Abstract

Objective: This study aimed to examine the patterns of complaints filed against physicians in Rhode Island, investigate the factors associated with complaint rates and outcomes, and assess the impact of the implementation of a new Framework for Just Culture.

Methods: Complaint data from the Rhode Island Department of Health’s complaint tracker and physician licensing database were analyzed for the period of 2018 to 2020. Descriptive and statistical process control analyses were conducted to assess complaint rates, investigation rates, and adverse outcomes.

Results: Over the three-year period, 1672 complaints were filed against Rhode Island physicians, with approximately 40% of complaints being opened for investigation. The implementation of the Framework for Just Culture coincided with a sustained decrease in the rate of complaints opened. Failure to meet the minimum standard of care was the most common allegation, and male physicians and those aged 40-50 were more likely to have complaints filed against them.

Conclusions: The study highlights the importance of complaint investigations in upholding standards for medical licensure and clinical competence. The Framework for Just Culture may have influenced the investigation process, resulting in fewer investigations opened without compromising the identification of cases requiring disciplinary action. These findings provide insights into physician accountability and the need for ongoing monitoring and improvement in complaint handling systems.

Keywords: complaint investigations, physician accountability, medical licensure, adverse outcomes, Framework for Just Culture

Introduction

State Health Departments and Licensing Boards have a shared responsibility to safeguard and promote the health and safety of their communities. In Rhode Island, the Board of Medical Licensure and Discipline (BMLD) is entrusted with the mission of protecting the public by upholding standards for medical licensure and ensuring ongoing clinical competence. Comprising eight physicians and four public representatives, as mandated by General Laws § 5-37-1.1, the BMLD benefits from the inclusion of individuals outside the medical field, offering diverse perspectives and insights into the investigation and decision-making process concerning physician misconduct.

Instances of concern, encompassing issues such as quality of care, communication, and other unprofessional behaviors, can give rise to complaints. All complaints filed against physicians in Rhode Island fall under the jurisdiction of the BMLD. These complaints may originate from various sources, including patients, patient relatives, and other healthcare professionals. Once a complaint is received, it is considered confidential and cannot be retracted. While the complaint review process may be time-consuming, it is of utmost significance to the Department of Health. Initially, the Board Administrators conduct a preliminary review of all complaints. If deemed necessary, the complaint is then assigned to an Investigating Committee for further examination. The physician in question is notified of the complaint and provided with a designated period to respond to the allegations. Following the collection of all pertinent information, board members meticulously evaluate the findings, make recommendations, and vote on whether the physician has violated General Law 5-37-5.1, which outlines measures for unprofessional conduct.

Previous studies have analyzed BMLD administered disciplinary actions in Rhode Island, shedding light on physician characteristics associated with an increased risk of license revocation. Other jurisdictions have published reviews examining behaviors that trigger the generation and investigation of complaints; however, to date, Rhode Island has previously only anecdotal data available. The present study aims to surpass anecdotal evidence by examining behaviors that prompt the generation of complaints and investigating which behaviors ultimately lead to disciplinary actions resulting from a complaint.

Methods

Complaint information was obtained from the BMLD complaint tracker, a repository of all complaints submitted to the Rhode Island Department of Health (RIDOH). To gather licensing information regarding physician age, gender, and
specialty, we utilized RIDOH’s publicly available physician licensing database for the period between January 1, 2018, and December 31, 2020.

The complaint allegations were classified into 22 distinct types, as presented in Table 1.

Duplicate complaints or those filed against unidentified individuals were excluded from the analysis. Descriptive analysis was conducted on physician characteristics such as age, specialty, and gender. We performed this analysis on physicians with a complaint, physicians with three or more complaints, and physicians whose complaints were opened for investigation.

Furthermore, using descriptive methods, we examined the underlying allegations and the outcomes of investigations for complaints that were opened for investigation.

To assess whether rates of complaints changed over the period of study, we used statistical process control (SPC) charts. Rates of complaints filed, complaints opened, and adverse actions taken by the board were evaluated using this method. SPC charts are valuable tools for detecting nonrandom variation in measured rates over time. In our analysis, we utilized XmR charts, which make no assumptions about data distribution. The XmR charts incorporated standard rules to identify any points outside the control limit, defined as three standard deviations from the mean. Additionally, we applied the Western Electric (WE) statistical process control chart rules, which detect two out of three successive points beyond a 2-sigma limit, four out of five successive points beyond a 1-sigma limit, or eight or more successive points on one side of the center line. Research has shown that using an XmR chart with this set of rules effectively identifies statistically significant outliers and trends.6

RESULTS

A total of 1,672 complaints filed against Rhode Island physicians between 2018 and 2020 were included in the analysis after excluding complaints against unknown individuals. Among licensed physicians, 992 received at least one complaint. The majority of licensed physicians with complaints were male, accounting for 73% (726) of the cases, while female physicians represented 27% (266).

Age was categorized into deciles, and the average age of physicians with a complaint was in the fourth decade of life across all specialties. Figure 1 illustrates the distribution of complaints by age decile and gender.

Among physicians receiving three or more complaints, a similar pattern emerged. Out of 113 physicians in this category, 85% (97) were male (Figure 2). The average age for

Table 1. Complaints categorized by alleged offending behavior

<table>
<thead>
<tr>
<th>Allegations (percent of total)</th>
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</thead>
<tbody>
<tr>
<td>Abuse (Physical, Mental, Emotional, Verbal) 1%</td>
</tr>
<tr>
<td>Billings/Claims or Fee Related &lt;1%</td>
</tr>
<tr>
<td>Boundary violations 1.5%</td>
</tr>
<tr>
<td>Breach of Confidentiality &lt;1%</td>
</tr>
<tr>
<td>Death Certificate &lt;1%</td>
</tr>
<tr>
<td>Disciplinary action in another jurisdiction 9.1%</td>
</tr>
<tr>
<td>Drug Diversion &lt;1%</td>
</tr>
<tr>
<td>Failure to Complete CME’s 1.6%</td>
</tr>
<tr>
<td>Failure to meet minimum standard of care 60.3%</td>
</tr>
<tr>
<td>Filing a false report 1.6%</td>
</tr>
<tr>
<td>Fraud &lt;1%</td>
</tr>
<tr>
<td>Impairment &lt;1%</td>
</tr>
<tr>
<td>Inappropriate Prescribing 4%</td>
</tr>
<tr>
<td>Lack of Informed Consent &lt;1%</td>
</tr>
<tr>
<td>Malpractice 7.4%</td>
</tr>
<tr>
<td>Medical Records 7%</td>
</tr>
<tr>
<td>Non-compliance of Disciplinary Action &lt;1%</td>
</tr>
<tr>
<td>Office Related (Sanitation) &lt;1%</td>
</tr>
<tr>
<td>Patient Abandonment 2.1%</td>
</tr>
<tr>
<td>Practicing outside of scope &lt;1%</td>
</tr>
<tr>
<td>Practicing without a license &lt;1%</td>
</tr>
<tr>
<td>Violation of Civil or Criminal Law &lt;1%</td>
</tr>
</tbody>
</table>

Figure 1. Number of complaints received by age and gender

Figure 2. Number of physicians with 3 or more complaints by age decile and gender
physicians with three or more complaints was in the fifth decade of life. Notably, the highest number of complaints received by a single physician was 32.

Regarding specialties, physicians in internal medicine, family practice, and psychiatry received the highest number of complaints, both overall and among physicians with three or more complaints.

During the period of study, 667 or approximately 40% of the complaints were opened for investigation. The BMLD investigated 274 complaints in 2018, 224 in 2019, and 169 in 2020, averaging 222 investigations per year. Of the opened complaints, 80% (534) targeted male physicians, while 20% (133) targeted female physicians. The average age of physicians with opened complaints was in the fourth decade of life.

The primary allegations in opened complaints were failure to meet the minimum standard of care, inappropriate prescribing, and disciplinary actions in another jurisdiction. The specialties with the highest number of opened complaints were internists, family physicians, psychiatrists, surgeons, and diagnostic radiologists (including physicians with multiple complaints).

Figure 3 presents the board decisions or findings on opened complaints. Out of 667 opened complaints, 256 (38%) were voted as No Unprofessional Conduct (NUPC), indicating no apparent violation of rules, regulations, or laws. Only 17% (112) of opened complaints resulted in a Public Adverse Action, indicating a disciplinary action (e.g., consent order, reprimand, suspension, surrender). Thirteen percent (13%) of complaints were vacated, used when the facts support a complaint that would not normally have been opened; 9% received a non-disciplinary letter used when after review, investigation and closing the case a decision was made not to issue NUPC; this may include advice or other recommendations, and 23% were administratively closed used when the Investigative Committee decided not to make a final decision at this time and may revisit the matter later.

Figure 3. Shows board findings as a percentage of complaints opened for investigation

Figure 4. Shows the X chart from an XmR chart, which shows the rate of the rate of complaints opened per quarter.

The statistical detection rules applied for this chart are enumerated in the methods section. Points and trends detected as statistically significant outliers are highlighted in red. LCL: Lower Control Limit, UCL: Upper Control Limit.

Figure 4 displays Statistical Process Control X charts depicting investigations opened per quarter. Control limits were set at 3 standard deviations, with the WE SPC rules applied. Points outside of statistical control are shown in red. This XmR chart revealed special cause variation or a statistically significant change according to WE SPC rules, indicating a significant downward trend in investigations opened starting in Q4 of 2019. The average rate of investigations opened per quarter decreased from 65.1 to 42.2 after this change.

We also analyzed by process control methods, but are not shown, the number of complaints received per quarter, and adverse actions per quarter. The rate of complaints received per quarter did not show any statistically significant change, suggesting a stable process under statistical control. On average, the BMLD received 139 complaints per quarter. Future rates are predicted to fall within the control limits, with a lower limit of 44.5 and an upper limit of 234.1 complaints per quarter.

Similarly, the rate of Public Adverse Actions per quarter, indicated a stable process under statistical control. An average of 10 Public Adverse Actions per quarter was observed, and future rates are predicted to fall below the upper limit of 20.8 Public Adverse Actions per quarter.

DISCUSSION

Complaint investigations play a vital role in upholding the mission of the Board of Medical Licensure and Discipline (BMLD) to enforce standards for medical licensure and ongoing clinical competence. In our dataset covering a three-year period, we identified 1,672 complaints submitted to the Rhode Island Department of Health (RIDOH), excluding those filed against unknown individuals. Our analysis, employing process control methods, revealed that the rate of complaints remained stable throughout the study period.

Between 2018 and 2020, approximately 40% of the complaints were opened for investigation. Previous analysis conducted by the BMLD from 2000 to 2009 reported an average
of 400 complaints per year, with 60% of those complaints being opened for investigation.8

Our process control analysis, Figure 4, detected a statistically significant shift, indicating a sustained decrease in the rate of complaints opened after the fourth quarter of 2019. The decrease in opened complaints observed in our study may be attributed to two factors: the COVID-19 pandemic and the introduction of RIDOH’s new Framework for Just Culture. The Framework for Just Culture, implemented in the fall of 2019, aimed to streamline the decision-making process of complaint investigations; the resulting process changes were previously published in the Journal of Medical Regulation.9 Our process control analysis suggests that the timing of the implementation of the Framework for Just Culture coincided with a statistically significant decrease in the number of complaints opened for investigation starting in the fourth quarter of 2019. In addition, the public health emergency related to the COVID-19 pandemic was declared in March 2020. This pandemic changed almost every aspect of healthcare delivery and presents an important additional explanation for the shift. While the timing of the decrease in complaints opened predates the onset of the pandemic, it is important to note that because we are analyzing this as a process over time and not before and after one point in time, changes related to the pandemic could still contribute to this shift.

Our analysis found that the rate of public adverse outcomes remained stable throughout the period of study without any statistically significant change noted despite fewer complaints being opened for investigation. Combined, the BMLD received a stable rate of complaints, and administered a stable rate of public adverse outcomes. However, beginning in the fourth quarter of 2019, the BMLD changed its process for opening complaints in accordance with Framework for a Just Culture, and at that time we note a statistically significant decrease in the rate of complaints being opened for investigation.

From 2000 to 2009, acts of physician negligence were the most common type of complaint received by the BMLD.8 Similarly, between 2018 and 2020, the most common allegation for complaints was failure to meet the minimum standard of care, accounting for 60% of the total number of complaints.

It is important to note that not all complaints investigated by the BMLD will result in a public adverse action, which refers to a disciplinary action such as a consent order, reprimand, suspension, or surrender. For a physician to be found guilty of unprofessional conduct, they must be in violation of one or a combination of the items outlined in General Law 5-37-5.1.

Our findings regarding age and gender align with previous Rhode Island studies on disciplinary actions and malpractice settlements. Male physicians, and those in their fourth decade of life, are more likely to have complaints filed against them compared to their female counterparts and physicians in other age deciles. In our dataset, 77% of complaints were filed against male physicians, with the average age being in the fifth decade of life. It is worth noting that one male physician falls in the 100th decile; however, this physician was not actively practicing. The BMLD receives complaints regarding retired, inactive, and deceased physicians as well.

Regarding specialty, the specialties with the highest number of opened complaints were internists, family physicians, psychiatrists, surgeons, and diagnostic radiologists. However, it is important to understand that the number of complaints does not necessarily indicate the extent of liability. Our licensing data indicates that internal medicine, family practice, and psychiatry are also the most common specialties in Rhode Island.

CONCLUSION

Our analysis using process control methods provides valuable insights into the patterns of complaints, investigations, and outcomes within the Rhode Island physician community. The implementation of the Framework for Just Culture appears to have influenced the number of investigations initiated, while the stability of adverse outcomes suggests thorough examination of the complaints that had the potential to lead to disciplinary actions. Understanding the factors associated with complaints and their investigation can help inform targeted interventions and improve the overall quality of medical practice in Rhode Island.

Limitations

Several limitations should be considered when interpreting the findings of this study. First, our analysis relied on data from the Rhode Island Department of Health’s complaint tracker. As noted, there were complaints against unknown individuals which were removed from the analysis suggesting incomplete information. Additionally, the dataset only included complaints submitted to RIDOH, which may not capture all instances of potential misconduct or substandard care.

Furthermore, the categorization of complaints into specific allegation types may introduce subjectivity and potential misclassification. While efforts were made to standardize the categorization process, individual judgments and interpretations could have influenced the assignment of allegations.

The study’s generalizability is limited to the Rhode Island context and may not be representative of other states or regions. Variations in healthcare systems, cultural norms, and reporting mechanisms can influence the frequency and nature of complaints against physicians. Therefore, caution should be exercised when extrapolating these findings to other jurisdictions.
It is important to acknowledge that the results presented in this study are descriptive in nature and do not establish causal relationships. Factors contributing to the observed patterns, such as age, gender, and specialty, require more comprehensive investigations to understand their underlying mechanisms and potential confounding variables.

Lastly, process control charts do not establish causal relationships, but are used to show statistically significant changes in a process, termed special cause variation. Thus, while a significant decrease in complaints opened was noted during the course of our analysis, we can only say that the process change resulting from the Framework for a Just Culture, and the COVID-19 pandemic timing occurred at the time of the observed decrease.

Despite these limitations, this study provides valuable insights into the patterns of complaints, investigation rates, and outcomes among Rhode Island physicians. Future research should address these limitations and explore additional factors that may influence the occurrence, investigation, and resolution of complaints, ultimately leading to improved physician accountability and patient care.

References
1. Rhode Island Board of Medical Licensure and Discipline 2021 Annual Report. 2022.