# PEDAGOGICAL INTERACTION

## between supervising physicians and resident doctors in Quebec

Comprehensive comparative analysis for resident doctors subject to the CBD pedagogical approach and for those not under CBD

AUGUST — 23

FÉDÉRATION DES MÉDECINS RÉSIDENTS DU QUÉBEC

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# INTRODUCTION

**The fact that doctors in residency deliver patient care and take on growing responsibilities throughout their postgraduate education is recognized as an excellent training model that prepares physicians for the realities of their profession. In this context, the further development of new physicians' medical practice is largely built around the nature and quality of the pedagogical and professional relationships that develop between supervising physicians and resident doctors. This interaction can have a significant impact on the pedagogical development of physicians in postgraduate education, and most such interaction generally leads to an assessment that dictates whether or not the doctor progresses toward professional autonomy.**

But the nature of these relationships between supervising physicians and residents can vary greatly. Some have a pedagogical approach focussing on direct and indirect supervision and critical appraisal of resident doctors over time, while others tend instead to observe, guide, and coach residents in their development.

To gain a clearer understanding of this phenomenon, the *Fédération des médecins résidents du Québec* (FMRQ) polled its members, to learn more about the nature and frequency of this day-to-day pedagogical interaction. The study also made it possible to compare the findings of the survey for three resident doctor subgroups: those subject to the CBD approach, being gradually implemented in programs since 2017; those still in programs based on the traditional pedagogical approach focussing on mentoring within a set time frame; and resident physicians registered in family medicine in Quebec, a program that has long since adopted a blend of competency-based approach and traditional learning, through the Triple C method.

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# METHODOLOGY

**In this report, we present highlights from the survey on pedagogical relations between physicians in residency in Quebec and their supervising physicians during the first five periods (first five months) of the 2021-2022 academic year. This poll was carried out December 3–19, 2021 on 3,589 resident doctors, 770 of whom responded to the survey, for a 21.5% response rate with a margin of error of 3%.**

## PEDAGOGICAL INTERACTION IN QUEBEC

Survey on observations, feedback, coaching, and assessments by supervising physicians

**3,589**
Members invited

**770**
Respondents representing the FMRQ population

**21.5%**
Response rate

**3%**
Margin of error

*Poll conducted December 3–19, 2021*

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Some characteristics of

# PEDAGOGICAL RELATIONSHIPS

as perceived
by resident doctors

**From the data gathered through the survey on pedagogical interaction, we see that 58.5% of Quebec resident doctors said they practically always work in the presence of a supervising physician[1] during a regular rotation week. This is quite a positive figure, and the following data tend to show that the frequency of relations strongly influences the perception of the quality of those relations.**

## 2.1 NATURE AND QUALITY OF PEDAGOGICAL INTERACTION

How is the nature of the pedagogical relationship with teaching physicians described by resident doctors? We note that 90.8% generally have the impression of developing a relationship of trust with most teaching physicians throughout the rotations, and 87.3% said they had been directly or indirectly observed whenever the situation lent itself to observation, in the performance of one or more of their tasks associated with their specialty or during pedagogical activities. Finally, 86.4% said the assessments received from teaching supervising physicians since the beginning of the academic year were constructive and contributed to their development toward autonomous practice.

We also observed that 22.2% of resident doctors generally did not have the opportunity, for each rotation, to discuss with the supervising physicians the pedagogical goals to be achieved in connection with their rotation; 23.3% instead had the impression that the supervising physicians are there to observe them and assess them in their learning and not to guide and coach them. Moreover, 22.7% generally did not receive constructive feedback suggesting tangible improvements or means for enhancing their practice, and 21.4% did not receive feedback from supervising physicians when the situation lent itself to that, during the first five months of the 2021-2022 academic year.

The results thus show that a large proportion of resident doctors have a somewhat positive view of their general pedagogical relationships with supervising physicians, those relationships appear to be based on trust, and assessments received seem positive. That is very good news.

But, as we will see a little later on, these results conceal some less positive realities for a number of resident doctors, and the fact remains that there is still room for improvement in our training sites as to the quality of teaching, since the overall positive results nevertheless show that 20–25% of all resident physicians are not in what could be described as an optimum situation in terms of pedagogical interaction with supervising physicians. Furthermore, the very existence of pedagogical relationships all too often falls on resident doctors' shoulders, since 37.1% say they have generally had to "chase after" supervising physicians to have them observe, teach, or assess them.

[1] Survey questions used vocabulary more familiar to resident doctors, employing the term "staff physicians"—commonly used in training sites—to designate supervising physicians.

## 2.2 FREQUENCY OF PEDAGOGICAL INTERACTION TO BE INCREASED

The quality of pedagogical interaction is obviously a determining factor in ensuring resident doctors' academic progression, but it is not the sole criterion to be taken into account. So we pushed our study farther by gathering our members' perceptions concerning the frequency of such interaction. Unfortunately, the results are less positive in that regard. In fact, only 35.1% of respondents said they regularly received constructive feedback throughout their rotations. Also, 40% of the group polled received documented results of observations, written assessments, and feedback on those assessments only at the end of rotations, or after their rotations were completed. Finally, 10.4% had no opportunity to discuss a written assessment transmitted by any of their supervising physicians between July and December 2021. That finding is worrisome, to say the least. Does that situation stem from the changes made in the assessment mode associated with Competence by Design (CBD)? The results by subgroup that we shall be looking at later in this study could suggest that, particularly since a majority of physicians in residency in specialties other than family medicine are now subject to the CBD pedagogical method.

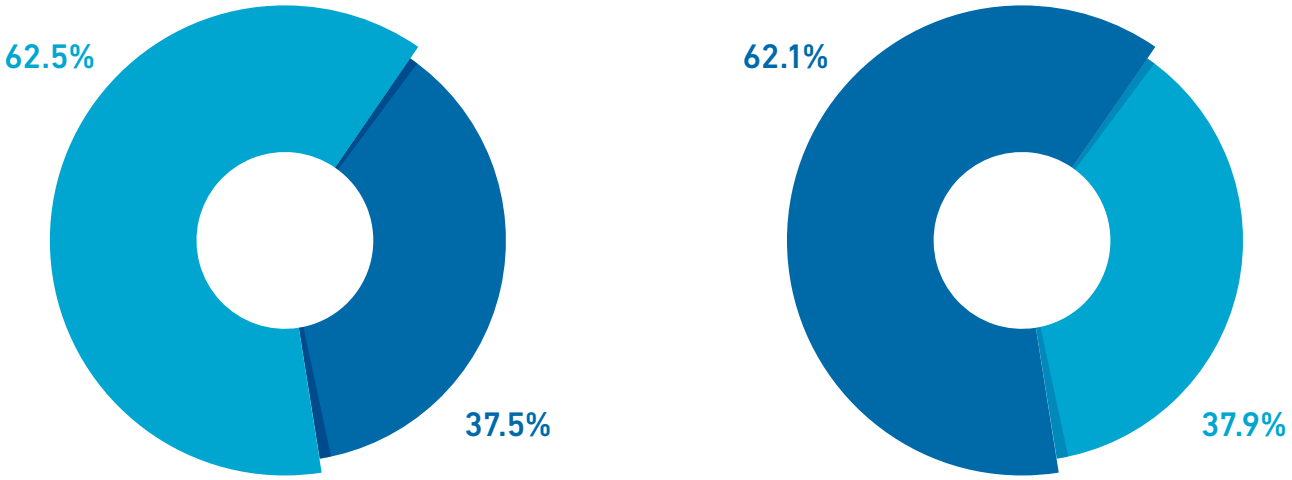
## 2.3 SUPERVISION AND CRITICAL ASSESSMENT VS LEARNING AND COACHING

In this survey, we asked resident doctors to choose which of two statements better represented their experience since the start of the current academic year. These statements were intended to be representative of two visions of the pedagogical approach in medicine, one focussing on supervision and critical assessment, the other on learning through coaching.

Faced with this choice, some two-thirds of resident doctors said the supervising physicians shared their expertise with them by coaching and supervising them, while one third felt the supervising physicians essentially supervised and assessed them. Nevertheless, close to two-thirds of resident physicians were of the view that their assessments were used more to measure their learning than for the purpose of the learning itself.

### GENERAL PERCEPTION OF PEDAGOGICAL RELATIONSHIPS

**Please select which of the following two statements better represents your experience since the start of the current academic year:**




- Since the start of the current academic year, the supervising physicians have only supervised me and assessed me in the acquisition of my competencies.
- Since the start of the current academic year, the supervising physicians have shared their expertise with me by coaching me and supervising me in the acquisition of my competencies.
- Your assessments were used to measure your learning (summative assessment)
- Your assessments were used for learning purposes (formative assessment)

**The first finding from this study is that Quebec resident doctors rate rather positively the nature, frequency, and usefulness of their pedagogical relationships with the supervising physicians alongside whom they work regularly.**

Moreover, when we cross-reference the data, we are not surprised to find that the frequency and quantity of observations, feedback, and assessments are directly linked to how regularly the residents work with supervising physicians.[2]

But this generally positive profile varies significantly by resident doctor subgroup divided by the pedagogical method associated with their training path. When we analyse the data by comparing resident physicians according to the three main pedagogical approaches used in training sites (i.e., family medicine residents subject to the Triple C competency-based approach, and residents in other specialties depending on whether they are subject to CBD or the traditional approach), we are led to different general observations concerning the overall results. That analysis is presented in the following section.

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# PEDAGOGICAL INTERACTION

by resident doctor subgroup

**In view of the relatively positive overall findings on the quality of the pedagogical relationships between members and their supervising physicians, we wondered whether the survey findings would be similar depending on the pedagogical approach officially used by supervising physicians according to the training program. So we dug a little farther and decided to study that hypothesis by grouping the data together in three distinct groups of respondents, namely, family medicine residents, members subject to CBD, and members neither in FM nor under CBD, i.e., members subject to the traditional approach that has been in effect for decades. Note that each of the three subgroups comprises a similar number of resident doctors.**

## Different learning methods

We would point out that the traditional approach narrowly qualified in some quarters—including the Royal College of Physicians and Surgeons of Canada (RCPSC)—as "time-based," is a teaching method that does not involve simply letting time go by and do its work. This method is based on acquiring knowledge, and learning techniques and competencies over time through the actual practice of medicine, but in a supervised manner and with time divisions corresponding to rotations, each of which is subject to a summative or formative assessment. This method remains the glue that keeps residency together for all our members, in both family medicine and CBD programs, since, as we shall see below, "competency-based" approaches do not have any real scope all-embracing enough to meet all the needs of comprehensive postgraduate training.

Implemented in some specialties since 2017-2018, Competence by Design (CBD) is an approach built around the development of competencies through the completion of a number of "entrustable" professional activities (EPAs) at specific stages in residency. In addition to CBD having been developed from the top down, the Royal College wanted to replace time-based education with training that could vary in line with each learner's individual path beyond the concepts of cohorts and prescribed durations of training. The RCPSC promised an increase in the quality of pedagogical interaction between supervising physicians and resident doctors, in particular through more coaching.

The main difference for members subject to CBD is that this approach supposes a systematization of the competencies to be acquired by resident doctors for each specialty. Contrary to Triple C, CBD continues to be implemented from the top down, by the RCPSC, in all specialties other than family medicine.

[2] We wondered whether the pandemic (COVID-19 and its variants) might have a negative impact on the findings of the survey conducted in early December 2021—a somewhat less intense period of the pandemic that began in March 2020—but the different results by subgroup suggest that is not the case, as they differ by subgroup whereas there is no reason to believe the pandemic affected one broad subset of physicians more strongly than another subgroup.

## Triple C in Family Medicine

While many may possibly not realize, family medicine members have all been subject since 2011 to a complementary pedagogical approach known as Triple C, built around the development of competencies specific to family medicine. This approach (Comprehensive care, Continuity of care and education, Centred in family medicine) was developed by and in training sites, in conjunction with the College of Family Physicians of Canada (CFPC).

## CBD in specialties other than family medicine

Many aspects of residency—for instance, its duration counted in terms of academic years, and time devoted to studying and preparing for certification exams—are far removed from the logic of competency-based approaches. Indeed, we will see in the data presented below that it is a very good thing the promoters of CBD did not manage to do away with the notion of time-based training in residency, as we would be in a rather drastic situation in terms of quality of training if CBD had become the cornerstone of the organization of residency. Also, it comes as no surprise to note that this learning approach built on exposure over time to the various aspects of the profession is still largely used in most other professions.

### Surprising findings

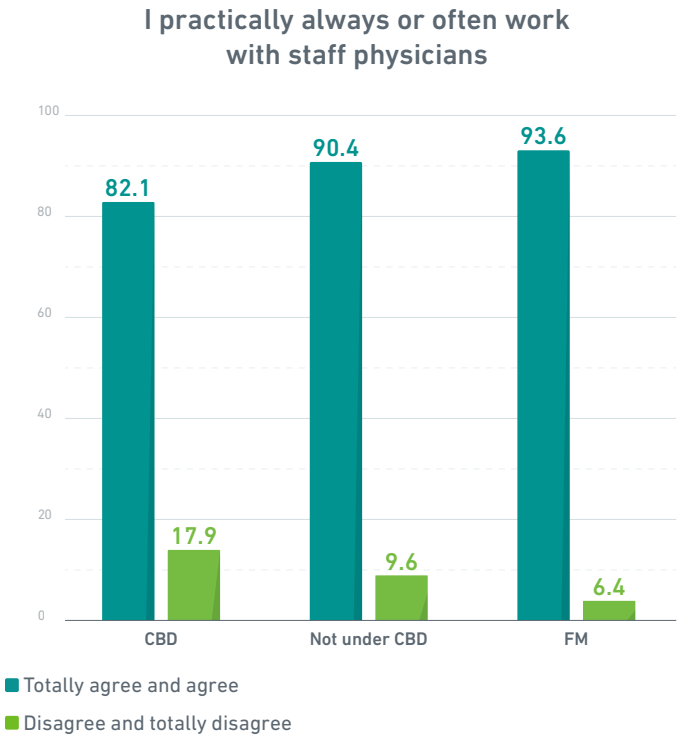
Before performing this analysis by subgroup, we expected to find that there was more coaching for our members under CBD, in line with the method's promises in that regard, and to have to wonder whether this benefit offset the negative aspects relating to the stress for members of chasing after EPAs, but we would never have expected results showing that CBD generates less coaching than the other pedagogical methods.

That was, however, the main surprise in this analysis, with results for the subgroup subject to CBD being less positive overall. But one of the RCPSC's main goals in creating CBD and building on a supposedly competency-based learning approach was to enhance the quality of teaching and assessment.

## 3.1 LOWER FREQUENCY OF PEDAGOGICAL INTERACTION FOR MEMBERS UNDER CBD

According to the results by subgroup, 82.1% of resident doctors under CBD "always or often" work with supervising physicians, whereas for those in specialties not under CBD and resident doctors in family medicine, the figures are 90.4% and 93.6%, respectively.

### FREQUENCY OF INTERACTION WITH SUPERVISING PHYSICIANS

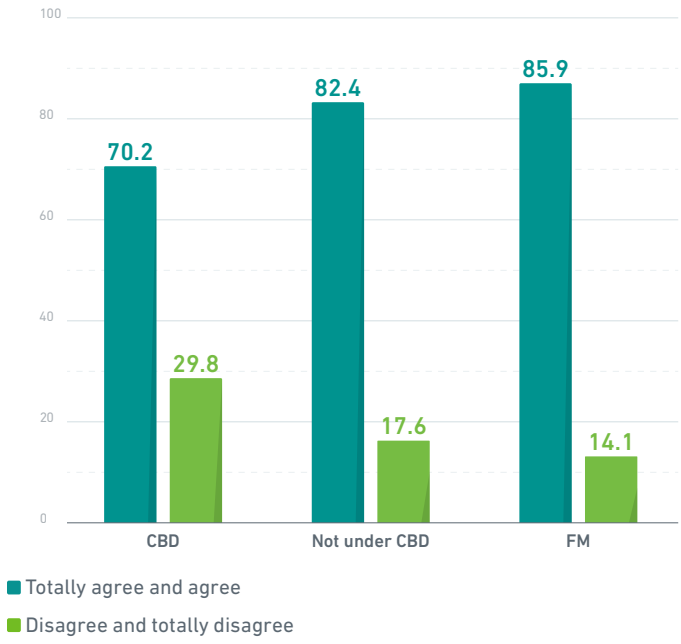


## 3.2 FEWER DISCUSSIONS CONCERNING PEDAGOGICAL OBJECTIVES OF ROTATIONS FOR MEMBERS UNDER CBD

Also, a proportionally smaller number of resident doctors under CBD (between 12 and 15 percentage points less than the other two groups) agreed that they had generally had the opportunity, for each rotation, to talk with their supervising physicians and discuss with them the pedagogical objectives to be attained in connection with their rotations. The difference between the family medicine group and the group of other specialties not under CBD is non-significant. Here, it is possible that the existence of lists of EPAs to be carried out has the effect of discouraging discussions with supervising physicians concerning the objectives to be attained in a rotation.

### DISCUSSIONS ON EDUCATIONAL GOALS

**Since the start of the academic year, I've generally had the opportunity, for each rotation, to talk with my staff physicians and discuss with them the pedagogical objectives to be attained in connection with the rotation.**

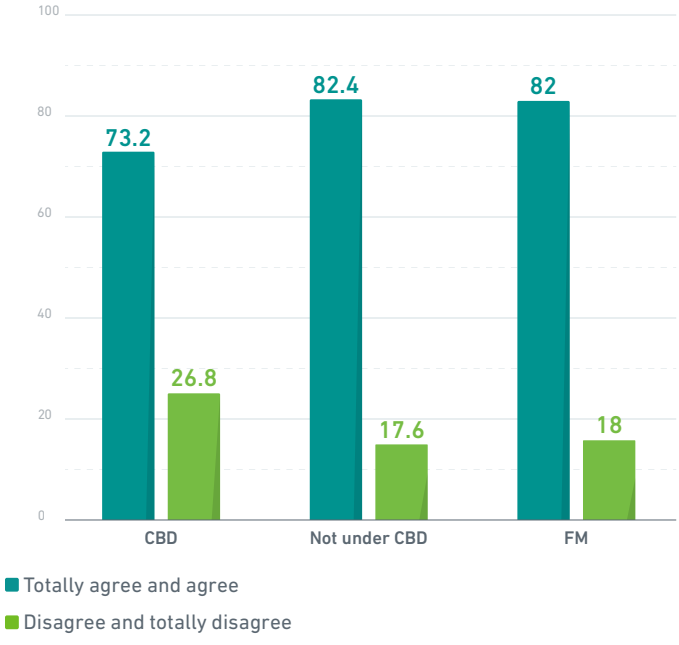



## 3.3 LESS COACHING FOR MEMBERS UNDER CBD

For coaching more formally, a markedly smaller proportion of resident doctors assessed under CBD compared with the others agreed or completely agreed that they had the impression their main supervising physicians were there to guide or coach them, and not just to observe and assess them in their learning. The result here between the family medicine group and the group of other specialties not under CBD is practically identical, with slightly stronger agreement from the FM group (more who "completely agree").

### SUPERVISION AND COACHING FROM STAFF PHYSICIANS

**Since the start of the academic year, I've generally had the impression that my main staff physicians were there to guide and coach me, and not just to observe me and assess my training.**

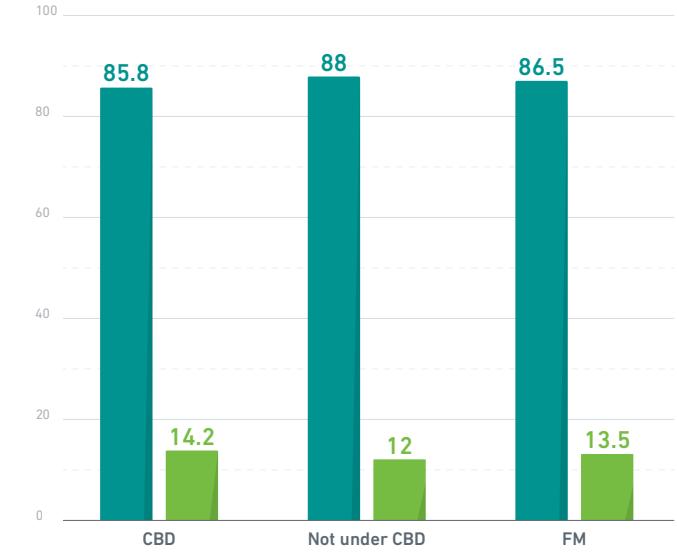


## 3.4 QUALITATIVELY CONSTRUCTIVE ASSESSMENTS FOR ALL THREE GROUPS

We observed no significant variation among the three subgroups concerning the constructive nature of assessments and their contribution to development toward professional autonomy. It was noted that 85.8% of resident doctors under CBD completely agreed and agreed with that statement, compared with 88% of those not under CBD and 86.5% of family medicine residents.

### ASSESSMENTS FROM STAFF PHYSICIANS

**The assessments I've had from my staff physicians since the start of the academic year have been constructive and contributed to my development toward autonomous practice.**

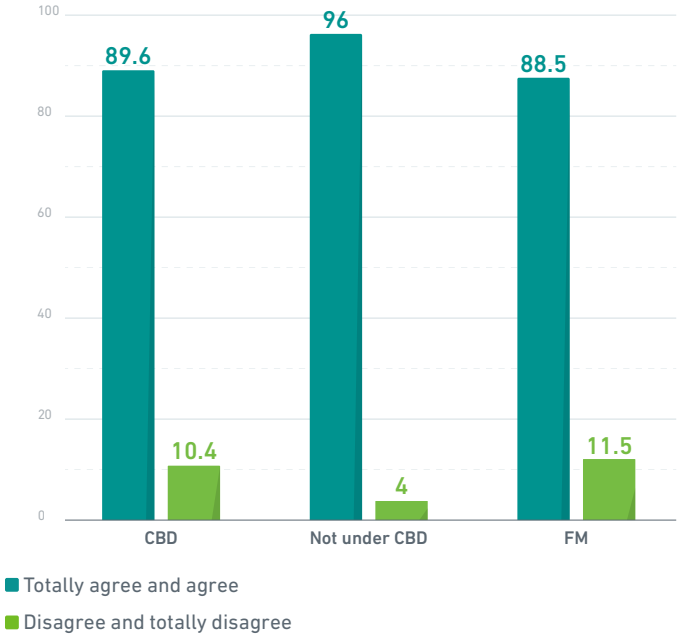



## 3.5 IS THE IMPORTANT RELATIONSHIP OF TRUST BETWEEN LEARNERS AND SUPERVISING PHYSICIANS NEGATIVELY AFFECTED BY COMPETENCY-BASED METHODS?

Despite the official objectives of competency-based learning approaches of building on coaching relations, surprisingly, doctors under CBD, but also those in family medicine (to a lesser extent), were less likely (88.5% and 89.6%) than the group outside CBD (96%) to have had the impression of developing a relationship of trust with most of their staff physicians throughout their rotations.

### RELATIONSHIP OF TRUST

**Since the start of the academic year, I've generally had the opportunity to develop a relationship of trust.**

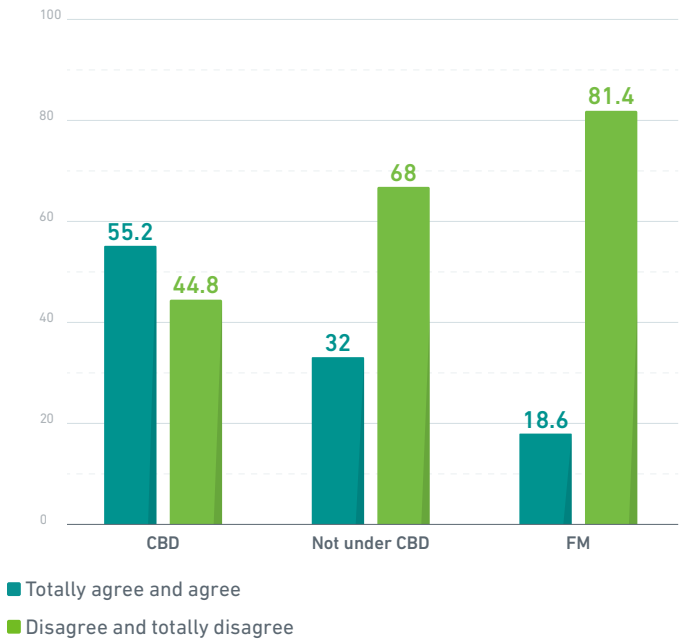


## 3.6 HAVING TO CHASE AFTER THEIR ASSESSMENTS IS A BIGGER PROBLEM FOR MEMBERS UNDER CBD

One of the major differences observed between resident doctors under CBD and the others concerns the need to chase after observations, teaching, and assessments. In that regard, proportionally far more resident physicians assessed under CBD (55.3% vs. 32% not under CBD and 18.6% in FM) said they generally had to run after their supervising physicians to have them observe, teach, or assess them. It comes as no surprise to learn that this is a perfect match with the ongoing data we have gathered in our surveys on implementation of CBD since 2018.

### AVAILABLITY OF STAFF PHYSICIANS

**I've generally had to run after my staff physicians to have them observe, teach, or assess me.**

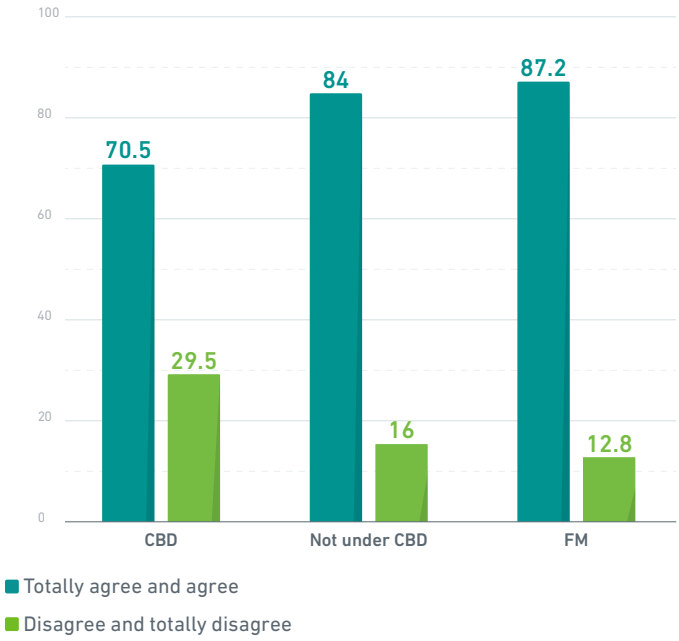



## 3.7 LESS INVOLVEMENT FROM SUPERVISING PHYSICIANS ENCOUNTERED ON A DAY-TO-DAY BASIS IN ASSESSING PROGRESSION OF MEMBERS UNDER CBD

Far fewer resident doctors assessed under CBD (70.4%) than those not under CBD (84%) or in family medicine (87.2%) agreed that those deciding on their progression during their residency were their supervising physicians who assess them on a day-to-day basis. The particularity of the existence of competency committees under CBD likely explains the findings here, but this nevertheless raises the possibility of a disconnect (and an impact on the relationship of trust, as seen previously) between resident doctors and supervising physicians working daily alongside one another. Further analysis of this would be helpful.

### PEOPLE DECIDING ON MY PROGRESSION

**Ultimately, the people who decide on my progression during my residency are the staff physicians who assess me on a day-to-day basis.**



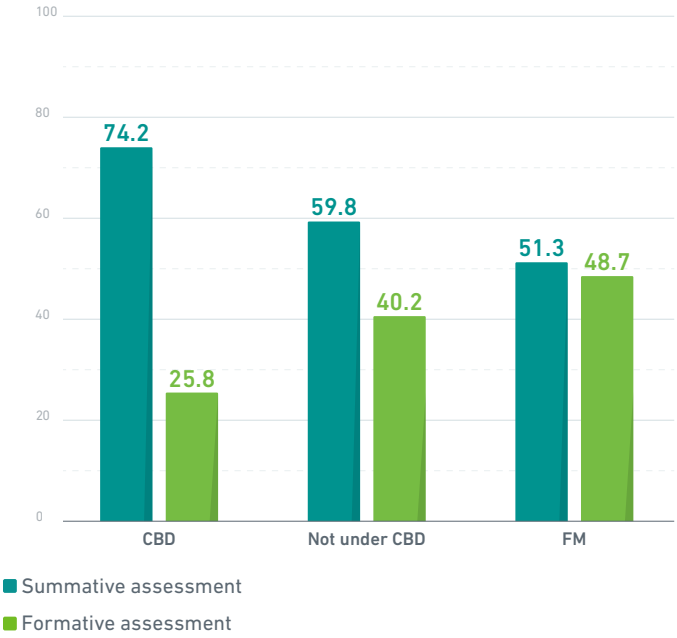
## 3.8 ASSESSMENTS APPARENTLY USED ONLY TO ASSESS RATHER THAN TEACH: WORSE FOR MEMBERS UNDER CBD

In the results where respondents had to choose which of two statements more closely represented their pedagogical experience—namely, whether their assessments were used essentially to measure their learning or for the purposes of learning itself—we observe statistically significant differences, where the family medicine subgroup is the first group to consider that their assessments are used for the purposes of learning itself, followed by the non-CBD subgroup, but with a clear demarcation for the CBD subgroup, where only 25.8% of resident doctors considered their assessments to be used for the purposes of learning itself (formative assessment), vs. 48.7% in FM and 40.2% for the subgroup outside CBD.

These findings may relate to the results observed above (3.3), and the following findings (3.9) concerning the coaching relationship. Where pedagogical relationships are less coaching-based, it would not be surprising to observe that assessments are used more to evaluate learners' level rather than that they also represent opportunities for providing feedback and teaching, thus for making them learning opportunities.

### ASSESSMENTS

**Your assessments were used to measure your learning (summative assessment) or for learning purposes (formative assessment).**

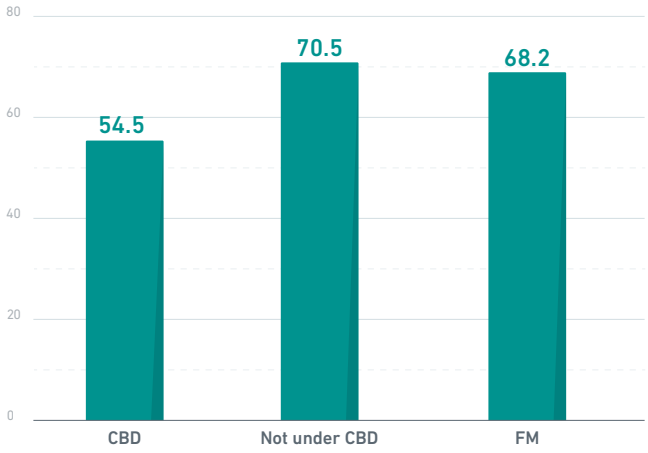



## 3.9 FAR LESS COACHING UNDER CBD: EXACTLY THE OPPOSITE OF WHAT WAS PROMISED FOR THE MODEL

Similarly, when we look at the results by subgroup for the other choice of which of two statements more closely represents their pedagogical experience—namely, whether their supervisors only supervised and assessed them or shared their expertise with them by coaching—we observe statistically significant differences where, this time, the subgroup outside CBD was the most positive (70.5% said they mostly experienced coaching), followed by the family medicine subgroup (68.2%), far removed from the CBD subgroup, where only 54.5% of resident doctors felt their supervising physicians shared their expertise through coaching, whereas 45.5% said they were only supervised and assessed—quite contrary to one of the main promises of CBD, that of building on coaching.

### COACHING AND MENTORING

**Since the start of the current academic year, the supervising physicians have shared their expertise with me by coaching and supervising me in the acquisition of my competencies.**



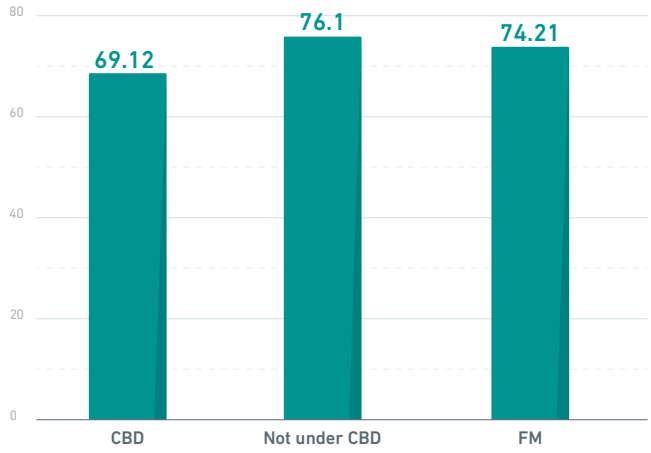

We seriously wonder what could explain these last results, particularly since they seem to run contrary to the "promises" of the CBD model, as conceived by the RCPSC. Would the CBD pedagogical approach have the effect of leaving the work of teaching in the lurch, of devaluing it, in building too much on an approach involving checklists of clinical tasks to be performed and mastered (the infamous EPAs), to the detriment of genuine coaching-based learning? That could unfortunately correspond to many observations previously made by the FMRQ in its earlier analyses of implementation of CBD.

## 3.10 PEDAGOGICAL INTERACTION LESS SATISFACTORY FOR MEMBERS UNDER CBD

In light of the previous findings, we were therefore not surprised to see that when we asked resident doctors to rate out of 100 the quality and helpfulness of their assessments on the one hand and their overall satisfaction concerning their pedagogical interaction on the other hand, the findings for the CBD subgroup were less positive. Resident doctors under CBD gave the quality and helpfulness of assessments a rating of 71.3 out of 100, compared with 76.61 and 76.48 from the subgroups not under CBD and in FM, respectively. The overall level of satisfaction concerning pedagogical interaction was given a rating of 76.10 by the subgroup outside CBD, and 74.21 by residents in family medicine, whereas the CBD subgroup posted a less positive result of 69.12 out of 100.

## GENERAL LEVEL OF SATISFACTION

**On a scale from 0 to 100, with 100 being the highest score, rate your overall level of satisfaction concerning the pedagogical interaction between you and your staff physicians since the start of the current year.**

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# GENERAL OBSERVATIONS

## Pedagogical interaction is generally good, except under CBD

Generally speaking, pedagogical interaction between supervising physicians and resident doctors is doing quite well, according to the survey data, but to a lesser extent for those not under CBD. On the other hand, the gradual introduction of CBD since 2017 seems not only not to have been beneficial in terms of pedagogical interaction, in increasing observations, feedback, assessments, and coaching, as the promoters of CBD promised, but, on the contrary, this controversial method appears to have had a negative impact on the pedagogical relationship between resident doctors and supervising physicians.

## The problems with the CBD method appear to be intrinsic to its design, beyond any possible issues with competency-based pedagogical methods

Building on a competency-based approach does not appear in itself to hamper good pedagogical interaction between resident doctors and supervising physicians, since family medicine has already espoused such an approach, and the findings from our members in that subgroup are considerably more positive than for those under CBD.

While more work remains to be done to gain a clear understanding of the impact of the competency-based approach on new doctors' learning of medical practice, our findings tend to show that the model proposed by the Royal College likely has built-in defects that lead it directly counter to its objectives.

## Foundations of CBD: review needed

Since the introduction of the pedagogical revolution represented by the gradual implementation of the "CBD" method in residency programs across Canada concerned with medical pedagogy from 2017 onward, no medical education body in Canada has put in place a rigorous system for monitoring the impact of this major change. The RCPSC itself did not carry out what should have been the basis of a serious, rigorous approach, merely conducting very short yearly surveys on a statistically non-significant number of supervising physicians who had been initiated into the method in what the Royal College accurately called a "Pulse check"—quick polls from which biased observations were even sometimes drawn, to avoid acknowledging problems that were nevertheless rapidly noted in training sites from the first years of CBD implementation.

The Royal College behaved in this matter as if the promoters of the model were well aware of the problems encountered but were more concerned, not to say obsessed, with making implementation of its model irreversible, by speeding up the pace of its implementation and constantly arguing that the problems observed were nothing more than the effects of a normal period of change. Even sadder, though, is the fact that no other body independent of the RCPSC—including the medical faculties themselves, despite their being grouped together on a Canada-wide basis in the AFMC—took the trouble to monitor the implementation of a major pedagogical reform. AFMC senior management even refused on more than one occasion to take up the FMRQ's formal proposal to put in place a consultation, independent from RCPSC, of Canadian supervising physicians with regard to CBD. Worse still, neither the Federation of Medical Regulatory Authorities of Canada (FMRAC) nor the *Collège des médecins du Québec* (CMQ)—despite being bodies legally responsible for ensuring the quality of medical acts—were concerned with questioning the CBD model prior to its implementation, nor with demanding rigorous monitoring of its impact on the quality of medical education during implementation.

Only after the first cohort of guinea pig resident doctors had completed their five years of residency under CBD—notwithstanding several FMRQ reports that sounded the alarm and, above all, despite the publication of a devastating report from independent researchers and a report in *Le Devoir* on its main conclusions in fall 2022—did our faculties in Quebec and the CMQ finally seemed to take a more serious interest in the question and pressure the Royal College to get to the point where, in December 2022 for the first time, it said it was prepared to review its pedagogical model.

At time of writing, the FMRQ was waiting to see whether the RCPSC genuinely intended to upgrade CBD, taking note of the problems intrinsic in the model and its negative impact on medical education.

While the FMRQ is proud to have defended its members' interests in this important matter by asserting their right to quality medical training, it is still quite inconceivable that this should have been necessary. But it remains fertile territory for teaching about sound governance—unfortunately, governance too often fails in the world of medical education, where there are clearly too many organizations involved, with the same doctors often intervening as they move from one organization to another, and where the most essential organizations—the medical faculties themselves—are increasingly sidelined.

**We have to have the courage to question, and the worst thing to do would be to keep on applying a remedy that is not only ineffective, but potentially harmful, from political interests.**

Most often for lack of financial and human resources, our faculties frequently find themselves at the mercy of the whims of Canada-wide bodies (RCPSC, CFMC, and MCC) that have no democratic legitimacy, or accountability toward public decision-makers in the health field or to the public. But these bodies have positioned themselves skilfully over the years, through subcontracting relationships agreed upon with the medical regulatory authorities, including the CMQ, which have willingly delegated powers in Quebec since the late 1990s, including the authority to administer highly lucrative certification exams that have to be passed in order to obtain a permit to practise.

But the leaders of the FMRQ believe that, as physicians and scientists, we have to have the courage to question, and the worst thing to do would be to keep on applying a remedy that is not only ineffective, but potentially harmful, from political interests, in order to salvage the reputation of a body behind the creation of that remedy or because implementation of the remedy took so much energy that the idea of possibly having to backtrack becomes unacceptable.

The good news is that there is no need whatsoever to backtrack. There are elements of CBD—including systematizing competencies to be acquired in detailed lists—that represent helpful progress, certainly such as to enhance the quality of medical education. The problem is rather the method put forward to ensure the acquisition of these competencies. That, in our view, is where the limitations of CBD were rapidly encountered. Which type of pedagogical relationships do we want in our training sites?

Do we want dehumanized, impersonal relationships where the learners are responsible for orienting their own training themselves, on the basis of lists of competencies to be acquired? Do we have to hope that the real cases their practice confronts them with will fit into the boxes on the forms to be filled out by supervising physicians, who would thus no longer have to teach per se, merely filling out EPA sheets that are then uploaded to an ePortfolio allowing other doctors on competence committees to decide on the progression of learners with whom they may never have been in contact? Or rather do we want genuine coaching organized around a learner-supervisor relationship where both parties work together to deliver care to the public on a daily basis and the supervisors regularly take the time to produce progress reports and provide feedback on the knowledge and competencies that have been involved in the delivery of patient care? In the latter case, that is what was already happening before the implementation of CBD, and indeed is still happening.

In this traditional pedagogical model, we report on each learner's pedagogical progression through the end-of-rotation assessment model divided into 28-day periods, based on observations made by supervising physicians who have worked alongside the learner, using a grid showing agreed-upon objective criteria that make up the assessment, with the possibility of adding qualitative remarks. This method that is still in place in our training sites has the advantage of providing regular monitoring and taking into account the concrete reality of learners' interaction in the context of their practice in residency. Are these assessments enhanced by being complemented by more formal "statements" of competences acquired, as CBD proposes? Without doubt, but provided this does not have the effect of doubling the red tape for learners and supervising physicians, as is sadly all too often the case with CBD.

But if a choice has to be made, time-based formative assessments have to predominate, because they are, in all likelihood, better fitted to allowing for the complexity of medical education, which is far more than just lists of competencies to be completed. Most fortunately, the two elements can coexist. But the potential for complementarity has to be acknowledged from the start.

**CBD was initially presented by its promoters as a sea change, with a rhetorical arsenal minimizing the existing model as being no more than "time-based education," presented as obsolete, whereas the reality of CBD's failures has had the effect of revealing even more clearly the usefulness of teaching based on human coaching relationships.**

Once this is established, it is the assessment tools that have to be adapted to incorporate elements for monitoring whether or not competencies deemed essential have been attained. Why, rather than having to fill out forms for each EPA, could training sites not perform the exercise, in the context of assessments for each rotation, of logging whether all the EPAs were completed or not. That would enable the competence committees to follow learners' progression with even more information and a view that is both more macroscopic and more rigorous, while ensuring the acquisition of more highly focussed competencies.

## It's time to build on evidence

New data on the scientific basis of CBD published on September 13, 2022 by Éditions de l'Apprentissage, written by four independent researchers (C. Boyer et al), echo the findings of our research. Released in English in March 2023, this ***Critical Analysis of A Pedagogical Paradigm Shift in Medical Residency in Quebec*** concluded that CBD was "not based on evidence from scientific research, in either general education or medical education."

Also, the FMRQ will soon publish the analysis of the individual interviews we conducted in 2022 with residents completing their residency in Otolaryngology/Head and Neck Surgery (ENT/HNS) and Anesthesiology from the 2017-2018 cohort, along with the polls carried out with resident doctors midway through their residency. These findings will be released in the next few months.

After over six years of evaluating the deployment of Competence by Design in our postgraduate education sites, and after seeing its sometimes disastrous impact in some settings, we feel it is essential today to turn toward measures for improving a situation that now affects nearly all our resident doctors.

**Let us keep the best of the traditional approach, and the real enhancements brought by CBD, forget the initial promise of modelling medical education on the acquisition of competences alone, and maintain the time-based framework that allows each resident some latitude within a time-space that has been considered necessary by experts for many years.**

If all health system stakeholders—medical faculties, colleges, and other bodies representing the upcoming generation of physicians—want to play their role in medical education fully at the postgraduate level in terms of teaching and assessment, we must stop hoping to see positive results arise over time as if by magic while continuing to suffer the consequences of CBD. Instead, we should be asking clear questions and collectively finding solutions to the real problems being experienced by both resident doctors and supervising physicians. We have to stop depending on the approaches dictated from above by the Canadian colleges and take back control over medical education in the training sites.

We believe that we, as physicians and scientists, have to have the courage to question any pedagogical approach. The worst thing to do would be to continue to apply a remedy that is not only ineffective, but is even potentially harmful, because it is prescribed by a respected accreditation body which has continued to prescribe it despite several uncontested unfavourable studies.

**We have to take back control over medical education in Quebec.**

At time of writing, the partners were (finally) starting an exercise to re-evaluate the CBD pedagogical method. The future will tell us whether the alarm bells resident doctors have been heard ringing since 2018 will lead to tangible improvements in their residency—and that should be the sole goal of any pedagogical reform of postgraduate medical education.