CARECOMMUNICATION

USE CASES

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Version	Initials	Date	Description
1.0.0	KML/OVI/MBK	August 2022	Example revised
2.0.0	KML/KRC	November 2022	Previous use-case document migrated into new template/structure. Content clarified.
2.1.0	KML/KRC/TMS/OVI	March 2023	New use cases added (S2.A3, S3.A3) In addition to minor clarifications and bug fixes, corrections and detailed refinements have been made to actions and/or notes concerning attached files, message-text formatting, replying to a MedCom message, forwarding, as well as cancellation and correction. These changes affect the following use cases: S1.A1, S1.A3, R1, S2, S2.A1, S2.A2, S3, S3.A1, S.CANC, R.CANC, S.CORR, and R.CORR.
2.1.1	KRC	September 2023	There is no longer a requirement that a CareCommunication message must be forwardable, correctable, or cancelable. These functionalities have been changed to optional upon sending. MedCom nevertheless recommends that the functionalities be supported! It remains a requirement that all systems must be able to receive and load a forwarded CareCommunication message, a correction, and a cancellation. In the following use cases, a note has been added clarifying that the functionality upon sending is optional: S3, S3.A1, S3.A2, S.CANC, S.CORR.
3.0.0	KRC	September 2023	The flow for replying to a CareCommunication message has been clarified and simplified, in that attached files must not automatically be included when replying. Instead, MedCom will ensure, as part of testing and certification, that systems load and store IDs for attachments. This is so that, upon receiving a reply, the system can retrieve and display previously attached files for the user. Furthermore, an ID has been added to each message segment, which must also be sent and received by the systems. In that context, MedCom maintains the requirement that message segments containing message text must always be sent in the communication. This is with a view to future proofing and ensuring minimum support in the systems. On that basis, minor changes have been made in the following reply use cases: S2, S2.A1, S2.A2.
4.0.0	KML/KRC	Juni 2024	A new alternative use case has been added: S2.A4, which describes the flow for replying to one's own most recently sent CareCommunication. In addition, action descriptions for automatic assignment of the communication identifier and references between

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			provenance and message segment (payload) have been clarified. Corrective actions, i.e., cancellation and correction, have been removed, as the requirement to be able to send and receive cancellations and corrections has been dropped. Likewise, the optional use case on formatting the message text has been removed, as the possibility of formatting has been dropped.
5.0.0	KML/SKS	September 2025	Translated the use case document to English and corrected some linguistic, grammatical and other minor specifications.

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1 Introduction

This document contains a series of business use case descriptions for the implementation of the CareCommunication standard.
The use case descriptions complement the CareCommunication documentation materials and should therefore be read in conjunction with them (see section 1.3 for references).

1.1 Background and Purpose

The use cases link content requirements with business rules for usage and are intended to ensure consistent implementation and application of CareCommunication.

The use cases have been discussed at meetings with representatives from regions and municipalities as well as EPJ, EOJ, and LPS vendors, including the established working group for the FHIR CareCommunication.

1.2 Target Group

This document is aimed at both IT system vendors and implementation managers in regions and municipalities.

1.3 Referencer

Material	Version	Link/reference	Description
SKA-4.1.4 Use cases	1.0.0-rc.1	Publication pending	Template on which these use cases are based
General technical use cases	1.0.0	https://medcomdk.github.io/dk-medcom-acknowledgement/#11-use-cases	Detailed use case descriptions of the technical actions that occur before and after the user's interaction with the system, including communication with the communications network regarding the sending and receiving of messages and acknowledgments.
Clinical and technical guidelines	4.0.0	https://medcomdk.github.io/dk-medcom-carecommunication/assets/documents/Clinical-guidelines-DA.html	Comprehensive overview of the clinical guidelines, and the requirements and recommendations that the standard fulfills and that the use cases reflect.

1.4 Terms

Term	Description
Domain-specific system	A domain specific system consists, in relation to message sending and receiving, of a business part and a technical part. The two parts range from being a tightly integrated system to two separate modules within the same system, or even two distinct systems configured to communicate with each other. This distinction has no impact on the structure of the use cases.
Sender system	The sender's (of a message) domain-specific system
Receiver system	The recipient's (of a message) domain-specific system
Business part of the domain-specific system	The business part handles all domain-specific functionality, which is the primary use case of the domain-specific system. It consists of: – Business inbox – Business messaging module – Business outbox
Technical part of the domain-specific system	The technical part handles communication with the network for sending and receiving messages and acknowledgments. It also determines which acknowledgment type is returned to the sender of a received message. It consists of: – Technical inbox – Technical messaging module – Technical outbox
Business messaging module	Within the business part, this module handles the domain-specific messaging interface, where end users interact with messages.
Business inbox	The domain-specific system's business inbox is an abstract term for the incoming functionality between the domain-specific system's technical part and its business part in the inbound direction.
Business outbox	The domain-specific system's business outbox is an abstract term for the outgoing functionality between the domain-specific system's business part and its technical part in the outbound direction with respect to the business part.
Communication network	The communication network is the network over which messages are physically sent. The network is currently the same as the VANS network.
Transmission flow	A transmission flow consists of: • A message flow from the sender's business messaging module in the domain-specific system to the receiver's business messaging module in the domain-specific system. • An acknowledgement flow from the receiver's business messaging module in the domain-specific system to the sender's business messaging module in the domain-specific system. Not all messages and acknowledgements are necessarily visible to the end users, but their contents are available in the domain-specific system's business messaging module.
Message segment	A message segment consists of the CareCommunication's free text field and the sender's signature. In cases where a file is attached to the message, the attachment will be linked to a new message segment.

1.5 Scope

The use cases in this document describe the user actor's (end user) interaction with the system and thus cover the business part of the message exchange flow, cf. the green marking in Figure 1. The technical actions that occur before and after the user actor's interaction with the system (e.g. the system's functionalities in the communication network as well as the sending and receiving of acknowledgments) are generic across various MedCom standards and are described as separate use cases in the document "General Technical Use Cases" (marked in red in Figure 1).

This means that 'sender use cases' end when the user actor sends a message, which (by the system actor) is placed in *the business outbox of the domain-specific system*, while receiver use cases are initiated when the system actor has registered a (technically positively validated) message in *the business inbox of the domain-specific system*, which is then presented to the user actor in the user interface. See the explanation in section 1.4 Term as well as the detailed explanation in the document "General Technical Use Cases".

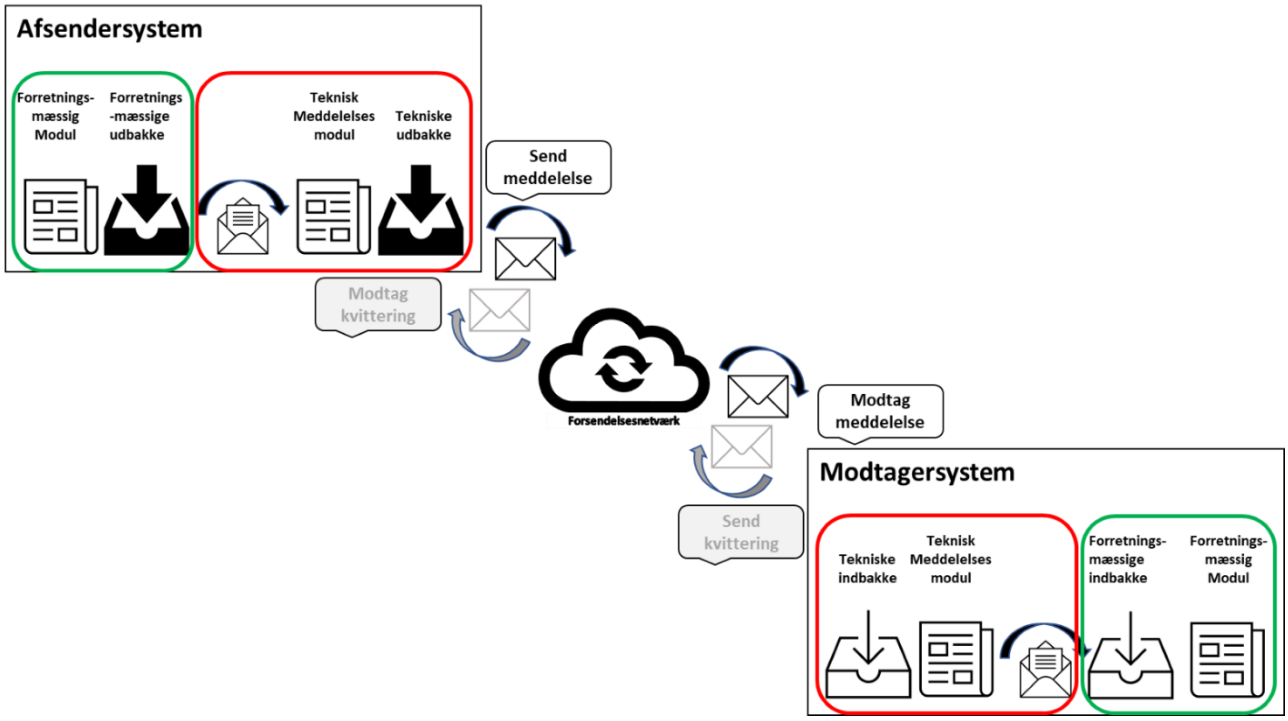

Figure 1: Illustration of Transmission Flow

1.6 Reading Guide

The use cases in this document describe a detailed sequence of the user actor's interaction with the system during various events. The use cases reflect the clinical and technical needs that the standard fulfills. These needs are summarized in a table clarifying the requirements for sender and receiver systems in section 5.

Three different types of use cases are distinguished:

- Primary use cases: For each event, one primary use case is described, outlining the normal flow of the actor's interaction with the system via the user interface.
- Alternative use cases: If there are possible deviations from the normal flow, the primary use case will reference alternative (independently described) use cases.
- Corrective use cases: Likewise, for corrective actions in the process (typically corrections and cancellations), the primary use case will reference corrective (independently described) use cases. These

corrective use cases are generally applicable across different use cases. (Not relevant in this use case document).

All use cases are divided into:

- Sender (S)-use case: Describes the use case from the sender´s side (S = Sender)
- Receiver (R)-use case: Describes the use case from the receiver´s side (R = Receiver)

Primary use cases are structured according to the following elements[1].

Element	Explanation
ID	Unique ID.
Name	Activity in imperative form.
Initiating actor	Name of the initiating actor (can be a user actor, e.g., nurse or medical secretary, or a system actor, e.g., a received notification).
Purpose	Brief description of the business purpose, including any possible delimitation from other use cases.
Starting conditions/prerequisites	The conditions that must be met for the scenario/use case to be carried out to its conclusion.
Initiating event	The event or incident that triggers the actor's actions in the scenario/use case.
Actions	The sequence of actions that—without interruptions—leads from the initiating event to the end result.
End result	The desired business objective.
Alternative actions	Description of any alternative actions that deviate from the actions in the normal flow (with reference/link to alternative use case(s)).
Corrective actions (CANC/CORR) (not relevant in this use case document)	Description of corrective actions taken when a process ends in an error situation or is resumed (with reference/link to corrective use case(s)). For example, corrections or cancellations.
Remarks	Any remarks on the use case. A remark will often refer to a specific numbered Action in the use case.

Table 1: Overview of the elements included in the primary use cases.

[1] The use cases have been prepared with inspiration from KOMBITs methods handbook for use cases

Alternative use cases will always refer to a use case with a 'normal' flow, which is why the preceding elements; initiating actor, purpose, starting conditions/prerequisites, and initiating event will not appear in the alternative use cases. Alternative use cases are therefore structured according to the following elements.

Element	Forklaring
ID	Unique ID.
Name	Activity in imperative form.
Reference to use case which this use case is an alternative to	Use case ID of the primary use case which this use case is an alternative to.
Actions	The sequence of actions that – without interruptions – leads from the initiating event to the end result.
End result	The desired business objective.
Remarks	Any remarks regarding the use case. A remark will often refer to a specific numbered Action in the use case.

Table 2: Overview of the elements included in the alternative use cases.

2 Overview of use cases

2.1 Overview of primary og alternative use cases

Event	Sender (S)-use case	Receiver (R)-use case
Send CareCommunication	S1	
Send CareCommunication with attached files	*S1.A1*	
Enter topic in topic text field	*S1.A2*	
Select *topic* from regionally agreed *topic* list	*S1.A3*	
Select category "Other"	*S1.A4*	
Select category "Regarding referral" and assign priority	*S1.A5*	
Receive CareCommunication		R1
Reply to CareCommunication	S2	
Reply to CareCommunication with attached files	*S2.A1*	
Change category and topic	*S2.A2*	
Reply to an OIOXML, EDIFACT or FHIR MedCom message with a CareCommunication	*S2.A3*	
Reply to own most recently sent CareCommunication	*S2.A4*	
Forward CareCommunication	S3	
Forward CareCommunication with attached files	*S3.A1*	
Change category and topic	*S3.A2*	
Forward selected parts of a CareCommunication message thread	*S3.A3*	

3 Use cases

3.1 S1: Send CareCommunication

Use case S1	Send CareCommunication
Initiating actor	User actor: Sender
Purpose	To send a CareCommunication to the correct recipient, fulfilling the standard´s requirements for content as well as sender system
Starting conditions/prerequisites	The user actor needs to contact another healthcare actor related to a citizen
Initiating event	The user actor wants to send a CareCommunication to the recipient
Actions	1. User actor: Creates a CareCommunication
	2. User actor: Enters recipient of the CareCommunication
	3. User actor: Enters citizen/patient information the inquiry concerns
	4. User actor: Selects a category form the national category list
	5. User actor: Does not enter a topic to the message
	6. User actor: Writes their text in the message free text field
	7. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number)
	8. User actor: Chooses to send the message
	9. System actor: Automatically inserts a communication identifier on the current message
	10. System actor: Automatically inserts references between Provenance and message segment for the current message
	11. System actor: Notifies user actor if the message exceeds 100 MB
	12. System actor: Places the message in the business outbox of the main-specific system
End result	A CareCommunication has been created and submitted for sending in the business outbox of the main-specific system
Alternative actions	6: User actor chooses to attach files to the message, see use case S1.A1 5a: User actor chooses to enter a topic, see use case S1.A2 5b: User actor selects a subject from a regionally predefined topic list, see use case S1.A3 4a: User actor selects category "Other" from the category list and must fill in the topic text field with a topic, see use case S1.A4 4b: User actor selects category "Regarding referral" from the national category list and applies a priority on the message, see use case S1.A5
Remarks	If the system actor notifies the user actor that the message exceeds the allowed size of 100 MB, the user actor must reduce the size of the message before it can be sent. The user actor must therefore edit and shorten the message text and/or remove attached files, so that the message, including attachments and VANS-envelope, does not exceed 100 MB.

3.1.1 S1.A1: Send CareCommunication with attachments

Alternative use case S1.A1	Sender chooses to attach files
Reference to use case which this use case is an alternative to	S1 – Send a CareCommunication
Actions	1. User actor: Creates a CareCommunication
	2. User actor: Enters recipient of the CareCommunication
	3. User actor: Enters citizen/patient information the inquiry concerns
	4. User actor: Selects a category from the national category list
	5. User actor: Does not enter a topic
	6. User actor: Writes their text in the message free text field
	7. User actor: Attaches permitted file types
	8. System actor: Automatically inserts new message segments with the attached files
	9. System actor: Automatically inserts title and ID to the attached files
	10. System actor: Ensures the titles of the attached files are visible to the user actor
	11. User actor: Chooses to write the name of the author and creation time of the attached files, if this is supported by the system
	12. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number).
	13. User actor: Chooses to send the message
	14. System actor: Automatically inserts communication identifier on the current message
	15. System actor: Automatically inserts references between Provenance and message segments for the current message
	16. System actor: Automatically inserts timestamp for sending of the message and attached files
	17. System actor: Notifies user actor if the message including attachments exceeds 100 MB
	18. System actor: Places the message in the business outbox of the main-specific system
End result	A CareCommunication including attached files is created and placed for sending in the business outbox of the main-specific system
Corrective actions	Not relevant
Remarks	MedCom recommends that the name of the author and time of creation of the attached file are included. System functionality that supports automatic insertion of author name and creation time is optional. If such functionality does not exist, it is recommended that the system supports the user actor in manually adding this information either in the attached file or as structured information in the message segment with the attached file.

3.1.2 S1.A2: Write topic in topic text field

Alternative use case S1.A2	Sender chooses to enter a topic
Reference to use case which this use case is an alternative to	S1 – Send CareCommunication
Actions	1. User actor: Creates a CareCommunication
	2. User actor: Enters recipient of the CareCommunication
	3. User actor: Enters citizen/patient information the inquiry concerns
	4. User actor: Selects a category from the national category list
	5. User actor: Chooses to enter a topic in the topic field
	6. User actor: Writes their text in the message free text field
	7. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number).
	8. User actor: Chooses to send the message
	9. System actor: Automatically inserts a communication identifier on the current message
	10. System actor: Automatically inserts references between Provenance and message segment for the current message
	11. System actor: Notifies user actor if the message exceeds 100 MB
	12. System actor: Places the message in the business outbox of the main-specific system
End result	A CareCommunication has been created and placed for sending in the business outbox of the main-specific system
Corrective actions	Not relevant
Remarks	Not relevant

3.1.3 S1.A3: Selection of topic from Regionally agreed-upon topic list

Alternative use case S1.A3	Subject is selected from a regionally agreed subject list
Reference to use case which this use case is an alternative to	S1 – Send a CareCommunication
Actions	1. User actor: Creates a CareCommunication
	2. User actor: Enters recipient of the CareCommunication
	3. User actor: Enters citizen/patient information the inquiry concerns
	4. User actor: Selects a topic from a regionally agreed-upon topic list
	5. User actor: Selects a category from the national category list (if not the system actor automatically inserts the category determined by the selected topic).
	6. User actor: Writes their text in the message free text field
	7. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number).
	8. User actor: Chooses to send the message
	9. System actor: Automatically inserts a communication identifier on the current message
	10. System actor: Automatically inserts references between Provenance and message segment for the current message
	11. System actor: Notifies user actor if the message exceeds 100 MB
	12. System actor: Places the message in the business outbox of the main-specific system
End result	A CareCommunication has been created and placed for sending in the business outbox of the main-specific system
Corrective actions	Not relevant
Remarks	4: The user actor may choose a topic from a topic list in cases where a regionally agreed topic list is available. 5: For regionally agreed upon topics, the system may choose to link a category to a topic, so that a category is automatically inserted into the category field when the user selects a specific topic from the regionally agreed upon topic list.

3.1.4 S1.A4: Selection of category "Other"

Alternative use case S1.A4	Sender selects the category "Other" and must enter a topic
Reference to use case which is an alternative to	S1 – Send a CareCommunication
Actions	1. User actor: Creates a CareCommunication
	2. User actor: Enters recipient of the CareCommunication
	3. User actor: Enters citizen/patient information that the inquiry concerns
	4. User actor: Selects category "Other" from the national category list
	5. User actor: Enters a topic in the topic text field
	6. User actor: Writes their text in the message free text field
	7. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number).
	8. User actor: Chooses to send the message
	9. System actor: Automatically inserts a communication identifier on the current message
	10. System actor: Automatically inserts references between Provenance and message segment for the current message
	11. System actor: Notifies user actor if the message exceeds 100 MB
	12. System actor: Places the message in the business outbox of the main-specific system
End result	A CareCommunication has been created and placed in the business outbox of the main-specific system
Corrective actions	Not relevant
Remarks	4-5: When selecting the category "Other," it is a requirement that the user actor enters a topic to the message.

3.1.5 S1.A5: Selection of category "Regarding Referral" and add priority

Alternative use case S1.A5	Sender selects the category "Regarding referral" and can add priority on the message
Reference to use case which this use case is an alternative to	S1 – Send en CareCommunication
Actions	1. User actor: Creates a CareCommunication
	2. User actor: Enters recipient of the CareCommunication
	3. User actor: Enters citizen/patient information that the inquiry concerns
	4. User actor: Selects category "Regarding referral" from the national category list
	5. User actor: Does not enter a topic
	6. User actor: Adds priority to the message
	7. User actor: Writes their text in the message free text field
	8. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number).
	9. User actor: Chooses to send the message
	10. System actor: Automatically inserts a communication identifier on the current message
	11. System actor: Automatically inserts references between Provenance and message segment for the current message
	12. System actor: Notifies user actor if the message exceeds 100 MB.
	13. System actor: Places the message in the business outbox of the main-specific system
End result	A CareCommunication has been created and placed for sending in the business outbox of the main-specific system
Corrective actions	Not relevant
Remarks	6: It is only possible to set priority on a CareCommunication when selecting the category "Regarding referral."

3.2 R1: Receive CareCommunication (new, replied, and forwarded)

Use case R1	Receive and read a CareCommunication
Initiating actor	System actor
Purpose	To receive a CareCommunication that meets the standard´s requirement for content display in the receiver system
Starting conditions/prerequisites	A CareCommunication has been sent to the business inbox of the main-specific system
Initiating event	System actor has registered a received message in the business inbox of the main-specific system
Actions	1. System actor: Notifies user actor that a CareCommunication has been received
	2. System actor: Clearly indicates to the user actor that the message is a new received message
	3. User actor: Opens the received CareCommunication
	4. System actor: Displays category, topic (if filled), priority (only if category "regarding referral" is selected), message segment containing message text and sender's signature
	5. System actor: Displays message segments with attached files and the corresponding author name and creation time of the attached files for the user
End result	The CareCommunication is received, loaded, and displayed to the user actor in the user interface.
Alternative actions	Not relevant
Corrective actions	Not relevant
Remarks	1: It is a requirement that the receiver system clearly indicates to the user actor whether the message is a newly received message, a reply, or a forwarded message. In the test protocol for receiving a CareCommunication, there are three separate tests for respectively a newly received message (R1), a reply (R2), and a forward (R3). The system must support and be able to display the permitted file types for attachments to the user. An overview of allowed file types can be accessed via the IG. The national category list enables the distribution of received CareCommunications. It is up to the receiver system to decide whether this functionality should be supported in the system upon receipt. In rare cases where the same CareCommunication is replied to at the same time by both sender and receiver, both sender and receiver systems will receive so-called parallel CareCommunications. It is a requirement that both systems load the messages into the corresponding message thread even if they are not the latest message in the thread. Both parallel sent messages must therefore be placed in the same message thread with the same communication identifier. It is important to make visible which information the user actor was aware of at the time of sending when parallel CareCommunications are placed in the same thread. Therefore, it is a requirement that the systems include a visible reference between CareCommunications in the thread so that users clearly can see what the given CareCommunications are replies to, as well as show the relationship between the

	other CareCommunications in the message thread. It is up to the vendor to ensure a display that best supports the user. It is a requirement that the user must be able to continue communication in the message thread either by replying or by receiving a new message, even if parallel CareCommunication messages occur. In the test protocol for receiving a CareCommunication, test steps for handling and linking parallel CareCommunications in the same message thread are included.

3.3 S2: Reply CareCommunication

Use case S2	Load and reply to a received CareCommunication
Initiating actor	User actor: Receiver
Purpose	To reply to a CareCommunication that meets the standard´s requirements for content and sender system
Start conditions/prerequisites	R1 – A CareCommunication has been received
Initiating event	The user actor has received, opened, and read a CareCommunication and wishes to send a reply.
Actions	1. User actor: Chooses to reply to the received CareCommunication
	2. System actor: Creates a CareCommunication
	3. System actor: Automatically inserts the sender of the received CareCommunication as recipient, via lookup in SOR.
	4. System actor: Automatically inserts the same category and topic from the received message
	5. System actor: Displays category and topic to the user actor in the user interface
	6. User actor: Writes their text in the message free text field
	7. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number).
	8. User actor: Chooses to send the message
	9. System actor: Automatically inserts the same communication identifier from the received message to the reply
	10. System actor: Automatically inserts reference between Provenance and message segment in the current message as well as history (containing previous provenances) in the reply
	11. System actor: Notifies user actor if the message exceeds 100 MB
	12. System actor: Places the message in the business outbox of the main-specific system
End result	The CareCommunication has been replied to and placed for sending in the business outbox of the main-specific system
Alternative actions	2: User actor chooses to reply to a CareCommunication with attachments, see use case S2.A1 5: User actor chooses to change category and topic on a received CareCommunication, see use case S2.A2 1a: User actor chooses to reply to a received MedCom message with a CareCommunication, see use case S2.A3 1b: User actor chooses to reply to their own most recently sent CareCommunication, see use case S2.A4
Corrective actions	Not relevant
Remarks	The system must always display the topic to the user actor if the topic field in the received message is filled with a topic by the sender.

3.3.1 S2.A1: Reply CareCommunication with attached files

Alternative use case S2.A1	Reply with attached files
Reference to the use case this is an alternative to:	S2 – Reply to received CareCommunication
Actions	1. User actor: Chooses to reply to the received CareCommunication with attached files
	2. System actor: Creates a CareCommunication
	3. System actor: Automatically inserts the sender of the received CareCommunication as recipient via lookup in SOR
	4. System actor: Automatically inserts the same category and topic from the received message
	5. System actor: Displays category and topic for user actor in the user interface
	6. User actor: Writes their text in the message free text field
	7. User actor: Chooses to attach a new file to the CareCommunication
	8. System actor: Automatically inserts a new message segment with the attached file
	9. System actor: Automatically inserts title and identifier for the attached file
	10. System actor: Ensures the title of the attached file visible to the user actor
	11. User actor: Chooses to write the author's name and time of creation for the attached file, if supported by the system
	12. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number).
	13. User actor: Chooses to send the message
	14. System actor: Automatically inserts the same communication identifier from the received message into the reply
	15. System actor: Automatically inserts references between Provenance and message segments in the current message as well as history (including previous provenances) for the reply
	16. System actor: Automatically inserts the timestamp for sending the message and the attached files
	17. System actor: Notifies the user actor if the message and attachments exceed 100 MB
	18. System actor: Places the message in the business outbox of the main-specific system
End result	The received CareCommunication with attached files has been replied to, and a new file has been attached to the reply. The message is placed for sending in the business outbox of the main-specific system
Corrective acts	Not relevant
Remarks	The system must always show the topic for the user actor if the topic text field in the received message is filled out with a topic by the sender. MedCom recommends that the author's name and creation time of the attached file are included. System functionality

	supporting automatic insertion of the author's name and time of creation is optional. If this functionality is not present, it is recommended that the system supports manual insertion of this information by the user actor either within the attached file or as structured information in the message segment containing the attachment.

3.3.2 S2.A2: Change category and topic in a reply

Alternative use case S2.A2	Change category and subject in a reply
Reference to the use case this is an alternative to:	S2 – Reply to a received CareCommunication
Actions	1. User actor: Chooses to reply to the received CareCommunication
	2. System actor: Creates a CareCommunication
	3. System actor: Automatically inserts the sender of the received CareCommunication as the recipient via lookup in SOR
	4. System actor: Automatically inserts the same category and (if filled in) topic from the received message
	5. System actor: Displays category and (if filled in) topic for the user actor in the user interface
	6. User actor: Changes category and writes a new topic
	7. User actor: Writes their text in the message free text field
	8. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number).
	9. User actor: Chooses to send the message
	10. System actor: Automatically inserts the same communication identifier from the received message into the reply
	11. System actor: Automatically inserts reference between Provenance and message segment in the current message as well as history (including previous provenances) in the reply
	12. System actor: Notifies the user actor if the message exceeds 100 MB
	13. System actor: Places the message in the business outbox of the main-specific system
End result	The received CareCommunication has been replied to with a new category and new subject and placed for sending in the business outbox of the main-specific system
Corrective actions	Not relevant
Remarks	The system must always show the topic to the user actor if the topic text field in the received message is filled out with a topic by the sender.

3.3.3 S2.A3: reply to a received OIOXML, EDIFACT or FHIR MedCom message with a CareCommunication

Alternative use case S2.A3	Reply to a received OIOXML/EDIFACT/FHIR with CareCommunication
Reference to the use case this is an alternative to:	S2 – Reply to a received CareCommunication
Actions	1. User actor: Chooses to reply to a received MedCom message
	2. System actor: Creates a CareCommunication
	3. System actor: Automatically inserts the correct identifier type from the received message into the reply
	4. System actor: Automatically inserts the sender of the received message as the recipient via lookup in SOR
	5. User actor: Selects a category for the reply
	6. System actor: Displays the category to the user actor in the user interface
	7. User actor: Writes their text in the message free text field
	8. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number).
	9. User actor: Chooses to send the message
	10. System actor: Automatically inserts the same communication identifier from the received message into the reply
	11. System actor: Automatically inserts reference between Provenance and message segment in the current message as well as history (including preceding provenances) in the reply
	12. System actor: Notifies the user actor if the message and attachments exceed 100 MB
	13. System actor: Places the message in the business outbox of the main-specific system
End result	A received OIOXML, EDIFACT or FHIR MedCom message has been replied to with a CareCommunication. The message is placed for sending in the business outbox of the main-specific system
Corrective actions	Not relevant
Remarks	When replying to a received EDIFACT, OIOXML or FHIR MedCom message, the identifier included in the received message is used and included in the reply. This makes it possible, via the identifier, to link a relevant flow of messages together. For example, by replying to a received referral with a CareCommunication, using and including the referral identifier in the reply.

3.3.4 S2.A4: Reply to own most recently sent CareCommunication

This use case is only relevant for systems that support the user actor replying to their own most recently sent correspondence message.

Use case S2.A4	Reply to own most sent CareCommunication
Reference to the use case this is an alternative to:	S2 – Reply to received CareCommunication
Actions	1. User actor: Chooses to reply to their own previously sent message
	2. System actor: Creates a CareCommunication
	3. User actor: Inserts the same recipient to the reply as in the previously sent message
	4. System actor: Automatically inserts the same category and topic term from the previously sent message
	5. System actor: Displays category and topic to the user actor in the user interface
	6. User actor: Writes their text in the message free text field
	7. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number).
	8. User actor: Chooses to send the message
	9. System actor: Automatically inserts the same communication identifier from the previous message into the reply
	10. System actor: Automatically inserts references between Provenance and message segment in the current message, as well as history (including preceding provenances) in the reply
	11. System actor: Notifies the user actor if the message exceeds 100 MB
	12. System actor: Places the message in the business outbox of the main-specific system
End result	The CareCommunication has been replied to and placed for sending in the business outbox of the main-specific system
Corrective actions	Not relevant
Remarks	It is up to the system how the recipient of the reply is inserted. This can be handled automatically by the system actor when creating the reply, or manually by the user actor. It is important that the user ensures the correct recipient is inserted when replying to their own most recently sent CareCommunication.

3.4 S3: Forward CareCommunication

This use case is only relevant for systems that support the user actor in forwarding a CareCommunication.

Use case S3	Forward a CareCommunication to a new recipient
Initiating actor	User actor: Receiver
Purpose	To forward a received CareCommunication that meets the standard's requirements for content and sending system
Starting conditions/prerequisites	R1 – A CareCommunication has been received
Initiating event	The user actor has received, opened, and read a CareCommunication and assesses that the message should be forwarded
Actions	1. User actor: Chooses to forward a received CareCommunication
	2. System actor: Automatically inserts the same category and (if filled) topic from the received CareCommunication
	3. System actor: Displays category and (if filled) topic to the user actor in the user interface
	4. User actor: Selects the recipient of the forward
	5. User actor: Writes the reason for forwarding and adds supplementary text in the message free text field
	6. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number).
	7. User actor: Chooses to send the message
	8. System actor: Automatically inserts a new communication identifier for the forwarded message
	9. System actor: Automatically inserts references between Provenance and message segment in the current message, and history (including preceding provenances) for the forward
	10. System actor: Notifies the user actor if the message exceeds 100 MB
	11. System actor: Places the message in the business outbox of the main-specific system
End result	A received CareCommunication has been forwarded and placed for sending in the business outbox of the main-specific system
Alternative actions	1a: User actor chooses to forward the message with attached files, see use case S3.A1 1b: User actor chooses to forward selected parts of a message thread, see use case S3.A3 6: User actor chooses to change category and topic in a received CareCommunication, see use case S3.A2
Corrective actions	Not relevant
Remarks	This functionality is optional for sending. If a user has forwarded a message, the system must support that the user can continue the communication in the original message thread. If the system supports the functionality of forwarding, it is a requirement that the entire message thread is forwarded, which may consist of one or more messages and attached

	files. It is optional whether the system supports that the user actor can select which parts of the thread and which files to forward. If the system does not support selecting parts of the message thread or attachments — and this is necessary — the user must instead create a new CareCommunication, copy the relevant content from the message to be forwarded into the new message, and optionally attach relevant files. This creates a new message thread. It is recommended that the user actor notes the name of the original author of the forwarded message in the new message.

3.4.1 S3.A1: Forward CareCommunication with attached files

This use case is only relevant for systems that support the user actor in forwarding a CareCommunication.

Alternative use case S3.A1	
Reference to the use case this is an alternative to	S3 – Forward a received CareCommunication
Actions	1. User actor: Opens and reads a CareCommunication and determines that the message, including attached files, should be forwarded
	2. User actor: Chooses to forward a received CareCommunication including attached files
	3. System actor: Automatically inserts the same category and (if filled) topic from the received CareCommunication
	4. System actor: Displays category and (if filled) topic to the user actor in the user interface
	5. User actor: Enters the recipient of the forwarded message
	6. User actor: Writes the reason for forwarding and adds supplementary text in the message free text field
	7. User actor: Chooses to attach a new file to the message
	8. System actor: Automatically inserts a new message segment with the attached file
	9. System actor: Automatically inserts title and ID for the attached file
	10. System actor: Displays the title of the attached file to the user actor
	11. User actor: Chooses to enter the author's name and the time of creation of the attached file, if supported by the system
	12. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number).
	13. User actor: Chooses to send the message
	14. System actor: Automatically inserts a new communication identifier for the forward
	15. System actor: Automatically inserts references between Provenance and message segments in the current message, as well as history (including preceding provenances) for the forward
	16. System actor: Automatically inserts the timestamp for sending the message and attached files
	17. System actor: Notifies the user actor if the message and attachments exceed 100 MB.
	18. System actor: Places the message in the business outbox of the main-specific system
End result	A received CareCommunication has been forwarded with attached files and placed for sending in the business outbox of the main-specific system
Corrective actions	Not relevant
Remarks	This functionality is optional for sending.

	MedCom recommends that the author's name and time of creation of the attached file are included and sent along. System functionality that supports automatic insertion of the author's name and time of creation is optional. If such functionality is not available, it is recommended that the system supports manual entry of this information by the user actor, either in the attached file itself or as structured information in the message segment containing the attached file.

3.4.2 S3.A2: Change category and topic in a forwarded CareCommunication

This use case is only relevant for systems that support the user actor in forwarding a CareCommunication.

Alternative use case S3.A2	
Reference to the use case this is an alternative to:	S3 – Forward a CareCommunication
Actions	1. User actor: Opens and reads a CareCommunication and determines that the message should be forwarded
	2. User actor: Chooses to forward a received CareCommunication
	3. System actor: Automatically inserts the same category and topic from the received CareCommunication
	4. System actor: Displays category and topic to the user actor in the user interface
	5. User actor: Chooses to change the category and topic
	6. User actor: Enters the recipient of the forwarded message
	7. User actor: Writes the reason for forwarding and supplementary text in the message free text field
	8. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number).
	9. User actor: Chooses to send the message
	10. System actor: Automatically inserts a new communication identifier for the forward
	11. System actor: Automatically inserts references between Provenance and message segments in the current message, as well as history (including preceding provenances) for the forward
	12. System actor: Notifies the user actor if the message exceeds 100 MB
	13. System actor: Places the message in the business outbox of the main-specific system
End result	A received CareCommunication has been forwarded with a new category and subject term and placed for sending in the business outbox of the main-specific system
Corrective actions	Not relevant
Remarks	This functionality is optional for sending.

3.4.3 S3.A3: Forward selected part of a CareCommunication message threat

This alternative use case is only relevant for systems that support the user actor in selecting which parts of the message thread and attached files should be forwarded.

Alternativ use case S3.A3	
Reference to the use case this is an alternative to	S3 – Forward a received CareCommunication
Actions	1. User actor: Opens and reads a CareCommunication which is part of a message thread and determines that a part of the thread's content should be forwarded
	2. User actor: Chooses to forward a received CareCommunication
	3. User actor: Chooses to forward a specific received CareCommunication with attached files that is part of the message thread
	4. System actor: Automatically inserts the same category and (if filled) topic from the received CareCommunication
	5. System actor: Displays category and (if filled) topic to the user actor in the user interface
	6. User actor: Selects which attachments to include
	7. System actor: Inserts message segments with the selected attachments for the forward
	8. System actor: Automatically inserts title and ID on the attached files
	9. System actor: Displays the titles of the attached files to the user actor
	10. User actor: Enters the author's name and creation timestamp for the attached files, if supported by the system
	11. User actor: Enters the recipient of the forwarded message
	12. User actor: Writes the reason for forwarding and any supplementary text in the message free text field
	13. System actor: Auto-fills the signature as much as possible (the user actor's signature with name, date and time, job title, and relevant phone number).
	14. User actor: Chooses to send the message
	15. System actor: Automatically inserts a new communication identifier for the forward
	16. System actor: Automatically inserts references between Provenance and message segments in the current message and the selected history (including preceding provenances) for the forward
	17. System actor: Automatically inserts the timestamp for the sending of the message and attached files
	18. System actor: Notifies the user actor if the message and attachments exceed 100 MB.
	19. System actor: Places the message in The business outbox of the Main-specific system
End result	A newly created CareCommunication with content from a previously received message has been sent and placed in The business outbox of the main-specific system

Corrective actions	Not relevant
Remarks	MedCom recommends that the author's name and the creation timestamp of the attached file are included and sent. If the system does not support automatic insertion of author name and creation timestamp, it is recommended that the system supports the user actor in manually entering this information either in the file itself or as structured information in the message segment containing the attached file.