

Timestamp	Name • Organization • Role	Vote	Use Case Section	Comment	Disposition
9/26/2014 9:25:53	Willis Morris • Independent • Committed Member	Yes			
9/30/2014 13:49:23	Oliver Lawless • Independent • Committed Member	Formal Objection (with comments)	5.0 Use Case Assumptions	<p>1. Clinical data and information that already exists within EHR, PHR, and HIE systems (without the use of the CDA artifact) is found at the level appropriate for the implementation. (Added PHR and HIE)</p> <p>4. Data provenance captures (embodies) data related to the Who, What, When, Where, Why, and Authenticity of a clinical encounter or data capture event for each type of author and supporting system. (This is literally what data provenance is. It has to be stated in the assumptions, refer back to itself in the Dataset Requirements section, and be used for harmonization with the Implementation Guide and everything else that is going on with the initiative. If this isn't in there, what data are we going to base everything on or carry forward for next steps?)</p>	<p>1. Accepted</p> <p>2. Accepted with Modifications - Added to Initiative Overview and Changed to: Data provenance captures (embodies) data related to the Who, What, When, Where, Why, and Authenticity of a clinical encounter or data capture event for each type of author and supporting system</p>
9/30/2014 13:58:34	Oliver Lawless • Independent • Committed Member	Yes (with comments)	6.0 Pre-Conditions	<p>1. Strike "on behalf of one or more organizations or persons (e.g. a patient) responsible for deploying it. This muddles who owns and deploys an assembler in their system and who are the actors that may use it. It isn't very clear or correct and can be striken.</p> <p>1 Bullet. Should be authoring system instead of sending system and strike receiving system. Provenance data is captured in an assembly/recorded event, not as part of a transmission of that record or data. If it's done with some sort of metadata at the exchange level it can't achieve permanence for future use and would just be a log event.</p> <p>2. at the end of sentence... as specified herein.</p> <p>6. Add privacy and security.</p>	<p>1. Accepted</p> <p>1 bullet. Accepted with Mod</p> <p>Added "authoring or sending"; we kept receiving system to specify who the information is being sent to</p> <p>2. Accepted</p> <p>6. Accepted with Mod</p> <p>Changed to: Systems participating must be able to appropriately maintain privacy and security (e.g. confidentiality, integrity, and availability of information)</p>
9/30/2014 14:02:27	Oliver Lawless • Independent • Committed Member	Yes (with comments)	8.0 Actors and Roles	<p>Add "Create Data Exchange Artifact" to Start Point, Assembler, and Composer.</p> <p>Add Consolidate and Select Data for Assembler and Composer instead of Consolidate/Consolidate Selected Data. Both have to make selections in every case.</p>	<p>"Create Data Exchange Artifact" has been added in the system requirements table for each one of the actors (refer to Table 11).</p> <p>To differentiate the Assembler from the Composer, the community had previously agreed upon the distinction lying in the selection of the data. This is also reflected on the Use Case glossary page.</p>
9/30/2014 14:12:51	Oliver Lawless • Independent • Committed Member	Yes (with comments)	10C.1. User Stories	<p>Strike "and the actions they have taken" with regard to the Assembler. Assembler will be identified but whatever algorithm, decision making, or terms of service aren't going to be reflected in the document created. It doesn't make sense to state that that is going to happen because the backstory is long and cumbersome, that documentation would require a separate spec, and will presumably be stated in the terms of service or data use agreement.</p> <p>Third bubble - package clinical and provenance data into an data exchange artifact and send that data exchange artifact to the requestor/receiver.</p> <p>Fourth bubble should say that both Assembler and Composer "aggregates and selects data incorporated in the data exchange artifact created."</p> <p>Fifth bubble - send packaged response to the requestor/receiver.</p>	<p>Third bubble: Accepted with Modifications</p> <p>Changed to: Assembler/Composer is triggered by an event or receives a query that triggers a requirement to package and send the data exchange artifact to the requester/receiver.</p> <p>Fourth bubble: Accepted with Modifications</p> <p>Added: incorporated in the data exchange artifact created.</p> <p>Community has agreed that the differentiator between the Assembler and Composer is the "selection" piece</p> <p>Fifth bubble: Accepted</p>
9/30/2014 14:16:21	Oliver Lawless • Independent • Committed Member	Yes (with comments)	10C.2.1 Base Flow	<p>3 and 4 - Aggregate, select, and package clinical data</p> <p>For Role and Event/Description where it applies</p>	<p>Accepted with Modifications</p> <p>Base Flow has been updated to match Activity Diagram; Community has agreed that the differentiator between the Assembler and Composer is the "selection" piece</p>
9/30/2014 14:18:08	Oliver Lawless • Independent • Committed Member	Yes (with comments)	10C.3.2 System Requirements	<p>Assembler - 2. Aggregate, extract, and select clinical data</p> <p>Add 3. Create exchange artifact</p>	<p>2. Not Persuasive</p> <p>Community has agreed that the differentiator between the Assembler and Composer is the "selection" piece</p> <p>3. Accepted</p> <p>Added create exchange artifact.</p>

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				<p>Dataset Requirements are for what? Creation or Exchange? They're different purposes and data sets. This data set has to be done better because it's the basis for harmonization and everything going forward. If it is generic and imprecise (as it is now), it's isn't usable as a building block.</p> <p>Start Point: Sending System and Organization should be authoring system/organization Add - Patient Record Target Assigned Author Informant Service Event Performer Authenticator Legal Authenticator</p> <p>Transmitter: Add - Patient Record Target</p> <p>Whatever is listed here has to be able to be captures, recorded, and exchanged in a persistent form. Where is the Transmitter data detail going to be captured?</p> <p>Originator: Add I would make this Start Point/Oriinator. Otherwise it's confusing and potentially incorrect. Patient Record Target Author Assigned Author Authoring System Authoring Organization Informant Service Event Performer Participant Custodian Authenticator Legal Authenticator</p> <p>It isn't Originator Time Sent - the date and time refer to when the record was created/data captured. Not sending. The preamble should state whether this stuff is going to be captured in an exchange artifact with persistence and fidelity for re-use or just in a system log, which isn't really data provenance in the way it's being addressed here. That goes for all examples.</p> <p>Assembler/Composer: Add - Patient Record Target Author Assigned Author Authoring System Authoring Organization Informant Service Event Performer Participant Custodian Authenticator Legal Authenticator</p> <p>Assembler and Composer can have non-human authenticators that certify compliance with a given algorithm and data use agreement as of assembly date. These docs need a Custodian because there will be versions of patient data that change over time and each snapshot which was captured may need to be referred to for legal and clinical purposes.</p>	
9/30/2014 14:40:41	Oliver Lawless • Independent • Committed Member	Formal Objection (with comments)	11.0 Dataset Requirements	<p>Where is Intended Recipient going to be captured in the Assembler exchange artifact? Where is the Selector going to be identified in the Composer case? Selector could be Performer and Service Event is record assembly.</p>	<p>Dataset requirements are for either creation or exchange or both depending on the role as described in the table. When an actor is performing in that role (such as an Assembler), then that actor's dataset requirements follow in the table.</p> <p>During harmonization we will evaluate the standards against the dataset requirements in the Use Case. During this process, it is likely that we will have the opportunity to refine the dataset requirements.</p>
9/30/2014 14:49:12	Oliver Lawless • Independent • Committed Member	Yes (with comments)	12.0 Risks, Issues and Obstacles	<p>1. Provenance data shouldn't be affected just because it moves through multiple locations. Sentence should say "due to record/data extraction and re-assembly."</p> <p>1.1. Strike "this refers to" on. Accumulation and movement doesn't affect provenance.</p> <p>1.2. Strike this. Changes aren't made. The data stays intact, it's just divided into pieces and since the provenance may be assigned to the document as a whole, the piecemeal provenance may be lost. This sentence isn't correct and I would delete it.</p> <p>1.3. I would also strike this. Bring up multiple threads of provenance - where? - is something that doesn't need to be addressed or tackled until the base cases are actually well thought out and working.</p> <p>6. I would strike this because that is what this initiative is supposed to be doing - standardizing the representation of data provenance.</p>	<p>Added additional data elements</p> <p>1. Accepted with Modifications Changed to: The management of data provenance will become harder due to record/data extraction and re-assembly, and its movement through the life cycle and multiple locations.</p> <p>1.1. Not persuasive While accumulation may not affect provenance, the accumulation OF provenance is the issue.</p> <p>1.2. Accepted with Modifications Changed to: When a provenance even occurs, the provenance information is changed accordingly; the accumulation on provenance changes poses a challenge</p> <p>1.3. Disposition: This has been previously agreed upon and revised by the community.</p> <p>6. Accepted; already conveyed in Challenge Statement</p>
9/30/2014 18:14:29	Gary Dickinson • CentriHealth • Committed Member	Formal Objection (with comments)	General Comment	<p>CentriHealth comments are posted here in .pdf form: https://dl.dropboxusercontent.com/u/10786720/ONC-SI-Data%20Provenance%20Consensus%20Review-20140930.pdf</p> <p>[I can't get our comments to display correctly or completely in this Comment box.]</p>	<p>No Actionable Comments</p> <p>The three documents referenced have all been addressed through multiple public/community conference calls; several meetings were extended to address these comments. No new comments were found in the document submitted during consensus voting.</p>
10/1/2014 22:34:16	Lester Keepper • SHAPE HITECH, LLC • Committed Member	Yes			
10/3/2014 18:35:39	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	1.0 Preface and Introduction	<p>"establish trusted, high integrity data" need to be in this first paragraph. You need to tie in the issue of "Provenance" and the value of getting at the "evidence of origin" of data. Also, need to weave in the issue of "chain of trust" when data is exchanged. Here is another good phrase to weave in "improve trust in healthcare data and its applications."</p>	<p>Accepted with Modifications</p>
10/3/2014 18:36:41	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	1.0 Preface and Introduction	<p>For bullet list: Either the Use Cases are too "generalized and technical, or you are missing inclusion of "User Stories" which clearly link the functional capabilities with the business goals/needs listed in the paragraph above.</p>	<p>Added second paragraph; this is also captured in the sections under Initiative Overview (2.0)</p> <p>Accepted</p>

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10/3/2014 18:37:38	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	1.0 Preface and Introduction	<p>"The Use Case is the foundation for identifying and specifying the standards required to support the data exchange and developing reference implementations and tools to ensure consistent and reliable adoption of the data exchange standards. "</p> <p>True, but the Use Case also needs to allow you to track back to "real life examples" (Maybe we should call them User Stories, where you can see the humans and systems in the story and can see where the actors in the Use Case actually plug in to the User Story. This is how you establish that the proposed innovation actually adds value into the real life scenario.</p>	Accepted Addressed by the first bullet in the paragraph above. User Stories are a component of the Use Case.
10/3/2014 18:40:10	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	2.0 Initiative Overview	<p>A significant amount of literature has discussed the value, importance and legal necessity of provenance.</p> <p>The Data Provenance Initiative aims to establish a standardized way of capturing provenance (including inbound, system generated, and outbound provenance), retaining and exchanging the provenance of health information. (Provenance Capabilities)</p> <p>*President's Council of Advisors ...</p> <p>You should quote some specific here.</p> <p>Alternate Sentence Suggestion: The Data Provenance Initiative aims to establish a standardized way of capturing, retaining and exchanging the provenance of health information for data that is originated or assembled by humans and well as systems.</p>	<p>What we currently have does not preclude humans or systems; this is language taken directly from the consented Charter</p> <p>The paragraph with the asterisk will be moved to the References in the Appendix section</p>
10/3/2014 18:41:11	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	2.1 Initiative Challenge Statement	<p>Further challenges are presented if one system can share detailed provenance data but those receiving it cannot capture, retain and convey the level of detail exchanged.</p> <p>Alternate wording suggestion: Further challenges are presented if one system can share detailed provenance data but those receiving it cannot capture, retain and convey the same level of detail.</p>	Addressed by the first bullet in the paragraph above. User Stories are a component of the Use Case.
10/3/2014 18:45:27	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	3.0 Use Case Scope	<p>* When the receiving system combines this information with data received from third parties, how do we persist the provenance from multiple sources?</p> <p>You need to also deal with where, now just how it is persisted. A distinction exists between what is saved in metadata or in a document handling system, and what actually persists with the document. You need to deal with WHERE the information is persisted. The assumption needs to be that the Provenance information travels with the data – IN THE PERSISTENT DOCUMENT...otherwise we won't be able to trust that we are seeing the WHOLE TRUTH about the provenance of the data we are looking at.</p>	Not Persuasive This bullet point is a discussion item helping frame the overall efforts of the initiative, it's not meant to be specific to CDA.
10/3/2014 18:48:13	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	3.4 Communities of Interest (Stakeholders)	<p>Patient Healthcare consumers who are recipients of health care services and products.</p> <p>Either add another row or broaden this to include patient's family members.</p> <p>BTW - something seems wrong with the numbering here, 3.3 is Communities of Interest</p>	Not Persuasive This is a high level list of communities of interest. Patient's families or patient's delegates are all considered within the community of interest.
10/3/2014 18:53:54	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	4.0 Value Statement	<p>Ultimately these standards will improve trust in healthcare data and its applications, which may include clinical care, interventions, analysis, decision making, clinical research, and other uses.</p> <p>Can you include patient engagement.</p>	Accepted
10/3/2014 18:59:54	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	6.0 Pre-Conditions	<p>Need to clarify that there is Never a use case where there is not either a Person or a Device listed as the Author. There may additionally be some software listed as a participant in the role of assembler. But in CDA documents There MUST be an AUTHOR, CUSTODIAN, and RECORDTARGET.</p> <p>I think you need some real examples and then say, in each example, who is the Author person and what system is playing the role of the Assembler. Or what constitutes the authoring device and what is the Assembler software. It isn't clear how to distinguish the concepts/roles an apply them in the context of what you are describing.</p>	Not persuasive This Use Case is not specific to the CDA. If conformance statements need to be specified, they will be documented in any resulting technical specification.
10/3/2014 19:00:42	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	8.0 Actors and Roles	<p>It is hard for me to see the Person or Device Author –or to tell that they have a role, and will be documented in the CDA, but are not the focus here... These actors seem only involved with moving the data around...The evidence of the person or device authoring the information has already been assumed to have been captured, right?</p>	Not Persuasive We are using these as generalized actors and roles not specific to CDA concepts.
10/3/2014 19:01:33	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	10A.1 User Stories	<p>Please establish who is the Author, the assembler, the start point, the end point, the assembler, etc. in this story. I'm having trouble seeing the base roles for the CDA: RecordTarget, Author, Custodian, Participant, Informant, etc.</p>	The Use Case aims to be broadly applicable and extensible, and the Use Case aims to be standards agnostic. The User Stories aim to capture generalized requirements not specific to the CDA. Also reviewed User Stories on 9/16 All Hands and made sure human aspect was not lost.
10/3/2014 19:02:12	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	10B.1 User Stories	<p>Please establish who is the Author, the assembler, the start point, the end point, the assembler, etc. in this story. I'm having trouble seeing the base roles for the CDA: RecordTarget, Author, Custodian, Participant, Informant, etc.</p>	The Use Case aims to be broadly applicable and extensible, and the Use Case aims to be standards agnostic. The User Stories aim to capture generalized requirements not specific to the CDA. Also reviewed User Stories on 9/16 All Hands and made sure human aspect was not lost.
10/3/2014 19:02:54	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	10C.1. User Stories	<p>Please establish who is the Author, the assembler, the start point, the end point, the assembler, etc. in this story. I'm having trouble seeing the base roles for the CDA: RecordTarget, Author, Custodian, Participant, Informant, etc.</p> <p>Could you align this analysis with the 9 participations and 5 act relationships of the CDA Model. This clear alignment will make it easier to see what information gets recorded where.</p>	The Use Case aims to be broadly applicable and extensible, and the Use Case aims to be standards agnostic. The User Stories aim to capture generalized requirements not specific to the CDA. Also reviewed User Stories on 9/16 All Hands and made sure human aspect was not lost.
10/3/2014 19:06:33	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	11.0 Dataset Requirements	<p>The structure of the CDA Header provides a perfect framework for the the analysis, and the answers will line up directly with the artifact available to represent the information. You just walk through the questions associated with the 9 participations a 5 act relationships to make sure you can explain/account for the data requirements for these 14 areas.</p>	Acknowledged Thank you for your comment! This mapping is a good idea and would be most appropriate in the Provenance CDA IG.
10/3/2014 19:09:25	Lisa Nelson • Life Over Time Solutions, LLC • Committed Member	Formal Objection (with comments)	11.0 Dataset Requirements	<p>You really do need to distinguish what data is IN a CDA Document and what data is OUTSIDE the CDA document when it is exchanged. THERE IS A HUGE difference and it is relevant to know what is IN the document and what only exists as metadata OUTSIDE of the document.</p> <p>Much of this information is carried on the envelope, not in the letter (for XDS or Direct or in a document management system). There is provenance information in the metadata...and we need to deal with how to persist that with the data it is currently separated away from.</p>	Acknowledged Thank you for your comment! These are CDA implementation specific issues; this discussion would be most appropriate in the Provenance CDA IG.

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10/3/2014 19:21:47	Satya Sahoo • Case Western Reserve University • Committed Member	Yes (with comments)	10C.0 Scenario	<p>1. Scenario 2 and 3 are same in terms of provenance management requirements. Scenario 2 depicts transmission of provenance (without errors or unintended changes). Similarly, Scenario 3 is transmission of existing data + provenance with additional data + provenance (without errors or unintended changes). Scenario 3 alone can be used to represent both.</p> <p>2. Instead a new scenario involving modification of data that is captured in the provenance instead of simple aggregation/transmission of data (as reflected in Scenario 2 and 3) needs to be included. For example, x-ray report from center A is modified after second reading by radiologist in center B. The results from center B are used for treatment of patient. A year after incident, PCP can look at provenance of current treatment based on center B results and also the original results from center A.</p> <p>The above use case is a suggestion and can be modified to reflect modification of data and the associated provenance recording.</p> <p>3. In 12.0, the statement "Data representation of provenance is not standardized" is not clear. The W3C PROV specification are also not mentioned.</p>	<p>Acknowledged</p> <p>Thank you for the suggestion!</p> <p>1 &2. The scenarios in the Use Case are intended to service a foundation for developing the technical specification during the Harmonization phase of the initiative. The community discussed several possibilities for additional scenarios and agreed that those currently included in the Use Case were sufficient.</p> <p>3. Candidate standards including W3C PROV specification have been listed on the Wiki and will be addressed during the harmonization phase.</p>