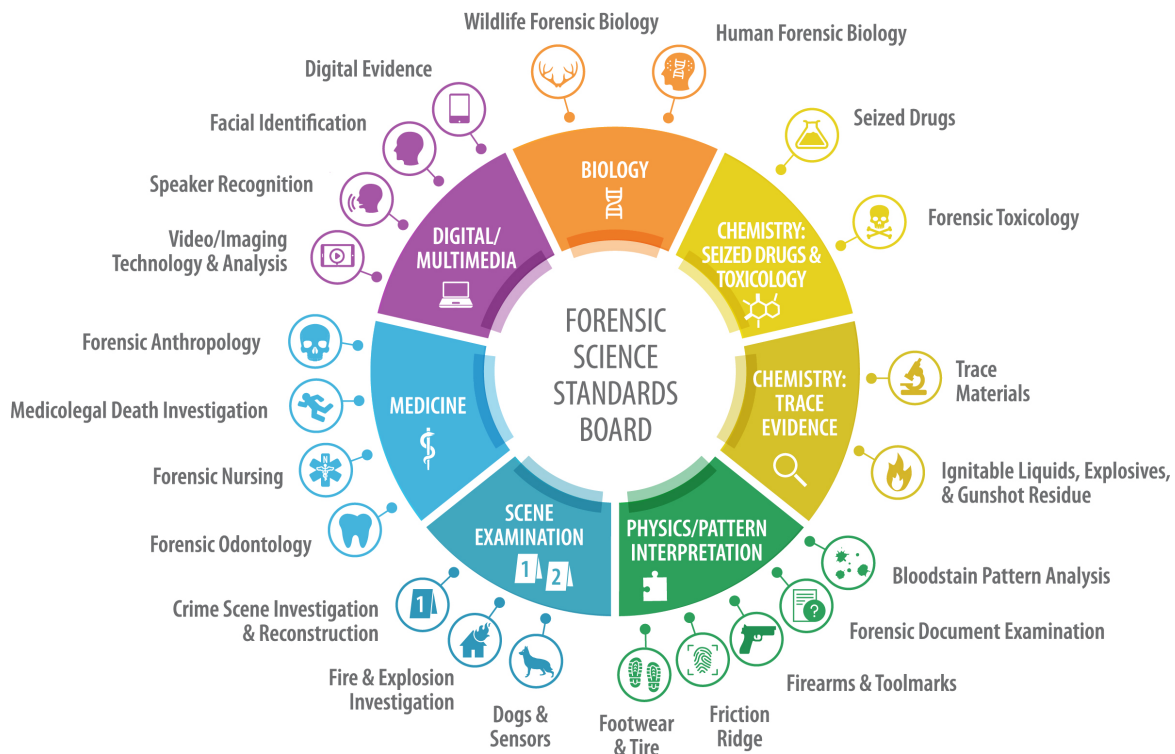# OSAC Registry Implementation Plan

Prepared for
The Organization of Scientific Area Committees (OSAC) for Forensic Science

By
Forensic Science Standards Board (FSSB)

Abstract

The Forensic Science Standards Board (FSSB) of the Organization of Scientific Area Committees (OSAC) has prepared an *OSAC Registry Implementation Plan* for our forensic science partners. The Implementation Plan describes various pathways for OSAC to promote and encourage our partners and stakeholders to adopt and implement the approved standards listed on the OSAC Registry. Additionally, the Plan describes strategies within these pathways that OSAC and the FSSB may leverage to encourage support from forensic service providers, associations, criminal justice system, academia, and federal, state, and local agencies.

This work product is the collective output of initial ideas from the FSSB Implementation Task Group and OSAC Affairs, and establishes a compendium of options for moving OSAC supported standards into practice in our Nation's crime laboratories and beyond. These pathways describe different levers/tools that can be used to encourage standards adoption. Some of these pathways may not be pursued after further evaluation.

The FSSB and OSAC Affairs has just started the activity of prioritizing the pathways for standards implementation and are ready to engage with the forensic science community. We are aware that some pathways are better than others and through engagement with stakeholders, we can determine the best way to move forward with implementation. Our ultimate goal is to have stakeholders in the forensic science community and criminal justice community embrace the approved standards listed on the OSAC Registry and implement them into every day practice. In Appendix A, the FSSB and OSAC Affairs has identified a list of outreach deliverables to engage with the forensic science community.

We encourage you to read through the Implementation Plan and provide the FSSB with any feedback, including suggestions for prioritization, by sending your thoughts to FORENSICS@NIST.GOV.

The Plan is a work in progress and there will be further revisions published in future as we fine-tune the pathways, our metrics, and priorities.

---- OSAC Forensic Science Standards Board (FSSB)

Keywords

adoption; forensic science; implementation; organization of scientific area committees; OSAC; registry; standards; standard developing organizations; SDO

Table of Contents

FORENSIC SCIENCE SERVICE AND MEDICAL PROVIDERS SELF-ADOPTION

Description

Forensic science service and medical providers (FSP) can voluntarily adopt OSAC Registry standards, individually or its entirety, on their own initiative. The FSPs are the primary benefactor of the OSAC Registry that provides them standards determined to be appropriate and technically sound by forensic practitioners, academic researchers, measurement scientists, and statisticians through a consensus development process. By specifying OSAC Registry standards in the FSP management system, accrediting bodies would be required to assess the FSP's conformance to one or more documents on the OSAC Registry standards as a part of an accreditation assessment.

Implementation Approach

- Document and disseminate the value of self-adopting OSAC Registry standards to the FSP.
  For the hundreds of publicly and privately funded FSP who strive to provide accurate and dependable results, the OSAC Registry lists standards determined to be appropriate and technically sound by forensic practitioners, academic researchers, measurement scientists, and statisticians through a consensus development process.
- Develop incentives that may include recognition of self-adopting laboratories on the OSAC website and in the OSAC Annual report.
- Make sample FSP management system language widely available, so that laboratories can incorporate the language that best suits their needs. Such as:
  - Language that indicates the FSP will adopt ALL relevant OSAC-Registry standards,
  - Language that indicates the FSP will adopt all or parts of an OSAC-Registry standard.
- Perform targeted outreach to describe and define the value of adoption to forensic service providers.

Rationale

- The community is supportive of the OSAC program and improving quality in forensic science now, we can leverage that enthusiasm.
- The OSAC has nationally recognized experts on the FSSB and on OSAC committees that can share the message.
- This approach is imminently pursuable, which will help begin to track true program metrics in the near term. For example, even if only five laboratories have incorporated this language in their management system by 2019, the OSAC can say they have impacted thousands of cases in the criminal justice system.
- The launch of this approach does not detract from the pursuit of other approaches (efforts can be concurrent).

Stakeholders / Target Audience for Outreach

- FSP managers, supervisors, and quality managers of all forensic laboratories

Barriers to Implementation

- The cost of purchasing the standard documents from the Standards Development Organizations (SDO).
- The cost of implementation of the standard:
    - One-time or long-term capital investment for renovations or equipment,
    - Training and continuing education,
    - Certification and accreditation requirements.
- Other potential organizational impacts identified by the document specific QIC impact survey.
- The perception that the federal government or the OSAC is dictating how the FSP conducts scientific analysis.
- The development of a robust and effective outreach plan to both:
    - Comprehensively communicate the value of OSAC Registry standards to public and private forensic labs,
    - Track the adoption and implementation of OSAC Registry standards to gauge the effectiveness of such a campaign is labor intensive and costly.

Engagement Plan

- Outreach:
    - OSAC can leverage owned media (OSAC website, fact sheets, OSAC booth at conferences, which can be staffed by OSAC members) to share the message.
    - OSAC can leverage forensic science professional organizations (e.g. American Academy of Forensic Sciences, American Academy of Psychiatry and the Law, American Society of Crime Laboratory Directors, International Association for Identification, National Association of Medical Examiners, Society of Forensic Toxicologists) to share the message.
    - OSAC can leverage current membership to further disseminate the message.
    - OSAC can leverage other publications to further disseminate the message.
- Metrics:
    - The number of laboratories that have adopted OSAC Registry standards can be tracked.

Responsible OSAC Units

FSSB Implementation Task Group, FSSB Outreach & Communications Task Group, Quality Infrastructure Committee.

OSAC MEMBER EXTERNAL ENGAGEMENT

Description

Laboratories' adoption of standards can be facilitated by those experts who have shared their expertise and demonstrated their dedication in developing the standards themselves. The current structure of OSAC includes over 600 forensic scientists. Leveraging this current base of expertise, experience and support of OSAC can advance the implementation of standards. Current OSAC and SDO Consensus Body members are the perfect ambassadors for the very standards they helped develop. These scientists are forensic experts and leaders and have unique insight into the intricacies of the development of the standard. They may have either started or are well on their way to implementing standards in their own forensic laboratories. Development of peer to peer networks taps existing expertise and enables forensic scientists to steward their disciplines.

Implementation Approach

- Formalize and direct that implementation is part of each SAC strategy. For example:
  - Each SAC plan for provisions of existing laboratory procedures which adhere to the new standards will serve as an invaluable resource for laboratories looking to adopt the new standards,
  - Develop workshops, presentations for national and regional meetings,
  - Implement individual mentorship within the SACs as a natural extension of standards development.
- Seek funding mechanisms to facilitate attendance at meetings to present materials.
- Post or otherwise make available procedures that adhere to standards to serve as examples, thereby narrowing the gap for labs to move between existing procedures to new standards.
- Provide a list of mentor laboratories and contacts to facilitate relationship building and outreach to make connections between mentors and adopters.

Rationale

- OSAC participating forensic scientists are enthusiastic and supportive of the program.
- OSAC participating forensic scientists have in depth knowledge of the standards themselves and the discussion and rationale that led to the standards, therefore are the greatest advocates for the standards.
- OSAC participating forensic scientists having been exposed to the standards through the development process may have experience and insight on implementing them. OSAC participating forensic scientists therefore have the most practical understanding of how to implement standards.
- OSAC participating forensic scientists are among the most recognized and respected members of the forensic community. Their presence, support, and leadership in providing implementation will drive acceptance.
- The community is dedicated to quality in forensic science.

- Current and past members of OSAC can be leveraged to implement these standards in their laboratories.
- The launch of this approach does not detract from the pursuit of other approaches (efforts can be concurrent).
- OSAC participating forensic scientists will:
  - Encourage and drive participation and lower mistrust and resistance,
  - Increase standardization and uniformity in use of best practices,
  - Enhance troubleshooting and comparison of data as labs will increasingly utilize more standardized practices.

Stakeholders / Target Audience for Outreach
- OSAC participating forensic scientists shall target their peers, managers, supervisors, and quality managers of their laboratories.
- Members of SDO consensus bodies who have participated in the process.

Barriers to Implementation
- Cost of developing workshops, presenting at national and regional meetings, and providing individual mentorship.
- Cost for OSAC participating forensic scientists
  - Travel investment,
  - Procedure repository,
  - Publication of handbook,
  - Directory of scientists and laboratories.
- Additional volunteer time by OSAC participating forensic scientists and their laboratories.
- Perception of extensive federal oversight.
- Over commitment of OSAC members leading to them to decrease the time they dedicate to the process.

Engagement Plan
- Outreach:
  - Leverage OSAC participating forensic scientists and existing infrastructure to develop implementation plan as a natural extension of their standard development process.
  - OASC existing infrastructure can arrange travel, meetings, and workshops, thereby facilitating implementation and lessening the burden on OSAC participating forensic scientists.
  - OSAC can leverage OSAC owned media (OSAC website, fact sheets, OSAC booth at conferences, which can be staffed by OSAC members) to publish materials and share the message.
  - OSAC can leverage forensic profession organizations to share message, support and assist with the development of the forensic scientist mentored implementation approach.

- o OSAC can encourage and assist current membership to further disseminate message including developing workshop and presentation curriculum.

- Metrics:
    - o Tracking the number of presentations, workshops developed and provided.
    - o Tracking the number of agencies that participate in mentoring programs.
    - o Tracking the number of scientific attendees and crime labs attending workshops and presentations.
    - o Tracking the number of documents provided through the OSAC media.
    - o Tracking the number of laboratories that have adopted Registry documents.
    - o Tracking the number of laboratories who adjusted the way they do things based on that adoption.
    - o Tracking the number of cases potentially impacted.

Responsible OSAC Units

SACs, FSSB Implementation Task Group, FSSB Outreach & Communications Task Group.

FORENSIC SCIENCE PROFESSIONAL ASSOCIATIONS

Description

Numerous Forensic Science Professional Associations (FSPAs) exist that cover the breath of forensic science disciplines. Most forensic scientists belong to at least one association whether it is regional, national, international, or discipline specific. These associations have a wide range of influence including a core mission statements, defined ethical policies, educational programs, standards boards, and certification programs. Professional organizations could encourage adoption by promoting the shared value of OSAC Registry standards and facilitating adoption by training and sharing of mutual strategies for implementation in each member's laboratory.

Implementation Approach

- Document and disseminate the value of employing OSAC Registry standards to the FSPA members.
  For the hundreds of publicly and privately funded FSPA members strive to provide accurate and dependable results, the OSAC Registry lists standards determined to be appropriate and technically sound by forensic practitioners, academic researchers, measurement scientists, and statisticians through a consensus development process.
- Make a variety of sample promotional wording widely available, so that FSPA members can incorporate the language that best suits their discipline-specific needs. That would include language that indicates the FSPAs will promote and endorse ALL relevant OSAC Registry standards.
- Perform targeted outreach to describe and define the value of adoption to FSPA members.

Rationale

- FSPAs have a vested interest in OSAC and have participated throughout the organization's existence.
- As promoters of research, best practices, and sound scientific applications, FSPAs are intrinsic to the mission of the OSAC and can provide the subject matter expertise for quality standards development.
- Members of several FSPAs are represented and active on the OSAC board, committees, and subcommittees.
- FSPAs provide training opportunities for their members that can incorporate OSAC Registry standards in the curriculum including focused training on the implementation of those standards.
- FSPAs encourage and promote research, presentation and publication from their members at their meetings.

Stakeholders / Target Audience for Outreach

- Forensic practitioners and subject matter experts affiliated with the various forensic organizations.
- Outreach to other organizations that are not currently represented on the FSSB (e.g. International Association of Forensic Nurses, International Association of Arson Investigators, International Association of Property and Evidence).
- FSPA and their members participating in the OSAC process.

Barriers to Implementation

- The amount of time from development to implementation of standards and guidelines.
- A general suspicion that the development of standards or guidelines are regulatory.
- Concerns regarding the content of the OSAC Registry standards.

Engagement Plan

- Outreach:
    - OSAC can leverage owned media (OSAC website, fact sheets, OSAC booth at conferences, which can be staffed by OSAC members) to share message.
    - OSAC can leverage forensic professional organizations to share message, such as encourage the FSPAs to include information and updates related to OSAC Registry standards development, review, implementation, and acceptance in publications.
    - OSAC can leverage current members who have affiliation with professional organizations to further disseminate the message.
    - OSAC can encourage the FSPAs to incorporate in their programs OSAC Registry standards via workshops and focused presentations.
        - OSAC can leverage current members to submit presentations and workshops based on OSAC Registry standards.
        - Encourage OSAC Registry standards focused research, workshops and sessions.
- Metrics:
    - Tracking the number of OSAC Registry standards workshops and presentations.
    - Tracking the number of scientific attendees and crime labs attending workshops and presentations.
    - Tracking the number of the OSAC defined research projects supported by the FSPAs.
    - Tracking the number of the OSAC defined research project presentations.

Responsible OSAC Units

FSSB Implementation Task Group, FSSB Outreach & Communications Task Group, Quality Infrastructure Committee, FSSB FSPA representatives

LEGAL COMMUNITY

Description

The Legal Community has extensive power related to the requirements of science admitted into court proceedings. The impact includes admissibility of forensic procedures and analyst testimony in not only criminal but also in civil legal actions. Appellate ruling can have a wide-reaching effect at the state and national levels. Attorneys and judges may demand that forensic service providers incorporate OSAC Registry standards into their management system. The spotlight on forensic sciences, as they are presented in courts of law, will continue to bring a commensurate demand for more scientific applications and validation from the legal community.

Implementation Approach

- Document and disseminate the value of adopting OSAC Registry standards to the legal community.
- Perform targeted outreach to describe and define the value of adoption of OSAC Registry standards to legal professional organizations.
- Perform targeted programs and workshops focused on introducing, teaching, and the presentation of OSAC Registry standards.

Rationale

- Courts have a vested interested to ensure that accuracy regarding the presentation of forensic science evidence best represents the impartiality of the legal system.
- Providing validated and scientifically sound forensic sciences to all sides in the courtroom is a fundamental expectation of jurisprudence.
- Determining guilt or innocence is the purview of the court, not the forensic science practitioner.
- Seeking the scientific truth as applied by forensic science should be preeminent.
- Sound scientific principles applies to both the criminal justice system and civil justice system.

Stakeholders / Target Audience for Outreach

- All elements of the legal community who would benefit from a better understanding of forensic science as they are applied by triers of fact, such as:
    - American Bar Association (ABA)
    - National Association of District Attorneys (NADA)
    - Association of Defense Trial Attorneys (ADTA)
    - National Association for Presiding Judges and Court Executive Officers (NAPCO)
    - American Judges Association (AJA)
    - National Association of Legal Assistants (NALA)
    - National Association for Criminal Defense Lawyers (NACDL)
    - National Association for Public Defense (NAPD)
    - Association of Defense Trial Attorneys (ADTA)
    - Appellant level judges

- Forensic scientists providing testimony and education to the legal community.

Barriers to Implementation

- Suspicions from defense attorneys regarding long-standing relationships between prosecutors/law enforcement and the forensic science community.
- Pre-conceived concepts and biases about the effectiveness (or lack thereof) of forensic science and their adoption of sound scientific principles.
- Concerns of the forensic scientist bias with interpretation and presentation of evidence.
- Juries bring their own biases and can be confused with technical and scientific language or principles when presented by forensic science practitioners.

Engagement Plan

- Outreach:
  - Present at annual conferences of the legal associations.
  - Provide training to said same organizations to enhance understanding of forensic science, its benefits and limitations.
  - Better educate the public in that they may be part of a jury.
- Metrics:
  - Tracking the number of OSAC Registry Standards workshops and presentations.
  - Tracking the number of attendees to workshops and presentations.
  - Tracking admissibility hearings and judicial rulings related to OSAC Registry standards both at court and appellant levels.

Responsible OSAC Units:

FSSB Implementation Task Group, SACs, FSSB Outreach Task Group, Legal Resource Committee

CERTIFICATION BODIES

Description

Assurance of reliable and accurate forensic analysis requires confidence in both the analytical procedures and the quality of the scientist performing them. External evaluation of the knowledge and skills through written and practical testing demonstrates the abilities of the forensic scientists. Certification programs promote consumer and public confidence in the capabilities and competence of the people who provide specialized services. Adoption of OSAC Registry standards by the certification bodies will provide consistency in analytical processes and provide a common foundation to base certification examinations.

Implementation Approach

- Perform targeted outreach to describe and define the value of adoption to certification bodies.
- Develop targeted workshops focused on introducing and teaching of OSAC Registry standards for analysts wanting to achieve certification in their field of expertise.

Rationale

- Certifying bodies in the United States have been providing certification testing to forensic science practitioners since the 1970s.
- Certification today is spread across most forensic science disciplines (e.g. IAI, ABC, AFTE, AFDE, ABFT).
- Certification programs include discipline specific requirements to improve the quality and consistency of the analysis.
- Certification bodies are tasked with the preparation, moderation, and assessment of tests designed to appraise the level of the practitioner's knowledge, skills, and abilities pursuant to the applications of their discipline.
- Certification includes discipline specific requirements.
- The OSAC Registry Standards will provide discipline specific requirements that certification bodies can use to develop assessments of the practitioner's competence.

Stakeholders / Target Audience for Outreach

- Forensic service and medical providers
- Regulators (e.g. state statute, commissions)
- Legal system
- Certification Bodies

Barriers to Implementation

- Certification bodies have no mandated regulatory authority; therefore, any decision to implement documents on the OSAC Registry of Standards is not within the control of the certification bodies.

Engagement Plan

- Outreach:
    - Certification bodies can promote a program that encourages and recognizes the incorporation of OSAC Registry standards into a forensic science practitioner's methodologies, technologies, and standard operating procedures.
- Metrics:
    - Tracking the number of forensic science practitioners that are certified.
    - Tracking the number of OSAC Registry standards incorporated into a certification body's assessment process and procedures.

Responsible OSAC Units:

FSSB Implementation Task Group, FSSB Outreach & Communications Task Group, FSSB FSPA Representatives, Quality Infrastructure Committee

ACCREDITATION BODIES

Description

Accreditation bodies have a direct influence on the policies and procedures forensic laboratories must implement to achieve accreditation. Approximately 88% of the publicly funded forensic laboratory are now accredited and some judicial systems required accreditation of forensic laboratories offering testimony. The accreditation bodies that provide programs for forensic service providers have supplemental requirements to address the unique requirements of forensic testing. In addition, accreditation bodies assist in implementation of the FBI Quality Assurance Standards for DNA Testing and Databasing Laboratories that add discipline specific requirements. Toxicology specific accreditation requirements are available from the American Board of Forensic Toxicology and requirements focused on the medical examiner community are available from the National Association of Medical Examiners. Accreditation bodies provide a pathway to document forensic service provider implementation of OSAC Registry standards based on all other avenues highlighted in this document (e.g. self-adoption, support by professional organizations).

Implementation Approach

- Document and disseminate the value of adopting OSAC Registry standards in their supplemental accreditation standards to accreditation bodies.
- Perform targeted outreach to describe and define the value of adoption by accreditation bodies.
- Develop targeted workshops focused on introducing and teaching the OSAC Registry standards for the accreditation bodies assessors.

Rationale

- Accreditation bodies in the United States have been providing accreditation to forensic service providers since the 1980s.
- Accreditation today is based on an international standard (e.g. ISO/IEC 17025, ISO/IEC 17020).
- International standards are general in nature and do not include discipline specific requirements.
- Accreditation bodies' role is to implement requirements established by the sector, in this case the forensic science and legal communities. The accrediting bodies do not specify how the forensic service providers conduct their analyses.
- The OSAC Registry standards will provide sector specific requirements. Accreditation bodies can develop programs that can confirm implementation.

Stakeholders / Target Audience for Outreach

- Forensic service providers
- Regulators (e.g. state statute, forensic commissions)
- Legal community

- Accreditation bodies and assessors

Barriers to Implementation

- Accreditation bodies have no regulatory authority; therefore, any decision to implement documents on OSAC Registry standards is not within the control of the accrediting bodies.

Engagement Plan

- Outreach:
    - Accreditation bodies can promote an accreditation program that recognizes incorporated OSAC Registry standards into a forensic service provider's management system, quality systems, and procedures.
- Metrics:
    - Tracking the number of forensic service providers accredited that have incorporated one or more OSAC Registry standards.
    - Tracking the number of OSAC Registry standards incorporated into a forensic service provider's management system and procedures.

Responsible OSAC Units:

FSSB Implementation Task Group, FSSB Outreach & Communications Task Group, FSSB FSPO Representatives, Quality Infrastructure Committee

FUNDING BODIES

Description

Offer funding incentive and/or require OSAC standards implementation for grant funding. One primary concern of all stakeholders is financial. The National Institute of Justice (NIJ) is the primary provider of external grants to the state and local forensic science community. These grants generally support research and development, capacity enhancement, backlog reduction, cold case analysis, training, and quality improvement. NIJ's grant offerings can be leveraged as a funding incentive for state and local forensic science laboratories to adopt standards listed on the OSAC Registry by giving preference to laboratories using one or more of the OSAC Registry standards or include funding to achieve implementation of OSAC Registry standards.

Implementation Approach

- Document and disseminate the value of adopting OSAC Registry standards in grant requirements to NIJ.
- Funds for implementation of OSAC Registry standards can be included in the funding requirements.
- NIST/OSAC Affairs can interface with NIJ as federal agency peers.
- Engage with Consortium of Forensic Science Organizations (CFSO).

Rationale

- Quality improvement costs time, money, and resources.
- To ensure the highest degree of quality and professionalism, training/research must continue and be expanded.
- NIJ supports the state and local FSP through a variety of grant opportunities, some of which are formula grants. These grants come with special conditions which grantees must comply to obtain the funding.
- The federal government often uses federal funding distributions to states to encourage adoption of specific federal laws or requirements. This is concept was observed when the FBI required laboratories to be compliant with the FBI Quality Assurance Standards to access CODIS and received federal grants.
- The preferable approach for implementing this type of program would be to offer a new dedicated funding stream to adopt OSAC Registry standards. This would combat the perception of OSAC Registry standards are unfunded mandates.

Stakeholders / Target Audience for Outreach

- Criminal Justice or forensic science focused Federal funding bodies
- Criminal Justice or forensic science focused private philanthropic organizations
- Criminal Justice or forensic science focused International organizations (World Court, United Nations)

- Consortium of Forensic Science Organizations (CFSO)
- Forensic Science Professional Associations

Barriers to Implementation

- General lack of funding for forensic science training/research.
- Need for funding spans the spectrum of forensic sciences.
- Political focus on specific forensic science discipline to the exclusion of others (e.g. DNA).
- Forensic science training and research support has a history of being a low priority.
- Utilizing existing federal funding to implement OSAC Registry standards by state and local crime laboratories adversely affects other areas of the laboratory desperately in need of funding. There is already a very limited pool of funding distributed by NIJ to support operations.
- Creating new special conditions for NIJ's grants or developing new programs may require approval from DOJ offices that manage and oversee NIJ (e.g. Office of Justice Programs, Office of Legal Policy, Office of the Deputy Attorney General).
- Political opposition.

Engagement Plan

- Outreach:
  - Schedule meetings with identified stakeholders.
  - Advertise the efforts of OSAC to gain public support for training and research funding.
  - Outreach to state and local organizations that may have resources available for research and training.
  - Partnering with interested organizations, such as universities, to provide training in exchange for forensic science research.
  - NIST/OSAC Affairs approach NIJ a with the concept (Executive Branch approach).
  - CFSO lobbying (Legislative Branch approach).
- Metrics:
  - Tracking the amount of funding/services resulting from outreach efforts listed above.
  - Tracking the number of NIJ Programs that offer incentive to implement OSAC standards.
  - Tracking the number of laboratories receiving funding under these programs.

Responsible OSAC Units:

FSSB Implementation Task Group, FSSB Outreach Task Group, Long-Range Planning
  - Federal staff members from NIST/OSAC Affairs can interface with NIJ
  - OSAC members can independently engage with CFSO

STATE FORENSIC SCIENCE COMMISSIONS / REGULATORY AUTHORITIES

Description

State forensic science commissions have the potential to advance forensic efforts by providing oversight, making recommendations, and coordinating resources consistent with the mission of the OSAC. Although the mandates, scope, and authority of each commission varies widely, some have investigative authority, oversee accreditation, certification or licensing standards, rulemaking authority, or fiscal oversight. More importantly, some state commissions have developed systems to engage forensic laboratories with criminal justice stakeholders. State commissions could be a valuable resource for outreach and future implementation efforts.

Implementation Approach

- Document and disseminate the value of encouraging or requiring use of OSAC Registry standards to the commissions.
- Coordinate outreach efforts at the state and local level.
- Improve cooperation between FSP and the broader criminal justice system.
- Making use of the commission's members and engaged stakeholders to promote and foster change.

Rationale

- Most state forensic science commissions were specifically created to improve forensic science or to address gaps or issues.
- As of 2016, ten states (and the District of Columbia) have statutorily created forensic science commissions[1]; some states also have forensic advisory boards.
- Commissions developed by state statute may have legal power to implement their requirements.
- Commissions may develop specific requirements FSP must meet to operate or offer testimony in their jurisdiction.
- Some commissions have fiscal oversight allowing them to direct funds for the implementation of their requirements.
- Those commissions with the mandate to investigate allegations may use OSAC standards in their review process.

Stakeholders / Target Audience for Outreach

- Existing state commissions (11 total).
- Specifically target those with authority to provide guidance (Delaware, DC, North Carolina, Virginia, Texas) or responsibilities with respect to accreditation/licensing (Maryland, New York, Texas).
- Legislative bodies considering the development and implementation of a forensic science commission.

---

[1] State Forensic Science Commissions, Final Report. Forensic Technology Center of Excellence (November 2016).

- Forensic advisory boards at the state level; although these advisory boards may not have regulatory oversight, they can play an important role.

Barriers to Implementation

- Resistance to another level of bureaucracy in the oversight and management of FSP operations.
- Inherent costs of adoption of OSAC Registry standards if required by the commission.
- Legislative authority or rule making varies widely between commissions.

Engagement Plan

- Outreach:
    - The eleven state forensic commissions.
    - Other states that are considering establishing a commission.
    - State-level legal entities to determine viability/acceptability of a commission.
- Metrics:
    - Successful adjudications in court using accredited/certified and commission approved accreditation and certification bodies.
    - Endorsements of OSAC work products, standards, and guidelines.

Responsible OSAC Units:

FSSB Implementation Task Group, FSSB Outreach & Communications Task Group

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO) DOCUMENTS

Description

ISO US Technical Advisory Group (TAG) members provide input and comments on drafting of documents at the Working Group (WG) level, and ballot items with a unified US vote. US TAG members can also submit US standards, technical reports, and other supporting material for consideration during development of documents by ISO TC 272 and/or for inclusion as references in ISO TC 272 documents. ISO Technical Committee (TC) 272 and Joint Technical Committee (JTC1) Subcommittee (SC) 37 may incorporate OSAC input and outputs into ISO documents related to forensic science.

TC 272 Scope: Standardization and guidance in the field of Forensic Science. This includes the development of standards that pertain to FSP and field based forensic science techniques and methodology in broad general areas such as the detection and collection of physical evidence, the subsequent analysis and interpretation of the evidence, and the reporting of results and findings. Excludes:
- Generic quality management standards dealt with by ISO/TC 176;
- Conformity assessment guidelines dealt with by the ISO committee on conformity assessment (CASCO).

JTC1 SC37 Scope: Standardization of generic biometric technologies pertaining to human beings to support interoperability and data interchange among applications and systems. Generic human biometric standards include: common file frameworks; biometric application programming interfaces; biometric data interchange formats; related biometric profiles; application of evaluation criteria to biometric technologies; methodologies for performance testing and reporting and cross jurisdictional and societal aspects. Excluded is the work in ISO/IEC JTC 1/SC 17 to apply biometric technologies to cards and personal identification. Excluded is the work in ISO/IEC JTC 1/SC 27 for biometric data protections techniques, biometric security testing, evaluations and evaluations methodologies.

The ISO US Technical Advisory Group (TAG) to JTC 1 SC 37 is INCITS M1. US members provide input and comments on drafting of documents at the Working Group (WG) level, and ballot items with a unified US vote. US TAG members can also submit US standards, technical reports, and other supporting material for consideration during development of documents by ISO/IEC JTC1 SC 37 and/or for inclusion as references in ISO/IEC JTC1 SC 37 documents.

Implementation Approach
- The OSAC should provide input on draft documents as they are a key stakeholder.
- Submit documents on the OSAC Registry to the ISO US TAG for consideration and possible forwarding to the Working Groups.
- Request liaison position(s) with T272 and/or JTC1 SC37.

Rationale

ISO performs standards development. ISO documents are recognized internationally and have a high-level of implementation by organizations working in related sectors. ISO guides and standards represent an international consensus of best practice. OSAC Registry standards should be submitted to the ISO US TAG for consideration and possible forwarding to the Working Groups. OSAC should provide input on draft documents as they are a key stakeholder.

Stakeholders / Target Audience for Outreach

- Current FSPs that are accredited based on one or more ISO standards
- Other FSPs that are familiar with ISO documents for operations
- International Organization for Standardization (ISO) TC 272 members
- US Technical Advisory Group (TAG) members
- Standards Developing Organizations (SDO)
- American Society of Crime Laboratory Directors (ASCLD) as ISO US TAG Secretariat

Barriers to Implementation

- Financially challenging (initial costs and sustainment). The US TAG is a fee-based committee.
- There are only a small number of organizations involved in ISO TC Working groups and the ISO US Technical Advisory Group.
- TC 272 is focused on higher level framework documents and not specific test methods/guides.
- OSAC members are not currently engaged on the Technical Committee nor the US TAG.
- Based on TC 272 or JTC1 SC 37's work, ISO could publish a Standard or Guide that conflicts with a document on the OSAC Registry.

Engagement Plan

- Outreach:
    - ISO TC 272 developers
    - ISO/IEC JTC 1 37 standards developers
    - Forensic science and medical professional organization
    - US SDOs
    - OSAC members and affiliates
- Metrics:
    - Number of US standards, technical reports, and other supporting material referenced in ISO TC 272 standards
    - US Comments submitted on drafts
    - Number of US TAG Participants that also participate in OSAC
    - Increase in number of US TAG participants

Responsible OSAC Units:

FSSB Implementation Task Group, FSSB Outreach & Communications Task Group, Quality Infrastructure Committee; OSAC participants on ISO US TAG to TC 272; INCITS M1 to JTC1 SC 37; ASB Consensus Bodies and ASTM International's E30 Technical Committee.

EDUCATION PROGRAMS

Description

Post-secondary education and research bodies required content for curriculum they provide to their students and researchers and they look to the forensic science community for support. Many new forensic scientists will attend these colleges or universities that introduces them to the scientific procedures they will be using during their careers. It is important to provide a foundation of appropriate scientific procedures. The future application of sound practices, protocols and procedures can be influenced by introducing to collegiate forensic science practitioner candidates the developed standards and emphasizing their importance.

Implementation Approach

- Document and disseminate the value of including some, or all, OSAC Registry standards in their curriculum to the Forensic Science Education Programs (FSEP).

  Colleges and Universities with either science or forensic science-based education and courses are provided free access to the OSAC Registry. The OSAC Registry consists of documents that have been deemed to be appropriate and technically sound by forensic practitioners, academic researchers, measurement scientists, and statisticians through a consensus development process.

- Develop incentives based on incorporation of OSAC Registry standards in their curriculum and research.
- Encourage a link between FEPAC accreditation and the incorporation of OSAC Registry materials within the curriculum.
- Encourage marketing opportunities that permit academic programs that incorporate OSAC documents to advertise on the academic program websites, such as:
  - o Language that indicates their forensic science program includes all relevant OSAC Registry standards,
  - o Language that indicates their forensic science program includes a specific OSAC Registry standard or a subset of the OSAC Registry standards.
- Make a variety of sample procedures widely available, so that educators can incorporate the accepted procedures and analysis in their courses.
- Perform targeted outreach to disseminate message to forensic science educators.

Rationale

- FSEP provides the initial training of new scientists to the field:
  - o Encourage the adoption of OSAC Registry Standards into their curriculum,
  - o Newly hired scientists in FSPs will know the procedures and benefits of OSAC Registry standards.
- As promoters of research, best practices and sound scientific applications, FSEP are intrinsic to the mission of OSAC and can provide the subject matter expertise for quality standards and guidelines development.

- FSEPs conduct research based on scientific needs of the forensic science community and can be encouraged to conduct research based on needs defined by the OSAC committees.
- The launch of this approach does not detract from the pursuit of other approaches (efforts can be concurrent).

Stakeholders / Target Audience for outreach

- Educational programs that are either currently FEPAC accredited or seeking FEPAC accreditation.
- Educational programs that may not be forensically based but interested in standardized procedures and research opportunities.
- Masters and doctoral students looking for research projects.
- College applicants interested in forensic science careers.
- FSPs hiring staff, including recent college graduates, with the best qualifications.

Barriers to implementation

- Cost of the standard.
- Cost of incorporating specific requirements of the standards including instrumentation, consumables and reagents.
- Knowledge of the standards and procedures for proper implementation.
- Concerns of the FSEP academics regarding the content of the OSAC Registry standards.

Engagement Plan

- Outreach:
    - OSAC can leverage owned media (OSAC website, fact sheets, OSAC booth at conferences, which can be staffed by OSAC members) to share message.
    - OSAC can work with FEPAC to encourage their accredited programs to incorporate the OSAC Registry standards.
    - OSAC can leverage current research and academic scientist members to promote the OSAC Registry standards at their colleges and universities.
    - OSAC can encourage funding programs to prioritize OSAC identified research projects.
- Metrics:
    - Tracking the number of colleges and universities using the OSAC Registry standards in their programs.
    - Tracking the number of masters and doctoral thesis written based on OSAC Registry standards.
    - Tracking the amount of funding and grants to colleges and universities for OSAC identified research needs.

Responsible OSAC Units:

FSSB Implementation Task Group, FSSB Outreach & Communications Task Group, Educational and Training Task Groups of Subcommittees.

Appendix A.   Outreach Deliverables

Deliverable	FSSPs	Regulators/ Lobbyists	OSAC Members	Assoc.	Criminal Justice System	Certifiers	Accreditors	Funding Bodies	State/ Muncipalities	SDOs	Ed. Institutions
Develop incentives and recognition for adoption or curriculum (like a certificate; gold star; logo / certificate you can put on your website)	X		X								X
Make sample language available on the value in adopting standards on the the OSAC Registry (e.g, press kits) to different disciplines	X		X	X	X						
Make sample language available to enable ease adoption in laboratories via accredition scopes, quality manuals and policies. Detailed lab procedures.	X		X	X			X				X
Develop list of "mentor labs" to connect adopters with interested labs	X		X	X							
Ask Labs to "Sign on" and sign a pledge to adhere to standards on the OSAC Registry. Leverage peer pressure to get other labs to sign on.	X		X	X					X		X
Develop workshop and training, other presentation materials for national and intl meetings (including specific to standards)			X	X	X			X			X
Work with certifying and accrediting bodies to incorporate standards on the OSAC Registry into certification and accreditation standards for analysts/laboratories (leverage Commissions that require licensing and/or certification)						X	X		X		
Determine if NIJ can incoporate use of standards on the OSAC Registry in Federal grant requirements		X						X			
Determine if NIJ can incoporate use of standards on the OSAC Registry in State funding requirements		X						X	X		
Develop outreach/advertisments to gain support for training and research funding		X	X	X				X			X
Develop partnerships with interested organizations to provide training and/or research funding		X	X	X				X	X		X
Apply for grants with interested organizations to provide training and/or research funding	X	X						X			X
Develop more formal channels of communication with criminal justice system/Law Enforcment agencies			X		X						
Work with State Commissions to incorporate standards on the OSAC Registry									X		
Submit standards on the OSAC Registry for consideration for adoption/inclusion in ISO standards										X	

Appendix A.   Outreach Deliverables

Deliverable	How - Outreach Channel
	OSAC Comm	Formal Liaison	Outside Pubs incl. Research	Site Visits	Mtgs with Officials	OSAC Members	Surveys	Presentations/Exhbits at Conf.
Develop incentives and recognition for adoption (like a certificate; gold star; logo / certificate you can put on your website)	X	X	X	X		X		X
Make sample language available on the value in adopting standards on the the OSAC Registry (e.g, press kits) to different disciplines	X	X	X	X		X		X
Make sample language available to enable ease adoption in laboratories via accredition scopes, quality manuals and policies. Detailed lab procedures.	X	X	X	X		X		X
Develop list of "mentor labs" to connect adopters with interested labs			**X**				X	
Ask Labs to "Sign on" and sign a pledge to adhere to standards on the OSAC Registry. Leverage peer pressure to get other labs to sign on.	X			X		**X**		
Develop workshop and training, other presentation materials for national and intl meetings (including specific to standards)			**X**					X
Work with certifying and accrediting bodies to incorporate standards on the OSAC Registry into certification and accreditation standards for analysts/laboratories (leverage Commissions that require licensing and/or certification)			**X**	X				
Determine if NIJ can incoporate use of standards on the OSAC Registry in Federal grant requirements					X			
Determine if NIJ can incoporate use of standards on the OSAC Registry in State funding requirements					X			
Develop outreach/advertisments to gain support for training and research funding	X							X
Develop partnerships with interested organizations to provide training and/or research funding				X	X			
Apply for grants with interested organizations to provide training and/or research funding		**X**				X		
Develop more formal channels of communication with criminal justice system/Law Enforcment agencies	X	**X**		X	X			
Work with State Commissions to incorporate standards on the OSAC Registry					X			
Submit standards on the OSAC Registry for consideration for adoption/inclusion in ISO standards	**X**					X		