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FOREWORD

This is the inaugural edition of the Canadian Federation of Medical Students (CFMS) Transition to Residency (TTR) Guide. This guide is written by medical students to support their peers in the transition from undergraduate to postgraduate medical education. It draws upon the experiences of residents through survey and interview as well as a review of available literature.

The TTR Guide provides key information on the various aspects of residency training and provides insight into learning within the new model of Competency-Based Medical Education, mentorship and teaching as a resident, and pursuing research during residency. This guide also offers suggested resources for both wellness and finance management. A highlight of the TTR Guide is its emphasis on peer-to-peer advice, with a multitude of tips from current residents integrated throughout the guide. The final chapter is also dedicated to general advice from residents. This guide is available in both English and French.

We are especially thankful to all resident respondents for providing their advice to the incoming cohort, as well as to Resident Doctors of Canada for their facilitation and support in sharing this survey. We look forward to the evolution of future editions of this guide through ongoing close collaboration. Thank you to the CFMS Education committee and the Bilingualism Committee: Rishi Sharma (Past Director of Education), Avrilynn Ding (Director of Education), Alexandra Cohen (National Officer of Education), and Yseult Gilbert (Quebec Regional Director, Communications Attaché) for their contributions. Our team looks forward to the evolution of this guide throughout the upcoming years, and we hope that it serves as a source of support to incoming residents. We are always looking for feedback and invite your recommendations to improve this guide to best serve future residents.

To all graduating medical students reading this guide, congratulations on achieving an incredible milestone - we wish you all the best in the journey ahead!

Sincerely,

Irena Zivkovic and Daniel Lu Competency-Based Medical Education File 2019-20



LEARNING IN CBME

WHAT IS CBME AND ITS IMPACT

Competency-Based Medical Education (CBME) is a new model of medical education currently integrated into the majority of postgraduate and some undergraduate medical curricula across Canada.^{1,2} In fact, CBME represents the biggest change in the delivery of medical education in the past 100 years!³ The goal of this model is to enhance patient care by improving both the learning and assessment of trainees.¹

CBME is an outcome-focused education model in which competencies are broken down into smaller learning objectives of increasing complexity and are distributed along a learning continuum.¹ This is now implemented in postgraduate medical education by the Royal College and the College of Family Physicians of Canada (CFPC).^{1,2} The Royal College oversees postgraduate medical education of specialties in Canada, setting standards for specialty medical education and focusing on accreditation, physician credentials, examination, research, and physician competency development.⁴ The CFPC oversees postgraduate medical education in family medicine, and leads program accreditation, continuing professional development, licensing, research, and advocacy work.⁵

While CBME refers to the model of education itself, the Royal College terminology for its implementation and delivery within Canada is Competency by Design (CBD). The initial rollout of this curriculum was in 2017.6 Prior to the delivery of CBD, CBME was implemented in 2011 by the CFPC, called the Triple C Competency-Based Curriculum.² The delivery of CBME within Triple C is structured to provide comprehensive education for the development of family medicine physicians, focusing on a comprehensive curriculum, continuity of education and care, centred within family medicine.² With the majority of disciplines training under the CBD model, this will be the CBME model of focus in this guide. For more information regarding Triple C, please see the Additional Resources at the end of this chapter.

Prior to the adoption of CBD, progression through residency training was measured by the amount of time a resident has fulfilled in their program. CBD focuses on ensuring that graduates complete their training with satisfactory preparedness to practice, with the model focusing not on the amount of time spent during training, but on the abilities of the trainee. 1,7,8 As stated by the Royal College, the time needed to train under CBD is not expected to change for the majority of residents, and continues to be program-specific.⁷ Please connect with your Program Director if you have further questions regarding timelines.



CBD STRUCTURE AND EVALUATIONS

Ultimately, for residents, CBD is a learning model with coaching and mentorship at its core. CBD centres on the concept of competency for trainees, which is reflected by their performance.⁸ This focus allows programs to increase their accountability to training learners, and for trainees to grow through frequent, low-stakes feedback.8 CBD at the postgraduate level is structured along a competence continuum, with residency divided into several stages (Figure 1):1

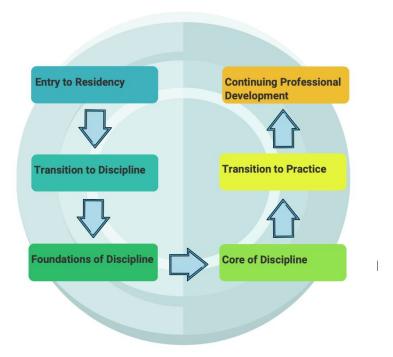


Figure 1. CBD Competence Continuum. Adapted from the Royal College Competence Curriculum Flowchart.1

In each stage of this competency-based curriculum, performance outcomes are defined and structured into Entrustable Professional Activities (EPAs), Workplace-Based Assessments (WBAs), and Milestones. We will walk through the definitions of each of these terms. In 2015, the Royal College introduced the CanMEDs framework, consisting of seven roles that synergistically describe the competent physician. ⁹ These roles include: Professional, Scholar, Advocate, Medical expert, Communicator, Leader, and Collaborator. These CanMEDs roles have been integrated within the CBD framework to reflect different stages of postgraduate training, ranging from "entry to residency" to more advanced levels of expertise.8 These roles, as well as specialty-specific competencies, have been used to develop the aforementioned EPAs and milestones.8



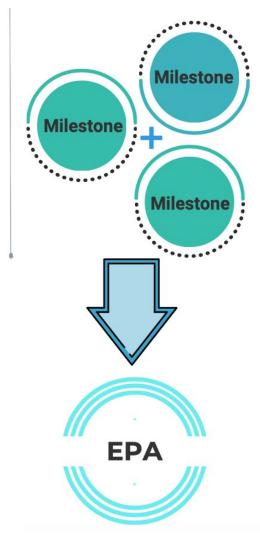


Figure 2. Milestones and EPAs.

Milestone: An educational statement that demonstrates how a trainee's competence should progress over the course of their career, from novice to mastery.¹⁰

Example: Set up and position the patient for a procedure; Perform common procedures in a skillful, fluid and safe manner; Establish and implement a plan for post-procedure care.¹¹

Entrustable Professional Activity (EPA): A clinical task that is delegated to a resident, which integrates multiple milestones and is linked to the CanMEDS competencies. 10 This is a key task of the discipline that a trainee can be entrusted to perform independently in a health care context after demonstrating sufficient competence. 10

A trainee can work toward completing an EPA by asking a supervisor to observe them in carrying out a specific task, following which the supervisor should fill out a form providing feedback. 10 Residents will be observed completing an EPA multiple times, each time receiving feedback and coaching from a supervisor, with the goal of improving their performance.¹⁰ Example: Providing initial management for

Workplace-Based Assessment (WBA): A written evaluation based on multiple direct observations of the trainee in the clinical environment, which must be coupled with verbal feedback. 12 Data from WBAs is important for informing the Competence Committee of trainee performance, supplementing decisions regarding EPA achievement.12

critically ill surgical patients. 10

A Competence Committee will review a resident's completed EPAs and make subsequent decisions regarding their progression through training. 12 In making these decisions, they are informed by the resident's WBAs. 12 These reviews allow residents who have not achieved certain milestones to be identified early, so that support can be offered.^{8,13}



BREAKDOWN OF AN EPA

An EPA will focus on a specific task of a discipline. For example, for Otolaryngology, an EPA could focus on a component of emergency care: recognizing and initiating early management for critically ill surgical patients. The resident is assessed on their ability to complete the EPA by examining how dependent they were on their supervisor during the encounter. This reflects how much the supervisor believes that the trainee can be "entrusted" with completing this skill independently in the future.

The EPA itself consists of a group of milestones which make up its successful completion. Sample milestones include the following, for the above-mentioned EPA: eliciting a history, identifying the need for consultation.¹¹ Each milestone has its own rating scale to determine whether it was not yet observed, in progress (requires further work to reach full competence), or completely achieved. This allows trainees to determine specific areas (milestones) in which they need to improve, when reviewing the results of the EPA.

The EPA has been successfully achieved after being reviewed by the Competence Committee for your program. While achieving all of the milestones on an EPA reflects positively regarding performance, it is important to note that each EPA is subjective to a specific point in time at which the skill is observed, and as such, successful completion of one iteration of an EPA (i.e. all milestones are marked as "achieved" and the observer states that they "did not need to be there") does not mean that the trainee is able to perform this skill independently from this point onwards. The Competence Committee will review data from multiple iterations of the EPA together with data from WBAs to make decisions regarding promotion, and ultimate achievement of the EPA; decisions are made with a holistic approach. The competence is a proach.

Each program will have an online platform for you to view milestones and EPAs for each stage of your training, allowing you to view your progression and upcoming goals. Through this platform, you will also be able to request assessments and track the encounters you have completed as well as the feedback that was given alongside them. Planning ahead with each rotation on what clinical encounters you expect and what EPAs you might be able to achieve with them will allow you to efficiently progress through your learning plan.¹⁴



MAKING THE MOST OF EPAS

A key component necessary for success within a CBD curriculum is your ability to understand your own stage of training and to identify the EPAs and milestones which your program has set out for you.⁸ This could be organized by block or by year and may differ between programs.

It is highly encouraged that you check in with your program directors to gain access to these documents early in your training should they not already be provided to you. Seeing the breakdown of tasks and goals listed within each EPA will allow you to focus your learning and also create a step-wise approach to a particular task.⁸

It is important for you to be proactive in your learning by keeping track of your completed and outstanding EPAs.⁸ Work with your supervisor to find opportunities to practice and perform EPAs.

Receiving feedback from your preceptor with milestones is equally as, if not more, important as completing them for your learning and growth. Take the time to reflect on what you did well and should continue doing with each encounter as well as areas for improvement. If your self-assessments do not align with your supervisors' then address that but remember there is always room for improvement and assessment are rarely meant to be personally criticizing.⁸

THE BENEFITS OF CBME

This model has been well-documented in the literature to improve transparency and accountability in medical training and is particularly helpful in delineating a clear structure of expectations for residents' learning.¹⁵⁻¹⁷ Trainees participating in CBME-aligned curricula have shown increased confidence in their skills, ultimately progressing toward the end of residency with improved performance upon graduation and entry to practice.¹⁵

Benefits of a CBME curriculum include: 17

- More frequent assessment and feedback
- Well-defined learning paths
- Clarity on competencies needed to progress
- Personalized learning plans
- Preparation for independent practice
- Early recognition and support of learners who are struggling



For further reading, please see the following:

- CanMEDS Continuum: http://canmeds.royalcollege.ca/guide
- CBD Resource Directory: http://www.royalcollege.ca/rcsite/cbd/cbd-tools-resources-e
- EPAs and CanMEDs Milestones:
 http://www.royalcollege.ca/rcsite/cbd/implementation/cbd-milestones-epas-e
- Introduction to Triple C: https://www.cfp.ca/content/cfp/57/6/739.full.pdf
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MENTORSHIP

BEING MENTORED

For many incoming residents, mentorship is not a new concept. While some may have had extraordinary experiences as mentees, others may not have been so fortunate. However, mentorship's key role in the development of skillful, professional, and successful residents has been stressed by residency groups, program leadership, and the medical education literature. In residency, your mentor can be an invaluable source for advice and guidance on numerous topics ranging from your academic progression to research, career planning, work-life balance, navigating ethical dilemmas, and many more. 1,4,5,6

MAKING MENTORSHIP WORK FOR YOU

Finding a Mentor. Many residency programs have implemented formal mentorship pairings for their residents and interested faculty mentors. ^{4,5,7} While this may suffice for some, seeking different or additional mentors may be beneficial. ^{8,9} Finding mentors in your fields of interest or who have experience from which you would like to learn can be a good place to start, but continue to ask around to meet people who reflect goals that you hope to achieve. ^{10,11,12} Many start with their senior physicians, program leaders, or members of organizations they are interested in. Once you have met, make sure that this potential mentor also matches important factors such as your engagement, values, and work-style (Table 1). ^{9,13}

	Personal	Relational	Professional
Mentee	Honest Reliable Open to feedback	Proactive Willing to learn	Passionate
Mentor	Altruistic Trustworthy Honest, Open Active listener	Accessible Mentee-centred Non-judgmental	Expert Senior

Table 1. Characteristics of mentors and mentees with successful dynamics. Adapted from Chartering a Professional Course: A Review of Mentorship in Medicine.



Good Practices. Remember, a mentor is not just an advisor or a role-model – try to think of the relationship as a collaboration (Table 2).1 Establishing commitment, guidelines for meeting and communication, as well as explicit shared expectations and goals are essential.4,11,12 By "Managing Up" - taking ownership of the dynamic, flow of information, and scheduling - the relationship may be both more productive and satisfying for all. Lastly, as ideas are shared and disagreements occur, be receptive by exploring each other's feedback, experiences, and

perspectives.9

Getting Ready

- ☐ Clarify your values
- ☐ Identify your work style
- ☐ List sought-after opportunities, e.g. grants, internships
- ☐ Set goals for 3 months, 1 year, 5 years
- ☐ Identify your skill and knowledge gaps
 - o Personal
 - Professional
 - Academic

Finding a Mentor or Two

- ☐ Meet with people you know
- ☐ Get recommendations
- ☐ Network from initial contacts
- ☐ Be persistent
- ☐ Find multiple mentors

The First Meeting

- ☐ Identify why you sought them in particular
- $\hfill \square$ Disclose your background, values, and needs
- ☐ Send a thank-you note after the meeting

Cultivating the Relationship

- ☐ Agree on structure and objectives
- ☐ Plan and set an agenda
- ☐ Ask questions
- ☐ Actively listen
- \square Follow through on assignments
- ☐ Ask for feedback

- ☐ Manage Up
 - Set goals and expectations
- o Be responsive and flexible
- o Direct the flow of information
- Follow a regular meeting

schedule

Separation

- ☐ Discuss the timing of separation
- ☐ Talk about next steps

☐ Identify future mentors

Table 2. Checklist for mentees to create successful mentoring relationships. Adapted from Making the Most of Mentors: a Guide for Mentees

Potential Challenges. Despite these efforts, challenges will arise. Learning to navigate them is also part of the mentorship experience. Common barriers for both mentors and mentees include perceived lack of time, lack of identifiable resources, and a poor culture of mentorship at the institution.^{1,3,14} Poor expectation-setting may also lead to a mismatch of goals, commitment, and personalities.⁹ Ideally, as the mentee accomplishes their goals and advances through their career, the mentoring dynamic evolves into a more collegial one.^{9,12}

For further reading, please see the following:

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TEACHING JUNIOR LEARNERS

If you recall your best clinical experiences during medical school, you will likely remember residents and staff who taught exceptionally well. Soon, you will have the opportunity to emulate them and similarly impact others. Teaching is a major expectation of all physicians not only because it is linked to essential skills, but also because it positively impacts learners, patient care, and institutional culture. ^{1,2,3} With CBME, this expectation is explicitly defined through a series of EPAs within the Scholar role. ⁴ Specifically, as residents, you might find yourselves spending a significant amount of time on teaching-related activities because of your unique position as near-peer teachers to others, with an understanding of their learning preferences. ^{2,3}

LEARNING HOW TO TEACH.

You have likely not received any formal training in teaching up to this point, but you can likely recall great learning environments, memorable teaching methods, and excellent preceptors or colleagues to model. Commonly, great teaching occurs when it is delivered in an affable environment, with applicable learning objectives, to the appropriate audience.^{5,6,7} Many universities, residency programs, and provincial housestaff organisations will have dedicated workshops or modules focused on "Residents as Teachers".^{1,5,8,9} However, as you learn to teach by emulating role models, similar to the way you are learning to provide care, it will be important to be self-reflective to determine what works best for you as well as to avoid perpetuating negative practices. Encouraging your learners to also be self-reflective of what they are learning may lead them to be more self-directed in developing their own skills and strategies as well.^{10,11}

CLINICAL TEACHING STRATEGIES

One-Minute Preceptor. What is unique to physician educators is the busy environment within which they teach and the constraints that this imposes. The One-Minute Preceptor framework is a commonly used model made up of five discrete steps, designed to fit within the pace of a busy clinic or ward. Teaching through the use of these steps (Figure 1), with the model's focus on clinical decision-making, has been shown to be both effective and efficient. 14,15



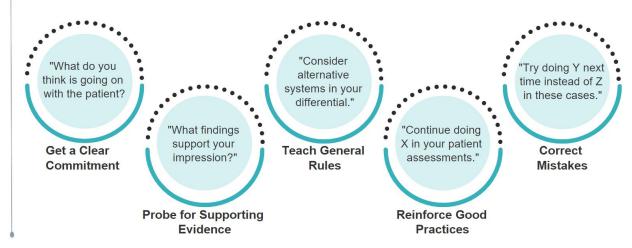


Figure 1. One-Minute Preceptor framework and examples. Adapted from A five-step "microskills" model of clinical teaching.

GIVING FEEDBACK

Again, recall moments when you have received feedback in your training and reflect upon the factors that made those experiences better or worse for your learning. Working from those memories, it may be obvious that non-judgmental environments, as well as having the feedback be specific and actionable, are important factors. Some effective frameworks for giving feedback embrace giving a sandwich of reinforcing, constructive, and then reinforcing statements as well as having the learner reflect on their own performance. Similarly, residents can ask *for* feedback in this framework to improve their own performance and teaching. Setting an expectation for feedback in both directions can facilitate a more open and communicative environment as well.^{16,17,18}

Ultimately, learners want educators who are enthusiastic, engaging, and who encourage their growth by not only teaching but also by being good role models or advisors.⁶ There are numerous frameworks and methods to use, but they are all secondary to the attitude that you bring to the opportunity to teach others.

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RESEARCH DURING RESIDENCY

Residency brings with it many changes regarding your roles and responsibilities in the clinical setting. When beginning postgraduate training in their new disciplines, many residents pursue research projects reflecting their academic interests, finding this to be beneficial to their learning and career development. This chapter provides an overview of pursuing research in residency, including possible timelines, connecting with mentors or research groups, and sources of funding and presentation opportunities.

INTEGRATING RESEARCH IN RESIDENCY

Most specialties in Canada have strictly outlined the pursuit of a scholarly project as a component of their training requirements.² These requirements can range from the inclusion of scholarship within your residency learning plan, to the presentation or publication of a research project.² We highly recommend checking in with your program director(s) regarding these requirements at the outset of your training, as this will inform you of potential deadlines and objectives to meet.

Royal College Specialty Training Programs. There are two main paths for pursuing research during residency:

- 1. Participating in a dedicated research program (the Royal College Clinician Investigator Program); or
- 2. Engaging in research alongside your regular clinical and educational residency schedule (Figure 1).^{3,4}

Residents can apply to the Royal College Clinician Investigator Program (CIP) at any time during their residency training. Please note that this program is not a separate application stream during CaRMS, and all students beginning residency have the option of engaging in the Clinician Investigator Program during their training. Residents are able to engage in this program given approval by their program director and potential research supervisor, and are able to do research off-site and abroad; program entry may also require nomination by the department head, depending on your institution.⁷ Please note that each institution has separate requirements for application to CIP.



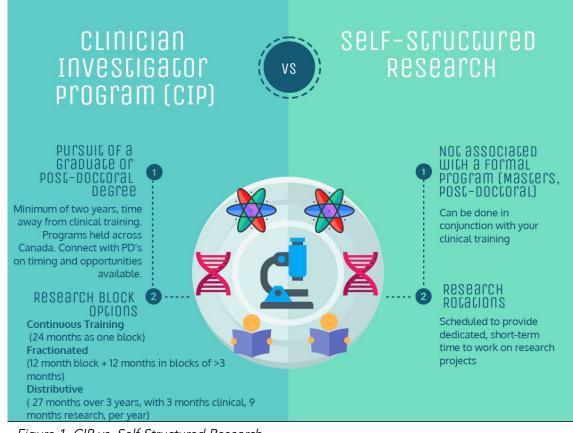


Figure 1. CIP vs. Self-Structured Research.

CIPs are available at the following institutions for all Royal College programs:⁷

- University of Alberta
- University of British Columbia
- University of Calgary
- Dalhousie University
- University of Manitoba
- McGill University
- McMaster University
- University of Ottawa
- Queen's University
- University of Saskatchewan
- University of Toronto
- University of Western Ontario

Memorial University, Université de Montréal, and the Northern Ontario School of Medicine do not have a formal CIP, but interested residents are encouraged to speak with their program directors regarding research opportunities.



Family Medicine Programs. Research is encouraged during family medicine residency training, either in the form of short research blocks (several weeks), self-structured research, or via the Clinician Scholar Program (CSP).^{8,9} The CSP is offered through the College of Family Physicians of Canada (CFPC). ^{8,9} Residents apply to this program during their PGY-2 year.^{8,9} Application is through your home program, please connect with your program directors for further information.

A cornerstone of CSP is the integration of research and clinical care.^{8,9} It is structured in the format of an additional 3rd or 4th year after PGY-1 and PGY-2, consisting of a mix of clinical and research responsibilities. These up to two additional years can be used to complete a Master's degree or purely as research year(s).^{8,9} An important part of CSP is its flexibility, as outlined by the CFPC, as such, each program will have different criteria for the time devoted to clinical work versus research, as well as timelines for post-graduate degrees (ex. opportunity to pursue a Master's via an additional 4th year of research training).^{8,9}

CSP is available at the following institutions:8,9

- University of British Columbia
- Université Laval
- McGill University
- McMaster University
- Université de Montréal
- University of Ottawa
- University of Toronto
- University of Western Ontario

MAKING TIME FOR RESEARCH

Participating in a dedicated research program, such as CIP or CSP, presents the opportunity for protected research time. Engage with your program director(s) to determine the structure of CIP or CSP that you are able to pursue, as well as the time points in which you will transition from clinical to research work within your training program. This schedule will likely be different from that of other trainees participating in CSP/CIP. The personalized nature of these programs means that your schedule may even be different from that of a co-resident in your program participating in CIP or CSP.

With regards to research work not affiliated with a formal program, although this is done in conjunction with your clinical work, there are several strategies for maximizing your time:



- Identify areas in which you need support:⁴
 - For ethics and institutional approvals, connect with your department's research coordinator.
 - For data collection, consider electronic data collection, databases, and collaboration with research assistants or junior trainees such as medical students.
 - For statistical analysis, connect with your department's research coordinator or dedicated statistician.
- Develop a timeline, taking into account the timing of your exams and/or particularly busy rotations.
- Schedule a research elective/rotation, which provides short-term dedicated research time.
- Connect regularly with your research team/mentor, as they can provide support and advice throughout the process.⁵

GETTING A PROJECT STARTED

There are multiple avenues for finding ongoing research projects to join or research groups who share your interests and may be able to support you. Below are some initial suggestions:

- Connect with your mentors.
 - Discuss your research interests and goals.
 - Your mentor may be conducting research of interest to you this presents a chance to collaborate.
 - Ask your mentor to help connect you with research teams and supervisors within your program.
- Your program may have a dedicated matching system for trainees and research supervisors or teams.6
- Take note of research activity in your program at grand rounds, departmental research days, or conferences.
 - Identify which topics or projects interest you and get in touch with the principal investigator via email or in-person.

Remember to also take advantage of the funding and presentation opportunities your residency program or institutional department may organise and offer. These learner-centred opportunities provide an excellent chance to share and obtain feedback on your project but are also valuable settings for networking and learning about others' research.



Your specialty's Canadian society webpage is another cornerstone for beginning your search for research funding, and contains a repository of relevant conferences, meetings, and professional development opportunities which are specific to your field, all housed in one online location. The links for each specialty society are included in the list below.

Consider applying to the Canadian Institutes for Health Research (CIHR) for additional funding opportunities; please see their website <u>here</u>.

See the Clinician Investigator Trainee Association of Canada website <u>here</u>, which provides support and information for residents engaged in CIP across Canada.

List of Canadian Specialty Society Webpages:

- Anatomical Pathology
- Anesthesiology
- <u>Cardiac Surgery</u>
- Dermatology
- <u>Diagnostic Radiology</u>
- <u>Emergency Medicine</u>
- Family Medicine
- General Pathology
- General Surgery
- Hematological Pathology
- <u>Internal Medicine</u>
- Medical Genetics and Genomics
- <u>Medical Microbiology</u>
- Neurology
- Neuropathology
- Neurosurgery
- Nuclear Medicine
- Obstetrics and Gynecology
- Ophthalmology
- Orthopedic Surgery
- Otolaryngology-Head and Neck Surgery
- <u>Pediatrics</u>
- Physical Medicine and Rehabilitation
- Plastic Surgery
- Psychiatry
- Public Health and Preventative Medicine
- Radiation Oncology
- <u>Urology</u>



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WELLNESS IN RESIDENCY

The current postgraduate medical training environment emphasizes the promotion of trainee wellbeing. 1-6 In recent years, programs have focused on identifying areas in which residents need support and then developing resources to meet these needs. This chapter provides an overview of wellness resources on both the national and provincial levels, in addition to resources provided by each postgraduate training institution. Advice from current residents on maintaining wellbeing and finding support during residency is included at the end of this chapter.

A REVIEW OF WELLNESS RESOURCES

National

<u>Canadian Medical Association (CMA) Wellness Connection</u> offers virtual group support sessions for trainees and staff, aiming to facilitate connections with peers. This service includes drop-in and formal support sessions led by trained facilitators.⁴

<u>Resident Doctors of Canada (RDoC)</u> advocates for initiatives meant to promote wellness and resiliency for Canadian residents. This page includes documents for personal use, including fatigue risk management and FAQs on harassment and intimidation.⁵

<u>Canadian Medical Protective Association (CMPA)</u> focuses on support during medicolegal events which can impact well-being. They provide a phone line for reaching out to other physicians for support, and documents for personal use on resiliency, self-care, and harassment.⁶

Provincial

The following resources are specific to Provincial Housestaff Organizations (PHOs) across Canada. Please see the list below to find your current PHO.

- British Columbia
- Alberta
- Saskatchewan
- Manitoba
- Ontario
- Quebec
- Newfoundland and Labrador
- Maritimes



Institution-Specific

The following resources are specific to post-graduate training institutions across Canada. Please see the list below to find your current institution:

- University of British Columbia
- <u>University of Alberta</u>
- <u>University of Calgary</u>
- University of Saskatchewan
- University of Manitoba
- University of Toronto
- University of Western Ontario
- Queen's University
- Northern Ontario School of Medicine
- McGill University
- Université Laval
- Université de Montréal
- Université de Sherbrooke
- <u>Dalhousie University</u>
- Memorial University

ADVICE FROM CURRENT RESIDENTS

Quick Tips: Summary of residents' responses

Maintaining well-being:

- Exercise
- Stay in touch with friends (both in and out of your program!)
- Try to keep up with your hobbies/routine

Supports:

- Colleagues, family, friends
- Program Supports (program directors, staff, resident wellness offices)
- Counsellors



Quotes	Source (Program Type)		
What are your own top two methods for maintaining your well-being during residency?			
"Having my Christian faith, and fostering relationships with friends/family."	Anesthesiology		
"Try to complete work before coming home and stay physically active."	Family Medicine		
"Take care of yourself (eat right, sleep and work out as much as possible) and take care of your colleagues."	Family Medicine		
"Take care of yourself (eat right, sleep and work out as much as possible) and take care of your colleagues."	Family Medicine		
"Take time to spend with your friends and family. Take your vacation days and book it early."	Family Medicine		
"Clearly delineating work time vs. family time - when I'm at work I word hard, but when I have time off I try not to think about work. Get some exercise and time outdoors whenever you can - even a 10 minute walk during your lunch break to help clear your mind and refocus for the afternoon makes a big difference."	Family Medicine		
"I treat myself to take-out once a week, which means I don't have to cook once a week and I get to eat some really tasty food (the food I cook is edible but nothing fancy). I also try to do non-work related things for the hour before going to bed that night, and that varies from watching tv to talking to my friends/family to doing nothing."	Family Medicine		



"Trying to do something active every day. Socializing with other residents who can identify with what you experience on a daily basis can be healing."	Family Medicine
"Getting outside when I can and maintaining active group chats with my med school friends."	General Surgery
"Exercise; staying in touch with non-medical friends."	Internal Medicine
"Cooking nice meals for myself at least three nights a week. Catch whatever sleep you can, whenever you can."	Internal Medicine
"Exercise isn't optional, treat it like a necessity. The same goes for making time for the people you love. Give up everything else in favour of those two things."	Orthopedic Surgery
"People to talk to in and outside of work Exercise and eating (clean and treats!)"	Pediatrics
"Prioritizing my 8 hours of sleep a night Talking on the phone to a friend or loved one every day."	Pediatrics
"Reaching out to mentors and co-residents."	Psychiatry
What supports would you encou	rage residents reach out to?
"Your fellow residents (if you get along well with them) can be awesome "comrades" because that's what you guys truly are - you're in it together. If you click with a staff member, having a mentor like that works wonders too."	Anesthesiology
wonders too.	



"Really whoever it is in your life that keeps you grounded. For me, that's my family, my partner, my medicine friends, and my non-medicine friends. I find that each group of supports are able to help me through residency in different ways, sometimes just by hanging out or spending time talking about non-medical things."	Family Medicine
"Get therapy if you think it will help you to be more content, happier, safer. Because it's no longer only your life that hangs in the balance, the lives of patients are also in your hands on a daily basis."	General Surgery
"Student Affairs and counselling services."	General Surgery
"The provincial medical association likely has some good resources available, as may your employer."	Internal Medicine
"Everyone is different. If you are having difficulty coping or have had an adverse outcome please look to access resources to help you process this."	Obstetrics and Gynecology



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FINANCES IN RESIDENCY

Personal finance is likely the last thing you will want to get a handle on while you are still orienting yourself to a new residency program, school, city, or group of people. However, a basic understanding of how money is moving in and (mostly) out of your bank account, as well as the financial choices that await you will be invaluable. This chapter serves as a reference with basic information. It is not intended to replace professional advice or provide specific guidance. It will cover topics most relevant to new residents that merit further reading while building upon your knowledge of grants, loans, lines of credit, and budgeting, which supported the majority of graduates through medical school.¹

INCOME, DEBT, AND SAVING

Firstly, take stock of your current financial situation - your net worth and cash flow - and begin planning ahead. How will your residency income balance against expenses, what debts should be paid off quicker than others, and what is your timeline for your financial goals? Furthermore, are you aware of the tax deduction and tax credits you might be able to take advantage of?^{1,2,3} Below is some advice from residents who similarly were gaining a grasp of finances (Table 1):

Topic	Quotes
Budgeting	"Try to chip away at loans and not take out more money if you can." "Make a budget and stick to it. Include debt repayment early. Decide what you will splurge on that will optimize your well-being most (gym membership? travel? dog walker? gourmet donuts for every call shift?). Yes you're finally making money but going crazy will put you in a tougher spot financially than when you were a broke med student."
Taxes	"Don't forget moving expenses can be written off federal personal taxes." "I also use MNP for tax returns, as they do this for free for medical students and residents."
Seek Experts	"Talk to someone who knows finances professionally (i.e. MD financial)." "MD financial - great resource and the advisors are not paid commission so you know it's relatively unbiased." "Meet with a financial advisor at your bank, MD Mgmt, etc. at least once - I have found this very helpful in terms of goal-setting and understanding how to invest based on your situation and goals." "MD financial has been really helpful for me in terms of learning about repaying debt and how to approach the vast world of investing."
Learning	"Facebook - Physicians Financial Independence (Canada). Read a book on budgeting - any one will do as long as you figure out budgeting." "Read basic, entry-level personal finance books!"

Table 1: Quotations from 2020 resident survey regarding personal finance management.



Income & Taxes. As employees associated with your institution and healthcare system, your paycheck is deposited approximately twice a month with deductions already taken off. These paycheck deductions account for income tax and contributions to the Canadian Pension Plan, Employment Insurance, your provincial resident association, and long-term disability premiums. Canadians are taxed at marginal tax rates dictated by provincial and federal income tax brackets, though tax rates also vary by type of income.^{2,4} Furthermore, many companies and organisations will offer residents their tax and financial services free of charge if you need assistance leading up to tax season. They will also be able to best advise you regarding how to take advantage of tax deductions and credits for moving expenses, professional dues, tuition, scholarships, and childcare, amongst others.^{3,5}

Dealing with Debt. The transition from medical school to residency has implications for your government student loans, line of credit, and other potential debts. Familiarizing yourself with the details of your loans such as their interest rates, grace periods, and repayment periods may save you from paying extra due to accumulating interest.⁶ Some general rules of thumb include paying off debts with the highest interest rates first, making at least minimum payments to avoid penalties, and paying off debt quickly to minimize accrued interest payments over time.^{7,8,9} Another way to minimize interest payments is to consolidate debts by, for example, borrowing from a lower-interest line of credit to pay off a higher-interest student loan. A caveat to remember is that there is a tax credit for interest you have paid on eligible government student loans that does not exist for lines of credit or other loans which may make interest costs overall lower on government loans despite the higher interest rate.^{2,9}

Renting versus Owning. Many recent graduates consider buying property over renting in their first few years due to the similarities of paying a mortgage off and paying rent each month. However, other immediate factors in this decision include upfront closing costs, taxes associated with home-ownership, condo or maintenance fees, and one's down payment. Furthermore, renting has its advantages depending on your local housing market, potential for mortgages with lower interest rates in the future, and ability to pay off other debts. Down the road, you may also need to move cities for subspecialty training or employment. However, when you do decide to buy, be aware of the First-Time Home Buyers' Tax Credit and other resources to lower your purchase costs. 2



INSURANCE

There are numerous types of insurance and too many aspects of each type of insurance to cover in this primer. Broadly, insurance is a contract (policy) in which the insurer agrees to pay the insured to offset financial burdens associated with specific possible events if those events occur. Common features of most policies are premiums, limits, and deductibles, which dictate who and how much will be paid. A reliable approach to obtaining insurance is first understanding the purpose, conditions, benefits, and costs of an insurance policy, then assessing whether those factors align with your financial needs. For example, an individual with no dependents might decide against purchasing life insurance as the purpose and benefits of life insurance might not align to outweigh its costs. For similar reasons, many people advise against whole life insurance in favour of term life insurance when they do have dependents which differ in the time period the policy provides coverage.

1,2,11,12 A brief description of types of insurance that are often relevant to residents can be found below (Table 2):

Insurance	Purpose	Considerations
Disability	Guarantees monthly payments to the insured if they become unable to perform their work due to a disability. Regular and own occupation coverage meets the needs of most physicians.	Specifics: short vs long-term; any vs regular vs own occupation; elimination period. Residents often have some coverage through their employer and association. Often requires a medical exam and disclosures.
Life	Guarantees a lump sum payment to named beneficiaries when the insured dies.	Specifics: term vs permanent vs universal life Residents often have some coverage through their employer and association. Often requires a medical exam and disclosures.
Professional Liability	Guarantees coverage of the costs associated with professional negligence and malpractice claims made against the insured.	Mandatory, provided by the CMPA with reimbursable premiums.
Critical Illness	Guarantees a lump sum payment to the insured if they develop specific life-altering illnesses.	Often requires a medical exam and disclosures.
Health	Guarantees coverage of the medical costs associated with illness or injury.	Provided by provincial governments with its "premiums" covered by your taxes. Does not insure prescription drug or dental costs which are often covered by employer benefits packages instead.
Others	Home and property; Mortgage; Automobile	

Table 2: Types of insurance and their general purposes.

Policies can be very limited and conditional so it is important to understand what your potential insurer is offering. For example, being offered any-occupation disability means coverage in the event you are unable to work at all; whereas, regular or own occupation means you'll receive benefits if you are unable to perform the main duties of the job you had when the disability started. Some provincial medical associations, both for residents and doctors, offer insurance as part of membership but also other plans that can be purchased.



FINANCIAL SUPPORT

In addition to the scholarships and bursaries that you may be able to apply for through your institution, the federal government and some provincial governments offer loan forgiveness and relief programs.¹³ These programs may involve return of service agreements or other obligations but are worth researching to see if they can be used to meet your goals.²

Residents with families or those thinking of starting a family have further resources and options to explore. These include federal benefits, tax credits and deductions, and employment insurance for childcare and new parents. Pregnancy and parental leave are also negotiated benefits in a resident's Collective Agreement.²

INVESTING

Investing is the practice of allocating resources, money in this scenario, with the expectation of it generating profit via income or price appreciation. Essential to investing is the concept of risk and return, where riskier investments may yield higher returns but also have higher potential to lose your investment. This is reflected in asset classes such as equities, fixed-income, and cash-like assets which vary in their risk-return profiles. Diversification is the strategy of owning investments across these classes to mitigate your investment portfolio's overall risk. Other aspects of how to invest include your investing style (active versus passive, growth versus value), the brokerage platform used, and self versus professional asset management. 1,2,14

While investing may be off-putting when carrying large debt burdens, residents with a greater tolerance for carrying debt and comfort with risk may do well putting portions of their income toward investing over paying off debt. However, if their return on investment is not greater than the interest rates of their debt, then they will have accrued extra overall costs. Investing is particularly relevant to physicians as they do not typically have pension plans or other retirement benefits, so investing early allows one to take greater advantage of compound growth in preparation for retirement.^{3,15}

Initially, it is recommended to begin investing through registered accounts such as a Tax-Free Savings Account (TFSA) or Registered Retirement Savings Plan (RRSP) as they have tax incentives but also associated restrictions. These accounts contrast with non-registered ones with fewer restrictions and incentives. Below is a table describing their similarities and differences (Figure 1):^{16,17,18}



Contribution room equals yearly allotment plus rollover from past years

Flexible withdrawal allows for savings for things other than retirement

Post-tax contributions with taxfree withdrawals

Amount withdrawn will be added back to next year's contribution room

Investments in U.S stocks are not subject to foreign withholding taxes

Contribution room equals 18% of gross income or \$26,500, whichever is less

Contribution ceilings

Can be either a traditional savings account OR an investment account

Growth within the account is tax-free year to year

Can be opened at most banks and discount brokerages

Specific privileged withdrawals such as for first home or Lifelong Learning Plan

Benefit of contributions increase with increasing income and marginal tax rate

Pre-tax contributions with taxed withdrawals via tax deductions

Contribution room is lost in the amount withdrawn

Can contribute directly to a spousal RRSP

Tax-Free Savings
Account

Registered Retirement Savings Plan

Figure 1: Tax-Free Savings Account and Registered Retirement Savings Plan.

While financial planning may be overwhelming, it will be a critical aspect of your career. Thankfully, you are well positioned with the support and skills that you need to gather information, weigh options, and make good decisions for your future while balancing the things that are important in your life right now.



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PEARLS FROM CURRENT RESIDENTS

This chapter is a collection of advice to incoming R1's from current residents, in which they share their perspectives on the shift from undergraduate to postgraduate medical training environments.

Quick Tips: Summary of residents' responses

What do you wish you knew before starting residency?

- To be organized: keep track of meal prep, resources, tasks, consults
- Review your contract
- Expect periods of stress and remember the importance of reaching out to resources/supports in these times
- It is important to maintain your relationships
- The utility of budgeting!

The shift in clinical responsibilities from medical school to residency:

- Can be challenging and overwhelming at times
- Is facilitated by support from co-residents and staff
- Is enjoyable
- Is comparable to clinical responsibilities in year 4 of medical school

Tips for being on-call:

- Communicate: ask your team for help and/or for clarifications when necessary
- Bring snacks and water
- Sleep and shower when you can
- Keep a set of fresh clothes with you to change into during a long shift
- Identify a few go-to resources to keep on hand
- Develop a systematic approach to handovers, admissions, consults, discharges

On studying during residency:

- Study a bit every day if possible (approximately 30 minutes-1 hour)
- Pick a topic per day/week to review
- Read around your cases
- Create an organized system for notes/resources early on

General Advice:

- Look after yourself (exercise, sleep, vacations, family time)
- Be kind to co-workers and patients
- Have a strong support system



Quotes

Source (Program Type)

What do you wish you knew before having started residency?

"I worked hard on my rotations (even ones outside of the specialty I was going for) and learned what I can, and then took the summer off to relax before residency. Never regretted this, particularly the break, because you'll likely never get such a long break in your life again without taking a leave of absence during residency or purposely giving up income afterwards."	Anesthesiology
"First paycheck is July 15 (2 weeks after start date)."	Family Medicine
"Lots of self-directed learning, so spend some time thinking about your goals for residency and what you want to make sure you get to do/see during your training."	Family Medicine
"Expectations from preceptors are usually reasonable."	Family Medicine
"Enjoy your vacation before residency! And find a good cook book for call meals."	General Surgery
"Meal prepping. Skim your contract - see what benefits exist, what the call stipulations are, anything else that may be helpful, use your holidays!"	Internal Medicine
"I wish I knew how relentless residency is, and therefore how important it is to go into it with as much in reserve as you possibly can,	Internal Medicine

and to maintain important relationships starting from day one because you will need the support later and there won't be time to

rebuild the relationships."



"A better organization system for managing my tasks and consults on call. More knowledge about reductions and casting."	Orthopedic Surgery
"Life! Residency will support you in studying/learning but the time commitment is immense so work on connecting with your support system and organizing your outside of work life!"	Pediatrics
"The learning curve is really steep but everyone is in the same boat."	Pediatrics
"Having a budget and tracking how much of my money is going to rent/insurance/utilities/food/etc and keeping a document of employee benefits has really eased the "being an employee" aspect of residency and has let me focus on becoming a better doctor."	Psychiatry
"How taxing it can be on your loved ones. Burnout is real. We're trained to power through and keep the head down and GO but, if it's affecting your relationships outside the hospital (or even inside) - don't hesitate to ask for help. Don't be hard on yourself as you're getting acquainted with residency and it's many moving parts - it will have flow sooner than you think."	Psychiatry



What advice and reflections can you share on the shift in responsibilities from medical school to residency?

"R1 was mostly off-service, so it was honestly not unlike fourth year med school except now you don't have to have orders co-signed."	Anesthesiology
"You have to judge your own limitations. You won't always have someone looking over your shoulder; if you need something double-checked, you might need to ask for it. MD stands for Makes Decisions. Early in medical education, most of what you learn is data acquisition (the history and physical). Then the focus expands to data analysis (the differential). In residency, the focus broadens to encompass decision making (the treatment plan)."	Family Medicine
"A bit overwhelming! I am constantly realizing how much I still have to learn, which is definitely humbling. Still it is really nice to have your own patients who you are responsible for - this is what we spent the last 4 years working for!"	Family Medicine
"Fairly comparable at the start as they eased me in slowly. Community FM is awesome!!"	Family Medicine



"The expectations are higher, but you always have support. Always call on someone to help you, that's why you are in residency to have support in your learning before you have to make the final call as staff."	General Surgery
"Stressful at first, but you quickly learn there are many people senior to you to ask for help and advice."	Internal Medicine
"Challenging. Doing all of the little extra things like actually ordering medications and dictating notes and discharge summaries eats into personal time making balance difficult."	Internal Medicine
"Less oversight in what you are doing from staff or other residents- you need to know when to ask for help and know your limits. More ward calls for both simple and complicated problems. Supervision of medical students and off-service residents. Expected to do more tasks in less time."	Obstetrics and Gynaecology
"Dramatically more responsibility, expected to figure it out and get things done. Significantly less oversight. "	Orthopedic Surgery
"Pediatrics has a very reasonable graded responsibility. We have excellent supervision and always have a senior to bounce ideas off of."	Pediatrics



"Staff and senior residents have been very supportive and seem quite aware we are just starting as residents. The expectations for competency, manageable work-load, and independence seem set accordingly."	Psychiatry
"There is certainly a big jump, and you will often question your judgement. Be confident in what you do know, be mindful of your limitations, and ask for help when needed."	Psychiatry



Tips for being on call:		
"It can be scary but you are never alone. When getting handover, try to focus on the "big picture" and "things to watch out for overnight." This avoids cognitive overload and is actually a useful skill when managing a list of patients not your own."	Anesthesiology	
"Set boundaries on your hours while also respecting the time of your attending (if you're scheduled to be done at midnight then let your attending know, but don't leave work half finished if you can help it)."	Family Medicine	
"Keep open communication with your seniors, get an understanding of their expectations very early."	Family Medicine	
"Bring lots of snacks! Don't hesitate to call your senior if you are uncertain or worried about something. They expect this when you are new and it shows that you know your limits and are being safe. Don't try to be super hardcore - if you have a chance to sleep, take it!"	Family Medicine	
"You always have back up! Ask for help if you need it. The MD on Call app is a great resource, particularly in the beginning."	Family Medicine	
"Create a template document where you can record info about every page/consult that comes in patient name, MRN, consulting service, clinical question. Use this to stay organized. Accept that you will fall behind and that this is healthy and normal."	General Surgery	



"If you don't feel comfortable doing something for fear of harming a patient, don't do it. Ask for help. Even if the staff says something is easy and should not be a problem. Just assume that everything new you haven't done before is hard. If it turns out that it's not that hard after all, the staff will laugh at you for being so scared, you'll laugh at yourself out of relief, and you'll build some confidence."

"Have a good way of tracking your pages. I keep one page as consults that I have been called about with their names, what's going on with them, and where they are, and another page for all other pages from the floor about admitted patients. I cross each one off when I finish dealing with it so that I can figure out what I need to do next."

"Try to call back ASAP regarding a page even if you know you don't have time to deal with it immediately. You never know, it could be something super urgent." "Questions to ask emerg doc when you're asked about a consult before taking it: (1) is the patient vitally stable, (2) have appropriate investigations [imaging and bloodwork] been done, and (3) what is your question, and what do you think our service can do for the patient. The third question will always stump them if it's a bad consult.

them if it's a bad consult.

"Have a few go-to references. Have a basic plan for when you get called about common things" **General Surgery**

Internal Medicine



Internal Medicine "Don't expect to get any sleep. Don't plan anything on post-call days other than to sleep." "Take care of yourself- have healthy food Obstetrics and Gynaecology (and enough of it!), a granola bar in the pocket, clean socks to start your shift, set out expectations at the beginning of the shift, anticipate night concerns with day team and discuss contingency plan, ask senior residents or staff for help (especially while you are new, as it gets more embarrassing to ask "stupid" questions as you become more senior or progress throughout the year). Review bread and butter ward concerns or consults before your shift as well as some emergency issues that you will have to know how to respond to in a timely manner." "Call for help, find a few good resources that **Pediatrics** you know you can reference on the fly on your phone. PROTECT your post call days for rest and recovery, don't plan too much for your post call day! It's not a day off." "Don't be afraid to ask for help. Nights can **Pediatrics** be difficult, mentally prepare for a hard night of no sleep and then if you do sleep it's a nice bonus."



"Have a pocketbook/app; Have phone numbers and don't be afraid to call them for help." Psychiatry

"Bring food and water! If you have time, wash your face and brush your teeth at some point to help you wake up and still feel human at 4am. Don't hesitate to ask for help of your senior - there is always someone senior available for you to turn to. Keep a checklist of logistical things that must be done to either admit, consult, or discharge a patient. It's tough to spontaneously recall all the steps to admitting a patient, for example, if you're new to the hospital, you might feel overwhelmed, and exhausted! That's ok, take a breath, and just stay organized. Develop a systematic method that works for you to keep track of consults, patients seen, and what needs to be handed over in the morning. Practice the SBAR handover approach so you are clear in your (sleepy) handover."

Psychiatry



Tips for studying during residency:

"Identify a good textbook recommended by your seniors and use that one, and make a study plan based on topics. Don't focus on "studying for the exam" until you get into your senior years, but just to learn. As you get closer to senior years, then ramp up in your use of different textbooks and sources in preparation for the exam."	Anesthesiology
"Try to pick one topic per day during the week and read around it for 15-20 minutes in the evening. Then take the weekends off (for your wellness)!"	Family Medicine
"Don't get overwhelmed with studying, just try to read around cases you saw that day."	Family Medicine
"Try to read around the cases you have, and where possible, read around expected patient visits so you feel prepared."	Family Medicine
"Study a little bit every day, at least one hour per day. Read around your cases that you see every day. Even if you think that you know the case, because there are more in depth textbooks that are geared at specialists, which you're to start reading now. No more Toronto Notes. That's for medical students. Read the textbooks that your seniors read."	General Surgery



-	for your half days and prepare dvance the best you can."	General Surgery
"Try to establ study right fro	ish a good routine of daily om the start."	Internal Medicine
notes of pear to read up on	go, have a system to jot down ls you learn or things you need , small consistent study ughout the week."	Obstetrics and Gynaecology
knowledge by will solidify th about. A tota time even if y	you can, you won't just absorb y osmosis in the hospital, you ings you have already read I hip is very confusing the first ou do study. Very hard to follow othing going into it."	Orthopedic Surgery
_	tem for organization - many of Il happen based on the cases ,	Pediatrics
	each day. Read one scientific reek. It's often not feasible to ook."	Pediatrics
interesting ca memory. Get residents too. way for most	n in small pieces. Read around ses to help pin it in your advice from your upper year. You can buy Q banks along the royal college exams to help what is most important."	Psychiatry



General advice:	
"Try to learn and be good for the patients' sake rather than trying to impress."	Anesthesiology
"Your co-residents are so important, support each other whenever you can. Don't stress about it, there are lots of people invested in your well-being and success so don't hesitate to reach out to them whenever you need."	Family Medicine
"Remember to stay in contact with your non-medicine supports! Sometimes it is helpful to be able to talk to someone about something completely unrelated to your work stresses."	Family Medicine
"Speaking for my own residency, there is lots of support, and there are excellent learning opportunities. If you want more experience in something, just ask."	Family Medicine
"Be nice to everyone! This is a five-year job interview and people notice everything you do, you might think they don't but staff have eyes everywhere."	General Surgery
"Get life stuff done ASAP before starting (e.g. changing driver's license, insurance, getting furniture). You will not have energy for this after."	General Surgery



"Stop thinking like a medical student. Start thinking like a MD, because you are one now. You should act and think like the buck will stop with you, and that if you don't deal with something yourself, it will go unnoticed and patient harm will occur (even if your seniors and staff cover for you, because you will inevitably make mistakes). You need to do a procedure? Make sure that you have everything that you need. Make mental plan A, B, and C if the procedure goes sideways so you'll be prepared. Be prepared for the idea that if you don't order something, or ask about something, no one else will"	General Surgery
"If the nurse calls, always go see the patient - and then document. If you didn't document, it didn't happen." "Try to be a good co-resident. If you're twiddling your thumbs at any point during the day and none of your co-residents are, something's wrong. Ask them if they need any help."	General Surgery
"Make sure to look after yourself. Actually schedule exercise and learn some quick healthy meals you can make easily; but be kind and forgiving of yourself when you do neither."	Internal Medicine
"Get compression socks. Book vacations in advance throughout the year so you always have something to look forward to. Take advantage of having supervision- try seeing the difficult or challenging things as much as you can because if you don't see this in residency, it's going to be challenging when you're a new staff that doesn't have enough experience."	Obstetrics and Gynecology



"If you are someone who really needs a lot of sleep, you need to get serious about managing that somehow, because you will need to function without sleep. Coffee is your friend. Water is your friend (with electrolytes, I like nuun!). You will be shocked by how much better you feel if you stay hydrated. Every patient is someone's child/parent/grandparent, so treat them the way you'd want your own family treated."	Orthopedic Surgery
"Residency is long - defend your time off so you can recover and maintain your energy/mental health/exercise. Burnout is real and you will face it in different extremes, so have some strategies/supports for recovery when you need it most!"	Pediatrics
"There isn't a "right" way to go about residency; just strive for balance and adjust to situations so they work well enough for you"	Psychiatry
"Know you are not alone if you are struggling or overwhelmed and do not let anyone else tell you otherwise!"	Psychiatry