

Comparing the Usability of Health Information Technology

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Criticality of Usability Comparison

- Sub-optimally designed Health IT remains a significant issue
 - Frustrating interaction for clinicians
 - Unsafe for patients
- Comparison tools will likely improve transparency which will support:
 - More informed purchaser decision-making
 - Vendors competing on usability in the marketplace

Need to Compare Process and Product



- Provide a method for comparing the usability design and development process
- Provide a method for comparing the *actual* usability of the implemented product
 - Subjective user assessment
 - Objective quantitative assessment

Barriers to Comparing Process

- Limited to a statement of process, but no evidence of process to compare across EHRs
- Poor adherence to standard reporting makes comparison difficult

Vendor Name	Reported Process Max pts:5	Participants Max pts:1	Clinical Expertise Max pts:2	Use Cases Max pts:1	Metrics Max pts:1	Effectiveness Max pts:3	Improvements Max pts:2	Total score
	5 ISO 9241-210	0 9.3	2 100%	.5 Vague	1 Complete	3 93.4	.5 Scant	12
Points assigned	Stated UCD process	Avg. # of participants used across all tests	% of clinical participants	Richness of use cases	Completeness of metrics	Avg. % effectiveness	Completeness of improvements	

www.healthITusability.org

Barriers to Comparing Product Usability

- **Certified Product**

- Standard use cases and testing methods
- Adherence to reporting requirements
- Standard reporting templates

- **Implemented Product**

- Access to EHRs
- Standard use cases and testing methods
- Authority to conduct assessment

Recommendations

- Consider:
 - Evidence of vendor user centered design process
 - Standard use cases for usability testing
 - Usability assessment of implemented EHRs
 - Safety surveillance data made available as part of product comparison

Thank You

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