	Disclosure Levels	Abbreviation	Information Disclosure	On/Offline	Revoke	Mode of Information Presentation				
	Private Venue	**PV**	Minimal	fully offline	only at DSC level	Conclusion only (yes/no)				
	Border Control	**BC**	Medium	offline	online at certificate level	Conclusion only (yes/no for vaccine approved in country of arrival - "allow list" of vaccines in MS)				
	Medical	**MD**	Full (Medical Info)	online	always possible	Original Data, may be subject to online authentication and/or auditing.				
						https://www.hl7.org/fhir/immunization-definitions.html				
		PV	**BC**	**MD**		**HL7 / FHIR 4.1 path (root: Immunization)**	**Short Name**	**Short Name Mnemoic**	**Format**	**Values**
General	Legal name	✓	✓	✓		ref: patient	nam	Name	string, ?	PV = Initials (as one string); BC,MD = Fu
	Person ID		✓	✓		ref: patient	pid	Person ID		
	Administrative Gender	✓	✓	✓		ref: patient	gen	Administrative Gender	string, 1	enum values: M,F,O,U
	Date of Birth		✓	✓		ref: patient	dob	Date of Birth	date	ISO8601 Date
Vaccination specific	Disease or Agent Targeted	✓	✓	✓		protocolApplied.targetDisease	v:tg	Target	string, ?	
	Vaccine / Prophylaxis		✓	✓		vaccineCode	v:cd	Code	string, ?	
	Vaccine Medicinal Product		✓	✓		(unclear: vaccineCode in FHIR 4.1 seems closest)	v:mp	Medical Product	string, ?	
	Marketing Authorization Holder		✓	✓		ref:manufacturer	v:ah	Auth Holder	string, ?	
	Number in series of Dose		✓	✓		protocolApplied.doseNumber / protocolApplied.seriesDoses	v:sq	Sequence	string, ?	
	Batch/Lot Number			✓		lotNumber	v:lt	Lot	string, ?	
	Date Of Vaccination		✓	✓		occurence	v:oc	Occurance	date	ISO8601 Date
	Administering Centre			✓		ref: performer.actor where (performer.function == AP)	v:ap	Actor AP	string, ?	
	Health Professional ID			✓		ref: performer.actor->practitioner.identifier	v:pi	Practitioner Identifier	string, ?	
	Country of Vaccination		✓	✓		ref: location->position (long, lat, alt -> WGS84) OR ref:location->address	v:lo	Location	string, ?	Joined address elements or WGS84
	Next vaccination date			✓		not availaible directly: there is expirationDate of current vaccine	v:nx	Date Next	date	ISO8601 Date
Start: Not part of FHIR Immunization resource / Vaccination Only - is Test / Recovery specific - (Green Pass)										
Test Specific	Disease or Agent tested	✓	✓	✓			t:tg	Target	**See v:tg**	
	Type of Test		✓	✓			t:tt	Type of Test	string, ?	Enum?
	Test Brand Name		✓	✓			t:bn	Brand name	string, ?	
	Test Manufacturer		✓	✓			t:mp	Medical Product	**See v:mp**	
	Sample Origin			✓			t:so	Sample Origin	string, ?	
	Sample Collection Datetime		✓	✓			t:st	Sample time	date	ISO8601 Datetime UTC
	Test Result (datetime)	✓	✓	✓			t:rt	Result time	date	ISO8601 Datetime UTC
	Status	✓	✓	✓			t:st	Status	?	enum? values?
	Testing Centre			✓		location.Display	s:tc	Testing Centre	**See v:lo**	
	Health Professional ID			✓			t:pi	Practitioner Identifier	**See v:pi**	
	Country where Testing Performed		✓	✓			t:co	Country	string, 2	ISO 3166-1 alpha-2
Recovery Specific	Disease recovered from	✓	✓	✓		todo: coded value -> agent recovered from? "adverse reaction" belongs somewhere else, not here	r:tg	Target	**See v:tg**	
	Start Date of Recovery	✓	✓	✓		todo: occurence	r:fr	Valid from	date	ISO8601
	Country of Test		✓	✓		todo: needed?	r:co	Country	**See t:co**	
End: Not part of FHIR Immunization Immunization resource / Vaccination Only - is Test / Recovery specific										
Document Specific	Certificate Issuer	✓	✓	✓		could be dropped in lieu of DSC signing key (in combination with master list)	c:is	Issuer	string	
	Certificate Identifier		✓	✓			c:id	Certificate identifer	string	
	Certificate Valid From	✓	✓	✓			c:st	Start	string	ISO8601 Date
	Certificate Valid Until	✓	✓	✓			c:en	End	string	ISO8601 Date
	Certificate Schema Version	✓	✓	✓		could be replaced by a 2-4 byte Qr header having same (but not signed!)	c:vr	schema Version	string	
	Issuing Authority Country	✓	✓	✓		could be dropped in lieu of DSC signing key (in combination with master list)	c:ia	issuing Authority	**See t:co**	
Document Specific	DSC signing key	✓	✓	✓		8 bytes of SHA256 of DSC certificate, reveals issuing entity (and country)	dsc		string, 12	hexadecimal
							c, t, v and r are sub-sections			
	Separate FHIR resource for vaccination certificate? Or do we get these parameters from e.g. the IIS some other way?						c: once-only			
							t, v and r: repeating groups			
	This appears to differ on a natonal basis e.g. Annex. National IIS... (p. 69) in https://www.ecdc.europa.eu/sites/default/files/documents/designing-implementing-immunisation-information-system_0.pdf									
	IIS HL7 https://www.cdc.gov/vaccines/programs/iis/technical-guidance/hl7.html									
	NB PLEASE BE CAREFUL MOVING ITEMS - MOVE THE WHOLE ROW									
	All dates are ISO 8601, timezone UTC for any time component									
	TODO									7.8.6.1
	Add AG to all parts									Immunization
										identifier
	Complete column G (FHR mappings to JSON) as per https://build.fhir.org/ig/hl7-eu/dgc/StructureDefinition-Immunization-dgc-mappings.html#mappings-for-eu-vaccination-certificate-http-hl7-eu-fhir-ig-dgc									status
	NOTE									statusReason
	I was going to implement as inheritance MD -> BC -> PV									vaccineCode (vaccineGPSCode)
	where:									vaccineCode (atcClass)
	PV has the basic number of fields									vaccineCode (absentOrUnknownImmuni
	BC adds BC-specific to PV									patient
	MD adds MD-specific to BC									encounter
	However, although this table doesn't show it (yet), the data fields can be disjoint and may not necessarily be supersets of each other									occurrence[x]
	So I went for no inheritance and just repeated the fields at each level -> this allow us to model full or partially disjoint sets of fields, which it almost certainly will be in practice once legal finished with it									occurrence[x] (occurrenceDateTime)
										location
										performer
										function
										actor
										note
										reasonCode
										reasonReference

	https://build.fhir.org/ig/hl7-eu/dgc/StructureDefinition-Immunization-dgc-mappings.html#mappings-for-eu-vaccination-certificate-http-hl7-eu-fhir-ig-dgc	
	7.8.6.6	
Notes	Name	Path
ıll Name (one string)		
	protocolApplied, targetDisease	vaccinationCertificate.vaccination.targetDisease
e.g. https://www.hl7.org/fhir/valueset-vaccine-code.html	vaccineCode, coding	vaccinationCertificate.vaccination.vaccineCode
	vaccineCode, text	vaccinationCertificate.vaccination.vaccineProductName
Unclear if MAH == Manufacturer, I will assume yes	manufacturer	vaccinationCertificate.subject.identifier, vaccinationCertificate.vaccination.vaccineMarketingAuthorizationHolder
	protocolApplied, doseNumer[x]	vaccinationCertificate.vaccination.doseNumber
	lotNumber	vaccinationCertificate.vaccination.vaccineBatchNumber
	occurrence[x] (occurrenceDateTime)	vaccinationCertificate.vaccination.dateOfVaccination
	performer	vaccinationCertificate.vaccination.administeringCentre, vaccinationCertificate.vacc doseNumber[x]
BIG registration in NL	performer	vaccinationCertificate.vaccination.administeringCentre, vaccinationCertificate.vacc seriesDoses[x]
	location	vaccinationCertificate.vaccination.administeringCentre, vaccinationCertificate.vaccination.countryOfVaccination
	??????	
<< NOTYET		
<< NOTYET		
<< NOTYET		
<< NOTYET		
<< NOTYET		
<< NOTYET		
<< NOTYET		
<< NOTYET		
<< NOTYET		
UVCI		
https://semvers.org is used.		
PV =-only 2 digit country code from UVCI; BC, MD - Full UVCI		
part of the COSE signature		
Event		
Event.identifier		
Event.status		
Event.statusReason		
Event.code		
Event.code		
Event.code		
Event.subject		
Event.context		
Event.occurrence[x]		
Event.occurrence[x]		
Event.location		
Event.performer		
Event.performer.function		
Event.performer.actor		
Event.note		
Event.reasonCode		
Event.reasonReference		