



College of  
Physicians  
& Surgeons  
of Alberta

Wayne, John  
Registration Number:  
005555

2019

# Practice Checkup

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MD snapshot

# 5 tips to get the most out of your report

## 1. Read the whole thing

Please take 10-15 minutes to review your whole report. In addition to your responses to the 2019 annual Renewal Information Form (RIF) questions, there is information in your **Practice Checkup** explaining what we know about why certain factors may act as risks or supports to individual physician practice performance. We also included some opportunities for self-reflection to contemplate when considering the factors.

## 2. Use the data to inform your practice

The **Practice Checkup** is an annual report and educational tool specifying factors that may potentially impact your performance. The Practice Checkup is intended to stimulate self-reflection and quality improvement when considering such factors. It is not intended as a judgment or indictment of your practice.

## 3. Let us know if there are errors

The information in the **Practice Checkup** comes from your responses to the annual RIF. If you notice something that does not make sense given your current practice, please let us know so that we can make the change. Contact CPSA's Research & Evaluation Unit at [REVU.Inquiries@cpsa.ab.ca](mailto:REVU.Inquiries@cpsa.ab.ca).

## 4. Claim CME credits

Review your **Practice Checkup** and claim uncertified Mainpro+ credits under the College of Family Physicians of Canada's (CFPC) "Assessment" category of credit. Additionally, a Linking Learning exercise can be completed to earn 5 Mainpro+ certified credits. Members of the Royal College of Physicians and Surgeons of Canada (RCPSC) may claim MOC Section 3 credits. (For additional details, see page 4 of this report or visit [www.cfpc.ca](http://www.cfpc.ca) or [www.royalcollege.ca](http://www.royalcollege.ca)).

## 5. Contact CPSA if you have questions or feedback

We love your feedback and use it to help inform future iterations of **Practice Checkup**. Please take five minutes to complete our short online survey: <https://www.surveymonkey.com/r/MXF39VX>. If you have questions, please contact CPSA's Research and Evaluation Unit at [REVU.Inquiries@cpsa.ab.ca](mailto:REVU.Inquiries@cpsa.ab.ca).

# Understanding your report

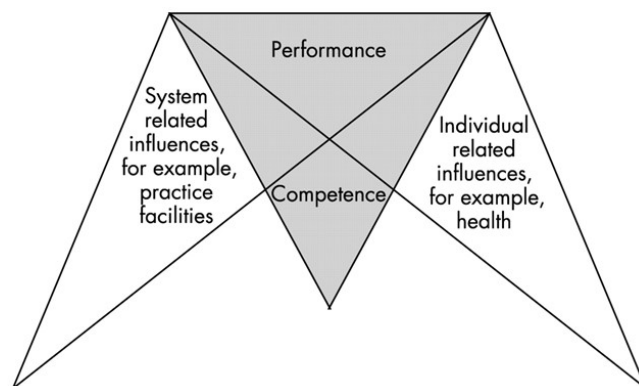
## Introduction

The **Practice Checkup** is an educational tool, produced to facilitate self-reflective quality improvement (QI) by providing an assessment of the current evidence regarding various risks and supports to physician performance. It is populated by your responses to the 2019 Renewal Information Form (RIF).

**Table 1.** Glossary of key terms

<b>Performance</b>	According to the Cambridge Model (Figure 1) [1], performance is the combined, interactive effect between a physician’s individual influences (e.g. health, relationships), system influences (e.g. guidelines, remuneration) and competence (e.g. training)
<b>Competence</b>	The knowledge and skills gained through medical and clinical training
<b>Factor</b>	Any influence that may affect performance as understood through the Cambridge Model [1]
<b>Protective Factor</b>	Any influence that may be associated with promoting or protecting strong performance
<b>Risk Factor</b>	Any influence that may be associated with poor or riskier performance

'Performance' is defined in accordance with the Cambridge Model [1], which is grounded in Miller’s framework for clinical assessment, competence, and performance [2]. Applying the Cambridge Model, the **Practice Checkup** identifies potential risk and protective factors that may impact a physician's performance. Physician performance can be measured in many ways. For example, the number of complaints, potentially harmful prescriptions of opioids and benzodiazepines (BDZs) and compliance with CPSA's Standards of Practice, or patient health outcomes.



**Figure 1.** The Cambridge Model [1] delineating the interactive effect between system influences, competence, and individual influences on overall performance.

CPSA is mandated to assess the performance of Alberta’s physicians according to the Health Professions Act. The **Practice Checkup** is just one component of CPSA's Continuing Competence programs intended to support your performance as a physician.

Most physicians in Alberta are performing safely and competently. At the same time, everyone benefits from participation in QI. We encourage you to use the information in this report to engage in a QI process by self-reflecting on your unique practice. Through engagement in critical self-reflection, you can increase your self-awareness of a situation [3] and possibly take measures to mitigate any associated risks while leveraging the protective factors specific to your performance.

The 2019 **Practice Checkup** highlights the current level of evidence regarding specific risk and protective factors related to performance in Alberta by triangulating peer-reviewed literature, multivariate statistical performance models produced by CPSA and years of experience from the Collège des Médecins du Québec (CMQ). The 2019 RIF data and other CPSA databases were used to create the models, which were constructed using a cohort of physicians active between January 1 and December 31, 2018.

## Practice Checkup

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The **Practice Checkup** is designed to outline factors specific to you and your medical practice. Based on the parameters of this report, factors can and likely do exist outside of the ones presented here. We welcome your suggestions on additional factors to include in future iterations of the report.

The factors in your report, both risk (-) and protective (+), will be listed in descending order from strongest evidence to those with the least available evidence, as indicated by the number of plus (+) and minus (-) symbols (e.g. +++ strongest evidence and + means least available evidence). See Table 2 for more details.

**Table 2.** Categorization of risk and protective factors based on level of evidence triangulated from the literature, CPSA data and CMQ data

Level	Definition
Recognized Risk [---]	There are many published peer-reviewed articles and papers, supplemented with CPSA and/or CMQ research findings, indicating that the factor is likely to pose a risk to physician performance
Probable Risk [--]	There may be some published literature about the risk in addition to CPSA and/or CMQ research findings, indicating that the factor may pose a probable risk to physician performance
Possible Risk [-]	There may only be a single peer-reviewed paper, or not yet published CPSA and/or CMQ research findings, or mixed findings in the literature, indicating that it is possible the factor could pose a risk to physician performance
Recognized Protective [+++]	There are many published peer-reviewed articles and papers, supplemented with CPSA and/or CMQ research findings, indicating that the factor is likely to have a probable protective influence on physician performance
Probable Protective [++]	There may be some published literature, in addition to CPSA and/or CMQ research findings, indicating that the factor may have a probable protective influence on physician performance
Possible Protective [ + ]	There may only be a single peer-reviewed paper or not-yet published CPSA and/or CMQ findings, or mixed results in the literature, indicating the factor could have a possible influence on physician performance

## Limitations

An association between a given factor and a proxy measure of performance does not imply a cause-and-effect relationship. The presence of certain risk factors does not equate to poor performance; in the same vein, having certain protective factors does not mean you are practicing without risk.

Mitigating risk does not necessitate a change in status for an indicated factor. Rather than ceasing a potentially risky aspect of your practice, take the opportunity to reflect on how that factor might influence your performance at an individual and/or systems level.

Some of the identified risk and protective factors are non-modifiable. The intent is to stimulate self-reflection on the intersectionality of these factors on your practice and within the culture of medicine. In these instances, we would encourage you to utilize the evidence presented and consider what might be affecting the identified associations.

Some of the data used to create the risk models was self-reported. Limitations related to self-reported data (e.g. imprecise measurement), in addition to potential confounders that remain unmeasured, could lead to the identification of an association where one does not exist or could fail to identify a true association. The rating scale presented above (Table 2) is intended to guide you through the weighing of evidence.

Lastly, the **Practice Checkup** is still in its infancy with the inaugural report developed in 2017. Therefore, we are continually conducting re-analyses and validation studies to ensure the information being provided is current and as accurate as possible.

## Claiming CME Credits

**MOC:** Reviewing your report qualifies for non-certified CME credits under the RCPSC’s “Assessment” category of credit. To claim these MOC Section 3, non-certified credits, go to [www.royalcollege.ca](http://www.royalcollege.ca) and login to your member account.

**Table 3. Steps to collect MOC section 3 non-certified credits**

1	Select section 3 “Assessment Activities”
2	Select “Practice Assessment” from the drop down menu that will appear after Step 1
3	Answer a number of questions regarding the activity (focus, length of time spent, self-reflection considerations, etc.)
4	Submit

**Mainpro+:** You can claim Mainpro+ credits in one of two ways: 1) Claim non-certified credits under the CFPC “Assessment” category of credit or 2) Complete a Linking Learning Assessment Exercise (Table 4) for 5 Mainpro+ certified credits. Members of the CFPC can claim these credits by going to [www.cfpc.ca](http://www.cfpc.ca) and logging in to your member account.

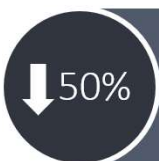
**Table 4. Example of a Linking Learning Assessment Exercise.**

**Select two to three factors for this exercise. For each factor, ask yourself the following:**

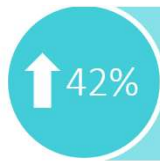
- 1 How might this factor impact or influence my practice?
- 2 Is this a modifiable risk or protective factor?
- 3 Can I do something to mitigate the potential impacts of this factor’s associated risk(s)? Or, is there a way I can enhance the potential positive benefits of this factor’s associated protection?

## Survey Feedback (2018)

In 2018, we asked for your feedback on the Practice Checkup. Over 1,200 physicians responded and provided over 1,300 comments. Here are some of the findings:



Fewer negative comments than the previous report



More positive comments than the previous report

**Table 5.** Changes to the 2019 **Practice Checkup** based on feedback.

Recommendations	Changes
<b>Clarify purpose of the report</b>	The report was edited for consistency and clarity. Limitations of the report are highlighted more clearly.
<b>Make the self-reflection questions more applicable</b>	Consulted with physicians at CPSA to reduce and refine the self-reflection questions.
<b>Clarify how to get CME credits</b>	A step-by-step guide outlining how to collect credits is included on page 4.
<b>Include additional factors</b>	One new factor was added and two previous factors were revised. <ul style="list-style-type: none"> <li>- The new factor considers the impact of working in a rural, more remote, or urban location.</li> <li>- Teaching was expanded to include didactic teaching as well as teaching in a clinical environment as self-reported on the RIF.</li> <li>- Patient volume has changed from days per week to patients seen per day as self-reported on the RIF.</li> </ul>
<b>Specify what is on the portal in the notification</b>	We created a specific notification indicating that the 2019 <b>Practice Checkup</b> has been uploaded to the Portal.
<b>Include graphs and images</b>	We incorporated figures into the report to highlight additional context for various risk and protective factors.
<b>Consult and follow up</b>	As exemplified by the changes in the 2018 and 2019 report, your feedback matters and we will continue to engage in quality improvement to allow for iterative changes to the report.

## Your Profile

Name	Wayne, John
Primary Speciality	Family Medicine
Gender and Age*	67, Male
Years Since Graduation*	41

\* Calculated as of July 1, 2019.

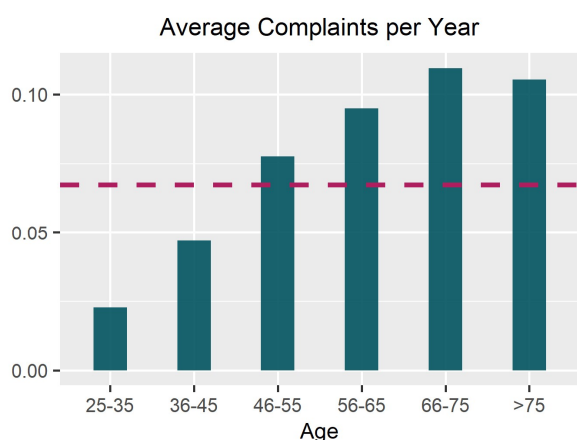
### Age [---]

The majority of older physicians are excellent practitioners who provide high quality care to Albertans. Those later in their careers can bring a level of experience and expertise to the medical community that is instrumental in protecting our population's health. Alongside these benefits, age can also come with some natural challenges. Older physicians can be considered at a higher risk for practice errors compared to their younger physician colleagues [4-6]. Physicians later in their careers are more at risk of receiving complaints, undergoing disciplinary findings, and having lower scores on peer review assessment measures [7-22].

Changes in physician age-related performance can negatively impact patient safety through prescribing errors [23], surgical outcomes [24-26], and increased patient mortality [27-29]. It has been postulated that the natural aging, both physical and cognitive, along with potential opposition to changing practice guidelines can explain why age may be a predictive risk factor for performance [30-44]. Research at CMQ has produced similar findings [45, 46]. CPSA's risk models, built with Alberta physician data, have also shown this consistent relationship between age and risk of complaints (Figure 2) and potentially harmful prescribing of opioids/benzodiazepines (BDZs).

Bringing age to the forefront may initiate or strengthen self-reflection surrounding this factor. CPSA's goal is to ensure all Alberta physicians continue to practice safely, especially those later in their careers as they are an asset to the medical community. Increased (older) age is considered to be a **recognized risk factor**.

### Your response: 67



### Self-Reflection Opportunity

- How do you remain current with rapidly changing technological and medical advancements?
- How might you alter your practice to adapt to changes and best practices over time?

**Figure 2.** Average number of complaints received per year, by physician's age. Dotted line represents the average for all ages combined.

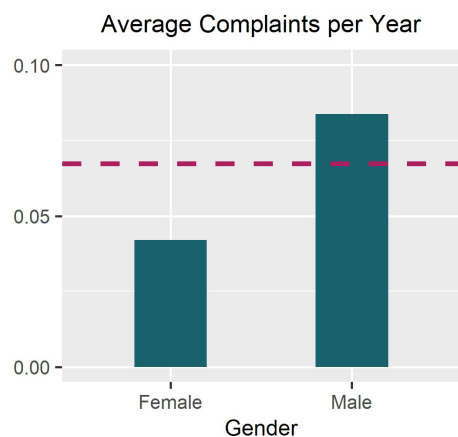
# Practice Checkup

## Gender [---]

There is evidence within the literature and throughout our research findings at CPSA that suggests male physicians are at a greater risk for lower performance ratings. In comparison to female physicians, males tend to receive more complaints, have higher incidences of potentially harmful prescribing practices, have expired certifications and other areas of performance discrepancies [5-12, 16, 19, 22, 23, 42, 43, 47-51]. Subsequently, research at CMQ has shown that females tend to complete their patient care plans more thoroughly than males, and that males have a statistically significant negative association with performance outcome measures [46].

At CPSA, similar trends have been revealed (Figure 3). When controlling for multiple variables in CPSA's models, males remained more likely to receive complaints and prescribe patients higher doses of opioids and BDZs. While we recognize that gender is a non-modifiable risk factor, awareness of the potential effects of gender on performance can yield self-reflection opportunities. Although we appreciate that gender can be viewed as non-binary, available published literature to date considers gender in binary terms. Being male is considered a **recognized risk factor**.

**Your response: Male**



### Self-Reflection Opportunity

- How do you think your gender might affect your interactions with patients?
- How do you think the changing expectations of gender are influencing the practice of medicine?

**Figure 3.** Average number of complaints received per year, by physician's gender. Dotted line represents the average for both genders.

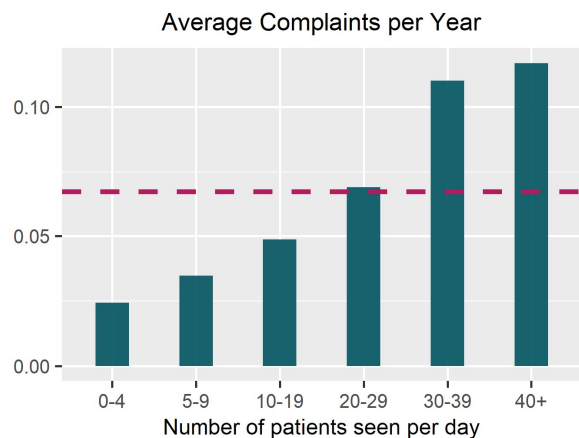


## Practice Checkup

### Patients Seen per Day [--]

There are various measures of patient volume found within literature – patients per week; patients per day; workload; hours worked per week – all of which measure some aspect of workload, which can act as a potential risk factor of physician performance [5, 14, 16, 36, 47, 52-54]. Both CMQ and CPSA have noted a similar trend of increased risk with increased patient volume (Figure 4). In CPSA’s models, risk of complaints and potentially harmful prescribing of opioids and BDZs increases with each increase in patients seen per day. Increasing patients seen per day is considered to be a **probable risk factor**.

**Your response: 20**



**Figure 4.** Average number of complaints received per year, by number of patients seen per day. Dotted line represents the overall average.

### Self-Reflection Opportunity

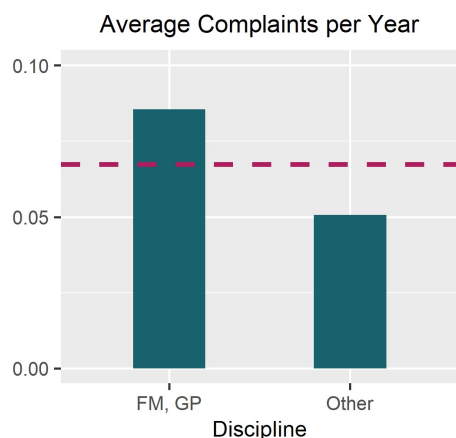
- What advice would you give to a colleague looking to create a sustainable workload?
- How might your workload impact your physician-patient interactions?
- How might various influences (e.g. remuneration models, patient population requirements) contribute to your workload?

## Discipline: FM/GP vs. Other Specialties [--]

An increasing body of research regarding the risk(s) associated with different disciplines is emerging in published literature. Specifically, family medicine physicians and general practitioners (FM/GP) have been identified as being at higher-risk of patient complaints [5, 9, 10, 48]. Other specialties potentially at higher risk include surgery, anesthesiology, obstetrics and gynecology, emergency medicine and psychiatry [5, 7, 9-13, 15, 47, 48, 55]. Disciplines evidenced as being possibly at lower risk include pediatrics and radiology [10]. Within the literature, one study identified anesthesia as lower risk [7] and another publication distinguished psychiatry as being at lower risk [11].

Research at CPSA also sought to identify higher-risk disciplines. Owing to limitations of degrees of freedom and small sample sizes among some disciplines in the sample, disciplines were broken down into FM/GP compared with all other disciplines. Using this binary comparison in CPSA's models, FM/GP physicians were at a greater risk of complaints and potentially harmful prescriptions of opioids and BDZs. Working as an FM/GP is considered to be a **probable risk factor**.

**Your response: Family Medicine**



**Figure 5.** Average number of complaints received per year, by discipline. Dotted line represents the overall average.

## Country of Medical School Graduation [--]

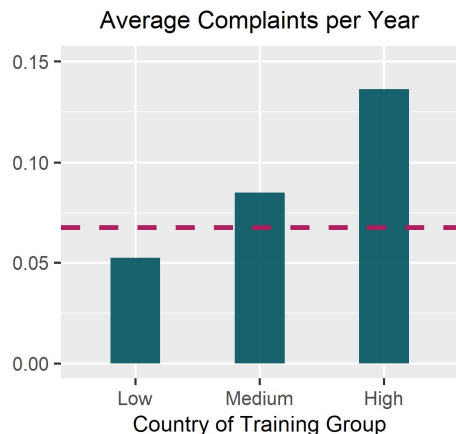
Medical school training varies widely across the globe. Given the multicultural context in Canada, supporting physicians from all countries to be able to practice their profession in Canada is a priority. Literature regarding the performance of physicians who have trained in countries outside of Canada is mixed [4, 5]. The term "International Medical Graduate" (IMG) is somewhat difficult to interpret as its meaning differs depending upon location. While some studies from the US, UK and Canada have suggested that non-IMGs outperform IMGs (e.g. certification and licensing exams) [21, 49, 56-59], and that IMGs are more likely to be referred for performance issues [22], other studies have found that IMGs in Australia had fewer complaints than Australian graduates [55] and that IMGs outperformed US medical graduates on resident assessments [60].

While some of the literature indicates little to no difference in the performance of those who graduated outside the country [29, 61, 62], other research (including that conducted by CMQ) suggests that being an IMG was associated with an increased risk of poor performance [6, 9, 10, 48, 63]. A recent Ontario study postulated that performance issues among FM/GP could be related to the pathway a physician took to gain registration, regardless of IMG status; however the results from this study showed little differences across groups after controlling for a number of covariates [64].

This mixed evidence may spur from the inconsistency in both reference and comparison groups. The country in which medical training occurred may actually be a better predictor of performance than "IMG" status [63, 65]. This theory was tested in the CPSA's models by using the *Transparency International* index in which all countries were assigned a score between 0 and 100 [66]. Scores were sorted into groups to determine a country's level of risk (0-33=high risk [Group 3], 34-67= medium risk [Group 2], 68+= low risk [Group 1]).

At CPSA, physicians with training from lower risk countries had fewer complaints (Figure 6). This remained in CPSA's models; physicians who completed medical school in the low risk group of countries experienced fewer complaints than those in high risk countries. Initial medical training in a Group 3 country is considered to be a **probable risk factor**.

**Your response: Group 1**



**Figure 6.** Average number of complaints received per year, by country of training. Dotted line represents the overall average.

## Practice Checkup

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### **Opioid & Benzodiazepine Prescribing [--]**

CPSA monitors opioid and benzodiazepine (BDZ) prescribing because both classes of drugs are commonly associated with misuse, diversion and overdose [67-69]. In Alberta, there are high rates of prescription opioids and BDZs, coinciding with high rates of overdose [69-71].

Various prescribing measures serve as potential indicators of potentially higher-risk prescribing patterns; risks for both patients and physician performance. Since 2016, CPSA has regularly sent **MD Snapshot-Prescribing** reports detailing personalized prescribing of opioids and BDZs in a given quarter. These reports highlight your prescribing patterns based on different measures. Please watch for your newest **MD Snapshot-Prescribing** report in the Physician Portal for the most up-to-date information on your prescribing patterns and trends.

While multiple prescribing measures may indicate risk of poor performance and potentially poor patient outcomes, in the CPSA models, prescribing more patients 3 times the defined daily dose (3XDDD) of a BDZ was associated with an increased risk of complaints. Higher-risk BDZ prescribing is considered to be a **probable risk factor**.

**Number of your patients on 3XDDD of a BDZ in 2018: 1**

#### **Self-Reflection Opportunity**

- Are there areas in prescribing that you find challenging?
- CPSA prescribing resources and tools:  
<http://www.cpsa.ca/your-practice/prescribing-resources-tools/>

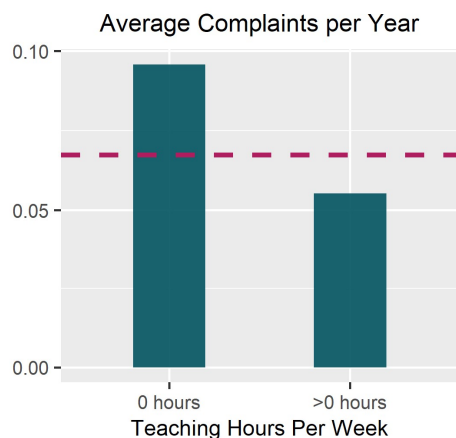
## Practice Checkup

### Teaching Hours per Week [++]

Teaching can occur in many environments. As this report is populated by RIF responses, teaching hours per week refers to the number of total hours spent teaching in a clinical and non-clinical environment (correlating with the appropriate questions in the RIF). Research suggests that physicians who teach medical students report improved decision-making, self-awareness, reflective practice, confidence and improved job satisfaction, leading to assumed benefits for their patients [72]. CMQ considers time spent participating in teaching or administration (e.g. office administrative duties) to be protective for physicians aged less than 70 years. Similar trends have been noted at CPSA (Figure 7).

After controlling for covariates, CPSA's models showed that an increase in hours per week of teaching was associated with a reduced risk of complaints and potentially harmful BDZ prescriptions. Teaching as self-reported on the RIF is considered to be a **probable protective factor**.

**Your response: 3 hours per week**



**Figure 7.** Average number of complaints received per year, by teaching hours per week. Dotted line represents the overall average.

### AHS / Hospital Privileges [++]

Alberta Health Services (AHS) / Hospital Privileges refers to the procedures and/or services you are deemed competent to perform, and the facilities and zone(s) you are able to access and provide those services within [73]. In CPSA's models, having AHS / Hospital Privileges was associated with a reduced risk of complaints. A study from Quebec revealed that one of the factors associated with high quality medical practice was having hospital privileges; conversely, the absence of privileges was associated with a poorer quality of practice [45]. Having AHS / Hospital Privileges is considered to be a **probable protective factor**.

**Your response: Yes**

## Practice Checkup

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### Exclusive Locum Practice [+]

Exclusive locum practice refers to whether or not the physician practices only as a locum. A locum physician is one who temporarily fills in or covers for another physician while they are away, or temporarily fills a gap in service delivery. These physicians are providing care to patients that are not considered their own. In CPSA's models, practicing exclusively as a locum was associated with a reduced risk of potentially harmful prescribing of opioids and BDZs. The literature regarding locum practice is mixed: some propose that practicing as a locum physician may be considered a protective factor [74-76]; one paper found no differences in care outcomes between locum and non-locum physicians [77]; and one study suggested that care provided by locum physicians is not as strong as that provided by established physicians in the community [78]. Practicing exclusively as a locum is considered to be a **possible protective factor**.

**Your response: No**

### Practicing in a Rural Location [-]

Discussion within the literature outlines a potential risk factor associated with the geographic location of medical practice. Research on this specific factor is mixed [8]. One study found that practicing in a rural location is a risk factor to physician performance [16], whereas other studies did not report a significant correlation [7, 17, 55]. Research and experience at CMQ has not reported any significant findings that showcased practice location as being a risk factor. However, in CPSA's models, compared to practicing in a rural location, practicing in an urban and metro location was protective of prescribing potentially harmful opioids and BDZs. The protective benefit was greater in metro locations. Rural, urban and metro locations were categorized by assigning primary practice location postal codes to local geographic areas. These local geographic areas were assigned to 7 categories (metro, moderate metro influencer, urban, moderate urban influencer, rural, rural center area, rural remote) by the cartographer which were further grouped into Metro (metro and moderate metro influence), Urban (urban and moderate urban influencer) and rural (rural, rural center area, rural remote) for analysis. Practicing in a rural location is considered a **possible risk factor**.

**Your response: Rural**

### Self-Reflection Exercise

#### When reflecting on ALL of the factors presented in this report:

- Thinking back to the Cambridge model (page 2), how might any of these factors interact at a systems, individual or competence level to impact your performance?
- What is one area of your practice that you would like to focus on this upcoming year?

Thank you for taking the time to review your 2019 **Practice Checkup**. Your feedback is appreciated and will help inform future iterations of the report! Please take 5 minutes to complete this survey.

<https://www.surveymonkey.com/r/MXF39VX>

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