Response to vacuous standards subversion of the OSAC standards development process

The Editor,

In Forensic Science International: Synergy 2 (2020) 206–209, the authors (subsequently referred to as “authors”) of “Vacuous standards Subversion of the OSAC standards-development process” took exception to the efficacy of two recently published forensic standards. They asserted that the standards ANSI/ASB 030 Standard for a Quality Assurance Program in Bloodstain Pattern Analysis and ANSI/ASB 072 Standard for the Validation of Procedures in Bloodstain Pattern Analysis were meaningless and vacuous. This article addresses some of the misconceptions in their paper and provides more accurate information on how the Academy Standards Board of the American Academy of Forensic Sciences (ASB-AAFS) and other Standards Developing Organizations (SDOs) develop voluntary consensus standards for forensic science applications in cooperation with the Organization of Scientific Area Committees for Forensic Science (OSAC).

OSAC was established with a mission focused on “strengthening the nation’s use of forensic science by facilitating the development of scientifically sound forensic science standards and for promoting the adoption of those standards by the forensic science community” ([1] §11). OSAC is administered by the National Institute of Standards and Technology (NIST), part of the U.S. Department of Commerce. Among its many roles and programs, NIST coordinates the U.S federal response to the National Technology Transfer and Advancement Act (NTTAA) and the implementing directive, Office of Management and Budget Circular A-119 Federal Participation in the Development and Use of Voluntary Consensus Standards and in Conformity Assessment Activities [2] (subsequently referred to as “regulations”). These regulations direct U.S. federal agencies to, whenever possible, preferentially use non-governmental voluntary consensus standards in lieu of government-unique standards. Federal entities, including the Department of Justice, federal forensic laboratories, and all other federal agencies are required to follow these regulations, and must annually report their use of voluntary consensus standards through NIST to the U.S. Congress.

OSAC enlists Standards Developing Organizations (SDOs) to create consensus-based forensic standards. Some of the SDOs, such as ASB, are accredited by the American National Standards Institute (ANSI), although OSAC does not require ANSI accreditation. OSAC has a cooperative relationship with SDOs that utilizes the following flow. 1) Draft documents are developed by OSAC subcommittees. 2) OSAC submits these drafts to SDOs who consider them for standards development work and, if accepted for development, follow procedures to transform the draft documents into voluntary consensus standards and best practices. ASB publishes American National Standards so it follows ANSI accredited procedures. Of note, all SDOs have internal development procedures regardless of ANSI accreditation. 3) OSAC then reviews the final SDO published forensic standard or best practice and determines its eligibility for inclusion on the OSAC Registry established by NIST [3].

Given OSAC’s role and NIST’s statutory obligations, it is unclear why the authors felt that an SDO was subverting a process that OSAC chooses to use. Since many forensic standards users work in government facilities, OSAC’s preference for specifying private sector SDOs to further develop consensus standards is consistent with the NTTAA and the OMB Circular.

Another concern is that the authors’ appear to devalue consensus developed science-based standards as something “less” than the science-based work created in OSAC. Consensus, achieved through due process, is the very heart of the voluntary standards process. Consensus standards have a level of agreement - not necessarily unanimity -forged in an open, balanced process. Users, producers, government, laboratory personnel, forensic experts from many disciplines and others all provide input and reach agreement on the science as well as the expression of the science.

The consensus process in standardization furthers the applicability of the science. Consensus allows for critical thinking and implementation to be evaluated in a structured domain that includes public review. All comments including those from the forensics and scientific communities, the legal community, academia, the public at large, and the standards body must be fully considered. All negative comments must be resolved before a document can progress. Consensus, then, allows for thoughtful consideration of the science and the acceptability of the science’s implementation.

Consensus standards developed in an ANSI accredited process must be reviewed for possible revision every five years. Most if not all SDOs have a similar requirement. The benefit of review for potential revision falls to the users of the standards and to the furtherment of forensic science. As ASB and other SDOs work to develop voluntary consensus standards from the draft documents provided by OSAC, they are fully aware of how experience in using standards generates data and information that become part of the standards revision process which results in more robust, useful, and perhaps even more scientifically advanced standards.
The standards reviewed by the authors represent the strength of the consensus process where applicable science-based elements found agreement, while aspirational or ‘not yet there’ elements were left out. Unfortunately, as noted in the article, the authors did not contribute to the debate on any of the documents, so their potentially helpful ideas and views were not considered. Had they suggested changes, the committees involved would be obligated to consider their views.

Finally, standards writing is a complicated process. Rarely does the content of a standard meet the expectations of all the members of a community. Participation is a necessary component in effective consensus development. The public review process opens participation to anyone interested in shaping consensus through comments, criticisms, positive feedback, wording, structure suggestions, and other views. Science-based documents for forensic science may be an especially technical and challenging area for standardization, but that is precisely why timely and thoughtful input is both so welcome by ASB and other SDOs, and so necessary.

Respectfully,

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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