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Scope of professional roles for genetic counsellors and clinical geneticists in the United Kingdom

Position on behalf of the Association of Genetic Nurses and Counsellors and the Clinical Genetics Society

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This document is written on behalf of the two professional bodies in the United Kingdom that represent genetic counsellors (the Association of Genetic Nurses and Counsellors) and clinical geneticists (the Clinical Genetics Society) and aims to support multidisciplinary working of these professional groups highlighting within a quick-reference format, areas of shared practice and the distinctions between role profiles for a Consultant Clinical Geneticist, Principal/Consultant Genetic Counsellor and the new support role that we have termed 'Genomic Associate', see AGNC career structure [1]. This builds on published documents that articulate the scope of practice of the clinical genetics workforce [2] and specifically the genetic counsellor [3] and clinical geneticist [4] roles.

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In the United Kingdom clinical geneticists are medically qualified Members/Fellows of the Royal College Physicians or equivalent, where Clinical Genetics is an affiliated medical specialty. Genomic or genetic counsellors are allied health professionals with Masters level accreditation from the Genetic Counsellor Registration Board included in the Academy for Healthcare Science register and clinical scientists (genomic counselling specialty) accredited by the Health and Care Professions Council.

We acknowledge there is currently variability in these roles between NHS trusts and exceptions where the scope of practice for one professional group exceeds what is provided below in Fig. 1.

In Fig. 1 the roles are deliberately forward looking, i.e. they acknowledge that there are some areas of practice that may have

traditionally been performed by one professional group, can now be shared with or devolved to other groups. Broadly speaking, the clinical geneticist leads on diagnostics and therapeutics and the genetic counsellor leads on psychosocial issues and care of the extended family. Both groups have skills and training in clinical genetics and there is much cross over between roles. The genomic associate leads on administrative support for the clinic, the patient and the clinical activities of the clinical geneticist and genetic counsellor. The genomic associate is part of the genetic counsellor career structure and has a clinical role that is different to a secretary; it is a position that has already been discussed in relation to the Genomics Service Specification for the National Health Service in the United Kingdom.

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		Clinical Geneticist	Genetic Counsellor	Genomic Associate
Triaging referrals	Referrals are assessed and triaged	Green	Green	Red
Advice and guidance letters for refused referrals	Letters written in response to referrals that require clinical advice, but do not meet Genomic Medicine Service referral guidelines	Green	Green	Amber
	Responsibility for responding to referrals that do not require any clinical advice nor clinical contact	Red	Red	Green
Access to the appointment	Facilitating patient access, including establishing if patient wants to be seen, supporting minority populations to access services, supporting patients with disabilities/audio/visual impairment to access services, contacting patients to explain what clinical genetics services can offer, arranging interpreters	Red	Red	Green
	Acting as a chaperone in clinic	Red	Red	Green
	Arranging measurements for patients in clinic, e.g. taking patient's weight and height	Red	Red	Green
Preparation for appointment	Transcribing a written pedigree into electronic software	Red	Red	Green
	Gathering relevant medical records, pathology reports, death certificates, tumour blocks	Red	Red	Green
	Organising and obtaining familial blood or saliva samples to help confirm diagnosis in proband	Red	Red	Green
	Obtaining record of patient choice/consent (not having the full consent conversation, but recording that it has been taken)	Red	Red	Green
	Collating appropriate patient leaflets, consent forms for the clinic as determined by senior staff	Red	Red	Green
Patient/family type seen	General genetics (adult or paediatric)	Green	Green	Red
	Cancer genetics (adult or paediatric)	Green	Green	Red
	Prenatal	Green	Green	Red
Physical medical examination	Physical examination of a patient to make a clinical diagnosis and/or to support or stratify genetic testing	Green	Red	Red
	Specific physical examination that might be considered routine with respect to particular conditions (e.g. head measurement for a Cowden's clinic)	Green	Amber	Red
Family history	Taking a family history	Green	Green	Amber
	Evaluating a family history to determine genetic risk	Green	Green	Amber
Psychosocial history	Taking a detailed psychosocial history to determine effect of genetic diagnosis on individual and wider family members	Amber	Green	Red
Investigations	Medical investigations: Employ a range of tailored investigations including genetic, biochemistry, radiology, haematology etc. for clinically undiagnosed patients	Green	Red	Red
	Routine medical investigations for specific, defined conditions, e.g. ophthalmology or audiological investigations as part of conditions involving visual and/or hearing impairment	Green	Amber	Red
	Genetic investigations: Choose appropriate genetic testing for patients with specific family history indicative of genetic risk (e.g. family history of cancer)	Green	Green	Red
	Genetic investigations: Choose appropriate genetic testing determined by a pre-existing definitive clinical diagnosis/clinical presentation (e.g. breast cancer)	Green	Green	Red
	Take samples (e.g. blood saliva) for genetic testing	Red	Amber	Green
Consent	Consent a patient for genetic testing	Green	Green	Red
	Arrange and consent for cascade genetic testing amongst extended family (e.g. BRCA, Fra-X testing)	Red	Green	Red
Counselling and support	Generic genetic counselling skills e.g. disclosure of diagnosis, breaking bad news etc.	Green	Green	Red
	Supporting patients and families adjusting to a genetic diagnosis or coping without one	Amber	Green	Red
	Making appropriate onward referrals for further psychological support	Amber	Green	Red
	Identifying complex grief reactions and interpreting complex family dynamics	Red	Green	Red
	Specific application of genetic counselling theory to person-centred care, e.g. application of reciprocal-engagement models and/or reflective practice models	Red	Green	Red
Genomic variant interpretation	Interpreting gene variants to determine clinical decisions, as part of a multidisciplinary team	Green	Green	Red
	Integrating the results of clinical presentation and investigation to determine whether a rare phenotype supports variant pathogenicity	Green	Red	Red
	Interpreting whether an established clinical presentation supports variant pathogenicity	Green	Green	Red
	Administration to track down relatives to provide evidence in support of variant interpretation	Red	Amber	Green

Fig. 1 Scope of professional roles for clinical geneticist, genetic counsellor and genomic associate in the United Kingdom. The colour coding provides a guide to the professional group providing each aspect of service: green = routinely within the scope of practice, amber = within the scope of practice for some professionals, but not for the majority, red = outside of the scope of routine practice.

Management and Treatment	Reviewing and recommending peer-reviewed management guidelines. Writing, e.g. NICE guidance			
	Organising appropriate disease screening and acting as patient advocate to arrange access to services			
	Devising individual management guidelines for a rare disorder based on research evidence			
	Prescribing pharmaceuticals or molecularly targeted therapies			
	MDT coordination, collating agenda items, taking meeting minutes			
	All administration required for clinic and follow up			
	Ordering of clinic supplies, test kits, appropriate proformas, consent forms			
Follow Up	Follow up care of the nuclear family (e.g. parents and children)			
	Follow up care of the extended family (e.g. 2nd and 3rd degree relatives)			
	Monitoring/chasing outstanding records/samples/screening and any administration work needed to support the clinical geneticists and genetic counsellors			
Research	Leading or referring to research studies relating to patient's genetic diagnosis			
	Leading or being a site investigator for Clinical Trials of Investigational Medical Products			
	Finding and referring to surveillance trials (e.g. for cancer screening)			
	Referring to psychosocial research (e.g. genetic counselling or communication research)			
	Leading genetic counselling research specifically on the evidence base behind genetic counselling practice			
	Administration for research studies			
Mainstreaming	Providing advice and support to other healthcare workers			
	Participation in multi-disciplinary team meetings			
	Managing and leading a specialist nurse mainstreaming team (e.g. familial hypercholesterolemia clinic, family breast screening clinics, pre-implantation genetic diagnosis within an IVF clinic)			
Education	Delivering education programmes for patients, public, health professionals			
	Developing educational material such as leaflets, interactive infographics and decision aids			
	Liaising with patient support groups to participate in patient led events and sharing of verified information			
	Administration for education events			
Management	Running a genetic register			
	Training and mentoring colleagues from genetics services			
	Training, mentoring and supporting non-genetics healthcare colleagues			
	Acting as Clinical Lead for a clinical genetics service			
	Acting as Management Lead for clinical genetics service			
Leadership	Sitting on regulatory bodies for own profession			
	Designing professional competency-to-practice frameworks			

Fig. 1 Continued.

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AUTHOR CONTRIBUTIONS

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COMPETING INTERESTS

The authors declare no competing interests.

ADDITIONAL INFORMATION

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