Map between OIOXML Advis and FHIR HospitalNotification Messages

This document describes mapping between the OIOXML Advis (XDIS20/XDIS17) and the FHIR HospitalNotification message. Not all elements from OIOXML Advis are relevant in FHIR HospitalNotification message, which is marked with a 'NA'. The purpose of this document is to help implementers of FHIR HospitalNotification message. The actual implementation guide which includes all requirements for the HospitalNotificationMessage can be found here.

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

Data	OIOXML	Pseudo FHIR path	Must	Comment	
		Actual FHIR path	Support		
Date for Message sent	Emessage.Envelope.Sent.Date	Med Com Hospital Notification Message. time stamp	Yes	All FHIR timestamps contain both date and time. This element holds information about when a bundle is created. The	
		Bundle.timestamp		timestamp is equivalent to MedComHospitalNotificationMessage.M edcomMessagingProvenance.occurred[x] occurredDateTime	
Time for Message sent	Emessage.Envelope.Sent.Time	MedComHospitalNotificationMessage.timestamp	Yes	All FHIR timestamps contain both date and time. This element holds information about when a bundle is created. The	
		Bundle.timestamp		timestamp is equivalent to MedComHospitalNotificationMessage.M edcomMessagingProvenance.occurred[x] occurredDateTime	
Message envelope id	Emessage.Envelope.Identifier	MedComHospitalNotificationMessage.id	Yes	A unique identifier for a bundle. The MedComHospitalNotificationMessage.id	
		Bundle.id		must be updated with a new value each time a new message is sent or a message is resent.	

Data	OIOXML	Pseudo FHIR path Actual FHIR path		
				Comment
Acknowledgeme ntCode	Emessage.Envelope.Acknowledge mentCode	NA		Not relevant, as all FHIR messages shall be acknowledged.
Message letter id	Emessage.NotificationOfAdmission .Letter.Identifier	MedComHospitalNotificationMessage.MedComHospitalNotificationMessageHeader.id	Yes	A unique identifier for each message. This identifier should be globally unique.
		Bundle.entry.resource.ofType('MessageHeader').id		
Version code	Emessage.NotificationOfAdmission .Letter.VersionCode	NA		The version of the FHIR profiles is part of the profile's URL.
Statistical code	Emessage.NotificationOfAdmission .Letter.StatisticalCode	NA		Only VANSEnvelope contains a statistical code.
Authorization timestamp date	Emessage.NotificationOfAdmission .Letter.Authorisation.Date	MedComHospitalNotificationMessage.timestamp	Yes	The authorization timestamp and the timestamp for when the message is sen are equivalent. Is also equivalent to MedComHospitalNotificationMessage.N
		Bundle.timestamp		edcomMessagingProvenance.occurred[x] occurredDateTime
Authorization timestamp time	Emessage.NotificationOfAdmission .Letter.Authorisation.Time	MedComHospitalNotificationMessage.timestamp	ti	The authorization timestamp and the timestamp for when the message is sent are equivalent. Is also equivalent to
		Bundle.timestamp		MedComHospitalNotificationMessage.M edcomMessagingProvenance.occurred[x] occurredDateTime
Message type (DIS20/DIS17)	Emessage.NotificationOfAdmission .Letter.TypeCode	lem:medcomHospitalNotificationMessage.medcomMessageHeader.event [x]. event coding. code		

Data	OIOXML	Pseudo FHIR path		Command
Data		Actual FHIR path	Support	Comment
		Bundle.entry.resource.ofType('MessageHeader').event.code		The type of message. For HospitalNotification the code shall be "hospital-notification-message"
Message status	Emessage.NotificationOfAdmission .Letter.StatusCode	MedcomMessagingMessage.MedcomMessagingProvenance.activity.coding.code	Yes	The element that describes the status of the HospitalNotification eg. admitinpatient.
		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.NotificationOfAdmission .Letter.NotificationIdentifier	MedComHospitalNotificationMessage.MedComHospitalNotificationMessag eHeader.MedComHospitalNotificationEncounter.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.NotificationOfAdmission .sender.EANIdentifier	MedComHospitalNotificationMessage.MedComHospitalNotificationMessageeHeader.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.NotificationOfAdmission .receiver.EANIdentifier	MedComHospitalNotificationMessage.MedComHospitalNotificationMessag eHeader.destination.primary.receiver.MedComMessagingOrganization.iden tifier.eanIdentifier	Yes	The EAN identifier for a receiving organization.
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') = %resource.entry.resource.ofType('MessageHeader').destination.receiver.ref		

Data	OIOXML	Pseudo FHIR path		Comment
		Actual FHIR path	Support	
		erence.replace('Organization/','')).resource.ofType('Organization').identifier. where(system = 'urn:oid:1.3.88').value		
Sender id	Emessage.NotificationOfAdmission .sender.Identifier	MedComHospitalNotificationMessage.MedComHospitalNotificationMessageHeader.sender.MedcomMessagingOrganization.identifier	Yes	The identifier that describes the sender of the HospitalNotification message. Both a SOR- and EAN-identifier must be sent.
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id')		a sort and EAN Identifier must be sent.
		%resource.entry.resource.ofType('MessageHeader').sender.reference.repla ce('Organization/','')).resource.ofType('Organization').identifier		
Receiver id Emessage.NotificationOfAdmission .receiver.Identifier		MedComHospitalNotificationMessage.MedComHospitalNotificationMessag eHeader.destination.primary.receiver.MedcomMessagingOrganization.iden tifier	Yes	The identifier that describes the receiver of the HospitalNotification 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.ref erence.replace('Organization/','')).resource.ofType('Organization').identifier		
Sender type	Emessage.NotificationOfAdmission .sender.IdentifierCode	ission NA		The type of the organization is given in the SOR identifier. See sender id.
Receiver type	Emessage.NotificationOfAdmission .receiver.IdentifierCode			The type of the organization is given in the SOR identifier. See receiver id.
Sender organization	Emessage.NotificationOfAdmission .sender.OrganizationName	MedComHospitalNotificationMessage.MedComHospitalNotificationMessageHeader.sender.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').sender.reference.repla ce('Organization/','')).resource.ofType('Organization').name		

Data	OIOXML	Pseudo FHIR path Actual FHIR path		Comment	
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Receiver organization	Emessage.NotificationOfAdmission .receiver.OrganizationName	MedComHospitalNotificationMessage.MedComHospitalNotificationMessag eHeader.destination.primary.receiver.medcomMessagingOrganization.nam e	Yes	This information is depending on the SOR identifier and shall only be included, if the OrganizationName is given in the SOR	
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') = %resource.entry.resource.ofType('MessageHeader').destination.receiver.ref erence.replace('Organization/','')).resource.ofType('Organization').name		identifier.	
Sender department	Emessage.NotificationOfAdmission .sender.DepartmentName	MedComHospitalNotificationMessage.MedComHospitalNotificationMessageHeader.sender.medcomMessagingOrganization.name	Yes	This information is depending on the SOR identifier and shall only be included, if	
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') = %resource.entry.resource.ofType('MessageHeader').sender.reference.replace('Organization/',")).resource.ofType('Organization').name		the DepartmentName is given in the SOR identifier.	
Sender unit	Emessage.NotificationOfAdmission .sender.UnitName	MedComHospitalNotificationMessage.MedComHospitalNotificationMessageHeader.sender.medcomMessagingOrganization.name	Yes	This information is depending on the SOR identifier and shall only be included, if	
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') = %resource.entry.resource.ofType('MessageHeader').sender.reference.repla ce('Organization/',")).resource.ofType('Organization').name		the UnitName is given in the SOR identifier.	
Sender telephone	Emessage.NotificationOfAdmission .sender.TelephoneSubscriberIdenti fier			Organization contactinformation is described by the SOR identifier.	
Answer to EAN id	Emessage.NotificationOfAdmission .sender.AnswerTo.EANIdentifier	MedComHospitalNotificationMessage.MedComHospitalNotificationMessag eHeader.MedComHospitalNotificationReportOfAdmissionRecipientExtensio n.MedComMessagingOrganization.identifier:eanIdentifier		Contains EANidentifier for the recipient of the report of admission.	

Data	OIOXML	Pseudo FHIR path		
		Actual FHIR path	Support	Comment
		Bundle.entry.where(resource.ofType('Organization').id.replace('string', 'id') = %resource.entry.resource.ofType('MessageHeader').extension.where(url = 'http://medcomfhir.dk/fhir/core/1.0/StructureDefinition/medcommessaging-reportOfAdmissionRecipientExtension').value.reference.replace('Organization','')).resource.ofType('Organization').identifier.where(system = 'urn:oid:1.3.88').value		
Patient id	Emessage.NotificationOfAdmission .Patient.CivilRegistrationNumber	MedComHospitalNotificationMessage.MedComHospitalNotificationMessag eHeader.MedComHospitalNotificationEncounter.MedComCorePatient.ident ifier.cpr	No	Information about the patient cpridentifier.
		Bundle.entry.resource.ofType('Patient').identifier.where(system = 'urn:oid:1.2.208.176.1.2').value		
Episode of care status Emessage.NotificationOfAdmission .Patient.EpisodeOfCareStatusCode		MedComHospitalNotificationMessage.MedComHospitalNotificationMessag eHeader.MedComMessagingProvenance.activity.coding.code MedComHospitalNotificationMessage.MedComHospitalNotificationMessag eHeader.MedComHospitalNotificationEncounter.MedComCorePatient.dece ased	Yes (all)	The HospitalNotification message episodeofcare status is more complexed than the OIOXML message, please refer to the implementation guide for more information.
		Bundle.entry.where(resource.ofType('Provenance').target.reference.replace ('MessageHeader/','') = %resource.entry.resource.ofType('MessageHeader').id).resource.ofType('Provenance').activity.coding.code		
		Bundle.entry.resource.ofType('Patient').deceased		
Notification start date Emessage.NotificationOfAdmission .Patient.Admission.Date		MedComHospitalNotificationMessage.MedComHospitalNotificationMessageHeader.MedComHospitalNotificationEncounter.period.start	Yes	The start of the admission. Date and time are included in the same element.
		Bundle.entry.resource.ofType('Encounter').period.start		
Notification start time	Emessage.NotificationOfAdmission .Patient.Admission.Time	MedComHospitalNotificationMessage.MedComHospitalNotificationMessageHeader.MedComHospitalNotificationEncounter.period.start	Yes	The start of the admission. Date and time are included in the same element.
		Bundle.entry.resource.ofType('Encounter').period.start		

Version	Date	Responsible	Description
0.1.0	4-11-2021	TMS	Draft of mapping between OIOXML and FHIR HospitalNotification. This is based on a
			previous mapping document.
0.2.0	11-11-2021	TMS	Spelling corrections.
0.3.0	18-11-2021	TMS	Addition of FHIR-paths.
1.0.0	25-11-2021	TMS, ANJ, OVI	After review. Added note the 'Actual FHIR paths' in the top of the document and
			adjusted the 'Actual FHIR path' for 'Episode of care status' and 'Message status'.