



UNIVERSITY  
OF MANITOBA

MAX RADY COLLEGE OF MEDICINE

Rady Faculty of Health Sciences

Bachelor of Science in Medicine Degree Program  
End of Term Final Report

Office of Graduate and  
Advanced Degrees  
Education in Medicine Max  
Rady College  
of Medicine  
Rady Faculty of  
Health Sciences  
University of Manitoba

Student Name:

Date:

Project Title:

Primary Supervisor Name:

Department:

Co-Supervisor Name:

Department:

Summary (250 words max single spaced):

Student Signature

Primary Supervisor Signature

**Acknowledgments:** I gratefully acknowledge the sole or partial funding support from the following sponsors;

H.T. Thorlakson Foundation  
Dean, College of Medicine  
Research Manitoba

Manitoba Medical Service Foundation (MMSF)  
Vice-Dean, Research Rady FHS  
Health Sciences Centre Research Foundation  
Heart and Stroke Foundation

Sponsorship if different or additional to above;

MD/PHD MD/MSc. BSc. (MED) MED II Research Program

Joe Doupe Annual Event Undergraduate Medical Student Research Symposium

Canadian National Medical Student Research Symposium

## Introduction & Background

Gender affirming therapies are used to alleviate gender dysphoria, and may include the following: transitioning to living in a gender role consistent with one's identity, hormone therapy, trans-affirmative psychological therapy, and/or gender affirming surgeries, including lower (hysterectomy, salpingo-oophorectomy, metoidioplasty, phalloplasty, or vaginoplasty) and upper surgeries (mastectomy with masculine chest contouring or breast enhancement) (Coleman et al., 2012). Most of these therapies alleviate gender dysphoria by bringing the individual's physical appearance into greater alignment with their gender identity. Many studies have demonstrated positive impact on the lives of those with gender dysphoria; improving quality of life (Teixeira et al., 2020), reducing gender dysphoria (Murad, et al., 2010), and decreasing mental health comorbidity (Dhejne et al., 2016).

The availability of gender dysphoria treatment, and the process of accessing it varies greatly between countries and between Canadian provinces. In Canada, certain gender affirming surgeries are covered by the publicly funded healthcare system, while others are deemed "cosmetic" and are therefore the individual's responsibility to fund. However, the forms of surgeries covered, and their availability, differ between Canadian provinces. Gender affirming surgeries are also sharply divided in regards to their pre-surgical assessment and informed consent process depending on whether they are covered by the publicly funded healthcare system or not. Surgical procedures that are not covered are treated similar to cosmetic procedures obtained by cisgender individuals, where the surgeon solely bears the duty to inform patients of risks and benefits, and to obtain their consent (Ashley, 2019). In contrast, pre-surgical assessment for many surgeries that are publicly funded in Canada requires the involvement of at least one mental health professional, in addition to the surgeon. In this approach, the responsibility to inform patients and obtain their consent is shared between the surgeon and mental health professional(s). This approach is delineated in the World Professional Association of Transgender Health Standards of Care (Version 7), published in 2011, and applies to lower surgeries and upper surgeries in most of the country (Ashley, 2019). WPATH regularly provides updated guidance for professionals working with transgender and non-binary individuals (Coleman et al., 2012). In Canada, these guidelines are the most accepted and widely used to guide professional practice. A new (8th) version of the Standards of Care is currently in development.

The SOC7 outlines who can provide a pre-surgical mental health assessment to refer an individual for surgery, provides recommendations regarding what should be assessed, and lists how many assessments should be performed, which depends on the type of surgery being requested. Upper surgeries (including mammoplasty and mastectomy) require one referral from a qualified mental health professional (Coleman et al., 2012). In contrast, lower surgeries (such as hysterectomy, salpingo-oophorectomy, metoidioplasty, phalloplasty, or vaginoplasty) require two independent qualified mental health professionals to assess and refer the patient for the procedure (Coleman et al., 2012). The SOC7 likewise defines who constitutes a "qualified mental health professional" in this regard, with the two most important requirements being a master's degree in the behavioral sciences, and competence in diagnosing conditions defined within the Diagnostic and Statistical Manual of Mental Disorders (DSM) or International Classification of Diseases (ICD) (Coleman et al., 2012). In Ontario, registered nurses, psychologists, nurse practitioners, physicians, and social workers holding a master's degree can all assess and refer for gender affirming surgeries, though only physicians, nurse practitioners,

and psychologists are able to make the formal diagnosis of gender dysphoria required by the SOC7 (Koch et al., 2020). In the years since SOC7 was published, there has been a general movement away from following a strict guideline based model towards an informed consent method of pre-surgical assessment, nevertheless, the SOC7 still provides the gold standard for which publicly funded surgery is accessed in Canada.

The SOC7 has gained enough influence and acceptance to become a standard of professional practice (Bouman et al., 2014). However, care providers and/or researchers do not unanimously agree with the SOC7 or its use in determining who receives access to publicly funded gender affirming surgery in Canada. A number of recent publications, including those by Ashley (2019); Bockting et al. (2004); Bouman et al. (2014); Corneil, Eisfeld, & Botzer (2010); De Cuypere & Vercruyssen (2009); Lawrence (2003); Murphy (2016); Toivonen & Dobson (2017); and van de Grift, Mullender, & Bouman, (2018) have examined the benefits and drawbacks of adhering to the SOC7. Lev (2009) summarizes the difficult position mental healthcare providers are placed in, discussing how those advocating for transgender and non-binary rights are frustrated by what they call “professional gatekeeping,” (where professionals are involved in assessing and determining who can access gender affirming procedures, thus “guard the gate” against unsuitable candidates) while the professionals providing referrals know they may face judicial consequences if they do not strictly follow the recommended guidelines.

Budge, Israel, & Merrill, (2017), in their review of psychotherapy research with sex and gender minority (SGM) populations, declare that one of the key areas of research needed in transgender and non-binary health literature is an analysis of how different mental health professionals provide assessments and referrals for gender affirming surgery. The current study intends to address this knowledge gap. Given the controversy surrounding the use of the SOC7 guidelines, it is imperative to examine what Canadian practitioners are actually applying to their work with transgender and non-binary individuals. Few researchers have directly examined this question, and those who do are often vague in their descriptions. For example, a surgeon in Mississauga, Ontario who performs upper surgeries only notes in their retrospective chart review that their 679 patients were over 16 years old, reported experiencing gender dysphoria, and were deemed able to grant informed consent (McEvenue et al., 2018). Likewise, Rachlin, Hansbury, & Pardo (2010) note that in their surveyed sample of 134 transmasculine individuals undergoing hysterectomy and/or oophorectomy, only 11% met the minimum SOC7 prerequisites, and 13% had met none of the SOC7 recommendations. This highlights the need to examine health care providers’ practices around pre-surgical assessment for gender affirming surgery.

### ***The Current Survey***

The aim of this survey study is to determine the practices and decision-making of pre-surgical mental health assessors for gender affirming surgeries across Canada. As previously outlined, there are flexible clinical guidelines available, set by the WPATH. However, the extent of flexibility in these guidelines necessarily indicates that individuals interpret and follow them in divergent ways. Pre-surgical requirements for gender affirming surgeries in Canada are changing rapidly, thus it is important to gauge practitioner attitudes and practices as a starting point to inform practice. In addition to providing a general description of respondents providing pre-surgical assessments in Canada, the following two hypotheses were examined:(a) we predicted that most providers, in response to the question of “what guidelines do you use

when assessing an individual for surgical readiness?" would name the WPATH SOC7 as their main or only resource for basing their decisions. This is based on the observation that most official provincial websites specifically name the WPATH guidelines in their discussion of how to access surgery and many provincial health funding agencies require the SOC7 prerequisites to be fulfilled prior to surgery funding being granted, and (b) we hypothesized that there would be a general movement away from endorsement of WPATH guidelines as the most appealing model of decision-making around gender affirming surgeries.

## **Materials and Methods**

### ***Recruitment Procedures***

Participants were selected on the basis of being health professionals who provide assessments to adults in order to determine their readiness for gender affirming surgery within Canada. An attempt was made to recruit participants through the Canadian Professional Association for Transgender Health (CPATH), a network of care providers in Canada, however, we were unable to obtain their assistance. Forty-three Canadian Institutions (including Transcare BC, Sherbourne Health Center, New Brunswick Transgender Health Network, and other regional programs) and 151 clinicians were contacted via email and phone. Snow-ball sampling was used to expand on the number of providers contacted: potential participants were asked to send the survey link to other professionals they know who do this work. There is no available list of providers who conduct gender affirming pre-surgical assessments, thus snow-ball sampling was the only means to ensure a reasonable sample size and inclusivity of individuals who may be excluded otherwise. Potential participants were provided with a brief study description: "We are doing a survey of the practices and decision-making of mental health assessors for gender confirming/transition-related surgeries in Canada. The survey will ask about your current assessment practices, opinions of the World Professional Association for Transgender Health guidelines, and for your ideas about any clinical practice changes you think could be helpful to the pre-surgical assessment process. It will take approximately 20 to 30 minutes to complete. [...] Assessment practices are changing rapidly in this field. We are trying to understand a diversity of approaches to inform future directions to benefit people who participate in these assessments. We are using snowball sampling to recruit participants. We would sincerely appreciate it if you forward this email to any provider you know who does this work." Selecting the link to the qualtrics web survey brought potential participants to an informed consent disclosure statement. Participants were then invited to complete an online survey and offered a chance to enter a draw for a \$100 gift card (Amazon). Approval for the study was obtained from the University of Manitoba Health Research Ethics Board (HREB).

### ***Participants***

71 individuals consented to participate between November 26, 2018 and October 22, 2019. Data from a participant indicating that their client base was entirely composed of children (under 18) was removed before proceeding with further analysis. This left 70 participants in the sample, however, many surveys were incomplete: 37 individuals (52.9%) did not provide answers to every question applicable to all participants. All of the participants conducted psychological readiness assessments for gender affirming surgeries, with 41 participants (58.6%) only assessing adults over 18 years old, and 29 participants (41.4%) providing assessments to both adults and youth. The mean number of assessments performed by the 62

respondents who provided this information was 135.2, with a range from 1 assessment (3 respondents) to 3,000 assessments (1 respondent). 64 respondents provided at least one answer when asked the context in which they performed their assessments, while 6 individuals (8.6%) did not respond. Most respondents worked in private practice ( $n = 44$ ), while 15 worked in a gender clinic with a multidisciplinary team; 7 reported providing assessments in a hospital setting; 6 reported working within a community health organization; 2 reported working within a provincial trans health program. There was 1 report each of conducting assessments within university health services, a “LGBT Counselling center”, and a sexual health center. Fifty-one (72.9%) of the 70 participants provided the province(s) in Canada they practiced in. Most practiced in Ontario alone (22 people; 31.4% of total sample), 10 (14.3%) practiced in British Columbia, 8 (11.4%) practiced in Quebec alone, 3 (4.3%) practiced in Nova Scotia, 3 (4.3%) practiced in Manitoba, and 3 (4.3%) practiced in Alberta, 1 practiced in New Brunswick, and 1 practiced in both Ontario and Quebec. Fifty-three respondents provided their professional qualification. Of those who responded, 11 were Ph.D. or PsyD. Psychologists; 10 held a Master of Social Work; 7 were Psychiatrists; 6 held a Master of Counselling; 2 were Nurse Practitioners; 1 held a Master of Marriage and Family Therapy; 1 was an Occupational Therapist; and 17 wrote in their own response. These answers were grouped into the following categories: 13 individuals identified as Physicians (12 Family Physicians and 1 Endocrinologist); 2 identified as Clinical Sexologists, and 2 identified as Registered Nurses. Fifty-two professionals provided information on the number of years they practiced professionally ( $M = 10.3$  years), with a range from 1 year (2 respondents) to 40 years (2 respondents). In terms of gender identity, the sample comprised 43 (61.4%) cisgender, 5 (7.1%) transgender, 4 (5.7%) non-binary, and 18 participants (25.7%) who did not specify their gender identity.

### ***The Survey***

**Assessment Procedures.** Participants were asked, “What areas do you cover in your assessment? Please check all that apply: (a) Social history, (b) Current living situation/employment, (c) Gender development history, (d) Mental health history, (e) Current mental health presentation, (f) Informed consent- do they understand the risks and benefits, (g) Informed consent- do they have the ability to consent, (h) Informed consent- do they have clear and realistic expectations of surgical outcomes, (i) Informed consent- do they understand the irreversible nature of the surgery, (j) Informed consent- do they understand fertility options and loss, (k) Other options- i.e., other ways to express gender without surgeries, (l) The person’s ability to care for themselves after surgery and engage in post-surgical procedures (e.g. dilation), and (m) Other- please describe.” Participants were asked about their use of assessment aides via the question, “do you routinely use measurement tools, surveys or questionnaires as part of your assessment?: (a) Yes, or (b) No.” Those that responded with “(a) yes,” were asked, “If yes, please indicate what measurement tools, surveys or questionnaires that you use?” Adherence to the SOC7 and personal evaluation criteria were assessed using two questions: “Do you assess clients for whom you are both the assessor and therapist, or both assessor and health care provider?: (a) Never, (b) Rarely, (c) Sometimes, (d) Often, (e) Always”; and “When you conduct pre-surgical assessment for lower surgeries (i.e., phalloplasty/ metoidioplasty/ penectomy, orchiectomy, vaginoplasty): (a) I am the only assessor, (b) I am one of two mental health assessors, (c) I am one of two mental health assessors + a medical assessor, (d) I am the mental health assessor, and there is also a medical assessor, (e) Unsure, (f) Other- please describe.”

**Guideline use.** To examine our first hypothesis regarding the common use of the WPATH SOC7 across Canada, participants were asked “what guidelines do you use when assessing an individual for surgical readiness? Please describe in detail.”

**Practitioner Recommendations for Future Referral Processes.** To address the second hypothesis, participants were asked, “What model of medical decision-making around gender confirming surgeries most appeals to you?: (a) Current WPATH guidelines (standard referral to mental health provider for an opinion for psychological readiness) prior to any surgery referral , (b) Referral from general provider, (c) Referral from family physician/nurse practitioner to surgeon, with option of general provider to obtain mental health opinion prior to referring in the case of preference/comfort or complicated mental health presentation, (d) Other- please describe.” Participants were then asked the open-ended follow up question, “What, if any, clinical practice or bureaucratic changes would you like to see in general with regard to mental health assessment for gender confirming surgeries?”

## Results

**Assessment coverage.** Of the 64 participants (91.4% of the total sample) who provided information on the content of their pre-surgical assessment, all but one (who only selected the answer of *other ways to express gender without surgeries*) covered multiple areas in their assessments. Some general topics were assessed in the following frequency: 62 (88.6%) covered *current mental health presentation*, 61 (87.1%) covered *gender development history*, 61 (87.1%) covered *mental health history*, 60 (85.7%) assessed *current living situation/employment*, 59 (84.3%) covered *the person's ability to care for themselves after surgery and engage in post-surgical procedures*, 58 (82%) examined *social history*, and 51 (72.9%) covered *other ways to express gender without surgeries*. A large number of respondents examined specific aspects of informed consent during their assessment process, including: 63 (90%) *do they understand the risks and benefits*, 63 (90%) *do they have the ability to consent*, 62 (88.6%) *do they have clear and realistic expectations of surgical outcomes*, 62 (88.6%) *do they understand the irreversible nature of the surgery*, and 61 (87.1%) *do they understand fertility options and loss*. The unique answers that some participants provided were analyzed according to their thematic content, and the following subjects emerged: six reported examining family/social support, 6 reported assessing current and past medical/surgical/medication history, 5 reported addressing substance use/addictions history, 4 participants reported assessing post-surgical need for supportive care, 2 reported evaluating emotional readiness and coping strategies, 1 examined patients' legal history, 1 addressed financial barriers to care, and 1 explored how surgery may impact sexual functioning.

**Assessment Tool Use.** Fifty participants (71.4%) responded that they did not use any tools during their assessments. In contrast, only 14 participants (20%) said that they routinely use measurement tools, surveys or questionnaires during their pre-surgical assessments. These participants used many different combinations of various measures, which included: personally developed gender assessment questionnaires (6 participants), Sherbourne-developed questionnaires (2 participants), Patient Health Questionnaire 9-question depression scale (2 participants), anxiety scales (used by 1 participant), depression scales (1 participant), Beck Youth Inventories (1 participant), Patient Health Questionnaire-2 (1 participant), Utrecht Gender Dysphoria Scale (1 participant), chest dysphoria scale (1 participant), Body Image Questionnaire (1 participant), DSM-5 cross-cutting measure (1 participant), Life Line (1

participant), Millon Clinical Multiaxial Inventory (1 participant), Personality Assessment Inventory (1 participant), Beck Depression Inventory (1 participant), Generalized Anxiety Disorder-7 (1 participant), Maclean Inventory (1 participant). Six participants (8.6%) provided no answer to this question.

**Assessor and Care Provider Role Conflicts.** Sixty one participants (87.1%) discussed their role in their client's care, and whether they were their client's therapist or healthcare provider in addition to being the one providing the client's pre-surgical mental health assessment. Most of the respondents experienced a role conflict at some point, as 30 participants (42.9%) responded they were *often* both the assessor and therapist/healthcare provider for their client. Fifteen respondents (21.4%) said that this role conflict occurred *sometimes*, 7 respondents (10%) said that this role conflict *rarely* occurred, 5 individuals (7.1%) responded with *never*, and 4 (5.7%) responded *always*. Nine participants (12.9%) provided no response.

**Assessment Protocol & SOC7 Adherence.** Sixty participants (85.7%) provided information on the role their pre-surgical mental health assessment played in fulfilling the requirements for accessing lower surgeries (i.e., phalloplasty/ metoidioplasty/ penectomy, orchiectomy, vaginoplasty). Thirteen participants (18.6%) answered *I am one of two mental health assessors + a medical assessor*, 10 participants (14.3%) provided no answer, 2 participants (2.9%) answered *I am the only assessor*, 1 participant (1.4%) answered that they were *unsure*. Twenty participants (28.6%) provided a written response. The content of these responses were analyzed, and grouped into themes: 5 participants were one of two medical health assessors, 5 participants had not (or could not have, due to local regulations) been able to provide lower surgery assessment at the time of the survey, 4 participants described being a medical health assessor in a multi-disciplinary assessment team, 2 participants described their role as the single assessor for gonadectomy but one of two for genital reconstructive surgery, 1 participant described their role as a non-specific assessor alongside a medical provider, 1 participant self-described as "I am what they need," 1 participant described providing both a mental and medical assessment, and one participant (who works both in Ontario and Quebec) described how their role changed according to where they provided an assessment: "In Ontario, I am the mental health assessor, and there is also a medical assessor. In Quebec, I am one of two mental health assessors + a medical assessor."

### ***Guideline use [Hypothesis 1]***

**Guidelines Used to Assess Surgical Readiness.** Participants contributed a diversity of answers when asked to provide a detailed description of the guidelines they use when assessing clients' mental health readiness for gender affirming surgery. Ten participants (14.3%) did not provide any written answer to the question. Twenty two participants (31.4%) listed that they used the SOC7 in combination with at least one other form of guidelines. The other guidelines used were the following: 6 participants additionally used a personal assessment method and/or professional experience/knowledge, 6 participants also used Rainbow Health Ontario (1 of these participants specified that they used "WPATH Criteria as taught through Rainbow Health Ontario"), 6 participants also used Sherbourne Health Center Guidelines, 4 participants also used "Provincial Criteria"/Health Department for their funding province or territory, 3 participants also used Trans Care BC Primary care toolkit, 2 participants also used an Informed Consent model, 2 participants also used University of California San Francisco, 1 participant also used Vancouver Coastal Health, 1 participant also used Endocrine

Society guidelines; and 1 participant also utilized journal articles. Twenty individuals (28.6%) listed the WPATH SOC7 as their sole source of surgical readiness guidelines. Ten individuals (14.3%) did not list the SOC7 in any form: 8 of these 10 participants instead used an adapted informed consent model, while 2 of these 10 participants used personally developed assessment criteria. Eight other individuals (11.4%) did not use the WPATH SOC7 guidelines in their original form, and instead used a combination of Canadian-developed guidelines (most of which are based off of the SOC7). The guidelines they used included some combination of: Rainbow Health Ontario (3 participants), Sherbourne Health Center Guidelines (5 participants), JCEM (1 participant), and/or the Trans Care BC Primary care toolkit (2 participants).

### ***Changes Practitioners Want to See [Hypothesis 2]***

**Decision-Making Models Practitioners Want.** Participants were asked to either select, or write in, their preferred model of medical decision-making around gender affirming surgeries. Eighteen participants (25.7%) did not select an answer or provide their own. Of the 52 participants (74.3%) who responded, only 14 individuals (20% of total sample) selected the *current WPATH guidelines*. In contrast, 28 individuals (40% of the total sample) selected *referral from family physician/nurse practitioner to surgeon, with option of general provider to obtain mental health opinion prior to referring in the case of preference/comfort or complicated mental health presentation*, and 4 (5.7%) selected *referral from a general provider*. Six individuals (8.6%) wrote their own response to the question. However, 2 of these written entries were removed from further analysis, as they did not pertain to the question being asked, and the 4 remaining answers were reported. One individual suggested that surgery access should be changed to a combination of the decision-making models previously provided, but seemed uncertain of how this could be incorporated into practice. Another individual suggested that lower surgery access should reflect in-depth pre-surgical assessment modeled after those performed prior to major medical procedures, such as organ transplant. One individual wrote that lower surgery access should be changed to a simplified informed consent process. One individual argued against a change to a referral-based lower surgery access model because of lack of remuneration for physicians, and instead advocated for a centralized intake approach.

**Changes to Mental Health Assessments Practitioners Would Like to See.** Practitioners were asked *what, if any, clinical practice or bureaucratic changes would you like to see in general with regard to mental health assessment for gender confirming surgeries?* Thirty-nine written responses were received (3 responses were omitted from further analysis due to a lack of clarity). The remaining 36 responses (51.4% of total sample) were analyzed for content and grouped according to the main theme that they expressed: Ten individuals wanted to see specific changes to the SOC7 requirements, including everything from greater clarity in regards to certain requirements, reductions in the number of pre-surgical assessors needed, loosened hormone and lived-experience prerequisites, and reduced minimum age requirements for surgery. Nine participants wished to see increased accessibility and/or funding of surgeries. They wished to see decreased surgery request processing times, better inter-professional communication, “fewer barriers,” increased access to mental health providers/assessors, more providers being approved to provide surgery-related care/assessments, increased public funding of surgeries, increased numbers of sites that provide surgeries, improved access to surgery-related information and assessment tools, and improved funding for surgery performed outside of Canada. Seven participants wished for complete removal of the mental health assessment requirement for surgery. They argued that the capacity assessment that is integral



to an informed consent model would be sufficient, and/or the current mental health assessment is “inappropriate.” Two participants specifically asked for the removal of their province’s requirement for a pre-surgical assessment performed by a psychiatrist, arguing that the skills of other mental health experts would be sufficient. Two individuals wished to see a movement towards a supportive model of pre-surgical assessment, and away from strict guidelines and capacity assessments. Two respondents stated that they wanted to see an increase in trans-affirmative training of primary care providers. Two participants wanted to see greater consistency within the process of surgery access, in terms of pre-surgical wait-times, quality of pre-surgical assessments, and between public versus private means of access. One participant, paradoxically, stated that they wanted limitations on funded upper surgeries. One participant wished for increased financial incentives for medical practitioners involved in surgery-related care and assessment.

## Discussion

The main purpose of the study was to provide a general description of practitioners providing pre-surgical assessments for gender affirming surgery in Canada, including their assessment procedures and interpretations of the SOC7 guidelines, in addition to testing the following two main hypotheses: (a) that providers would identify the WPATH SOC7 as their main (or only) source of pre-surgical assessment guidelines, and (b) providers would demonstrate a trend towards preferring decision making models other than the SOC7.

**Standardization & Evidence-based Assessment.** Providers in this study reported a wide variety of assessment practices for pre-surgical assessment, demonstrating a lack of standardization intra and inter-provincially. This finding is consistent with previous research on the provision of pre-surgical mental health assessments for gender affirming surgery (see Coolhart et al., 2008; Gridley et al., 2016; and Sterling & Garcia, 2020). In the current study, we elucidated inconsistencies in the content covered by different practitioners during their assessments. Only 14 participants (20%) consistently used standardized tools, surveys, or questionnaires during their assessment procedure: furthermore, 6 of these participants used personally developed measures. As surgeons providing gender affirming surgeries are reliant on the professional judgement of mental health providers to determine that candidates are optimally prepared prior to undergoing surgery, these assessments should ideally be standardized and based on objective criteria that is tied to the success of surgical outcome (Ettner, 2018; Goodheart et al., 2006; and Keo-Meier & Fitzgerald, 2017). We also found a large degree of variation in the role each provider’s assessment played in their patients’ process of accessing lower surgeries. Some of this variation may have been explained by provincial funding bodies relying on different guidelines to determine access criteria (Solomon, Safer, & Tangpricha, 2019). Variation in criteria and regulations leads to confusion, frustration, and delays for not only providers (as many of the participants in this study expressed) but patients as well, and does not reflect the level of standardization that is essential to evidence-based practice and to the equitable and timely provision of healthcare services.

**Role Conflicts.** Most of the providers surveyed expressed some level of conflict between their role as a therapist or healthcare provider, and their duty to provide a pre-surgical mental health assessment to the individuals under their care. Some transgender and non-binary individuals feel pressured to present a falsified story to pre-surgical mental health assessors that masks their genuine distress, in the fear that expressing the truth could lead to delays in their ability to

access gender affirming surgery (Kinnon et al., 2020). This becomes complicated when the person's assessor is also the person who is responsible for assisting them with their mental health requirements, as a certain degree of trust and honesty is integral to the success of this therapeutic relationship. The finding that this role conflict is so common among Canadian practitioners likely reflects the small number of professionals qualified to do this work, but is concerning in that it may hinder genuine therapeutic relationships and contribute to patient resentment toward both the Canadian healthcare system and perceived "professional gatekeeping" (Hale, 2007).

### ***Guideline Use [Hypothesis 1]***

As hypothesized, most of the practitioners surveyed acknowledged the SOC7 as their main (or only) guideline for assessing their clients' readiness for gender affirming surgery. A third of participants listed the SOC7 as their only source of guidelines, while another third listed the SOC7 in conjunction with at least one other guideline source. Several respondents additionally listed a derivative of the SOC7 as their main source of guidance (e.g., Rainbow Health Ontario, Sherbourne Health Centre, Trans Care BC), demonstrating the extensive influence of the SOC7 on provincial health practice. These results are consistent with the observation that many provincial health funding agencies require the SOC7 prerequisites to be fulfilled prior to surgical funding being granted, and that there has previously been legal action taken against providers who sent referrals without fulfilling the SOC7 recommendations (Bouman et al., 2014). A significant number (16.7%) of participants did not use the SOC7, or its derivatives, in any form, representing a significant departure from the established norms of Canadian practice, and suggest that the SOC7 are not fully accepted as the standard of practice Canada-wide.

### ***Changes Practitioners Want to See [Hypothesis 2]***

We predicted that there would be variability in whether practitioners endorsed the SOC7 guidelines as the most appealing model of decision-making around gender affirming surgeries, based on the lack of consensus demonstrated in the current literature. This prediction held true among the sample of practitioners surveyed in the study. Only a quarter of those who responded endorsed the WPATH SOC7 as their preferred model for assessing readiness for gender affirming surgery. Likewise, the most common clinical or bureaucratic change practitioners expressed wanting was specific changes to the current WPATH Standards of Care, which included removal of the need for a second mental health assessor for lower surgeries, more clearly defined guideline recommendations, and removing mental health assessments for certain gender affirming surgeries. This suggests that the dissenting views on the SOC7 presented within recent academic publications ((Ashley, 2019; Bockting et al., 2004; Bouman et al., 2014; Corneil, Eisfeld, & Botzer, 2010; De Cuypere & Vercruysse, 2009; Lawrence, 2003; Murphy, 2016; Toivonen & Dobson, 2017; and van de Grift, Mullender, & Bouman, 2018) are mirrored by professionals in clinical practice. The most popular model among the practitioners surveyed (selected by 40% of the total sample) was *referral from family physician/nurse practitioner to surgeon, with option of general provider to obtain mental health opinion prior to referring in the case of preference/comfort or complicated mental health presentation*. Practitioners also wanted to see increased accessibility to and/or funding of surgeries. A simplified referral system could ideally facilitate faster surgery request processing times and decreased barriers to surgical access, while still providing a safety net for primary care providers

who do not have the training needed to adequately assess and care for patients with complex mental health presentations. However, this model would still not fully address practitioners' desire for improved inter-professional communication, increased access to mental health professionals, improved access to surgery-related information and assessment tools, more providers being approved to assist with surgery-related care, or their request for improved public funding of these services. This suggests that interprofessional teamwork is needed, and that public policy makers must become engaged in reforming the current system of gender affirming surgery access.

### **Limitations**

While the providers in this study were recruited from numerous disciplines and locations across Canada, it is impossible to ascertain how representative the sample was of the actual population of Canadian providers who perform pre-surgical mental health assessments for gender affirming surgery. Compounding this issue, many of the providers, organizations, and facilities contacted did not choose to participate in the study, and of the 70 providers who did, only 33 respondents (47.1%) consistently provided answers to all the applicable questions: 37 participants (52.9%) provided answers to only some of the questions. The cross-sectional study design itself limited our ability to assess for trends in the data. As there was no longitudinal component, it was not possible to ascertain how participants' professional practices, and view of the WPATH SOC iterations, have changed over their years of education and/or practice. It must also be acknowledged that the questionnaire-style method of gathering data opened the study to self-reporting biases, though this is a universal challenge (Althubaiti, 2016). Despite these challenges, the study provides a vital perspective into the practices and perspectives of a diverse group of Canadian providers who have not yet been the subject of study.

### **Implications**

Canadian providers demonstrated large variation in their pre-surgical assessment procedures. One major area of concern is the lack of consistent use of standardized assessment tools validated within transgender and non-binary populations, which must be rectified to allow for an equitable and equivalent assessment process to be integrated across Canada. Another implication of this research is the finding that the SOC7, though still the most widely used and influential guideline across Canada, is not universally accepted. Canadian providers show a preference for other models of pre-surgical assessment and are moving towards adopting other recommendations, unless forced to adhere to the SOC7 by local regulations. This demonstrates the need for the WPATH to collaborate with providers, researchers, and patient advocates to develop a new version of the Standards of Care that is responsive to the changing needs of these populations. Though there is much work to be done, the current study demonstrates that there are providers from a diversity of disciplines interested in this work, who are committed to improving care to transgender and non-binary Canadians.

### **References**

- Althubaiti A. (2016). Information bias in health research: definition, pitfalls, and adjustment methods. *Journal of multidisciplinary healthcare*, 9: 211–217.
- Ashley, F.F. (2019). Surgical informed consent and recognizing a perioperative duty to disclose

in transgender health care. *McGill Journal of Law and Health : MJLH = Revue de Droit et Santé de McGill : RDSM*. 13(1), 73–116.

Bockting, W., Robinson, B., Benner, A., & Scheltema, K. (2004). Patient satisfaction with transgender health services. *Journal of Sex & Marital Therapy*. 30(4), 277-294.

Bouman, W. P., Richards, C., Addinall, R. M., Arango, de Montis, I., Arcelus, J., et al. (2014). Yes and yes again: Are standards of care which require two referrals for genital reconstructive surgery ethical. *Sexual Relationship Therapy*. 29(4), 377-389

Budge, S. L., Israel, T., & Merrill, C. R. S. (2017). Improving the lives of sexual and gender minorities: The promise of psychotherapy research. *Journal of Counseling Psychology*. 64(4), 376-384

Colebunders, B., De Cuypere, G., & Monstrey, S. (2015). New criteria for sex reassignment surgery: WPATH standards of care, version 7, revisited. *International Journal of Transgenderism*, 16(4), 222-233.

Coleman, E., Bockting, W., Botzer, M., Cohen-Kettenis, P., DeCuypere, G., et al. (2012). Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People, Version 7. *International Journal of Transgenderism*. 13(4), 165-232

Coolhart, D., Provancher, N., Hager, A., & Wang, M. N. (2008) Recommending transsexual clients for gender transition: A therapeutic tool for assessing readiness. *Journal of GLBT Family Studies*, 4(3), 301-324.

Corneil, T. A., Eisfeld, J. H., & Botzer, M. (2010). Proposed changes to diagnoses related to gender identity in the DSM: A world professional association for transgender health consensus paper regarding the potential impact on access to health care for transgender persons. *International Journal of Transgenderism*, 12(2), 107-114.

De Cuypere, G., Vercruysse Jr, H. (2009). Eligibility and readiness criteria for sex reassignment surgery: Recommendations for revision of the WPATH standards of care. *International Journal of Transgenderism*. 11(3), 194-205.

Dhejne, C., Van Vlerken, R., Heylens, G., & Arcelus, J. (2016). Mental health and gender dysphoria: A review of the literature. *International Review of Psychiatry*. 28(1), 44-57.

Do T. T. & Nguyen A.T. (2020). 'They know better than we doctors do': providers' preparedness for transgender healthcare in Vietnam. *Health Sociology Review*. 29(1), 92-107.

Ettner, R. (2018). Mental Health Evaluation for Gender Confirmation Surgery. *Clinics in Plastic Surgery*. 45(3), 307–311.

Goodheart, C. D., Levant, R. F., Barlow, D. H., Carter, J., Davidson, K. W., et al. (2006). Evidence-Based Practice in Psychology. *American Psychologist*, 61(4): 271-285.

Gridley, S. J., Crouch, J. M., Evans, Y., Eng, W., Antoon, E., et al. (2016). Youth and caregiver perspectives on barriers to gender-affirming health care for transgender youth. *Journal of Adolescent Health*, 59(3): 254-261.

Hale, C. J. (2007). Ethical problems with the mental health evaluation standards of care for adult gender variant prospective patients. *Perspectives in Biology and Medicine*, 50(4), 491-505.

Keo-Meier, C. L., Fitzgerald, K. M. (2017). Affirmative psychological testing and neurocognitive assessment with transgender adults. *Psychiatric Clinics of North America*, 40(1), 51-64.

Kinnon R. MacKinnon, Daniel Grace, Stella L. Ng, Suzanne R. Sicchia & Lori E. Ross (2020) “I don’t think they thought I was ready”: How pre-transition assessments create care inequities for trans people with complex mental health in Canada. *International Journal of Mental Health*. 49(1), 56-80.

Koch, J.M., McLachlan, C., Victor, C.J., Westcott, J., & Yager, C. (2020). The cost of being transgender: where socio-economic status, global health care systems, and gender identity intersect. *Psychology & Sexuality*, 11(1-2), 103-119.

Lawrence, A. A. (2003). Factors associated with satisfaction or regret following male-to-female sex reassignment surgery. *Archives of Sexual Behavior*. 32(4), 299-315.

Lev, A. I. (2009). The ten tasks of the mental health provider: Recommendations for revision of the world professional association for transgender health’s standards of care. *International Journal of Transgenderism*. 11(2), 74-99.

MacKinnon, K., Ng, S., Grace, D., Sicchia, S., & Ross, L. (2020). Protocols as curriculum? Learning health advocacy skills by working with transgender patients in the context of gender-affirming medicine. *Advances in Health Sciences Education*. 25(1), 7–18.

McEvenue, G., Xu, F., Cai, R., & McLean, H. (2018). Female-to-Male Gender Affirming Top Surgery: A Single Surgeon’s 15-Year Retrospective Review and Treatment Algorithm. *Aesthetic Surgery Journal*. 38(1), 49–57.

Murad, M. H., Elamin, M. B., Garcia, M. Z., Mullan, R. J., Murad, A., Erwin, P. J., & Montori, V.M. (2010). Hormonal therapy and sex reassignment: a systematic review and meta-analysis of quality of life and psychosocial outcomes. *Clinical Endocrinology*. 72, 214-231.

Murphy, T. F. (2016). Should mental health screening and psychotherapy be required prior to body modification for gender expression? *AMA Journal of Ethics*. 18(11), 1079-1085.

Rachlin, K., Hansbury, G., & Pardo, S. T. (2010). Hysterectomy and Oophorectomy experiences of female-to-male transgender individuals. *International Journal of Transgenderism*. 12(3), 155-166.

Solomon, C., Safer, J., & Tangpricha, V. (2019) Care of Transgender persons. *New England Journal of Medicine*, 381(25): 2451-2460.

Sterling, J., & Garcia, M. M. (2020). Fertility preservation options for transgender individuals. *Transl Adrol Urol*, 9(2): S215-S226.

Teixeira, M., Almeida-Santos, M., Passos, T., & Teixeira, M. (2020). Quality of Life After Gender Affirmation Surgery: a Systematic Review and Network Meta-analysis. *Sexuality Research & Social Policy : Journal of NSRC : SR & SP*. 17(2), 252–262.

Toivonen, K. I., Dobson, K. S. (2017). Ethical issues in psychosocial assessment for sex reassignment surgery in Canada. *Canadian Psychology*. 58(2), 178-186.

van de Grift, T., Mullender, M., & Bouman, M. (2018). Shared Decision Making in Gender-Affirming Surgery. Implications for Research and Standards of Care. *The Journal of Sexual Medicine*. 15(6), 813–815.

Rachlin, K., & Lev, A. I. (2011). Challenging cases for experienced therapists. *Journal of Gay and Lesbian Mental Health*. 15(2), 180-199.