



ACMG STATEMENT

Points to consider for providing expert witness testimony for the specialty of medical genetics: A statement of the American College of Medical Genetics and Genomics (ACMG)

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Clinicians are encouraged to document the reasons for the use of a particular procedure or test, whether or not it is in conformance with this statement. Clinicians also are advised to take notice of the date this statement was adopted, and to consider other medical and scientific information that becomes available after that date. It also would be prudent to consider whether intellectual property interests may restrict the performance of certain tests and other procedures. Where individual authors are listed, the views expressed may not reflect those of authors' employers or affiliated institutions.

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Background

Both civil and criminal proceedings may require the expert testimony of a medical or laboratory genetics professional. Examples of such proceedings include (but are not limited

to) medical malpractice, worker compensation, insurance, child abuse, or molecular-based forensics. Further, there is an increasing need for not only expert "opinion" testimony in criminal and civil cases but potentially also expert "fact" testimony to explain complex concepts to lay persons involved in legal proceedings that involve genetic conditions or genomic testing.

Guidelines for expert witness testimony provided by individuals in the field of medical genetics were established by the American College of Medical Genetics and Genomics (ACMG) in 2000.¹ Since then, the role of the medical geneticist, compared with other genetics or health care professionals, has been more clearly defined, and the scope of our field has become further delineated in accordance with evolving roles and subspecializations.² The ACMG remains unique among other medical specialty organizations in that individual fellows may have different credentials (eg, MD or DO physicians, PhD Medical Geneticists, or laboratory geneticists), which will distinguish individual qualifications for providing opinion or fact expertise within a

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judicial proceeding. Further, there are other ACMG members that may also be called to participate as an expert witness, including associate members who are certified in genetic counseling (or eligible via the American Board of Genetic Counseling or an equivalent), affiliate members who possess a doctoral degree and have an active interest in medical genetics but it is not their primary specialty, and finally, those who may not possess a doctoral degree but are licensed and credentialed by other professional boards and societies (eg, nurse practitioners and physician assistants).

Several other medical specialties have recently updated guidelines for participating as an expert witness including qualifications, standards of testimony, and ethical practices,³⁻⁶ some being quite detailed.^{7,8} Based on the evolution of the practice of medical genetics, the ACMG suggests the following qualifications and ethical guidelines for participation as an expert witness in legal proceedings. All ACMG Fellows and members are encouraged to reference these guidelines in their professional practice.

Qualifications

1. The physician expert witness should have a current and unrestricted medical license (except for those who are retired from clinical practice); and subject to the specific requirements of an individual state or territory, a state, or territorial license may be required.
2. A Fellow (MD, DO, and PhD) who is an expert witness in the field of medical genetics should be certified by the American Board of Medical Genetics and Genomics and enrolled in the Continuing Certification Program (formerly the Maintenance of Certification Program). For those diplomates with a lifetime certificate, enrollment in Continuing Certification is strongly encouraged.
3. The expert witness should limit testimony to cases in which they have relevant knowledge and expertise, reflecting their specific credentials, certification, and role within their scope of practice, as outlined by ACMG in 2015.²
4. Commensurate with the qualifications for MD, DO, and PhD expert witnesses, other genetics professionals should be certified by their respective boards, meet continuing educational requirements to maintain certification, hold a current and unrestricted license (when applicable) for the state or territory in which they practice, and demonstrate sufficient training and experience in the area at issue.
5. The ACMG encourages broad participation by genetics professionals in the expert witness process, including participation by qualified part-time or retired medical geneticists. However, the ACMG discourages participation as an expert witness as the sole or primary professional activity of medical geneticists.

Ethical guidelines for legal proceedings

1. The expert witness will conduct a thorough and impartial review of relevant case documents and

render an opinion or testimony only in cases in which they have relevant knowledge and experience.

2. The expert witness will provide complete and impartial testimony and state whether their opinions are based on personal experience, scientific evidence, evidence-based guidelines, and/or generally accepted standards of practice.
3. The expert witness will be open to reviewing cases and offering opinion or testimony for either plaintiff or defendant in civil cases and either for prosecution or defense in criminal cases.
4. The expert witness will respect the privacy and confidentiality of the documents and proceedings regardless of whether expert witness testimony is provided in a given case.

Standards of care of medical practice

1. It is recognized that the body of knowledge and technology evolves rapidly in the field of medical genetics; yet, the expert witness must be familiar with the relevant standard of care or practice at the time and place of the event(s) leading to the litigation. Those unfamiliar with the standard of care at the given time or place would not meet qualifications for providing relevant opinions and/or testimony.
2. The expert witness will evaluate the care provided in the context of generally accepted standards of practice at the time and place of the event(s) leading to the litigation.
3. The expert witness will use their best effort and knowledge to determine how adherence or non-adherence to standards of practice affected outcomes.

Ethical business practices

1. The medical geneticist will not advertise or solicit employment as an expert witness.
2. The expert witness will not misrepresent their credentials, certification, training, experience, or qualifications.
3. The expert witness may accept compensation that is commensurate with their expertise, time and effort required to review case materials and provide testimony.
4. The expert witness will not accept compensation based on the outcome of the litigation.
5. The expert witness employed by an organization should be familiar with any relevant institutional policies or procedures related to time spent, billing, reimbursement, and compensation related to participation in this endeavor.
6. The expert witness should contact their professional liability or malpractice insurance carrier to determine if additional coverage may be needed.

These guidelines support the significant role that medical geneticists play in health care and society and the needs of our judicial process for this expertise. It is critical that the expert witness for the specialty of medical genetics meet relevant qualifications and provide scientifically valid, objective, and unbiased testimony. The ACMG

encourages participation of its members in this important duty.

Conflict of Interest

All authors declare no conflicts of interest related to the matter of this statement.

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References

1. McGinnis MJ, Peliak MK, Anderson RR. Guidelines for expert witness testimony for the specialty of medical genetics. *Genet Med.* 2000; 2(6):367-368. <http://doi.org/10.1097/00125817-200011000-00013>
2. ACMG Board of Directors. Scope of practice: a statement of the American College of Medical Genetics and Genomics (ACMG). *Genet Med.* 2015;17(9):e3. <http://doi.org/10.1038/gim.2015.94>
3. Committee on Ethics, American College of Obstetricians and Gynecologists, American College of Obstetricians and Gynecologists. ACOG committee opinion no. 374: expert testimony. *Obstet Gynecol.* 2007;110(2 Pt 1):445-446. <http://doi.org/10.1097/01.AOG.0000263921.00566.3b>
4. Strouse PJ, Callahan MJ, Annam A, et al. Guidelines for expert testimony in pediatric radiology. *Pediatr Radiol.* 2021;51(7):1275-1280. <http://doi.org/10.1007/s00247-021-05046-3>
5. American College of Emergency Physicians (ACEP). Expert witness guidelines for the specialty of emergency medicine. *Ann Emerg Med.* 2010;56(4):449-450. <http://doi.org/10.1016/j.annemergmed.2010.07.014>
6. ACR practice parameter on the physician expert witness in radiology and radiation oncology. American College of Radiology. Accessed January 15, 2023. <https://www.acr.org/-/media/ACR/Files/Practice-Parameters/ExpertWitness.pdf>
7. Paul SR, Narang SK, Committee on Medical Liability and Risk Management. Expert witness participation in civil and criminal proceedings. *Pediatrics.* 2017;139(3):e20163862. <http://doi.org/10.1542/peds.2016-3862>
8. Narang SK, Paul SR, Committee on Medical Liability and Risk Management. Expert witness participation in civil and criminal proceedings. *Pediatrics.* 2017;139(3):e20164122. <http://doi.org/10.1542/peds.2016-4122>