E4   Helping Juries and Officers of the Courts Make Sense of Statistics in Forensic Science: Update From the Working Group on Presenting Forensic Science Evidence Using Quantitative and Qualitative Terms (QQWG)

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After attending this presentation, attendees will learn about the nature of forensic inferences, the psychology of effective communication, and best practices related to presenting statistical information in testimony and reports.

This presentation will impact the forensic science community by informing forensic science practitioners, managers, and other key criminal justice system stakeholders how statistics can be effectively communicated in testimony and written reports. This presentation will provide better understanding of how numeracy, the ability to process basic probabilities and numerical concepts, affects how one processes qualitative and quantitative data.

The National Institute of Standards and Technology has partnered with the Pennsylvania State University to establish a working group that will propose generally applicable best practices for reporting relevant statistical information about forensic evidence (e.g., quantitative measurements, expressions of uncertainty or error probabilities in measurements or conclusions, and validation studies). To meet its charge, the working group reviewed studies related to the presentation of statistical information to lay individuals that have been published in forensic, legal, social science, and statistical literature. The group also reviewed how forensic science evidence and other types of expert or scientific evidence (e.g., medical evidence) have been presented in court in the United States (and in the similar legal system in the United Kingdom). This presentation will provide the findings and recommendations of the group.

Qualitative/Quantitative Data, Numeracy, Testimony