Map between OIOXML Advis and FHIR CareCommunication Messages

This document describes mapping between the OIOXML ClinicalEmail (XDIS91) and the FHIR CareCommunication message. Not all elements from OIOXML ClinicalEmail are relevant in FHIR CareCommunication message, which is marked with a 'NA'. The purpose of this document is to help implementers of FHIR CareCommunication message. The actual implementation guide which includes all requirements for the CareCommunicationMessage can be found here.

Please notice, that the expressions in 'Actual FHIR path' are made using the windows app FHIRPath tester. In other applications, will the apostrophe ('…') might not be used.

Data	OIOXML	Pseudo FHIR path	Must Support	Comment
		Actual FHIR path		
Date for Message sent	Emessage.Envelope.Sent.Date	MedComCareCommunicationMessage.timestamp	Yes	All FHIR timestamps contain both date and time. This element holds information about when a bundle is created. The timestamp is equivalent to MedComCareCommunicationMessage.MedcomMessagingProvenance. occurredDateTime
		Bundle.timestamp		
Time for Message sent	Emessage.Envelope.Sent.Time	MedComCareCommunicationMessage.timestamp	Yes	All FHIR timestamps contain both date and time. This element holds information about when a bundle is created. The timestamp is equivalent to MedComCareCommunicationMessage.MedcomMessagingProvenance. occurredDateTime
		Bundle.timestamp		
Message envelope id	Emessage.Envelope.Identifier	MedComCareCommunicationMessage.id	Yes	A unique identifier for a bundle. The MedComCareCommunicationMessage.id must be updated with a new value each time a new message is sent, or a message is resent.
		Bundle.id		

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Data	OIOXML	Pseudo FHIR path / Actual FHIR path	Must Support	Comment
Acknowledgementcode	Emessage.Envelope.AcknowledgementCode	NA		Not relevant, as all FHIR messages shall be acknowledged.
Message letter id	Emessage.ClinicalEmail.Letter.Identifier	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.id Bundle.entry.resource.ofType('MessageHeader').id	Yes	A unique identifier for each message. This identifier should be globally unique.
Version code	Emessage.ClinicalEmail.Letter.VersionCode	NA		The version of the FHIR profiles is part of the profile's URL.
Statistical code	Emessage.ClinicalEmail.Letter.StatisticalCode	NA		Only VANSEnvelope contains a statistical code.
Authorization timestamp date	Emessage.ClinicalEmail.Letter.Authorisation.Date	MedComCareCommunicationMessage.timestamp Bundle.timestamp	Yes	The authorization timestamp and the timestamp for when the message is sent are equivalent. Is also equivalent to MedComCareCommunicationMessage.MedcomMessagingProvenance.occurred[x] occurredDateTime
Authorization timestamp time	Emessage.ClinicalEmail.Letter.Authorisation.Time	MedComCareCommunicationMessage. MedComCareCommunicationMessageHeader.MedComCareCommunication .sent Bundle.entry.resource.ofType('Communication').sent	Yes	This timestamp includes a date and time. It represents the date and time for when the healthcare professional press the 'sent'-button in the screen.
Message type (DIS91)	Emessage.ClinicalEmail.Letter.TypeCode	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.event[x].eventcoding.code	Yes	

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Data	OIOXML	Pseudo FHIR path / Actual FHIR path	Must Support	Comment
		Bundle.entry.resource.ofType('MessageHeader').event.code		The type of message. For CareCommunication the code shall be "care-communication-message"
Message status	Emessage.ClinicalEmail.Letter.StatusCode	MedComCareCommunicationMessage.MedComMessagingProvenance.activity.coding.code	Yes	The element that describes the status of the CareCommunication eg. new-message
		Bundle.entry.where(resource.ofType('Provenance').target.reference.replace('MessageHeader/','') = %resource.entry.resource.ofType('MessageHeader').id).resource.ofType('Provenance').activity.coding.code		
Episode of care identifier	Emessage.ClinicalEmail.Letter.EpisodeOfCareIdentifier	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCareCommunicationEncounter.episodeOfCare.identifier.value	No	A unique identifier for the episode of care.
		Bundle.entry.resource.ofType('Encounter').episodeOfCare.identifier.value		
EAN id for sender	Emessage.ClinicalEmail.sender.EANIdentifier	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.sender.MedComMessagingOrganization.identifier.eanIdentifier	Yes	The EAN identifier for a sending organization.
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') = %resource.entry.resource.ofType('MessageHeader').sender.reference.replace('Organization/','')).resource.ofType('Organization').identifier.where(system = 'urn:oid:1.3.88').value		
EAN id for receiver	Emessage.ClinicalEmail.receiver.EANIdentifier	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.destination.primary.receiver.MedComMessagingOrganization.identifier.eanIdentifier	Yes	The EAN identifier for a receiving organization.

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Data	OIOXML	Pseudo FHIR path / Actual FHIR path	Must Support	Comment
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') = %resource.entry.resource.ofType('MessageHeader').destination.receiver.reference.replace('Organization/','')).resource.ofType('Organization').identifier.where(system = 'urn:oid:1.3.88').value		
Sender id	Emessage.ClinicalEmail.sender.Identifier	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.sender.MedComMessagingOrganization.identifier	Yes	The identifier that describes the sender of the CareCommunication message. Both a SOR- and EAN-identifier must be sent.
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') = %resource.entry.resource.ofType('MessageHeader').sender.reference.replace('Organization/','')).resource.ofType('Organization').identifier		
Receiver id	Emessage.ClinicalEmail.receiver.Identifier	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.destination.primary.receiver.MedComMessagingOrganization.identifier	Yes	The identifier that describes the receiver of the CareCommunication message. Both a SOR- and EAN-identifier must be sent.
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') = %resource.entry.resource.ofType('MessageHeader').destination.receiver.reference.replace('Organization/','')).resource.ofType('Organization').identifier		
Sender type	Emessage.ClinicalEmail.sender.IdentifierCode	NA		The type of the organization is given in the SOR identifier. See 'sender id'.
Receiver type	Emessage.ClinicalEmail.receiver.IdentifierCode	NA		The type of the organization is given in the SOR identifier. See 'receiver id'.
Sender organization	Emessage.ClinicalEmail.sender.OrganizationName	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.sender.MedComMessagingOrganization.name	Yes	This information is depending on the SOR identifier and shall only be included, if

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		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') = %resource.entry.resource.ofType('MessageHeader').sender.reference.replace('Organization/','')).resource.ofType('Organization').name		the OrganizationName is given in the SOR identifier.
Receiver organization	Emessage.ClinicalEmail.receiver.OrganizationName	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.destination.primary.receiver.MedComMessagingOrganization.name	Yes	This information is depending on the SOR identifier and shall only be included, if the OrganizationName is given in the SOR identifier.
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') = %resource.entry.resource.ofType('MessageHeader').destination.receiver.reference.replace('Organization/','')).resource.ofType('Organization').name		
Sender department	Emessage.ClinicalEmail.sender.DepartmentName	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.sender.MedComMessagingOrganization.name	Yes	This information is depending on the SOR identifier and shall only be included, if the DepartmentName is given in the SOR identifier.
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') = %resource.entry.resource.ofType('MessageHeader').sender.reference.replace('Organization/','')).resource.ofType('Organization').name		
Receiver department	Emessage.ClinicalEmail.receiver.DepartmentName	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.destination.primary.receiver.MedComMessagingOrganization.name	Yes	This information is depending on the SOR identifier and shall only be included, if the OrganizationName is given in the SOR identifier.
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') = %resource.entry.resource.ofType('MessageHeader').destination.receiver.reference.replace('Organization/','')).resource.ofType('Organization').name		
Sender unit	Emessage.ClinicalEmail.sender.UnitName	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.sender.MedComMessagingOrganization.name	Yes	This information is depending on the SOR identifier and shall only be included, if the UnitName is given in the SOR identifier.
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') =		

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Data	OIOXML	Pseudo FHIR path / Actual FHIR path	Must Support	Comment
		%resource.entry.resource.ofType('MessageHeader').sender.reference.replace('Organization/','')).resource.ofType('Organization').name		
Receiver unit	Emessage.ClinicalEmail.receiver.UnitName	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.destination.primary.receiver.MedComMessagingOrganization.name	Yes	This information is depending on the SOR identifier and shall only be included, if the OrganizationName is given in the SOR identifier.
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') = %resource.entry.resource.ofType('MessageHeader').destination.receiver.reference.replace('Organization/','')).resource.ofType('Organization').name		
Sender streetname	Emessage.ClinicalEmail.sender.StreetName	NA		The address of the Organization is described by the SOR identifier.
Receiver streetname	Emessage.ClinicalEmail.receiver.StreetName	NA		The address of the Organization is described by the SOR identifier.
Sender suburb name	Emessage.ClinicalEmail.sender.SuburbName	NA		The address of the Organization is described by the SOR identifier.
Receiver suburb name	Emessage.ClinicalEmail.receiver.DistrictName	NA		The address of the Organization is described by the SOR identifier.
Sender district name	Emessage.ClinicalEmail.sender.DistrictName	NA		The address of the Organization is described by the SOR identifier.
Receiver postal code identifier	Emessage.ClinicalEmail.receiver.PostCodeIdentifier	NA		The address of the Organization is described by the SOR identifier.
Sender postal code identifier	Emessage.ClinicalEmail.sender.PostCodeIdentifier	NA		The address of the Organization is described by the SOR identifier.
Sender telephone	Emessage.ClinicalEmail.sender.TelephoneSubscriberIdentifier	NA		Organization contactinformation is described by the SOR identifier.

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Data	OIOXML	Pseudo FHIR path	Must Support	Comment
		Actual FHIR path		
Sender speciality code	Emessage.ClinicalEmail.sender.MedicalSpecialityCode	NA		This element is not of relevance in the FHIR CareCommunication message.
Patient id	Emessage.ClinicalEmail.Patient.CivilRegistrationNumber	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCareCommunicationEncounter.MedComCorePatient.identifier.cpr	Yes	Information about the patient cpr-identifier.
		Bundle.entry.resource.ofType('Patient').identifier.where(system = 'urn:oid:1.2.208.176.1.2').value		
Patient alternative id	Emessage.ClinicalEmail.Patient.AlternativeIdentifier	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCareCommunicationEncounter.MedComCorePatient.identifier	Yes	It is allowed to add an alternative identifier to the MedComCorePatient, however it is preferred to use the cpr-identifier.
		Bundle.entry.resource.ofType('Patient').identifier		
Patient family name	Emessage.Clinicalemail.Patient.PersonSurName	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCareCommunicationEncounter.MedComCorePatient.name.official.family	Yes	
		Bundle.entry.resource.ofType('Patient').name.family		
Patient name	Emessage.Clinicalemail.Patient.PersonGivenName	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCareCommunicationEncounter.MedComCorePatient.name.official.given	Yes	
		Bundle.entry.resource.ofType('Patient').name.given		
Patient street name	Emessage.Clinicalemail.Patient.StreetName	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCareCommunicationEncounter.MedComCorePatient.adress.line	Yes	
		Bundle.entry.resource.ofType('Patient').address.line		

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Data	OIOXML	Pseudo FHIR path	Must Support	Comment
		Actual FHIR path		
Patient suburb name	Emessage.Clinicalemail.Patient.SuburbName	NA		
Patient city name	Emessage.Clinicalemail.Patient.DistrictName	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCareCommunicationEncounter.MedComCorePatient.adress.city	Yes	
		Bundle.entry.resource.ofType('Patient').address.city		
Patient post code	Emessage.Clinicalemail.Patient.PostCodeIdentifier	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCareCommunicationEncounter.MedComCorePatient.adress.postalCode	Yes	
		Bundle.entry.resource.ofType('Patient').address.postalCode		
Patient occupancy	Emessage.Clinicalemail.Patient.OccupancyText	NA		
Episode of care status	Emessage.ClinicalEmail.Patient.EpisodeOfCareStatusCode	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCoreEncounter.status MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCoreEncounter.class MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCoreEncounter.MedComCorePatient.deceased	Yes (all)	The CareCommunication message episodeofcare status is more complexed than the OIOXML message. Together these three elements constitute the status of the patient.
		Bundle.entry.resource.ofType('Encounter').status Bundle.entry.resource.ofType(Encounter).class.code Bundle.entry.resource.ofType('Patient').deceased		

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Data	OIOXML	Pseudo FHIR path / Actual FHIR path	Must Support	Comment
Priority	Emessage.ClinicalEmail.AdditionalInformation.Priority	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCareCommunication.priority Bundle.entry.resource.ofType('Communication').priority	Yes	It is only allowed to used priority when the category is 'Regarding Referral', in Danish 'Vedr. Henvisning'. Therefore, will the priority element not always be present in examples.
Subject	Emessage.ClinicalEmail.AdditionalInformation.Subject	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCareCommunication.topic Bundle.entry.resource.ofType('Communication').topic	Yes	This element refers to the regionally agreed topics, called 'emne' in Danish.
Text	Emessage.ClinicalEmail.ClinicalInformation.Text01	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCareCommunication.payload.content Bundle.entry.resource.ofType('Communication').payload.content	Yes	This element holds the actual text message included in the CareCommunication.
Reference	Emessage.ClinicalEmail.Reference	MedComCareCommunicationMessage.MedComCareCommunicationMessageHeader.MedComCareCommunication.payload.attachement Bundle.entry.resource.ofType('Communication').payload.attachment	Yes	This element holds the attachments in the CareCommunication.

Version	Date	Responsible	Description
0.1.0	29-11-2021	TMS	Draft of mapping between OIOXML and FHIR CareCommunication. This is based on a previous mapping document.
1.0.0	03-01-2022	TMS	Minor corrections of the comments.

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