Title: College complaints against resident physicians in Canada: a retrospective review of Canadian Medical Protective Association data from 2013 to 2017

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ABSTRACT

Background: An understanding of regulatory complaints against resident physicians is important for practice improvement. We aimed to describe the nature of regulatory College complaints against resident physicians using Canadian Medical Protective Association data.

Methods: We conducted a retrospective descriptive study of College complaint cases closed between by the Canadian Medical Protective Association (CMPA), a mutual medico-legal defense organization for over 99,000 physicians, representing an estimated 95% of Canadian physicians. Eligible cases involved ≥1 resident physicians and closed between 2008-2017 (for time trends) or 2013-2017 (descriptive analyses).

Results: Trend analysis showed the number of College complaints involving residents increased significantly (p= 0.0032) from 5.4 per 1,000 residents in 2008 to 7.9 per 1,000 in 2017 (average annualized increase=5.0%, *P*<0.0001). For cases from the descriptive analysis (2013-2017), the top reason for complaint was deficient patient assessment (69/142; 48.6%). Some patients (22/142; 15.2%) experienced severe outcomes. Most cases (139/142; 97.9%) did not result in severe sanctions for the resident. A thematic analysis of complaints found 106/163 (65.0%) involved a clinical problem, 95/163 (58.3%) a relationship problem (e.g. communication), and 67/163 (41.1%) a professionalism problem. In College decisions, only 36/163 (22.1%) had the theme of clinical problem, 66/163 (40.5%) a patient-physician relationship problem, and 63/163 (38.7%) a professionalism problem. In 63/163 (38.7%) the College had no criticism.

Interpretation: Problems with communication and professionalism feature prominently in resident College complaints. Thematic analysis demonstrated the potential for mismatch between patient and healthcare provider perceptions of care. These results may direct medical education to areas of potential practice improvement.

INTRODUCTION

Canadian physician regulatory bodies serve the public by regulating the medical profession in accordance with legislation in each province or territory. These bodies are known as the Colleges of Physicians and Surgeons of each province, or the Medical Council or Department of Health and Social Services in the Territories (hereafter referred to as "Colleges"). Practicing physicians and postgraduate trainees (residents and fellows) must hold a practice or educational license from the College in the province or territory in which they practice or study.

As part of their mandate to protect patients and the public interest, most Colleges must investigate complaints concerning physicians. Complaints can be filed by any member of the public (including patients and their families), other healthcare professionals or administrators. Complaints can relate to incidents both inside and outside the workplace. Each College has a distinct process for investigating complaints. This typically involves gathering information from the complainant, the physician, and other sources (including peer expert consultants) if needed. The College then issues a decision. In some locations, this may include referral to a discipline committee for a hearing if the matter is deemed serious. There are a range of potential outcomes for physicians who are the subject of a College complaint. These include, but are not limited to, complaint dismissal, advice given to the physician, license suspensions and revocations.

The Canadian Medical Protective Association (CMPA) is a not-for-profit mutual defence association that assists physician members with medico-legal matters and aims to reduce medico-legal risk through improvements in the safety of care. If a physician member advises the CMPA of a College complaint, the CMPA may assist the member in responding to the matter. While CMPA data indicate that College complaints reported by all physician members have increased across Canada over the past ten years, (1-3) the trend for resident members is unknown. Furthermore, published work on regulatory complaints involving physicians in Canada is scant. Previous studies have examined disciplinary findings against

specific Canadian medical specialties, but these studies did not include residents.(3-9) Although these studies represent a step towards learning more about College complaints, disciplinary findings are only one possible physician outcome of a College complaint, and represent a small fraction of complaint outcomes overall.(10)

It is critical to gain a better understanding of College complaints against residents for several reasons. First, better understanding patient complaints provides insight into problems in healthcare,(11) and may also improve patient safety.(11-14) There is also evidence to suggest patient complaints may be associated with defensive medicine, which is not necessarily beneficial to patient care.(15) Patient complaints can also seriously impact physicians' psychological wellbeing.(16,17) Ultimately, a better understanding of the nature of College complaints against resident physicians could benefit the medical education community by identifying areas of practice improvement and helping target educational initiatives to improve patient safety and professionalism, and in doing so mitigate medico-legal risk.

The purpose of this study was to better understand the trends and nature of College complaints filed against resident physicians. Our first objective was to examine how the rates of College complaints involving residents have changed over 10 years relative to other physician members of the CMPA. Our second objective was to describe and analyze a more recent sample of College complaints against residents, including resident and patient demographic data, case characteristics, and themes across College complaints.

METHODS

Data sources

At the time of this study, the CMPA had over 99,000 members, including 12,996 residents. Approximately 95% of Canadian physicians were members, who were thus eligible to seek medico-legal

advice and education from the Association. All service requests are voluntary. The CMPA maintains a repository of medico-legal data, routinely collected and coded when members involve the Association. Post postgraduate residents in Canada are members of the CMPA, with the exception of most residents practicing in the province of Québec (N = 3892 based on 2016-2017 data from the Canadian Post-M.D. Education Registry). Eligible CMPA data were organized by case, each of which represents an instance during which a physician or multiple physicians contacted the CMPA after being named in a College complaint. To capture and characterize key details about these cases, medical analysts, who are experienced registered nurses, reviewed closed cases and coded specific clinical details using the Canadian enhancement to the International Statistical Classification of Diseases and Related Health Problems (18) and the Canadian Classification of Health Interventions.(19) They also coded the level of patient harm using an in-house classification system based on the American Society for Healthcare Risk Management's "Healthcare Associated Preventable Harm Classification".(20) To reduce misclassification, analysts conducted quality assurance reviews of coding on a weekly basis.

Study design

In this study, we conducted retrospective analyses of College complaints involving ≥ 1 resident. We analyzed data from the national medico-legal repository of the CMPA, with an aim to describe and characterize College complaints involving resident doctors Canada.

Case selection

Throughout the manuscript, we use the word "College complaint" to reflect complaints relating to patient care and those relating to Colleges opening investigations prompted from another source. We refer to College complaints as complaints to a provincial regulatory authority about a resident doctor. This is a study of *closed cases*, meaning that a final outcome determined by a provincial regulator had been determined. We first identified College complaints involving Canadian residents over a 25-year period and 10-year period of closed cases from 1993-2017. For inclusion in the trend analysis, College

complaints must have been closed between January 1, 2008 and December 31, 2017. For inclusion in our 5-year descriptive analysis of patient and physician demographic data, case characteristics, and themes across College complaints, cases must have been closed between January 1, 2013 and December 31, 2017.

For our analysis of patient and physician demographic data, case characteristics, and themes across College complaints, we excluded all cases where a College decision was not available. We also excluded cases where a resident may have been named in a College complaint but upon further review, they were not directly involved in that patient's care. Additionally we excluded cases where the resident was practicing independently during the index occurrence, called "moonlighting" in some regions. We chose periods longer than our five-year study period to demonstrate trends because medico-legal trends typically change more slowly than healthcare trends.

College complaints involving patient care are routinely coded by CMPA analysts using international, national and in-house coding frameworks.(21) Our analysis of resident and patient demographics as well as case characteristics used these coded data. For our analysis of themes across College complaints, we broadened the search criteria to include College complaints for any reason, not limited only to complaints involving patient care (such as complaints from educational supervisors, administrative personnel, or other healthcare providers).

Variables

To characterize resident and patient demographics, we extracted resident postgraduate year (PGY-year), specialty, and age based on year of birth; the province of complaint; descriptive variables from the patients included age and self-reported sex. To explore the characteristics of College cases, we extracted the reason for complaint, complainant (i.e. academic, administrative personnel, other healthcare provider, patient or advocate, other member of pubic), case outcome, whether the complaint was

reviewed or appealed; whether the complaint involved a procedure; and, whether the complaint stemmed from a single episode of care versus multiple episodes of care.

Thematic analysis

Our exploration of themes across complaints leveraged several existing frameworks. This involved an in-depth analysis of the full medico-legal file of closed cases from 2013-2017 by the primary author (CC) who is both a senior resident physician and a lawyer. For each complaint, themes underlying both the complaint, the College's decision, and contributing factors were identified. We also explored level of patient harm according to the ASHRM 7-point scale **(Appendix 2)**. We considered patient harm as an outcome that negatively affects a patient's health and/or quality of life. We used the Health Communication Assessment Tool (HCAT), a validated tool for classifying healthcare complaints to inform thematic classification.(22-24) When the nature of a College complaint or decision was not adequately captured by HCAT, we categorized those complaints and decisions into separate pre-defined themes agreed upon by the research team (**see Appendix 1** for theme definitions). For each complaint, themes underlying both the complaint, the College's decision, and contributing factors were identified. Over 24 months, quarterly coding meetings took place between the coder and the second author (AM). Disagreements on theme definitions were resolved during team coding meetings through discussion until consensus.

Statistical methods

In order to determine how complaint rates have changed over time, we conducted a 10-year trend analysis of cases closed from 2008-2017, comparing cases with ≥ 1 resident physician cases with ≥ 1 non-resident physician(s). To allow comparison, we stratified all CMPA member physicians into two groups: residents and non-resident physicians. We calculated each group's relative complaint rates per 1,000 physician members per year. We fitted a trend line for each physician group and calculated the annualized growth rate based on the fitted trend. Statistical tests were two-tailed and we considered P

values < 0.05 to be statistically significant. We applied an ANOVA type III sum of squares test to determine the statistical significance of the change over time for temporal trends from 2008 to 2017.

We used frequencies and proportions (for categorical variables) and medians and ranges (for continuous variables) to characterize and to describe resident and patient demographic data, case characteristics, and themes across College complaints for cases closed 2013-2017 that involved at least one resident. We completed all statistical analyses using SAS 9.4©. We do not report numbers less than 10 as doing so could represent a risk to physician or patient confidentiality, and have consequently aggregated these data.

Ethics Approval

The Canadian ethics review panel of the Advarra (formerly Chesapeake) Institutional Review Board, based in Aurora, Ontario and comprised of Canadian members, reviewed and approved the study in compliance with Canada's Tri-Council Policy Statement on the Ethical Conduct for Research Involving Humans (TCPS 2). Funding and support for this research was provided by the CMPA.

RESULTS

Trend analysis

The 10-year trend analysis identified 36,490 College complaint cases between 2008-2017. (Figure 2) Over the 10-year study period, the number of College complaints involving residents increased significantly (p= 0.0032) from 5.4 per 1,000 residents in 2008 to 7.9 per 1,000 in 2017 (average annualized increase=5.0%, *P*<0.0001). This finding paralleled, although was significantly lower than (*P*<0.0001), the increase in College complaints across all CMPA members during the same period (average annualized increase=6.3%, p=0.0008).

Resident and patient demographic data

The CMPA closed 33,780 medico-legal cases from January 2013 until December 2017. Of those, 20,109 were regulatory complaints, and 469 of those involved a resident **(Figure 1)**. Our resident and patient demographic analysis included 142 cases that involved 145 patients **(Table 1)**. The majority of cases (n = 66, 46.5%) occurred among patients admitted to hospital, 42 (29.6%) occurred in the emergency department, day surgery or a clinic affiliated with a hospital, and 37 (26.1%) occurred in an ambulatory care area outside the hospital (there was more than one care setting per complaint in some cases). Ontario represented 101/142 complaints (71.1%).

Case characteristics

The top reasons for complaint involved deficient patient assessment, diagnostic error, and professionalism **(Table 2)**. Of the 142 cases, 62 (43.7%) had no peer expert or College criticism and therefore no contributing factors assigned. For the 80 cases (56.3%) with contributing factors, we categorized the contributing factors as provider, team, or system factors. There was often more than one contributing factor per case. The majority of cases (n = 53, 66.3%) involved provider factors **(Table 3)**. Cases involving team factors (n = 35, 43.8%) included documentation issues (20/35; 57.1%), communication breakdown with the patient (17/35; 48.6%), and communication breakdown between physicians (5/35; 14.3%). Of the 80 cases, (17.5%) 14 involved system factors. These included health information technology issues (2/14; 14.3%), office issues (4/14; 28.6%), protocol, policy and procedure issues (4/14; 28.6%), and resource issues (4/14; 28.6%).

Regarding healthcare related harm, 27 of 142 cases (19.0%) in the resident and patient demographic analysis involved errors in the diagnostic process leading to a misdiagnosis, a missed diagnosis, or a delay in diagnosis. The most common types of diagnostic error involved infectious processes and disorders (e.g. pneumonia, otitis media, appendicitis, abscesses); post-procedural complications (e.g. hemorrhage), and missed severity of injuries (e.g. fractured spine, foot). Fourteen of 142 of cases (9.9%)

involved injuries, and the most common injury involved laceration of blood vessels during an invasive procedure (e.g. central line insertion or thoracentesis) or during surgery. Among the 145 patients in the 142 cases, 22/145 (15.2%) experienced severe outcomes, including death in 13 cases (9.0%).

The majority of complaints did not result in severe sanctions for the resident involved. Seventy-nine of 142 cases (55.6%) were dismissed for the resident with no further action taken, and 56 (39.4%) were given an educational or remedial disposition. In 7 cases, residents received more severe sanctions (4.9%).

Themes across College complaints

Our thematic analysis included a sampling of all College complaints against residents that were closed between 2013-2017, meaning that a portion of the cases may not have involved a specific patient (i.e. may have involved a professionalism issue that did not involve patient care). The thematic analysis focused on a sample of 163/469 (34.7%) complaints involving a resident. Ontario represented 115/163 complaints (70.1%). The majority of complaints were filed by patients (57/163; 35.0%) and their advocates (53/163; 32.5%). Approximately one third of cases (53/163; 32.5%) were filed by personnel other than patients or their advocates. These included complaints filed by academic personnel (23/163; 14.1%), administration (12/163; 7.4%), other healthcare professionals (9/163; 5.5%), other members of the public (7/163; 4.3%). One case was self-reported and one was unknown.

Cases included in the thematic analysis similarly did not lead to severe resident sanctions: 84 complaints (51.5%) were dismissed with no further action taken and 60 complaints (36.8%) were given an educational or remedial disposition. Conversely, 19 complaints (11.7%) resulted in severe sanctions, which included voluntary resignation, suspension, limitations placed on practice, citation or written caution, erased or revoked license, and remedial agreement. Several of the cases involving a suspension also included limitations on practice once the resident returned to practice (e.g. cannot prescribe

opioids, must take part in physician health program, must have chaperone present). A total of 25 cases (25/163; 15.3%) were reviewed or appealed by the resident.

Out of the 110 cases that involved complaints filed by patients or their advocates, 10 (9.1%) involved a complaint arising from an incident where a patient had more than one interaction (on separate dates) with the resident and 29 of these cases (26.4%) involved procedures.

The most frequent theme in College complaints was clinical problems (106/163; 65.0%), whereas patient-physician relationship problems was the top theme in College decisions (66/163; 40.5%). Over one third of cases [63/163 cases (38.7%)] had no College criticism and were coded as groundless. **Table 4** provides complete information for how many times a theme (and subcategory of theme) was found in College complaint allegations and College decisions.

When examining College decision themes by outcome (**see Appendix 3**), the top 3 themes in College decisions in cases that were dismissed with no further action taken were 1) groundless (60/84; 71.4%); 2) professionalism problems (12/84; 14.3%, with 7 being documentation issues); and 3) patient-physician relationship (e.g. communication or respect) problems (11/84; 13.1%).

Of the 60/163 cases (36.8%) that were provided with an educational or remedial disposition, the top three themes in College decisions were 1) patient-physician relationship problems (39/60; 65.0%); 2) professionalism problems (32/60; 53.3%); and 3) clinical problems with quality or safety (29/60; 48.3%).

Of the 19/163 College decisions (11.7%) where there was concern expressed by the College and sanctions imposed, the top three themes in College decisions were 1) professionalism problems (19/19; 100.0%); 2) patient-physician relationship problems (17/19; 89.5%); and 3) criminal, ethical or boundary issues (such as fraud, prescription diversion, and driving while impaired) (13/19; 68.4%).

INTERPRETATION

Our results indicate that the proportion of residents named in College complaint cases is low, but that the proportion of CMPA resident members named in College complaints reported to the CMPA has increased in the most recent 10-year study period. As the medico-legal curriculum has traditionally not been a focus of residency programs, our results underscore the need to address College complaints in residency education, and provide guidance to residency programs regarding what to address, in order to potentially improve the quality of clinical practice and mitigate medico-legal risk.

Implications for Patient Safety

Our results contribute to a growing body of literature demonstrating how complaints data provide important information to improve patient safety.(11-15) While a high proportion of complaints concluded with favorable outcomes for the involved residents, outcomes for physicians are only one part of the story. We highlight that some complaints involved situations of severe patient harm, flagging areas for needed improvements in care settings or in physician training. We advocate for postgraduate medical educational programming that addresses both medico-legal risk mitigation and learning from the patient experience. It is our hope that improving resident medico-legal education offers beneficial downstream effects for understanding patient experiences and improving patient safety culture, particularly in areas such as patient-physician communication, which has been identified as a key underlying cause of patient safety incidents.(25)

Implications for Professionalism

Despite complainants' common perceptions of poor clinical care, College decisions reflected a theme of clinical problems in only 36/163 cases (22.1%). Furthermore, our thematic analysis indicated a significant proportion of College complaint decisions (63/163; 38.7%) were coded as groundless. This illustrates that although patients and other complainants may feel there has been a particular wrong committed, this is not necessarily affirmed following investigation of the complaint. This finding highlights the

potential for mismatch between patient and healthcare provider perceptions of care. Training directed at enhancing empathy (26) may help resident physicians better understand a patient's position and perceptions, and could potentially lessen this mismatch, thereby avoiding some of the communication-related complaints. The importance of empathy is routinely taught in medical school, often as part of the FIFE (feelings, ideas, functioning, and expectations) model; however, it is not necessarily a similar area of focus in residency education. The potential importance of this is further underscored by the fact that residents commonly experience burnout, and any empathy teaching from medical school may be lost with increasing levels of burnout.(27-28) In addition, a recent systematic review and meta-analysis found that the presence of burnout amongst health professionals is associated with worsening patient safety.(29) We believe that activities designed to reduce burnout and increase empathy could also enhance quality of care and positively impact patient safety.

Some residents received severe sanctions, with a few losing or giving up their ability to practice. In cases where residents received severe sanctions, at least some aspect of the Colleges' decisions always concerned patient-physician relationship (e.g. communication and respect), professionalism problems (e.g. deceitful behaviour), or criminal, ethical and boundary issues (e.g. fraud), as opposed to clinical problems. This finding complements other research that reported surprisingly high levels of unprofessional, fraudulent and deceitful behaviours amongst resident physicians in the United States.(30) Even when examining complaints that had educational or remedial dispositions, we found patient-physician relationship and professionalism problems were more prevalent than clinical problems in College decisions. This represents another potential educational gap that could be addressed by targeted interventions to increase awareness regarding the effects poor communication and unprofessional behaviours have in both prompting College complaints against residents and negatively impacting College decision outcomes.

One American study that found that low professionalism ratings on annual evaluations predicted an increased risk for disciplinary actions from state licensing boards.(31) This adds further support to the suggestion that professionalism should be appropriately taught and evaluated in residency education. We believe strategies at the postgraduate medical education level can help improve resident professional behavior and the physician-patient relationship, thereby potentially decreasing the chances of receiving a complaint. Postgraduate educators should also consider that such education strategies can help support residents to cope with, and manage, complaints when they occur.

Implications for Medico-Legal Risk Mitigation

We found that perception of problems with clinical care is the most common reason patients complain to Colleges about residents. Further, evidence exists that physicians who reported overall participation in continuing professional development activities were significantly less likely to receive quality of care-related complaints than those who did not report participating in such activities.(32) We surmise that allocation of resources during residency on medico-legal education by postgraduate medical education leaders could lessen the chance their residents will receive a complaint. Of note, the CanMEDS framework (34) requires knowledge of medico-legal frameworks governing practice as part of achieving the "Professional" competency.(34) The CMPA offers a Resident Symposium to all Canadian medical schools focusing on patient safety and medico-legal risk reduction targeted at residents in PGY-1 and PGY-2 to help address this competency. While current approaches vary across residency programs, we believe that medico-legal education should be a sustained area of focus throughout the duration of residency training in order to achieve this particular goal of medical education.

Another key finding from our study is that documentation was often criticized by Colleges even when poor documentation was not an issue in the College complaint. This highlights the need for residency education programs to impress the importance of clear and appropriate documentation, and teach

residents how to document appropriately. Good documentation is critical in mitigating medico-legal risk.(35-36)

Limitations

Several limitations to our study should be considered. Some residents, particularly a large proportion from Quebec, are not CMPA members. Moreover an unknown proportion of others who are CMPA members may have received College complaints but not voluntarily reported these cases to the CMPA. The results of the two aforementioned limitations mean our findings likely represent an underestimate of the total number of College complaints involving Canadian residents. Beyond this, the demographic data we report were not collected for research purposes, therefore we were unable to report on specific specialty and other practice characteristics due to confidentiality concerns, as some residency programs have very small numbers of residents. According to Canadian Post-M.D. Education Registry (CAPER), residents from the province of Québec made up 23.8% of Canadian residency spots between 2008 and 2017.(37) The lack of information regarding the medico-legal experience of the majority of these residents undermines the representativeness of our results as a national sample. Additionally, Ontario had a disproportionately high number of complaints. There can be numerous reasons why these variations exist, including different decision-making processes amongst Colleges. Therefore, caution should be taken when extrapolating the summary results to local jurisdictions. We acknowledge that our College case analysis may also have been negatively influenced by outcome and hindsight biases.(38-41)

Conclusion

Our study highlights that residents continue to be named in College complaints. Problems with communication skills and professionalism feature prominently among College complaints experienced by residents training in Canada. Thematic analysis also demonstrated the potential for mismatch between patient and healthcare provider perceptions of care. We believe that targeted interventions focused on non-clinical aspects of training (e.g. professionalism, empathy, documentation), in addition

to mitigating resident burnout, have the potential to improve outcomes for patients and decrease both the number of complaints filed against residents and the severity of outcomes. The improved understanding of College complaints against residents our study provides has the potential to benefit patients, residents, educators, and Colleges.

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TABLES

Table 1. Resident and patient demographics, CMPA College complaint cases involving patient care, 2013-2017 (N = 142)

Residents*	**N, %**
Resident Postgraduate Year	
1	25, 17.6%
2	36, 25.4%
3	22, 15.5%
4	18, 12.7%
5	9, 6.3%
6	0
Fellow	19.0%
Unknown	14, 9.9%
Resident Specialty (see Appendix 3)	
Family medicine	22, 15.5%
Surgical	54, 38.0%
Medical	64, 45.1%
Unknown	11, 7.7%
Location of Complaint	
Newfoundland & Labrador, Nova Scotia, Prince Edward Island, New Brunswick	12, 8.5%
Ontario	101, 71.1%
Quebec, Manitoba, Saskatchewan, Alberta	21, 14.8%
British Columbia	17, 12.0%
Territories	0
Resident Age range	
24-29	57, 40.1%
30-34	57, 40.1%
35-39	24, 16.9%
40-59	13, 9.2%
Patients	
Patient Age Range	

0-18	12, 8.5%
19-29	15, 10.6%
30-49	45, 31.7%
50-64	27, 19.0%
65-79	22, 15.5%
80+	8, 5.6%
Unknown	16, 11.3%
Patient Sex	
Female	86, 60.6%
Male	40, 28.2%
Unknown	1, 0.7%

***** There may be more than 1 resident named in a complaint.

Table 2. Top 10 Reasons for Complaints, CMPA College complaint cases involving patient care, 2013-2017 (N = 142)

Reason for Complaint	**N, %**
Deficient assessment	69, 48.6%
Diagnostic error	62, 43.7%
Unprofessional manner	41, 28.9%
Communication breakdown, patient	32, 22.5%
Failure to perform test/intervention	21, 14.8%
Inadequate supervision	16, 11.3%
Inadequate consent process	16, 11.3%
Injury associated with healthcare delivery	14, 9.9%
Inadequate monitoring or follow-up	13, 9.2%
Sexual impropriety	13, 9.2%

Table 3. Contributing factors, CMPA College complaint cases involving patient care, 2013-2017 (N = 53)

Provider factor	Complaints N, %	Example
Clinical Decision-making	27, 50.9%	
Thoroughness of assessment	19 ; 35.8%	Failure to obtain detailed history and conduct focused physical exam
Diagnosis	13, 24.5%	Failure to reassess in timely manner when condition deteriorates or after giving medications
Management errors	7, 13.2%	Inappropriate disposition or delay or failure to consult with senior residents or staff
Lack of Situational Awareness	15, 28.3%	
Failure to read patient record	6, 11.3%	Reading patient's previous record would likely have prompted ordering a diagnostic test or led to a different differential diagnosis
Lack of self-awareness in resident's knowledge, skill, technique, training, education	6, 11.3%	Resident showed poor judgement in not seeking supervisor's assistance prior to performing invasive procedure
Health, Conduct & Boundary issues[1]	20, 37.7%	Use of cell phone during patient examination
Procedural Violations	17, 32.1%	Failure to complete checklist prior to invasive procedure; failure to provide adequate supervision of residents

[1] See Appendix 1 for definition of Health, Conduct & Boundary Issues.

Table 4. Complaint themes, CMPA College complaint cases (not limited to patient care), 2013-2017 (N = 163)

Theme	Number (%) in Complaint	Number (%) in Decision
HCAT* Themes		
Clinical Problem	106 (65.0%)	36 (22.1%)
Quality	96 (58.9%)	32 (19.6%)
Safety	44 (27.0%)	24 (14.7%)
Relationship Problem	95 (58.9%)	66 (40.1%)
Communication	63 (38.7%)	47 (28.8%)
Listening	11 (6.7%)	8 (4.9%)
Respect and patient rights	58 (35.6%)	40 (63.5%)
Management Problem	5 (3.1%)	5 (3.1%)
Environment	1 (0.6%)	3 (1.8%)
Institutional Processes	5 (3.1%)	3 (1.8%)
Supplementary Themes		
Professionalism	67 (41.1%)	63 (38.7%)
Physician Conduct	58 (35.6%)	42 (25.8%)
Deceit/dishonesty	22 (13.5%)	21 (12.9%)
Documentation	10 (6.1%)	23 (14.1%)
Criminal, Ethical and Boundary violations	33 (20.2%)	23 (14.1%)
Fraud	9 (5.5%)	9 (5.5%)
Boundary Crossing/Violation	18 (11.0%)	11 (6.7%)
Other Charge or Investigation	13 (8.0%)	8 (4.9%)
Inappropriate Prescribing	6 (3.7%)	6 (3.7%)
Academic	6 (3.7%)	15 (9.2%)
Failure to Ask for Help	1 (0.6%)	5 (3.1%)
Inadequate supervision	6 (3.7%)	10 (6.1%)
Groundless	N/A	63 (38.7%)

There is often more than one subcategory of theme in a case (i.e. subthemes will often add up to greater than the total of the category of theme because a resident was found to have a problem with both listening and communication, for example). **See Appendix 1** for theme definitions.

*HCAT = Health Communication Assessment Tool, a validated tool for classifying healthcare complaints to inform thematic classification.(22-24)

Figure 1. Flow chart of CMPA medico-legal cases from 2013-2017

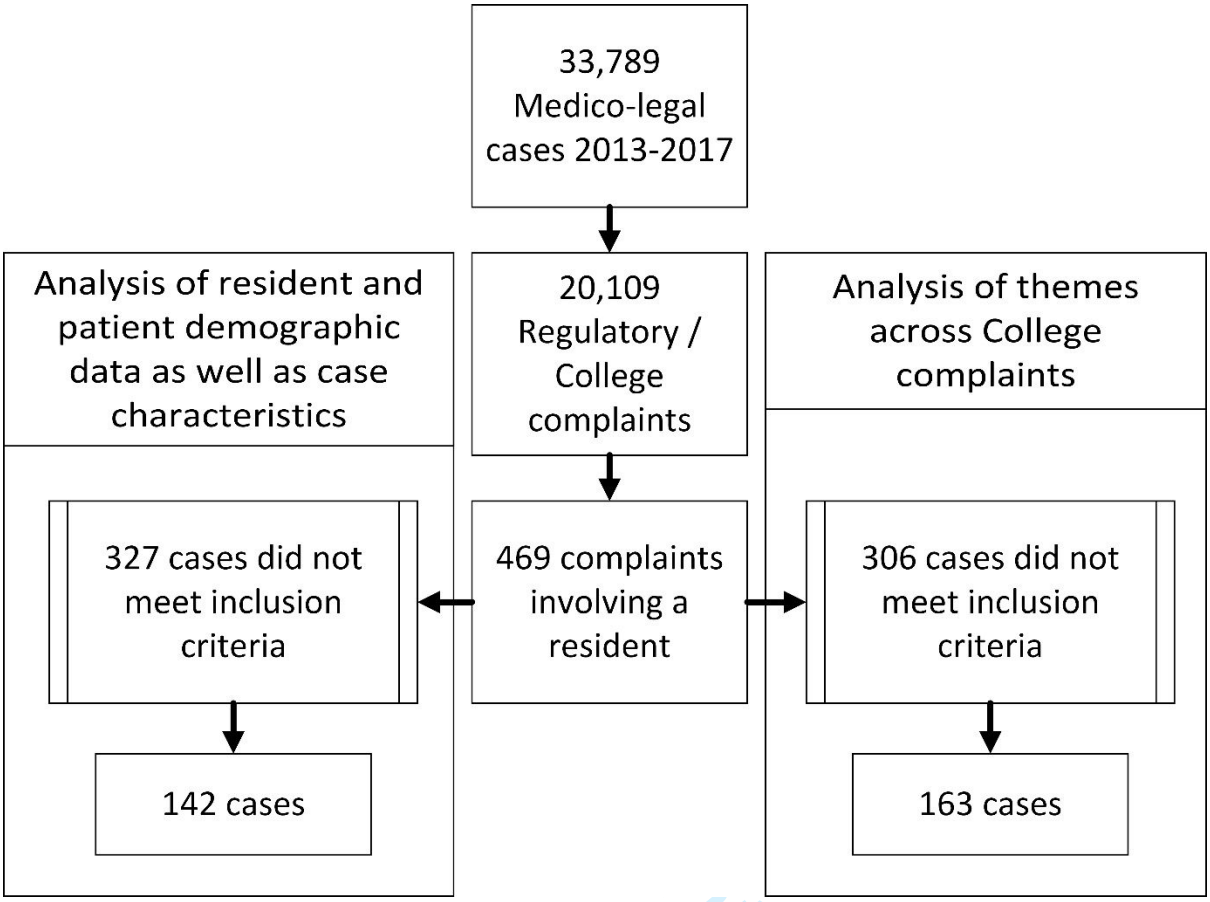
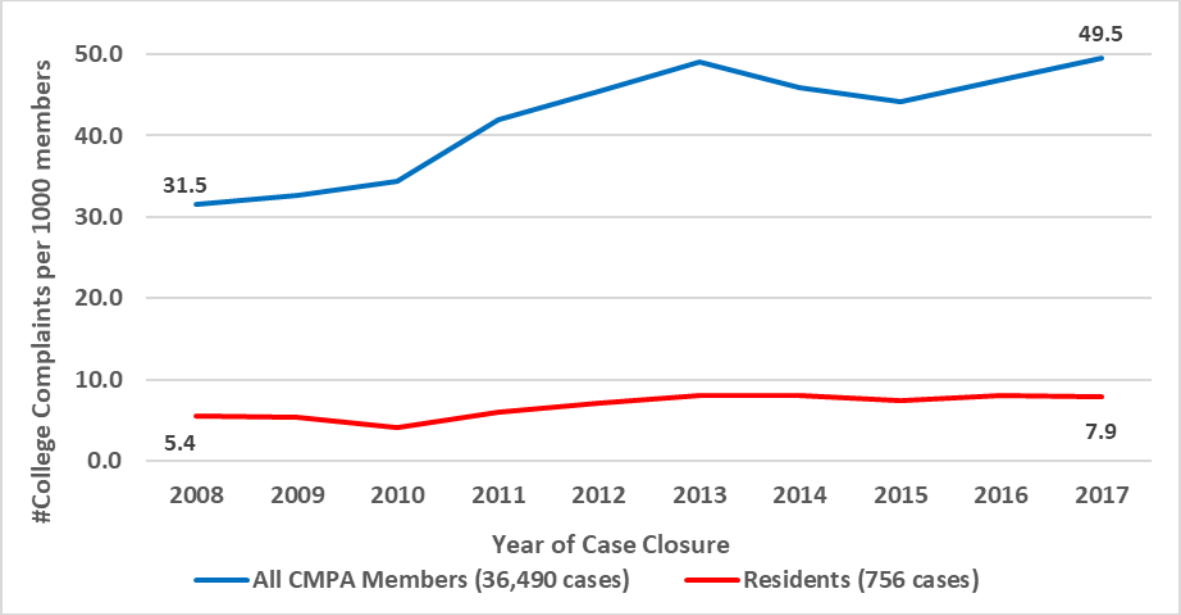


Figure 2. 10-year trend, Number of College Complaint Cases per 1000 members, residents versus all CMPA members



APPENDICES

Appendix 1

Theme Definitions

The following pre-determined themes were agreed upon by the research team and used to **supplement** the HCAT tool themes of clinical problems (quality, safety); management problems (environment, institutional processes); and, relationship problems (listening, communication, respect & patient rights):

- **Professionalism:**
    - **Physician conduct:** Inappropriate language, behavior and manner, including confidentiality breaches.
    - **Deceit/dishonesty:** Misrepresenting or concealing the truth, or telling someone something known to be false. Lesser moral wrongdoing than fraud.
    - **Documentation:** Issues with inadequate and/or non-contemporaneous, or illegible notations in the medical record involving patient assessments; diagnostic plans; pending investigations; consent discussions; management plans.
- **Criminal, Ethical or Boundary Issues:**
    - **Fraud:** Dishonesty intended to result in personal gain (e.g. submitting billings inappropriately, or falsifying documents).
    - **Boundary crossing or violation:** Not respecting the accepted social, physical or psychological space between people and thereby breaching the appropriate therapeutic distance between physician and patient (e.g. an issue with an exam that requires additional sensitivity such as a rectal or vaginal exam, or inappropriate communication or touching). Violations are more serious and usually are harmful and exploitative acts, which can include sexual misconduct.
    - **Other charge or investigation:** Any charge under the *Criminal Code*, RCS 1985, c. C-46 or other legislation (e.g. prescription diversion of opioids or benzodiazepines, driving under the influence).
- **Inappropriate prescribing:** Outside the bounds of what would be considered to be reasonable by most physicians or in violation of accepted guidelines or practice.
- **Groundless:** Patient/complainant feels complaint is warranted, but this issue was not validated in the College's decision (e.g. patient complaints about clinical care but College finds care to be adequate; patient suffered harm but College finds outcome is related to known complication of procedure or pre-existing illness). Also includes frivolous and vexatious claims.

- **Academic:**
    - **Failure to ask for help:** Resident should have asked for help from more senior physician.
    - **Inadequate supervision/guidance:** Resident should have been supervised or had more guidance from more senior physician.

Other terms defined from Tables 2 and 3:

- **Sexual impropriety:** Inappropriate comments with sexual overtones, touching, or intercourse.
- **Health, Conduct & Boundary issues:**
    - **Health** refers to physician health (e.g. a physical or mental health problem that was identified during the College investigation, hence coded based on peer expert opinion).
    - **Conduct** includes inappropriate communication or behavior that is non-sexual (e.g. not listening or dismissing the patient's concerns, making comments that can appear to be belittling or judgmental).
    - **Boundary** includes inappropriate physician-patient relationship (e.g. developing friendship).

Appendix 2

Harm Classification Table with definitions

Term	Description
Harmful incident	Based on peer expert opinion, the harm resulting from the care or services provided to the patient due to failures in the processes of care or in the performance of procedures, including provider error.
Inherent risk	Based on peer expert opinion, a harmful incident that is a known risk associated with a particular investigation, medication, or treatment. It is the risk from undergoing a procedure in ideal conditions, performed by qualified staff using current research, equipment, and techniques.
Asymptomatic	Patient safety event or patient safety incident** that reached the patient but the patient reports no symptoms and no treatment is required.
Mild harm	Patient harm is symptomatic, symptoms are mild, loss of function or harm is minimal (permanent or temporary), and minimal or no intervention is required (e.g., extra observation, investigation, review, or minor treatment).
Moderate harm	Patient harm is symptomatic, requiring intervention (e.g., additional moderate or minor operative procedure, additional therapeutic treatment), or an increased length of stay, or causing permanent or temporary harm, or loss of function.
Severe harm	Patient harm is symptomatic, requiring life-saving intervention or major medical/surgical intervention, or resulting in a shortening life expectancy, or causing major permanent or temporary harm or loss of function.
Death	Health care-related death

* Adapted from the American Society for Healthcare Risk Management's *Healthcare Associated Harm Level Classification Tool*. (20)

** Patient safety incident: An event or circumstance which could have resulted, or did result, in unnecessary harm to the patient.

Appendix 3

Specialty Classification:

Surgical specialties:
Anesthesiology
Obstetrics & gynaecology
General surgery
Thoracic surgery
Cardiac surgery
Plastic surgery
Neurosurgery
Orthopaedic surgery
Otolaryngology
Urology
Vascular surgery
Ophthalmology

Medical specialties:
Emergency medicine
Internal medicine
Paediatrics
Gastroenterology
Nephrology
Rheumatology
Psychiatry
Cardiology
Neonatology
Radiation oncology
Neurology
Diagnostic radiology
Dermatology
Respirology
Hematology
Endocrinology
Critical care

Family medicine:
Family medicine
Public health

Outcome definitions

(1) Dismissed outright. The College took no further action in response to the complaint.

(2) Educational or remedial disposition. The complaint is not dismissed outright, but it is not serious enough to warrant a sanction. Rather, the College sees an opportunity for the member to improve care by educating the physician (e.g. the member could be a little more careful with documentation). These outcomes include advice, counsel, remedial agreement, or Specified Continuing Education or Remediation Programs.

(3) Sanction. The College is significantly concerned with the conduct that they require the member to be cautioned, restrict their practice (i.e. through an undertaking) or be referred to another committee such as discipline or fitness to practice where they may be subject to a range of sanctions from suspension to revocation to restrictions on their ability to practice (e.g. chaperone or supervision subject to reassessment).