

Section Interop.3 – EHR Interoperability Model – Stakeholder Assurance

Table Interop.3.A (following) describes, column by column:

A) Identifier

B) EHR Interoperability Assertion or Characteristic

C-E) Stakeholder Assurance

Col	Stakeholder	Record Role
C	Patient, Consumer	Subject
D	Healthcare Provider	Originator, Author, Source
E	All	Recipient, User

ID	EHR Interoperability Assertion/Characteristic	<u>Assurance</u> Patient, Consumer Record Subject	<u>Assurance</u> Provider, Record Source/ Originator	<u>Assurance</u> Record Recipient/User
Section 1 - Health(care) Delivery				
1.1	Health(care) delivery occurs at points along a time continuum.			
1.2	The Health Record documents health(care) along the time continuum.	Trusts that his/her Health Record documents health(care) along the time continuum.	Trusts that his/her authored Health Record documents part of health(care) rendered along the time continuum.	Trusts that received Health Records document health(care) rendered along a time continuum.
Section 2 - Health(care) Act				
2	An Act is a discrete action, service or event occurring in the course of health(care) delivery.			
2.1	An Act is an accountable unit of health(care) delivery.			
2.2	Health(care) delivery is comprised of Acts.			
2.3	An Act has associated facts, findings and observations.			
2.4	An Act is (one of):			
2.4.1	Patient related.			
2.4.2	Not patient related.			
2.5	An Act has Actor(s), in Roles, in Participations.			
2.6	An Act has one or more accountable Actor(s).			
2.7	An Act occurs at a specific date/time and has an elapsed time.			
2.8	An Act occurs at a specific physical location.			
2.9	An Act may be an aggregation of other Acts.			
Section 3 - Act Record				
3	An Act is documented by an Act Record instance.			

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3	An Act is documented by an Act Record instance.	Trusts that each Act and its corresponding Act Record persist as a complete and legal record of the Act.	Trusts that the authored Act Record persists as a complete, legal and persistent record of the Act.	Trusts that the received Act Record is the complete, legal and persistent record of the Act.
3.1	An Act/Act Record instance is uniquely identifiable.			
3.2	An Act Record is persistent legal evidence of Act occurrence.	Trusts that each Act Record is/has:	Trusts that each authored Act Record is/has:	Trusts that each received Act Record is/has:
3.3	An Act Record is a unit of record of the Health Record.	<ul style="list-style-type: none"> • uniquely identifiable; • attested as to Actors, Roles and Participations; 	<ul style="list-style-type: none"> • uniquely identifiable; • attested as to Actors, Roles and Participations; 	<ul style="list-style-type: none"> • uniquely identifiable; • attested as to Actors, Roles and Participations;
3.4	An Act Record is comprised of multiple attributes (elements).	<ul style="list-style-type: none"> • attested for authorship, accuracy and completeness; 	<ul style="list-style-type: none"> • appropriate and factual content; 	<ul style="list-style-type: none"> • attested for authorship, accuracy and completeness;
3.5	An Act Record may contain attributes:	<ul style="list-style-type: none"> • appropriate and factual content; 	<ul style="list-style-type: none"> • protected by access controls; 	<ul style="list-style-type: none"> • appropriate and factual content;
3.5.1	Current to the Act	<ul style="list-style-type: none"> • known source, time and location; 	<ul style="list-style-type: none"> • traced (audit trailed) for original content and amendments; 	<ul style="list-style-type: none"> • known source, time and location;
3.5.2	Of an historical nature	<ul style="list-style-type: none"> • protected by access controls; 	<ul style="list-style-type: none"> • traced (audit trailed) for original content and amendments; 	<ul style="list-style-type: none"> • protected by access controls;
3.6	An Act Record is (one of):	<ul style="list-style-type: none"> • traced (audit trailed) for original content and amendments; 	<ul style="list-style-type: none"> • traced (audit trailed) for access/use, transmittal and disclosure, receipt, de-identification/aliasing... 	<ul style="list-style-type: none"> • traced (audit trailed) for original content and amendments;
3.6.1	Patient specific and patient identifiable.	<ul style="list-style-type: none"> • traced (audit trailed) for access/use, transmittal and disclosure, receipt, de-identification/aliasing... 	<ul style="list-style-type: none"> • linked to corresponding encounters, problems, orders, care plans... 	<ul style="list-style-type: none"> • traced (audit trailed) for access/use, transmittal and disclosure, receipt, de-identification/aliasing...
3.6.2	Not patient specific.	<ul style="list-style-type: none"> • linked to corresponding encounters, problems, orders, care plans... 		<ul style="list-style-type: none"> • linked to corresponding encounters, problems, orders, care plans...
3.6.3	Patient related but aliased.			
3.6.4	Patient related but anonymized.			
3.7	An Act Record is (one of):			
3.7.1	A non-attestable unit of the health record			
3.7.2	An attestable (signature specific) unit of the health record, which is (one of):			
3.7.2.1	Attested by one or more Actor(s)/ Author(s)			
3.7.2.2	Not yet attested			
3.8	An Act Record has (may have):			
3.8.1	One or more originating Actor(s)/Author(s)			
3.8.2	One or more amending Actor(s)/Author(s)			

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3.9	An Act Record is sourced by an originating application.			
3.10	An Act Record allows revision by additive amendment only.			
3.10.1	Each Act Record amendment may include a reason for amendment			
3.11	An Act Record is time stamped according to:			
3.11.1	Act Date/Time			
3.11.2	Act Duration			
3.11.3	Act Record Origination Date/Time			
3.11.4	Act Record Amendment Date(s)/Time(s)			
3.12	An Act Record is oriented to physical locations:			
3.12.1	Act Location			
3.12.2	Act Record Origination Location			
3.12.3	Act Record Amendment Location(s)			
3.13	An Act Record is originated/amended at a specific device and network location.			
3.14	An Act Record may contain uniquely identified multi-media elements.			
3.15	An Act Record may contain uniquely identified document elements.			
3.16	An Act Record may be signed or attested as complete, by declaration or by algorithmic measure.			

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3.17	An Act Record may be designated as accurate, by declaration or by algorithmic measure.			
3.18	An Act Record may embed access controls to allow only permitted:			
3.18.1	Record access/view			
3.18.2	Record creation/amendment			
3.19	An Act Record has an embedded audit trail, tracing:			
3.19.1	Original record content along with each successive amendment, time stamped			
3.19.2	Point of record origination and initial retention			
3.19.3	Point of record amendment			
3.19.4	Point of record content translation			
3.19.5	Point of record verification			
3.19.6	Point record attested complete			
3.19.7	Point record attested accurate			
3.19.8	Point of record content access/view			
3.19.9	Point of record transmittal or disclosure (to external entity)			
3.19.10	Point of record receipt (from external source)			
3.19.11	Point of record de-identification, aliasing			
3.19.12	Point of record re-identification			
3.19.13	Point of record archival			
3.19.14	Point of record destruction or identified missing			
3.19.15	Point of record deprecation			
3.20	An Act Record may be:			

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3.20.1	Part of a patient encounter			
3.20.2	Related to an identified patient problem			
3.20.3	Related to a specific order or care plan			
Section 4 - Act Record Attributes				
4	[Per 2.3 & 3.4] An Act Record is comprised of multiple attributes (elements).			
4.1	An Attribute is uniquely identifiable.			
4.2	An Attribute has a data type.			
4.3	An Attribute is (one of):			
4.3.1	Computable			
4.3.2	Non-computable			
4.4	An Attribute may have (one or more):			
4.4.1	Unit of measure			
4.4.2	Reference range			
4.4.3	Expiration date/time or duration			
4.5	An Attribute may be encoded according to:			
4.5.1	Industry standard coding/classification scheme			
4.5.2	Local coding/classification scheme			
4.6	An Attribute may be translated from one code set to another with:			
4.6.1	Industry standard mapping scheme			
4.6.2	Local mapping scheme			

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4.7	An Attribute may embed access control parameters to allow only permitted:			
4.7.1	Attribute access/view			
4.7.2	Attribute edit			
Section 5 - Health Record				
5	A Health Record is comprised of Act Record instances.			
5.1	A Health Record may be:			
5.1.1	Patient specific & identifiable			
5.1.2	Not patient specific			
5.2	A Health Record is bounded within a timeframe, specifically:			
5.2.1	At point in time			
5.2.2	Over one or more patient encounter(s)			
5.2.3	Over a patient's lifetime			
5.2.4	Within an arbitrary period of time			
5.3	A Health Record may be patient specific:			
5.3.1	Patient Personal Health Record			
5.3.2	Patient Encounter Record			
5.4	A Health Record may be provider oriented:			
5.4.1	Practitioner Service Record			
5.4.2	Provider Service Record			
5.5	A Health Record may be population oriented:			
5.5.1	Population Health Record - Identifiable			
5.5.2	Population Health Record - Anonymized			
Section 6 - Patient Encounter Record				

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6	[Per 5] A Patient Encounter Record is comprised of Act Record instances.			
6.1	A Patient Encounter Record is persistent legal evidence of the encounter.			
6.2	A Patient Encounter Record may be designated as complete, by declaration, by algorithmic measure or by declaration of agreement with algorithmic measure.			
Section 7 - Patient Summary Record				
7	The Act of creating a summary record is in itself an Act and produces an Act Record			
7.1	A Summary Record is (one of):			
7.1.1	Persistent			
7.1.2	Non-Persistent			
Section 8 - EHR Interoperability (In Summary)				
8	EHR interoperability occurs via the interchange of Act Records			
8.1	<u>Technical</u> EHR Interoperability: Act Records are interchanged with secure and reliable transport.			
8.2	<u>Semantic</u> EHR Interoperability: Act Records are interchanged with content and meaning preserved.			
8.3	<u>Process</u> EHR Interoperability: Act records are interchanged in the course of the healthcare delivery process and promote continuity of that process.			