

Digital Bridge eCR Functional Requirements Statements

January 24, 2017

To be read with accompanying eCR Task Flow diagram and process notes documents. Documentation available at digitalbridge.us

Task	Req ID	ENTITY / FUNCTIONAL ROLE	ACTIVITY	FUNCTIONAL REQUIREMENT	INITIAL IMPLEMENTATION REQUIREMENT STATUS (Required, Optional, or Deferred)	TECHNICAL REFERENCE	COMMENTS
1	1.00	Health Care Provider	Begin Patient Visit				
1	1.01	Health Care Provider	Begin patient visit	None – Outside scope of eCR	N/A		
2	2.00	Health Care Provider	Review, Deliver and Document Patient Care				
2	2.01	Health Care Provider	Review, Deliver and Document Patient Care	Accept structured information, including patient and clinical information that is either in coded values or can be translated by the EHR to coded values.	Required – required for all Digital Bridge Initial Implementations		This pre-defined process is unique to each patient and provider encounter but could include documenting symptoms, history, diagnoses, ordering labs, performing procedures, prescribing medications, etc.
3	3.00	Health Care Provider	Provider Initiated Electronic Initial Case Report				
3	3.01	Health Care Provider	Provider Initiated Electronic Initial Case Report	Provide ability for user to manually trigger an electronic initial case report	Optional – not required, may be implemented by Digital Bridge Initial Implementations if so desired	HL7 CDA® R2 Implementation Guide: Public Health Case Report, Release 2 - US Realm - the Electronic Initial Case Report (eICR) http://www.hl7.org/imple	

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7	7.00	Health Care Provider	Send Electronic Initial Case Report to Decision Support Intermediary				
7	7.01	Health Care Provider	Send Electronic Initial Case Report to Decision Support Intermediary	Send public health case report to decision support intermediary	Required – required for all Digital Bridge Initial Implementations	Decision Support Intermediary will be the APHL Informatics Messaging Service (AIMS) https://www.aphl.org/programs/informatics/Pages/aims_platform.aspx	Digital Bridge initiative will collaborate with implementing sites on agreements needed to connect to AIMS. Electronic initial case report may travel to another intermediary (e.g., HIE) before reaching AIMS.
7	7.02	Health Care Provider	Send Electronic Initial Case Report to Public Health Decision Support	Provide ability for Health Care Provider to configure EHR to send eICR to an electronic endpoint responsible for routing to Decision Support Intermediary	Optional – not required, may be implemented by Digital Bridge Initial Implementations if so desired		Electronic initial case report may travel to another intermediary (e.g., HIE) before reaching AIMS.
8	8.00	Health Care Provider	Document Activity Related to eICR				
8	8.01	Health Care Provider	Document Activity Related to eICR	Document confirmation of receipt of eICR by Decision Support Intermediary	Required – required for all Digital Bridge Initial Implementations		This information will be provided by Decision Support Intermediary
8	8.02	Health Care Provider	Document Activity Related to eICR	Document the information contained within the eICR that is sent to the Decision Support Intermediary	Required – required for all Digital Bridge Initial Implementations		
8	8.03	Health Care Provider	Document Activity Related to eICR	Document request for information missing from eICR	Required – required for all Digital Bridge Initial Implementations		This request will be provided by Decision Support Intermediary
8	8.04	Health Care Provider	Document Activity	Notify provider (or associated support personnel) of request	Required – required for all Digital Bridge Initial Implementations		

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			Related to eICR	for information missing from eICR			
8	8.05	Health Care Provider	Document Activity Related to eICR	Document provision of information missing from eICR	Required – required for all Digital Bridge Initial Implementations		
8	8.06	Health Care Provider	Document Activity Related to eICR	Document determination of public health reportability	Optional – not required, may be implemented by Digital Bridge Initial Implementations if so desired		This information will be provided by Decision Support Intermediary
8	8.07	Health Care Provider	Document Activity Related to eICR	Document which public health agency (or agencies) case report was forwarded to	Optional – not required, may be implemented by Digital Bridge Initial Implementations if so desired		This information will be provided by Decision Support Intermediary
8	8.08	Health Care Provider	Document Activity Related to eICR	Document confirmation of receipt of eICR by public health agency (or agencies)	Optional – not required, may be implemented by Digital Bridge Initial Implementations if so desired		
8	8.09	Health Care Provider	Document Activity Related to eICR	Notify provider (or associated support personnel) of request for follow up action	Optional – not required, may be implemented by Digital Bridge Initial Implementations if so desired		This information will be provided by Decision Support Intermediary Follow up actions could include: Immediate reporting via telephone to Public Health Agency; Request for supplemental information on case;
8	8.10	Health Care Provider	Document Activity Related to eICR	Provide ability to queue and prioritize notifications and requests for follow up action received by Decision Support Intermediary	Optional – not required, may be implemented by Digital Bridge Initial Implementations if so desired		
8	8.11	Health Care Provider	Document Activity Related to eICR	Document actions taken by provider (or associated support personnel) to satisfy request for follow up action	Optional – not required, may be implemented by Digital Bridge Initial Implementations if so desired		
8	8.12	Health Care Provider	Document Activity	Document any intervention guidelines provided by Public	Optional – not required, may be implemented by Digital Bridge		

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			Related to eICR	Health Agency	Initial Implementations if so desired		
8	8.13	Health Care Provider	Document Activity Related to eICR	Document request for information supplemental to electronic case report	Deferred – not required and not to be implemented by any Digital Bridge Initial Implementations, future requirements		
8	8.14	Health Care Provider	Document Activity Related to eICR	Document provision of information supplemental to electronic case report	Deferred – not required and not to be implemented by any Digital Bridge Initial Implementations, future requirements		
9	9.00	Decision Support Intermediary	Receive Electronic Initial Case Report				
9	9.01	Decision Support Intermediary	Receive Electronic Initial Case Report	Receive public health case report(s) from Health Care Provider	Required – required for all Digital Bridge Initial Implementations	Decision Support Intermediary will be the APHL Informatics Messaging Service (AIMS) https://www.aphl.org/programs/informatics/Pages/aims_platform.aspx	
9	9.02	Decision Support Intermediary	Receive Electronic Initial Case Report	Provide an acknowledgement to the Health Care Provider that a message was successfully receiver	Required – required for all Digital Bridge Initial Implementations		
9	9.03	Decision Support Intermediary	Receive Electronic Initial Case Report	Provide an acknowledgement to the Health Care Provider that the received message data is correctly formed or malformed	Required – required for all Digital Bridge Initial Implementations		
10	10.00	Decision Support Intermediary	Valid Message/ Document?				
10	10.01	Decision Support Intermediary	Valid Message/ Document?	Determine whether or not eICR has correct structure and content	Required – required for all Digital Bridge Initial Implementations	HL7 CDA® R2 Implementation Guide: Public Health Case Report, Release 2 - US Realm - the Electronic Initial Case Report (eICR)	

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						http://www.hl7.org/implementation/standards/product_brief.cfm?product_id=436	
11	11.00	Decision Support Intermediary	Build, Send Error Message				
11	11.01	Decision Support Intermediary	Build, Send Error Message	Create and send message indicating the eICR was malformed and could not be processed by Decision Support Intermediary	Required – required for all Digital Bridge Initial Implementations		
11	11.02	Decision Support Intermediary	Build, Send Error Message	Create and send message indicating any missing data elements from eICR	Required – required for all Digital Bridge Initial Implementations		
11	11.03	Decision Support Intermediary	Build, Send Error Message	Forward malformed eICRs for dispositioning by Decision Support Intermediary according to public health jurisdiction-specific rules.	Required – required for all Digital Bridge Initial Implementations		
		Decision Support Intermediary	Determine Public Health Reportability				
12	12.01	Decision Support Intermediary	Determine Public Health Reportability	Consume jurisdiction-specific public health criteria for use in determining Public Health Reportability	Required – required for all Digital Bridge Initial Implementations	Reportable Conditions Knowledge Management System (RCKMS)	Jurisdiction-specific reporting criteria will be provided by public health agencies through use of Reportable Conditions Knowledge Management System (RCKMS).
12	12.02	Decision Support Intermediary	Determine Public Health Reportability	Use jurisdiction-specific public health criteria to make an automated determination if case report <ul style="list-style-type: none"> • does not meet reporting criteria and should not be sent to Public Health Agency • meets reporting criteria and should be 	Required – required for all Digital Bridge Initial Implementations	Reportable Conditions Knowledge Management System (RCKMS) http://www.cste.org/group/RCKMS	Jurisdiction-specific reporting criteria will be provided by public health agencies through use of Reportable Conditions Knowledge Management System (RCKMS).

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				sent to Public Health Agency			
12	12.03	Decision Support Intermediary	Determine Public Health Reportability	<p>Use jurisdiction-specific public health criteria to make an automated determination if case report</p> <ul style="list-style-type: none"> • does not meet reporting criteria and should still be sent to Public Health Agency • represents an indeterminate case and should be sent to Public Health Agency 	Optional – not required, may be implemented by Digital Bridge Initial Implementations if so desired	<p>Reportable Conditions Knowledge Management System (RCKMS)</p> <p>http://www.cste.org/group/RCKMS</p>	Some public health agencies may set their reporting criteria to receive non-cases (e.g. negative lab result, no diagnosis) or indeterminate cases (i.e. insufficient data to determine reportability) if legally permitted.
12	12.04	Decision Support Intermediary	Determine Public Health Reportability	Document determination on public health reportability.	Required – required for all Digital Bridge Initial Implementations	<p>Reportable Conditions Knowledge Management System (RCKMS)</p> <p>http://www.cste.org/group/RCKMS</p>	<p>Possible determinations include:</p> <ol style="list-style-type: none"> 1) does not meet reporting criteria and should not be sent to Public Health Agency 2) meets reporting criteria and should be sent to Public Health Agency 3) does not meet reporting criteria and should still be sent to Public Health Agency 4) indeterminate case and should be sent to Public Health Agency 5) indeterminate case due to missing information <p>Specific public health agencies should be referenced in above</p>

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							determinations as appropriate.
13	13.00	Decision Support Intermediary	Report to Public Health?				
13	13.01	Decision Support Intermediary	Report to Public Health?	If determination is that case is reportable to public health, determine which public health agency(ies) case should be sent to (see below).	Required – required for all Digital Bridge Initial Implementations		
14	14.00	Decision Support Intermediary	Determine Public Health Routing (for eICR)				
14	14.01	Decision Support Intermediary	Determine Public Health Routing (for eICR)	Determine which Public Health Agency(s) should receive the electronic case report	Required – required for all Digital Bridge Initial Implementations		Electronic case report may be routed to more than one Public Health Agency. Criteria supports following options made by jurisdictions: <ul style="list-style-type: none"> •Report to jurisdiction if care was provided in jurisdiction •Report to jurisdiction if patient is a resident •Report to jurisdiction if lab was in jurisdiction
15	15.00	Decision Support Intermediary	Need Supplemental Information?				
15	15.01	Decision Support Intermediary	Need Supplemental Information?	Based on public health jurisdiction-specific requirements, provide ability to	Deferred – not required and not to be implemented by any Digital Bridge Initial Implementations,		

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				request supplemental information in addition to data provided in eICR.	future requirements		
16	16.00	Decision Support Intermediary	Build Supplemental Information Request				
16	16.01	Decision Support Intermediary	Build Supplemental Information Request	Request supplemental information in addition to data provided in eICR.	Deferred – not required and not to be implemented by any Digital Bridge Initial Implementations, future requirements	Functionality could be provided by Structured Data Capture standard.	
16	16.02	Decision Support Intermediary	Build Supplemental Information Request	Send a request for disease-specific information to Health Care Provider	Deferred – not required and not to be implemented by any Digital Bridge Initial Implementations, future requirements	Functionality could be provided by Structured Data Capture standard.	
16	16.03	Decision Support Intermediary	Build Supplemental Information Request	Send a request for incident-specific information to Health Care Provider	Deferred – not required and not to be implemented by any Digital Bridge Initial Implementations, future requirements	Functionality could be provided by Structured Data Capture standard.	
16	16.04	Decision Support Intermediary	Build Supplemental Information Request	Send a request for case-specific information to Health Care Provider	Deferred – not required and not to be implemented by any Digital Bridge Initial Implementations, future requirements	Functionality could be provided by Structured Data Capture standard.	
17	17.00	Decision Support Intermediary	Build Reportability Response				
17	17.01	Decision Support Intermediary	Build Reportability Response	Provide ability to communicate reportability status of an eICR or group of eICRs.	Required – required for all Digital Bridge Initial Implementations		
17	17.02	Decision Support Intermediary	Build Reportability Response	Provide ability to communicate requested Health Care Provider actions related to eICR or group of eICRs.	Required – required for all Digital Bridge Initial Implementations		
17	17.03	Decision Support Intermediary	Build Reportability Response	Provide ability to communicate which potential case reports were <ul style="list-style-type: none"> reportable and sent to 	Required – required for all Digital Bridge Initial Implementations		

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				Public Health Agency <ul style="list-style-type: none"> not reportable and not sent to Public Health Agency 			
17	17.04	Decision Support Intermediary	Build Reportability Response	Provide ability to communicate which the potential case reports were <ul style="list-style-type: none"> not reportable and still sent to Public Health Agency of indeterminate status and still sent to Public Health Agency 	Required – required for all Digital Bridge Initial Implementations		
17	17.05	Decision Support Intermediary	Build Reportability Response	Provide ability to communicate that reportability could not be determined because eCR was missing information and specify the information that is missing	Required – required for all Digital Bridge Initial Implementations		
17	17.06	Decision Support Intermediary	Build Reportability Response	Provide ability to include links to external resources (e.g. treatment guidelines, intervention protocols)	Optional – not required, may be implemented by Digital Bridge Initial Implementations if so desired		
17	17.07	Decision Support Intermediary	Build Reportability Response	Provide ability to embed materials/ documents within response	Optional – not required, may be implemented by Digital Bridge Initial Implementations if so desired		
17	17.08	Decision Support Intermediary	Build Reportability Response	Provide the ability to request supplemental data	Deferred – not required and not to be implemented by any Digital Bridge Initial Implementations, future requirements		
17	17.09	Decision Support Intermediary	Build Reportability Response	Provide the ability to include a technical acknowledgement that the PHA successfully received the eCR	Optional – not required, may be implemented by Digital Bridge Initial Implementations if so desired		The Governance body strongly encourages all Initial Implementation Sites to send this acknowledgement message
18	18.00	Decision Support	Send Reportability				

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		Intermediary	Response				
18	18.01	Public Health Decision Support	Send Reportability Response	Send Reportability Response to Health Care Provider.	Optional – not required, may be implemented by Digital Bridge Initial Implementations if so desired		
18	18.02	Public Health Decision Support	Send Reportability Response	Send Reportability Response to Public Health Agency.	Required – required for all Digital Bridge Initial Implementations		
18	18.03	Public Health Decision Support	Send Reportability Response	Send technical acknowledgement that the PHA successfully received the eCR to the HCP	Optional – not required, may be implemented by Digital Bridge Initial Implementations if so desired		The Governance body strongly encourages all Initial Implementation Sites to send this acknowledgement message
19	19.00	Decision Support Intermediary	Send Electronic Initial Case Report (eICR)				
19	19.01	Decision Support Intermediary	Send Electronic Initial Case Report (eICR)	Use the predefined transport to deliver the case report to each appropriate local Public Health Agency	Required – required for all Digital Bridge Initial Implementations	Decision Support Intermediary will be the APHL Informatics Messaging Service (AIMS) https://www.aphl.org/programs/informatics/Pages/aims_platform.aspx	
20	20.00	Decision Support Intermediary	Disposition eICR				
20	20.01	Decision Support Intermediary	Disposition eICR	Disposition Electronic Initial Case Report (eICR) according to public health jurisdiction-specific dispositioning rules.	Required – required for all Digital Bridge Initial Implementations		Public health jurisdiction-specific dispositioning rules will prescribe how long an eICR can be retained by Decision Support Intermediary

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23	23.00	Public Health Agency	Receive Reportability Response				
23	23.01	Public Health Agency	Receive Reportability Response	Provide the ability for Public Health Agency to receive the same Reportability Responses sent to a Health Care Provider.	Required – required for all Digital Bridge Initial Implementations		
24	24.00	Health Care Provider	Provide Supplemental Information (if requested)				
24	24.01	Health Care Provider	Provide Supplemental Information (if requested)	Extract structured data from an electronic health record associated with a case	Deferred – not required and not to be implemented by any Digital Bridge Initial Implementations, future requirements	Functionality could be provided by Structured Data Capture standard.	
24	24.02	Health Care Provider	Provide Supplemental Information (if requested)	Have the ability to enter unstructured data	Deferred – not required and not to be implemented by any Digital Bridge Initial Implementations, future requirements	Functionality could be provided by Structured Data Capture standard.	
25	25.00	Health Care Provider	Create Supplemental Information Report				
25	25.01	Health Care Provider	Create Supplemental Information Report	Properly populate and format a message with supplemental/modified information so that it can be routed and associated with the appropriate case and (if applicable) specific Reportability Response that requested the supplemental/modified information.	Deferred – not required and not to be implemented by any Digital Bridge Initial Implementations, future requirements	Functionality could be provided by Structured Data Capture standard.	
26	26.00	Health Care Provider	Send Supplemental				

