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One of the 13 recommendations from the National Academy of Sciences (NAS) report called for mandatory certification of forensic science professionals and included recommended minimum requirements for certification.

- Accreditation is for the forensic science provider
- Certification is for the individual practitioner

What is Certification?

- Professional certification is the recognition by an independent body that an individual has acquired and demonstrated specialized knowledge, skills, and abilities in the standard practices necessary to execute the duties of their profession.
- Certification provides the general public and the judicial system a means of identifying those practitioners who have successfully demonstrated compliance with established requirements.

What is Certification?

- Certification ensures that professionals maintain technical proficiency and ethical standards of practice.
- Professional certification programs can include: written and/or practical testing; an evaluation of education, training and practical experience; requirements for continuing education; and adherence to a code of ethics.

- What certification programs exist in forensic science?
- Are the programs standardized?
- Who accredits the certification program providers?
- What certification organizations and programs are needed to fill identified gaps in certification?

- Who should be certified?
- What are minimum requirements for beginning a certification process?
- What are requirements for maintenance and continued professional development?
- Should certification become mandatory or a condition of employment?
- What are the differences between certification, licensure, credentialing, certificate programs and registration?

Universal adoption and compliance

- What economic and organizational framework exists for certification?
- Can the current structure support new developments and requirements, and potential universal compliance to strengthen the forensic sciences?

Personnel

Funding

Facilities

- Professional certification bodies in forensic science have been in practice for over thirty years. However, they do not exist for all forensic science categories of testing.
- There are specialty and subspecialty categories of testing that do not have certification bodies due to the very small number of practitioners. It is recognized in the certification community that it is difficult to create a certification program with less than fifty practitioners.

- The existing certification bodies differ in the certification examination processes and essential elements of the programs but it may be appropriate depending on the category of testing.
- There are many unknown variables, such as the number of practitioners that are not currently certified, the costs associated with developing certification examinations and programs, and the cost for the certification bodies to become accredited.

Variations in the Requirements of Three Accredited Certifying Bodies (CB)

Requirement	CB#1	CB#2	CB#3
Degree		X	X
Experience	X	X	X
Written exam (initial)	X	X	X
Practical exam (initial)	X	X	X
Oral demonstration (initial)	X*		X^
Continuing education	X	X	X
Retesting	X		

*Transcript or moot court

^Specific to practical exam

- The Forensic Specialties Accreditation Board (FSAB) a voluntary program since 2000 to assess, recognize and monitor forensic science certification bodies. FSAB reviews and evaluates the operating procedures and standards of forensic certification bodies to ensure that a minimum set of standards are being met. FSAB standards are modeled on ISO/IEC 17024; as of 2012, they were not recognized by a third party or accredited under ISO/IEC 17011.
- American National Standards Institute (ANSI) is an accrediting body recognized by ISO/IEC 17011 that offers accreditation under ISO/IEC 17024. Accreditation under ISO/IEC 17024 ensures the validity, reliability and quality of the certification programs.

The confirmation of qualifications such as licensure, credentialing, certificate programs and registration are not used in the forensic sciences primarily due to their limited scope or specific nature.

- Licensure is a mandatory process used by a governmental agency which grants a time-limited permission for an individual to perform the duties of their profession after verifying that this individual has met specific standardized criteria.
- Registration is a process in which a governmental agency grants a timelimited status on a registry, determined by specified knowledge-based requirements such as experience, education or examinations. The registration is similar to licensure, but also maintains a continuous record of past and current occupational status of the individual.

- Credentialing by an authorized and qualified entity is the formal recognition or recording of the recognition status of individuals, organizations, institutions, programs, processes, services or products that meet specific standardized criteria.
- Certificate programs are learning events developed and administered by the certificate issuer. A certificate is presented at the end of a training course as recognition of specific skills. Unlike certification programs, these certificates do not have renewal requirements and cannot be revoked.

Practitioners should become certified in all categories of testing in which examinations are performed as soon as the requirements of the certification body are met, provided a certification examination is available.

- Includes all federal, state and local government, private and part-time practitioners.
- Certification should be appropriate to the responsibility, activity or function performed
- Certification should include multiple levels based upon the responsibilities of the forensic science practitioner to include managers, analysts and technical support.
- Certification processes should include basic levels for practitioners who do not yet meet the requirements of a specialty certification body or for practitioners conducting examinations in categories of testing that do not have a certification process.

Certification bodies should collaborate to develop uniform requirements.

- Programs should include these essential elements: education and experience requirements, proctored written examination, a practical component, and a code of ethics/conduct.
- Recertification should include continuing education and periodic retesting with practical and written components.

Forensic Science Service Providers should include certification requirements in position descriptions, where possible.

Accrediting bodies should include standards requiring certification.

- Incorporate a confirmation of qualifications review of the individual practitioners into the forensic science service providers' ISO/IEC 17025 accreditation process.
- Review the competency and proficiency of all non-certified practitioners as part of the accreditation process.

Considerations

Implementation – How do we do this?

Timeframe – What is reasonable?

Costs/Budget – How do we pay for it? This is unknown due to scope.

Stakeholder education – How do we identify and reach out?

Current state laws – Contract or union issues?

Specialty and sub-specialty examinations – How do we address these?

Considerations

Practitioners would be required to obtain multiple certifications for different categories of testing in which they perform examinations. This may be difficult to accomplish due to time and cost constraints and may result in a loss of expertise in certain areas.

In specialized categories of forensic science testing which have a small number of practitioners, other similar specialized experienced scientists, researchers, and academicians would be needed to assist in development of examinations.

There may be human resource challenges such as revising position descriptions, certifying existing employees, and modifying employment policies and procedures.

Forensic science service providers may incur increased costs to support and maintain certification of practitioners and would need policies and procedures if practitioners are not successful in obtaining certification.

Other data

- Data on the certification bodies in forensic science categories of testing as of Dec 2011.
- Cost estimate for certification and related activities based upon information from certifying bodies.
- A compilation of the certification processes available in Medicolegal Death Investigation and Pathology.

Interagency Working Group - Accreditation & Certification

Resources

American Board of Criminalistics American Board of Medical Death Investigators National Association of Medical Examiners American Board of Forensic Toxicologists International Association of Computer IS International Association of Identification Forensic Specialties Accreditation Board American National Standards Institute **ASTM** (Certificate and Certification Programs) Institute for Credentialing Excellence Idaho State Laboratory (mandatory certification program) American Society for Clinical Pathology Board of Certification American Society for Quality Certification

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Resources

Bureau of Justice Statistics (Census) Statistical Counseling (ISO17043)

Uniform Law Commission
National Council of State Legislators

American Judges Association

Senator Leahy & Judiciary Committee