

Authentication, Access Control, and Authorization (1 of 2)



Health IT Standards Committee
A Public Advisory Body on Health Information Technology
to the National Coordinator for Health IT

NPRM Request (for 2017)

ONC is requesting comment on two-factor authentication in reference to two use cases:

- e-prescribing of controlled substances
- remote provider access to EHR technology

Specifically:

- 1) Whether the HIT Policy Committee’s recommendations are appropriate and actionable and, if not, what level of assurance should be the minimum required for provider-users seeking remote access to EHR technology.”
- 2) Whether we should adopt a general two-factor authentication capability requirement for certification...[which] could complement e-prescribing of controlled substances requirements and more definitively support security requirements for remote access to EHR technology as well as any other EHR technology uses that may require two factor authentication.”

Authentication, Access Control, and Authorization (2 of 2)



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PSWG Response (2017)

1) **Re: appropriateness and actionability of HITPC recommendation:**

The HITPC's policy recommendations are actionable, **from a certification perspective**, as the capability to require two forms of authentication can be tested functionally (for example, using the 800-63-2 LOA 3 functional specification). However, given the number of approaches that can be used in two-factor authentication for remote access, and the fact that authentication technology is likely to advance over the next three years, the PSWG cannot recommend a specific set of standards to use for this purpose.

However, from a policy perspective, we would note that in today's environment, "remote access" may be difficult to define, as it is situational. For example, would EHR access using a mobile device within a hospital be considered "remote access?" We would suggest that "remote access" needs to be clearly defined in order to make this policy recommendation actionable.

2) **Re: broad adoption of two-factor authentication:**

We are not aware of any meaningful-use measures or other healthcare policy that would warrant a general requirement for a two-factor authentication capability. However, if the ONC decides to add such a requirement, the PSWG suggests that a product presenting proof of having passed a DEA audit of its two-factor authentication capability should be considered as having met the certification requirement for two-factor authentication for an EHR, but not necessarily for remote access. We would again note that this can only be tested functionally (see response above). The PSWG also would observe that these two use cases (e-prescribing of controlled substances and remote access) highlight the need for healthcare engagement with the NSTIC program.



NPRM Request (for 2017)

ONC is requesting comments on the sufficiency of ASTM E1247 for the 2017 NPRM, specifically:

- 1) "The 'query' action in section 7.6 of the ASTM E2147 standard is not a defined term in the standard's definition section." ONC wants to know A) "whether this ambiguity has caused additional burden or challenges for EHR technology developers," B) "how EHR technology developers have interpreted the term when designing their EHR technology," and C) if there is any "industry knowledge related to any plans to revise ASTM E2147 to address this ambiguity."
- 2) "Whether [ONC] should establish a minimum/baseline set of actions that EHR technology must always be capable of" for the purpose of audit?
- 3) Whether there are other actions that ONC should consider specifying in an updated standard for the 2017 Edition that the current standard does not sufficiently address, such as the act of 'transmission'? ONC does not favor this approach because implementing it in regulation would cause addition to the existing standard and seeks feedback on whether the standard is sufficiently up-to-date and appropriately specifies all of the actions necessary for EHR audit logs to capture.
- 4) Are there "any alternative standards to ASTM E2147 that [ONC] should consider in light of the aforementioned concerns and ambiguities."



PSWG Response (2017)

1) **Re: The 'query' action in section 7.6 of the ASTM E2147 standard:**

ASTM E2147 was updated a year ago, and the PSWG is not aware of any need to define 'query' or any problems developers have encountered regarding query. Greater vendor input is needed to fully answer this question for the entire healthcare industry. We recognize that there is confusion in the market in understanding the Security Audit Logging concept. We would suggest that a broader reference to ASTM E2147 might serve well to help clarify any misunderstandings. Specifically, we recommend expanding the references to include at least section 5 which explains Security Audit Logging and describes the kinds of events that should be recorded in the audit log. In addition, we recommend that Section 7 be referenced in its entirety, rather than individually enumerating those parts of Section 7 that are not labeled "optional." Note that by citing all of Section 7, the labeled provisions still would be treated as "optional."

2) **Re: Minimum/baseline set of actions for the purpose of audit**

Section 7.6 of ASTM E2147 specifies the types of actions to be included in the audit trail and should cover any type of action taken within an enterprise, including transmitting a record within an enterprise, which would require a "copy." Transmissions to outside the enterprise are covered in Section 8, Disclosure Log Content, but Accounting of Disclosures currently is outside the scope of EHR certification so Section 8 should not be added at this time. Typically, one audits security relevant actions associated with performing required functions; one does not require functions so that they can be audited. The PSWG is opposed to establishing a minimum or baseline set of actions that EHR technology must always be capable of so that they can be audited.



PSWG Response (2017)

3) Re: Other actions to consider specifying, such as the act of ‘transmission’:

The PSWG believes it is quite feasible to certify EHR compliance with the ASTM E2147 audit log standard, and does not recommend ONC specify other actions in an updated standard for the 2017 Edition, or that ONC consider any additional standards.

4) Re: Alternative standards to consider:

The PSWG believes it is quite feasible to certify EHR compliance with the ASTM E2147 audit log standard, and does not recommend that ONC consider any additional standards.



NPRM Request

ONC plans “to adopt 2015 Edition certification criterion that is the same text as the 2014 Edition version. However, given [ONC’s] proposal to discontinue the Complete EHR concept” ONC is proposing that this criterion no longer be optional as “such a designation would no longer be necessary.”

PSWG Response

Since OCR has not yet issued its final rule, the PSWG believes it is premature to include an Accounting of Disclosures criterion at this time, **and agrees with ONC’s recommendation to remove it as an “optional” requirement.**