Canadian Medical Education Journal
Revue canadienne de l'éducation médicale

Considering the potential unintended consequences of RateMDs: An exploratory study in one specialty

Envisager les conséquences involontaires potentielles du site RateMDs : une étude exploratoire dans une spécialité

Kristina H Pulkki, Shamira Pira, Meredith Young, Grace M Scott, Carol Nhan, Kevin Fung, Gabriella Le Blanc and Lily HP Nguyen

Volume 16, Number 2, 2025

URI: https://id.erudit.org/iderudit/1118216ar
DOI: https://doi.org/10.36834/cmej.77821

See table of contents

Publisher(s)

Canadian Medical Education Journal

ISSN

1923-1202 (digital)

Explore this journal

Cite this article

Pulkki, K., Pira, S., Young, M., Scott, G., Nhan, C., Fung, K., Le Blanc, G. & Nguyen, L. (2025). Considering the potential unintended consequences of RateMDs: An exploratory study in one specialty. *Canadian Medical Education Journal / Revue canadienne de l'éducation médicale*, *16*(2), 17–24. https://doi.org/10.36834/cmej.77821

Article abstract

Background: Websites that facilitate communication between patients regarding their experiences with individual physicians are now relatively commonplace. Given patient-generated ratings are publicly available, physicians could use these to access rarely available patient feedback. We explored the content of reviews associated with low physician ratings and consider the potential benefits and consequences of relying on this form of freely available data to support individual life-long learning.

Methods: We conducted an exploratory qualitative descriptive study. We collected narrative comments associated with low numerical ratings on one physician-rating website (RateMDs) drawn from one specialty in Canada. Written reviews associated with low numerical ratings (⩽2/5) for Canadian otolaryngologists were collected yielding a total of 878 comment sets that were analyzed deductively and iteratively.

Results: We found that patient comments described poor performance in areas that aligned, for the most part, with the CanMEDS roles including Professional, Communicator, and Leader; specifically referring to management of the clinical environment, administrative staff, and trainees.

Conclusion: While not intended for physician feedback, physicians could access patient-to-patient ratings and associated written reviews as a means to identify areas of practice improvement. However, this represents an unintended use of these websites. While speculative, access to patient-to-patient rating websites could negatively impact physician confidence or self-worth – representing a negative consequence of their use. The utilization of these data for potential self-improvement represents an unintended use of patient-to-patient ratings and so may be accompanied by unintended consequences for physicians who use these data as potential feedback, and patients who contribute to physician rating sites.

Canadian Medical Education Journal

Original Research

Considering the potential unintended consequences of RateMDs: an exploratory study in one specialty

Envisager les conséquences involontaires potentielles du site RateMDs : une étude exploratoire dans une spécialité

Kristina H Pulkki,[1] Shamira Pira,[2] Meredith Young,[3,4] Grace M Scott,[5] Carol Nhan,[6] Kevin Fung,[5] Gabriella Le Blanc,[6] Lily HP Nguyen[3,6]

[1]Department of Otolaryngology, Head and Neck Surgery, University of Ottawa, Ontario, Canada; [2]Faculty of Medicine, McGill University, Quebec, Canada; [3]Institute of Health Sciences Education, McGill University, Quebec, Canada; [4]Department of Medicine, McGill University, Quebec, Canada; [5]Department of Otolaryngology, Head and Neck Surgery, Western University, Ontario, Canada; [6]Department of Otolaryngology, Head and Neck Surgery, McGill University, Quebec, Canada

Correspondence to: Lily H.P. Nguyen, Department of Otolaryngology – Head & Neck Surgery, McGill University Health Centre, Montreal Children's Hospital; 1001 Boulevard Décarie, Room A02.3015, Montreal, Quebec, H4A 3J1, Canada; email: phan.nguyen@mcgill.ca

Published ahead of issue: Feb 4, 2025; published: May 1, 2025. CMEJ 2025, 16(2) Available at https://doi.org/10.36834/cmej.77821

Abstract

Background: Websites that facilitate communication between patients regarding their experiences with individual physicians are now relatively commonplace. Given patient-generated ratings are publicly available, physicians could use these to access rarely available patient feedback. We explored the content of reviews associated with low physician ratings and consider the potential benefits and consequences of relying on this form of freely available data to support individual life-long learning.

Methods: We conducted an exploratory qualitative descriptive study. We collected narrative comments associated with low numerical ratings on one physician-rating website (RateMDs) drawn from one specialty in Canada. Written reviews associated with low numerical ratings (≤2/5) for Canadian otolaryngologists were collected yielding a total of 878 comment sets that were analyzed deductively and iteratively.

Results: We found that patient comments described poor performance in areas that aligned, for the most part, with the CanMEDS roles including Professional, Communicator, and Leader; specifically referring to management of the clinical environment, administrative staff, and trainees.

Conclusion: While not intended for physician feedback, physicians could access patient-to-patient ratings and associated written reviews as a means to identify areas of practice improvement. However, this represents an unintended use of these websites. While speculative, access to patient-to-patient rating websites could negatively impact physician confidence or self-worth – representing a negative consequence of their use. The utilization of these data for potential self-improvement represents an unintended use of patient-to-patient ratings and so may be accompanied by unintended consequences for physicians who use these data as potential feedback, and patients who contribute to physician rating sites.

Résumé

Contexte : Les sites Web qui facilitent la communication entre les patients au sujet de leurs expériences avec des médecins en particulier sont désormais relativement courants. Étant donné que les évaluations réalisées par les patients sont accessibles au public, les médecins pourraient les utiliser pour accéder aux commentaires rarement disponibles des patients. Nous avons étudié le contenu des commentaires associés aux mauvaises évaluations des médecins et nous avons examiné les avantages et les conséquences potentiels de l'utilisation de cette forme de données librement accessibles pour soutenir l'apprentissage individuel tout au long de la vie.

Méthodes : Nous avons mené une étude qualitative descriptive exploratoire. Nous avons recueilli des commentaires narratifs associés à des évaluations numériques faibles sur un site Web d'évaluation des médecins (RateMDs) provenant d'une spécialité au Canada. Les commentaires écrits associés à de faibles notes numériques (≤2/5) pour les oto-rhino-laryngologistes canadiens ont été recueillis, ce qui a donné un total de 878 ensembles de commentaires qui ont été analysés de manière analytique et récurrente.

Résultats : Nous avons constaté que les commentaires des patients décrivaient des performances médiocres dans des domaines qui correspondaient, pour la plupart, aux rôles CanMEDS, notamment Professionnel, Communicateur et Leader, en particulier en ce qui concerne la gestion de l'environnement clinique, le personnel administratif et les stagiaires.

Conclusion : Bien qu'il ne s'agisse pas d'un retour d'information, les médecins peuvent accéder aux évaluations des patients et aux critiques écrites qui y sont associées afin d'identifier les domaines dans lesquels ils peuvent améliorer leur pratique. Toutefois, il s'agit là d'une utilisation involontaire de ces sites Web. Bien que spéculatif, l'accès aux sites Web d'évaluation des patients pourrait avoir un impact négatif sur la confiance ou l'estime de soi des médecins, ce qui représenterait une conséquence négative de leur utilisation. L'utilisation de ces données à des fins potentielles d'amélioration personnelle représente une utilisation involontaire des évaluations faites par les patients et peut donc s'accompagner de conséquences involontaires pour les médecins qui utilisent ces données comme retour d'information potentiel et pour les patients qui contribuent aux sites d'évaluation des médecins.

Introduction

Formal assessments generate data that can be used to promote learning, provide feedback, and evaluate various competencies of physicians.[1-9] While assessments are an integral component of the formal education process, there are fewer, or less frequent, opportunities available for practicing physicians to engage with assessment-generated feedback. A formal, verified, central database for physician assessment and quality-assurance can serve as a source of feedback to support practice improvement; however, such formal systems are relatively rare. However, large databases of publicly available patient-generated reviews of physicians can be found online such as physician rating websites. Patient-to-patient physician rating websites facilitate communication between patients regarding their experiences with and perceptions of individual physicians.[10-12] As stated on RateMDs.com, the publicly accessible, anonymous website was created "For patients, by patients". Given the limited availability of assessment-generated feedback for practicing physicians in many contexts, ratings and reviews available on patient-to-patient rating websites such as RateMDs.com could provide a valuable indirect source of feedback on aspects of physician performance as perceived by patients, potentially providing areas for future practice improvement. We acknowledge that physician access of patient-to-patient rating websites represents an unintended use of these platforms; however, we wanted to explore what kind of potential indirect feedback could be extracted for physicians rated more poorly on websites such as RateMDs.

Physician rating websites facilitate patients' sharing of medical experiences, both positive and negative, with specific care providers.[13-18] These ratings of physicians are made possible by the anonymity, accessibility, and ubiquity of the Internet, and the widespread awareness of these websites.[19-21] Several cross-sectional studies conducted both in North America and Europe investigating the use of physician rating websites show that 25-28% of patients have visited at least one of these sites, and 11% had reviewed a physician.[10-19] Most of the reviews posted on physician rating websites are encouraging, suggesting that patients are largely pleased with the care they received.[22,23] An American study of online ratings of otolaryngologists (OTLs) found that the majority of the reviews were positive (73% positive reviews, 266 physicians) however, they also noted that nearly half (49%) of the physicians received at least one negative review.[23]

Patient-to-patient physician rating websites have potential as a means to explore patient perspectives and could potentially be used by physicians to identify areas for practice improvement.[20] Currently available literature largely focuses on the analysis of the ratings in general to better understand patient perceptions of one's speciality rather than focusing on areas of improvement or physician access and possible physician perspective (24-29). For patient-generated physician-rating data to be used for practice improvement, we must first explore whether the content of the reviews associated with low physician ratings contain data that could be useful as feedback. Therefore, we aimed to assess whether patient-generated reviews could potentially be used for a purpose separate from their original intention, and provide valuable feedback for physicians. To determine the potential value of publicly available patient-generated physician ratings as performance data, we engaged in a descriptive analysis of the written reviews associated with low physician ratings for one specialty in Canada. Here, we report on a summary and analysis of the individual comments found within these reviews and consider the potential positive and negative consequences of utilizing patient-to-patient ratings and reviews of physician performance for something it was not initially intended for – as a source of assessment-generated feedback for physicians. Specifically, we discuss: (1) the potential use of patient-generated data to facilitate a physician engaging in deliberate practice improvement if the feedback is deemed credible, and (2) the potential that receiving unstructured critical feedback could elicit a negative physician response.

Methods

Methodology: We conducted a qualitative descriptive study, in order to synthesize patient-generated comments for low-scoring physicians on the patient rating website RateMD.com.

Study context: We focused our analysis on Canadian physicians in one target specialty. We chose a Canadian context due to the current shortage of formal patient-sourced feedback for practicing physicians, and the availability of a database for all currently practicing physicians through the Royal College of Physicians and Surgeons of Canada (RCPSC). We selected to execute our exploratory study in the specialty of otolaryngology, as it is a specialty that encompasses aspects of both medical and surgical practices.

Data collection

To identify our data source, we conducted several internet searches of various iterations of "rate doctor" with the Google search engine. Data contained on physician rating websites has been utilized for research purposes in primary care, urology**,** ophthalmology, orthopedic surgery, and otolaryngology.[23, 30-34] Of the top five results, we chose RateMDs.com as it had the most user-friendly interface and included the highest volume of Canadian OTL physicians.[34] Reviews were obtained by first searching RateMDs.com for "Specialty: Ears Nose and Throat (ENT) doctor" in all Canadian provinces. This was subsequently cross-linked to a list of all Royal College of Physicians and Surgeons of Canada (RCPSC) certified OTL specialists. Ethics approval was waived by the institutional ethics review board of the Faculty of Medicine at McGill University (Montreal, QC) due to the public nature of the data**.**

Data treatment

All written reviews accompanying ratings with a poor global score (defined as two or less out of a five-point Likert scale) were collected and anonymized.

Approach to data analysis

Narrative reviews associated with the low ratings were analyzed from a Qualitative Descriptive approach, informed by the data analysis principles of Miles, Huberman & Saldana.[36,37] The initial coding framework was informed by previous studies that analyzed data from physician rating websites**.**[30,,32,38] As we engaged with coding, it became clear that the content of the reviews generated by the patients aligned well with the physician competencies described in the CanMEDS 2015 framework by the RCPSC.[39] The CanMEDS framework was designed to define the necessary competencies for all areas of medical practice in Canada and is comprised of seven roles: Scholar, Professional, Health Advocate, Communicator, Collaborator, Leader, and Medical Expert.[39] As such, we adapted our approach to a more deductive approach, and shifted to using the CanMEDS terminology to describe and categorize individual comments sourced from the written reviews on RateMDs.com. While we shifted to a more deductive approach using the CanMEDS framework, we remained attentive to other potential codes. Two investigators initially coded the same 10% of reviews prior to starting independent coding to ensure consistency in how coders were interpreting and using the codebook. Each written review could potentially contain multiple individually coded comments resulting in more than one code assigned to a single patient-provided narrative review. Frequencies were calculated to summarize our deductive coding and complement our findings.

Results

Study sample

The search for OTL specialists on rateMD yielded a list of 1,452 OTLs, which was compared to the list of 850 OTLs certified by the RCPSC**.**[35] We therefore found that the majority of Canadian RCPSC certified OTLs had at least one rating on RateMDs.com (73%; *n* = 650) with the total number of ratings per physician ranging from 1 to 63. Filtering reviews for those with a poor overall score resulted in 1,796 total reviews. According to our cut-off point, 61% of Canadian OTLs found on RateMDs.com (*n* = 395) had at least one review associated with a poor global score.

Data set

Initially, there were a total of 1,796 written reviews; however, we discontinued our analysis after the first 1,000 as no new codes were identified. Of the 1,000 coded written reviews, 122 were in French. Due to the linguistic capabilities of the reviewers, these were ultimately excluded, resulting in 878 total written reviews included in the final analysis.

Findings

While patients likely have little knowledge of formal medical educational frameworks, we found that content of the narrative reviews associated with low physician ratings aligned well with the CanMEDS 2015 physician competency framework. Our data were coded to the seven roles: Medical Expert, Collaborator, Scholar, Health Advocate, Communicator, Leader, and Professional.[21] Table 1 includes the frequency with which comments were coded to the various CanMEDS roles in addition to exemplary quotes for each.

Individual patient comments extracted from written reviews associated with poor ratings most frequently related to the *Professional* role (*n* = 524, 59.7%) (see Table 1). This included mentions of a perceived lack of empathy or compassion, rudeness, and arrogance. Patients highlighted aspects of their encounters that fell outside of what they felt were appropriate in terms of attitudes, behaviours, or perceived physician integrity.

Table 1. Summary of patient comments, organized by CanMEDs roles and relative frequencies

Role *Patient narrative comment* with >1 code for this role (%, n)	Attribute	Attribute included in comments (%)	Representative Quotes
Professional (59.7%; ***n*** = 524)	Negative behaviour or affect	49 (*n* = 433)	*"Very poor bedside manner. No compassion or interest in patient. Arrogant!!!!"*
	Unprofessional, untrustworthy	13 (*n* = 117)	*"He made a huge scene in front of my stepdad and everyone in the waiting room! It was very unprofessional."*
	Conflict of interest	9.8 (*n* = 86)	*"In love more with his Mercedes than with his work or patients."*
	Privacy and confidentiality	0.5 (*n* = 4)	*"Left the door open so everyone could hear"*
*Leader (45.3%; **n** = 398)*	Time management	32 (*n* = 278)	*"Yes, one expects to have to wait a while but 2 hrs is absolutely ridiculous, especially when she invests no time once you're in her office."*
	Staff, medical learners	19 (*n* = 164)	*"Very rude and lazy receptionists with bad manners"*
	Cost of health care	4.4 (*n* = 39)	*"I needed to cancel on them due to my job (…) gave me a $300 bill because I didn't meet their 30-day clause"*
	Practice environment	1.9 (*n* = 17)	*"Had to take my shoes off at the door and walk around their filthy carpet in my socks."*
*Communicator (34.3%; **n** = 301)*	Inadequate communication	30 (*n* = 264)	*"He would not answer questions, took no history"*
	Poor informed consent	5.2 (*n* = 46)	*"Could not string two words together about the surgery itself, any risks associated with it, potential benefits etc."*
	Accuracy or detail in records	3.9 (*n* = 34)	*"He does not take notes for files and claims he remembers everything in his head."*
*Medical Expert (42.2%; **n** = 370)*	Poor judgement/decision making	16 (*n* = 141)	*"Was stunned [Anonymous] ignored this, now going for biopsy which I asked him to do but waved [sic] it off"*
	Failure of treatment	12 (*n* = 107)	*"I was only prescribed a spray that did not work."*
	Patient safety	12 (*n* = 103)	*"She also incorrectly prescribed me a painkiller which I was wearing an allergy alert wrist band for"*
	Poor technical skill	10 (*n* = 90)	*"He scoped me & really hurt me, yelling at me to keep my head still while rammed the scope in deeper."*
*Health Advocate (29.3%; **n** = 257)*	Unhelpful or lack of advocacy	25 (*n* = 218)	*"He had absolutely no treatment suggestions whatsoever"*
	Poor follow-up	5.6 (*n* = 49)	*"He doesn't [sic] really do any follow ups"*
*Scholar (15.6%; **n** = 137)*	Lack of knowledge or evidence-based practice	15.6 (*n* = 137)	*"The surgery she conducted is useless, and it was a fad at one time, but no longer used."*
*Collaborator (5.01%; **n** = 44)*	Lack of respect for healthcare team members	2.3 (*n* = 20)	*"Even had the nerve to belittle my GP"*
	Lack of recognition of own limits	1.9 (*n* = 17)	*"Unwilling to take adequate responsibility for mistakes that were made under his authority and judgement."*
	No referral	0.9 (*n* = 8)	*"Refuses to make a referral"*

Patients also expressed dissatisfaction with various behaviours we considered related to the *Communicator* role. Specifically, comments alluded to a lack of active listening and of clear explanations (30%; *n* = 264). Issues in communication have the potential to generate conflict, misinterpretation, feelings of resentment, and development of medico-legal issues.[40] Patient comments also frequently included mention of dissatisfaction with time management, including length of time to acquire an appointment, wait in office, and length of actual appointment—all of which are competencies that reflect the *Leader* role (45.3%; *n* = 398).

Discussion

Comments associated with low patient-generated physician ratings mapped onto several CanMEDs roles specifically Professional, Leader, Communicator, Medical Expert, Health Advocate and Scholar. This suggests that ratings available on patient-to-patient physician rating websites could provide opportunities for physicians to identify potential areas for practice improvement as it aligns well with the CanMEDs roles. However, patient-to-patient rating websites were not intended to be used in such a manner, thus we have devoted the majority of this discussion to considering potential positive and negative unintended consequences of utiliizing patient-to-patient physician rating data as a form of assessment-generated feedback for physicians.

Potential positive consequences of accessing patient-generated feedback

Numerical ratings and written reviews posted on patient-to-patient physician rating sites are the result of a complex social interaction and include both satisfactory and unsatisfactory elements of an experience.[41] The most common categories identified in our data were based on perceived physician behaviours and attitudes that could be considered modifiable (e.g, improved communication

practices; see Table 1); and therefore, could represent a potential focus for practice improvement. When considering issues of professionalism, communication, and resource management, there is a growing body of available literature with suggestions on how to improve along these dimensions (e.g. to facilitate patient communication, decrease burnout, build resiliency, and improve overall coping skills).[42-45]

However, for an assessment to be considered helpful feedback, it should focus on deficiencies in performance while also providing targets for future learning through content that is specific, diagnostic, constructive, and perceived as credible.[41,46,47] Moreover, providing constructive feedback is a complex skill and must be seen as credible - which is influenced not only by the source of the feedback, the interaction that prompted the feedback, but also by the quality, characteristics, and content of the feedback itself.[21,41,47,48] Here, we have made the assumption that online patient-to-patient physician rating sites, which are publicly accessible databases comprised of patient-generated assessments of physician performance, could utilized to identify areas of improvement–particularly around issues of professional behaviour, communication, and time management as reflected in our findings. However, it is important to remember that these websites, and the accompanying data, are not intended for access by physicians themselves. As such, we found that the patient-to-patient ratings and comments contained within the reviews are not all structured in a way that aligns with the principles of effective feedback, in that they are unverified, anonymous, unstructured, and uncensored (in terms of emotional tone and language).[49] There are several potential limitations to using publicly available patient ratings. Given the anonymous nature of the reviews, it is impossible to determine whether there were other factors at play influencing the negative rating of a physician–for example, a patient may have a negative preconception of a physician, differences in opinion or beliefs which may play into the medical encounter yet do not necessarily pertain to physician competence. Additionally, anonymity may provide an added layer of subjectivity to the reviews themselves by protecting the identity of the reviewer. Therefore, the perceived quality, credibility, and utility of these assessments as a valuable source of feedback may vary significantly.

Potential negative consequences of accessing patient-generated feedback

Accessing patient-to-patient physician rating websites for the purpose of viewing patient reviews of their practice will inevitably expose practitioners to negative reviews. While these critical reviews may provide fodder for performance improvement, it is possible that accessing them could have negative unintended consequences. Negative consequences of receiving unstructured feedback have been found to be psychologically and emotionally wounding in several ways, including conflict within self (self-esteem, motivation, satisfaction, professional identity), conflict in relationships (mistrust, betrayal, fear for safety), and conflict in professional identity (medico-legal issues, damage to one's reputation, potential loss of employment).[20,21] This is particularly true for feedback that is focused on the person instead of the task, not goal-directed, and has no recourse or option for discussion. It is important to note that these potential unintended consequences for an individual practitioner would be a result of accessing an assessment system that was designed for patient-to-patient communication, rather than patient-to-physician assessment.

Much like a consumer wishing to make an informed choice prior to purchasing a product, patients requiring healthcare services often seek out reviews on providers prior to accessing services. Some patients do so via traditional means such as word of mouth. However, increasingly, this means turning towards easily accessible sources such as physician rating websites. In their research letter discussing public awareness and use of physician rating websites in the U.S., Hanauer *et al.* stated that not only are many people aware of their existence, but that the content found on these websites is in fact informing the decision-making process for many patients. This ranges from choosing a physician based on positive ratings to avoiding a physician on the basis of negative ratings.[12] The potential influence of patient-to-patient physician rating websites is not lost on physicians as some are now requiring that patients sign documents stating they will not post online reviews, while others have admitted to hiring individuals to write positive reviews, and others seem to have resorted to writing reviews themselves.[16,50] Despite the growing popularity of physician rating websites, controversy remains over their utility.

Current trends in patient-generated feedback

While physicians accessing patient-to-patient rating sites may not reflect an intended use, it does reflect a growing interest in seeking out patient-generated feedback on physician performance. The UK National Health Services (NHS) first introduced mandatory annual patient surveys in 2002, which assessed a variety of topics including access and wait times, provision of information, communications

with health or social care professionals, and involvement in decision-making.[51] In addition, they provided incentive to general practitioners in the form of extra contractual points and financial support to implement these surveys in their practices.[52] As physician rating websites began to gain traction, the NHS encouraged patients to review their physicians and hospitals online. In 2006, they went one step farther and developed the NHS Choices website which allows patients to leave comments in addition to rating their healthcare providers on several dimensions. More importantly, it allows physicians to access these comments and even respond to individual patients. This kind of feedback system could facilitate communication between patients and healthcare providers and allow physicians to obtain additional information about specific patient concerns, as well as provide clarification to patients when appropriate. However, this new structure removes the element of anonymity present in the less regulated physician rating sites and may contribute to improving the assessment dimension of patient ratings.[53]

Although implementing a more formal physician rating website may allow for improved data collection and increased credibility, barriers to using patient-generated assessment data for practice improvement include the lack of detail on how to improve, making it less actionable.[54-56] Rather than asking patients to evaluate their encounter on a limited number of broad categories using a Likert type scale, perhaps we could provide more goal directed questions that require reporting details of care provided during a particular clinical encounter or over a specific period of time.[52] Such initiatives are a component of multisource feedback approaches, often also referred to as 360° feedback. This involves obtaining feedback in the form of questionnaires from peers, co-workers, patients and often physicians themselves in order to generate data which the physician can use to reflect on to determine where there may be room for practice improvement. Employing this form of feedback has been shown to be an acceptable, reliable and feasible method of physician assessment in practice.[57]

While this study focuses largely on the type of negative comments and the possible advantages or disadvantages of using patient to patient data for physician feedback, it has limitations. Although we explore the possibility of using patient-to-patient reviews for physician access and feedback, how physicians are accessing these reviews was beyond the scope of this initial exploratory study. Future work exploring how physicians in practice are using publicly available patient-generated physician ratings would not only help to better understand the utility and potential impact of data generated by these platforms. Despite our study limitations, we believe that this work reflects an important first step in better understanding the content of patient-generated physician ratings, including careful consideration of the potential positive and negative unintended downstream consequences of re-purposing these data.

Conclusions

In Canada, patient-to-patient online physician rating websites are the only publicly available option for patient-generated assessment. Patient concerns expressed in reviews of Canadian OTLs revealed the potential for both positive and negative unintended consequences if accessed by physicians. An important positive consequence includes serving as a guide for improvements to quality of care provided. Our findings suggest that patient concerns aligned well with characteristics described in the CanMEDS roles, and many of the comments within the written reviews focus on what could be considered as modifiable aspects of practice. Negative consequences include effects on physician confidence, self-worth, and disability. This is relevant to future and practicing physicians for directing awareness and education to improve patient-physician interactions and patient satisfaction, to reduce medico-legal risk, and to increase the quality of care delivered. However, the credibility and usefulness of patient-generated assessment websites for formal use by physicians remain questionable. Since diverse and constructive feedback from many sources and perspectives, including those of colleagues and patient, is central to the personal and professional development of physicians, it may be beneficial to increase the value and usability of patient-generated assessments.[20,42]

Conflicts of Interest: The authors declare no conflicts of interest.
Funding: There was no source of funding related to this study.
Edited by: Anita Acai (section editor); Christina St-Onge (senior section editor); Marcel D'Eon (editor-in-chief)
Acknowledgements: The authors thank Mélyssa Fortin, M. D., C. M. candidate (McGill University) for her contribution.

References

1. Boud D. Sustainable assessment: Rethinking assessment for the learning society. *Stud Contin Educ*. 2000; 22(2): p. 151-167. https://hdl.handle.net/10536/DRO/DU:30071986.
2. Gipps CV. *Beyond testing: towards a theory of educational assessment*. London. Washington: The Falmer Press; 1994. https://doi.org/10.4324/9780203486009.

3. Rushton A. Formative assessment: a key to deep learning? *Med Teach.* 2005; 27(6): p. 509-513. https://doi.org/10.1080/01421590500129159.
4. Schuwirth LWT, Van der Vleuten CPM. Programmatic assessment: from assessment of learning to assessment for learning. *Med Teach*. 2011; 33(6): p. 478-485. https://doi.org/10.3109/0142159X.2011.565828.
5. Shepard LA. The role of assessment in a learning culture. *Educ Res.* 2000; 29(7): p. 4-14. Https://doi.org/10.3102/0013189X029007004.
6. Nicol DJ, Macfarlane-Dick D. Formative assessment and self-regulated learning: a model and seven principles of good feedback practice. Stud High Educ. 2006; 31(2): p. 199-218. https://doi.org/10.1080/03075070600572090.
7. Tamblyn R, Abrahamowicz M, Brailowsky C et al. Association between licensing examination scores and resource use and quality of care in primary care practice. *JAMA*. 1998; 280(11): p. 989-996. https://doi.org/10.1001/jama.280.11.989
8. Tamblyn R, Abrahamowicz M, Dauphinee WD et al. Physician scores on a national clinical skills examination as predictors of complaints to medical regulatory authorities. *JAMA*. 2007; 298(9): p. 993-1001. https://doi.org/10.1001/jama.298.9.993.
9. Tamblyn R, Abrahamowicz M, Dauphinee WD et al. Association between licensure examination scores and practice in primary care. *JAMA*. 2002; 288(23): p. 3019-3026. https://doi.org/10.1001/jama.288.23.3019.
10. Emmert M, Meier F, Pisch F, Sander U. Physician choice making and characteristics associated with Using physician-rating websites: cross-sectional study. *J Med Internet Res*. 2013; 15(8). https://doi.org/10.2196/jmir.2702.
11. Emmert M, Sander U, Pisch F. Eight questions about physician-rating websites: a systematic review. *J Med Internet Res*. 2013; 15(2). https://doi.org/10.2196/jmir.2360.
12. Hanauer DA, Zheng K, Singer DC, Gebremariam A, Davis MM. Public awareness, perception, and use of online physician rating sites. *JAMA*. 2014; 311(7): p. 734-735. https://doi.org/10.1001/jama.2013.283194.
13. Aungst H. Patients say the darnedest things. You can't stop online ratings, but you can stop fretting about them. *Med Econ.* 2008; 85(23): p. 27. PMID: 19209533.
14. Bacon N. Will doctor rating sites improve standards of care? Yes. BMJ. 2009; 338. https://doi.org/10.1136/bmj.b1030.
15. Greaves F, Ramirez-Cano D, Millet C, Darzi A, Donaldson L. Harnessing the cloud of patient experience: using social media to detect poor quality healthcare. *BMJ Qual Saf.* 2013; 22(3): p. 251-255. http://dx.doi.org/10.1136/bmjqs-2012-001527.
16. Lagu T, Hannon NS, Rothberg MB, Lindernauer PK. Patients' Evaluations of health care providers in the era of social networking: an analysis of physician-rating websites. *J Gen Intern Med.* 2010; 25(9): p. 942-946. https://doi.org/10.1007/s11606-010-1383-0.
17. McCartney M. Will doctor rating sites improve the quality of care? No. *BMJ*. 2009; 338. https://doi.org/10.1136/bmj.b1033.
18. Pasternak A., Scherger JE. Online reviews of physicians: what are your patients posting about you? *Fam Pract Manag*. 2009; 16(3): p. 9. PMID: 19492765.
19. Hanauer DA, Zheng K, Singer DC, Gebremariam A, Davis MM. Parental awareness and use of online physician rating sites. *Am Acad Pediatr*. 2014; 134(4): p. 966-975. https://doi.org/10.1542/peds.2014-0681.
20. Strech D. Ethical principles for physician rating sites. *J Med Internet Res.* 2011; 13(4): p. 113. https://doi.org/10.2196/jmir.1899.
21. Trehan SK, Daluiski A. Online patient ratings: why they matter and what they mean. *Hand Surg*. 2016; 41(2): p. 316-319. https://doi.org/10.1016/j.jhsa.2015.04.018.
22. Kadry B, Chu LF, Gammas D, Marcario A. Analysis of 4999 online physician ratings indicates that most patients give physicians a favorable rating. *J Med Internet Res*. 2011; 13(4): p. 95. https://doi.org/10.2196/jmir.1960.
23. Sobin L, Goyal P. Trends of online ratings of otolaryngologists: what do your patients really think of you? *JAMA Otolaryngol. Head Neck Surg*. 2014; 140(7): p. 635-638. https://doi.org/10.1001/jamaoto.2014.818.
24. Yu J, Samuel LT, Yalçin S, Sultan AA, Kamath AF. Patient-recorded physician ratings: what can we learn from 11,527 online reviews of orthopedic surgeons? *J Arthroplasty*. 2020 Jun;35(6). https://doi.org/10.1016/j.arth.2019.11.021
25. Ramkumar PN, Navarro SM, Chughtai M, La T Jr, Fisch E, Mont MA. The patient experience: an analysis of orthopedic surgeon quality on physician-rating sites. *J Arthroplasty*. 2017 Sep;32(9):2905-2910. https://doi.org/10.1016/j.arth.2017.03.053
26. Akbarpour M, Tawk K, Frank M, Gomez AS, Mostaghni N, Abouzari M. Assessment of laryngologists' ratings on physician review websites. *World J Otorhinolaryngol Head Neck Surg.* 2023 Mar 31;10(1):1-6. https://doi.org/10.1002/wjo2.95
27. Chua JT, Nguyen E, Risbud A, et al. online ratings and perceptions of pediatric otolaryngologists. *Laryngoscope.* 2021 Oct;131(10):2356-2360. https://doi.org/10.1002/lary.29479
28. Calixto NE, Chiao W, Durr ML, Jiang N. Factors impacting online ratings for otolaryngologists. *Ann Otol Rhinol Laryngol*. 2018 Aug;127(8):521-526. https://doi.org/10.1177/0003489418778062
29. Stanbouly D, Rahhal Z, Talis A, Stanbouly R, Baron M, Arce K, Chandra SR. Assessing reviews of academic oral and maxillofacial surgeons within the US on Healthgrades. *Oral Maxillofac Surg*. 2024 Mar;28(1):323-330. https://doi.org/10.1007/s10006-023-01146-6
30. López A, Detz A, Ratanawongsa N, Sarkar U. What patients say about their doctors online: a qualitative content analysis. *J Gen Intern Med.* 2012; 27(6): p. 685-692. https://doi.org/10.1007/s11606-011-1958-4.
31. Ellimoottil C, Hart A, Greco K, Quek ML, Farooq A. Online reviews of 500 urologists. *J. Urol.* 2013; 189(6): p. 2269-2273. https://doi.org/10.1016/j.juro.2012.12.013.
32. Kinast RM, Barker GT, Day SH, Gardiner SK, Mansberger SL. Factors related to online patient satisfaction with ophthalmologists. *J. Ophthalmol*. 2014; 121(9): p. 1843-1845. e1. https://doi.org/10.1016/j.ophtha.2014.04.009.
33. Bakhsh W, Mesfin A. Online ratings of orthopedic surgeons: analysis of 2185 reviews. *Am J Orthop*. 2014; 43(8): p. 359-363. PMID: 25136868.
34. RateMDs. Available from www.RateMDs.com. [Accessed on Oct 15, 2015].

35. Stolberg M. Active euthanasia in pre-modern society, 1500–1800: learned debates and popular practices. *Soc Hist Med.* 2007; 20(2): p. 205-221. https://doi.org/10.1093/shm/hkm034.
36. Sandelowski M. What's in a name? Qualitative description revisited. *Res Nurs Health*. 2010; 33(1): p. 77-84. https://doi.org/10.1002/nur.20362.
37. Miles MB, Huberman AM, Saldana J. Qualitative data analysis: a methods sourcebook. Los Angeles: SAGE; 2013. https://www.jstor.org/stable/24332877.
38. Adams SA. Sourcing the crowd for health services improvement: the reflexive patient and "share-your-experience" websites. *Soc Sci Med*. 2011; 72(7): p. 1069-1076. https://doi.org/10.1016/j.socscimed.2011.02.001.
39. Canada, R.C.o.P.a.S.o. *CanMEDS Framework*. 2015 [Accessed on Aug 14, 2018].
40. Mayer B. *The dynamics of conflict resolution: a practitioner's guide.* New York: John Wiley & Sons; 2010.
41. Watling C, Driessen E, Vander der Vleuten CP, Lingard L. Learning from clinical work: the roles of learning cues and credibility judgements. *Med Educ*. 2012; 46(2): p. 192-200. https://doi.org/10.1111/j.1365-2923.2011.04126.x.
42. Krasner MS, Epstein RM, Beckman H et al. Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *JAMA.* 2009; 302(12): p. 1284-1293. https://doi.org/10.1001/jama.2009.1384.
43. Siedsma M, Emlet L. Physician burnout: can we make a difference together? *J Crit Care.* 2015; 19(1): p. 273. https://doi.org/10.1186/s13054-015-0990-x.
44. Sood A, Prasad K, Schroeder D, Varkey P. Stress management and resilience training among Department of Medicine Faculty: a pilot randomized clinical trial. *J Gen Intern Med*. 2011; 26(8): p. 858-861. https://doi.org/10.1007/s11606-011-1640-x.
45. West CP, Dyrbye LN, Rabatin JT et al. Intervention to promote physician well-being, job satisfaction, and professionalism: a randomized clinical trial. *JAMA Inten Med*. 2014; 174(4): p. 527-533. https://doi.org/10.1001/jamainternmed.2013.14387.
46. Kluger AN, DeNisi A. The effects of feedback interventions on performance: a historical review, a meta-analysis, and a preliminary feedback intervention theory. *Psychological Bulletin.* 1996; 119(2): 254-284. https://doi.org/10.1037/0033-2909.119.2.254.
47. Lefroy J, Watling C, Teunissen PW, Brand P. Guidelines: the do's, don'ts and don't knows of feedback for clinical education. *Perspect Med Educ*. 2015; 4(6): p. 284-299. https://doi.org/10.1007/s40037-015-0231-7.
48. Sargeant J, Mann K, Sinclair D, Vleuten C, Metsemakers J. Understanding the influence of emotions and reflection upon multi-source feedback acceptance and use. *Adv Health Sci Educ Theory Pract.* 2008; 13(3): p. 275-288. https://doi.org/10.1007/s10459-006-9039-x.
49. Archer JC. State of the science in health professional education: effective feedback. *Med Educ*. 2010; 44(1): p. 101-108. https://doi.org/10.1111/j.1365-2923.2009.03546.x.
50. Samora JB, Lifchez SD, Blazar PE. Physician-rating web sites: ethical implications. *J Hand Surg AM*. 2016; 41(1): p. 104-110. e1. https://doi.org/10.1016/j.jhsa.2015.05.034.
51. Coulter A, Locock L, Ziebland S, Calabrease J. Collecting data on patient experience is not enough: they must be used to improve care. *BMJ.* 2014; 348. https://doi.org/https://doi.org/10.1136/bmj.g2225.
52. Coulter A. Can patients assess the quality of health care? Patients' surveys should ask about real experiences of medical care. *BMJ.* 2006; 333(7557): p. 1-2. https://doi.org/10.1136/bmj.333.7557.1.
53. Hodges B. Scylla or Charybdis: navigating between excessive examination and naive reliance on self-assessment. *Nurs. Inq.* 2007; 14(3): p. 177-177. https://doi.org/10.1111/j.1440-1800.2007.00376.x.
54. Baldie DJ, Guthrie B, Entwistle V, Kroll T. Exploring the impact and use of patients' feedback about their care experiences in general practice settings—a realist synthesis. *Fam Pract*. 2018. 35(1): p. 13-21. https://doi.org/10.1093/fampra/cmx067.
55. Gleeson H, Calderon A, Swami V, Deighton J, Wolpert M, Edbrooke-Childs J. Systematic review of approaches to using patient experience data for quality improvement in healthcare settings. *BMJ Open*. 2016; 6(8): p. e011907. https://doi.org/10.1136/bmjopen-2016-011907.
56. Wensing ME, Vingerhoets E, Grol R. Feedback based on patient evaluations: a tool for quality improvement? *Patient Educ Couns.* 2003; 51(2): p. 149-153. https://doi.org/10.1016/s0738-3991(02)00199-4.
57. Donnon T, Al Ansari A, Al Alawi S, Violato C. The reliability, validity, and feasibility of multisource feedback physician assessment: a systematic review. *Acad Med.* 2014; 89(3): p. 511-516. https://doi.org/10.1097/ACM.0000000000000147