Training and Certification in Genetic Counseling: The Australian and New Zealand Experience

McEwen, A.R.¹, Young, MA.² and Wake, S.³

1. Genetic Health Service NZ (Central Hub), Wellington Hospital, Private Bag 7902, Wellington South, New Zealand
2. Peter McCallum Cancer Centre, St Andrews Place, East Melbourne 3002, Victoria, Australia
3. Victorian Clinical Genetics Services, Murdoch Childrens Research Institute, Parkville, 3052, Victoria, Australia and Department of Paediatrics, University of Melbourne, Melbourne, Australia

Corresponding Author: Alison.McEwen@ccdhb.org.nz; Phone +64-4-3855310;
Fax +64-4-3855822

Key words: genetic counseling; training, certification; skills; competencies

ABSTRACT

The development of standards for training and certification is essential to the credibility and integrity of a developing profession. Training and certification of genetic counselors in Australasia has undergone a detailed review during the past few years, resulting in changes to the way certification is obtained. This paper presents an overview of the process of developing a robust training and certification program which reflects the social and cultural environment of genetic counselors working in Australasia. A brief history of the development of the profession in Australasia is provided, followed by a detailed discussion of the recent development of Masters programs and a portfolio of work required for certification. The importance of consultation within the profession and with our colleagues in the field of human genetics is considered, and we provide a discussion of defining moments that occurred during the review. This paper is intended to provide a detailed description of genetic counselor training and certification in Australasia. We anticipate that our insights into the process of redevelopment of training and certification guidelines may be helpful for genetic counselors working in countries where certification requirements are being developed.

INTRODUCTION

The experiences of countries where genetic counseling has become well established as a recognised profession demonstrates the importance of developing standards of practice underpinned by guidelines for training and certification. The profession of genetic counseling in Australasia¹ has developed over the last three decades. Whilst drawing on the professional models developed in the United States of America, Canada and United Kingdom the Australasian profession has evolved allowing for specific local factors including geographical, historical, healthcare and educational differences to be considered (Sahhar et al, 2005).

The first guidelines developed by the Human Genetics Society of Australasia for training and certification in genetic counseling were issued in 1990. In 2010, recognising the evolution and changes to the profession, and as a result of the implementation of a two year clinical Master of Genetic Counseling by Australian universities, new guidelines were issued. The completion of these guidelines coincided with the 20th anniversary of the 1990 guidelines. These guidelines herald a new era in the training and certification of genetic counselor practitioners in Australasia. This paper examines the history and development of genetic counseling training and certification in Australasia, with particular consideration of the recent review of training and certification and subsequent issuing of the 2010 guidelines, which reflect the clinical and theoretical competencies required for practice in Australasia. The process of development of professional competencies, and guidelines for training and certification will be of interest to those working in this field in countries where training guidelines are yet to be developed. Just as we drew on the experiences of our colleagues in the United Kingdom, the United States of America and Canada, genetic counselors in other countries may draw on our experiences as they develop their own processes for training.

¹ Australasia is a term used to include both Australia and New Zealand. In this paper the term Australasia is used as a descriptor for these two countries, unless the context of the discussion necessitates designating either one or both countries separately.

DEVELOPMENT OF THE GENETIC COUNSELING PROFESSION IN AUSTRALASIA

Background

Genetic counseling by non-medically trained professionals has been formally recognised as a profession in Australasia since the late 1980s. Prior to that individuals with various backgrounds including nursing, social work, and science, often performed the work of genetic counselors, but were employed under a variety of professional position description guises. Importantly, the small population sizes and large geographical areas of both Australia and New Zealand have contributed to the shaping of the genetic counseling profession in these two countries. Genetic counselors may be based in rural and regional areas, working as sole practitioners linked to larger metropolitan clinical genetics services. A flexible approach has been needed to balance service delivery priorities whilst recognising the importance of professional development.

The Human Genetics Society of Australasia (HGSA) was officially recognised in 1977 to provide a forum for those working in the field of human genetics. During the mid 1980s discussion began amongst members of the HGSA regarding formal recognition and development of the role of non-medical genetic counselors working in clinical genetics. Plans for the establishment of a genetic counseling training and certification program arose out of these discussions.

Recognition, Education and Training of Genetic Counselors in Australasia

In 1986 the HGSA formed a working party, to look at developing a non-medical profession of genetic counselors. This was a somewhat controversial topic amongst HGSA members, with some members uncomfortable about the concept of non-medical practitioners providing genetic counseling. Interestingly, the difficulties encountered in Australasia regarding attaining professional acceptance for non-medical genetic counselors were also seen in other countries such as the United States of America, where genetic counselors had experienced difficulties with professional acceptance and recognition a few years earlier (Heimler, 1997). Fortunately the members of this HGSA working party had the foresight to recognise that there was a need for suitably trained non-medically qualified practitioners. In 1988 a draft policy

regarding training of non-medical genetic counselors was discussed at the HGSA Annual General Meeting (AGM), and the following motion was passed.... “This AGM accepts the principles outlined in the draft policy document and instructs the Working Party to produce a tighter document for presentation at the 1989 AGM, together with plans for implementation”.

In 1989 a draft policy statement on ‘The training of genetic counselors’ was published in the HGSA Bulletin (Bulletin, 1989). This policy outlined the definition and duties for individuals who wished to train as genetic counselors, rather than medical geneticists. Importantly, the Working Party recognised that it was impractical, initially at least, to establish specific postgraduate courses in genetic counseling, due to local economic and geographical constraints. Rather, they proposed that training be undertaken via a two step process, with the first part comprising development of theoretical knowledge and the second being development of practical/clinical skills. It was envisaged that this model would allow individuals to take advantage of local genetics and counseling courses, whilst ensuring a consistent theoretical knowledge and training standard. Later that same year, the policy was ratified.

Formation of a Board of Censors for Genetic Counseling

HGSA Council appointed the first Board of Censors for Genetic Counseling in 1989. Their role was to develop, oversee, administer and assess the training and certification of the HGSA’s genetic counselor members. The inaugural Board members were chosen to represent the skills and expertise considered essential to the development of a certification process for genetic counselors.

Since then the membership of the HGSA Board of Censors for Genetic Counseling has evolved in parallel with the development of the profession. Currently the chair is appointed from the Board membership. Seven certified genetic counselors and one clinical geneticist comprise the membership and all positions are voluntary. A membership term comprises three years.

Genetic Counseling Guidelines for Training and Certification

The first general genetic counseling training guidelines were ratified in 1990 (Bulletin, 1990). Certification involved a two part process. Part 1 involved completion

of a check list of core knowledge in aspects of genetics and counseling obtained by enrolling in existing university programs and/or through additional training such as professional development courses within the clinical genetics unit where the trainee genetic counselor was employed (Sahhar et al 2005). Part 2 involved completion of a prescribed number of written cases and annual education reports while working under supervision as a trainee genetic counselor for a minimum of two years full time equivalent. In the first few years of this certification program candidates were often completing Part 1 and Part 2 simultaneously, however, Part 1 certification became established as the entry level requirement for employment as a trainee genetic counselor. One concern that arose from the two part certification process was the use of professional titles for those working as genetic counselors. It was finally agreed in 2002 that Associate Genetic Counselor would be the professional title used to describe those with Part 1 certification, and Certified Genetic Counselor for those with Parts 1 and 2.

Genetic Counseling University Education in Australasia

When the initial guidelines were developed there were no post-graduate courses in genetic counseling in Australasia. However, in 1995 the University of Newcastle established a genetic counseling program and by 1996, four one year full time equivalent university based programs were available in Australia whose curriculum met the requirements for Part 1 certification. One was offered by distance education, ensuring people from New Zealand and Australian states without a university program could access the theoretical and clinical knowledge required for certification.

Formation of the Australasian Society of Genetic Counselors (ASGC)

Concomitant with the formalization of a training and certification program for genetic counselors working in Australasia was the development of a professional genetic counselors association to enable genetic counselors to discuss professional issues and contribute to the development of the profession.

In 1993 the genetic counselors formalized the 'special interest' professional group within the HGSA, known as the Australasian Society of Genetic Counselors (ASGC). Currently there are over 270 members who participate in activities such as committee membership, policy development, and various workplace activities. Through the

advocacy of its elected Executive and members the ASGC is a strong voice for the Australasian genetic counseling profession.

Members of the ASGC executive were actively involved in the review of the training and certification guidelines. They have also assisted the Board of Censors for Genetic Counseling in engaging and communicating with the members about the guideline review and subsequent changes to the certification process.

PROFESSIONAL DISCOURSE ABOUT REVIEWING TRAINING AND CERTIFICATION REQUIREMENTS

During 2004-2005 discussions began within the ASGC regarding the future of genetic counseling training and certification in Australasia. These discussions arose from concerns which included that the current training and certification program needed to be modified to recognise the increasing complexity of genetic knowledge and its application to the delivery of best practice healthcare, the desire to raise professional standards to be equivalent to those in the United Kingdom, United States of America and Canada, and the need for a robust program allowing genetic counselors to demonstrate the development of profession-specific clinical skills through a variety of methods of assessment.

A number of forums, both local and international, provided a platform for discussions about a review of training and certification. These included the 2005 ASGC conference in Newcastle, Australia where Heather Skirton spoke about the development of the registration process in the United Kingdom. Following this, the December 2005 edition of Linkage (the ASGC newsletter) was devoted to presenting the views of ASGC members who had responded to a general invitation by the editors of Linkage to comment on the current training and certification process. Another opportunity for formative discourse occurred during the first Transnational Alliance of Genetic Counselors meeting in May 2006 in Manchester, United Kingdom, where representatives of genetic counseling training programs, credentialing bodies and professional societies from 17 countries met to discuss professional issues for genetic counselors. The exchange of information and ideas at the Manchester meeting subsequently informed the discussions held during the ASGC conference in Brisbane,

Australia later that year. Following this meeting, a survey of the ASGC membership was undertaken to ensure all members had an opportunity to present their views and concerns about the review of training and certification. In early 2007 a working party was formed to consider the implications of implementing clinical Masters training programs, and the logistics of undertaking a review of training and certification. The working party included representation from the ASGC Executive and the Board of Censors for Genetic Counseling as well as all the conveners of the postgraduate genetic counseling programs. At the 2007 ASGC conference in Auckland, New Zealand a summary of the results of the membership survey was presented and discussion ensued about the future course of training and certification in Australasia.

Finally, in late 2007 it was decided that the minimum requirement for eligibility to undertake certification would become a two year full-time Masters-level postgraduate qualification. A further minimum two year full-time equivalent period of employment in the field of genetic counseling, undertaking regular supervision, and satisfactory completion of a prescribed body of work would fulfil the requirement to be awarded Board Certification.

DEVELOPMENT OF MASTERS LEVEL TRAINING PROGRAMS

Conveners of the one year post graduate genetic counseling programs worked with their relevant stakeholders to develop the two year clinical Masters programs. Two Masters programs were developed out of existing courses, the University of Melbourne program which had its first intake of students in 2008 and the Griffith University program which had its first intake of students in 2011. In addition, a Masters program based at University of Sydney was developed with the first intake of students in 2011. Two graduate diploma programs were discontinued.

HGSA guidelines for the accreditation of genetic counseling training programs were developed as part of the review process which is discussed in detail in the next section of this paper. These guidelines provide the university programs with a framework to ensure the courses meet all the formal requirements for accreditation, which include minimum times devoted to the clinical, research and theoretical components of the teaching curriculums. The accreditation guidelines were developed in consultation

with the course convenors and reflect the need for initial development in the core competencies to demonstrate the scope of practice in Australasia.

THE TRAINING AND CERTIFICATION GUIDELINES REVIEW PROCESS

Formation and membership of the Oversight Committee

In 2008, the Board of Censors for Genetic Counseling, together with the ASGC, and with the approval of the HGSA Council, established an Oversight Committee to manage the review of the process of certification in genetic counseling and develop appropriate training guidelines. Membership of the Oversight Committee included current Board of Censors for Genetic Counseling members; the previous two chairs of the Board; members of the ASGC Executive, including the current chair; convenors of Australian postgraduate genetic counseling programs; and others, to ensure a broad skill base and representation of all interests. The chair of the Oversight Committee was the incoming chair of the Board of Censors, who at that time had completed one year of a three year term as a Board member.

The members of the committee came from five states in Australia and from New Zealand, so the practical implications of communicating from a distance had to be addressed. The meetings were held mostly by teleconference, often with ten or more participants, and much email discussion occurred. Groups of Oversight Committee members also met in person during annual conferences.

Skills and Competencies

The Oversight Committee began by developing a broad set of skills and competencies (appendix 1), which would be used to inform the development of the assessment tasks. The committee drew on the skills and competencies that had previously been developed by the genetic counseling profession in the United Kingdom (AGNC, 2008) and the United States of America (Fiddler et al, 1996; Fine et al, 1996). The skills and competencies developed by other professional groups including social work and nursing were also reviewed to ensure the set of competencies and skills developed encapsulated the work of genetic counselors in Australasia.

Tasks for certification

Until 2010, general certification for genetic counselors in Australasia involved the completion of twenty long cases and a logbook of one hundred short cases, along with an annual continuing education report. Supervision has been integral to the profession in Australasia from its inception and candidates were required to attend both counseling supervision and genetic supervision for the duration of their training, with the submission of annual supervisor's reports. The minimum time for completion of certification was two years full time equivalent; however the majority of candidates took significantly longer. Certification was frustrating for some candidates, as the assessment was based on the ability to write about their practice, and was limited to the assessment of case work. In addition, the Board of Censors for Genetic Counseling received a number of requests for recognition of published work (research articles and case reports) as part of the certification process, highlighting an emerging interest in research among some genetic counselors.

The Oversight Committee made the decision to develop a certification process that included a range of ways of assessing competence. This decision was based on two key considerations, firstly that candidates undertaking the original certification program had repeatedly commented on the lack of opportunity to display the full range of their skills in the process of writing only case reports, and secondly the recognition and acknowledgement that the genetic counseling profession in the United Kingdom had developed a portfolio of certification tasks which seemed well suited to the local training resources available in Australasia (AGNC, 2008). The portfolio for registration in the United Kingdom, overseen by the Genetic Counselor Registration Board, was introduced in 2002, providing an established model for the Oversight Committee to consider. It was further decided that the set tasks would require the associate genetic counselor to demonstrate stage appropriate competence at two specified time points in their training. This was in contrast with the previous certification process, in which the Board of Censors for Genetic Counselling looked for development of competency over time.

Over a period of 18 months, the Oversight Committee developed a portfolio of tasks which the associate genetic counselor submits at specific time intervals. The assessment tasks include:

- five long cases
- a logbook of fifty cases
- submission of a published article, or alternatively a literature review
- two reflective essays – the first based on the transcript of a recorded consultation and the second based on a simulated consultation with an actor
- annual continuing education reports
- annual counseling and genetic supervision reports
- an interview with the Board

The details of the tasks can be found in the guidelines (<https://www.hgsa.org.au/website/wp-content/uploads/2009/06/Guidelines-for-TC-in-genetic-counseling-version-31-July-2011.pdf>)

The process of consultation during the review

Communication with the ASGC membership occurred through a number of forums during the review. The planned review process was presented and further discussion ensued at the 2008 ASGC conference in Adelaide, Australia. Another presentation was made during the 2009 ASGC conference in Fremantle, Australia, followed by a minuted discussion by conference attendees. In addition, a written summary of these presentations and ensuing discussion, as well as other regular report updates were circulated to the ASGC membership and comments invited from members. Each time, comment was invited through the email of the chair of the Oversight Committee. The views of the membership which came about as a result of these discussions were considered by the Oversight Committee and incorporated into the draft guidelines.

Prior to finalising the guidelines, the Oversight Committee sought feedback from the clinical genetics community in Australasia, sending a draft of the guidelines to the HGSA Clinical Services Committee (CSC). The membership of the CSC at the time consisted of a clinical geneticist and a senior genetic counselor from each clinical genetics service in Australasia. The feedback, which included issues related to employment and resources for training, was considered by the Oversight Committee. The guidelines were subsequently finalised and sent to the HGSA Council for ratification.

To conclude the review process a professional editor was engaged to edit and format the final written materials. The outcome was a document incorporating the skills and competencies of genetic counselors, information about the certification process and detailed instructions about each assessment task. Also included was information about arrangements for the three year transition period as the previous method of certification by case reports was phased out and the new certification by portfolio was phased in. The maintenance of professional standards program was also included; finally, the document included a number of application forms and additional information in appendices.

This has resulted in a document that is meaningful to people who are not involved in the profession and to those seeking information about genetic counseling as a career choice. In addition, the completed document is professional, well laid out and easy to use by applicants.

The Outcomes

In order to facilitate the introduction of the guidelines, which were made available on the HGSA website in late April 2010, the Board of Censors for Genetic Counseling offered a workshop for supervisors prior to the November 2010 ASGC conference. This was attended by over 40 supervisors. Board members reviewed the different tasks and provided feedback to supervisors based on the assessment of the initial portfolio submissions. During the ASGC conference a session was devoted to discussion of the guidelines, which was attended by a broad range of individuals, including associate and certified genetic counselors.

Following the first two rounds of submissions (which equates to one year) the guidelines were reviewed and edited. Some minor corrections were made, and some additional information was included to clarify some of the portfolio tasks, particularly regarding the reflective assessments. With hindsight, the need to provide additional material about these was understandable as some current candidates have had little experience with this type of assessment. We believe this will change over time as more candidates have completed Masters programs.

As the review of our training and certification guidelines progressed various members of the Oversight Committee took on additional tasks related to the review. Guidelines for the Accreditation of Master of Genetic Counseling programs were developed in consultation with program conveners (<https://www.hgsa.org.au/website/wp-content/uploads/2009/06/2010GL01-Masters-Programs.pdf>). In addition, a policy relating to cross-training (<https://www.hgsa.org.au/website/wp-content/uploads/2009/06/2011GL02-Genetic-Counseling-Guidelines-for-Cross-Training.pdf>) of genetic counselors, was developed in view of the perceived consequences of moving to Masters level training and requiring candidates who work in specialty areas to complete some case reports in areas outside of their specialty. In light of feedback obtained from the ASGC membership, and in consultation with the professional editors the Oversight Committee also developed a Frequently Asked Questions document which has greatly assisted the Board of Censors for Genetic Counselling in dealing with questions and concerns from those interested in, or undertaking certification (<https://www.hgsa.org.au/website/wp-content/uploads/2009/06/GENCON-09-EDIT2-FAQs-29May10.pdf>). This has proven to be particularly useful in dealing with the phasing out of certification by Case Reports (ends 2013). In addition, the Oversight Committee developed a policy for the accreditation of genetic counselors trained and/or certified overseas which provides specific requirements for those genetic counselors seeking HGSA certification (<https://www.hgsa.org.au/website/wp-content/uploads/2011/01/2011GL01-Certification-Eligibility-for-Overseas-TrainedCertified-GCs-FINAL.pdf>).

At the time of preparation of this article the 2010 guidelines have been available for two years and we have received four rounds of submissions from candidates. The majority of candidates to date are undertaking the modified portfolio, which was developed in order to facilitate transition from the previous method of certification by case reports to the current certification by portfolio, as well as the transition from completion of a one year postgraduate genetic counseling qualification to the two year Masters programs as the entry level for employment as an associate genetic counselor. The changes to certification appear to be increasingly accepted by the associate genetic counselors, with the majority of candidates who had only recently started certification choosing to transfer to the portfolio.

Defining moments – examples, how we handled them and what happened next

In undertaking this task of reviewing the requirements for genetic counseling training and certification, we sought to bring together a number of people as members of the Oversight Committee who had been working in the field of genetic counseling for many years to develop a training and certification process that would take our profession forward and that would be robust enough to ensure it could be used for many years. We felt key aspects of the training process included that it was rigorous, transparent, fair and reasonable, and that it reflected the core values and practices of genetic counseling in Australasia. One of the most significant changes made to the training process was the emphasis placed on the importance of reflective practice, with two reflective assessments included in the training requirements, and reflection an integral component of the long case reports.

Several key decisions were made that were integral to both the review process itself and to forming the direction that our profession will take in the coming years. The first was acceptance of the two year clinical Masters as the baseline qualification for entry into the profession. The Masters replaces the two former options for entry into the profession, which were either a one year full time postgraduate course in genetic counseling, or a checklist approach incorporating locally available courses to fulfill the core knowledge requirements in genetics and counseling. The decision to no longer offer the checklist was controversial because the Masters programs are only offered by three universities in Australia, meaning that people from some Australian states and from New Zealand will have to re-locate if they wish to train in genetic counseling. In order to allay concerns that this would disadvantage some workplaces/employers the Board of Censors for Genetic Counseling is developing a policy regarding employment of genetic counselors which provides an option to employ a person without formal genetic counseling training provided they undertake any Board requirements in order to be found eligible to undertake certification. This would only occur in the situation where an employer had failed to attract suitable candidates with genetic counseling qualifications to an advertised position. It is expected that this will occur rarely.

Secondly, development of the skills and competencies required for practice by certified genetic counselors in Australasia, which underpin our training process, involved recognising that we have our own professional values, aims and direction, shaped by our cultural experiences and that these should be reflected in our training.

Thirdly, the language that we used to describe the certification process became important as we sought to accurately delineate the process. Re-naming our training process as “Board Eligible” (ie working as an associate genetic counselor having previously completed a Masters, engaged in regular supervision and working towards certification) and “Certified” (ie having successfully completed their training) marked a turning point in the process. On-going, regular use of these terms throughout the guidelines and in the communications that were sent to the genetic counseling community has helped to begin to embed the new language and change the way both genetic counselors and their colleagues view the training program. The nexus between attaining Board Eligible status and working towards Certification now ensures that the process of certification is viewed as a ‘one part process’. It is envisaged that this will ultimately eliminate the situation where someone works as an associate genetic counselor without ever attaining certification.

The initial training guidelines offered training and certification in general genetic counseling, assuming candidates would see a range of conditions during their training. With the rapid rise of genetic counseling for familial cancer, and increasing numbers of genetic counselors practicing solely in this area, a specialist certification in cancer genetic counseling was developed by the Board of Censors for Genetic Counseling and offered from 1998. Perhaps the most challenging change was the decision by the Oversight Committee to phase out specialist certification in cancer genetic counseling. The decision was made in recognition that genetic counselors were increasingly working in other specialist areas (e.g. prenatal genetics, cardiac genetics). The current certification process recognises the importance of developing competence in ‘genetic counseling’, rather than of developing counseling skills in specific content or knowledge areas. Candidates who are working in a specialist area may now submit 80% of the casework component of the portfolio from their specialist area, and are required to cross-train to achieve 20% of their logbook cases and one long case from outside their specialty area.

This change caused a significant amount of concern for genetic counselors who have completed specialist certification in cancer genetic counseling, as well as those currently working in this area who had been intending to complete specialist certification. These concerns centred around the perception that specialist certification might become devalued, particularly in areas related to supervision and future employment. Fortunately, direct engagement with representatives of this group by the Oversight Committee provided the opportunity for their concerns to be discussed, and changes were made to the provisions for the option to transfer from cancer to general certification. In addition, the Oversight Committee developed a policy on cross training for those working in a specialty area to help ensure their training meets the requirements for general certification.

One of the most positive outcomes of the training and certification review process was the opportunity to work with members of the Oversight Committee who came from a diverse range of backgrounds and experiences. This provided a forum for discussion and debate, which could be lively at times but remained respectful, and which ultimately ensured that the resulting Guidelines reflect a strong consensus for how best to advance training and certification for genetic counselors in Australasia into the future.

The future

The 2010 training and certification guidelines have been designed and developed with the aim of taking the profession of genetic counseling in Australasia into the 21st century. After a period of professional review which was stimulating although at times unsettling, the Board of Censors in Genetic Counseling sees the profession entering a period of stability, where the 2010 training and certification guidelines will become embedded into our professional culture, and where certification is valued by all genetic counselors, as well as other health professional colleagues.

As genetic technologies develop and as genetics makes further inroads into health care in areas as diverse as testing, diagnosis, management and treatment of disease, it is vital that genetic counselors have the training and skills necessary to meet the challenge of their practice. Once certification is attained genetic counselors will

continue to utilise the 2010 guidelines through recognition of the importance of ongoing professional development and engagement with the Maintenance of Professional Standards program. For those certified genetic counselors who work outside the arena of clinical practice, e.g. research, education, community support or policy development, the challenge is to ensure they too retain a commitment to the ongoing development of the genetic counseling profession.

Finally, our intention is that the 2010 Guidelines and supporting documentation will inform the development of genetic counseling training and certification programs for those countries who are our neighbours in the Asia Pacific region. This may in part come about as a result of an emerging interest in international credentialing as well as through associations between international students undertaking a Master of Genetic Counseling in Australasian programs and program staff developing courses in South East Asia.

Working together with our fellow professionals both in Australasia and internationally, we believe the future will bring enhanced opportunities for genetic counselors to attain the professional status of certification and make significant contributions to the ongoing development and delivery of best practice health care and support services both in Australasia and internationally.

ACKNOWLEDGEMENTS

We are grateful to Clara Gaff for her comments on an earlier version of this manuscript.

We thank the members of the Oversight Committee who participated in the review and development of the guidelines with us: David Amor, Anne Baxendale, Leslie Colvin-James, Sue Fawcett, Clara Gaff, Lisa Gordon, Annette Hattam, Jill Parkes, Madelyn Peterson, Carolyn Rogers, Margaret Sahhar, Debbie Trott, and Cindy Zaitsoff.

We also thank the many other people who contributed their time, thoughts and energy to the guideline review and the development of the accreditation guidelines, including program directors, ASGC members, the HGSA Clinical Service Committee, and the Board of Censors for Genetic Counseling members who have joined the Board as the

guidelines have been introduced. Finally, we thank the HGSA Executive and Council for their support during this review process.

REFERENCES

AGNC (Association of Genetic Nurses and Counselors) (2008). Section 1 — New applicants registering, online text. www.agnc.org.uk (Viewed by author on 24 November 2008)

Bulletin of the HGSA Vol 2, No 1, March 1989 pages 7-8

Bulletin of the HGSA Vol 3, No 3, October 1990, pages 4-5

Fiddler, M., Fine, B. & Baker, D. (1996). A case-based approach to the development of practice-based competencies for accreditation and training in graduate programs in genetic counseling. *Journal of Genetic Counseling*, 5(3), 105-112.

Fine, B., Baker, D. & Fiddler, M. (1996). Practice-based competencies for accreditation of and training in graduate programs in genetic counseling. *Journal of Genetic Counseling*, 5(3), 113-121.

Heimler, A (1997). An Oral History of the National Society of Genetic . *Journal of Genetic Counseling*, 6(3), 315-336.

Linkage- Newsletter of the Australasian Society of Genetic Counselors, December 2005

Sahhar, M, Young MA, Sheffield, L & Aitken MA (2005). Educating genetic counselors in Australia: developing an international perspective. *Journal of Genetic Counseling* 14(4), 283-294.

<https://www.hgsa.org.au/website/wp-content/uploads/2009/06/Guidelines-for-TC-in-genetic-counseling-version-31-July-2011.pdf>

<https://www.hgsa.org.au/website/wp-content/uploads/2009/06/2010GL01-Masters-Programs.pdf>

<https://www.hgsa.org.au/website/wp-content/uploads/2009/06/2011GL02-Genetic-Counseling-Guidelines-for-Cross-Training.pdf>

<https://www.hgsa.org.au/website/wp-content/uploads/2009/06/GENCON-09-EDIT2-FAQs-29May10.pdf>

<https://www.hgsa.org.au/website/wp-content/uploads/2011/01/2011GL01-Certification-Eligibility-for-Overseas-TrainedCertified-GCs-FINAL.pdf>

APPENDIX ONE: Skills and Competencies

Competency Standard A: Communication skills

Description of standard	Competency	Outcome
The genetic counselor establishes and maintains a relationship with clients through effective communication, which promotes autonomy.	<ul style="list-style-type: none">Establishes a mutually agreed-upon genetic counseling agenda with the clientConveys clinical and genetic information to clients appropriate to their individual needsExplains options available to the client, including the risks, benefits and limitationsPresents opportunities for the client to participate in research projects in a manner that facilitates informed choice	<ul style="list-style-type: none">Establishes rapport through verbal and nonverbal interactionContracts with the client or familyExplains the process of genetic counselingElicits expectations, perceptions and knowledgeProvides information about the genetic disorder appropriate to the client's assessed needs, reflecting their values, religious and cultural beliefs and preferencesProvides information based on appropriate interpretation of genetic and clinical knowledgeExplains genetic risk-assessment information and possible options to manage identified risk, based on best evidence and clinical assessmentEnables clients to make an informed choice about whether to participate in research project(s)

Competency Standard B: Reflective practice, counseling and interview skills

Description of standard	Competency	Outcome
The genetic counselor takes a self-aware, client-centered approach to facilitate client support and decision making.	<ul style="list-style-type: none"> Establishes relationship with clients, and elicits their concerns and expectations Elicits and interprets appropriate medical, family and psychosocial history Acknowledges the implications of individual and family experiences, beliefs, values and culture for the genetic counseling process Uses a range of counseling skills to facilitate clients' autonomy and decision making Recognises their own limitations in knowledge and capabilities, and seeks consultation and refers clients when necessary Demonstrates reflective skills within the counseling context and participates in genetic counseling supervision Assesses client understanding and response to information and its implications, and modifies the counseling session as necessary 	<ul style="list-style-type: none"> Creates an environment conducive to expression of feelings, anxieties, beliefs and expectations, and considers clients' experiences Enables clients to make informed choices about the implications of their family history Enables clients to disclose their medical, family and psychosocial history by promoting trust and confidence Accurately interprets the medical, family and psychosocial history Acknowledges roles and relationships in families Facilitates and supports dissemination of information about the genetic disorder to at-risk relatives Uses a range of safe, effective and appropriate counseling skills to enable the client to respond to their individual circumstances Consults other health professionals and refers clients to other health professionals or support services when appropriate Demonstrates reflective practice, which informs future clinical interactions Accesses counseling or clinical genetic supervision to underpin and improve performance Responds to verbal and nonverbal cues Structures and modifies information presented to maximise comprehension by clients

Competency Standard C: Critical thinking skills

Description of standard	Competency	Outcome
The genetic counselor identifies, synthesises and organises pertinent information for use in genetic counseling.	<ul style="list-style-type: none"> Identifies, synthesises, organises and summarises pertinent medical and genetic information for use in genetic counseling Evaluates a psychosocial history Makes appropriate and accurate genetic risk assessments Develops the necessary skills to critically analyse research findings to inform practice development 	<ul style="list-style-type: none"> Uses a variety of sources to enable a genetic assessment to be made including client or family member(s), laboratory results, medical records, medical and genetic literature, and computerised databases Analyses and interprets the information that provides the basis for differential diagnosis, risk assessment and genetic testing Applies knowledge of the natural history and characteristics or symptoms of common genetic conditions Demonstrates understanding of family and interpersonal dynamics, and recognises the impact of emotions on cognition and retention, as well as the need for intervention and referral Ascertains sufficient medical, family and personal information from the client to make an appropriate genetic risk assessment Ascertains medical information from other sources to confirm family information and diagnosis Critically appraises current evidence to inform practice and professional development Disseminates evidence of good practice and service improvement through verbal and written media

Competency Standard D: Case management skills

Description of standard	Competency	Outcome
The genetic counselor facilitates best practice by advocating for clients, referring clients to appropriate services and maintaining comprehensive records.	<ul style="list-style-type: none">• Demonstrates ability to organise, prioritise and manage a case load• Identifies and supports clients' access to local, regional and national resources and services• Serves as an advocate for clients	<ul style="list-style-type: none">• Addresses clients' needs in a sensitive and fair manner, making the best use of resources available• Designs, conducts and regularly reviews case-management plans, making adjustments according to priorities• Identifies and offers information or support services to clients as appropriate, or at the clients' request• Identifies and encourages effective service delivery• Identifies barriers to effective service delivery and contributes to their resolution• Understands clients' needs and perceptions, and represents their interests in accessing services and responses from the health and social service systems

Competency Standard E: Professional and ethical practice

Description of standard	Competency	Outcome
The genetic counselor promotes knowledge and access to genetic services through effective communication and education, maintains professional behaviour and boundaries in keeping with accepted codes of ethical practice, and promotes evidence-based practice for one's self and others through continual professional development.	<ul style="list-style-type: none"> Contributes to the development and organisation of genetic services 	<ul style="list-style-type: none"> Evaluates own practice and that of others in the light of new evidence and modifies practice accordingly Uses skills of critical appraisal to consider how new evidence may contribute to the improvement of service organisation and delivery Actively seeks opportunities to meet with colleagues to discuss professional issues and innovations in care, to disseminate best practice and improve standards of care Actively seeks opportunities to collaborate with colleagues in audit and research that has the ultimate aim of improving client care
	<ul style="list-style-type: none"> Demonstrates continuing professional development as an individual practitioner and for the development of the profession 	<ul style="list-style-type: none"> Actively seeks opportunities to update knowledge and skills — reflects on the implications of these for own practice and that of professional colleagues — and maintains a portfolio of professional development detailing this
	<ul style="list-style-type: none"> Establishes effective working relationships to function within a multidisciplinary team, and as part of the wider health and social care network 	<ul style="list-style-type: none"> Promotes seamless care and interventions in partnership with the client, their family, and appropriate care providers and members of the multidisciplinary team Facilitates communication by establishing a strong multidisciplinary network of professional and lay colleagues
	<ul style="list-style-type: none"> Acts in accordance with the ethical, legal and philosophical principles and values of the ASGC Code of Ethics 	<ul style="list-style-type: none"> Recognises and responds to ethical and moral dilemmas arising in practice and seeks assistance from experts in these areas Identifies factors that promote or hinder client autonomy Demonstrates an appreciation of the issues surrounding privacy, informed consent, confidentiality, discrimination, and other ethical or legal matters related to the exchange of genetic information
	<ul style="list-style-type: none"> Plans, organises, and conducts public and professional education programs on human genetics, client care and genetic counseling issues 	<ul style="list-style-type: none"> Identifies educational needs and designs programs for specific audiences Demonstrates public-speaking skills Identifies and accesses educational materials Acts as a resource for other professionals and lay groups Seeks to raise awareness of available services and resources