medcom	ID and process	ID and title	Init	Version	Date
meacom	4.1. Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

HOSPITALNOTIFICATION

USE CASES

medcom	ID and process	Title	Init	Version	Date
medeom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

Versioning			
Version	Initials	Date	Description
1.0	MBK	26-01-2021	Release of use cases
1.0.1	MBK	03-02-2021	Minor corrections
			The content of the previous use case document has been
			transferred to new use case template/structure. There
			are no changes in the rules underlying the use cases, but
			the structure of the document has changed. Since the
2.0.0	MBK	October 2022	technical actions that lie before and after the user's inter-
			action with the system, and which were previously cov-
			ered by the current document, are generic across Med-
			Com standards, these have been transferred (in an ex-
			panded version) to a new independent document.
2.0.1	МВК	November 2022	Uniformity in the use of English (HospitalNotification) vs.
2.0.1	IVIDA		Danish (Advis om sygehusophold) naming.
			Correction to rule S.BR26: Validation mechanism may
3.0.0	МВК	January 2023	only be used for leave notifications, so that it is ensured
5.0.0	WIDK	January 2023	that recipient systems which cannot send admission re-
			port receive notification of completion.
			Clarification of remark for use case S5: Clarification that
3.0.1	MBK	April 2024	the receiving hospital (in case of transfer) only sends a
5.0.1	WIDK	April 2024	new notification of admission (STIN) if the patient has
			been transferred from another hospital.
			Relaxation to rule S.BR21: For corrections relating to ter-
3.0.2	MBK	May 2024	mination of leave [SLOR] or death [MORS], the sending
			system may choose not to send [RE_SLOR]/[RE_MORS].

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medcom	ID and process	Title	Init	Version	Date
medeom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

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1 Introduction

This document contains use case descriptions for implementing the standard HospitalNotification (Danish: Advis om sygehusophold).

The use case descriptions supplement the other documentation and should therefore be read in conjunction with this (see section 1.4 References).

1.1 Background and purpose

The use cases translate requirements for functionalities and business rules for use into detailed rules and use cases and intend to ensure a uniform implementation and use of 'HospitalNotification'.

The use cases have been prepared and qualified in collaboration with representatives from regions and municipalities through MedCom's home care hospital group (Danish: Hjemmepleje-sygehusgruppe), as well as system vendors.

1.2 Legal basis

HospitalNotifications are exchanged based on the Health Act and the Legal Security Act § 12 c.

"For use in the organization of care tasks, etc. pursuant to Section 79 a and Chapter 16 and Sections 107 and 108 of the Act on Social Services and the Health Act, as well as for follow-up of cases pursuant to Sections 8-10 of the Sickness Benefit Act, municipal councils and hospitals may exchange information on admission to and discharge from -hospitals of citizens in the municipality and about the citizen's acute hospital stay, where the citizen stays at the hospital for assessment and treatment without being admitted. The exchange can take place automatically and without the citizen's consent" (The Legal Security Act § 12 c LBK no. 265 of 25/02/2022).

Section 79 a of the Service Act covers preventive home visits, chapter 16 contains sections 83-99, which include personal help and care as well as care wills, and sections 107 and 108 cover temporary and longer-term housing.

1.3 Audience

The document targets both IT system vendors and implementation managers in regions and municipalities.

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1.4 References

Material	Version	Link/reference	Description
SKA-4.X.X busi-	1.0.0-rc.1	Awaiting publication	Template on which
ness-related use			these use cases are pre-
cases			pared
General technical	1.0.X	https://medcomdk.github.io/dk-medcom-	Detailed use case of the
use cases		acknowledgement/#11-use-cases	technical actions that
			take place before and af-
			ter the end user's inter-
			action in the system, in-
			cluding the communica-
			tion with the communi-
			cation network regarding
			sending and receiving
			messages and acknowl-
			edgements.
Clinical guidelines	3.0.X	https://medcomdk.github.io/dk-medcom-	Describes i.e., back-
for application		'Advis om sygehusophold'/#11-clinical-	ground, requirements for
		guidelines-for-application	content and profits, busi-
			ness rules for use, etc.

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

1.5 Terms

Term	Description
System (Danish:	A system consists – in terms of sending and receiving messages – of a business-related
Fagsystem)	and a technical part. The two parts of the system can be anything from a close-knit system
	to two different modules in the same system, or two systems that are configured to com-
	municate together. This is of no importance for the structure of the use cases.
Sender system	System that sends a message
Receiver system	System that receives a message
The business-related	The business-related part of the system provides all the primary features of the system as
part of the system	seen by the user. It consists of:
	- Business-related in-tray
	- Business-related communication module
	- Business-related out-tray
The technical part of	The technical part underpinning the system provides the means of communication through
the system	the exchange of messages and acknowledgements. This part also assesses the type of
	acknowledgement message to be sent to the sender. The technical part of the system con-
	sists of:
	- Technical in-tray
	- Technical communication module
	- Technical out-tray
Business-related com-	In the business-related communication module, all the professional actions, which are the
munication module	system's primary application area, are managed. It is, among other things, here the end user
manioation module	engages with the user interface in the system.
Business-related in-tray	The business-related in-tray is an abstract term for the inbound functionality between the
Business related in tray	technical part of the system and its business-related part of the system in an inbound direc-
	tion.
Business-related out-	The business-related out-tray is an abstract term for the outgoing functionality between the
tray	system's business-related part and its technical part in the outgoing direction.
Technical in-tray	The technical in-tray is an abstract term for the inbound functionality between the communi-
	cation network and the technical part of the subject system in the inbound direction. The
	technical in-tray is the communication network's delivery of a message to the system.
The communications	The communications network is the network on which messages are physically sent. The
network	network is currently the same as the VANS network.
Message flow	A message flow consists of:
Ŭ	- A message flow from the sender's business-related communication module in the
	system to the receiver's business-related communication module in the system.
	- An acknowledgement flow from the receiver's business-related communication
	module in the system to the sender's business-related communication module in
	the system
	Not all messages and acknowledgements are necessarily seen by the end users of the sys-
	tem, but their content is available in the system's business-related communication module.
ACK AA	HL7 acknowledgment term for a positive acknowledgment. ACK AA is HL7's counterpart to
	MedCom's positive acknowledgment CTRL ((X)CTL03).

In the use cases, in addition to the above terms, codes are used for the distinct types of HospitalNotification. A separate code overview has been prepared which shows the connection between these codes and the FHIR terminology (link to code overview).

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

HospitalNotification type	Description
STAA	Start hospital stay – acute ambulant
STIN	Start hospital stay - admission
SLHJ	End hospital stay – patient discharged to home/pri-
	mary sector
STOR	Start leave
SLOR	End leave
MORS	Deceased
AN_XX	of previously sent HospitalNotification
RE_XX	Correction to previously sent HospitalNotification

1.6 Scope

The use cases in this document describe, with a single exception (see below), the end user's interaction with the system, and thus include the business-related part of the message flow, cf. the green marking in Figure 1. The technical actions that lie before and after the end user's interaction with the system (e.g. the system's functionalities in the communication network as well as the sending and receiving of acknowledgements), are generic across various MedCom standards and appear as independently described use cases in the document "General technical use cases" (marked in red in Figure 1).

This means that the "sender use cases" end with the end user sending a message, which (by the System operator) is placed in the <u>system's business-related out-tray</u>, while "recipient use cases" are initiated by the System operator having registered a (technically positively validated) message in the <u>system's business-related in-tray</u>, which is presented to the end user in the user interface. See also explanation under section 1.5 Term and detailed explanation in the document "<u>General technical use cases</u>".



Figure 1 Illustration of message flow

medcom	ID and process	Title	Init	Version	Date
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Note regarding receipt of HospitalNotification: As the hospital cannot determine in advance which citizens are currently receiving services from the primary sector, HospitalNotification is created for all citizens with a CPR number and permanent residential address in Denmark when registering in the hospital's EHR system. It is up to the recipient system to ensure that HospitalNotification is only entered and made visible to citizens who receive services within the applicable legal basis. Therefore, in this document, a technical prerequisite use case has been added, which describes the extra/specific technical actions that, prior to the end user's interaction with the system, are necessary to ensure that the recipient system only stores and displays HospitalNotification for the end user when there is legal basis for this.

The use case descriptions do not include the subsequent communication flow with other home care-hospital messages (Danish: Hjemmepleje-sygehus-standarder).

1.7 Reading guide

The use cases in the document describe a detailed course of the end user's interaction with the system during various incidents/events. The background for the use cases is a number of (business) rules for use, which are described in section 6 Rules for the sending system on which the use cases are based..

A distinction is made between three different types of use cases:

- **Primary use cases:** For each incident, one primary use case will be described, which describes the normal process of the user's interaction with the system in the user interface.
- Alternative use cases: If there are deviations from the normal process, the primary use case will refer to alternative (independently described) use cases.
- **Corrective use cases:** Likewise, corrective actions for the process (typically corrections and cancellations) will be referred to corrective (independently described) use cases from the primary use case. The corrective use cases will typically be generic across different use cases.

All use cases are divided into:

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

Primary use cases are made up of the elements below¹.

¹ The use cases have been prepared with inspiration from <u>KOMBIT's method manual for use cases</u>.

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

Element	Description
ID	Unique ID
Name	Activity in imperative
Initiator	Name of the initiator (can be an end user (e.g., nurse or medical
	secretary) or a System operator (e.g., a received HospitalNotifica-
	tion)
Purpose	Brief description of the business-related purpose, as well as any
	delimitation to other use cases.
Conditions for initiation	The conditions for initiation that must be met for the sce-
	nario/use case to go through/completed to the end.
Reason for initiation	The event or incident which triggers the user's actions in the sce-
	nario/use case.
Actions	The sequence of actions that leads – without interruption – from
	the reason for initiation to the result.
Result	The desired business-related target/purpose
Alternative actions (A)	Description of any alternative actions that deviate from the ac-
	tions in the normal course (with reference/link to alternative use
	case(s).
Corrective actions (CANC/CORR)	Description of corrective actions that are taken when a course
	ends with an error situation or with a resumption (with refer-
	ence/link to corrective use case(s). For example, corrections or
	cancellations.
Comments	Any comments on the use case

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

	medcom	ID and process	Title	Init	Version	Date
May 2024	meacom	4.1 Preparation and modifica-	HospitalNotification – use cases	MBK	3.0.2	May 2024
IV		tion of a MedCom standard	Hospital Notification – Use cases	IVIBK	3.U.Z	١٧

Alternative use cases will always refer to a use case with a normal course, which is why the previous elements; initiator, purpose, starting conditions/conditions for initiation and reason for initiation, will not appear in the alternative use cases. Alternative use cases are therefore made up of the following elements:

Element	Description
ID	Unique ID
Name	Activity in imperative
Reference to the use case that this use	Use case ID of the primary use case to which this use case is an
case is an alternative to	alternative
Actions	The sequence of actions that leads – without interruption – from
	the reason for initiation to the result.
Result	The desired business-related target/purpose
Corrective actions (CANC/CORR)	Description of corrective actions that are taken when a course
	ends with an error situation or with a resumption (with refer-
	ence/link to corrective use case(s). For example, corrections or
	cancellations.
Comments	Any comments on the use case

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

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

2 Overview of use cases

2.1 Overview of primary and alternative use cases

Incident	HospitalNotifi- cation type	Request for DIS16	Sender (S) use case	Receiver (R) use case
Start adm	nission			
Patient is admitted	[STIN]	Yes	<u>S1</u>	<u>R1</u>
 Without prior admission 				
- After prior admission to another hospital in another				
region (transfer between regions)				
Patient is admitted	[STIN]	No	<u>S1.A1</u>	<u>R1.A1</u>
- After prior admission to another hospital in the same				
region (transfer between hospitals in the same re-				
gion)				
- After a previous acute ambulant hospital stay at the				
same hospital				
Patient is admitted after prior admission to another depart-	-	-	<u>S1.A2</u>	-
ment at the same hospital (internal transfer)				
The patient is referred to an acute ambulant hospital stay	[STAA]	Yes	<u>S2</u>	<u>R2</u>
Leav			1	r
The patient goes on leave from his/her hospital stay	[STOR]	No	<u>S3</u>	<u>R3</u>
The patient returns from leave from his/her hospital stay	[SLOR]	No	<u>S4</u>	<u>R4</u>
Transfer patient (ref	ferring company))	I	
Patient is transferred to	-	-	<u>S5</u>	-
- Another department at the same hospital				
- Another hospital in the same region				
- Another hospital in another region				
- Hospice				
The hospital is responsible for the transfer/transport.	[a]			
Patient is transferred to	[SLHJ]	No	<u>Se S6</u>	<u>Se R6</u>
- Another hospital in the same region				
- Another hospital in another region				
- Hospice				
The patient is responsible for the transfer/transport.	<u> </u>			
End adm		N 1	06	Dí
Patient is discharged (to home/primary sector)	[SLHJ]	No	<u>S6</u>	<u>R6</u>
Includes cases where:				
- The patient does not return after leave				
 The patient handles the transfer/ transport from one hospital to another by him/herself 				
Deat				
Patient dies	[MORS]	No	<u>S7</u>	<u>R7</u>
- Upon arrival	[IVIOR3]	INU	<u></u>	<u>IV/</u>
- During hospital stay				
- During hospital stay - During leave				
Manual end of I	hospital stav			
Manual end of hospital stay in recipient system		_	-	<u>R8</u>
mandar ond or nospital stay in recipient system				110

medcom	ID and process	Title	Init	Version	Date
medeom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

2.2 Corrective use cases

Note regarding corrections and cancellations: Cancellations and corrections must be able to be clearly linked to the original HospitalNotification to which the cancellation/correction relates, so that the recipient can clearly link the messages together. When the time for the end of the patient's hospital stay has been exceeded, and a HospitalNotification [SLHJ] has been sent, corrections and cancellations must not be sent, unless these relate to that particular HospitalNotification.

Incident	Sender (S) use case	Receiver (R) use
		case
There is a need to cancel a HospitalNotification which has al-	<u>S.CANC</u>	<u>R.CANC</u>
ready been sent.		
There is a need to correct a HospitalNotification which has al-	<u>S.CORR</u>	<u>R.CORR</u>
ready been sent.		

2.3 Technical validation of legal basis for reception

Incident	Sender (S) use case	Receiver (R) use case
Technical validation of legal basis for reception (positive)		<u>R.PC</u>
Technical validation of legal basis for reception (negative)		<u>R.PC.A1</u>

medcom	ID and process	Title	Init	Version	Date
medeom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

3 Use cases

3.1 Patient is admitted

3.1.1 S1: Admit patient and send HospitalNotification [STIN] Events leading to this use case:

- The patient is admitted without prior admission.
- The patient is admitted after prior admission to another hospital in another region (transfer between regions)

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

Use case S1	Admit patient and send HospitalNotification [STIN]	
Initiator	End user: Nurse/secretary at the hospital	
Purpose	To admit a patient and to notify relevant collaborators about this (send HospitalNotifi- cation [STIN], when the conditions for this are present/fulfilled cf. Rules for the sending system on which the use cases are based.	
Conditions for initiation	 The patient is referred to admission (acute or planned): Without prior admission After prior admission to another hospital in another region. 	
Reason for initiation	The patient is present at the hospital for admission.	
Actions	1. End user: Registers the patient as present and admitted	
	 System operator: Evaluates positively that HospitalNotification [STIN] must be sent, cf. Rules for the sending system on which the use cases are based. 	
	 System operator: Evaluates positively that an admission note must be re- quested (XDIS16) cf. Rules for the sending system on which the use cases are based. 	
	 System operator: Based on the evaluation, places a HospitalNotification [STIN] with request for admission repot (XDIS16) in <u>the system's business-related out-tray</u> 	
Result	The patient is admitted.	
	The System operator has placed a HospitalNotification [STIN] in <u>the system's business-related out-tray</u> with a request for an admission note (XDIS16).	
Alternative actions	 2a System operator evaluates negatively that HospitalNotification [STIN] must be sent, as the patient has been transferred from another department at the same hospital cf. Rules for the sending system on which the use cases are based. See <u>alternative use case S1.A2</u>. 3a System operator evaluates negatively that an admission note (XDIS16) must be requested, as the patient has been acute ambulant at the hospital prior to the admission or has been transferred from another hospital in the same region cf. Rules for the sending system on which the use cases are based. See <u>alternative use system</u> on which the use cases are based. See <u>alternative use system</u> on which the use cases are based. See <u>alternative use case S1.A1</u> 	
Corrective actions	 1a End user has registered the wrong personal identification number as admitted and thus activated sending of HospitalNotification [STIN] concerning the wrong patient, see use case <u>S.CANC</u> 1b End use has mistakenly registered the patient as "admitted" instead of "acute ambulant", see use case <u>S.CANC</u> 1c End user has registered the wrong hospital department or time, see use case <u>S.CORR</u> 	
Comments	Not relevant	

3.1.1.1 S1.A1: Admit patient and send Hospital Notification [STIN] without a request for admission

note

Events leading to this use case:

• Patient is admitted after prior admission to another hospital in the same region (transfer between regions)

medcom	ID and process	Title	Init	Version	Date
medeom	4.1 Preparation and modifica-	HospitalNotification – use cases	MBK	3.0.2	May 2024
	tion of a MedCom standard				

• Patient is admitted after a previous acute ambulant hospital stay

Alternative use case S1.A1	Admit patient and send HospitalNotification [STIN] without request for admission note
Reference to the use case that this use case is an alternative to	<u>S1</u>
Actions	1. End user: Registers the patient as present and admitted
	2. System operator: Evaluates positively that HospitalNotification [STIN] must be sent, cf. Rules for the sending system on which the use cases are based.
	 System operator: Evaluates negatively that an admission note (XDIS16) must be requested, cf. Rules for the sending system on which the use cases are based.
	 System operator: Based on the evaluation, places a HospitalNotification [STIN] without request for admission note (XDIS16) in <u>the system's business-related out-tray</u>
Result	Patient is admitted.
	System operator has placed a HospitalNotification [STIN] in <u>the system's business-re-</u> lated out-tray without a request for an admission note (XDIS16)
Corrective actions	 1a End user has registered the wrong personal identification number as admitted and thus activated sending of HospitalNotification [STIN] concerning wrong patient, see use case <u>S.CANC</u> 1b End use has mistakenly registered the patient as "admitted" instead of "acute ambulant", see use case <u>S.CANC</u> 1c End user has registered the wrong hospital department or time, see use case <u>S.CORR</u>
Comments	Not relevant

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

3.1.1.2 S1.A2: Admit patient without sending HospitalNotification [STIN]

Events leading to this use case:

• Patient is admitted after prior admission to another department in the same hospital (internal transfer)

Alternative use case S1.A2	Admit patient without sending HospitalNotification [STIN]	
Reference to the use case that this use case is an alternative to	<u>S1</u>	
Actions	1. End user: Registers the patient as present and admitted	
	2. System operator: Evaluates negatively that HospitalNotification [STIN] must be sent, cf. Rules for the sending system on which the use cases are based.	
Result	The patient is admitted. System operator has not placed a HospitalNotification [STIN] in <u>the system's busines</u> related out-tray	
Corrective actions	Not relevant	
Comments	Not relevant	

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

3.1.2 R1: Receive HospitalNotification [STIN] and send admission note

Events leading to this use case:

- Citizen is admitted without prior admission
- Citizen is admitted after admission to a hospital in another region (transfer between regions)

Use case R1	Receive HospitalNotification [STIN] and send admission note		
Initiator	System operator		
Purpose	To be informed that a citizen has been admitted to the hospital		
Conditions for initiation	The citizen is registered as admitted to a hospital. The system operator has evaluated positively that HospitalNotification [STIN] must be placed in <u>the system's business-related in-tray</u> cf. <u>R.PC</u>		
Reason for initiation	System operator has placed a formatted HospitalNotification [STIN] in <u>the system's</u> <u>business-related in-tray</u>		
Actions	 System operator: Evaluates positively that an admission note (XDIS16) must be sent cf. request in HospitalNotification [STIN] 		
	 System operator: Based on the evaluation, places an admission note (XDIS16) in <u>the system's business-related out-tray</u> 		
	 System operator: Imports HospitalNotification [STIN] and notifies end user that HospitalNotification [STIN] has been received. 		
	4. End user: Accesses HospitalNotification [STIN]		
	5. System operator: Displays HospitalNotification [STIN] for end user.		
Result	The citizen is admitted.		
	HospitalNotification [STIN] is imported and displayed, and the end user is notified.		
	System operator has placed an admission note (XDIS16) in <u>the system's business-re-</u> lated out-tray.		
Alternative actions	2a System operator evaluates negatively that an admission note must be sent, cf. request in HospitalNotification [STIN]. See alternative use case <u>R1.A1</u>		
Corrective actions	Not relevant		
Comments	It is up to the receiving system to set up rules for any automatic pausing of services when receiving a HospitalNotification [STIN]		

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

3.1.2.2 R1.A1: Receive HospitalNotification [STIN] without sending an admission note

Events leading to this use case:

- Citizen is admitted after prior admission to another hospital in the same region (transfer between hospitals in the same region)
- Citizen is admitted after prior acute ambulant hospital stay

Alternative use case R1.A1	Receive HospitalNotification without sending an admission note		
Reference to the use case that this use case is an alternative to	<u>R1</u>		
Actions	1. System operator: Evaluates negatively that an admission note (XDIS16) must be sent, cf. request in HospitalNotification [STIN]		
	 System operator: Imports HospitalNotification [STIN] and notifies end user that HospitalNotification [STIN] has been received. 		
	3. End user: Accesses HospitalNotification [STIN]		
	4. System operator: Displays HospitalNotification [STIN] for end user.		
Result	The citizen is admitted.		
	HospitalNotification [STIN] is imported and displayed, and the end user is notified.		
	System operator has not placed an admission note (XDIS16) in <u>the system's business-</u> related out-tray.		
Corrective actions	Not relevant		
Comments	It is up to the receiving system to set up rules for any automatic pausing of services when receiving a HospitalNotification [STIN]		

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024
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3.2 Patient is referred to acute ambulant hospital stay

3.2.1 S2: Register patient as acute ambulant and send HospitalNotification [STAA]

Use case S2	Register patient as acute ambulant and send HospitalNotification [STAA]			
Initiator	End user: Nurse/secretary as the hospital			
Purpose	To notify relevant collaborators about the patient's acute ambulant hospital stay by sending HospitalNotification [STAA] when the conditions for this are present cf. Rules for the sending system on which the use cases are based.			
Conditions for initiation	Patient is referred to acute ambulant contact at the hospital.			
Reason for initiation	The patient is present at the hospital for acute ambulant contact.			
Actions	1. End user: Registers the patient as present (acute ambulant)			
	2. System operator: Evaluates positively that a HospitalNotification [STAA] must be sent, cf. Rules for the sending system on which the use cases are based.			
	 System operator: Evaluates positively that an admission note (XDIS16) must be requested. 			
	 System operator: Based on the evaluation, places a HospitalNotification [STAA] with a request for an admission note (XDIS16) in <u>the system's busi- ness-related out-tray</u> 			
Result	The patient is at the hospital for acute ambulant contact.			
	The system operator has placed a HospitalNotification [STAA] in <u>the system's busi-</u> <u>ness-related out-tray</u> with a request for an admission note (XDIS16).			
Alternative actions	Not relevant			
Corrective actions	 1a End user has registered the wrong personal identification number as admitted and thus activated sending of HospitalNotification [STAA] concerning wrong patient, see use case <u>S.CANC</u> 1b End use has mistakenly registered the patient as "acute ambulant" instead of "admitted", see use case <u>S.CANC</u> 1c End user has registered the wrong hospital department or time, see use case <u>S.CORR</u> 			

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

3.2.2 R2: Receive HospitalNotification [STAA] and send admission note

Use case R2	Receive HospitalNotification [STAA] and send admission note
Initiator	System operator
Purpose	To be informed that a citizen is at the hospital for acute ambulant contact
Conditions for initiation	The citizen is registered as 'acute ambulant' at the hospital. The system operator has evaluated positively that HospitalNotification [STAA] must be placed in <u>the system's business-related in-tray</u> cf. <u>R.PC</u>
Reason for initiation	System operator has placed a formatted HospitalNotification [STAA] in <u>the system's</u> <u>business-related in-tray</u>
Actions	 System operator: Evaluates positively that an admission note must be sent (XDIS16) cf. request in 'HospitalNotification' [STAA]
	 System operator: Based on the evaluation, places an admission note (XDIS16) in <u>the system's business-related out-tray</u>
	 System operator: Imports HospitalNotification [STAA] and notifies the end user that HospitalNotification' [STAA] has been received.
	4. End user: accesses the HospitalNotification' [STAA]
	5. System operator:: Displays HospitalNotification [STAA] for end user.
Result	The citizen is at the hospital for acute ambulant treatment.
	HospitalNotification [STAA] is imported and displayed, and the end user is notified.
	System operator has placed an admission note (XDIS16) in <u>the system's business-re-</u> lated out-tray.
Alternative actions	Not relevant
Corrective actions	Not relevant
Comments	It is up to the receiving system to set up rules for any automatic pausing of services when receiving a HospitalNotification [STAA]

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

3.3 Patient goes on leave from his hospital stay

3.3.1 S3: Register the patient on leave and send HospitalNotification [STOR]

Use case S3	Register the patient on leave and send HospitalNotification [STOR]
Initiator	End user: Nurse/secretary at the hospital
Purpose	To send the patient on leave from his hospital stay and to notify relevant collaborators (send HospitalNotification [STOR] cf. Rules for the sending system on which the use cases are based.
Conditions for initiation	Patient is admitted
Reason for initiation	Patient is sent on leave from his hospital stay
Actions	1. End user: Register patient on leave
	 System operator: Evaluates positively that HospitalNotification [STOR] must be sent cf. Rules for the sending system on which the use cases are based.
	 System operator: Evaluates negatively that an admission note must be re- quested (XDIS16) cf. Rules for the sending system on which the use cases are based.
	 System operator: Based on the evaluation, places a HospitalNotification [STOR] without request for admission note (XDIS16) in <u>the system's busi- ness-related out-tray</u>
Result	Patient is on leave from his hospital stay
	The system operator has placed a HospitalNotification [STOR] in <u>the system's busi-ness-related out-tray</u> without request for an admission note (XDIS16).
Alternative actions	Not relevant
Corrective actions	 1a End user has registered the wrong personal identification number as admitted and thus activated sending of HospitalNotification [STOR] concerning wrong patient, see use case <u>S.CANC</u> 1b End user mistakenly registered the patient as 'on leave', see use case <u>S.CANC</u> 1c End user has registered the wrong hospital department or time, see use case <u>S.CORR</u>
Comments	The EHR system might, prior to sending HospitalNotification [STOR], choose to validate whether an admission note has been received, so that HospitalNotification [STOR] is not sent on patients who do not receive services in the municipality.
	Notification of the patient's leave must be seen as a service message to the recipient, who is thus informed about the current leave if relatives or the patient himself ad- dresses the municipality during the leave. Treatment responsibility for a patient on leave lies with the hospital, and it must be agreed upon if personnel, other than the hos- pital, are to provide services during the leave.
	A leave notification is only sent when the patient is registered on home leave. Leave in the case of double admissions (simultaneous admission to a psychiatric and somatic ward) must therefore not trigger HospitalNotification [STAA].

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

3.3.2 R3: Receive HospitalNotification [STOR]

Use case R3	Receive HospitalNotification [STOR]		
Initiator	System operator		
Purpose	To be informed that a citizen is on leave from his hospital stay		
Conditions for initiation	The system operator has evaluated positively that HospitalNotification [STOR] must be placed in <u>the system's business-related in-tray</u> cf. <u>R.PC</u>		
Reason for initiation	System operator has placed a formatted HospitalNotification [STOR] in <u>the system's</u> <u>business-related in-tray</u>		
Actions	1. System operator: Evaluates negatively that an admission note (XDIS16) must be sent, cf. request in HospitalNotification [STOR]		
	2. System operator: Imports HospitalNotification [STOR] and notifies end user that HospitalNotification [STOR] has been received.		
	3. End user: Accesses HospitalNotification [STOR]		
	4. System operator: Displays HospitalNotification [STOR] for end user.		
Result	The citizen is on leave from his hospital stay.		
	HospitalNotification [STOR] is imported and displayed, and the end user is notified.		
	System operator has not placed an admission note (XDIS16) in <u>the system's business-</u> related out-tray.		
Alternative actions	Not relevant		
Corrective actions	Not relevant		
Comments	Notification of the patient's leave must be seen as a service message to the recipient, who is thus informed about the current leave if relatives or the patient himself ad- dresses the municipality during the leave. Treatment responsibility for a patient on leave lies with the hospital, and it must be agreed upon if personnel, other than the hos- pital, are to provide services during the leave.		

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024
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3.4 Patient returns after leave from his hospital stay

3.4.1 S4: Register patient as returned from leave and send HospitalNotification [SLOR]

Use case S4	Register patient as returned from leave and send HospitalNotification [SLOR]		
Initiator	End user: Nurse/secretary at the hospital		
Purpose	To notify relevant collaborators that a patient has returned to the hospital after leave (send HospitalNotification [SLOR] cf. Rules for the sending system on which the use cases are based.		
Conditions for initiation	Patient is on leave		
Reason for initiation	The patent is present at the hospital after end of leave.		
Actions	1. End user: Register patient as returned from leave		
	2. System operator: Evaluates positively that HospitalNotification [SLOR] must be sent cf. Rules for the sending system on which the use cases are based.		
	 System operator: Evaluates negatively that an admission note must be re- quested (XDIS16) cf. Rules for the sending system on which the use cases are based. 		
	 System operator: Based on the evaluation, places a HospitalNotification [SLOR] without request for admission note (XDIS16) in <u>the system's busi- ness-related out-tray</u> 		
Result	Patient has returned to the hospital after leave.		
	The system operator has placed a HospitalNotification [SLOR] in <u>the system's business-related out-tray</u> without request for an admission note (XDIS16).		
Alternative actions	Not relevant		
Corrective actions	 1a End user has registered the wrong personal identification number as admitted and thus activated sending of HospitalNotification [SLOR] concerning the wrong patient, see use case <u>S.CANC</u> 1b End user mistakenly registered the patient as 'end leave', see use case <u>S.CANC</u> 1c End user has registered the wrong hospital department or time, see use case <u>S.CORR</u> 		
Comments	Not relevant.		

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

3.4.2 R4: Receive HospitalNotification [SLOR]

Use case R4	Receive HospitalNotification [SLOR]
Initiator	System operator
Purpose	To be informed that a citizen has returned to the hospital after leave.
Conditions for initiation	The system operator has evaluated positively that HospitalNotification [SLOR] must be placed in the system's business-related in-tray cf. R.PC
Reason for initiation	System operator has placed a formatted HospitalNotification [SLOR] in <u>the system's</u> <u>business-related in-tray</u>
Actions	 System operator: Evaluates negatively that an admission note (XDIS16) must be sent, cf. request in HospitalNotification [SLOR]
	2. System operator: Imports HospitalNotification [SLOR] and notifies end user that HospitalNotification [SLOR] has been received.
	3. End user: Accesses HospitalNotification [SLOR]
	4. System operator: Displays HospitalNotification [SLOR] for end user.
Result	The citizen has returned to the hospital after leave.
	HospitalNotification [SLOR] is imported and displayed, and the end user is notified.
	System operator has not placed an admission note (XDIS16) in <u>the system's business-related out-tray.</u>
Alternative actions	Not relevant
Corrective actions	Not relevant
Comments	If the citizen does not return to the hospital after leave, the receiving system will receive HospitalNotification [SLHJ], <u>see use case R6.</u> Hospital Notification [SLOR] may have been received prior to HospitalNotification [SLHJ]
	If the citizen dies while on leave, the receiving system will receive HospitalNotification [MORS], <u>see use case R7</u> . HospitalNotification [SLOR] may have been received prior to HospitalNotification [SLHJ].

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

3.5 Patient is transferred

3.5.1 S5: Transfer patient (referring hospital)

Events leading to this use case

- Patient is transferred to another department in the same hospital
- Patient is transferred to another hospital in the same region
- Patient is transferred to another hospital in another region
- Patient is transferred to hospice

The hospital is responsible for the transfer/transport.

Use case S5	Transfer patient		
Initiator	End user: Nurse/secretary at the hospital		
Purpose	To transfer the patient without sending HospitalNotification that indicates that the pa- tient is discharged cf. Rules for the sending system on which the use cases are based.		
Conditions for initiation	The patient is admitted		
Reason for initiation	The patient is referred for admission to another department or another hospital.		
Actions	1. End user: Transfer the patient (system registration)		
	 System operator: Evaluates negatively that HospitalNotification must be sent, cf. Rules for the sending system on which the use cases are based. 		
Result	The patient is transferred. System operator has not placed a HospitalNotification in <u>the system's business-related</u> out-tray		
Alternative actions	1a End user terminates the patient, as the patient wants to take care of the trans- fer/transport himself, <u>see use case S6</u> .		
Corrective actions	Not relevant		
Comments	No notification of termination (HospitalNotification [SLHJ]) is sent, as the patient con- tinues his admission. When transferring to a new hospital, the receiving hospital sends HospitalNotification about admission (see use case S1 + S1.A1) to inform relevant par- ties about the transfer in this way.		
	If the patient takes care of the transfer/transport himself, the hospital cannot be sure that the patient will show up at the receiving hospital. In this case, the referring hospital should terminate the patient (see use case S6), The planned transfer should appear/be communicated to relevant personnel in the care course plan (Plejeforløbsplan) and/or CareCommunication (Korrespondancemeddelelse).		

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

3.6 Patient is discharged to home/primary sector

3.6.1 S6: End/discharge patient and send HospitalNotification [SLHJ] **Events leading to this use case:**

- The patient is discharged to home/primary sector
- The patient does not return to hospital after leave from his hospital stay
- The patient is transferred to another hospital but takes care of the transport himself.

Use case S6	End/discharge patient and send HospitalNotification [SLHJ]		
Initiator	End user: Nurse/secretary at the hospital		
Purpose	To end/discharge the patient to home/primary sector and to notify relevant collabora- tors about this (send HospitalNotification [SLHJ]) cf. Rules for the sending system on which the use cases are based.		
Conditions for initiation	The patient is currently in hospital (admitted or acute ambulant)		
Reason for initiation	The patient is to be discharged to home/primary sector.		
Actions	1. End user: Discharges the patient to home		
	 System operator: Evaluates positively that HospitalNotification [SLHJ] must be sent, cf. Rules for the sending system on which the use cases are based. 		
	 System operator: Evaluates negatively that an admission note must be re- quested (XDIS16) 		
	 System operator: Based on the evaluation, places a HospitalNotification [SLHJ] without request for admission note (XDIS16) in <u>the system's busi-ness-related out-tray</u> 		
Result	The patient is discharged to home/primary sector.		
	System operator has placed a Hospital Notification (SLHJ] in <u>the system's business-re-</u> <u>lated out-tray</u> without request for an admission note (XDIS16)		
Alternative actions	Not relevant		
Corrective actions	 1a End user has registered the wrong personal identification number as admitted and thus activated sending of HospitalNotification [SLHJ] concerning wrong patient, see use case <u>S.CANC</u> 1b End user mistakenly discharged the patient, see use case <u>S.CANC</u> 1c End user has registered the wrong hospital department or time, see use case <u>S.CORR</u> 		
Comments	The same HospitalNotification [SLHJ] is used both when an acute ambulant hospital stay, and an admission are completed/patient is going home.		
	HospitalNotification [SLHJ] is only used when a patient is discharged to the home/pri- mary sector and must not be used in the event of transfers (unless the patient man- ages the transfer himself) or death.		

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

3.6.2 R6: Receive HospitalNotification [SLHJ] regarding end of admission/discharge

Use case R6	Receive HospitalNotification [SLHJ] regarding end of admission/discharge		
Initiator	System operator		
Purpose	To be informed that a citizen has been discharged to home.		
Conditions for initiation	Notification has previously been received about the patient's hospital stay (Hospital- Notification [STAA] or [STIN]). System operator has evaluated positively that HospitalNotification [SLHJ] must be placed in <u>the system's business-related in-tray</u> cf. <u>R.PC</u>		
Reason for initiation	System operator has placed a formatted HospitalNotification [SLHJ] in <u>the system's</u> <u>business-related in-tray</u>		
Actions	 System operator: Evaluates negatively that an admission note (XDIS16) must be sent, cf. request in HospitalNotification [SLHJ] 		
	 System operator: Imports HospitalNotification [SLHJ] and notifies end user that HospitalNotification [SLHJ] has been received. 		
	3. End user: Accesses HospitalNotification [SLHJ]		
	4. System operator: Displays HospitalNotification [SLHJ] for end user.		
Result	The citizen is discharged to home/primary sector.		
	HospitalNotification [SLHJ] is imported and displayed, and the end user is notified.		
	System operator has not placed an admission note (XDIS16) in <u>the system's business-</u> related out-tray		
Alternative actions	Not relevant		
Corrective actions	Not relevant		
Comments	It is up to the receiving system to set up rules for possible automatic resumption of ser- vices upon receipt of HospitalNotification [SLHJ].		

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

3.7 Patient dies

3.7.1 S7: Send HospitalNotification [MORS] in the event of the patient's death **Events leading to this use case:**

- The patient is dead upon arrival
- The patient dies during hospital stay
- The patient dies during leave

Use case S7	Send HospitalNotification [SLHJ] in the event of the patient's death		
Initiator	End user: Nurse/secretary at the hospital		
Purpose	To register the patient as dead and to notify relevant collaborators about this (send HospitalNotification [MORS]) cf. Rules for the sending system on which the use cases are based.		
Conditions for initiation	Patient is either on his way to the hospital or is staying at the hospital		
Reason for initiation	Patient dies		
Actions	1. End user: Registers the patient as dead		
	 System operator: Evaluates positively that HospitalNotification [MORS] must be sent, cf. Rules for the sending system on which the use cases are based. 		
	 System operator: Evaluates negatively that an admission note must be re- quested (XDIS16) 		
	 System operator: Based on the evaluation, places a HospitalNotification [MORS] without request for admission note (XDIS16) in <u>the system's busi-ness-related out-tray</u> 		
Result	The patient is dead.		
	System operator has placed a HospitalNotification [MORS] in <u>the system's business-</u> related out-tray without request for an admission note (XDIS16)		
Alternative actions	Not relevant		
Corrective actions	 1a End user has registered the wrong personal identification number as admitted and thus activated sending of HospitalNotification [MORS] concerning wrong patient, see use case <u>S.CANC</u> 1b End user mistakenly registers the patient as dead, see use case <u>S.CANC</u> 1c End user has registered the wrong hospital department or time, see use case <u>S.CORR</u> 		
Comments	Not relevant		

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

3.7.2 R7: Receive HospitalNotification [MORS]

Events leading to this use case:

- The citizen is dead on arrival at the hospital
- The citizen dies during hospital stay
- The citizen dies during leave

Use case R7	Receive HospitalNotification [MORS]
Initiator	System operator
Purpose	To be informed that a citizen is dead
Conditions for initiation	System operator has evaluated positively that HospitalNotification [MORS] must be placed in <u>the system's business-related in-tray</u> cf. <u>R.PC</u>
Reason for initiation	System operator has placed a formatted HospitalNotification [MORS] in <u>the system's</u> <u>business-related in-tray</u>
Actions	 System operator: Evaluates negatively that an admission note (XDIS16) must be sent, cf. request in HospitalNotification [MORS]
	2. System operator: Imports HospitalNotification [MORS] and notifies end user that HospitalNotification [MORS] has been received.
	3. End user: Accesses HospitalNotification [MORS]
	4. System operator: Displays HospitalNotification [MORS] for end user.
Result	The citizen is dead.
	HospitalNotification [MORS] is imported and displayed, and the end user is notified. System operator has not placed an admission note (XDIS16) in <u>the system's business-</u> related out-tray
Alternative actions	Not relevant
Corrective actions	Not relevant
Comments	Not relevant

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

3.8 Manually end the citizen's stay at the hospital

3.8.1 R8: Manually end the citizen's stay at the hospital **Events leading to this use case**:

- The citizen has been transferred to a unit that does not send HospitalNotifications and is discharged to home from there
- Missing HospitalNotification[SLHJ] due to an error.

Use case R8	Manually end the citizen's hospital stay		
Initiator	End user		
Purpose	To manually end a hospital stay because of missing HospitalNotification [SLHJ]		
Conditions for initiation	The citizen is registered as admitted in the electronic care record (EOJ) The citizen has been discharged to home/primary without receiving HospitalNotifica- tion [SLHJ]		
Reason for initiation	The municipality is informed that the citizen has been discharged to home (telephone, secure e-mail, CareCommunication (Korrespondancemeddelelse), via the citizen, other.)		
Actions	1. End user: Manually ends the admission in EOJ		
Result	The citizen has returned to home.		
	The citizen's admission is closed in EOJ.		
Alternative actions	Not relevant		
Corrective actions	Not relevant		
Comments	It is up to the receiving system to set up rules for any automatic resumption of services when admission is manually closed.		

medcom	ID and process	Title	Init	Version	Date
medeom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

4 Corrective use cases

4.1 Cancellation

4.1.1 S.CANC: Cancel an already sent HospitalNotification

Use case S.CANC	Cancel an already sent HospitalNotification
Initiator	End user: Nurse/secretary at the hospital
Purpose	To correct and notify relevant collaborators about a HospitalNotification message that should not have been sent due to incorrect registration of the personal identification number or type of HospitalNotification
Conditions for initiation	HospitalNotification of the type [STIN] [STAA] [SLHJ] [MORS] [STOR] [SLOR] has been sent
Reason for initiation	End user has become aware of incorrect registration of the personal identification num- ber or HospitalNotification type
Actions	1. End user: Corrects the action
	 System operator: Evaluates positively that HospitalNotification [AN_XX] must be cent cf. Rules for the sending system on which the use cases are based.
	3. System operator: Evaluates negatively that an admission note (XDIS16) must be requested, as it is an cancellation.
	 System operator: Based on the evaluation, places a HospitalNotification [AN_XX] without request for admission note (XDIS16) in <u>the system's busi- ness-related out-tray</u>
Result	Error has been corrected.
	System operator has placed a HospitalNotification (AN_XX] in <u>the system's business-</u> related out-tray without request for an admission note (XDIS16)
Comments	Only error registrations regarding personal identification number or HospitalNotification type must result in cancellations being sent. Corrections to hospital department and/or time of hospital stay must result in corrections being sent.
	Cancellations must not be sent prior to corrections.
	The ID unambiguously links the cancellation to the HospitalNotification message to which the cancellation relates.

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

4.1.2 R.CANC: Receive HospitalNotification [AN_XX]

Use case R.CANC	Receive HospitalNotification [AN_XX]
Initiator	System operator
Purpose	To be informed that a previously received HospitalNotification has been cancelled/not valid.
Conditions for initiation	HospitalNotification of the type [STIN] [STAA] [SLHJ] [MORS] [STOR] [SLOR] has been received.
Reason for initiation	System operator has placed a formatted HospitalNotification [AN_XX] in <u>the system's</u> <u>business-related in-tray</u>
Actions	 System operator: Evaluates negatively that an admission note (XDIS16) must be sent, cf. request in HospitalNotification [AN_XX]
	2. System operator: Imports HospitalNotification [AN_XX] and notifies end user that HospitalNotification [AN_XX] has been received.
	 System operator: Activates cancellation display for the HospitalNotification which has been cancelled.
	4. End user: Accesses HospitalNotification [AN_XX]
Result	5. System operator: Displays HospitalNotification [AN_XX] for end user.
Comments	The recipient is informed that the previously received HospitalNotification has been cancelled. Cancellation view for the HospitalNotification which has been cancelled is activated.
Initiator	Not relevant
Purpose	It is up to the receiving system to ensure that the message that has been cancelled appears as cancelled to the user (cancellation view)

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

4.2 Corrections

4.2.1 S.CORR: Correct hospital stay and send HospitalNotification [RE_XX]

Use case S.CORR	Correct hospital stay and send HospitalNotification for corrections
Initiator	End user: Nurse/secretary at the hospital
Purpose	To correct and notify relevant collaborators about incorrect information in a Hospital- Notification message (wrong department or time of hospital stay).
Conditions for initiation	HospitalNotification of the type [STIN] [STAA] [SLHJ] [MORS] [STOR] [SLOR] has been sent
Reason for initiation	End user has become aware of incorrect registration of hospital department and/or time of hospital stay
Actions	 End user: Corrects information about the hospital stay (department and/or time).
	 System operator: Evaluates positively that HospitalNotification [RE_XX] must be sent cf. Rules for the sending system on which the use cases are based.
	3. System operator: Evaluates negatively that an admission note (XDIS16) must be requested, as it is a correction
	 System operator: Based on the evaluation, places a HospitalNotification [RE_XX] without request for admission note (XDIS16) in <u>the system's busi- ness-related out-tray</u>
Result	Error has been corrected.
	System operator has placed a HospitalNotification (RE_XX] in <u>the system's business-</u> related out-tray without request for an admission note (XDIS16)
Comments	Only corrections to the hospital department and/or time of hospital stay must result in the sending of corrections. Incorrect registration of personal identification number and HospitalNotification type must result in cancellations being sent.
	Cancellations must not be sent prior to corrections.
	ID unambiguously links the correction to the HospitalNotification message to which the correction relates.

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

4.2.2 R.CORR: Receive HospitalNotification [RE_XX]

Use case R.CORR	Receive HospitalNotification [RE_XX]
Initiator	System operator
Purpose	To be informed about corrections to a previously received HospitalNotification
Conditions for initiation	A HospitalNotification message of type [STIN] [STAA] [SLHJ] [MORS] [STOR] [SLOR] has been received.
Reason for initiation	System operator has placed a formatted HospitalNotification [RE_XX] in <u>the system's</u> <u>business-related in-tray</u>
Actions	 System operator: Evaluates negatively that an admission note (XDIS16) must be sent, cf. request in HospitalNotification [RE_XX]
	2. System operator: Imports HospitalNotification [RE_XX] and notifies end user that HospitalNotification [RE_XX] has been received.
	 System operator: Activates change marking for the HospitalNotification mes- sage which has been corrected.
	4. End user: Accesses HospitalNotification [RE_XX]
Result	5. System operator: Displays HospitalNotification [RE_XX] for end user with clear change marking.
Comments	The end user is informed that the previously received HospitalNotification message has been corrected.
	Track changes is activated in the HospitalNotification message which has been change.
Initiator	It is up to the receiving system and customers to decide how corrections are stored and displayed to the end user.

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

5 Technical validation of legal basis for reception

As the hospital cannot determine in advance which citizens are currently receiving services from the primary sector, HospitalNotification is created for all citizens with a personal identification number (CPR no.) and permanent residential address in Denmark when registering in the hospital's EHR system. It is up to the receiving system to ensure that HospitalNotifications are only entered and made visible in relation to citizens who receive services within the applicable legal basis. Therefore, a technical preconditional use case is described below. It describes the extra technical actions that, prior to the end user's interaction with the system, are necessary to ensure that the receiving system only stores and displays HospitalNotifications for the end user when authorized by law. The use case supplements the other technical actions that lie before and after the end user's interaction with the system, and which are described in the document "<u>General technical use cases</u>".

medcom	ID and process	Title	Init	Version	Date
medeom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

5.1 R.PC: Receive and store HospitalNotification (technical)

Use case R.PC	Receive and store HospitalNotification (technical)
Initiator	System operator
Purpose	To place a HospitalNotification message in <u>the system's business-related in-tray</u> , when there is legal basis for this
Conditions for initiation	The communication network has placed a HospitalNotification in the system's business-related in-tray.
Reason for initiation	System operator registers that a HospitalNotification has been received in <u>the system's business-</u> related in-tray.
Actions	1. System operator: Retrieves HospitalNotification in <u>the system's business-related in-tray</u> and logs sufficient metadata in the system so that an acknowledgement can be sent.
	2. System operator: Evaluates HospitalNotification positively against the standard's profiling.
	 System operator: Checks that HospitalNotification is marked to receive an acknowledge- ment cf. rules as described in "<u>General technical use cases</u>", and logs/marks that a posi- tive acknowledgement must be sent (<u>ACK AA</u>)
	4. System operator: Sets message state as "Validated"
	5. System operator: Formats message content according to the system's message format.
	 Evaluates positively that HospitalNotification must be placed in <u>the system's business-</u> related in-tray based on Rules for the receiving system on which the use cases are based (there is legal basis for storing).
Result	System operator has placed a formatted message content in <u>the system's business-related in-tray</u> , and logged/marked for a positive acknowledgement to be sent. Message state is set to "Validated"
Alternative actions	2a System operator rejects HospitalNotification due to technically invalid content, see <u>General tech-</u> <u>nical use cases'</u>
	2b System operator rejects HospitalNotification due to a technical error in the receiving system (see <u>General technical use cases</u> ')
	6a System operator evaluates negatively that HospitalNotification must be entered based on Rules
	for the receiving system on which the use cases are based. See alternative use case $\underline{\text{R.PC.A1}}$
Corrective actions	Not relevant
Comments	The use case supplements the other technical actions that lie before and after the end user's inter- action with the system, and which are describes in the document "General technical use cases".

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

5.1.1 R.PC.A1 Receive and dispose of HospitalNotification (technical)

Use case R.PC.A1	Receive and dispose of HospitalNotification (technical)
Reference to the use case that this use case is an alternative to	<u>R.PC</u>
Actions	 System operator: Evaluates negatively that HospitalNotification must be stored based on Rules for the receiving system on which the use cases are based (there is no legal basis for storing)
	 System operator: Deletes HospitalNotification and does not place HospitalNotification in <u>the system's business-related in-tray</u>
Result	System operator has not stored HospitalNotification and shown it to the end user. System operator has logged/marked that a positive acknowledgement must be sent. Message status is set to "Validated".
Corrective actions	Not relevant
Alternative actions	Not relevant
Comments	The use case supplements the other technical actions that lie before and after the end user's inter- action with the system, and which are describes in the document "General technical use cases".
	The receiving system must, even if HospitalNotification is not stored/persisted in the system, posi- tively acknowledge receipt of HospitalNotification (if the other conditions for initiation for this are present).

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

6 Rules for the systems on which the use cases are based

6.1 Rules for the sending system on which the use cases are based

6.1.1 Rules regarding sending distinct types of HospitalNotification messages

ID	Event	Type of HospitalNotifica- tion	Request for admission note (XDIS16)
S.BR1	Acute ambulant patient	STAA	Yes
S.BR2	Admit patient	STIN	Yes
S.BR3	Admit patient from another region	STIN	Yes
S.BR4	Admit patient from another hospital in the same region	STIN	No
S.BR5	Admit patient from another department at the same hospital	No HospitalNotification is sent	Not relevant
S.BR6	Patient goes on leave from his hospital stay	STOR	No
S.BR7	Patient returns from leave	SLOR	No
S.BR8	End/discharge patient to home/primary sector	SLHJ	No
S.BR9	Patient dies (upon arrival or during hospital stay)	MORS	No
S.BR10	Send correction to HospitalNotification (wrong department or time)	RE_XX	No
S.BR12	Send cancellation (used for wrong pa- tient/CPR no or wrong type of Hospital- Notification)	AN_XX	No

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

6.1.2 Other rules regarding sending of HospitalNotification

medcom	ID and process	Title	Init	Version	Date
medeom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024
	tion of a medicul fit standard				

ID	Rule
S.BR13	HospitalNotification must be sent in a timely manner from the EHR system.
	If future registrations of planned contacts are used in the patient administration system (PAS)/EHR,
0.001.4	these must first trigger the sending of a HospitalNotification message when the time occurs.
S.BR14	Notices about leave (HospitalNotification [STOR][SLOR]) are only sent when the patient is going on
	leave from his hospital at home. Leave from one of more admissions (e.g., simultaneous admission to a psychiatric and somatic ward) shall not trigger HospitalNotification.
S.BR15	, , ,
5.BR15	If the citizen does not show up from the hospital after leave, the patient is discharged and a Hospital- Notification [SLHJ] is sent. Sender can send HospitalNotification [SLOR] prior to HospitalNotification [SLHJ]
S.BR16	If the citizen dies while on leave, this is recorded and HospitalNotification [MORS] is sent. Sender can
	send HospitalNotification [SLOR] prior to HospitalNotification [SLHJ]
S.BR17	Concerning transfers (referring hospital): Notification of termination (HospitalNotification [SLHJ]) is
	not sent if the patient is discharged for further stay in another department and/or hospital, including hospice.
	The rule can only be deviated from if the patient himself manages/is responsible for the transport
	from hospital A to hospital B. The planned transfer should then be communicated to the recipient in
	another way, e.g., in a care course plan (Plejeforløbsplan) and/or in a CareCommunication (Korre-
	spondancemeddelelse)
S.BR18	Concerning transfers (receiving hospital): If a patient has been transferred from one hospital to an-
	other hospital in another region, a new HospitalNotification [STIN] is sent from the receiving hospital,
	including a request for an admission note (XDIS16).
S.BR19	Concerning transfers (receiving hospital): If a patient has been transferred from one hospital to an-
	other hospital in the same region, a new HospitalNotification [STIN] is sent from the receiving hospi-
	tal, without a request for an admission note (XDIS16).
S.BR20	Cancellations are sent in the event of wrong registrations regarding personal identification number or
	HospitalNotification type. The ID uniquely links the cancellation (HospitalNotification [AN_XX] to the
	HospitalNotification message to which the cancellation relates.
S.BR21	Corrections are sent in case of wrong registrations regarding department and/or time of hospital
	stay. The ID uniquely links the correction (HospitalNotification [RE_XX]) to the HospitalNotification
	message to which the correction relates. For corrections relating to end of leave [SLOR] or death
	[MORS], the sending system may choose to not send [RE_SLOR]/[RE_MORS].
S.BR22	Only corrections are sent to the most recently sent 'Advise on hospital stay'. If a correction is made to,
	for example, the time of admission for a patient who has been discharged, this correction must not
	be sent.
S.BR23	Cancellations are not sent prior to corrections.
S.BR25	HospitalNotification messages (which are not cancellations or corrections) is addressed to the pa -
	tient's municipality of residence.
S.BR25	Cancellations and corrections (HospitalNotification [AN_XX] [RE_XX] are addressed to the recipient of
	the erroneous HospitalNotification.
S.BR26	HospitalNotification messages are generated for all patients who are admitted (acute or planned) or
	who are on an acute ambulant stay at the hospital (and where the above applicable business rules
	have been complied with). The sending system can choose that the sending of leave-notifications
	[STOR] + [SLOR] are only sent on patients where an (automatic/and or manual) admission report
	(XDIS16) has been received.

medcom	ID and process	Title	Init	Version	Date
meacom	4.1 Preparation and modifica- tion of a MedCom standard	HospitalNotification – use cases	MBK	3.0.2	May 2024

6.3 Rules for the receiving system on which the use cases are based

6.3.1 Rules regarding receipt of HospitalNotification

ID	Rule
R.BR1	As the hospital cannot determine in advance which citizens are currently receiving services from the
	primary sector, HospitalNotification is created for all citizens with a personal identification number and
	permanent residential address in Denmark when registering in the hospital's EHR system. It is up to the
	receiving system to ensure that HospitalNotification is only stored and made visible regarding citizens
	who receive services within the applicable legal basis. The receiving system is obliged to delete other
	HospitalNotification messages but to log technical message event metadata.
R.BR2	The receiving system must - even if HospitalNotification – is not loaded/persisted in the system, posi-
	tively acknowledge the reception (if the other prerequisites for this are present).
R.BR3	The receiving system must, if they support admission note (XDIS16), send this when this has been re-
	quested in the received HospitalNotification cf. Rules for the sending system on which the use cases
	are based
R.BR4	It is up to the receiving system (and customers) to decide how the end user is notified /made aware of
	reception of HospitalNotifications.
	Especially regarding corrections: The receiving system can choose to load corrections [RE_XX] without
	notifications to the user, but the user must - in the case of other HospitalNotification - be made aware
	of/notified of reception of HospitalNotification.
R.BR5	It is up to the receiving system to set up rules for any automatic pause/resumption of services upon
	reception of HospitalNotification.
R.BR6	The receiving system must ensure that messages that have been cancelled appear as cancelled to the
	end user (cancellation display).
R.BR7	It must be possible to manually close an admission in the receiving system if no HospitalNotification
	[SLHJ] is received, and the receiver knows that the patient is back home.