

SPECIAL ISSUE

The Accreditation Council for Genetic Counseling's response to COVID-19 impact on genetic counseling programs

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1 | INTRODUCTION

This manuscript is a commentary outlining the response of the Accreditation Council for Genetic Counseling (ACGC) to the restrictions imposed by the COVID-19 pandemic and the disruption that presented for genetic counseling graduate programs.

This commentary makes transparent the process and procedures used by the ACGC Board of Directors to develop guidance and offer flexibility for students, faculty, and graduate program leadership that addressed safety, learning options, fieldwork placements, and matriculation. In addition, this manuscript outlines changes that granted programs greater flexibility in compliance with the Standards of Accreditation and to meet required accreditation activities including program reports, program review, and re-accreditation.

The first recognized diagnoses of Coronavirus infection in the United States and Canada occurred on January 21 and January 25, 2020, respectively. Named COVID-19 on February 11, 2020, the full pandemic implications of the SARS-CoV-2 viral infection would not be officially recognized until March 11, 2020. By April 11, 2020, the death toll in the US was 20,000 and 84 in Canada. As such, many states and provinces issued stay-at-home orders. An article in the Washington Post documented the shutdown of most institutions including schools, leading to telework and distance learning as the

only option available (Anderson et al., 2020, March 13). These efforts to contain the spread of Coronavirus infections led to striking healthcare delivery restrictions, with a significant impact on graduate education for healthcare professionals. Specifically, genetic counseling graduate programs found themselves needing to pivot both the delivery of in-classroom education and in-person fieldwork training (Bergstrom et al., 2020; Greenberg et al., 2020). As a result, genetic counseling graduate programs implemented novel strategies to address the pressing needs presented by COVID-19 restrictions while looking to the Accreditation Council for Genetic Counseling (ACGC) Board of Directors (BOD) for permission to make these changes. Herein, we present a summary of the actions taken by the ACGC BOD relative to these programmatic changes and their implications for program compliance related to current accreditation standards. We review the COVID-19 impact on genetic counseling graduate programs, the ACGC accreditation activities, the timeline of communication, a survey of program leadership to quickly assess the impact of COVID-19, and the allowances granted to programs to remain in compliance with accreditation standards. This review serves as transparent documentation of the decisions and decision-making process assumed by the ACGC BOD during the onset of COVID-19, and as a summary of modifications to accreditation standards that may guide future decision-making during a pandemic or stay-at-home orders.

2 | INITIAL COVID-19 IMPACT ON GENETIC COUNSELING GRADUATE PROGRAMS

The ACGC BOD began to receive inquiries from graduate programs related to their ability to remain compliant with the ACGC Standards of Accreditation (Standards) in late March and early April of 2020. The pandemic was impacting genetic counseling graduate programs in many areas including admissions and thesis project work, however, three main areas of concern surfaced related to the Standards that addressed teaching delivery models, fieldwork placements, and the development of resources and support services for remote learners and faculty. Table 1 provides an overview of the concerns identified by genetic counseling graduate program leadership together with the ACGC response and potential ongoing significance beyond COVID-19 implications. Given that social distancing was required to help prevent the spread of the virus, in-person classroom instruction

ceased at universities and colleges across North America, necessitating quick conversion to online platforms for the delivery of remote teaching. While some genetic counseling graduate programs in North America utilized some educational content asynchronously or utilized web- or telephone-based communication platforms for class prior to the COVID-19 pandemic, the majority of programs had little to no experience teaching learners with these systems (Berg et al., 2018; Hilgart et al., 2012; Greenberg et al., 2020; Zierhut et al., 2018). Typical in-person classroom case-based discussions, small group learning, didactic lectures, and role-plays were now being carried out online. Programs also had to determine how to appropriately assess learners' acquisition of knowledge and skills remotely, leading to remote proctoring of course examinations and implementation of online clinical skill Standardized Patient (SP) encounters. In order to effectively teach and assess learners through online synchronous and/or asynchronous methods, programs had to quickly adapt course learning objectives and lesson plans for the

TABLE 1 Overview of program COVID-19 concerns, ACGC response, and potential ongoing significance

Program concerns	ACGC response	Ongoing significance
Teaching delivery models <ul style="list-style-type: none"> • Immediate change to remote 	Permitted programs to quickly transition to distance learning modalities without required review	Once COVID-19 restrictions are lifted, programs will be required to undergo formal review of distance learning format
Fieldwork Placements <ul style="list-style-type: none"> • Availability of supervisors • Use of standardized patients (SP) • Depth and breadth of case mix • Documentation in student records of COVID-19 related changes 	Allowed programs greater flexibility to use 2014 and/or 2019 Standards through the '20/'21 academic calendar related to <ul style="list-style-type: none"> • fieldwork experiences, • fieldwork supervisor options, • SP encounters • Case mix may have less variation • Record changes in student records 	Programs will be required to be in compliance with 2019 Standards as of June 15, 2021 Programs that continue any changes implemented during COVID-19, will need to submit a substantive change request after COVID-19 resolves If COVID-19 restrictions continue past May 2021, ACGC will issue appropriate guidance
Resources and support for remote learners	Encouraged greater focus on online mental health support	Online wellness and mental health resources are likely to continue
Student, faculty, staff, and client safety	Promoted that programs must screen and monitor COVID risk and ensure availability of adequate Personal Protective Equipment (PPE)	Programs may need to continue to have screening programs in place, make PPE available, and develop disaster response plans
Broad move to telemedicine genetic counseling	Collaborated with NSGC to present joint seminar on remote supervision	Programs will need to develop ongoing supervisor and learner support for telemedicine genetic counseling and remote supervision
Acquisition of Practice Based Competencies	Allowed for greater flexibility in documenting acquisition	Demonstration of the acquisition of PBCs will remain a primary outcome for programs to document
Student Matriculation	Delayed graduation was not supported if due to case mix or lack of field work experiences, provided that students had acquired all of the PBCs	Programs should continue to assess student readiness for graduation based on acquisition of the PBCs
Report of current status	Extended deadline by one month from 6/15 to 7/15/2020	Will return to 6/15/2021 deadline
Accreditation self-study	Offered 2 options for submission: 8/1 or 10/1/2020	Will return to 8/1/2021 deadline
Accreditation site visits	Allowed virtual site visits and extended the time frame in which site visits could occur	Will need to have in-person follow-up site visit after COVID-19 restrictions are lifted All 2021 site visits are expected to be in-person.

remaining spring semester, as well as the subsequent summer and fall semesters.

While programs were transitioning didactic learning to virtual platforms, the rise of COVID-19 infections affected staffing for inpatient and outpatient clinical services in healthcare institutions (Bergstrom et al., 2020). In the acute early phase of the initial shut-down, many hospitals ceased all non-COVID-19 related healthcare services, including the provision of ambulatory genetic services. Additionally, given the highly contagious nature of the virus and limited PPE supplies, concerns were raised that students would not only be at risk for contracting the virus but also transmitting the virus to clients and other healthcare providers (Dewitt, 2020). These factors resulted in the removal of genetic counseling graduate students, as well as many other healthcare learners, from clinical environments, resulting in immediate cessation of onsite fieldwork placement opportunities for genetic counseling students.

Over time, healthcare institutions began converting outpatient services to telephone and/or telemedicine appointments, which allowed genetic providers and clinics to resume clinical operations (Norman et al., 2020; Pereira, 2020; Chad et al., 2020). Despite the implementation of telemedicine genetic counseling services at healthcare institutions, many graduate programs continued to have limited fieldwork experience opportunities for students due to ongoing bans on student involvement in healthcare settings, or lack of available fieldwork supervisors because of furloughs and/or redeployment of genetic counselor supervisors. Additionally, there was a notable increase in burnout and fatigue due to the impact of the COVID-19 pandemic on healthcare providers' work and personal lives, causing some genetic counselor supervisors to decline supervision of students, regardless of whether the institution allowed placements to resume (Bergstrom et al., 2020; Norman et al., 2020; Pereira et al., 2020; Chad et al., 2020). The switch to online learning and decreased availability of fieldwork placements required programs to proactively address the mental health and physical wellbeing of their faculty and learners. The requirement to shelter in place quickly resulted in the reduced social engagement of learners within their cohorts, among friends and family, as well as with their academic faculty mentors and advisors (Huckins et al., 2020; Son et al., 2020). Faculty also lost the in-person support they received from colleagues related to teaching, supervision, and clinical challenges. The ability to balance and maintain boundaries between work/school and home life demands (e.g., schooling of their own children, worrying and/or caring for family members who were infected with COVID-19, staying safe) was difficult (Zamarro & Prados, 2021). Additionally, altered communication and meeting patterns led to increased reliance on email correspondence and virtual meetings that required a novel skill set as compared to in-person meetings. While all universities had various student and faculty support services pre-pandemic, these services were typically delivered in person. Due to the pandemic, university offices that provided these support services also had to adjust to providing online support to their faculty and student constituents. Overall, the demand for counseling and support services was higher than the pre-COVID-19 era making it

harder for graduate students and faculty to access these resources (Lederer et al., 2021).

3 | COVID-19 IMPACT ON THE ACCREDITATION COUNCIL FOR GENETIC COUNSELING

As the impact of the COVID-19 restrictions was recognized, the ACGC BOD began to regularly consult the guidance published by other accrediting agencies, the United States Department of Education (USDE), and the Council on Higher Education Accreditation (CHEA) to inform and support the guidance that ACGC would offer to graduate programs (American Psychological Association, 2020; Long et al., 2020; Luke et al., 2020; Luke, 2020; United States Department of Education, 2020). It became clear that accrediting agencies faced two different exigencies as a result of the pandemic. The first involved the ongoing oversight of graduate programs relative to compliance with Standards, and the second involved the agencies' ability to complete normal accreditation activities associated with review and assignment of accreditation status.

Of the two exigencies, the most immediate for ACGC involved the programmatic issues caused by restrictions placed on in-person and/or on-campus classroom attendance and fieldwork placements. Based on ACGC experience with accreditation reviews, most genetic counseling graduate programs report in-person didactic curriculum and in-person training sites for the acquisition of clinical skills. COVID-19 restrictions upended these traditional modalities. Guidance from the USDE related to COVID-19 gave permission for accrediting agencies to forego routine review requirements and approval processes for distance learning, thereby enabling institutions to quickly transition to distance learning modalities (USDE, 2020, March 17).

4 | ACGC GUIDANCE FOR PROGRAMS RELATIVE TO SPECIFIC ACCREDITATION STANDARDS

The ACGC utilized existing scheduled monthly board meetings and emergency meetings of the executive committee to develop guidance around COVID-19 restrictions that impacted genetic counseling graduate program functions. A variety of methods over time were employed to communicate with genetic counseling program leadership as is seen in Figure 1, which provides dates for key COVID-19 milestones and a timeline of ACGC communication which consisted of eblasts and webinars directed to program leadership. On April 7, 2020, the ACGC BOD distributed by email and posted to the ACGC website its first COVID-19-related guidance to programs regarding flexibility to remain in compliance with the ACGC Standards. Table 2 lists the specific Standards which ACGC referenced when addressing program COVID-19 related concerns. The initial guidance focused on Standards related to fieldwork experiences, fieldwork supervision,

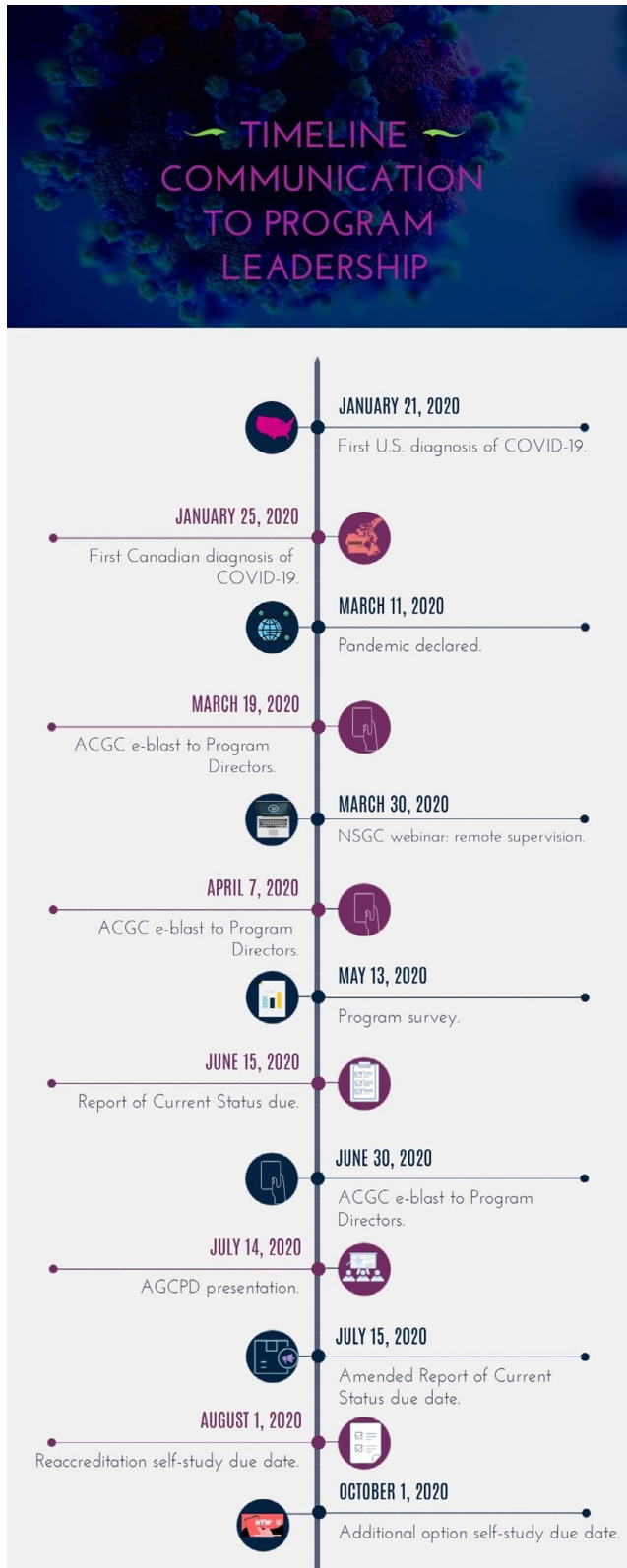


FIGURE 1 2020 COVID-19 timeline and ACGC communication (at the end of this manuscript)

and documentation of student records. It is important to note that during this time frame, ACGC was operating with two separate sets of Standards; the Standards published in 2014 and the newly revised

2019 Standards, requiring compliance by June 15, 2021. As such, the ACGC BOD was able to utilize both sets of Standards in order to provide programs with the greatest degree of flexibility in maintaining compliance.

4.1 | Standards related to case mix

Due to the decrease of in-person fieldwork placement opportunities, the primary concern among many programs was that enrolled students would not have the ability to acquire the required number of fieldwork cases necessary to graduate. Both the 2014 and 2019 Standards require that all students attain a minimum of 50 fieldwork cases in a clinical setting (see Table 2). The 2014 ACGC Standard (2014 A2.3.1) required that cases be obtained from a wide variety of clinical settings and service delivery models. However, only *in-person* face-to-face clinical encounters could be counted as core cases, and it was strongly encouraged that these cases be supervised by an experienced certified geneticist (ABMG or Canadian equivalent) and/or an ABGC/ABMG/CAGC certified genetic counselor. In contrast, the revised Standards (2019 A2.6.1) required that the cases be supervised by an ABGC/ABMG/CAGC certified genetic counselor with more than 1 year of experience, allow the use of all service delivery models, require demonstration that the participatory cases are conducted across multiple specialties and in a variety of diverse settings, and that at least 40 of these 50 cases be with individuals being evaluated for risk of or affected by diverse genetic conditions across the lifespan (i.e., patients; not individuals who are being consented to research; and not SPs).

In order to ensure that graduating students obtained an appropriate number of required cases, the ACGC BOD's COVID-19-related guidance to programs allowed students in the graduating classes of 2020 and 2021 to include cases using virtual healthcare delivery models as well as those involving SP following the new revised Standards. Additionally, ACGC allowed all of the 50 required cases for the students in the class of 2020 to be supervised by either a board-certified genetic counselor or geneticist, including those with less than one year of experience, provided the supervisor was mentored by a more senior supervisor following the 2014 Standards (2014 A2.3.1). Programs that could not ensure student acquisition of the required 50 cases had to provide students with access to comparable learning experiences to develop skills related to completing and exhibiting acquisition of the Practice-Based Competencies (PBCs). The effect would be most profound for the cohort of students expected to graduate in 2021, as it was likely that the impact of the pandemic would affect the entirety of the students' remaining time in graduate training. Therefore, ACGC informed programs that they could begin using the Revised Standards, so that all telemedicine and SP encounters could be counted toward their required cases. Additionally, all types of fieldwork placements settings (i.e., clinical, laboratory, research, industry, and/or other environments) and service delivery models (were considered acceptable for students to develop the skills necessary to acquire the PBCs (2019 B3.1.4).

TABLE 2 List of the specific Standards of Accreditation addressed in published ACGC guidance. The complete listing of ACGC Standards of Accreditation is available at Standards

2014 Standards	2019 Revised Standards
<p>A3.2.1 Policies</p> <p>a. Program policies apply to all students, principal faculty, and the Program Leadership, regardless of location.</p> <ul style="list-style-type: none"> • A signed clinical affiliation agreement or memorandum of understanding may specify that certain program policies will be superseded by those at the clinical site. <p>b. The program must inform students and faculty of program policies and practices.</p> <p>c. The program must have written policies that provide for timely access and/or referral of students to appropriate support services.</p> <p>d. The program must have defined, written policies and procedures for processing student grievances and allegations of harassment that are readily available to faculty and students.</p> <p>e. The program must make readily available to faculty institutional policies and procedures for processing faculty grievances and allegations of harassment.</p> <p>If the program has policies related to grievances and harassment in addition to those of the institution, the program is expected to document these and make them readily available to faculty.</p>	<p>A1.1.2 The graduate degree-granting institution is the sponsoring institution that applies for accreditation. This institution assumes primary responsibility for the program, although it can partner with other institutions that are responsible for providing one or more core program components. The graduate degree-granting institution is responsible for:</p> <ul style="list-style-type: none"> • Complying with the ACGC Accreditation Standards and policies • Hiring and maintaining faculty and staff in sufficient numbers, and with the expertise and experience required to fulfill ACGC requirements • Supporting the planning by program faculty of curriculum design, course selection, and program assessment • Permanently maintaining student transcripts • Conferring the credential and/or academic degree which documents satisfactory completion of the educational program • Ensuring that all genetic counseling program personnel and student policies are consistent with federal and state statutes, rules, and regulations • Addressing appropriate security and personal safety measures for genetic counseling students and faculty in all locations where instruction occurs • Ensuring fiscal stability of the program
<p>A2.3.1 Clinical Supervisor Qualifications</p> <ul style="list-style-type: none"> • Current certification in genetic counseling (ABGC, ABMG, CAGC) or medical genetics (ABMG or Canadian equivalent). • Sufficient experience as a clinical genetic counselor or medical geneticist <ul style="list-style-type: none"> a. At least one year experience as clinical genetic counselor or medical geneticist is recommended. b. If a clinical supervisor has less than one year of experience, he or she must have a mentorship relationship with a genetic counselor/medical geneticist with supervision experience. • Adequate preparation in clinical supervision 	<p>A2.6.1 Fieldwork Supervisor Qualifications</p> <p>a. Current genetic counselor certification by ABGC, the Canadian Association of Genetic Counsellors (CAGC), or ABMG[G];</p> <p>b. At least one year of experience as a clinical genetic counselor or in relevant fieldwork placement; and</p> <p>c. Documented preparation in fieldwork supervision</p>
<p>A3.1.4 Students must be informed about, and have access to, student health and counseling services.</p>	<p>A3.1.4 Students must be informed about, and have access to, student health, and counseling services.</p>
<p>A3.1.5 The health, safety, and privacy of clients, students, faculty, and staff associated with the educational activities must be reasonably safeguarded by the institution.</p>	<p>A3.1.5 The health, safety, and privacy of clients, students, faculty, and staff associated with the educational activities must be reasonably safeguarded by the institution.</p>

Section B: Curriculum and Instruction

B1.2.2 It is strongly encouraged that clinical supervisors have acquired some workplace counseling experience (e.g., minimum of 1-year of practice) before they are allowed to supervise students, especially for core cases. However, when this is not possible, the new counselor must be under the mentorship of an experienced supervisor for a period of time in which he or she is allowed to strengthen his or her own supervision skills.

(Continues)

TABLE 2 (Continued)

2014 Standards	2019 Revised Standards
<p>B3.2.1 A minimum of 50 “core cases” from a wide variety of clinical settings and service delivery models are required, reflecting students’ robust and evolving clinical involvement. Core cases focus on the development of the fundamental clinical counseling roles as described in B3.2.2 below. ANNOTATION: Core cases are ANY or ALL cases that meet the minimum specifications cited in B3.2.2. Each student must have at least 50, but the ACGC sets no upper limit on the number of designated core cases.</p> <p>B3.2.2 To be considered a “core case”, the clinical interaction must occur face-to-face (see annotation), and active student participation in at least one role in each of the three categories of Fundamental Counseling Roles (Management, Education, and Counseling) must be documented.</p> <p>B3.2.3 The 50 “core cases” must be supervised by an experienced certified geneticist (ABMG or Canadian equivalent) and/or an ABGC/ABMG/CAGC certified genetic counselor (see A2.3.1). Programs are expected to use a flexible and graduated supervision plan where the level of direct (in-person) supervision is commensurate with each student’s documented skills and competencies.</p> <p>B3.2.4 Cases must indicate exposure to a variety of genetic issues throughout the life cycle, including:</p> <ul style="list-style-type: none"> • Preconception counseling • Prenatal counseling (advanced maternal age, maternal serum/1st trimester screening abnormal ultrasound, maternal disease, teratogen, etc.) • Pediatric genetics (general, disease-specific) • Adult/presymptomatic genetics (cancer, cardiovascular, neurogenetic, etc.) • Individuals affected with genetic conditions • Family sessions, i.e., sessions in which multiple family members are evaluated and/or counseled (note: these sessions only count as one [1] case) <p>B3.2.5 To prepare students for the workforce in the best manner possible, clinical training should reflect current trends in the workplace. Programs should refer to the most recent ABGC Practice Analysis for a general breakdown of the distribution of the core cases across different practice areas. ANNOTATION: Using this information as a guideline, it is the responsibility of the Program Director to ensure that all students have adequate exposure and involvement in a wide breadth of clinical cases in an approximately similar ratio to that determined by the most recent ABGC Practice Analysis. The student should not have an overwhelming majority of cases in any single practice area.</p>	<p>B3.1.1 Refers to participatory encounters (cases) with a client that support the development of the PBCs. “Client” can refer to individuals seen in a clinic setting; as standardized patients; or in certain research participant encounters.</p> <p>B3.1.2 Must include a minimum of 50 required participatory cases. At least 40 of the 50 required participatory cases must be with individuals being evaluated for risk of or affected by diverse genetic conditions across the lifespan (i.e., patients; not individuals who are being consented to research; and not standardized patients).</p> <p>B3.1.3 The 50 required participatory cases described above must be supervised by an experienced ABGC/ABMGG/CAGC certified genetic counselor.</p> <p>B3.1.4 Programs must demonstrate that participatory cases and other field experiences are conducted (1) across multiple specialties, including prenatal, pediatric, cancer, and other adult; (2) in a variety of diverse settings that may include clinical, laboratory, research, industry, and/or other environments; and (3) using more than one service delivery mode, such as telephone, group, in-person, and/or telemedicine.</p> <p>B3.1.5 Programs must provide sufficient opportunities such that students are prepared to practice in each of the main specialties and settings. All participatory encounters (not just the minimum 50 required participatory cases) must be distributed across prenatal, pediatric, cancer, and other adult with no one specialty dominating.</p>
<p>B3.3.1 The ACGC expects each program to determine how its students’ clinical training/fieldwork experiences will be tracked (e.g., a traditional “logbook” format, portfolio format, etc.) The aggregate of these experiences provides a complete picture of each student’s acquisition of skills and competencies over time, as well as insight into the richness and diversity of his or her clinical training experiences.</p> <p>B3.3.2 Documentation of clinical training/fieldwork experiences must be maintained with the students’ files and include the entirety of the students’ clinical encounters, without any patient identifiers. These files must be available for review during site visits as part of the accreditation review process.</p>	<p>B3.6 Programs must maintain documentation of all student fieldwork experiences.</p> <p>B3.6.1 ACGC expects each program to determine how each student’s fieldwork training will be tracked (e.g., a traditional “logbook” format, portfolio format, etc.). This documentation must provide a complete picture of each student’s fieldwork training experiences</p> <p>B3.6.2 Documentation of fieldwork training must be maintained within each student’s record and include the entirety of the student’s fieldwork encounters, without client identifiers. These files must be available for review during site visits as part of the accreditation review process</p>

However, for students in the graduating class of 2021, ACGC expected programs to adhere to all other requirements set forth in the 2019 ACGC Standard B3.

The ACGC BOD noted that they would accept a model of remote supervision for students to acquire cases and PBCs. However, once COVID-19 restrictions are lifted, any permanent change

implemented by a program would require submission of a substantive change to ACGC noting the appropriate curricular changes, implementation of a fully recognized online supervisory format, as well as safeguards for student and patient privacy in ongoing clinical genetic counseling service delivery.

The ACGC also addressed COVID-19 guidance for the use of SPs, stating that SPs who were not affiliated with a formalized facility educational program must receive appropriate SP training. The ACGC also stated that genetic counseling students could not be used as SPs. Additionally, ACGC required that the vignettes used for the SP encounter would be fully developed with learning objectives and outcome measures formulated for each student prior to initiating the case experience.

4.2 | Documentation in student records

The ACGC BOD asked programs to record curricular or fieldwork placement changes due to COVID-19 (2014 B3.3.1 – B3.3.2; 2019 B3.5-B3.6.2). The ACGC stated this documentation must include the date and reason for a change, specific changes made, impact on student's remaining work during this timeframe, as well as documentation of program leadership's discussion of changes with students.

4.3 | Program survey and supplemental guidance to programs

At the end of the spring semester and after initial guidance was published, ACGC administered a non-validated survey through Survey Monkey to the program leadership of all 52 North American genetic counseling programs to assess program stresses and responses to COVID-19 (Appendix 1). The survey was comprised of fourteen questions related to student concerns about the certification exam, program staffing issues, fieldwork placement site availability, financial concerns, and two open-ended questions soliciting ways in which the ACGC BOD could further support programs. An additional question was included to assess the number of programs planning to submit their annual report of current status, a document that updates ACGC on an individual program's maintenance of compliance, based on the 2019 Standards or 2014 Standards. A total of 50 genetic counseling graduate programs responded to the survey.

Two major themes emerged across program responses. The first theme involved a very high level of broad uncertainty faced by program leadership regarding many areas of program functioning including in-person versus distance learning requirements related to the pending 2020/2021 academic year, the loss of genetic counseling staff, and potential budget implications of institutional financial losses due to the shutdown of regular outpatient clinics. The second major theme involved the need to rely on telemedicine and remote supervision to provide students with fieldwork experiences. Program leaders continued to express concerns about their program's ability to meet compliance with Standards, especially those

Standards that outlined case acquisition requirements given the significant restrictions placed on fieldwork activities. Based upon survey responses, the ACGC BOD published additional guidance for the 2020–2021 academic year. This secondary guidance again focused on fieldwork training and supervision, but also addressed student safety, Standards related to administration, length of training, and curriculum and instruction.

4.4 | Student safety

With regards to Administration Standards (2014 A3.1.5, A3.2.1; 2019 A1.1.2; A3.1.4; 2019 A3.1.5), ACGC provided guidance related to COVID-19 involving screening, monitoring, and PPE availability for students; communication of protocols and policies; maintenance of student and faculty confidentiality; and assessment of the need for and access to health and mental health services. Planning documents, resources, and toolkits found at the [www. OpenSmartEdu.org](http://www.OpenSmartEdu.org) website by CHEA, Johns Hopkins Center for Health Security, and Tuscany Strategy Consulting provided the ACGC BOD with concise and operational information relative to COVID-19 directed at institutional preparation and policies (Long et al., 2020, June 12). Several sections of the planning guide reiterated basic safety recommendations and highlighted checklists for programs to use to ensure attention to student wellbeing and for student assurance of competent educational opportunities.

4.5 | Curriculum, instruction, and distance learning

Pertaining to curriculum and instruction, ACGC stated that temporary changes in course instructional delivery method (e.g., hybrid, distance enhanced, or distance learning) for the 2020–2021 academic year were permitted and did not require programs to notify the ACGC BOD. The ACGC also maintained earlier guidance related to fieldwork supervisor qualifications and further stated that telemedicine and/or telephone counseling could be *the only* service delivery model used by students. However, programs were informed that for the matriculating classes of 2022, ACGC expected programs to comply with the 2019 Standards B3.1.2, B3.2.1, and B3.3. If programs anticipated that they would not be able to maintain compliance with these three standards for the classes of 2022, ACGC required submission of a no-cost variance which should include the rationale for non-compliance.

4.6 | Fieldwork experiences

The most significant impact of COVID-19 for genetic counseling graduate programs has been related to the reduction in clinical opportunities and variety of fieldwork cases necessary to meet compliance with Standards. As reported in the majority of responses to the May 2020 program survey, clinical fieldwork sites were very limited.

Specifically, the impact of the pandemic led to some genetic counselors being furloughed, others being re-assigned within the health-care system, some positions were unfilled, and a few lost their jobs. In turn, this led to a loss of fieldwork sites with qualified genetic counselor supervisors. In response, the ACGC BOD pulled from old (2014) and new Standards (2019) to devise guidance that allowed for newly graduated genetic counselors to supervise students, supported and promoted remote supervision, offered greater flexibility in fieldwork case mix and clinic settings, increased the use of SPs, and allowed for less depth in case variety. Despite the leniency with these Standards, the ACGC BOD continued to emphasize that each student was required to demonstrate acquisition of the PBCs prior to graduation. In addition to the published guidance based on the survey responses in June 2020, the ACGC President presented this information to the Association of Genetic Counseling Program Directors (AGCPD) in July 2020.

4.7 | Student matriculation

While some accrediting agencies, e.g. Accreditation Review Commission on Education for the Physician Assistant, Inc.(ARC-PA) and the American Psychological Association Commission on Accreditation (APA CoA), entertained the possibility that some students might not graduate on time due to a lack of clinical training options (APA, 2020; Luke, 2020), ACGC made the decision that delayed graduation due to lack of clinical opportunities was not a viable solution for the class of 2020. The rationale for ACGC's decision was based on historical data from ACGC program reviews showing that the majority of genetic counseling graduate students have approximately 2–3 times the number of cases required by ACGC to demonstrate depth and breadth of clinical exposure. In addition, under normal operating circumstances, it is the responsibility of programs to assess and determine whether a student has attained the necessary competencies in order to graduate. As such, ACGC believed that programs would enact appropriate interventions, such as remediation, placement changes, or delay in graduation if a student required more time to attain competence. The ACGC also informed programs that the BOD required notification of institution-mandated or program-related disruption or changes in the expected dates of matriculation or graduation dates for students.

4.8 | COVID-19 impact on ACGC accreditation activities

Given the increased stress programs were facing while trying to manage the impact of COVID-19, ACGC changed several reporting deadlines. The annual report of current status due on June 15, 2020 was changed to July 15, 2020 to provide programs more time to complete the report. Additionally, all programs undergoing re-accreditation were offered the option to delay submission of their self-study to October 1, 2020 rather than August 1, 2020. With 9

programs undergoing reaccreditation and several new program accreditation applications under review, the year 2020 would have been challenging for ACGC even without a global pandemic. Each program re-accreditation review requires multiple peer reviewers and a site visit and is a monumental task for the program and ACGC. Given that COVID-19 restrictions did not allow for in-person site visits, guidance from the USDE allowed accrediting agencies to make exceptions and allowed for virtual site visits; however, agencies must follow-up with an in-person follow-up site visit once deemed safe by appropriate health and government officials. The ability to implement virtual site visits, especially given the state and provincial lockdown orders, required ACGC to review and revamp the in-person visit process. Fortunately, ACGC had recently remodeled its program review and site visit processes to increase efficiency. These new processes lent themselves to a virtual site visit format utilizing a teleconferencing platform. As of the end of 2020, ACGC had virtually completed four of the anticipated nine reaccreditation site visits and reviews. Based on anecdotal reports to our executive office, programs appear to be satisfied with the virtual review process option.

5 | PRACTICE AND GRADUATE EDUCATION IMPLICATIONS

The required adoption of distance learning by genetic counseling graduate programs demonstrated that a virtual curriculum can be offered. Whether it should continue, particularly in programs that had not otherwise planned for distance learning modalities, will need to be addressed. An ideal response to this very pragmatic implementation would be to study the process and outcomes of the various different institutional change methods and products. The genetic counseling profession may benefit if a few were able to develop and conduct such a study, however, most programs based on informal feedback from program directors, have been too stressed and too stretched to carry out such research. Once the threat of the pandemic has been overcome, programs will need to evaluate their ongoing approach. Online education is likely to remain in some form for many programs that had not used this mode in the past.

Telemedicine as a service delivery model was gaining prominence prior to the pandemic but saw a dramatic increase due to in-person clinic restrictions (Greenberg et al., 2020; Hilgart et al., 2012; Zierhut et al., 2018). Due to the pandemic restrictions, programs reported that students sometimes saw the majority of their fieldwork cases through telemedicine modalities requiring remote supervision. As the pandemic continues, some students may not have any in-person encounters or some students may not see any patients in-person throughout their training. This raises important questions about the impact this may have on the quality of genetic counseling student education related to both the attainment of PBCs and the provision of remote supervision. How ACGC and individual programs will assess and address the differences in using distance learning and telemedicine modalities for education and training genetic counselors remains to be seen. For ACGC, this necessitates the development

of appropriate standards that can be applied to programs using remote supervision and distance learning methods. In alignment with this process, ACGC recently initiated a Distance Learning Task Force. Clinical service delivery models may continue to include greater emphasis on telemedicine opportunities. Perhaps a benefit of the COVID-19 experience will be that the current cohort of genetic counseling graduates may be better prepared than previous cohorts to meet this new focus in healthcare delivery. Regardless, a benefit of the forced move to distance learning and telemedicine service delivery is the opportunity to increase the “reach” of genetic counseling. This is true for learners who are limited by geographic location who could be enabled to participate through remote supervision options as well as for patients who live at a distance from the usual tertiary care location of healthcare services.

In addition, certain clinical settings appear to have been restricted more severely and for longer time frames, thereby potentially impacting the breadth of cases across specialties. Based on program report, specialties that depend on in-person patient interactions, such as pediatric and adult diagnostic evaluations, may continue to be less available for student involvement. In the 2019 Standards, ACGC removed the need to have specific percentages of case types, thus allowing for a broader range of fieldwork cases. The challenge will be to determine if it is acceptable to have an abundance of one case type at the expense of another. For example, could a student graduate fully competent with only pediatric cases or with only the experiences gained via SP encounters? Clearly, many questions remain to be answered regarding the number of cases within each specialty that are allowable. Such questions strive to determine if genetic counseling skills translate across fieldwork cases, thus asking whether students need to be “trained” in each setting to be competent. Such questions have led to an existential dilemma that the ACGC BOD continues to debate. In particular, how does an accrediting agency ensure high-quality instruction and student competence at graduation, while acknowledging the very real consequences of COVID-19 restrictions and recommendations? The ACGC BOD continues to examine and debate to what extent individual accreditation standards could be modified under exigent circumstances whereby still ensuring high-quality training that results in the graduation of fully competent genetic counselors. While it is hoped that the answers to such questions may one day be fully elucidated, the ACGC has had to adapt and respond throughout the COVID-19 pandemic, without these answers. By opting to allow greater flexibility for programs to find ways to provide their students with the opportunities needed to ensure the acquisition of the PBCs, ACGC will continue to evaluate student competence through the arc of the pandemic. The impact of the COVID-19 related changes may ultimately be shown by the currently published student outcome, that is, certification exam pass rates. Based on anecdotal reports, it is encouraging to note that the American Board of Genetic Counseling Certification exam pass rates did not significantly change in the August 2020 cycle. However, it should be noted that the new graduates who sat the August 2020 Certification examination would have only had 1–2 months of their

graduate training impacted by the pandemic. In contrast, the class of 2021 will have had over 15 months of graduate training impacted by the pandemic. Thus, it will be important for ACGC to monitor the pass rates for the August 2021–2022 examination cycle.

The pandemic led to chaotic but determined changes in graduate program functioning. Some of the changes showed that new learning modalities such as online learning and remote supervision could be managed. Therefore, they may be embraced long after the COVID-19 threat has passed. Increased telemedicine genetic counseling visits and high-quality remote supervision experiences could support many more supervision opportunities which in turn could support graduate program expansion. Future attention to distance learning accreditation principles and practices, for both didactic curriculum and fieldwork placements, will be important for ACGC to meet the changes that are sure to result from the 2020 COVID-19 pandemic. The ACGC BOD will also likely continue to grapple with the existential dilemmas, highlighted by COVID-19 challenges, that center around defining what is absolutely necessary for students to be fully competent and prepared to practice prior to graduation.

AUTHOR CONTRIBUTIONS

Janet L. Williams confirms that she had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis. All of the authors gave final approval of this version to be published and agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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COMPLIANCE WITH ETHICAL STANDARDS

CONFLICT OF INTEREST

All authors reports no conflict of interest.

HUMAN STUDIES AND INFORMED CONSENT

This manuscript is a commentary on process and procedures used by the Accreditation Council for Genetic Counseling. No institutional review board was engaged for the work presented in this manuscript as no human subjects research was conducted.

ANIMAL STUDIES

No non-human animal studies were carried out by the authors for this article.

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APPENDIX 1

ACGC COVID-19 AND REPORT OF CURRENT STATUS (RCS) PRE-REPORT SURVEY

1. Name of individual completing the survey:
2. Program/Institution:
3. As you know, we have the new 2019 Standards; however, programs do not have to be in compliance with the new standards until June 15, 2021. Some programs have already begun to comply with the new standards so we have two versions of the RCS application, one that addresses the former standards and one that addresses the new standards. Which version of the RCS do you plan to complete, the former Standards or the current 2019 version?
4. Have students expressed concerns? Re: being able to take the certification exam (either due to limitations in testing sites or ability to adequately prepared due to COVID-related disruptions)
5. Do you anticipate a loss of clinical supervisors? If so, how many?
6. Do you anticipate a loss of placements for students? If so, how many?
7. Is there any change in the number of students that your program took for the upcoming fall?
8. Do you anticipate or has your program already been impacted by budget cuts due to Covid-19?

9. Do you anticipate a loss of instructional faculty? If so, how many? What areas?
10. Has the current economic impact of Covid-19 led to any faculty/instructor loss?
11. Do you anticipate having to the change course delivery method for an autumn semester?
12. Do you anticipate having to change clinical placement delivery methods for an autumn semester?
13. Is there any additional information or resources ACGC can provide that might be helpful at this time?
14. Is there any additional information you wish to share with us at this time?