Implementation of OSAC Registry Approved Standards and Outreach

Frequently Asked Questions

Introduction:

The Organization of Scientific Area Committees (OSAC) for Forensic Science Charter and Bylaws states that the OSAC mission is not only to facilitate the creation of high-quality standards but also to encourage widespread adoption throughout the forensic science community. In 2018, the OSAC Forensic Science Standards Board (FSSB) adopted the OSAC Registry Implementation Plan. The first year of focus on implementation is dedicated to forensic service providers. There are numerous challenges to the successful implementation of standards on the OSAC Registry and stakeholders share many of the same questions about the best way to proceed with the implementation process. The following Frequently Asked Questions (FAQs) are provided to help address these questions and concerns.

FAQ 1:   **Why should OSAC work to facilitate implementation by forensic science service providers of standards on the OSAC Registry?**

Answer: The 2009 NAS Report identified the lack of consistent and uniformly high-quality standards across forensic science disciplines and across national, regional and local jurisdictions. OSAC was created in 2014 by the US DOJ and NIST specifically to address this issue. The process of creating high quality standards that are consensus based and demonstrate technical merit is arduous, requiring collaboration on the part of a widely diverse universe of stakeholders. OSAC has succeeded in generating a Registry that lists high quality standards which can address the criticisms in the NAS Report if implemented into practice by forensic science practitioners and recognized by the criminal justice system.

FAQ 2:   **How do forensic science service providers benefit from implementing some or all the standards on the OSAC Registry?**

Answer: The benefits to forensic scientists and the criminal justice system differ slightly according to the stakeholder group being impacted by standards implementation. The primary shared benefit across all stakeholder groups is the increase in consistency and quality in the production of laboratory outputs which impacts the entire criminal justice system. With uniformly higher quality comes improved confidence in the accuracy, reliability and reproducibility of test results. With improved test results comes a

reduction in potential errors. Reducing risks in forensic science test results can improve not only the likelihood of successfully identifying the true perpetrator but also the likelihood of exonerating the innocent. Among other noteworthy benefits from increasing quality include the reduction in the number of cases generating equivocal results that often require repetitive testing. Clearer testing outcomes lead to higher productivity and increased efficiency resulting in the higher rates of return on investments in laboratory operations and more consistency in report writing and expert testimony.

Summarizing, implementation of standards means higher quality, consistency, accuracy, reliability, reproducibility, interpretable results, productivity, confidence, satisfaction of clients including investigators, prosecutors, defense attorneys, judges and juries, and a reduction in risk, erroneous or inconclusive outcomes, uncertainty and costs associated with required mitigation of errors. When courts are able to begin taking judicial notice of expert testimony that the analysis, interpretation and reporting of results conforms with nationally recognized standards found on the OSAC Registry, challenges to the admissibility of the testimony may diminish and the impact of testimony on judges and juries may be enhanced.

FAQ 3: **With just over 20 standards on the OSAC Registry so far, what is the urgency for implementation for the average forensic science practitioner?**

Answer: Although the OSAC Registry has only 22 standards listed as of early fall, 2019, there are more than 70 OSAC standards sent to SDOs awaiting review, and nearly two dozen more already approved by SDOs that are currently in the Registry Approval Process. To access a list of the standards on the OSAC Registry, the standards sent by OSAC to SDOs awaiting review, and the standards already approved by SDOs that are currently in the Registry Approval Process, go to the OSAC Registry Implementation web page. The range of disciplines that will be impacted directly by standards approved for the OSAC Registry is expanding rapidly. Finally, it should be noted that the OSAC Registry Implementation Plan is focused in its first year on forensic science service providers but will also soon focus on prosecutors, defense attorneys and the courts. Forensic science service providers are encouraged to initiate the standards implementation process in their operations proactively while it is under their control rather than waiting to find themselves being reactive to address questions in court. Expert witnesses will increasingly begin to encounter questions about whether they conform with standards listed on the OSAC Registry.

FAQ 4: **Why does the OSAC Standards Implementation Plan include a chapter for prosecutors, defense attorneys and the courts?**

Answer: Not everyone in the criminal justice system is aware of OSAC or the standards listed on the OSAC Registry. Chapter 4 of the OSAC Registry Implementation Plan specifically addresses educating the legal community. The OSAC Legal Resource Committee (LRC) includes prominent members from the prosecution, defense and

innocence projects, and judges. They are encouraging OSAC to educate members of the court and eagerly await the introduction of OSAC Registry standards into evidence in criminal cases. Judge Christopher Plourd, who chairs the OSAC LRC has already issued findings in a criminal case in California which mentions an OSAC Registry seized drug standard. Case law referencing OSAC Registry standards will predictably follow in the not too distant future. OSAC has the responsibility to educate members of the court about the nature and significance of Registry standards.

FAQ 5: **What does this mean for accreditation for each individual forensic science laboratory?**

Answer: Accredited forensic science laboratories that implement some or all the applicable standards on the OSAC Registry in their operations will be assessed for conformity to those standards by accreditation bodies. If the standards are identified in the agency's quality manuals, assessors will evaluate conformity during laboratory audits. Chapter 6 of the OSAC Registry Implementation Plan addresses educating the accreditation bodies and encouraging them to add the standards on the OSAC Registry to their supplemental standards. The OSAC Quality Infrastructure Committee membership currently includes representatives of the US forensic science accreditation bodies who serve as excellent references to provide guidance on questions about accreditation and the impact of implementation of standards on the OSAC Registry to the audit process.

FAQ 6: **Does a forensic science service provider have to implement all standards listed on the OSAC Registry in their entirety?**

Answer: No. It is not necessary for forensic science service providers to implement all standards listed on the OSAC Registry. There are several ways to add standards on the OSAC Registry to the quality documents of the laboratory. One way is to include a simple statement in the Quality Manual that states that the laboratory has implemented all applicable standards on the OSAC Registry. Alternatively, laboratories are free to list individual standards or applicable portions of standards on the OSAC Registry in their quality documents. Sample language will be provided online in a detailed "How to" set of guidelines currently in preparation by the OSAC Program Office to help laboratories with implementation of standards on the OSAC Registry. The guidelines will include instructions on how to manage implementation of applicable portions of standards as well as entire standards.

FAQ 7: **How is OSAC keeping track of the forensic science service providers that have already implemented all or some of the standards on the OSAC Registry?**

Answer: Currently OSAC is maintaining an internal spreadsheet to track standards implementation by forensic science service providers. After OSAC completes its baseline survey of its membership to determine initial implementation of standards listed on the OSAC Registry, that data will be shared publicly. If you would like to have your

laboratory added as an implementer of standards listed on the OSAC Registry, please email mark.stolorow@nist.gov for more information. Laboratories that have already implemented some or all of the applicable standards on the OSAC Registry may fill out the Laboratory Standards Implementation Declaration Form available on the OSAC Registry Implementation web page and forward it to mark.stolorow@nist.gov.

FAQ 8: **How can forensic science service providers be acknowledged by OSAC as an implementer of some or all the standards on the OSAC Registry?**

Answer: Laboratories that have implemented some or all of the applicable standards on the OSAC Registry may fill out the Laboratory Standards Implementation Declaration Form available on the OSAC Registry Implementation web page and forward it to mark.stolorow@nist.gov. Forensic science service providers who provide their standards implementation status to the OSAC Program Office will be eligible to receive a printed OSAC Implementation Certificate. The Certificate will be suitable for framing and displaying onsite in the forensic science facility.

FAQ 9: **How can law enforcement agencies be made aware of OSAC and the value of implementing standards on the OSAC Registry by the forensic science service providers within those agencies?**

Answer: Many of the OSAC members are forensic scientists employed by law enforcement agencies. They have vast experience in communicating within the hierarchy of senior law enforcement officials in their own agencies and can recommend the most effective ways of communicating with them. The FSSB Outreach and Communication Task Group and the OSAC Program Office are also examining select professional law enforcement organizations to target for improved outreach and communication to increase awareness and support of OSAC and the value proposition of implementing standards on the OSAC Registry. A variety of outreach tools are also under consideration for social media, online communication, emails and printed materials.

FAQ 10: **Are there other standards under development or in review by OSAC and/or Standard Developing Organizations (SDOs) that should be considered for future implementation by forensic science service providers?**

Answer: Yes. As mentioned in FAQ 3, although there are just over 20 standards currently on the OSAC Registry, there are more than 70 OSAC standards that have been sent to SDOs awaiting review and nearly two dozen more already approved by SDOs that are currently in the Registry Approval Process. The range of disciplines that will be impacted directly by standards approved for the Registry is expanding rapidly. To help find the standards relevant to each discipline, the OSAC Program Office is currently preparing a list of Registry standards compiled by discipline as well as a list of recently approved SDO standards working their way through the OSAC approval process, also categorized by discipline. In addition, the list will include a section on OSAC candidate

standards that have been forwarded to SDOs for consideration. The list is updated regularly and is located on the OSAC website on the OSAC Registry Implementation web page.

FAQ 11:   **Where can forensic science service providers find detailed guidance to help them with the steps to follow in implementing the standards on the OSAC Registry?**

Answer: The OSAC Program Office will prepare and post online a detailed "How to" guidance document providing forensic science service providers with help with the process of implementing standards on the OSAC Registry. It will be located on the OSAC website on the OSAC Registry Implementation web page. The OSAC Quality Infrastructure Resource Committee has created a task group to assist the OSAC Program Office write the "How to" guidance document. The detailed guidance includes help with developing a logical step-wise plan. For example, the section leaders for each discipline will need to familiarize themselves with the standards currently on the Registry as well as those under consideration that might be added to the Registry over the next several months. The key is to focus on those standards which are applicable to the section leader's specific discipline. There are a lot of standards on the Registry overall but a much smaller number that are specific to each discipline. As described in FAQ 10, to help section leaders find the standards relevant to their discipline, the OSAC Program Office is currently preparing a list of Registry standards compiled by discipline as well as a list of recently approved SDO standards working their way through the OSAC approval process, also separated by discipline. In addition, the list will include a section on OSAC candidate standards that have been forwarded to SDOs for consideration. Section leaders will then be able to conduct a gap analysis to evaluate if they are ready to implement the standards. Finally, OSAC maintains an Implementation Tracker listing forensic science service providers that have already implemented some or all of the standards on the OSAC Registry. The OSAC Program Office can facilitate discussions between your lab and other forensic science service providers listed on the tracker to provide specific standards implementation guidance based on that laboratory's experience.

FAQ 12:   **How will OSAC communicate with and help educate the forensic science industry and relevant stakeholder groups about the value of implementing standards on the OSAC Registry?**

Answer: Chapter 2 of the OSAC Registry Implementation Plan is titled "OSAC Member External Engagement." There are more than 550 members of OSAC and several hundred additional OSAC affiliate members. This chapter focuses on strategies and action plans to leverage the current base of expertise, experience and support of OSAC that can be tapped to help advance the implementation of standards. Current OSAC and SDO Consensus Body members are the perfect ambassadors for championing the very standards they helped develop. These scientists are forensic experts and thought leaders who have unique insight into the intricacies of the development of the standards. They may have either started or are well on their way to implementing standards in their own forensic science laboratories. Development of peer to peer

networks taps existing expertise and enables forensic scientists to steward their disciplines. One strategy under consideration includes OSAC members networking with

laboratories interested in starting the implementation process. These OSAC members will serve as an invaluable resource for laboratories looking to adopt the new standards. OSAC members will also be encouraged to develop workshops, panels and presentations for national and regional meetings. Another strategy is to implement individual mentorships with OSAC members reaching out to other relevant stakeholder groups as a natural extension of standards development and implementation.

FAQ 13:   **How can the standards on the OSAC Registry and standards published by SDOs that are currently in the Registry Approval Process be accessed?**

Answer: Detailed instructions on how to access the standards are provided on the OSAC website [Access to Standards](#) section.

FAQ 14:   **How can the standards sent to the SDOs awaiting review be accessed online by interested parties?**

Answer: Detailed instructions on how to access the standards are provided on the OSAC website with links for each of the [OSAC Subcommittees](#).