

International Genetic Counselling Credentialing: a Working Group of the TAGC

Template for Comparing Credentialing/Registration

Country	CANADA
Date of completion	29-APR-2016
Name of Credentialing Body/Registration Board	CAGC (Canadian Association of Genetic Counsellors) Certification Committee
Website/Address	https://www.cagc-accg.ca/?page=111
Is there a separate credentialing/registration process for nurses? If yes, please give details of nursing credentialing group	<p>An education in nursing alone would not meet the criteria to apply to write the certification exam, according to the criteria laid out in the Certification Handbook.</p> <p>However, for the first cycles of the Certification Examination (three cycles from 1998-2007), nurses whose primary responsibility for the equivalent of one year's experience was providing genetic counselling in a medical setting were eligible to apply to write the examination, if additional criteria were met. Additional criteria were similar to Pathway B as outlined below.</p>
Eligibility criteria to apply for certification/registration	<p>Eligible candidates may apply through one of four pathways:</p> <ol style="list-style-type: none">1. Pathway A: Candidates who are graduates of a Masters program in Genetic Counselling accredited by the American Board of Genetic Counseling (ABGC) or its successor organization, the Accreditation Council for Genetic Counseling (ACGC), or candidates who will have graduated from an ABGC/ACGC accredited program by June 1st of the exam year.2. Pathway B (Special Consideration): Candidates who are graduates of a Masters program in Genetic Counselling that is not ABGC/ACGC accredited may request Special Consideration. This includes students who will have graduated from one of these programs by June 1st of the exam year.3. Pathway C (Pre-approved Canadian Programs): Candidates who are graduates of a Masters program in Genetic Counselling at a Canadian university that is not ABGC/ACGC accredited may request Special Consideration. The program must have pre-approved status from the CAGC for their graduates to apply through Pathway C. This pathway includes students who will have graduated from one of these programs by June 1st of the exam year.4. Re-Examination: Candidates who were unsuccessful or deferred in the last exam cycle and are applying to re-write the exam.
Required criteria to apply for a Masters degree in Genetic	Given that the Canadian Certification Committee has alternative pathways for individuals to apply through,

<p>Counseling</p>	<p>candidates from a number of national and international programs are considered. Each of these programs differs in their criteria.</p> <p>In Canada, there are four intuitions offering a Master of Science, specializing in genetic counselling. These include: the University of Toronto, McGill University, University of British Columbia and the University of Montreal.</p> <p>University of Toronto is used as an example:</p> <p>Prerequisites</p> <ul style="list-style-type: none"> • Four year bachelor's degree in biological sciences. Applicants with undergraduate degrees in other disciplines, such as social sciences or nursing, will also be considered. • Minimum B+ average. <p>Prerequisite Courses</p> <ul style="list-style-type: none"> • Biology • Molecular Biology/Genetics • Biochemistry • Embryology/Developmental Biology • Statistics • Psychology <p>Experience In Counselling Setting</p> <ul style="list-style-type: none"> • Can be paid or volunteer and can include such places as a family planning centre, a crisis intervention centre or a hotline. • This experience should promote development of communication and interpersonal skills, therefore a component of training supervision would be beneficial. <p>Language Requirements</p> <p>If the candidate's primary language is not English and he/she graduated from a non-Canadian University where the language of instruction and examination was not English, then he/she must complete an English facility exam. The following tests are used for an English facility exam:</p> <p>TOEFL (U of T Institutional code: 0982-00) Paper Based Test & TWE: Overall Score 580, TWE 5 Internet-Based Test IBT: Overall Score 93, Writing/Speaking 22</p> <p>IELTS: 7.0 MELAB: 85 COPE: 4 (with at least one in each component and 2 in the writing component) Academic Preparation Course: Final grade of B in Level 60</p>
<p>If there is a Masters Degree in Genetic Counseling, is this accredited? If so, by whom?</p>	<p>Programs offered by the University of Toronto, McGill University, and the University of British Columbia are accredited by the Accreditation Counsel for Genetic Counseling (ACGC). The ACGC is the same counsel used for accreditation of American based programs.</p>
<p>Minimum length of time between completing the training requirements and</p>	<p>None – all candidates who have completed training programs and meet criteria of Pathway A, B or C are eligible to sit for the certification examination.</p>

applying for certification/registration	
Number of cases used in Masters in Genetic Counseling course that can also be used in registration	Usually 100% - a case logbook requires 50 genetic counselling cases. However, some candidates may not achieve enough cases through their education and have to obtain the remainder either through volunteer or employment experience.
Is there a written examination? Yes/no, please give details	<p>Yes</p> <p>The CAGC Certification Examination is a computer-based exam hosted and proctored by Yardstick Inc. The current Canadian Certification examination is a 3 hour / 150 multiple-choice and multiple-answer examination that is assembled from an item bank of 950 questions. Each question is worth one point. The CAGC examines approximately 50 candidates each year.</p> <p>This examination is held every two years (odd-numbered years), immediately prior to the CAGC Annual Education Conference. The next exam will be offered in the fall of 2017.</p> <p>Both French and English versions of the examination are available. The exam is three hours in length. An approved application is eligible for two exam cycles.</p> <p>Description The CAGC Knowledge-Based Competencies is the basis for exam questions for the certification process and are outlined in a subsequent section of this document.</p> <p>A predetermined percentage of examination questions representing factual knowledge, information gathering, interpretation and counselling within each of the areas in the Knowledge Based Competencies are selected. Not all areas are equally represented but are weighted according to skills required in current genetic counselling practice. Each examination question is linked to a specific knowledge domain and skill domain within the Knowledge-Based Competencies. The questions have been designed to test the candidate's knowledge, as well as the qualities of discrimination, judgment, and reasoning. Descriptions of laboratory situations or problems presented in narrative, tabular or graphic formats are followed by questions designed to determine the candidate's knowledge and comprehension of the situation described.</p> <p>The goal of the examination is the certification of genetic counsellors who have a reasonable base of knowledge and skills in genetic counselling. Candidates are scored against an independently set score that is considered to be achievable by a competent genetic counsellor. Previous passing scores have ranged from 70 – 75%.</p>
Who is examination assessed and ratified by? Please give details or say if not applicable	The Certification Examination is mainly assessed and ratified by the Certification Committee. The Certification Committee also works with Yardstick, which is a company that provides computer-based testing solutions

	with proctoring services, psychometric analysis and training to millions of users, across dozens of industries. Yardstick provides ongoing training and support to the members of the Certification Committee to ensure that the establishment of exam content and evaluation are similar to the processes followed by other organizations that administer professional certification or licensure examinations.
Portfolio of work submitted for certification/registration? yes/no (n.b. this question relates to certification/registration and not to a portfolio of work needed to complete a Masters degree in Genetic Counseling)	<p>Yes</p> <p>The following are required for Pathways A, B and C</p> <ol style="list-style-type: none"> 1. Official transcript 2. Letters of recommendations (two for Pathway A, and three for B and C) <p>In addition, for Pathways B and C:</p> <ol style="list-style-type: none"> 3. Request for special consideration that outlines why the candidate is eligible to sit for the examination 4. Description of clinical training 5. List of professional activities 6. One page CV/Resume 7. Description of course content 8. Case logbook of 50 genetic counselling cases that are signed off by a case supervisor with appropriate certification (listed in the Certification Handbook)
Portfolio assessed by independent assessors? yes/no/not applicable	No
Portfolio ratified by the Registration Board? yes/no/not applicable	Yes
Candidate has an interview as part of the credentialing/registration process? yes/no	No
What work is done for certification/registration?	I am unclear about this question – what work is done by the Certification Committee or by the candidate?
Core competencies for practice as a genetic counselor, these are the skills that are assessed in the certification/registration process (and not only in the MSc course)	<p>The CAGC Core Competencies include both the Practice Based Competencies and Knowledge Based Competencies and serve as a platform for practice guidelines, training curricula, certification, continuing competency, re-entry to practice and other quality assurance initiatives for genetic counsellors in Canada</p> <p>Knowledge based competencies:</p> <p>Unit 1: Epidemiology, Population, and Basic Human Genetics</p> <p>Genetic Counsellors should have the knowledge, skills and abilities to:</p> <ol style="list-style-type: none"> 1.1 Understand, define and give examples of basic genetic concepts. Examples include but are not limited to heterogeneity, phenocopy, genocopy and pseudogene. 1.2 Understand basic cellular biology concepts. Examples include but not limited to transcription, translation,

mitosis, meiosis and gametogenesis.

1.3 Understand the principles of Mendel's laws and recognize the different patterns of single -gene inheritance.

1.4 Understand non-Mendelian modes of inheritance. Examples include but are not limited to genomic imprinting, uniparental disomy and mitochondrial inheritance.

1.5 Understand and apply concepts of complex inheritance. Examples include but are not limited to multifactorial inheritance, heritability and threshold models.

1.6 Describe the history of genetics, including the role and contributions of scientists, physicians and geneticists.

1.7 Understand the concepts regarding genetic changes. Examples include but are not limited to somatic vs germline mutation, mutation vs. polymorphism, new mutation rate and copy number variants.

1.8 Understand population genetics concepts. Examples include but are not limited to selective advantage, genetic drift, Hardy Weinberg equilibrium and founder effect.

1.9 Understand the association between fitness and natural selection and identify factors which increase or decrease fitness in an individual or a population.

1.10 Understand clinical research study designs. Be able to critically evaluate research based on factors such as: study limitations, bias, sample size and statistical analysis.

1.11 Understand basic statistical concepts. Examples include but are not limited to detection rate, sensitivity, specificity and positive predictive value.

Unit 2: Clinical Genetics

Genetic Counsellors should have the knowledge, skills and abilities to:

2.1 Understand the etiology, clinical features, testing and management of well defined genetic conditions.

2.2 Understand the etiology, clinical features, testing and management of medical conditions with significant genetic etiologies. Examples include but are not limited to hypertrophic cardiomyopathy and amyotrophic lateral sclerosis.

2.3 Calculate risk using various techniques and sources of information. Examples include but are not limited to pedigree analysis (Mendelian risk), Bayesian analysis, empiric risk and laboratory results.

2.4 Understand consanguinity, how to calculate coefficients of inbreeding and assess genetic risk.

2.5 Understand the common causes of, and appropriate investigations for recurrent pregnancy loss.

2.6 Understand dysmorphology concepts. Examples include but are not limited to isolated birth defects, syndromes and sequences/associations.

Unit 3: Molecular Genetics

Genetic Counsellors should have the knowledge, skills

and abilities to:

3.1 Understand mechanisms that lead to mutations, the different types of mutations and genetic changes and how these contribute to human variability and disease.

3.2 Understand techniques used to identify new genes and the limitations and strengths of each approach.

Examples include but are not limited to family studies, genome wide association studies and comparative genomic hybridization.

3.3 Understand clinical molecular testing techniques including indications for, limitations of and the types of mutation they identify.

3.4 Understand and apply the concept of linkage and interpret LOD scores.

3.5 Understand the presentation, frequency, inheritance pattern, molecular defect, diagnostic techniques and management of molecular disorders.

Unit 4: Cytogenetics

Genetic Counsellors should have the knowledge, skills and abilities to:

4.1 Understand cytogenetic techniques, including indications for, limitations of each technique and the type of chromosome abnormality they identify.

4.2 Understand mechanisms that lead to numerical and structural chromosome abnormalities. 4

4.3 Demonstrate a basic understanding of cancer cytogenetics. Examples include but are not limited to Wilm's tumour, retinoblastoma and chronic myelogenous leukemia.

4.4 Be familiar with recognized variant chromosomes, such as 1qh, and the implications for genetic counselling.

4.5 Understand the presentation, frequency, cytogenetic defect, diagnostic techniques, and management of cytogenetic disorders. Examples include but are not limited to aneuploidy, translocations, chromosome breakage syndromes and microdeletion/microduplication syndromes

4.6 Be familiar with standard cytogenetic nomenclature.

Unit 5: Biochemical Genetics

Genetic Counsellors should have the knowledge, skills and abilities to:

5.1 Understand the components of a metabolic pathway and the different possible effects on a pathway when an enzyme is impaired or non-functional.

5.2 Understand common terms associated with biochemistry. Examples include but are not limited to oxidation, catabolism, metabolism and phosphorylation.

5.3 Understand the limitations of and approach to testing for common metabolic disorders.

5.4 Understand the presentation, frequency, inheritance pattern, biochemical defect, and management of metabolic disorders.

Unit 6: Cancer Genetics

Genetic Counsellors should have the knowledge, skills and abilities to:

- 6.1 Understand the basic principles and theories of cancer genetics and oncogenesis.
- 6.2 Understand and interpret the influence of family history and other risk factors on cancer susceptibility.
- 6.3 Recognize family history features and clinical features associated with an inherited susceptibility to cancer and appropriateness for genetic testing.
- 6.4 Understand the presentation, frequency, inheritance pattern, genetic testing and management of cancer predisposition syndromes.
- 6.5 Understand and be able to address the benefits, risks, and limitations of genetic testing for cancer susceptibility.

Unit 7: Genetic Screening

Genetic Counsellors should have the knowledge, skills and abilities to:

- 7.1 Understand the different types of screening programs including but not limited to newborn screening, prenatal screening and population screening.
- 7.2 Understand the criteria used to select conditions and establish screening programs.
- 7.3 Understand the statistical measures of a screening test. Examples include but are not limited to validity, reliability, sensitivity and specificity.
- 7.4 Understand the risks, limitation and benefits of screening programs including potential ethical and legal concerns.
- 7.5 Be familiar with existing screening programs, their target population and methodologies.

Unit 8: Prenatal Diagnosis

Genetic Counsellors should have the knowledge, skills and abilities to:

- 8.1 Understand the indications, advantages, limitations and risks associated with all prenatal diagnostic procedures.
- 8.2 Understand all available prenatal screening options, including their sensitivity, specificity, limitations, false positive rates, positive predictive value and how to interpret the results.
- 8.3 Understand the indications, advantages, limitations, risks and accuracy of prenatal imaging including but not limited to ultrasound, fetal MRI and fetal echocardiography.
- 8.4 Understand the risks associated with single or multiple ultrasound soft markers and the appropriate follow up for each.
- 8.5 Understand the differential diagnosis and etiology of ultrasound abnormalities and the appropriate diagnostic testing options.
- 8.6 Understand the different methods used for termination of pregnancy and the risks, benefits, psychosocial implications and legal issues of each.
- 8.7 Understand prenatal risk factors. Examples including

but not limited to paternal and maternal health.
8.9 Be familiar with various assisted reproductive technologies and be aware of the benefits, risks and limitations of each. 6

8.10 Understand the general concepts of embryonic development and define the developmental stages of embryogenesis.

8.11 Understand the mechanisms of dysmorphism. Examples include but are not limited to malformations, deformations and disruptions.

8.12 Understand the potential effect of known teratogens and the appropriate counselling and investigations for exposed pregnancies.

8.13 Understand the reproductive risks associated with paternal exposures.

Unit 9: Genetic Counselling

Genetic Counsellors should have the knowledge, skills and abilities to:

9.1 Understand and apply the principles of medical ethics to the practice of genetic counselling. Examples include but are not limited to autonomy, nonmaleficence, beneficence, justice and paternalism.

9.2 Understand and apply principles of client -centered counselling and understand the essential components of communication.

9.3 Understand and apply genetic counselling strategies. Examples include but are not limited to contracting, shared decision-making and self-disclosure.

9.4 Understand common psychotherapy terms and principles. Examples include but are not limited to defense mechanisms, transference and coping mechanisms.

9.5 Obtain and interpret appropriate medical, social and family histories.

9.6 Understand the grieving process including the stages of grieving and the features of unhealthy grief. Understand bereavement issues as they pertain to genetic counselling.

9.7 Demonstrate an awareness of diverse cultures, values and beliefs and the potential barriers to genetic counselling services.

9.8 Understand the legal and ethical issues pertinent to genetic counselling and testing. Examples include but are not limited to practice guidelines, predictive testing protocols, genetic discrimination and privacy of health information.

Practice Based Competencies

1. COUNSELLING AND COMMUNICATION

Genetic counsellors have the necessary knowledge, skills, attitude and judgment to:

1.1 Effective Relationships

1.1.1 Demonstrate clear and professional communication in interactions with clients and

	<p>collaborators.</p> <p>1.1.2 Establish rapport with clients and identify and address barriers to communication.</p> <p>1.1.3 Apply the principles of trust, respect, beneficence, honesty, and empathy to all client relationships.</p> <p>1.1.4 Use client-centred principles in the communication process that respect and respond to clients' values, preferences, decisions or self-identified best interests.</p> <p>1.1.5 Strive to achieve a mutual understanding of expectations and desired outcomes with clients.</p> <p>1.2 Psychosocial Assessment</p> <p>1.2.1 Utilize appropriate interviewing techniques to identify clients' expectations and major concerns.</p> <p>1.2.2 Determine clients' sources of emotional and psychological support.</p> <p>1.2.3 Explore clients' coping skills including decision-making strategies and capacity.</p> <p>1.3 Psychosocial Support and Counselling</p> <p>1.3.1 Use empathetic listening to establish rapport and formulate appropriate questions to encourage clients to engage in discussion.</p> <p>1.3.2 Assess clients' understanding and response to medical and genetic information and its implications.</p> <p>1.3.3 Respond appropriately to clients' emotional states.</p> <p>1.3.4 Recognize when a clients' psychological state may benefit from appropriate interventions and/or referrals.</p> <p>1.4 Awareness of Diversity</p> <p>1.4.1 Recognize, acknowledge and respect differences relevant to client interactions, including but not limited to cultural, spiritual, physical, cognitive, political and sexual orientation.</p> <p>1.4.2 Communicate and practise in a culturally sensitive manner.</p> <p>1.4.3 Reflect on and address their own biases and cultural differences when interacting with clients.</p> <p>1.5 Communication of Information</p> <p>1.5.1 Elicit family, medical, genetic and other relevant information as appropriate.</p> <p>1.5.2 Synthesize information and perspectives and communicate these within a mutually agreed plan.</p> <p>1.5.3 Convey information to clients in a manner that meets their needs and levels of understanding.</p> <p>1.5.4 Discuss available options, appropriate genetic tests</p>
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and/or clinical assessments including the potential benefits, risks and limitations to enable clients to make informed decisions.

1.5.5 Provide clear oral and written information which is tailored to the needs of clients and collaborators and reflective of the services provided.

2. GENETIC EXPERTISE

Genetic counsellors have the necessary knowledge, skills, attitude and judgment to:

2.1 Effective Practice

2.1.1 Demonstrate an understanding of genetic counselling models, theories and approaches.

2.1.2 Understand the development and implementation of standards, practice guidelines, education, and research initiatives related to genetic counsellor practice.

2.1.3 Integrate genetic counselling skills with theoretical and scientific knowledge, as applicable in interactions with clients.

2.1.4 Provide safe, efficient and effective genetic counselling services.

2.2 Critical Thinking

2.2.1 Evaluate and summarize pertinent data from the published literature, databases, and other professional resources.

2.2.2 Synthesize relevant information as the basis for assessing risk potential, screening and testing options, reproductive options, and follow-up recommendations, in conjunction with collaborators.

2.2.3 Assess and calculate the risk of occurrence/recurrence of a genetic condition or congenital anomaly using a variety of techniques (inheritance patterns, epidemiologic data, quantitative genetic principles and/or statistical models).

2.2.4 Identify and access local, national and international resources such as support groups and other services as appropriate for specific genetic conditions.

2.2.5 Evaluate the applicability and relevance of research and evidence-based practice findings and, where appropriate, apply these findings to practice.

2.2.6 Evaluate and interpret issues for clients relating to research participation including risks, benefits and limitations.

2.3 Clinical Case Management

2.3.1 Analyze and accurately interpret genetic and family data.

2.3.2 Understand relevant medical details as related to clinical cases and genetic

	<p>conditions.</p> <p>2.3.3 Design, implement and periodically assess genetic counselling case management plans.</p> <p>2.3.4 Explain options and facilitate appropriate screening and testing.</p> <p>2.3.5 Facilitate decision making of clients that is informed and meets their needs.</p> <p>2.3.6 Follow up with clients, laboratories and/or other professionals as necessary.</p> <p>2.3.7 Document medical and genetic counselling information appropriately.</p> <p>2.3.8 Recognize circumstances in which the input of other members of the healthcare team would contribute to and enhance case management.</p> <p>2.4 Education</p> <p>2.4.1 Act as a reliable source for current medical genetics information for clients and collaborators.</p> <p>2.4.2 Tailor, explain and communicate complex information in order to meet the learning needs of various clients and collaborators.</p> <p>2.4.3 Share knowledge with collaborators to contribute to their professional development.</p> <p>2.4.4 Support health care students to meet their learning objectives, in cooperation with other members of the health care team.</p> <p>2.5 Research</p> <p>2.5.1 Identify and/or develop research questions to address knowledge gaps.</p> <p>2.5.2 Contribute to the design of research studies.</p> <p>2.5.3 Understand the need for and process involved in obtaining appropriate ethics review board approval.</p> <p>2.5.4 Develop and maintain research materials including consent forms and information sheets.</p> <p>2.5.5 Facilitate client participation in research.</p> <p>2.5.6 Partake in the collection and analysis of data.</p> <p>2.5.7 Participate in manuscript preparation.</p> <p>2.5.8 Present research to clients, collaborators and academic audiences.</p> <p>2.5.9 Support a culture of research within the genetic counselling discipline as well as with interdisciplinary teams.</p> <p>3. PROFESSIONALISM AND ETHICAL PRACTICE</p> <p>Genetic counsellors have the necessary knowledge, skills, attitude and judgment to:</p> <p>3.1 Collaboration and Interdisciplinary Teamwork</p> <p>3.1.1 Participate productively in a team environment and understand their own role and the roles of other professionals with whom they interact.</p> <p>3.1.2 Establish and maintain professional relationships with key individuals, organizations</p>
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and groups to facilitate the provision of service.

3.1.3 Seek, respect, consider and be receptive to the information and opinions of clients and collaborators.

3.1.4 Act as a consultant for other genetic counsellors and health care professionals.

3.1.5 Demonstrate effective interpersonal communication skills in collaborative and interdisciplinary practice.

3.1.6 Request and obtain consultative assistance or referral when appropriate.

3.1.7 Encourage mechanisms for support within the profession.

3.2 Professional Growth

3.2.1 Reflect on and evaluate their own practice, recognizing limitations in knowledge and level of competence.

3.2.2 Engage in life-long learning to gain new knowledge, skills and behaviours.

3.2.3 Keep abreast of new practice standards and evidence-based research advances, as well as scientific and societal developments.

3.3 Ethical Practice

3.3.1 Be aware of and act in accordance with the ethical and legal principles and values of the profession.

3.3.2 Be familiar with issues surrounding privacy, informed consent, confidentiality, real or potential discrimination, self-determination and other legal/ethical matters related to the collection, use, disclosure and exchange of genetic information.

3.3.3 Maintain appropriate confidentiality and security in the transmission, storage, management and discussion of professional issues and clinical and research information.

3.3.4 Recognize their own values and biases in relating to clients.

3.3.5 Identify and react to ethical dilemmas arising in practice and seek assistance as needed from experts in these areas.

3.4 Public Health and Advocacy

3.4.1 Identify and respond to the medical genetic needs of populations to promote health and well-being.

3.4.2 Advocate for clients by representing their interests in the medical and social service systems and community.

3.4.3 Demonstrate an awareness of resource allocation and cost-effectiveness in making decisions related to relevant diagnostics and therapeutic interventions.

3.4.4 Recognize the benefit of genetic counsellor

	<p>participation in public health policy development and be aware of key issues that may influence practices and health services.</p> <p>3.4.5 Explain and promote the role of the genetic counsellor to clients, the public, legislators, policy makers and other health care professionals.</p> <p>3.5 Leadership</p> <p>3.5.1 Demonstrate appropriate organization and management skills in order to successfully manage clients, projects, and programs.</p> <p>3.5.2 Act as a resource person, educator, advocate and/or mentor for students, health care professionals and the community.</p> <p>3.5.3 Assess quality of services provided and identify opportunities for improvement and strengths upon which to build.</p> <p>3.5.4 Support an organizational culture that facilitates professional growth, continuous learning, and collaborative practice.</p> <p>3.5.5 Recognize evolving arenas in medical genomics and health care in order to identify the potential for growth within the profession as well as for integration of genetic counsellor practice into new roles.</p>
<p>Is Genetic Counseling Supervision required, post-MSc completion, in order to obtain certification/registration?</p> <p>Please see Clarke et al (2007)¹ for a definition of Genetic Counseling Supervision (i.e. this is different from clinical supervision with a geneticist, or peer supervision with another GC or manager, counseling supervision is with a counseling therapist/psychologist and focuses on counseling issues)</p>	<p>No, unless additional cases are required for a candidate's logbook.</p>
<p>Are certified/registered genetic counselors regulated? If so, by whom?</p>	<p>In Canada, there are currently no specific laws outlining and enforcing the rules and standards that govern genetic counsellor training or practice; that is, genetic counsellors are currently unregulated health care professionals. Without some form of provincial/territorial regulation, genetic counsellors are unable to become</p>

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Clarke A, Middleton A, Cowley L, Guilbert P, Macleod R, Clarke A, Tran V (2007) Report from the UK and Eire Association of Genetic Nurses and Counsellors (AGNC) supervision working group on genetic counsellor supervision. J Genet Couns. 16(2):127-42

	<p>licensed and are legally prohibited from performing “health acts” autonomously. In clinical settings, genetic counsellors work under the supervision of physicians.</p> <p>There are certain provinces within Canada where a regulated health profession has its own stand-alone piece of law pertaining to their professional regulation (ex: doctors and nurses) and can utilize a Delegation of Medical Act/Function to an MSc trained genetic counsellor, within specified parameters, so that some tasks can be performed independently.</p> <p>There may be institutional policies that may restrict the activities of unregulated health professionals, as a means of liability protection.</p>
<p>What requirements exist to maintain certification/registration? How frequently is certification/registration maintained?</p>	<p>All diplomats of the certification examination of the CAGC have received certified status on a 10-year, time-limited basis. Certification will expire on December 31 of the 10th year from the date the exam was written and passed.</p> <p>There are two pathways available for the pursuit of recertification:</p> <ol style="list-style-type: none"> 1. Re-examination 2. Accumulation of continuing practice credits (CPCs) and continuing education credits (CECs) <p>1. Re-examination Individuals choosing the re-examination pathway are required to apply to write the certification examination prepared by the CAGC Certification Board prior to the expiration of their certification and apply through an extended Pathway A process</p> <p>2. Continuing Practice Credit (CPC) and Continuing Education Credit (CEC) Pathways Individuals choosing to recertify must submit a recertification application, a CPC logbook and a CEC logbook.</p> <p>CPCs are accrued from employment in the field of genetic counselling. Employment may include, but is not exclusive to, genetic counselling in a clinical, industry or research setting, administration/ management, and genetic counselling education. Individuals applying for recertification by means of a combination of CPCs and CECs must have a minimum of 20 and a maximum of 70 CPCs to count towards the 150 required total credits for the 10-year period</p> <p>CECs are accumulated by attendance at recognized educational forums. A list of recognized education sessions will be posted on the CAGC website. For all non-recognized remaining meetings and online educational courses, applications are considered on a case by case basis. These educational forums must meet the following criteria:</p>

	<p>1. One CEC will be granted for each hour of education session (in-person or online conference) relevant to genetic counseling. Partial CECs will be given for partial hours.</p> <p>2. The following sessions will not be assigned CECs:</p> <ul style="list-style-type: none"> <input type="checkbox"/> A panel session which is primarily a question and answer period would not be assigned CECs as there is no planned educational content and if there are no questions the session ends. <input type="checkbox"/> “By invitation only” sessions or sessions that require extra registration (with or <input type="checkbox"/> Poster sessions <input type="checkbox"/> Curbside consultations and diagnostic dilemmas <input type="checkbox"/> Business and committee meetings <input type="checkbox"/> Working group meetings <input type="checkbox"/> Award ceremonies (unless educational component explicitly stated) <p>3. Discretion will be used for those educational sessions that are not directly related to the work of genetic counsellors. For example, sponsored lectures on molecular techniques may not be granted CECs.</p> <p>4. For conferences that are related to one specific genetic condition or group of related conditions, a maximum of 15 CECs will be granted.</p> <p>Individuals applying for recertification by means of a combination of CPCs and CECs must have a minimum of 80 and a maximum of 130 CECs to count towards the 150 required credits for the 10-year period.</p>
<p>Do you have an international policy on registration of genetic counselors trained outside your country? If so, please provide a link to this</p>	<p>For all candidates that are trained by institutions that are not ACGC accredited must apply through Pathway B in order to be considered eligible to sit for the Certification Examination. International genetic counsellors therefore can apply through Pathway B.</p>
<p>Please briefly summarise what is required of international genetic counselors wanting to register/certify in your country</p>	<p>Details of Pathway B are described above and in further detail in the Certification Handbook.</p>