included questions based on results gathered from early participants, and we used these questions to check for resonance with subsequent participants' experiences. Guided by the principle of information power,¹⁸ our sample was deemed sufficient for our narrow study aim, and as a specific sample with variation therein, rich dialogue and cross-case analytical approach.

Reflexivity

The principal investigator (TT, a practicing OB/G physician) and co-investigators (NW, a second-year medical student, and AH, a PGY-5 OB/G resident) conducted the interviews. NW made regular memos and field notes during each interview to remain reflexively aware of how her insider-outsider experience informed the entire research process.¹⁹ Principal investigator TT is a practicing OB/G and PhD-level qualitative researcher within her first five years of practice. She assisted in analyzing the anonymized interviews and led all stages of the research process.

Results

A total of 20 recent OB/G graduates participated in our study. We presented the participant demographic data in Table 1. Our analysis led to developing five key themes that captured existing practice gaps, conceptualized as TTP competencies (Figure 1). Each competency included aspects of independent practice that new graduates felt variably unprepared to tackle following completion of

residency training. The five competencies identified by our participants included: providing clinical care, navigating logistics, managing administration, reclaiming personhood, and bearing ultimate responsibility. Key dimensions within each competency included mitigating factors that either widened or narrowed the practice gap. Furthermore, participants described how certain aspects of some competencies could not be achieved during residency but rather would only be realized through experiential learning in independent practice. We have organized the results to elaborate on the multi-dimensional nature of each competency using salient quotations from interview transcripts which are identified using anonymous participant codes (001, 002, etc.).

Table 1. Participant demographic information

Gender	
Female	15
Male	5
Training Centre	
Dalhousie University	1
University of Montreal	1
University of Ottawa	3
Queen's University	1
University of Toronto	2
McMaster University	2
Western University	4
University of Manitoba	3
University of Calgary	3
Independent Practice Setting	
Academic	9
Community	11
Fellowship Training	9
Years in Practice	
1-2	11
3-5	9

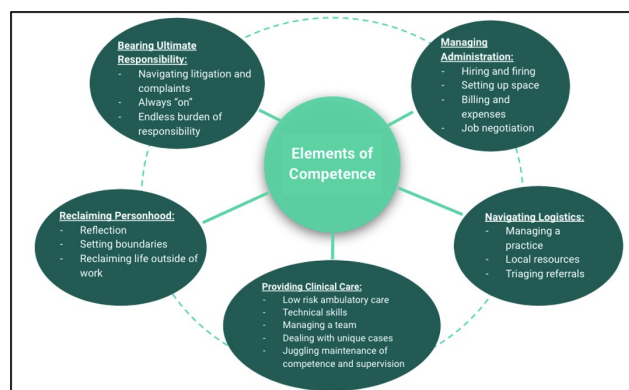


Figure 1. Key TTP competencies assumed by new graduates

Providing clinical care

"Providing clinical care" captured participants' perspectives regarding their readiness to provide comprehensive clinical care following graduation. Identified gaps included aspects of low-risk obstetrics,

surgical decision-making, and managing rare presentations or complications. In general, participants described feeling “pretty comfortable doing obstetrics” (002), specifically “prenatal and labour and delivery care” (013), and navigating multi-professional team dynamics. However, one participant also noted:

Often, patients will come in with things you may not have studied for. Like having difficulty sleeping and having pelvic pain that’s not getting better... those things that you encounter in day-to-day practice that you may not study in a textbook or learn during residency (004).

Though commonly faced in practice, these issues “don’t come up in acute settings that [residents] train in” (012). Some participants also cited a lack of “exposure in residency to operating independently” (013), which made it harder to prepare for the “decision-making that comes with being on your own and not having, necessarily, someone to bounce everything off of” (005). This missed opportunity was compounded by a sense that participants had underestimated how much they had previously relied on their supervisors’ support, intra-operatively:

[Faculty supervisors] were always like, ‘oh, don’t do that, or cut here, or don’t go there, or this will help you if you do this.’ That was very helpful...When you’re on your own, and you don’t have that little person on your shoulder who is telling you all the things, then you don’t even realize how much you unconsciously just really appreciated it. (014)

Uncommon, acute patient presentations and surgical complications represented a particular challenge and source of stress for new graduates. At times, this practice gap was mitigated by mentorship and words of encouragement from more experienced colleagues. One participant described this experience when faced with an unfamiliar but urgent emergency:

I asked them to call the second on-call gynaecologist and he answered, and I said, ‘hey, ...I think I’m going to have to open to do this wedge resection. I’ve never done it before. I never did it in all of my residency. What do you think?’ And I kind of thought he would just come in and he just said, ‘no, sounds good, just do it.’ And I was like, ‘okay.’ Then I opened and we did a wedge resection, everything went really fine. (009)

Approaches to mitigating this practice gap were varied. Some participants were more proactive in their final months of residency by seeking training in specific techniques (e.g. vaginal breech training (008)) or by seeking

opportunities for autonomy, as this participant recalled: “My last month of residency, I was the chief obstetrical resident, so I often said... ‘I’m going to be done in a month. I’m going to be alone. I need to practice this.’” (005). Those that sought fellowship training described a “gradual transition to practice” (013) which provided more scaffolded opportunities for independent decision-making and “boosted their confidence” (017) when operating. Once in practice, “access to mentors” (008) was the main mitigator that helped to narrow, or at least normalize the practice gap.

Navigating logistics

“Navigating logistics” encompassed participants’ views on their level of preparedness to make sound decisions regarding day-to-day operations of independent practice. Participants outlined gaps in their training in managing an office-based practice, working within local resource constraints, and accurately triaging referrals. Participants frequently commented on not having “any preparedness, really, at all, for being able to manage an office” (005) and noted receiving “zero training on anything managerial or clerical” (014). Logistical aspects that participants felt uncomfortable with included how to “book a day properly” (006), “send labs out” (005), “book [an] OR” (010), and how to manage “very difficult patients,” “paperwork,” and “returning phone calls” (016). The managerial aspects of practice were noted to be “harder to teach in residency” (006) and were thought to have been overlooked among the vast amount of content within the field of OB/G. Our participants also suggested that the lack of longitudinal patient exposure contributed to this perceived gap.

The shift from training at an academic centre to working in a community setting was jarring for some participants as they were forced to grapple with not having “the security blanket of another staff member on-call... or anyone else there that’s as qualified” (012). One participant reflected on their experience of adjusting to being the only OB/G trained physician on-call in the community:

I’ve definitely been in situations where I had a family med resident assisting me or the nurse. And those things you’re not prepared for, like you can’t be just because you’re never in those situations I think in residency but in the middle of the night you’re just happy to have an assist. (010)

Overall, participants expressed a sense of unpreparedness when determining how to triage patients for “certain medical conditions” and deciding “when to see people in follow-up” (002). One participant easily overcame this gap

in training as they were “shown [how to triage patients] by another obstetrician/gynaecologist colleague” (011), while others believed it was an aspect of practice that could be easily incorporated into residency curricula as “it’s probably not rocket science” (016).

Opportunities for autonomy during community residency electives helped prepare participants for their potential future practice in low-resource settings. One participant recounted that “the staff that I worked with insisted that I actually do the sections with the assistant they already had, which was usually a family doc ... to get more exposure” (010). Further, longitudinal senior resident-led clinics provided trainees with independence and helped them “figure out how to run a practice” (012). Finally, having a “strong sense of colleague support” (013) or having access to a competent “administrative assistant” (004) narrowed this practice gap during participants’ transition.

Managing administration

“Managing administration” described participants’ readiness to run their practice from a business standpoint. Areas of unpreparedness within this competency included hiring and firing support staff, billing for procedures, setting up office space, and negotiating job opportunities. The process of onboarding support staff and designing a practice space was similar to “opening an entire business” (003). Participants experienced a perceived training gap depending on their practice model and location. For instance, transitioning “into an already established clinic” meant that “I didn’t have to hire anybody. I didn’t have to set up an office. I didn’t have to do anything. I literally bought a desk and a computer and that was all I did” (015). However, the TTP was not as smooth and required more decision-making for others: “I had to find my own assistant. I had to buy all my own equipment. I had to negotiate my rent. I had no idea” (014). There was a shared sense that residency training lacked exposure to managing support staff, as one participant recalled that “no one taught me how to hire a secretary, no one taught me how to fire my secretary which happened in the first year of practice” (001). Additionally, knowing how to work with support staff, especially employees that participants had no control over hiring, was identified as another gap in training:

Dealing with support staff that I’ve actually not hired, not selected, and don’t work for me also comes with its own problems...having to address issues related to management, I’ve found that quite difficult this year. (016)

Participants expressed frustration about their lack of preparedness to tackle financial responsibilities. There was an overwhelming sense that recent OB/G graduates “don’t know how much money [they’re] going to make each year” (003), “had no idea what [OB/G physicians] billed for certain things” (009), and didn’t know “what finances looked like in terms of overhead, the clinic costs, salaries for administrative staff” (010). Many participants received a formal TTP session about billing during residency or had minimal exposure during senior-led clinics; however, the teaching missed the mark. Some new graduates felt they were “losing quite a bit of money” (016) due to billing oversights and didn’t know how to “make [their] money work for [them] to financially gain” (001). To remedy this gap in financial knowledge, some participants relied upon employing “billing people” (011) to manage their finances or asked local physicians and close colleagues for advice.

The administrative TTP challenges began for some while still in residency as the process of “picking which community” (018) to practice in, as well as “finding a job and negotiating the contract” was said to be “done in a very obscure way” (016). Further, guidance related to the “job search, interviewing, networking... was glossed over” in residency curriculum, resulting in “constant stress” (015). Some participants were fortunate to have “informal mentors” (006) who pushed them to negotiate job contract details and ask for key elements to ensure satisfaction with the final outcome. Ultimately, even those with informal support for this competency still felt that there “needs to be more mentorship around job negotiation” (004) during residency training.

Reclaiming personhood

“Reclaiming personhood” represented participants’ views on their preparedness to handle the impact of independent practice on their personal lives. Gaps within this competency included setting boundaries between work and home, building in time for reflection, and juggling multiple new roles. Recent graduates expressed difficulty finding a balance as a result of being frequently asked to take on “educational opportunities” (006), “call patients outside of scheduled appointments” (004), or manage “unscheduled extra things” (004). As one participant admitted, setting boundaries can be harder when administrative staff “always want to book you more clinic... and have you see more patients” (011). While the shift from residency to independent practice should offer more autonomy, external pressures to quickly “build your practice” (010) or always “prove yourself” (011) negatively impacted some participants’ success with setting

boundaries at the start of their TTP. One participant emphasized that residents are “rewarded for the erasure of personal and professional boundaries” (020), which makes it easier for the system to take advantage of new physicians.

Within this practice gap, participants flagged how the rigidly structured process of moving from medical student to resident trainee to attending physician can restrict opportunities to critically evaluate long-term life choices and change career trajectories. Some believed that the rotation structure of OB/G residency made career planning difficult for those “interested in doing subspecialties” (007). One participant described the process of becoming a physician as trainees “on a path that just goes forward and nobody really stops to question it” (018). This sentiment was echoed by another participant who stated that it may be harder for medical trainees to “ask themselves questions around what [they] really want in a job and in life” (006), when compared to peers outside of medicine. This left some new graduates feeling they had missed the opportunity to experiment within their chosen career path and reflect on their life goals.

Recent graduates often struggled to effectively assume multiple new roles during the transition. Participants needed to navigate generational pressures surrounding length of parental leave (001) or administrative burdens of paperwork and research commitments (017) to experience quality family time. Strategies used to reclaim participants’ identities separate from work included becoming “more intentional about taking vacation” (011), leaning on “family supports” (011), and listening to mentors who recommended putting “your life and your family first because at the end of the day your job is just a job” (010). The TTP is not solely centered around the transition to becoming a competent OB/G, as one participant reflected on their journey from a more holistic view:

There are so many transitions happening. You’re transitioning to practice. You’re transitioning to being a boss. You’re transitioning to being a newish [partner] and a newish [parent]. It feels like everything new is happening all at once. The first five years of practice, I would say, are incredibly challenging for so many professional and personal reasons. (001)

There was a shared sense that participants desired more mentorship and guidance to mitigate this practice gap and successfully integrate medicine into their personal lives. Some participants expressed gratitude that they had completed fellowship training or gained workforce

experience prior to medical school, as it was easier to know their limits and ask for help. Additionally, completing locums before committing to a full-time practice location enabled one participant to determine “the right speed, pace, and volume” (015) required to achieve an acceptable work-life balance in their future practice.

Bearing ultimate responsibility

“Bearing ultimate responsibility” described the practice gaps that emerged as participants adjusted to their new role as the most responsible care provider. Gaps in training consisted of navigating litigation and complaints, adjusting to being “always-on,” and assuming the endless burden of responsibility. The level of transparency during residency regarding litigation and complaints was varied, as some participants felt that their “staff were quite open about medicolegal matters” (009), while some experienced it as “another cone of silence that no one ever talks about” (014). Informal discussions during residency prepared participants in terms of knowing “how to document things properly” (010) to protect themselves and knowing that “there was a high chance that [they] were going to have [a medicolegal case] come up” (009) because of the unique climate in OB/G. While “mentorship with staff” (012) once out in practice helped participants manage college complaints, some participants suggested additional lectures during residency about the process of handling college complaints and coping with the emotional impact may have further eased the transition.

Although some participants anticipated that there would be “more work to be done [as a staff]” (009), many did not “appreciate what a full clinic day patient load looks like” (020) or how the responsibility would feel. They often described an unexpected increased sense of emotional fatigue associated with the weight of practicing independently:

I worked way longer hours as a resident, but I am so much more tired now just coping with all of the things that happen on a daily basis. The responsibility that you deal with as staff is substantial. (005)

New-to-practice physicians expressed discomfort performing independently for the first time but described these experiences as “confidence builder” moments (014), as being the physician in control made them recognize that they were “very prepared” and could put “forceps on alone without a staff in the room” (017). The role of formalized TTP teaching regarding this competency appeared to be minimal. When describing the worry associated with being

a staff physician, one participant bluntly said: “I don’t know how you prepare for that really, it just happens” (012).

Greater independence during residency narrowed the practice gap for some graduates as they “felt incredibly responsible” (020) as a resident and were already “carrying the weight” (016) or “feeling the ownership” (019) of their decision-making. Overall, the ease with which participants established and maintained their role as the most responsible provider was thought to “get better the longer [they were] in practice” (010). However, it was still recognized that “even sometimes despite your best efforts, you have bad outcomes” (015) and that discomfort is inevitable until you “start to do [things] for yourself” (007).

Discussion

This study qualitatively explored the TTP experiences of OB/G graduates from across Canada. New-to-practice OB/G physicians outlined gaps in their residency training that we described as TTP competencies, which included providing clinical care, navigating logistics, managing administration, reclaiming personhood, and bearing ultimate responsibility. While some practice gaps could be resolved through more targeted residency training experiences, we uncovered a shared notion that certain practice gaps, such as reclaiming personhood or bearing ultimate responsibility, were unavoidable and could only be addressed through firsthand experiences after graduation. The modifiable practice gaps we identified were widened or narrowed based on mitigating factors. Below, we explore the three factors during residency that most frequently impact participant success with their TTP across our results: mentorship, autonomy, and alignment between training and practice contexts.

In our study, strong and open relationships with fellow OB/G colleagues facilitated informal mentorship about aspects of practice such as dealing with legal cases and finding a job following residency. This resonates with research in general practice, surgery, and medicine disciplines.⁷ For example, MacMillan et al. developed a journal club to provide peer mentorship to general internal medicine graduates and discovered that members utilized this informal setting as an opportunity to discuss issues such as conflict resolution, negotiation, and research and teaching skills, rather than clinical knowledge.²⁰ Others have also highlighted the risks of insufficient mentorship during training leading up to the TTP, including increased job attrition due to limited support for clinical aspects, such as operative skills, and non-clinical aspects, such as managing finances and work-life alignment.²¹ Mentorship

is widely recognized as important for trainees and faculty, but TTP represents a gap in our mentorship efforts.^{4,7,11,12,15,21} There is a clear need for OB/G training programs to start encouraging earlier communication about the TTP and develop mentorship programs that begin in residency and extend into practice so that new graduates are not tackling the transition alone.

Our study also highlighted how trainee autonomy impacted their perceived preparedness during their TTP. The degree of autonomy experienced by our participants varied widely; some benefited from senior-led ambulatory clinic rotations, while others were granted autonomy based solely on their supervisors' comfort. Alarming, certain participants were not provided any opportunity for independent practice during residency. On the surface, the new CBD framework appears to promote graduated autonomy, earned through demonstrated competence. However, the emphasis on direct observation may inadvertently lead to less autonomy for trainees. Striking the right balance between support and independence is critical for optimizing both trainee learning and patient safety.²² To ensure the CBD framework effectively supports appropriate trainee autonomy and facilitates the TTP, training programs should consider incorporating structured feedback sessions and ongoing faculty development, and promoting a supportive learning environment that encourages trainees to seek guidance when needed.

Alignment between the training and practice setting significantly affected how participants experienced training gaps. For example, we found that participants who joined a well-established practice location or received training similar to their future practice setting had an easier time managing administrative tasks. The literature has found that with a closer resemblance between practice and learning environment, new consultants are better prepared for logistical and operational aspects of practice.^{6,12,23} Thus, OB/G training programs should expose trainees to a range of career possibilities early on and encourage individualized training options that are compatible with trainees' future aspirations whenever possible.

Consequently, subspecialty training through a fellowship program had the greatest overall impact on easing the TTP. Participants often pursued a fellowship to gain more technical skills and surgical confidence; learning experiences with the non-clinical nuances of independent practice was an unexpected benefit. Flavell et al. similarly noted that higher specialist training provided dedicated

time for trainees to manage non-clinical aspects of practice and additional opportunities for autonomy, leading to increased preparedness for the consultant role.⁶ However, if fellowships are exclusively relied upon to ease the TTP, this may worsen an already undesirable shift in practice patterns,²⁴ leading fewer graduates to practice as generalists within rural and community locations. For trainees who choose not to pursue fellowships, Canadian OB/G training programs would be wise to develop adaptable TTP curricula for trainees based on their intended area of practice following graduation.

Our results suggest that future graduates of CBD programs are unlikely to meet their readiness for practice goals exclusively within training. While there is some overlap between the TTP competencies identified by our study and those established by the Royal College OB/G CBD curriculum, including managing finances and human resources, triaging patients, handling patient-physician disputes, and setting boundaries, there are key aspects of independent practice missing from the proposed CBD model. We propose the following refinements for CBD in OB/G to address the gaps experienced by our study participants who trained in traditional time-based programs: longitudinal integration of management skills with clinical knowledge and expertise, offering formalized sessions to address TTP content (i.e. office management and billing), and developing mentorship and peer group opportunities that start in residency and continue into the first five years of practice to address the TTP as a process (i.e. handling complaints and establishing boundaries).^{3,12} As outlined by our participants and echoed in the literature, competencies related to managing the burden of responsibility and assuming the role of most responsible provider may be difficult to establish during training.⁶

Our recommended curriculum changes are not without challenges, as barriers such as short clinical rotations, complex training schedules, and difficulties with standardizing mentorship, may hinder successful implementation of TTP programs.^{21,25,26} Further, integration of TTP curriculum throughout residency is complicated by competing interests, particularly during the final year of training when residents are focused on gaining confidence in performing independently and preparing for licensing examinations. Ultimately, the responsibility of improving the TTP for future graduates must be shared between postgraduate programs and the Royal College as both bodies are jointly held accountable for ensuring graduates are truly ready for independence. The provision

of support from these two institutions to their graduating residents must not end at graduation.

Future research should uncover how new-to-practice OB/G physicians graduating from a CBD residency curriculum experience the TTP. CBD training includes specific entrustable professional activities linked to the TTP career stage and mandates that residency programs incorporate a senior resident-led ambulatory care clinic into their training.²⁷ The recent Royal College decision to move the OB/G licensing exam earlier in the final year of residency training may further assist with increasing the feelings of preparedness and success of the transition for CBD trained physicians.

Limitations

Our chosen methodology affords both strengths and limitations. The qualitative research approach allows for an in-depth and thoughtful analysis of participants' recounting of their lived experiences throughout their TTP, which was influenced by their residency training. The study design does not allow us to generalize beyond the study context, for example, to other training programs or specialties. However, we hope that this study inspires others to explore the transferability of our findings and we welcome readers from other programs to reflect on whether our findings resonate in their specific context. As study participation was voluntary and our recruitment materials were transparent about the focus of our study, new-to-practice physicians who felt most strongly about their TTP experience, from either a positive or negative standpoint, may have been more inclined to participate. Conversely, recent OB/G graduates who did not want to retell stories about their TTP or those who felt that TTP curriculum in residency training was irrelevant to their future success with starting an independent practice, may have been less likely to participate. Because NW, a second-year medical student, conducted most interviews, some participants may have moderated their responses to avoid displaying extreme emotion caused by their TTP or to save face when speaking with a junior peer. Although the physicians included in this study were trained prior to the introduction of CBD, their experiences offer important insights which the Royal College and OB/G programs can use to tailor and refine their approach to CBD based on the needs of independent practice.

Conclusions

Our research study explored the TTP experiences of recent OB/G graduates to understand potential gaps in their perceived readiness for practice. This research found that the TTP is a critical time period consisting of several multi-dimensional practice gaps. Because residency may not be able to close all of these identified practice gaps, there is a role for optimizing the TTP experience beyond residency to ease the burden of the transition. Ultimately, some aspects of the transition that are more challenging are often only evident once in practice, which is why we need longitudinal mentorship and training opportunities in place to support new graduates once working independently.

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References

1. CMPA. *New to practice? Practical tips for physicians in the first 5 years*. June 2017. Available from <https://www.cmpa-acpm.ca/en/advice-publications/browse-articles/2017/new-to-practice-practical-tips-for-physicians-in-the-first-5-years>. [Accessed on Jan 23, 2022].
2. Dijkstra IS, Pols J, Remmelts P, Brand PLP. Preparedness for practice: a systematic cross-specialty evaluation of the alignment between postgraduate medical education and independent practice. *Med Teach*. 2015;37:153-161. <https://doi.org/10.3109/0142159X.2014.929646>
3. Westerman M, Teunissen PW, van der Vleuten CP, et al. Understanding the transition from resident to attending physician: a transdisciplinary, qualitative study. *Acad Med*. 2010; 85(12), 1914-1919. <https://doi.org/10.1097/ACM.0b013e3181fa2913>
4. Westerman M, Teunissen PW, Fokkema JP, et al. The transition to hospital consultant and the influence of preparedness, social support, and perception: a structural equation modelling approach. *Med Teach*. 2013;35(4), 320-327. <https://doi.org/10.3109/0142159X.2012.735381>
5. Dahn H, Watts K, Best L, Bowes D. Transition to practice: creation of a transitional rotation for radiation oncology. *Can Med Educ J*. 2018;9(3):e89-e96. <https://doi.org/10.36834/cmej.43038>
6. Flavell S, Robinson A, Dacre J. The transition to consultant: identifying gaps in higher specialist training. *Clin Med*. 2020;20(4):406-411. <https://doi.org/10.7861/clinmed.2020-0085>
7. Gordon L, Jindal-Snape D, Morrison J, et al. Multiple and multidimensional transitions from trainee to trained doctor: a qualitative longitudinal study in the UK. *BMJ Open*. 2017;7:e018583. <https://doi.org/10.1136/bmjopen-2017-018583>
8. Cleland J, Patey R, Thomas I, Walker K, O'Connor P, Russ S. Supporting transitions in medical career pathways: the role of simulation-based education. *Adv Simul*. 2016;1(14). DOI: 10.1186/s41077-016-0015-0. <https://doi.org/10.1186/s41077-016-0015-0>
9. Dijkstra IS, Brand PLP, Pols J, Delwig H, Jaarsma DADC, Tulleken JE. Are graduated intensivists prepared for practice? a case study from The Netherlands. *J Crit Care*. 2017;42:47-53. <https://doi.org/10.1016/j.jcrc.2017.01.018>
10. Morrow G, Burford B, Redfern N, Briel R, Illing J. Does specialty training prepare doctors for senior roles? a questionnaire study of new UK consultants. *Postgrad Med J*. 2012;88:558-565. <https://doi.org/10.1136/postgradmedj-2011-130460>
11. Best LR, Sengupta A, Murphy RJL, et al. Transition to practice in radiation oncology: mind the gap. *Radiother Oncol*. 2019;138:126-131. <https://doi.org/10.1016/j.radonc.2019.06.012>
12. Schrewe B, Patel R, Rowan-Legg A. Growth curves: the experiences of Canadian paediatricians in their first 5 years of independent practice. *Paediatr Child Health*. 2020;25(4):235-240. <https://doi.org/10.1093/pch/pxz014>
13. The Royal College of Physicians and Surgeons of Canada. *Competence by design launch schedule*. 2022. Available at <https://www.royalcollege.ca/rcsite/cbd/schedule-status-e>. [Accessed on Jan 29, 2022].
14. The Royal College of Physicians and Surgeons of Canada. *Obstetrics and gynecology competencies 2019*. 2018 <https://www.royalcollege.ca/rcsite/ibd-search-e?N=10000033+10000034+4294967102>. [Accessed on Jan 29, 2022].
15. Sanaee MS, Tannenbaum E, Papillon-Smith J, Leyland N, Sobel M. Graduating obstetrics and gynecology residents' readiness for practice: a cross-section survey study. *J Obstet Gynaecol Can*. 2019;41(9):1268-1275. <https://doi.org/10.1016/j.jogc.2019.03.001>
16. Dotters-Katz SK, Gray B, Heine RP, Propst K. Resident education in complex obstetrics procedures: are we adequately preparing tomorrow's obstetricians? *Am J Perinatol*. 2020;37(11):1155-1159. <https://doi.org/10.1055/s-0039-1692714>
17. Charmaz K. *Constructing grounded theory*. Sage. 2014.
18. Malterud K, Siersma VD, Guassora AD. Sample size in qualitative interview studies: guided by information power. *Qual Health Res*. 2016;26(13):1753-1760. <https://doi.org/10.1177/1049732315617444>
19. Dwyer SC, Buckle JL. The space between: on being an insider-outsider in qualitative research. *Int J Qual Methods*. 2009;8(1):54-63. <https://doi.org/10.1177/160940690900800105>
20. MacMillan TE, Rawal S, Cram P, Liu J. A journal club for peer mentorship: helping to navigate the transition to independent practice. *Perspect Med Educ*. 2016;5:312-315. <https://doi.org/10.1007/S40037-016-0292-2>
21. Stolarski A, He K, Sell N, et al. Mentoring experience of new surgeons during their transition to independent practice: a nationwide survey. *Surgery*. 2021;169:1354-1360. <https://doi.org/10.1016/j.surg.2020.11.044>

22. Ilgen JS, de Bruin ABH, Teunissen PW, Sherbino J, Regehr G. Supported independence: the role of supervision to help trainees manage uncertainty. *Acad Med*. 2021;96:S81-S86. <https://doi.org/10.1097/ACM.0000000000004308>
23. Westerman M, Teunissen PW, Fokkema JPI, et al. New consultants mastering the role of on-call supervisor: a longitudinal qualitative study. *Med Educ*. 2013;47:408-416. <https://doi.org/10.1111/medu.12129>
24. Burrows J, Coolen J. Future career plans and practice patterns of Canadian obstetrics and gynaecology residents in 2011. *J Obstet Gynaecol Can*. 2016;38(1):67-74. <https://doi.org/10.1016/j.jogc.2015.10.012>
25. Cogbill TH, Shapiro SB. Transition from training to surgical practice. *Surg Clin N Am*. 2016;96:25-33. <https://doi.org/10.1016/j.suc.2015.09.001>
26. Shaffer R, Piro N, Katznelson L, Gephart MH. Practice transition in graduate medical education. *Clin Teach*. 2017;14:344-348. <https://doi.org/10.1111/tct.12593>
27. The Royal College of Physicians and Surgeons of Canada. *Entrustable Professional Activities for obstetrics and gynecology*. Version 1.1. 2019. [Accessed May 1, 2022].

Appendix A: Initial and final semi-structured interview guides.

1.1 Initial Interview Guide

1. How many years have you been in practice? Where and in what capacity do you currently practice (e.g. academic, community)? What Obstetrics and Gynecology residency program did you graduate from?
2. Overall, how well did your residency training prepare you for your future practice?
 - 2.1. What aspects of your daily practice do you feel that you were prepared well for?
 - 2.2. What aspects of your daily practice do you feel that you were not prepared well for?
3. Can you comment on your level of preparedness with respect to the following tasks:
 - 3.1. Managing finances?
 - 3.2. Managing an office based practice?
 - 3.3. Handling medicolegal risk?
 - 3.4. Interacting with other healthcare professionals?
 - 3.5. Performing specific procedures?
4. When presented with a situation where you do not feel comfortable performing a certain task, what do you do? Who do you turn to for help? What resources do you use to accomplish the task?
5. Can you describe a memorable transition to practice experience?
6. What formal training related to transition to practice did you receive during residency?
7. What aspects of starting out in practice do you wish had been part of your residency program?
8. From your perspective, how does your TTP experience (and formal curriculum) compare to other specialties?

1.2 Final Interview Guide

1. How many years have you been in practice? Where and in what capacity do you currently practice (e.g. academic, community)? What Obstetrics and Gynecology residency program did you graduate from?
2. Overall, how well did your residency training prepare you for your future practice?
 - 2.1. What aspects of your daily practice do you feel that you were prepared well for?
 - 2.2. What aspects of your daily practice do you feel that you were not prepared well for?
3. Can you describe a memorable transition to practice experience?
4. What formal training related to transition to practice did you receive during residency?
5. We've noticed that a lot of our participants have said that they struggled with independent surgical planning and decision making, managing finances (billing, clinic costs, paying admin salaries), setting boundaries between work and home, and providing low risk obstetrics care. How does this resonate with your experience?
6. Some participants have told us that they thought they were prepared for the transition, but once it happened, specific things were more difficult than they expected - such as the sense of increased responsibility and the emotional burden associated with becoming the most important care provider. What was your experience like?
7. We've heard that some new graduates underestimated the amount of support they had from staff as a resident or their ability to deal with any presentation that came through the door once working as a staff. Have you found this to be true during your transition or has it impacted your confidence when providing care?
8. There has been variation with regard to participants' ease with which they have transitioned from a managerial or office setting aspect, such that those who joined a well-established clinical practice have had an easier time versus

those who have joined a smaller space or work in the community are forced to make more “non-medical” day-to-day decisions. Has this affected your transition?

9. When speaking with participants who completed further OBGYN training through a fellowship program, they seemed to fare better during their TTP in terms of operating independently and supervising residents. Is this relevant for your transition? If you struggled with this, is there anything that you can think of that would have helped make these aspects of the TTP easier or more manageable?
10. When presented with a situation where you do not feel comfortable performing a certain task, what do you do? Who do you turn to for help? What resources do you use to accomplish the task?
11. How do you feel that your personality informed the TTP experience?
12. What aspects of starting out in practice do you wish had been part of your residency program?
13. What could have been in place during your first few years of independent practice to have made it a more manageable transition that might have supported some aspects which aren't as teachable?
14. Do you think that any TTP curriculum, whether it be formal or informal, could have adequately prepared you for starting out in practice?
15. If someone you knew had told you about the rewarding and challenging aspects of their TTP experience, do you think you would have used their advice to better prepare yourself for practice following residency? Would knowing particular information before transitioning into practice changed the way you approached this new stage in your career?
16. Do you think there is anything unique about OB/G that makes the transition to practice distinct?
17. From your perspective, how does your TTP experience (and formal curriculum) compare to other specialties?
18. Please refer to Figure 1. How does the figure resonate with your experience? Is there anything missing from the figure? Is there anything that does not resonate?