International Patient Summary (IPS) – Ensuring Content Authenticity in Primary Clinical Use
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Objectives
- To convey authentic health data/record content appropriate to purpose of use, particularly with regard to primary use: clinical care, interventions, decision making
- To ensure integrity of the clinical process
- To ensure PATIENT SAFETY

Background
- A substantial number of IPS coded elements are specified to use licensed vocabularies/codesets (e.g., SNOMED CT).
- Licensed vocabularies/codesets constrain access and use to those entities who have paid license fees and keep their licenses current.
- Some vocabulary/codeset proprietors have agreed to make available a "free" but arbitrarily limited subset of their licensed products for use by non-licensed entities (in this case for purposes of IPS exchange).
- IPS coded elements frequently require transformation between licensed codes, subset codes and local codes to enable exchange between licensed and non-licensed entities.
- Transformation of IPS content may introduce alterations, errors and omissions.
- And in fact, IPS content transformation may place integrity of the clinical process and most importantly patient safety AT RISK.

Following on:
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Page 3 – IPS Content Authenticity Scenarios – Source to Use + Notes and Questions + Terms

Examples of IPS Exchange Scenarios and Points of Coded Element Transformation

International Patient Summary (IPS) Exchange							
Source to Receiver - Data Match/Transformation/Loss Scenarios							
Scenario		Source/Sender		IPS		Receiver	
			➡		➡		
		Originate		Transmit	Receive		Access/Use
Ideal (Happy Path)							
	Receiver Known or Unknown	Licensed CODE	➡	Licensed CODE		➡	Licensed CODE
Licensed to Subset							
	Receiver Unknown	Licensed CODE	➡	Licensed CODE		➡	Subset CODE
	Receiver Known	Licensed CODE	➡	Subset CODE		➡	Subset CODE
Subset to Licensed							
	Receiver Unknown	Subset CODE	➡	Subset CODE		➡	Licensed CODE
	Receiver Known	Subset CODE	➡	Licensed CODE		➡	Licensed CODE
Subset to Licensed to Subset							
		Subset CODE	➡	Licensed CODE		➡	Subset CODE
Licensed to Subset to Licensed							
		Licensed CODE	➡	Subset CODE		➡	Licensed CODE
Local to Licensed							
		Local CODE	➡	Licensed CODE		➡	Licensed CODE
Local to Subset							
		Local CODE	➡	Subset CODE		➡	Subset CODE
Local to Subset to Licensed							
		Local CODE	➡	Subset CODE		➡	Licensed CODE
Local to Licensed to Subset							
		Local CODE	➡	Licensed CODE		➡	Subset CODE
Local to Subset to Local							
		Local CODE	➡	Subset CODE		➡	Local CODE
Local to Licensed to Local							
		Local CODE	➡	Licensed CODE		➡	Local CODE
	Licensed CODE	e.g., SNOMED					
	Subset CODE	e.g., Free Subset of SNOMED					

➡	Match (no transformation)
➡	Possible Result:
	1) Match (no transformation): from CODE = to CODE
	2) Approximation (possible data loss): many CODES to one CODE, one CODE to many CODES
	3) No match (data loss)

Alternative IPS Content Authenticity Scenarios – Source to Use

	At IPS Source...	What Originating Clinical Author Sees	What is exchanged (via secure channel(s))	What IPS Receiving Clinical User Sees
1	Include original/display text alongside each coded element through transformation (as currently proposed)	Original/display text	CDA/IPS instance with original/display text for each coded element	Original/display text – rendered from received CDA/IPS instance
2	Create PDF equivalent of source CDA/IPS document (with original/display text) and carry it alongside CDA/IPS document	Original/display text	CDA/IPS instance and corresponding PDF instance	Original/display text – rendered from received PDF instance
3	Create embedded link (URL) within CDA/IPS document to source CDA/IPS document instance or its PDF equivalent *with patient identifying information*	Original/display text	CDA/IPS instance with embedded link and patient identifying information	Original/display text – rendered via link to source CDA/IPS or PDF instance Patient ID (local or source)
4	Same as #3, but embedded link (URL) is to source CDA/IPS document instance or its PDF equivalent *without patient identifying information*	Original/display text		Original/display text – rendered via link to source CDA/IPS or PDF instance Patient ID (local)
5	Using a more traditional approach: Create facsimile image of patient summary (no actual CDA/IPS) and transmit via fax	Original/display text	Facsimile image of source patient summary	Original/display text – rendered in fax transmission

Notes, questions and considerations:
- Assume original/display text is always defined/rendered whether for licensed code, subset code or local code.
- Q: For Scenario #1 and if licensed code, is it permitted to convey corresponding display text to non-licensed entity (but not the code itself)?
- Q: Is it possible for a receiver to obtain an inexpensive license for the single purpose of receiving/retaining/accessing IPS content with licensed codes?
- Q: For a typical case of primary use, does receiving clinical user need the actual coded element or will original/display text suffice?
- Q: What are key advantages of structured (coded) content and computability: logical/conceptual relationships, graphing, trending, correlation, aggregation, summarization?

Terms

Entities	Organizations (e.g., healthcare providers), nations, regions
Coded element	Data item assigned a value from a formal vocabulary/codeset (often as a function of data entry, often based on selection(s) from "pick" lists)
Content	Data items and elements
Licensed code	Data value selected/referenced from vocabulary/codeset requiring license and/or fee for use (e.g., SNOMED CT vocabulary)
Local code	Data value selected/referenced from local (e.g., organizational, regional) vocabulary/codeset
Original/display text	Data value shown to user for selection or reference in the course of input or review of clinical content (e.g., when entering or viewing clinical notes or other documentation)
Subset code	Data value selected/referenced from an approved and constrained subset of a licensed vocabulary, as may be offered "free" for use without license or fee (e.g., a select subset of SNOMED CT vocabulary/codeset)