



<b>Example – Patient Summary Record (PSR)</b>			
<b>Integrity Constant – as Manifest by</b>			
	<b>Source</b> (Certified) EHR Technology	<b>Exchange</b> (specifically HL7 CCD)	<b>Receiver</b> (Certified) EHR Technology
<b>Generally...</b>			
		PSR transaction testing, against specified Standard and implementation guide	
	Encrypt health information	Convey encrypted PSR	Decrypt health information
	Record (audit) when health information is created, modified, deleted or printed	Convey PSR-related audit log	Record (audit) when health information is created, modified, deleted or printed
	Include PSR audit log		Capture, retain PSR audit log
	Record (audit) action occurring when health information is created, modified, deleted or printed		Record (audit) action occurring when health information is created, modified, deleted or printed
	Record (audit) when health information is disclosed for purposes of treatment, payment and health care operations	Convey PSR-related disclosure log	Record (audit) when health information is disclosed for purposes of treatment, payment and health care operations

Include PSR disclosure log			Capture, retain PSR audit log
Record (audit) when health information is accessed, viewed or exported		Convey PSR-related access and export log	Record (audit) when health information is accessed, viewed or exported
Audit log entries include date, time, patient ID and user ID		Convey PSR-related audit log entries	Audit log entries include date, time, patient ID and user ID
Audit log entries include description of disclosure, when applicable			Audit log entries include description of disclosure, when applicable
Create identity assertions for outbound transactions		Convey PSR identity assertions	Capture identity assertions in inbound transactions
Retain EHR patient information as persistent and unaltered, from point of origination or capture, sufficient to meet applicable retention requirements		Convey PSR without alteration	Retain EHR patient information as persistent and unaltered, from point of origination or capture, sufficient to meet applicable retention requirements
From this anchor point (source of truth) and for each subsequent request, reproduce patient PSR information consistent with previous requests		Not applicable	Not applicable
Retain each PSR instance, as transmitted, per applicable retention requirements		Not applicable	Retain each PSR instance, as received, per applicable retention requirements
Maintain or link to master patient index		Not applicable	Maintain or link to master patient index (often in common with Source)
Maintain patient demographic information		Not applicable	Maintain patient demographic information
Maintain or link to master index of - Individual and organizational providers		Not applicable	Maintain or link to master provider index (often in common with Source)
Maintain or link to master user registry, including identity and credentials		Not applicable	Maintain or link to master user registry (often in common with Source)
Maintain or link to master registry of application systems (incl EHRs), devices		Not applicable	Maintain or link to master registry of application systems (incl EHRs), devices
Ensure user identity authentication for health information access		Not applicable	Ensure user identity authentication for health information access
Ensure receiver (app/device) authentication before initiating exchange		Not applicable	Ensure source (app/device) authentication before initiating exchange
Maintain list of applicable patient consent directives		Not applicable	Maintain list of applicable patient consent directives
Maintain key patient clinical information including: diagnostic test results, problem list, medication list, medication allergy list, immunizations, procedures, and discharge summaries		Convey PSR clinical information	Capture, retain key patient clinical information

**DRAFT Analysis – End-to-End EHR Integrity Constant – a Perspective on  
ONC Interim Final Rule – Initial Set of Standards, Implementation Specifications, and Certification Criteria for EHR Technology**

Per PSR instance: create PSR, transmit PSR...					
	Create PSR, then transmit PSR as a snapshot of patient EHR information		Exchange PSR, per ONC/IFR specified interchange standard (HL7 CCD)		Receive, consume PSR
	Include PSR patient identity		Convey PSR patient identity		Capture, ensure patient identity, update patient registry, if necessary
	Include PSR provider identity		Convey PSR provider identity		Capture, ensure provider identity, update provider registry, if necessary
	Include patient consent directives, pertinent to PSR content		Convey PSR-related patient consent directives		Capture, ensure patient consent directives
	Include access authorizations and controls, pertinent to: - Whole PSR - PSR sections - Discrete PSR data elements, values		Convey PSR-related access authorizations and controls		Capture, ensure access authorizations and controls, pertinent to: - Whole PSR - PSR sections - Discrete PSR data elements, values
	Include digital signature (of PSR Source) bound to PSR content (encapsulation)		Convey digital signature (of PSR Source) binding to PSR content		Capture, ensure PSR content binding to signature (of PSR Source)
	Include patient demographic data elements/values		Convey patient demographics		Capture and retain, as appropriate, patient demographic data elements/values
	Include patient summary data elements/values, including: diagnostic test results, problem list, medication list, medication allergy list, immunizations, procedures, and discharge summary		Convey patient summary data elements/values		Capture and retain, as appropriate, patient summary data elements/values
	For each PSR data element/value, include source attribution (who, what, when) when different than whole PSR or PSR section attribution		Convey PSR data element/value source attribution		Capture and retain source attribution with each PSR data element/value
	If standard vocabulary native to EHR, no translation of data element/value		Convey PSR data elements/values encoded to standard vocabulary		If standard vocabulary native to EHR, no translation of data element/value
	<ul style="list-style-type: none"> <li>• Otherwise translated from internal (local) encoding to standard</li> <li>• Retaining both original and translated value</li> </ul>		<ul style="list-style-type: none"> <li>• SNOMED, LOINC, RxNORM, HL7...</li> </ul>		<ul style="list-style-type: none"> <li>• Otherwise translated to internal (local) encoding from standard</li> <li>• Retaining both original and translated value</li> </ul>

### Example – Lab Result Report (HL7 v2.5.1)

In addition to common Integrity Constants (identified above), per lab result instance: create report, transmit report...

			Lab result transaction testing, against specified Standard + implementation guide	
	Include digital signature (of Source) bound to lab result data content (encapsulation)		Convey digital signature (of Source) binding to lab result data content	Capture, ensure lab result data content binding to signature (of Source)
	Include attestation signature that lab result is accurate and complete, if applicable		Convey attestation signature for lab result accuracy/completeness	Capture, ensure attestation signature for lab result accuracy/completeness, if applicable
	If lab result modified, preserve original result (unaltered) along with newly updated/added information		Convey modified Lab Result with original result (unaltered) along with newly updated/added information	Capture, ensure modified lab result with original result (unaltered) along with newly updated/added information

### Example – Prescription (NCPDP SCRIPT v10.6)

In addition to common Integrity Constants (identified above), per prescription instance: create order, transmit order...

			Prescription transaction testing, against specified Standard + implementation guide	
	Include digital signature (of Source and author) bound to prescription data content (encapsulation)		Convey digital signature (of Source and author) binding to prescription data content	Capture, ensure prescription data content binding to signature (of Source and author)
	Include attestation signature that prescription is accurate and complete		Convey attestation signature for prescription accuracy and completeness	Capture, ensure attestation signature for prescription accuracy and completeness
	If prescription modified, preserve original prescription (unaltered) along with newly updated/added information		Convey modified prescription with original prescription (unaltered) along with newly updated/added information	Capture, ensure modified prescription with original prescription (unaltered) along with newly updated/added information

#### Color Key

	Covered by ONC/IFR specified standards and/or certification criteria
	Partially Covered by ONC/IFR specified standards and/or certification criteria
	Absent from ONC/IFR specified standards and/or certification criteria