# Medically Confirmed Functional Impairment as Proof of Accommodation Need in Postsecondary Education: Are Ontario's Campuses the Bellwether of an Inequitable Decison-Making Paradigm?

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#### Abstract

Historically, students with disabilities in Canada provided comprehensive and objective documentation of their diagnosis and related functional impairments to access appropriate accommodations at the post-secondary level. Recently, some Canadian provinces have adopted an approach whereby students with mental health disabilities need not reveal their diagnosis; a healthcare professional may simply verify that a disability exists, enumerate the functional impairments, and detail the accommodations to be provided. Without transparent documentation, Disability Services Offices frequently rely upon physicians for this information. We completed a census of all medical training programs in Ontario to evaluate the extent to which medical professionals receive training in determining functional impairments in postsecondary students with mental health conditions. Our findings demonstrated that the vast majority of medical residents receive no such training. Two programs report offering limited training in subjective methods such as self-report or the wishes of the client. Implications and recommended best practice are discussed.

Keywords: disability policy, academic accommodation, functional impairment, decision making, human rights

# Introduction

The number of students with mental health complaints enrolled in Canadian postsecondary institutions has grown markedly (American College Health Association, 2017a, 2017b; American College Health Organization, 2011) and is now in contention with learning disabilities (LD) to be the disability most commonly seen by Disability Services Offices (DSO) (Nadira Ramkissoon, Ministry of Advanced Education and Skills Development, personal communication, March 13, 2017). In community colleges in Ontario there was a 110% increase in mental health disabilities requiring accommodation between 2009 and 2015 as compared to a 25% increase in LD and a 71% increase in Attention Deficit Hyperactivity Disorder (ADHD) (Deloitte Canada, 2017). Postsecondary institutions in the United States are reporting similar increases in accommodation requests, with mental health diagnoses eclipsing all other disability groups over the past few years as the main justification for required supports (Belkin, 2018). The accommodations needed to level the playing field for students with mental health challenges may be quite different from those needed by students with other non-evident disabilities already served by DSOs, as symptoms may be transient, curable, or cyclical throughout the school year.

A provincially funded research survey investigating appropriate accommodations practices for students with mental health challenges (Condra & Condra, 2015) concluded, based primarily on the opinions of the students polled by the researchers, that students need not disclose their mental health condition in order to receive academic accommodations in postsecondary settings. Instead of documentation describing objective, evidence-based procedures, the report recommended that students provide only information regarding the functional limitations experienced as a result of their mental health issues in order to obtain

academic accommodations in college or university. These recommendations mirror current accommodation trends in both the United States (Lovett, Nelson, & Lindstrom, 2015) and other Canadian provinces such as Manitoba (Glowacki, 2018).

Taking their cue from the conclusions of this report, the Ontario Human Rights Commission (OHRC) issued a statement to all Ontario postsecondary institutions that students with mental health diagnoses need not disclose the specifics of their disability to educators when seeking accommodations (OHRC, 2016). Instead, students can simply provide a written statement from any qualified health care professional that they have a disability, without disclosing the actual diagnosis (OHRC, 2016). Health care practitioners must also indicate the functional impairments experienced by the student secondary to their (undisclosed) mental health condition, the types of accommodations and supports required, and whether such impairments are temporary or permanent. Thus, the adequacy and accurate measurement of disability-related functional impairment has become a central point of discussion and the new focus in regard to academic accommodation policies and procedures in postsecondary institutions.

A central assumption that is critical to this newly proposed system is that health care professionals are trained in making objective determinations of both functional impairments and appropriate accommodations for postsecondary students with mental health issues. This assumption, however, has not been studied empirically. While the new OHRC recommendations may provide greater personal privacy on behalf of students, this new system may also result in professionals with little training specific to the assessment of impairment dictating accommodation recommendations resulting in a decision-making paradigm that may not be equitable or reliable. Thus, the current system for determining academic accommodations leaves a gap that can result in a student receiving accommodations that may not be best suited to or appropriate for their actual impairments.

DSOs across the province are typically staffed by one or more Disability Advisors (DA) who hold undergraduate or graduate degrees in psychology, social work, or education and often have a post-degree certificate as a Learning Disabilities Specialist. DAs routinely review disability documentation and attend meetings where psychological practitioners present the results of psycho-educational assessments (Harrison & Wolforth, 2012). They also interact with faculty to understand the learning outcomes of particular programs so that they may help students understand how their disabilities interact with the requirements of their chosen program.

The challenge for DSOs in supporting students with disabilities is to provide appropriate accommodations or supports that do not violate the essential requirements of a program and do not confer an academic advantage relative to other non-disabled students (Harrison, Lovett, & Gordon, 2013). Some relevant questions for which DSO staff require specific information are as follows: are accommodations required because they serve to remove a bona fide barrier?; is a reported barrier actually a symptom associated with the disability?; do the symptoms fall outside the normal range of experiences for young adults?; or, is the requested accommodation simply a preference? Additional information of this nature is essential to inform accommodation implementation in an equitable manner and ensure equal, not excessive, access to a program of study (Lovett & Sparks, 2013; Pitoniak & Royer, 2001). Such information is not required with physician recommendations.

Many of the academic accommodations provided to students with non-evident disabilities (e.g., LD, ADHD, mental health, etc.) would improve the performance of non-disabled students as well (Gordon, Murphy, & Keiser, 1998; Kettler, 2012; Lewandowski, Cohen, & Lovett, 2013; Sireci & Hambleton, 2009; Sireci, Scarpati, & Li, 2005). For example, research evaluating the benefit of providing extra time on tests has shown that provision of more than time and a quarter actually provides an advantage to examinees with LD relative to other non-disabled postsecondary students (Lewandowski et al., 2013, Lovett, 2010). Additionally, while students with bona fide reading problems obtain an advantage if more than 25% extra time is given, any extra time may provide an unfair advantage if the accommodated test taker does not truly have a reading impairment (Kettler, 2012; Lewandowski, Hendricks, & Gordon, 2015; Miller, Lewandowski, & Antshel, 2013). Accommodation is meant to level the playing field, not tip the advantage in favour of the person with a disability.

Currently, there are a number of standardized measures available to assist health care professionals in determining the functional impairments experienced by persons with mental health issues (Els, Kunyk, Hoffman, & Wargon, 2012; Lewandowski, Berger, Lovett, & Gordon, 2015). The main drawbacks of these measures, however, are that most confuse self-reporting of symptoms with degree of actual impair-

ment (Leclair, Leclair, & Brigham, 2016; Lovett, Gordon, & Lewandowski, 2016; Patterson & Mausbach, 2010; Stone, Turkkan, Bachrach, Jobe, Kurtzman, & Cain, 2000; Ustun & Kennedy, 2009) and none are specific to impairments in academic functioning experienced in a postsecondary setting. Nevertheless, utilization of such standardized impairment measures would ensure that the functional impairments identified by health care professionals are based on a structured assessment methodology rather than on subjective information. This latter point is crucial, as an evaluator requires a reliable means of differentiating abnormal or statistically unusual complaints from ones common to most postsecondary students. Otherwise, it is difficult to know to what extent recommendations are made based on subjective factors or the wishes of the patient rather than objective standardized methods for making these decisions that allow for a consistent, equitable allocation of academic accommodations and monetary resources.

Given that Ontario's postsecondary DSOs must now rely on the opinions provided by physicians, this study set out to evaluate the extent to which the medical professionals most likely to assess students with mental health complaints (i.e., physicians specializing in Family Medicine, Psychiatry, or Pediatrics) receive formal training during residency in determining functional impairments in such postsecondary students, and if so, to identify which objective, standardized methods they are taught to employ when making such determinations. We also examined the extent to which these medical residents receive formal training in making evidence-based recommendations for academic accommodations when a patient is found to have a mental health impairment.

## Method

# **Participants**

Contact information for Ontario's six postgraduate medical education programs in Pediatrics, Psychiatry, and Family Medicine residency programs was gathered from the relevant medical school's websites. In all, 18 invitations to participate were extended and 16 responses received; this translates into a strong response rate of 88.9%. Fourteen completed the survey online, and two replied by email saying that there was no point in their completing the survey as they did not provide this type of educational training to their medical residents.

#### Measures

Participants answered ten questions capturing information such as their position and role within the medical program, familiarity with program content and hours of instruction, as well as knowledge of methods taught with respect to determining functional impairment and academic accommodations in a postsecondary setting. See Appendix A.

## **Procedures**

Program directors, or their recommended delegates for all six postgraduate medical education training programs in Ontario were contacted and asked to complete a short on-line questionnaire regarding the training provided to their students to determine functional impairment and any needed accommodations within a postsecondary educational setting. Each contact person was emailed a letter of information outlining the purpose of the study, its voluntary nature, the approximate time commitment as well as a link to the survey. The entire survey and recruitment process were given ethics approval by the Graduate Research and Ethics Board at Queen's University. Furthermore, at their request, a separate ethics application was submitted and approved by one of the institutions.

Given the small size of this census and to conserve respondent anonymity, identifying information about specific respondents (e.g., institution names, program type providing specific training) was not included in this report.

#### Results

The online questionnaire was completed by 14 of 18 potential participants. Two other program contacts responded by email stating that they did not complete the survey as their programs did not provide the training in question. Given, however, that these individuals identified both their program affiliation and

training position in postgraduate medicine, their responses were included in the results where appropriate (i.e., an answer of "no", "none", or "zero hours"). In every case but one, the respondents held director status (see Table 1).

Table 1
Response Frequency to (1) the Respondent's Position in the Medical School, (2) the Respondent's Level of Familiarity to Training Programs, and (3) Training Provided

Choices	N	0/0
Respondent's position at the school		
Program director (family medicine)	4	25.00
Program director (psychiatry)	5	31.50
Program director (pediatrics)	4	25.00
Other:	3	18.75
Curriculum instructional designer		(6.25)
Program director undergraduate family medicine and enhanced skills		(6.25)
Associate program director, curriculum mediation for the post-graduate program		(6.25)
Level of familiarity with training provided to residents		
Very familiar	9	64.30
Familiar	5	35.70
Somewhat familiar	0	
Not very familiar	0	
Is training provided?		'
Yes	1	6.25
No	14	87.50
Unsure	1	6.25

All respondents indicated being familiar or very familiar with the training curriculum provided to their residents. Opinions regarding how many hours of training (in general) are required to become expert in determining functional impairment in students with mental health disorders enrolled in postsecondary academic settings ranged from a one-hour lecture (one respondent), to 4-10 hours of training (one respondent), to no estimate (2 respondents). Ten respondents chose to answer the question by saying that no training was provided by their programs, and two indicated that this form of training may occur depending on the rotations of the residents.

When asked whether or not their medical programs offered training specific to determining functional impairment in postsecondary-aged students suffering mental health disorders the majority 87.5% (14/16) replied that no such training was provided. One respondent was uncertain if this type of training was offered to residents, and one confirmed that training did occur. In both of these cases, the use of an objective method to determine functional impairment was not thought to be employed as both respondents failed to endorse any of the more comprehensive, evidence-based measures offered as options (American Medical Association's Guides to the evaluation of permanent impairments, 6th edition (Rondinelli, 2009); The Psychiatric Impairment Rating Scale (Parmegiani, Lovell, & Skinner, 2007); or the Guide to the Evaluation of Psychiatric Impairment for Clinicians (Epstein, Mendelson, & Strauss, 2005)). Instead, the two respondents chose the "other" option; one indicated that their program taught residents to use the Global Assessment of Functioning (GAF; Yu, 2015) scale for this purpose, and the other indicated "DSM related functional impairment", which is ambiguous and may refer to the World Health Organization Disability Assessment Scale (WHODAS 2.0; Ustun, 2010) or the GAF. The number of hours allotted to this training was thought to be 20 plus hours in one program, and an unknown amount in the other program depending

on whether their residents gained exposure to this population through rotation at their student health service.

These same two programs (the only ones potentially providing training with respect to postsecondary students with mental illnesses) stated that they teach their residents to use clinical judgement based on interview (i.e., patient self-report) to determine the need for academic accommodations. Finally, one of these programs did not provide any training to residents with respect to determining the length of time required for mental health accommodation in a postsecondary setting, and the other indicated that residents are taught to use their clinical judgement based on interview to make such decisions.

When asked to specify the methods through which these two programs instructed medical doctors to determine the appropriateness of four common accommodations (extra time for test/exams, extra time for assignments/project, formula sheets for tests/exams, and deferral of tests/exams) for students presenting with suspected mental illness, the use of "clinical judgment" was endorsed by both programs for all four accommodations (Table 2 & 3). Asking the student if they thought a particular accommodation would be helpful was the next most frequently taught approach (see Table 2 & 3). Use of standardized tools such as self-report checklists tallying symptom count or rating systems was taught by only one program and only in relation to receiving accommodations of extra time.

Table 2
Response to Number of Hours of Training Required to Become Expert in Determining Functional Impairment due to Mental Disorders

Choices	N	%
How many hours of training are required in general to become expert in determining functional impairments due to mental health disorders?		
One hour	1	6.25
4 – 10 hours	1	6.25
Other	14	87.50
Training not provided	10/14	
I don't know	2/14	
May receive other training	2/14	

Table 3
Follow up Questions for the Two Respondents Reporting at Least One Hour of Training

Choices	N	
How do you teach your residents to determine the appropriateness of each of the following accommodations for students with mental health disorders?		
Extra time for tests and exams		
Ask patient if they think it would help	2	
Base on # of symptoms endorsed on self-report	1	
Base on clinical opinion	2	
Base on severity of impairment	1	
Extra time for assignments/projects		
Ask patient if they think it would help	2	
Base on # of symptoms endorsed on self-report	1	
Base on clinical opinion	2	
Base on severity of impairment	1	
Provide patient with formula sheets for tests/exams		
Ask patient if they think it would help	1	
Base on # of symptoms endorsed on self-report	0	

Base on clinical opinion	2
Base on severity of impairment	0
Deferral of test/exams	
Ask patient if they think it would help	1
Base on # of symptoms endorsed on self-report	0
Base on clinical opinion	2
Base on severity of impairment	0

Participants were asked to provide other comments at the end of the questionnaire; these may be found in Table 4. In general, participants either did not see the need for providing this type of training, or allowed that such decisions would be made based on the wishes of the patient.

Table 4
Respondents' Additional Comments

This is a good question. Normally we ask patients how their mental health condition interferes with their academic studies and base our recommendations on this information.
Not relevant for the population of patients my residents see.
Most of the time in our program, residents would not be expected to make this call.
Not sure why our residents would need this training.

## Discussion

Extraordinary weight is currently placed on the opinions provided by physicians regarding existing functional impairment and accommodations required for students with mental health disabilities in the Ontario postsecondary system. This is concerning primarily because the research presented here shows clearly that medical professionals generally receive no formal training in methods to determine functional impairments experienced by students with mental health conditions in postsecondary academic settings. Across Ontario, almost all postgraduate medical training programs indicated to us that they do not provide their physicians with this type of training. Indeed, when asked how physicians are taught to determine functional impairment, most programs provide residents with no formal guidance. The two programs offering some training in this regard referenced use of the GAF and/or the WHODAS, two brief screening measures that are subjective in nature, confuse symptoms with impairment, and have poor inter-rater agreement (Aas, 2011; Gold, 2014; Grootenboer et al., 2012). These same two programs also indicated that they teach residents to use patient self-report as both a proxy for impairment, even though there is little correlation between self-reported symptoms and actual functional impairment (Gordon et al., 2006; Ustun & Kennedy, 2009), and as a means of determining accommodation recommendations.

When asked how residents are taught to determine what accommodations a patient required, the chosen method reported by those schools that claim to teach it was clinical judgement based on the patient's wishes. This is both worrisome and the crux of the problem given the current situation. First, clinical judgment relies on anecdotal evidence, and is thus considered to be the lowest form of empirical evidence in both research and medical practice guidelines (Burns, Rohrich, & Chung, 2011; Iverson, 2014; Lee & Hunsley, 2015). In fact, Lee and Hunsley (2015) state that "although anecdotal evidence can inform hypotheses to be evaluated systematically, such evidence should not be equated with scientific data. Without the controls afforded by scientific practice and scientific thinking, such evidence should not be equated with scientific data" (p. 536).

Second, physicians typically view their role as being an advocate for their patients and feel uncomfortable refusing to support the wishes of their patients, even if they know that the treatment or service requested by the patient is contraindicated or not supported by evidence-based research (Epstein, 2017). Beyond discomfort, there is the fact that assuming the role of advocate makes it virtually impossible to then provide an independent, objective evaluation of a client's disability status for legal purposes (Hearn, 2011; Weinstein, 2001). Indeed, attempting to objectively determine disability status for legal purposes

while acting as a patient advocate is defined as a conflict of interest, a clear violation of professional codes of ethics (Hearn, 2011), and contrary to guidelines published by all professional regulatory bodies.

Results of this census suggest that student self-report will determine assumed functional impairment and subsequent accommodations as their attending physician is most likely not trained in making such determinations; when using clinical judgement, physicians simply ask the student what accommodations would help. Student self-report is often inaccurate for a variety of reasons (see Lovett et. al., 2015, for an extended discussion). For example, students are frequently unaware of the extent to which their reported symptoms might be normal relative to their non-disabled peers. Indeed, Garden and Sullivan (2010) found that between 59 to 73% of normal, non-disabled university students endorse problems with poor concentration, 45-57% report memory problems, and 37% report difficulty with reading. Similarly, Lewandowski, Lovett, Codding, and Gordon (2008) found that over half of non-disabled college students complain of having to read material over and over again to understand it and 47.5% report working harder than other students to obtain good grades. If physicians place considerable weight on student's self-reported problems without understanding the ubiquity of such complaints, they may incorrectly conclude that these problems are a significant limitation for this student rather than normal, common concerns.

Similarly, we know that many non-disabled postsecondary students believe that academic accommodations would help them perform better academically. Lewandowski, Lambert, Lovett, Panahon, and Sytsma (2014) found little difference between disabled and non-disabled students when asked if certain academic accommodations would be beneficial to their academic performance. All students, disabled or not, believed that accommodations such as extra time, access to a word processor for writing tests, and additional breaks during tests would all improve their academic performance. These authors conclude that most commonly provided accommodations improve the performance of all students, regardless of disability status. As such, if physicians base accommodation recommendations mainly on patient preference, other non-disabled students could rightly complain that this determination method was unfair and does not address a true disability-related need.

If physicians are trained to diagnose conditions, but not to objectively determine disability status, functional impairment, or appropriate and equitable accommodations for such impairments, then their contribution is that of identifying a disorder, which is not by any means equivalent to a disability. This distinction is stated directly in the opening pages of the Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5; American Psychiatric Association, 2013):

In most situations, the clinical diagnosis of a DSM-5 mental disorder ... does not imply that an individual with such a condition meets legal criteria for the presence of a mental disorder of a specified legal standard (e.g., disability). ... additional information is usually required beyond that contained in the DSM-5 diagnosis, which might include information about the individual's functional impairments and how these impairments affect the particular abilities in question ... assignment of a particular diagnosis does not imply a specific level of impairment or disability. (p. 25)

Hence, a DSM-5 diagnosis alone is not sufficient to demonstrate the presence of a disability. In the absence of a confirmed disability and associated functional impairments, the determination of desired accommodations as made within physician offices may be left in the hands of students who may not be fully aware of the implications of their disorder, nor the academic supports and accommodations that would grant them equal but not excessive access to their educational programs.

By contrast, DSO staff with their training in understanding cognitive skills related to academics (particular postsecondary programs), normal developmental complaints in the postsecondary setting, and knowledge of disability legislation are better positioned than physicians to weigh in on decisions regarding appropriate accommodations. Under the new system, however, they are no longer able to exercise these skills, as they are now looking only at a list of recommended accommodations stripped of the unique contextual factors that contribute to a proper diagnosis. This situation is similar to a teacher trying to determine how to best help a student who is struggling to master a complex mathematic procedure. If the student provides the teacher with just their final numerical answer, but not the calculations that went into the answer, the teacher can only adopt a trial-and-error approach as they try to determine whether the student understands or knows all the steps required in the task. The student is in no better position than the teacher when it comes to understanding where they need help, they only know they need it. Similarly, DSOs now have to work blind when a student enters their office with a form confirming that they have an

"impairment" and a companion checklist of recommended accommodations; without knowing the type of disability or seeing the assessment information on which the accommodation requests were based, the DSO can only give generic, trial-and-error, and possibly inappropriate help. This approach defies the principle of treating students with disabilities as individuals with unique strengths, weaknesses, and learning needs and relegates them to a group of learners with generic learning challenges to be met with similarly generic and impersonal supports.

One might suggest that family physicians or DSOs simply employ standardized self-report measures of functional impairment. This method, however, is also flawed. Indeed, a recent review of existing functional capacity measures used when evaluating individuals with mental illness cited numerous problems with these existing measures (Patterson & Mausbach, 2010). The authors noted that the very features that define some mental illnesses easily influence self-report scales. For example, the reliability of individuals with schizophrenia to self-report on their levels of functioning can be affected by poor insight and tenuous connection to reality (Atkinson, Zibin, & Chuang, 1997). Conversely, due to the nature of their symptoms those with anxiety may over estimate the extent to which they experience functional impairments and under estimate their actual level of functioning (Gentes & Ruscio, 2014; Lovett, 2017; O'Donohue & Fisher, 2006). Depressed individuals, too, often view their experiences through a negative filter whereby they consistently perceive, remember, and interpret their own actions and performance in a negative light and forget or disregard any positive behaviours or abilities they possess (see Mathews & MacLeod, 2005). As such, their self-report, too, is often negatively skewed and not always an accurate estimate of their actual functioning. In addition, brief self-report scales to determine functional impairment are also vulnerable to deliberate over reporting. For instance, recent research by Fuermaier et al., (2017) concludes that self-reported impairments on such rating scales are susceptible to noncredible responses and should be interpreted with caution in any clinical evaluation. Similarly, Patterson and Mausbach (2010) conclude that "self-reports may produce suspect information which may be neither a valid nor reliable measure of a patient's actual level of functioning" (p. 5). They also state that caregiver/proxy report could be equally problematic as suitable proxies may not be available or their interactions occur primarily in supportive settings that can mask the nature or extent of the functional challenges endured by the individual with mental illness.

Still, it is worth considering the utility of self-report of functional limitations as a screening approach that is subjective in nature and based on physician *impression* of functional impairments. The American Medical Association guidelines on determining permanent impairment (Rondinelli, 2009) indicate that impairment ratings are simply a physician driven first approximation of a process which is set up to try to assign a numeric value estimating the level of functional loss experienced by patient's within their daily lives. Studies show that these guidelines do not provide a valid, reliable, or evidence-based system for rating impairment and that that they do not reflect an individual's actual loss of functioning (see Holmes, 2016). However, as a first pass estimate, self-report screening can conceivably identify symptomology to guide DSOs and other involved professionals in obtaining the additional information needed to determine if the cited impact is truly significant and relevant as compared to other students in the academic arena. In other words, if students with mental illness deliver a checklist to DSOs indicating organizational and memory challenges as well as problems in completing written assignments, then objective, standardized assessments could be completed that measure these very skills and evaluate the student's functioning relative to other same-aged individuals. This presents a means to confirming the subjective information generated through self-report tools and improves the likelihood that any granted accommodations will be equitable in nature.

Comorbid conditions, too, affect the number and types of supports and services required by students with mental health conditions, and are thus crucial pieces of information removed from review in the new accommodation decision making process. For instance, Bijl and Ravelli (2000) examined functional disability scores of 7,147 individuals from the Dutch general population to assess the nature and strength of current and residual impairments in various functional domains of life. They found that disability levels varied by psychiatric diagnosis and that comorbidity strongly aggravated the impairments experienced. The authors concluded that mental health care providers should be made aware that the extent and type of impairment may vary with the different types of disorders and among different groups within the population. Further evidence on this point is provided by two findings from a recent study of Ontario's college students with mental illnesses (Holmes & Silvestri, 2016). This study determined that 60.8% of students

accessing campus counselling and DSOs reported having a mental illness with 45.5% reporting one diagnosis and 15.3% reporting two or more diagnoses. Students with two or more mental illness diagnoses indicated having more impairment in academic skills than those with just one diagnosis, and the nature of the academic impact varied by type of mental illness diagnosis. What this means is that the nature and the number of diagnoses attached to a student is important information. It provides guidance as to the likely areas of academic challenge and the severity or range of impact. A checklist that simply verifies the need for services falls short of imparting this key information and results in students and DSOs working to figure this out on their own as the school term marches on and time winds down for the student to receive necessary, individualized supports.

# Limitations

Typical of most surveys of this type, our study has a few expected limitations. First, we surveyed only postgraduate medical schools in one province. Although unlikely, it is possible that specific training of this type is provided to postgraduate medical residents in other provinces. Cross-Canada investigation regarding this training is therefore needed.

Second and relatedly, it is possible that physicians in these specialties are able to receive more specialised training in making such determinations by attending continuing education workshops; however, in discussions with the Royal College of Physicians and Surgeons of Canada and after undertaking a thorough perusal of continuing education workshops offered by each of these three specialities as listed on the various Canadian Association websites (Pediatrics, Family Medicine, Psychiatry) we failed to identify any accredited workshops dealing with this specialized topic. Future studies should investigate whether continuing education opportunities are offered to existing physicians in Canada to allow them to obtain this specific decision-making expertise.

## Conclusion

Ontario's physicians, according to the data gathered in this census, receive no or very little training in objectively determining either the functional impairments experienced by postsecondary students with mental illnesses or how to determine the academic accommodations that might be appropriate for specific and normatively unusual symptom complaints. Positioning our province's physicians as primary gatekeepers in determining the accommodation needs of students with disabilities is therefore unjustified. Furthermore, unless future research shows that physician training programs across the country offer substantially different curriculums than that offered in Ontario, this concern extends to Canada's other provinces and territories.

The findings of this survey revealed that the majority of physicians receive no training whatsoever in making such decisions. In the absence of training in determining functional impairment within academic settings, physicians apply clinical judgement or ask patients to state their perceived areas of difficulty and desired accommodations. Using self-report to determine accommodations has serious drawbacks. Limited self-awareness may cause a student to suggest insufficient accommodations relative to their need, or to be overly generous to the point that an academic advantage is conferred compared to non-disabled peers. More worrisome is that self-generated accommodations may work against students, as when a student believes they need text-to-speech software to aid in their reading when they would in fact, be better served by tutoring sessions to improve their comprehension of material (Holmes, Silvestri, & Gouge, 2009). Accommodations based on self-report screeners may be missing the mark in terms of what is needed to allow for equal, not enhanced, participation. While not presently documented in peer-reviewed journals, it is very likely that postsecondary sectors in Canada's other provinces and territories (who also rely upon physician verification of disability related needs for students with mental illnesses) face similar challenges in determining personalized and equitable accommodations for their students.

Many of the cognitive and processing deficits reported by patients with mental illnesses are objectively measurable. Formal psychometric evaluation using standardized measures therefore offers a useful means to conduct differential diagnosis, determine specific learning needs and generate accommodation recommendations tailored to the individual and postsecondary learning. The comorbidity rate of mental illness and learning or attention disabilities is such that both should also be screened for when clients present with symptoms suggesting either of these disorders.

It also seems prudent to look toward providing training to physicians, psychologists, and possibly occupational therapists to assist these professionals in objectively evaluating the level of functional impairment experienced by a student with a mental health condition and to better understand the appropriate academic accommodations that flow from such impairments. Such education, supplemented with the knowledge base of these highly trained and regulated health professionals, could ensure a more objective, impartial, and fair method of determining reasonable and appropriate accommodations.

In sum, the current system in Ontario for determining accommodations for postsecondary students with mental illnesses falls well short of being reliable, evidence-based, or equitable. Serious deficiencies in the process, players, and tools mean that students in need of academic accommodations due to mental health disorders may not be receiving the accommodations that best circumvent their functional impairments or provide equal but not enhanced participation. Physicians, as this survey has demonstrated, have little to no training in this area and therefore use clinical judgement or patient self-report to identify academic accommodations. The time and expense of using Ontario's already over-burdened medical practitioners to (poorly) document the academic accommodation needs of students with mental illnesses is thus hard to justify. Clearly, a better, more objective and research-informed system for determining the functional impairments experienced by postsecondary students with mental health disorders is required.

## References

- Aas, I. M. (2011). Guidelines for rating global assessment of functioning (GAF): A review. *Annals of General Psychiatry*, 10, 2-11. Retrieved from https://doi.org/10.1186/1744-859X-10-2
- American College Health Association. (2017a). American College Health Association-National College Health Assessment II: Ontario Canada Reference Group. Hanover, MD: Author.
- American College Health Association. (2017b). American College Health Association-National College Health Assessment II: Undergraduate Student Reference Group Executive Summary Fall 2016. Hanover, MD: Author.
- American College Health Orginization. (2011). American College Health Association-National College Health Assessment II: Undergraduate Reference Group Executive Summary Fall 2011. Hanover, MD: American College Health Association.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Atkinson, M., Zibin, S., & Chuang, H. (1997). Characterizing quality of life among patients with chronic mental illness: A critical examination of the self-report methodology. *American Journal of Psychiatry*. 154, 99-105. doi:10.1176/ajp.154.1.99
- Belkin, D. (2018, May). Colleges bend the rules for more students, give them extra help. *The Wall Street Journal*. Retrieved from https://www.wsj.com/articles/colleges-bend-the-rules-formore-students-give-them-extra-help-1527154200
- Bijl, R., & Ravelli, A. (2000). Psychiatric morbidity, service use, and need for care in the general population: Results of The Netherlands Mental Health Survey and Incidence Study. *American Journal of Public Health*, 90(4), 602-7.
- Burns, P. B., Rohrich, R. J., & Chung, K. C. (2011). The levels of evidence and their role in evidence-based medicine. *Plastic and Reconstructive Surgery*, *128*(1), 305-310. doi:10.1097/PRS.0b013e318219c17
- Condra, M., & Condra, E. M. (2015). Recommendations for documentation standards and guidelines for academic accommodations for postsecondary students in Ontario with mental health disabilities. Kingston, ON: Queen's University and St. Lawrence College Partnership Project.
- Deloitte Canada. (2017). Enabling sustained student success support for students at risk in Ontario's colleges. Retrieved from https://collegesontario.org/policy-positions/position-papers/Colleges%20Ontario%20\_At%20Risk%20Student%20Report\_2017\_vfinal.pdf
- Els, C., Kunyk, D., Hoffman, H., & Wargon, A. (2012). Workplace functional impairment due to mental disorders. In L. L'Abate. (Ed.), *Mental illnesses Understanding, prediction and control*. Rijeka, Croatia: InTech. doi:10.5772/1235
- Epstein, D. (2017, February 22). When the evidence says no, but the doctor says yes. The Altantic

- *Daily.* Retrieved from https://www.theatlantic.com/health/archive/2017/02/when-evidence-says-no-but-doctors-say-yes/517368/
- Epstein, M., Mendelson, G., & Strauss N. H. M. (2005). *Guide to the evaluation of psychiatric impairment for clinicians*. Melbourne: Authors.
- Fuermaier, A. B. M., Tucha, O., Koerts, J., Butzbach, M., Weisbrod, M., Aschenbrenner, S., & Tucha, L. (2017). Susceptibility of functional impairment scales to noncredible responses in the clinical evaluation of adult ADHD. *The Clinical Neuropsychologist, Nov 23*,1-10. doi:10. 1080/13854046.2017.1406143
- Garden, N., & Sullivan, K. (2010). An examination of the base rates of post-concussion symptoms: The influence of demographics and depression. *Applied Neuropsychology*, 17, 1-7.
- Gentes, E., & Ruscio, A. (2014). Perceptions of functioning in worry and generalized anxiety disorder. *Cognitive Therapy Research*, 38(5), 518-529.
- Glowacki, L. (2018, February 2). Disabled by anxiety: Accommodations on the rise for students at Manitoba post-secondary schools. CBC News. Retrieved from http://www.cbc.ca/news/canada/manitoba/student-accommodations-universities-1.4513369
- Gold, L. (2014). DSM-5 and the assessment of functioning: The World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0). Journal of the American Academy of Psychiatry and the Law Online, 42, 173-181.
- Gordon, M., Antshel, K., Faraone, S., Barkley, R., Lewandowski, L., Hudziak, J., ... Cunningham, C. (2006). Symptoms versus impairment: The case for respecting DSM-IV's Criterion D. *Journal of Attention Disorders*, 9(3), 465-475.
- Gordon, M., Murphy, K. R., & Keiser, S. (1998). Attention deficit hyperactivity disorder (ADHD) and test accommodations. *Bar Examiner*, 67(4), 26-36.
- Grootenboer, E. M., Giltay, E. J., van der Lem, R., van Veen, T., van der Wee, N. J., & Zitman, F. G. (2012). Reliability and validity of the Global Assessment of Functioning Scale in clinical outpatients with depressive disorders. *Journal of Evaluation in Clinical Practice*, 18, 502–507. doi:10.1111/j.1365-2753.2010.01614.x
- Harrison, A., Lovett, B. J., & Gordon, M. (2013). Documenting disabilities in postsecondary settings diagnosticians' understanding of legal regulations and diagnostic standards. *Canadian Journal of School Psychology*, 28(4), 303-322.
- Harrison, A., & Wolforth, J. (2012). Findings from a pan-Canadian survey of disability services providers in postsecondary education. *International Journal of Disability, Community and Rehabilitation*, 11(1). Retrieved from http://www.ijdcr.ca/VOL11 01/articles/harrison.shtml
- Hearn, M. T. (2011). Dual relationships: Managing the boundaries. In D. R. Evans (Ed.). Law, standards, and ethics in the practice of psychology (3rd ed., pp. 123-177). Toronto, ON: Carswell.
- Holmes, E. B. (2016). *Impairment rating and disability determination*. Retrieved from http://emedicine.medscape.com/article/314195-overview
- Holmes, A., & Silvestri, R. (2016). Rates of mental illness and associated academic impacts in Ontario's college students. *Canadian Journal of School Psychology, 31*(1), 27-46.
- Holmes, A., Silvestri, R., & Gouge, A. (2009, June). *Test-to-voice technology in an adult aboriginal sample with reading difficulties: Examination of the efficacy.* Poster session presented at the Canadian Psychological Association Annual Convention, Montreal, QC.
- Iverson, G. (2014, November). Improving the methodology for identifying cognitive impairment in psychiatry and neurology. Keynote Lecture presented at the 25th Anniversary Conference of the Swedish Neuropsychological Society, Stockholm, Sweden.
- Kettler, R. (2012). Testing accommodations: Theory and research to inform practice. *International Journal of Disability, Development and Education*, *59*, 53-66.
- Leclair, N., Leclair, S., & Brigham, C. (2016). The medical model of impairment. In S. Goldstein & J. Naglieri (Eds.), *Assessing impairment*. Boston, MA: Springer.
- Lee, C., & Hunsley, J. (2015). Evidence-based practice: Separating science from pseudoscience. *Canadian Journal of Psychiatry*, 60, 534-540.
- Lewandowski, L., Berger, C., Lovett, B., & Gordon, M. (2015). Test-taking skills of high school

- students with and without learning disabilities. *Journal of Psychoeducational Assessment*, 34(6), 566-576. doi:10.1177/0734282915622854
- Lewandowski, L., Cohen, J., & Lovett, B. (2013). Effects of extended time allotments on reading comprehension performance of college students with and without learning disabilities. *Journal of Psychoeducational Assessment*, 31(3), 326-336.
- Lewandowski, L., Hendricks, K., & Gordon, M. (2015). Test-taking performance of high school students with ADHD. *Journal of Attentional Disorders*, 19(1), 27-34. doi:10.1177/1087054712449183
- Lewandowski, L., Lambert, T. L., Lovett, B. J., Panahon, C. J., & Sytsma, M. R. (2014). College students' preferences for test accommodations. *Canadian Journal of School Psychology*, 29, 116-126. doi:10.1177/0829573514522116
- Lewandowski, L. J., Lovett, B. J., Codding, R. S., & Gordon, M. (2008). Symptoms of ADHD and academic concerns in college students with and without ADHD diagnoses. *Journal of Attention Disorders*, 12(2), 156-161.
- Lovett, B. (2010). Extended time testing accommodations for students with disabilities: Answers to five fundamental questions. *Review of Educational Research*, 80, 611-638.
- Lovett, B. (2017). *Test anxiety accommodations: Assessment, documentation and management.*Paper presented at the High Incidence Disabilities in Higher Education Conference. Toronto, ON.
- Lovett, B., Gordon, M., & Lewandowski, L. (2016). Legal conceptions of impairment: Implications for the assessment of psychiatric disabilities. In S. Goldstein & J. Naglieri (Eds.), *Assessing impairment*. Boston, MA: Springer.
- Lovett, B. J., Nelson, J. M., & Lindstrom, W. (2015). Documenting hidden disabilities in higher education: Analysis of recent guidance from the association on higher education and disability. *Journal of Disability Policy Studies*, 26(1), 44-53.
- Lovett, B., & Sparks, R. (2013). Applying objective diagnostic criteria to students in a college support program for learning disabilities. *Learning Disability Quarterly*, 46(4), 231-241.
- Mathews, A., & MacLeod, C. (2005). Cognitive vulnerability to emotional disorders. *Annual Review of Clinical Psychology, 1*, 167-195.
- Miller, L., Lewandowski, L., & Antshel, K. (2013). Effects of extended time for college students with and without ADHD. *Journal of Attentional Disorders*, 19(8), 678-686. doi:10.1177/1087054713483308
- O'Donohue, W. T., & Fisher, J. E. (2006). Clinician's handbook of evidence-based practice guidelines: The role of practice guidelines in systematic quality improvement. In J. E. Fisher & W. T. O'Donahue (Eds.), *Practioner's guide to evidence-based psychotherapy*. New York: Springer.
- Ontario Human Rights Commission (OHRC). (2016). With learning in ming: Inquiry report on systemic barriers to academic accommodation for postsecondary students with mental health disabilities. Retrieved from http://www.ohrc.on.ca/sites/default/files/With%20learning%20in%20mind\_inquiry%20report%20on%20systemic%20barriers%20to%20accademic%20accommodation accessible 2017.pdf
- Parmegiani, J., Lovell, D., & Skinner, Y. (2007). *Psychiatric impairment rating scale*. Sydney: Chambers Medical Specialists.
- Patterson, T. L., & Mausbach, B. (2010). Measurement of functional capacity: A new approach to understanding functional differences and real-world behavioral adaptation in those with mental illness. *Annual Review of Clinical Psychology*, (6), 139-154.
- Pitoniak, M., & Royer, J. (2001). Testing accommodations for examinees with disabilities: A review of psychometric, legal, and social policy issues. *Review of Educational Research*, 71, 53-104.
- Rondinelli, R. D. (Ed.). (2009). *Guides to the evaluation of permanent impairment* (6th ed., revised). Chicago, IL: American Medical Association Press.
- Sireci, S., & Hambleton, R. K. (2009). Mission--Protect the public: Licensure and certification testing in the 21st century. In R. P. Phelps (Ed.), *Correcting fallacies about educational and*

- psychological testing (pp. 199-217). Washington, DC: APA.
- Sireci, S. G., Scarpati, S. E., & Li, S. (2005). Hypothesis, test accommodations for students with disabilities: An analysis of the interaction. *Review of Educational Research*, 75(4), 457-490.
- Stone, A. A., Turkkan, J. S., Bachrach, C. A., Jobe, J. B., Kurtzman, H. S., & Cain, V. S. (Eds.). (2000). *The science of self-report: Implications for research and practice*. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Üstün, T. B. (2010). *Measuring health and disability: Manual for WHO disability assessment schedule WHODAS 2.0.* Geneva: World Health Organization.
- Üstün, B., & Kennedy, C. (2009). What is "functional impairment"? Disentangling disability from clinical significance. *World Psychiatry*, 8(2), 82-85. doi:10.1002/j.2051-5545.2009. tb00219.x
- Weinstein, M. C. (2001). Should physicians be gatekeepers of medical resources? *Journal of Medical Ethics*, *27*, 268-274.
- Yu, G. (2015). Global assessment of functioning (GAF). Encyclopedia of Cross-Cultural School Psychology. doi:10.1007/978-0-387-71799-9\_185