

**American Society of Crime Laboratory Directors
Forensic Research Committee and Standards & Accreditation Initiatives Committee
Joint Working Group – Implementation Needs**

ASCLD Implementation Survey

Executive Summary

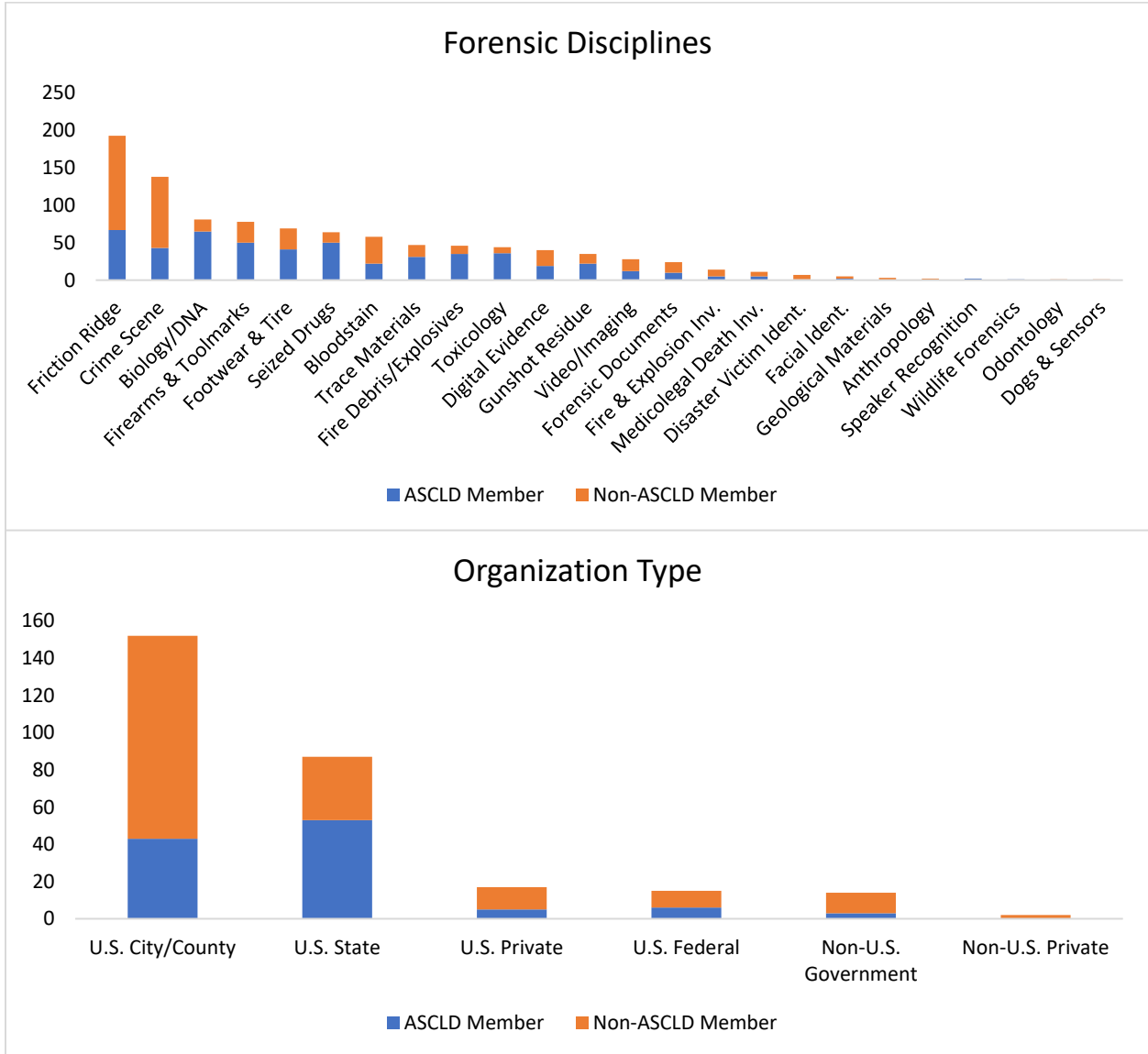
The American Society of Crime Laboratory Directors (ASCLD) is a nonprofit professional society of crime laboratory directors and forensic science managers dedicated to providing excellence in forensic science through leadership and innovation. As part of its mission, the ASCLD is committed to promoting, encouraging, and maintaining the highest standards of practice in forensic science. This is accomplished, in part, by encouraging the adoption of standards and best practice recommendations endorsed by the Organization for Scientific Area Committees for Forensic Science (OSAC). The ASCLD understands that implementation of new methods or protocols is often challenging and resource intensive. In an effort to support the forensic science community, the ASCLD is interested in understanding key challenges and barriers to implementation and identifying potential solutions to increase the likelihood agencies/organizations can increase consistency and quality of forensic science practices. Further, the ASCLD is interested in capturing baseline information related to the extent to which documents developed or approved by OSAC have been implemented or intend to be implemented into agency/organization standard operating procedures.

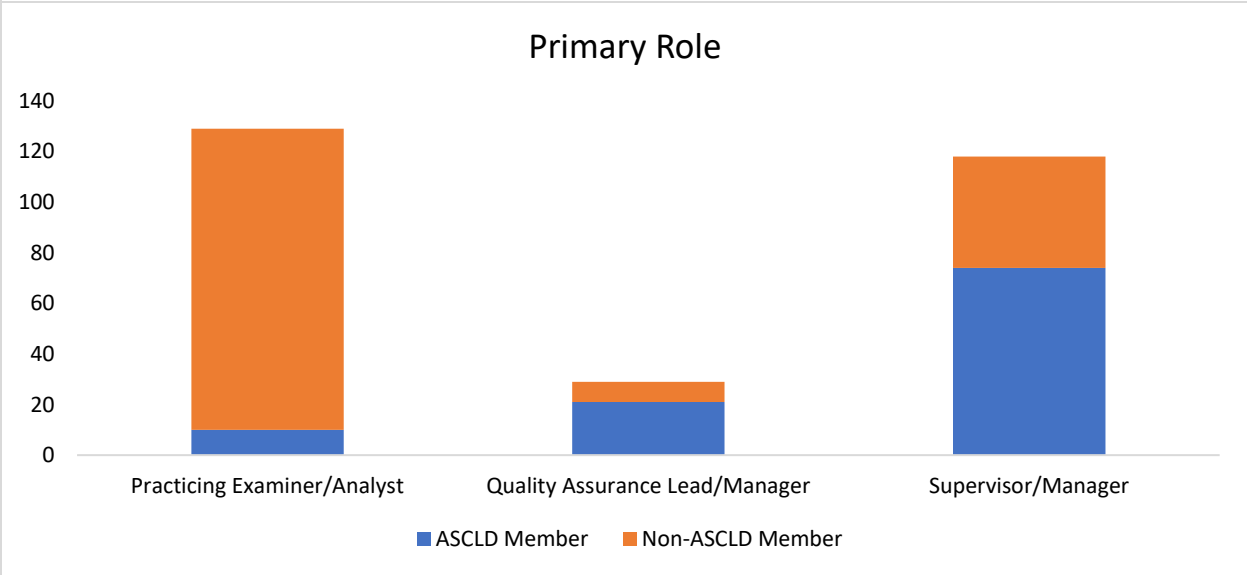
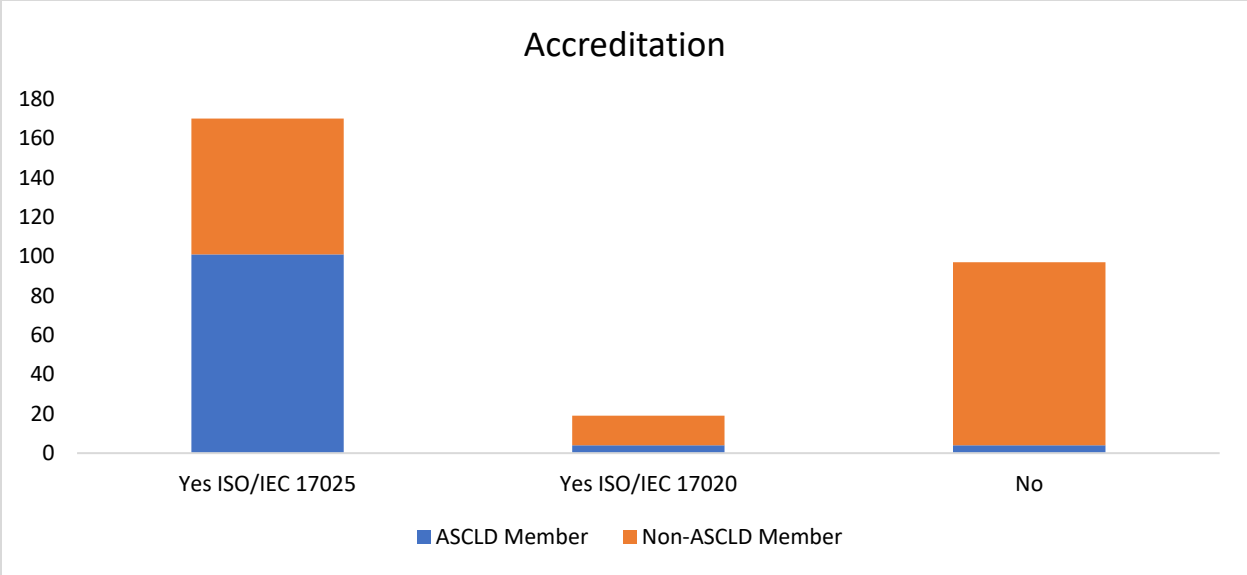
To accomplish this, the ASCLD Forensic Research Committee and Standards & Accreditation Initiatives Committee developed an online survey. The survey aims to provide baseline information and feedback about the extent documents included on the OSAC Registry have been implemented or are intended to be implemented into crime laboratory standard operating procedures, and to identify key challenges many laboratories face with implementation initiatives. Once this baseline is established, the Standards & Accreditation Initiatives Committee will continue to evaluate the operational impact of proposed OSAC standards through Impact Surveys distributed to the ASCLD membership. These surveys provide a deeper understanding to issues surrounding implementation and will enable the ASCLD, OSAC, and other stakeholders, to develop solutions to lower the barriers and promote greater consistency across the forensic science community.

The survey was open between February through June 2020 and was distributed throughout the forensic science community primarily through the ASCLD membership and International Association for Identification (IAI) membership. As a result of the combined dissemination from both the ASCLD and IAI, the survey received a total of 287 responses (110 of which were ASCLD members) representing a variety of different forensic disciplines¹. This report provides a high-level overview of the results of key survey questions related to implementation of OSAC developed documents in agency standard operating procedures. The complete set of survey results are available in a Microsoft Excel macro-enabled workbook that allows the results to be dynamically queried based on several different filters, such as: Agency type, Accreditation status, ASCLD membership, Role in organization, forensic discipline(s).

¹ Distribution was not uniform throughout all major professional forensic science organizations; thus, the responses may be biased toward the disciplines most represented by ASCLD and IAI.

Respondent Demographics

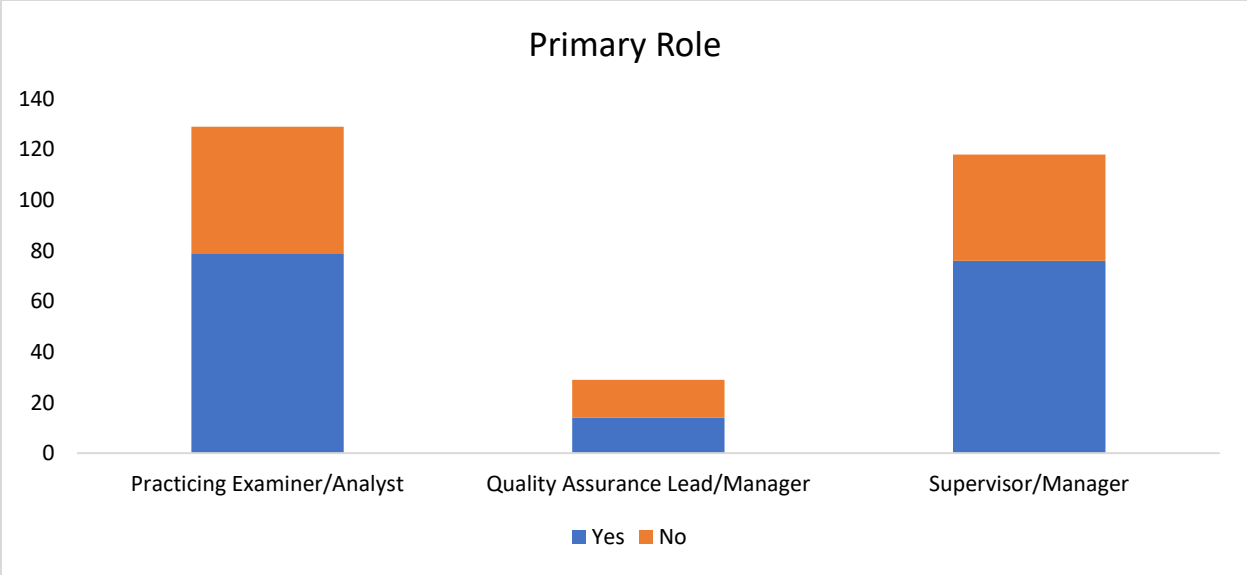
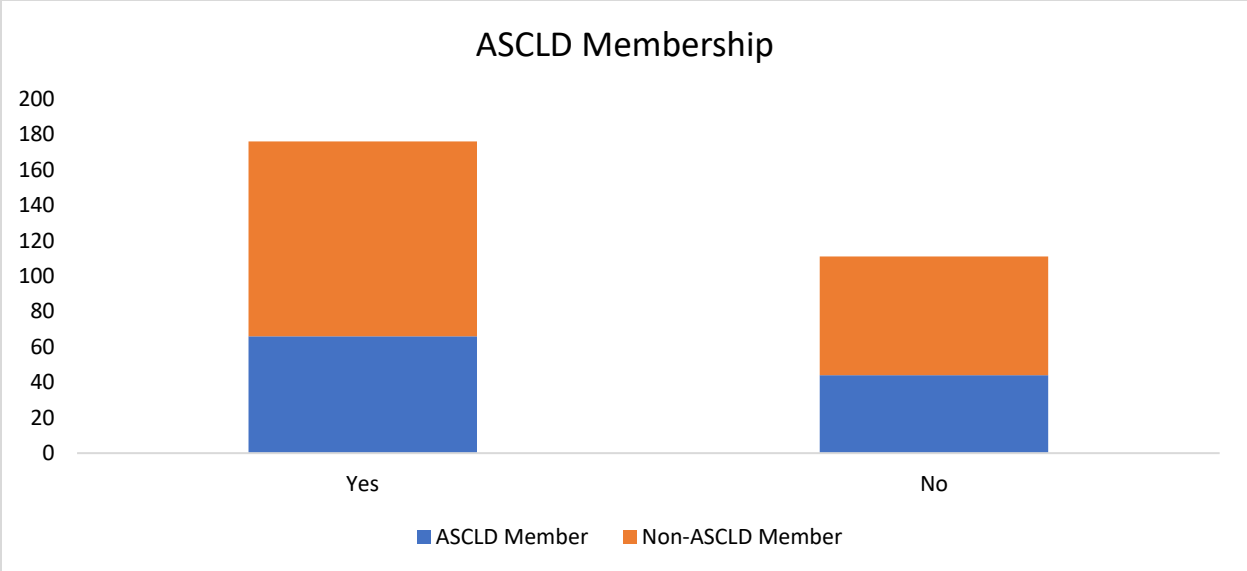




Do you consider implementation of policies, procedures, and practices based on OSAC developed or approved documents a high priority for your agency/organization in the discipline(s) you represent?

Out of the total number of 287 responses to this question, 176 answered “Yes” and 111 answered “No”. Among the respondents, 110 identified as ASCLD members and 177 identified as non-ASCLD members. Of the non-ASCLD members, 110 respondents answered “Yes” and 67 answered “No”. Of the 110 ASCLD members, 66 respondents answered “Yes” and 44 ASCLD members answering “No” to this question. All except 4 ASCLD members identified as belonging to an organization that was accredited by either ISO/IEC 17025 (102 respondents) or ISO/IEC 17020 (4 respondents). Most ASCLD members (75 respondents) identified as serving in the role of “supervisor/manager” with an additional 23 respondents identifying as “quality assurance lead/manager”. The remainder of the ASCLD members identified as serving in the role of “practicing examiner/analyst” (11 respondents) and “other” (1 respondent).

Of the 44 ASCLD members that answered “No” to this question, 32 respondents provided comments to elaborate on the “No” answer. Some of the comments focused on the fact that the OSAC standards are not “required” or “mandated” and therefore not a high priority for the laboratory. Other comments focused on the value proposition of the OSAC registry as the process is “taking too long” or “not necessary” but most of the “no” responses focused on the challenges posed by the additional resources required to implement the OSAC registry documents. Interestingly, one “no” respondent, who is responsible for a seized drugs unit within a laboratory, answered that the laboratory has “...incorporated and cited SOME specific portions of OSAC document(s) in the standard operating procedures...”. Another respondent responsible for a fire debris analysis section responded that “ASTM standards are currently used” and another ASCLD member answered that the OSAC standards are “redundant” given the existence of other standards or documents (SWGs, ASTM, ANAB, QAS, etc.). Most of the ASCLD members that responded “yes” and provided additional comments (38 respondents) to this question were generally very positive of the OSAC registry and supported adoption of OSAC documents in the future.



To date, 25 documents have been included on the OSAC Registry of Approved Standards and over 150 additional documents are in various stages of development by the OSAC. Please select the option that best describes the extent to which your agency/organization has already implemented or intends to implement policies, procedures, and practices based on OSAC developed or approved documents.

There was a total of 287 responses to this question.

Implemented (Full Incorporation): 11 have fully incorporated them into their organization. 3 are ASCLD members and 8 are not ASCLD members. 10 are already accredited to International standards and 1 is not. 5 respondents are practicing examiners/analysts, 5 are supervisors/managers, and 1 quality manager.

Implemented (Partial Incorporation): 39 have already partially implemented. 22 are ASCLD members and 17 are not ASCLD members. 31 are already accredited to International standards and 8 are not. 13 respondents are practicing examiners/analysts, 19 are supervisors/managers, and 7 are quality managers.

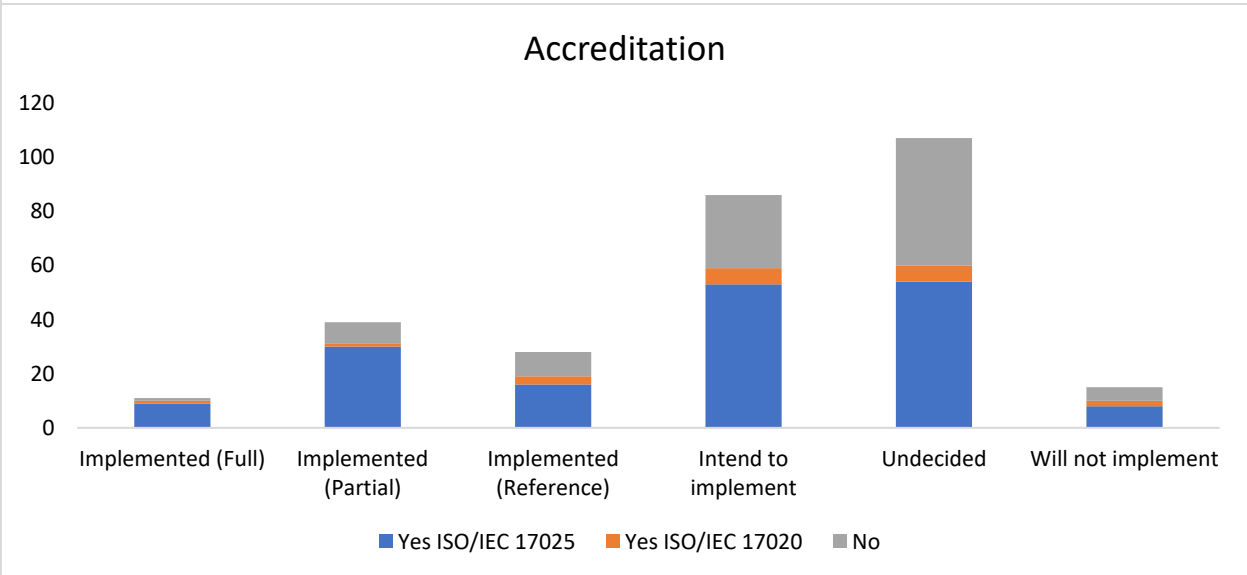
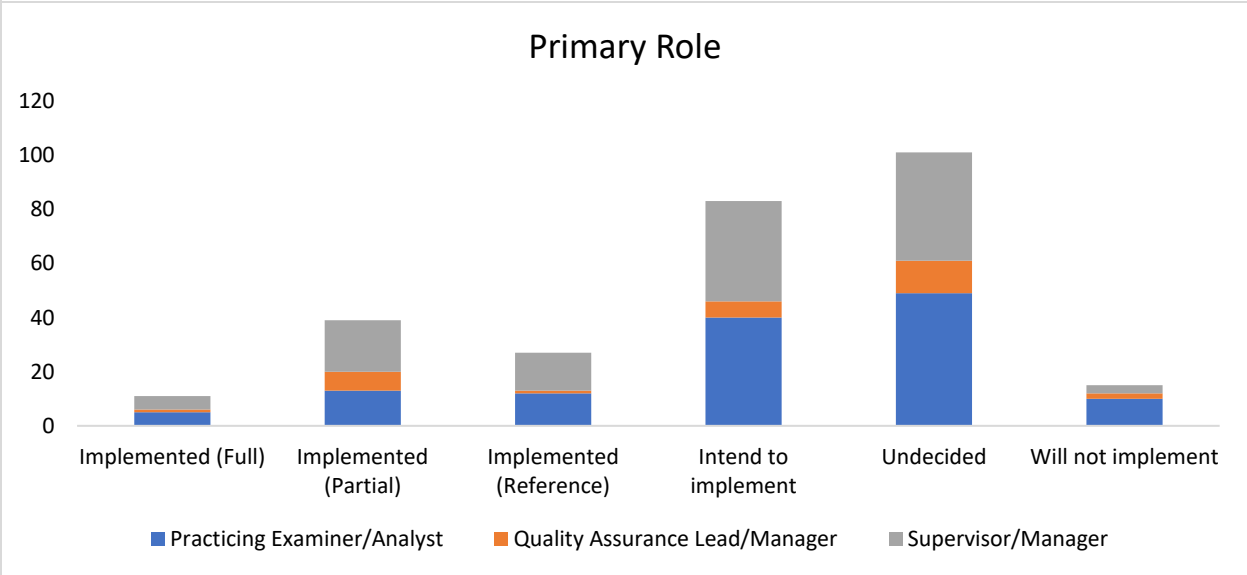
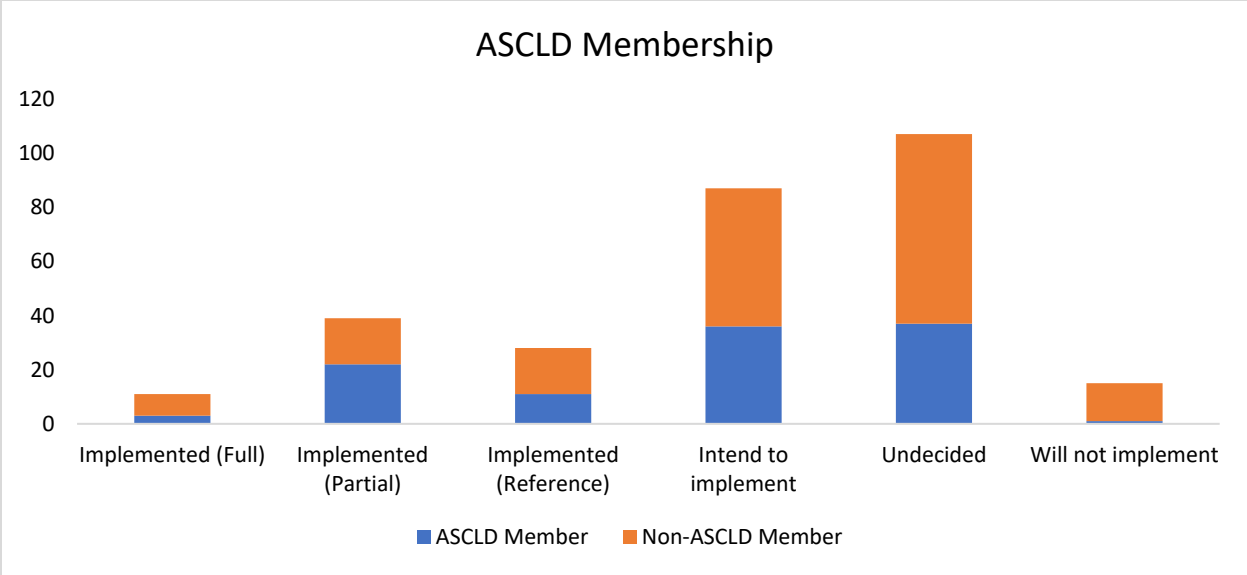
Implemented (Reference Only): 28 are implementing them as reference documents. 11 are ASCLD members and 17 are not ASCLD members. 19 are already accredited to International standard and 9 are not. 12 respondents are practicing examiners/analysts, 14 are supervisors/managers, 1 quality manager, and 1 forensic toxicologist.

Intend to Implement: 87 intend to implement, of which 82 are U.S. organizations and 5 are Non-U.S. organizations. 36 are ASCLD members and 51 are not ASCLD members. 60 are already accredited to International standards and 27 are not. 40 respondents are practicing examiners/analysts, 37 are supervisors/managers, 6 are quality managers, 1 system deputy administrator, and 3 are other.

Undecided: 107 are undecided, of which 104 are U.S. organizations and 3 are Non-U.S. organizations. 37 are ASCLD members and 70 are not ASCLD members. 60 are already accredited to International standards and 47 are not. 49 respondents are practicing examiners/analysts, 40 are supervisors/managers, 12 are quality managers, 2 are program managers or technical leads, and 4 are other.

Will not Implement: 15 will not implement. 1 is an ASCLD member and 14 are not ASCLD members. 10 are already accredited to International standards and 5 are not. 10 respondents are practicing examiners/analysts, 3 are supervisors/managers, and 2 are quality managers.

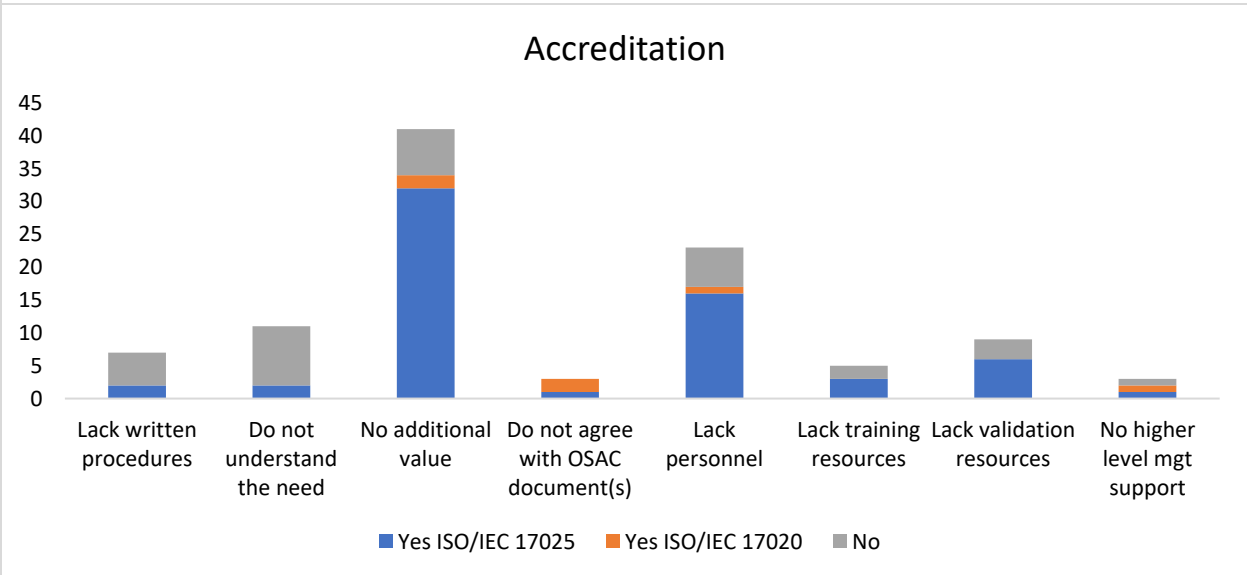
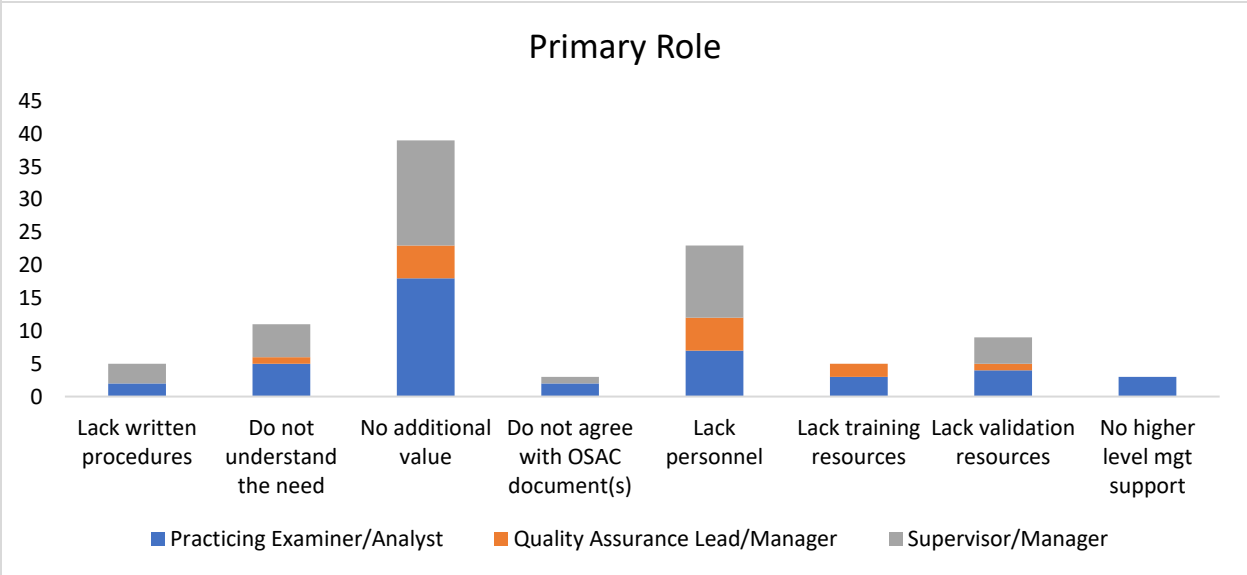
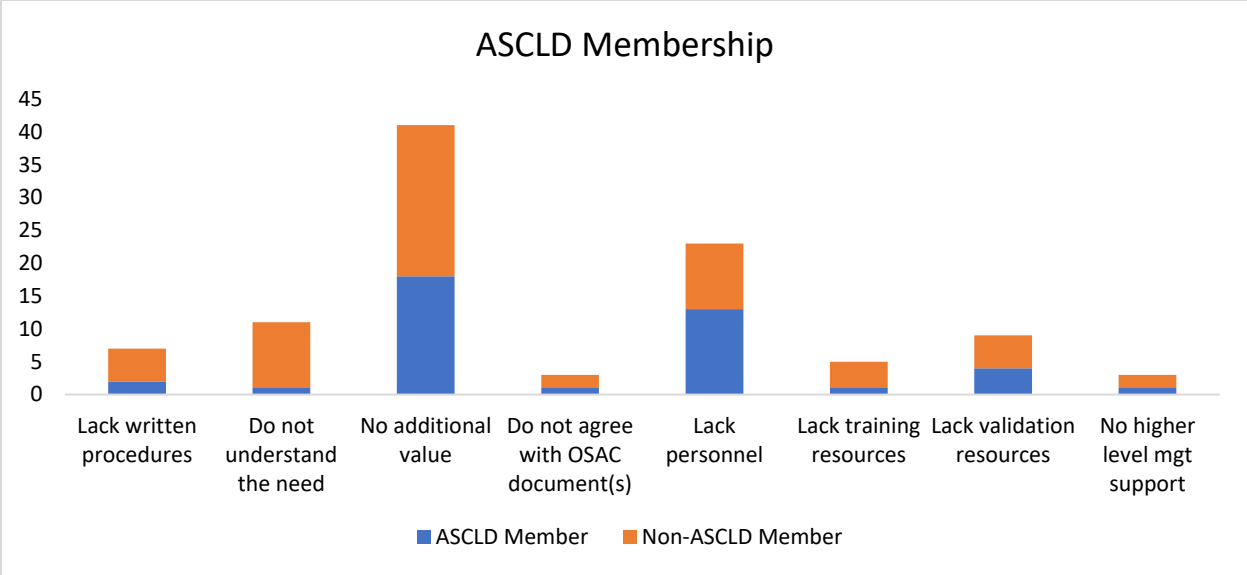
Of the 287 respondents, 140 provided additional explanations for their response. The types of explanations related to not implementing or undecided responses included not being aware of OSAC, not having sufficient approved documents relevant to the organization, waiting for legislation or administration to decide, and resistance from the organization.



Please select the key challenges or reasons preventing implementation of policies, procedures, and practices based on OSAC developed or approved documents at your agency/organization in the discipline(s) you represent (select all that apply).

The majority of the 287 respondents to this question selected multiple challenges or reasons preventing implementation of the OSAC approved documents. Of the 287 respondents, 110 (38.3%) indicated they were ASCLD members with the remaining 177 (61.7%) identifying as non-ASCLD members. Among the top three selected responses: 87 respondents (36 ASCLD members) selected “My agency/organization does not feel the OSAC document(s) will add additional value over what is already implemented;” 85 respondents (36 ASCLD members) selected “My agency/organization does not have the available personnel to allocate to this task;” and 54 respondents (18 ASCLD members) selected “My agency/organization does not have the available resources to support validation.” The reasons for lack of implementation related to lack of resources (e.g. personnel, training, and validation) were all in the top 5 most commonly chosen and, while chosen most often by Non-ASCLD members, personnel and validation resources were selected by 41.2% (35/85) and 33.3% (18/54) of the ASCLD members, respectively. There were also 43 respondents (7 ASCLD members) indicating that their agency/organization did not understand the need for the OSAC documents and 19 respondents (7 ASCLD members) indicating that their agency/organization did not agree with the OSAC documents.

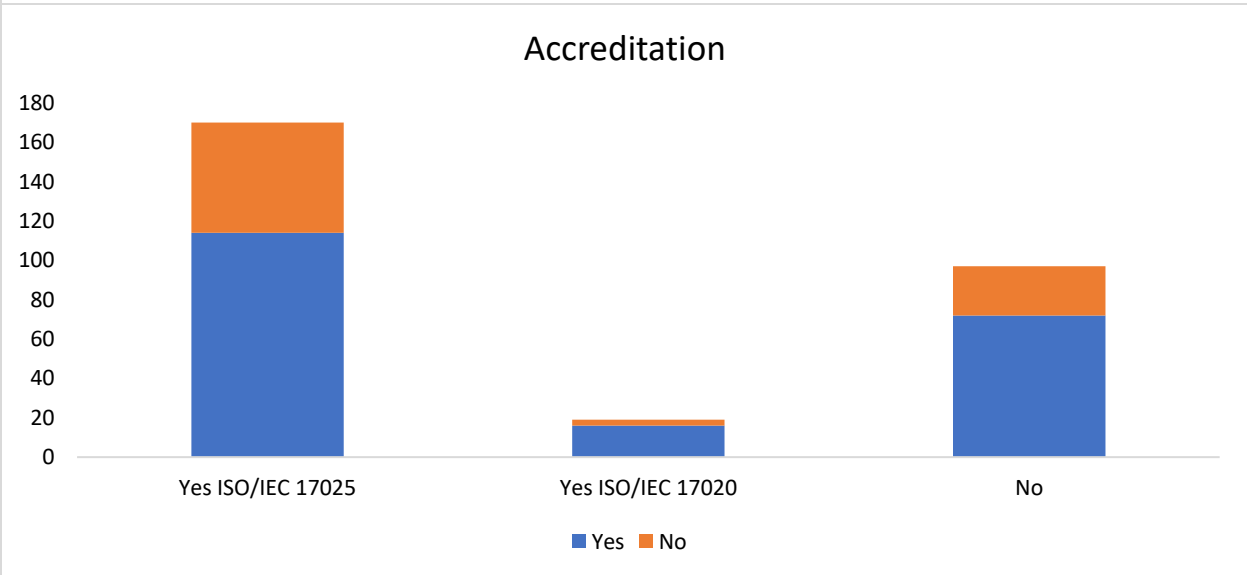
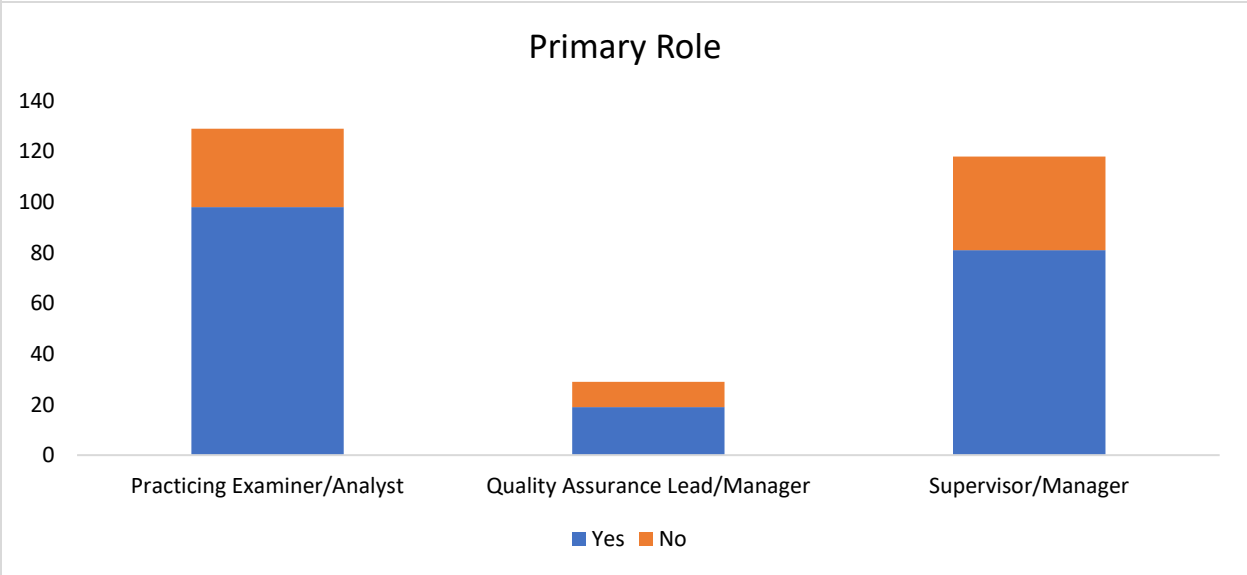
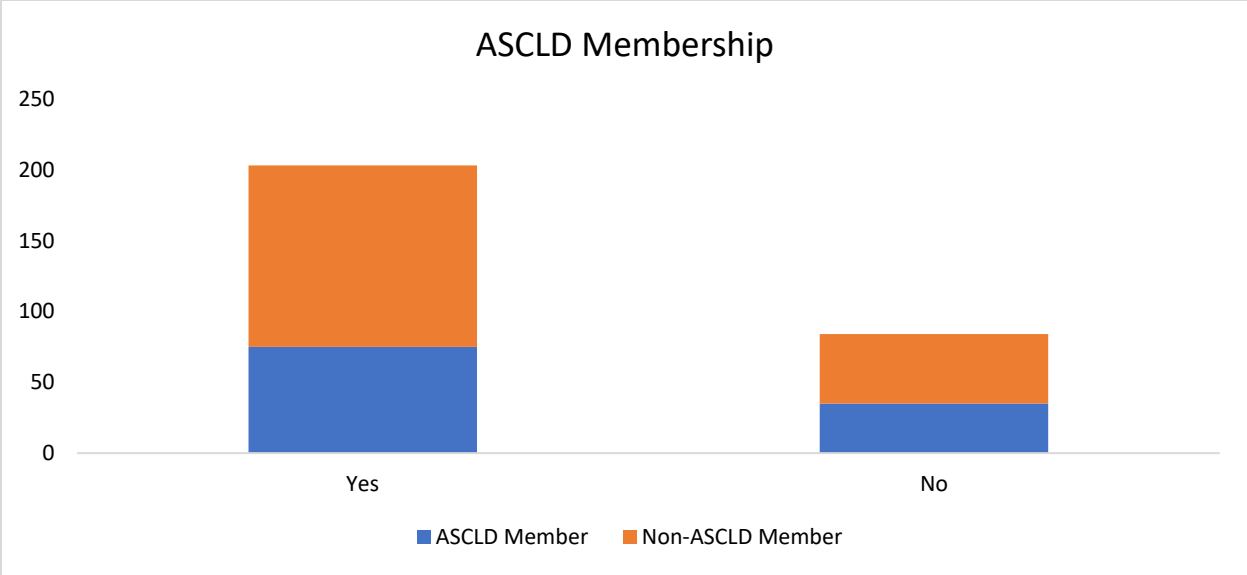
A review of the explanations given by the 110 ASCLD member respondents did present some common explanations/challenges to implementation. There were comments related to the OSAC standards not being mandated by any governing body while others felt that the standards did not add value to their procedures already in place. A few expressed frustrations with the OSAC process indicating that it was too long and OSAC was not necessary because standards and guidelines have already been developed by the SWGs or ASTM. There were a number of respondents indicating that they continue to review standards as they are published and would likely implement “parts” of the OSAC approved standards as they are published or at least cite the standards in their procedures. However, the most common challenge to implementation given was centered around lack of resources to implement the standards into their laboratory.



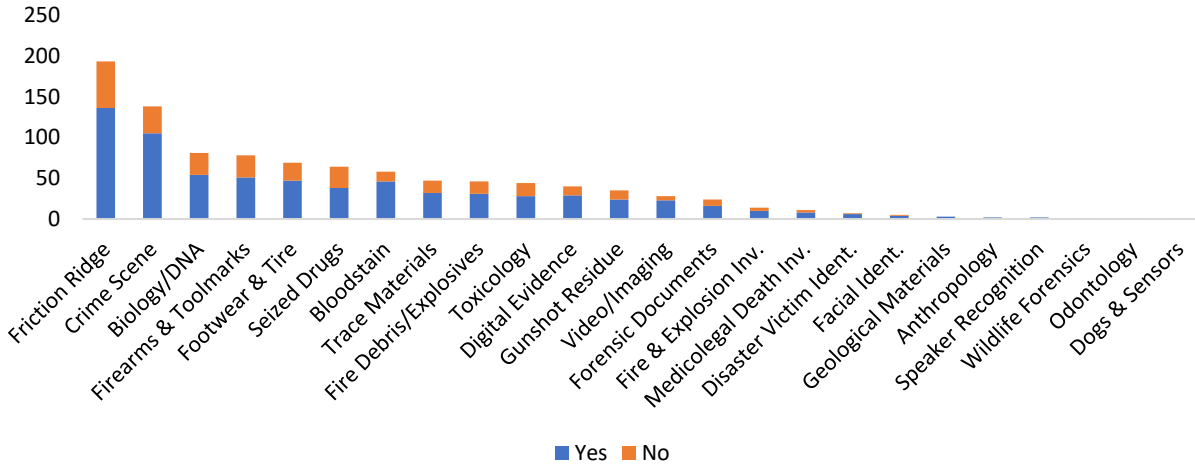
If a centralized repository existed allowing you the opportunity to connect you with other agencies/organizations that have already implemented or intend to implement policies, procedures, and practices based on OSAC developed or approved documents that are applicable to you, would that increase the likelihood your agency/organization would implement similar policies, procedures, and practices?

Out of the total number of 287 responses to this question, 203 (75 ASCLD members) answered “Yes” and 84 (35 ASCLD members) answered “No”. Responses of “Yes” were the majority with approximately two-thirds spread proportionately across nearly all disciplines. Responses were also fairly consistently distributed among respondents irrespective of laboratory accreditation and organizational role. Of laboratory jurisdictions, all except for U.S. federal laboratories had a majority response of “Yes”. Interestingly, among the few respondents from federal laboratories, the majority did not feel it would increase implementation.

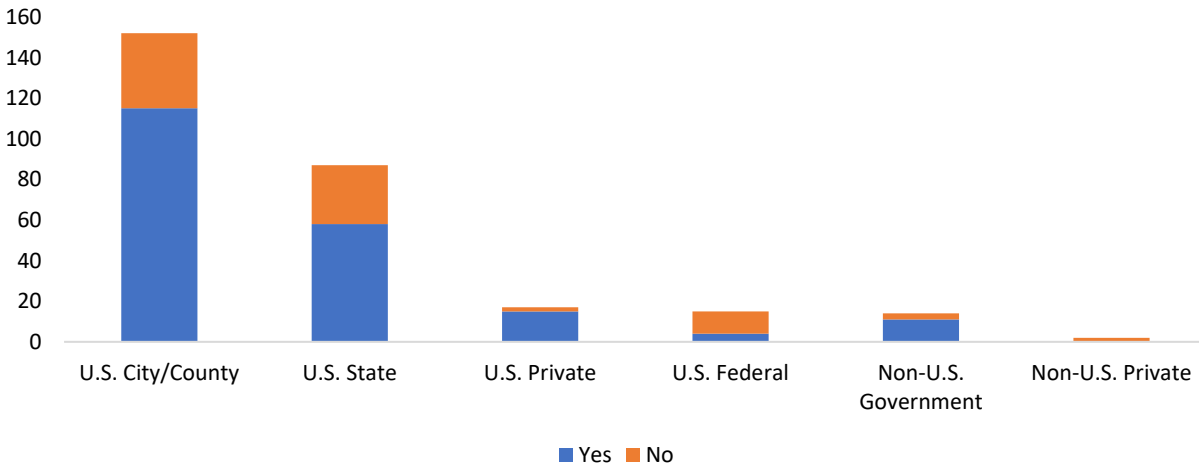
Comments were provided by 92 of the 287 total respondents. The comments focused on general difficulties to implementing standards, including funding to assist with implementation, more training on how to implement standards, and more development from OSAC on the standards themselves to better apply to the work of forensic examiners. Among those respondents that do not feel it would increase implementation cited the existence of standards already in place (e.g. SWG documents and other existing standards) and lack of funding. Finally, some of the respondents felt that implementation of OSAC standards should be handled through accreditation, or even by jurisdictional mandates for full implementation.



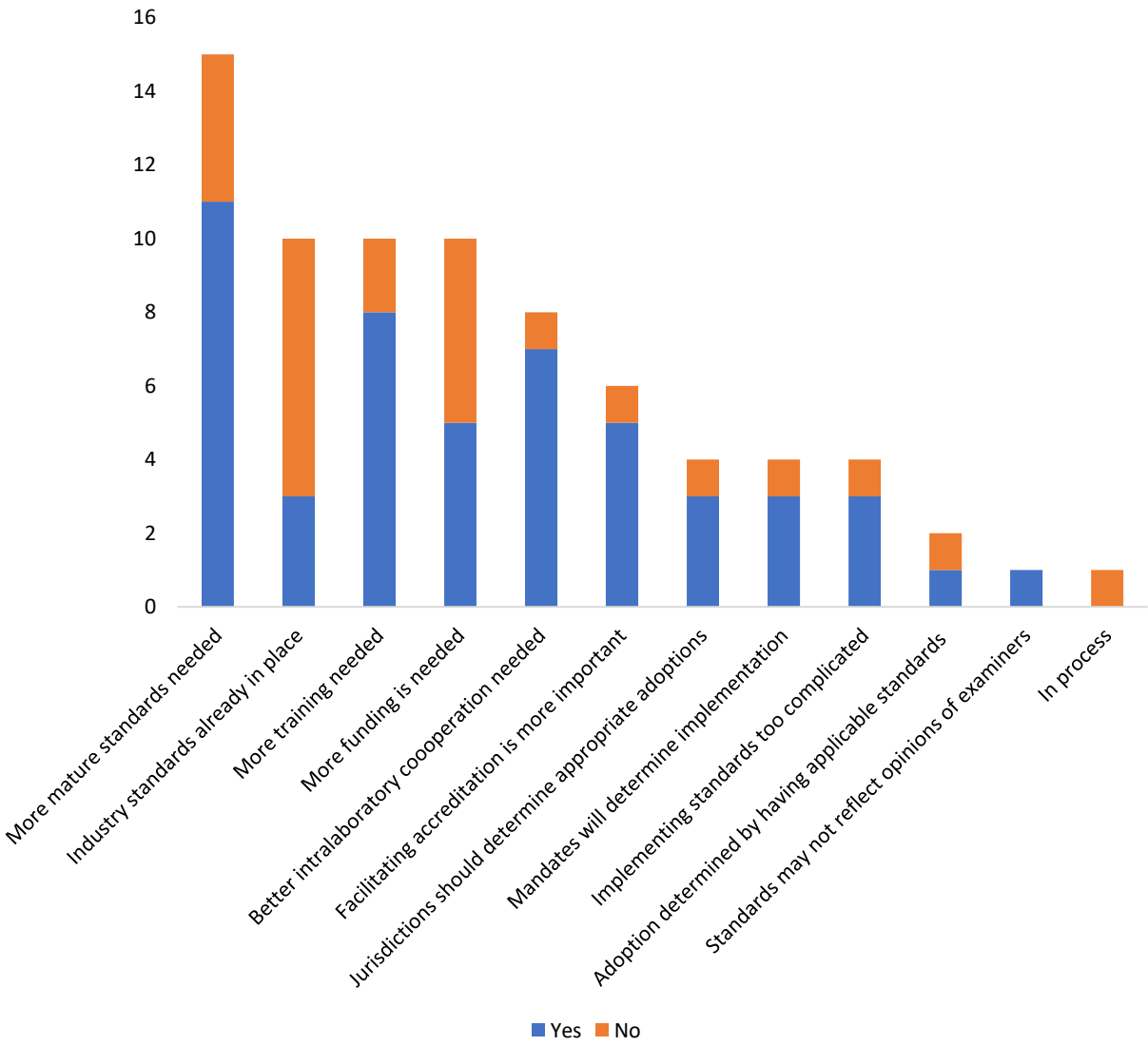
Forensic Disciplines



Organization Type

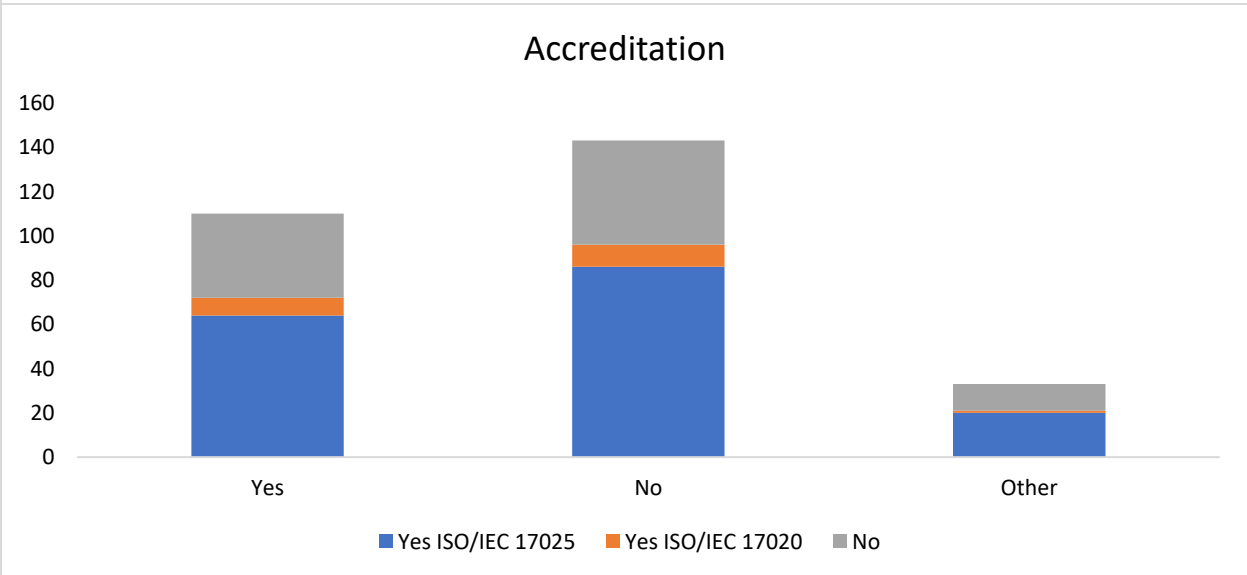
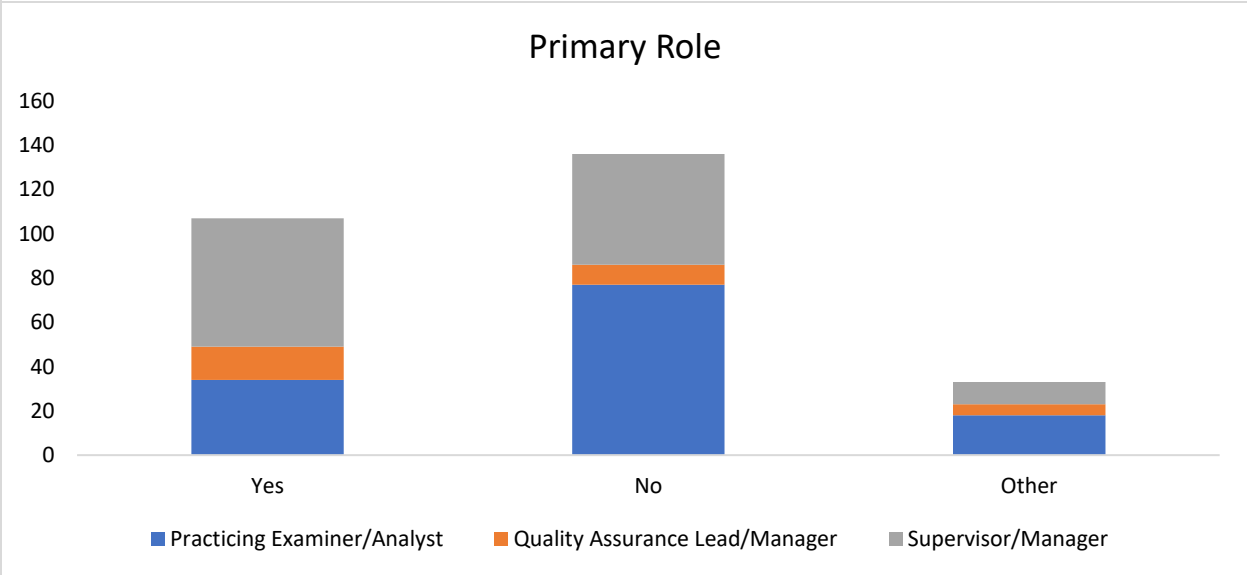
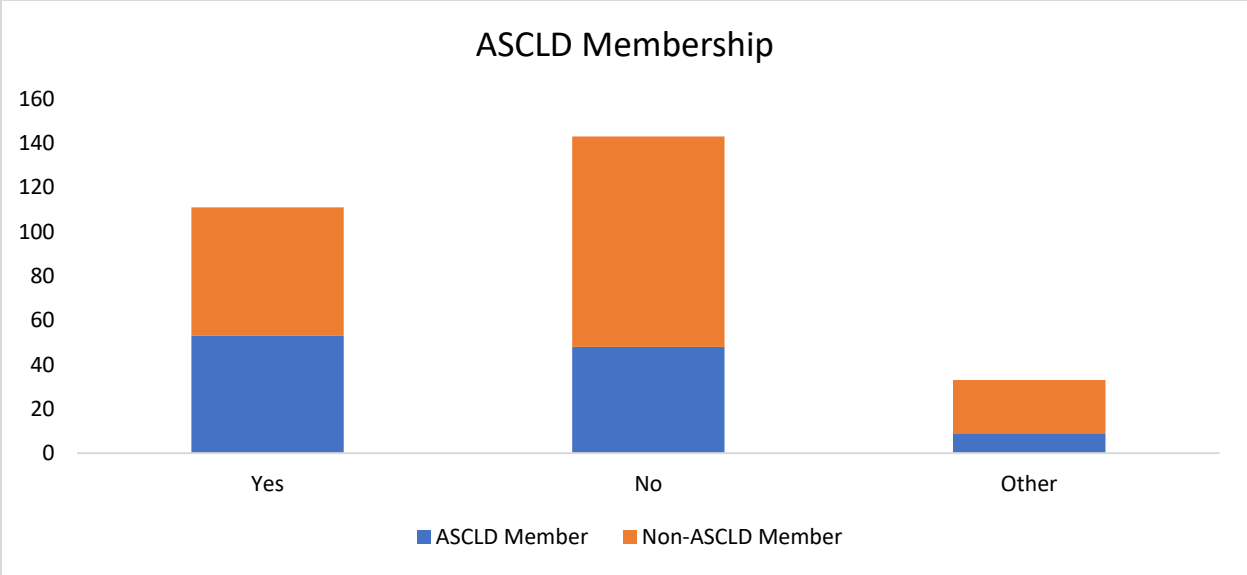


Other Factors to Increase Implementation (Coded from Free-Text)



ASCLD is interested in supporting members with implementation of policies, procedures, and practices to improve the validity and reliability of forensic science. Often, agencies/organizations face these challenges independently which can be inefficient and resource intensive. To ease the burden, ASCLD is interested in establishing a centralized repository that allows agencies/organizations the opportunity to identify, connect, and coordinate with other agencies/organizations working toward similar goals. Would you be willing to provide your name and contact information that other members of the forensic science community can access and potentially contact you regarding your experiences?

Out of the total number of 287 responses to this question, 111 (53 ASCLD members) answered “Yes” and 143 (48 ASCLD members) answered “No”. A total of 33 (9 ASCLD members) “Other” responses were received with comments generally indicating the respondent’s agency has not or does not plan to implement OSAC approved standards or the respondent was unable to provide a definitive commitment at that time. Approximately half of the ASCLD members who responded were willing and able to collaborate with other organizations, whereas only about one-third of the non-ASCLD members were willing or able. The proportion of “Yes” and “No” responses were not substantially different when responses were considered based on the respondent’s primary role in the organization and accreditation status. Among those respondents that indicated willingness to share their contact information, 74 respondents actually provided it.



**Extent of Implementation for each of the 25 documents currently on the
OSAC Registry of Approved Standards (as of February 2020)**

Implementation Document	Implemented (Full)	Implemented (Partial)	Implemented (Reference)	Intend to implement	Undecided	Will not implement	Not Applicable
Disaster Victim Identification: ANSI/ASB Best Practice Recommendation 007, Postmortem Impression Submission Strategy for Comprehensive Searches of Essential Automated Fingerprint Identification System Databases, First Edition, 2018 (effective September 5,	1.1% (3/276)	1.8% (5/276)	1.4% (4/276)	4.3% (12/276)	17.8% (49/276)	2.9% (8/276)	70.7% (195/276)
Disaster Victim Identification: ANSI/ASB Best Practice Recommendation 010, Forensic Anthropology in Disaster Victim Identification: Best Practice Recommendations for the Medicolegal Authority, First Edition, 2018 (effective September 5, 2019).	0.7% (2/275)	0.4% (1/275)	0.7% (2/275)	2.5% (7/275)	12.7% (35/275)	2.2% (6/275)	80.7% (222/275)
Dogs & Sensors: ASB Technical Report 025, Crime Scene/Death Investigation - Dogs and Sensors - Terms and Definitions, First Edition, 2017 (effective October 1, 2019).	0% (0/275)	0.4% (1/275)	0.7% (2/275)	0.7% (2/275)	11.6% (32/275)	1.8% (5/275)	84.7% (233/275)
Facial Identification: ASTM E3115-17 Standard Guide for Capturing Facial Images for Use with Facial Recognition Systems (effective October 1, 2019).	0.7% (2/274)	0.4% (1/274)	1.1% (3/274)	3.3% (9/274)	10.9% (30/274)	1.8% (5/274)	81.8% (224/274)
Facial Identification: ASTM E3148-18 Standard Guide for Postmortem Facial Image Capture (effective October 1, 2019).	0% (0/272)	0.4% (1/272)	0.7% (2/272)	3.3% (9/272)	9.6% (26/272)	2.2% (6/272)	83.8% (228/272)
Facial Identification: ASTM E3149-18 Standard Guide for Facial Image Comparison Feature List for Morphological Analysis (effective February 14, 2019).	0% (0/270)	0.4% (1/270)	0.7% (2/270)	3.7% (10/270)	11.1% (30/270)	1.9% (5/270)	82.2% (222/270)

Fire and Explosion Investigation: NFPA 921:2017 Guide for Fire and Explosion Investigations (effective November 1, 2017).	0.4% (1/271)	0.4% (1/271)	1.8% (5/271)	1.5% (4/271)	15.5% (42/271)	3.3% (9/271)	77.1% (209/271)
Fire and Explosion Investigation: NFPA 1033:2014 Standard for Professional Qualifications for Fire Investigator (effective December 22, 2016).	0% (0/269)	0.4% (1/269)	1.1% (3/269)	1.1% (3/269)	12.6% (34/269)	3% (8/269)	81.8% (220/269)
Materials (Trace): ASTM E3085-17 Standard Guide for Fourier Transform Infrared Spectroscopy in Forensic Tape Examinations (effective September 11, 2018).	0% (0/270)	1.9% (5/270)	2.2% (6/270)	4.4% (12/270)	15.2% (41/270)	3% (8/270)	73.3% (198/270)
Materials (Trace): ASTM E1610-18 Standard Guide for Forensic Paint Analysis and Comparison (effective June 26, 2018).	0.4% (1/268)	2.2% (6/268)	2.6% (7/268)	6.3% (17/268)	14.2% (38/268)	3% (8/268)	71.3% (191/268)
Materials (Trace): ASTM E2937-18 Standard Guide for Using Infrared Spectroscopy in Forensic Paint Examinations (effective June 26, 2018).	0.4% (1/267)	2.2% (6/267)	2.2% (6/267)	6.4% (17/267)	13.5% (36/267)	3% (8/267)	72.3% (193/267)
Materials (Trace): ASTM E2927-16e1 Standard Test Method for Determination of Trace Elements in Soda-Lime Glass Samples Using Laser Ablation Inductively Coupled Plasma Mass Spectrometry for Forensic Comparisons (effective June 5, 2018).	0% (0/270)	0.7% (2/270)	0.4% (1/270)	2.6% (7/270)	11.9% (32/270)	3.3% (9/270)	81.1% (219/270)
Materials (Trace): ASTM E2926-17 Standard Test Method for Forensic Comparison of Glass Using Micro X-ray Fluorescence (μ -XRF) Spectrometry (effective July 31, 2017).	0.4% (1/268)	1.1% (3/268)	1.5% (4/268)	3% (8/268)	12.3% (33/268)	3% (8/268)	78.7% (211/268)
Odontology: ADA 1088-2017D Human Identification by Comparative Dental Analysis (effective March 7, 2019).	0% (0/272)	0% (0/272)	0.7% (2/272)	1.1% (3/272)	4.8% (13/272)	2.2% (6/272)	91.2% (248/272)

Odontology: ANSI/ADA 1058-2010D Forensic Dental Data Set (effective February 14, 2019).	0% (0/271)	0% (0/271)	0.4% (1/271)	0.7% (2/271)	4.4% (12/271)	2.6% (7/271)	91.9% (249/271)
Seized Drugs: ASTM E2329-17 Standard Practice for Identification of Seized Drugs (effective August 7, 2018).	2.2% (6/268)	4.1% (11/268)	4.9% (13/268)	10.1% (27/268)	20.1% (54/268)	4.9% (13/268)	53.7% (144/268)
Seized Drugs: ASTM E2548-11e1 Standard Guide for Sampling Seized Drugs for Qualitative and Quantitative Analysis (effective April 3, 2017).	1.5% (4/265)	4.9% (13/265)	4.9% (13/265)	10.6% (28/265)	18.5% (49/265)	4.2% (11/265)	55.5% (147/265)
Toxicology: ANSI/ASB 037, Best Practice Recommendation, Guidelines for Opinions and Testimony in Forensic Toxicology, First Edition, 2019 (effective November 5, 2019).	1.1% (3/269)	2.2% (6/269)	2.6% (7/269)	5.6% (15/269)	16% (43/269)	2.6% (7/269)	69.9% (188/269)
Toxicology: ANSI/ASB Standard 017, Standard Practices for Measurement Traceability in Forensic Toxicology, First Edition, 2018 (effective June 18, 2019).	0.8% (2/266)	3.8% (10/266)	2.6% (7/266)	5.3% (14/266)	16.2% (43/266)	2.3% (6/266)	69.2% (184/266)
Interdisciplinary: ISO 21043-2 Forensic Sciences - Part 2: Recognition, recording, collecting transport and storage of items (effective December 3, 2019).	2.6% (7/271)	3% (8/271)	3.7% (10/271)	15.1% (41/271)	44.3% (120/271)	4.8% (13/271)	26.6% (72/271)
Interdisciplinary: ASTM E2917-19a Standard Practice for Forensic Science Practitioner Training, Continuing Education, and Professional Development Programs (effective November 5, 2019).	3.3% (9/270)	4.8% (13/270)	3.7% (10/270)	20.4% (55/270)	44.8% (121/270)	4.1% (11/270)	18.9% (51/270)
Interdisciplinary: ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories (effective June 18, 2019).	19.6% (53/270)	1.1% (3/270)	3.7% (10/270)	12.2% (33/270)	30.4% (82/270)	3% (8/270)	30% (81/270)

Interdisciplinary: ANSI/NIST ITL-1: 2011 (Update 2013) Data Format for the Interchange of Fingerprint, Facial & Other Biometric Information (effective July 13, 2017).	1.5% (4/268)	1.5% (4/268)	1.1% (3/268)	7.8% (21/268)	36.9% (99/268)	2.2% (6/268)	48.9% (131/268)
Interdisciplinary: ISO/IEC 17020:2012 Conformity Assessment— Requirements for the Operation of Various Types of Bodies Performing Inspection (effective April 18, 2017).	3.7% (10/269)	0.7% (2/269)	1.5% (4/269)	4.8% (13/269)	22.3% (60/269)	3% (8/269)	63.9% (172/269)
Interdisciplinary: ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (effective September 27, 2016).	12.8% (34/266)	1.1% (3/266)	4.9% (13/266)	6% (16/266)	27.8% (74/266)	4.5% (12/266)	42.9% (114/266)