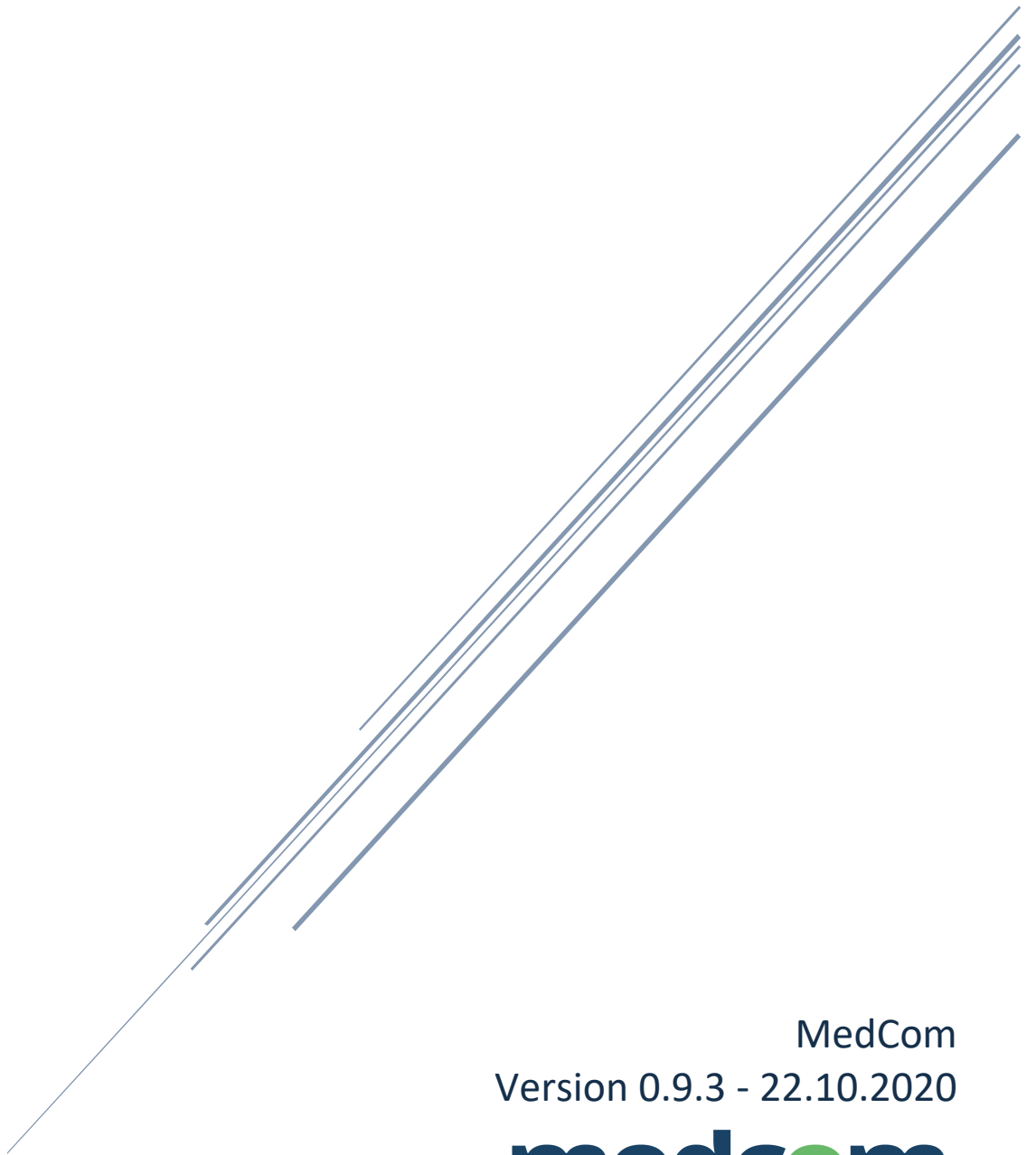


# USE CASES

## Modernised Hospital Notification



MedCom  
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**medcom**

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# 1 Introduction

This document contains a number of use case descriptions and is part of the documentation of MedCom's FHIR-standard "Hospital Notification".

The documentation consists of 3 parts:

1. 'Description of Hospital Notification'
1. FHIR profile of 'Hospital Notification'
2. Use case-descriptions

The use case descriptions should therefore be read together with the rest of the documentation.

The use case descriptions combine content requirements with business regulations for use (as described in 'Description of Hospital Notification') and should ensure a coherent implementation and use of the 'Hospital Notification'. The use cases are qualified in collaboration with EPR- and vendors catering to the municipalities.

The use case descriptions are targeted IT system vendors and the people responsible for the implementation in regions and municipalities.

Currently, the use case descriptions do not include the consignment of hospital notifications for several recipients and the following communication flow containing home care-hospital notifications.

## 1.1 Method for use case descriptions

The use cases are made from [KOMBIT's metodehåndbog for use cases](#). Every case consists of the following elements. A definition for both business-related (part 2) and technical (part 3) use cases can be found in the following as well.

Element	Explanation
ID	Unique ID
Name	Activity in city area
Initiator	Name of the initiator (could be the user, (nurse or medical secretary) or System actor (i.e. received notification)
Purpose, description and demarcation	Short description of the business-related purposes, possible demarcation related to other use cases.
Conditions for initiation	Preconditions which must be fulfilled in order for the standard procedure to run its course until the end.
Reason for initiation	The event that prompts the participant's actions in the standard procedure.
Actions	The sequence of actions which, without interruption, leads from the first initiation to the end result.
Result	The targeted business-related goal
Alternative actions	Alternative procedures diverging from the standard procedure which ends in error or with resumption.

## 1.2 Types of notifications and codes in modernised the Hospital Notification

In the use case descriptions, the following codes are used for different types of hospital notifications. There is prepared a separate code overview, which shows the connection between notification codes and FHIR terminology ([link to code overview](#)).

Code	Name of notification
STAA	Start hospital stay – Acute ambulant care
STIN	Start hospital stay- Admission <sup>1</sup>
SLHJ	End hospital stay – patient discharged and sent home/to primary sector
SLAN	End hospital stay – patient discharged and sent to other than home/primary sector
STOR	Start leave
SLOR	End leave
MORS	Death
AN_STAA	Cancellation of acute ambulant stay
RE_STAA	Correction of acute ambulant stay
AN_STIN	Cancellation of admission
RE_STIN	Correction of admission
AN_SLHJ	Cancellation of End of hospital stay
RE_SLHJ	Correction of End of hospital stay
AN_SLAN	Cancellation of End of hospital stay – patient discharged and sent to other than home/primary sector
RE_SLAN	Correction of End of hospital stay – patient discharged and sent to other than home/primary sector
AN_STOR	Cancellation of Start leave
RE_STOR	Correction of Start leave
AN_SLOR	Cancellation of End leave
RE_SLOR	Correction of End leave
AN_MORS	Cancellation of Death
RE_MORS	Correction of Death

<sup>1</sup> STIN is used with the options yes/no for request for admission report.

## 2 Use cases

The use case descriptions are divided into business-related use cases and technical use cases. The technical use cases are general use cases which are activated in the different actions that are described in the business-related use cases. To each of the business-related use cases, another use case is connected that respectively cancels and corrects the use case in question<sup>2</sup>.




In section 2.1 is an overview of the patient journeys and their connection to use cases. These are followed by business-related use cases (section 2.2) and technical use cases (section 2.3), which are divided into:

- a. Sender (hospital)
- b. Recipient (relevant recipient, typically the municipality)

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<sup>2</sup> **A General remark on cancellations/corrections:** The same procedure ID is used in case of cancellation/correction as in the original notification. This way, the recipient can easily connect the two messages unequivocally. When the patient's hospital stay has ended and a notification [SLHJ] has been sent, it is no longer necessary to use notifications with corrections and cancellations, unless the correction/cancellation is related to that exact notification [SLHJ].

## 2.1 Patient journeys and use cases

		Status code	Sender 	Recipient 
	Patient journey		Use cases	Use cases
1	The patient arrives at the hospital to be admitted	STIN	S1	K1
2	The patient arrives at the emergency department and is registered as acute ambulant	STAA	S2	K2
1.a	The patient is dead upon arrival at the hospital	MORS	S9.1	K9
2	Acute ambulant patient is admitted to department X	STIN	S10	K10
3	The patient is transferred to another department Y at the same hospital	STIN	S6.1 S6.2	No notification
4	The patient is sent on leave and leaves the hospital	STOR	S4	K4
5.	The patient arrives back at the hospital after ended leave	SLOR	S5	K5
5.a	The patient does not show up after ended leave	SLHJ	S3	K3
6.	The patient is transferred to another hospital in the same region. Transport responsibility: hospital	STIN	S7.1a	K7
6.a	Alternative: The patient is transferred to another hospital in the same region. Transport responsibility: the patient	SLAN	S7.1b	K7.1b
7.	The patient arrives at another hospital in the same region	STIN	S7.2	K7
8.	The patient is transferred to another hospital in another region. Transport responsibility: hospital/the patient	SLAN	S8.1	K8.1
9.	The patient arrives at another hospital in another region	STIN	S8.2.	K8
10.	The patient is discharged and sent home	SLHJ	S3	K3
10.a.	The patient dies at the hospital	MORS	S9.2	K9
10.b.	The patient is discharged and sent to hospice	SLHJ	As transfer S7.1 – S8.1	As transfer K7-K8



## 2.2 Business-related use cases

ID	Name
S1	Admit patient and send notification
K1	Receive notification about admission
S2	Receive acute ambulant care patient and send notification
K2	Receive notification about acute ambulant care hospital stay
S3	Discharge patient and send notification
K3	Receive notification about the patient's discharge
S4	Start leave for the patient and send notification
K4	Receive notification about start of leave
S5	Receive patient who has been on leave and send notification
K5	Receive notification about end of leave
S6.1	Transfer patient to another department at the same hospital
S6.2	Receive patient from another department at the same hospital
S7.1a	Transfer patient to another hospital in the same region (responsible: hospital)
S7.1b	Transfer patient to another hospital in another region (responsible: patient)
S7.2	Receive patient from another hospital in the same region and send notification
K7	Receive notification about admission in another hospital in the same region (transfer)
S8.1	Transfer patient to another hospital in another region (responsible: hospital/the patient)
S8.2	Receive patient from another hospital in another region and send notification
K8	Receive notification about admission in another hospital in another region (transfer)
S9.1	Register patient who has died during arrival
S9.2	Register patient who dies during admission in hospital
K9	Receive notification about death
S10	Admit patient who is registered as acute ambulant (see use case 6)
K10	Receive notification about changed status for an acute ambulant citizen.
AN S1	Cancel admission and send notification
RE S1	Correct admission and send notification
AN K1	Receive notification about the cancelled admission
RE K1	Receive notification about the corrected admission
AN S2	Cancel acute ambulant stay and send notification
RE S2	Correct acute ambulant hospital stay
AN K2	Receive notification about cancelled acute ambulant stay
RE K2	Receive notification about correction to acute ambulant hospital stay
AN S3	Cancel end of hospital stay and send notification
AN K3	Receive notification about cancelled end of hospital stay
RE S3	Correct end of hospital stay and send notification
RE K3	Receive notification about correction for end of hospital stay
AN S4	Cancel start of leave and send notification
RE S4	Correct start of leave and send notification

AN_K4	Receive notification about cancelled start of leave
RE_K4	Receive notification about corrected start of leave
AN_S5	Cancel ended leave and send notification
RE_S5	Correct ended leave and send notification
AN_K5	Receive notification about cancelled ended leave
RE_K5	Receive correction for ended leave
AN_S7.1b	Cancel end of hospital stay – patient discharged and sent to other than home/primary sector and send notification
RE_S7.1b	Correct end of hospital stay – patient discharged and sent to other than home/primary sector and send notification
AN_K7.1b	Receive notification about cancelled end of hospital stay – patient discharged and sent to other than home/primary sector
RE_K7.1b	Receive notification about correction for end of hospital stay – patient discharged and sent to other than home/primary sector
AN_S8.1	Cancel end of hospital stay – patient discharged and sent to other than home/primary sector and send notification
RE_S8.1	Correct end of hospital stay – patient discharged and sent to other than home/primary sector and send notification
AN_K8.1	Receive notification about cancelled end of hospital stay – patient discharged and sent to other than home/primary sector
RE_K8.1	Receive notification about correction for end of hospital stay – patient discharged and sent to other than home/primary sector
AN_S9	Cancel 'death' and send notification
RE_S9	Correct 'death' and send notification
AN_K9	Receive notification about cancelled death
RE_K9	Receive notification about correction of death

## 2.3 Technical use cases

TC.S1	Evaluate and send notification [Type] (sender)
TC.K1	Receive and evaluate notification [Type] (recipient)
TC.K2	Discard notification [Type] (recipient)
TC.K3	Load and show notification [Type]
TC.K4	Evaluate notification [Type] and send admission report if necessary (recipient)
TC.K5	Load notification [Type] (recipient)

## 2.4 Use case 1: Admissions

2.4.1 Use case S1	Admit patient and send notification [STIN]
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To admit the patient and notify relevant partners about this
Conditions for initiation	The patient is referred to admission (acute or planned) The patient is not transferred from another department at the same hospital/other hospital in the same region
Reason for initiation	The patient shows up at the hospital to be admitted.
Actions	<ol style="list-style-type: none"> <li>1. 'User actor: registers the patient as 'present and admitted'</li> <li>2. System actor: Activates Use case TC.S1 "Evaluate and send notification [STIN]" with request for automatic admission report from the recipient</li> </ol>
Result	The patient is admitted Use Case TC.S1 "Evaluate and send notification [STIN]" is activated with request for admission report
Alternative actions	1a. User actor enters the wrong personal identification number during the registration/admission → See use case AN_S1 1b. User actor enters the acute ambulant as the type of hospital stay → See use case AN_S2 1c. User actor enters the wrong hospital department or time of hospital stay → RE_S1
Remarks	Is the patient transferred from acute ambulant care department → see use case S10.

<i>2.4.1.1 Use case AN_SI</i>	Cancel admission and send notification [AN_STIN]
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about wrongly sent notifications [STIN]
Conditions for initiation	Notification has been sent [STIN]
Reason for initiation	The user cancels the admission because i) wrong patient entered or ii) wrong type of hospital stay (acute ambulant instead of admitted) entered for the right patient
Actions	<ol style="list-style-type: none"> <li>1. User actor: cancels admission</li> <li>2. System actor: activates Use Case TC.S1 “Evaluate and send notification [STIN]” No request for admission report is sent.</li> </ol>
Result	<p>Admission is cancelled</p> <p>Use Case TC.S1 “Evaluate and send notification [AN_STIN]” is activated</p>
Alternative actions	
Remarks	<p>The same procedure ID as for the first sent notification [STIN] is used.</p> <p>Subsequently, the user enters the correct registration.</p>

<i>2.4.1.2 Use case RE_SI</i>	Correct admission and send notification [RE_STIN]
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about wrong registration of an admission and consequently, a wrong notification [STIN] (not wrong personal identification number)
Conditions for initiation	Notification has been sent [STIN]  The notification [STIN] is the last sent notification
Reason for initiation	The user corrects the wrong registration of the admission <ul style="list-style-type: none"> <li>- Wrong entry of hospital department</li> <li>- Wrong entry of time</li> </ul>
Actions	<ol style="list-style-type: none"> <li>1. User actor: Corrects the relevant admission regarding the hospital department or time</li> <li>2. System actor: Activates Use Case TC.S1 “Evaluate and send notification [STIN]” No request for admission report is sent</li> </ol>
Result	Information about the admission is corrected and is now correct.  Use Case TC.S1 “Evaluate and send notification [RE_STIN]” is activated with request to not send a new admission report from the recipient system.
Alternative actions	
Remarks	<p>Only corrections for the hospital department and/or time should trigger the notification [RE_Type]. Entry of the wrong patient/personal identification number should trigger the cancellation (notification [AN_Type]).</p> <p>No cancellations should be sent in advance of the corrections</p> <p>The same procedure ID as for the first sent notification [STIN] is used.</p>

2.4.2 Use case K1	Receive notification about admission [STIN]
Initiator	System actor: notification [STIN]
Purpose, description and demarcation	To receive information on a citizen that has been admitted to hospital (possibly to pause the citizens' care services) and to send admission reports to the hospital.
Conditions for initiation	The citizen receives care services from the notification recipient. I.e. the notification recipient has a legal right to receive the notification.
Reason for initiation	System actor receives notification [STIN] with request for automatic admission report
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification [STIN] (TC.K1)</li> <li>2. System actor: Loads and shows the notification [STIN] (TC.K3)</li> <li>3. The User actor is informed that the citizen is admitted</li> <li>4. System and User actors: possibly pauses the citizens' care services</li> <li>5. System actor: Evaluates notification [STIN] and sends automatic admission report (TC.K4)</li> <li>6. User actor: If required, sends admission report manually.</li> </ol>
Result	<p>The citizen is admitted</p> <p>Notification [STIN] has been received, evaluated and shown in the recipient system.</p> <p>An automatic admission report has been sent</p> <p>Perhaps a manual admission report has been sent</p> <p>The citizen's care services are paused</p>
Alternative actions	
Remarks	It is up to the recipient system to set up rules to pause care services automatically when receiving a notification [STIN].

<i>2.4.2.1 Use case AN_K1</i>	Receive notification about the cancelled admission notification [AN_STIN]
Initiator	User actor: System actor notification [AN_STIN]
Purpose, description and demarcation	To receive notification about wrongly received notification [STIN]
Conditions for initiation	Notification [STIN] is received
Reason for initiation	System actor receives notification [AN_STIN]
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification [STIN] (TC.K1)</li> <li>2. System actor: Loads and shows notification [STIN] (TC.K3)</li> <li>3. The User actor: is informed that a previously received notification is cancelled</li> <li>4. User actor/System actor: Resume paused care services</li> <li>5. System actor: Evaluates notification [AN_STIN] (TC.K4)</li> </ol>
Result	<p>The admission is cancelled</p> <p>Notification [AN_STIN] has been received, evaluated and shown in the recipient system</p> <p>The citizen's paused care services are resumed</p>
Alternative actions	
Remarks	

<i>2.4.2.2 Use case RE_K1</i>	Receive notification about the corrected admission [RE_STIN]
Initiator	System actor: notification [RE_STIN]
Purpose, description and demarcation	To receive corrections to an already received notification [STIN]
Conditions for initiation	Notification [STIN] has been received  Notification [STIN] is the last received notification
Reason for initiation	System actor receives notification [RE_STIN]
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification [STIN] (TC.K1)</li> <li>2. System actor: Loads notification [RE_STIN] which replaces the previous received notification (TC.K5)</li> <li>3. System actor: Evaluates notification [RE_STIN]. No new admission report is sent (TC.K4)</li> </ol>
Result	Notification [AN_STIN] is received, evaluated and shown in the recipient system.  Admission report is not automatically sent
Alternative actions	
Remarks	



## 2.5 Use case 2: Acute ambulant hospital stay

<b>2.5.1 Use case S2</b>	<b>Receive acute ambulant patient and send notification [STAA].</b>
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To notify the relevant actors about the patient's acute ambulant hospital stay
Conditions for initiation	The patient is referred to acute ambulant contact at the hospital  The patient is not transferred from another department at the same hospital/other hospital in the same region
Reason for initiation	The patient is at the hospital regarding acute ambulant care
Actions	<ol style="list-style-type: none"> <li>1. User actor: registers the patient as 'attended' (acute ambulant)</li> <li>2. System actor: activates Use Case TC.S1 "Evaluate and send notification [STAA] with request for the <u>admission</u> report from the recipient".</li> </ol>
Result	The patient is admitted to the hospital  Use Case TC.S1 "Evaluate and send notification [STAA]" is activated with request for the <u>admission</u> report.
Alternative actions	1a. User actor enters the wrong personal identification number during the registration/admission → See use case AN_S2 1b. User actor enters the wrong type of hospital stay → See use case AN_S1 1c. User actor enters the wrong hospital department or time of hospital stay →, RE_S2
Remarks	In case an acute ambulant patient is admitted → see use case S10

<i>2.5.1.1 Use case AN_S2</i>	Cancel acute ambulant hospital stay and send notification [AN_STAA]
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about a wrongly sent notification [STAA]
Conditions for initiation	Notification has been sent[STAA]
Reason for initiation	The user cancels acute ambulant stay because i) wrong patient entered or ii) 'admission' entered instead of 'acute ambulant' for the correct patient
Actions	<ol style="list-style-type: none"> <li>1. User actor: cancels acute ambulant stay</li> <li>2. System actor: activates Use case TC.S1 "Evaluate and send notification [AN_STAA]". No request for admission report is sent.</li> </ol>
Result	<p>Acute ambulant stay is cancelled</p> <p>Use Case TC.S1 "Evaluate and send notification[AN_STAA]" is activated.</p>
Alternative actions	
Remarks	<p>The same procedure ID as for the first sent notification [STAA] is used</p> <p>Subsequently, the user enters the correct registration.</p>

<i>2.5.1.2 Use case RE_S2</i>	Correct acute ambulant stay and send notification [RE_STAA]
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about wrong registration about acute ambulant hospital stay and thereby wrong notification [STAA] (not the wrong personal identification number)
Conditions for initiation	Notification has been sent [STAA] Notification [STIN] is the last sent notification
Reason for initiation	User actor corrects the wrong registration about acute ambulant hospital stay <ul style="list-style-type: none"> <li>- Wrong entry of hospital department</li> <li>- Wrong time of acute ambulant hospital stay</li> </ul>
Actions	<ol style="list-style-type: none"> <li>1. User actor: Corrects the wrong information about acute ambulant hospital stay</li> <li>2. System actor: Activates Use Case TC.S1_”Evaluate and send notification [RE_STAA]”. No request for admission report is sent.</li> </ol>
Result	Information about the acute ambulant hospital stay is corrected and is now correct. Use Case TC.S1_”Evaluate and send notification [RE_STAA]” is activated with request to not send a new admission report from the recipient system. Use Case TC.S1_”Evaluate and send notification [STIN]” is activated with request for admission report.
Alternative actions	
Remarks	Only corrections for the hospital department and/or time should trigger the notification [RE_Type]. Entry of the wrong patient/personal identification number should trigger the cancellation (advis[AN_Type]). No cancellations should be sent in advance of the corrections. The same procedure ID as for the first sent notification [STAA] is used.

2.5.2 Use case K2	Receive notification about acute ambulant care hospital stay
Initiator	System actor: notification [STAA]
Purpose, description and demarcation	To receive notice that a citizen has been admitted acute ambulant at the hospital (to pausing the citizen's care services) and to send admission report to the hospital.
Conditions for initiation	The citizen receives care services from the notification recipient, i.e. the notification recipient has legal right to receive the notification.
Reason for initiation	System actor receives notification [STAA] with request for automatic admission report.
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification [STAA] (TC.K1)</li> <li>2. System actor: Loads and shows notification[STAA] (TC.K3)</li> <li>3. User actor is informed about the citizen's acute ambulant admission</li> <li>4. System and User actor: possibly pauses the citizens' care services</li> <li>5. System actor: Evaluates the notification[STAA] and automatically send the admission report (TC.K4)</li> <li>6. User actor: If required, sends admission report manually.</li> </ol>
Result	<p>The citizen is absent/stays at the hospital</p> <p>Notification[STAA] has been received, evaluated and shown in the recipient system</p> <p>An admission report has been automatically sent.</p> <p>A manual admission report has possibly been sent.</p> <p>The citizen's care services are possibly paused.</p>
Alternative actions	
Remarks	It is up to the recipient system to set up rules for a pause of care services when receiving the notification [STAA]

<i>2.5.2.1 Use case AN_K2</i>	Receive notification about cancelled acute ambulant stay, notification [AN_STAA]
Initiator	System actor: notification [AN_STAA]
Purpose, description and demarcation	To receive notice on a notification wrongly received [STAA]
Conditions for initiation	Notification [STAA] is received
Reason for initiation	System actor receives notification [AN_STAA].
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification [AN_STAA] (TC.K1)</li> <li>2. System actor: Loads and shows notification [AN_STAA] (TC.K3)</li> <li>3. User actor is informed that a previously received notification [STAA] is cancelled</li> <li>4. User actor/System actor: Resuming possibly paused care services</li> <li>5. System actor: Evaluates the notification [AN_STAA]. (TC.K4)</li> </ol>
Result	<p>Acute ambulant stay is cancelled</p> <p>Notification [AN_STAA] has been received, evaluated and shown in the recipient system.</p> <p>The citizen's possibly paused care services are resumed.</p>
Alternative actions	
Remarks	

<i>2.5.2.2 Use case RE_K2</i>	Receive notification about correction to acute ambulant stay [RE_STAA]
Initiator	System actor: notification[RE_STAA]
Purpose, description and demarcation	To receive corrections to an already received notification[STAA]
Conditions for initiation	Notification [STAA] is received  Notification[STAA] is the last received notification
Reason for initiation	System actor receives notification[RE_STAA].
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification [RE_STAA] (TC.K1)</li> <li>2. System actor: Loads the notification [RE_STAA] which replaces the previously received notification (TC.K5)</li> <li>3. System actor: "Evaluates the notification [RE_STAA]". No new admission report is sent. (TC.K4)</li> </ol>
Result	Notification [RE_STAA] is received, evaluated and loaded in the recipient system. Admission report is not automatically sent.
Alternative actions	
Remarks	

## 2.6 Use case 3: Patient is sent home after hospital stay

2.6.1 Use case S3	Discharge patient and send notification [SLHJ]
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To discharge a patient and notify relevant actors
Conditions for initiation	The patient is currently at the hospital (admitted or in acute ambulant care)
Reason for initiation	The patient is to end stay and be sent home.
Actions	1. User actor: discharges patient 2. System actor: Activates Use case TC.S1 "Evaluate and send notification" [SLHJ]. No request for admission report is sent.
Result	The patient is sent home after admission Use case TC.S1 "Evaluate and send notification[SLHJ]" is activated.
Alternative actions	1a. User actor enters the wrong personal identification number during the registration/discharge. See use case AN_S3 1b. User actor enters the wrong discharge type. 1c. User actor must revoke the discharge because the patient cannot be discharged anyway. See use case AN_S3
Remarks	<p>The same notification [SLHJ] is used both when an acute ambulant hospital stay (outpatient) and inpatient admission has ended and the patient is sent home.</p> <p>Notification [SLHJ] is only used when the patient is discharged and sent home or to care in the primary sector and must not be used when transferring patients or if the patient dies (note exception: use case S7.1b).</p> <ul style="list-style-type: none"> <li>• If the patient is discharged and not sent home (e.g. to hospice) it is regarded as a transfer, see use case <u>S6.1</u>, <u>S7.1</u> and <u>8.1</u></li> <li>• If the patient is transferred to another department, see use case S6.1</li> <li>• If the patient is transferred to another hospital, see use case S7.1 and S8.1</li> <li>• If the patient dies, see use case S9.1 and S9.2</li> </ul>

<i>2.6.1.1 Use case AN_S3</i>	Cancel end of hospital stay and send notification [AN_SLHJ]"
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about the wrongly sent notification.
Conditions for initiation	Notification has been sent [SLHJ]
Reason for initiation	The user cancels discharge
Actions	1. User actor: cancels end of hospital stay 2. System actor: activates Use case TC.S1 "Evaluate and send notification" [AN SLHJ]. No request for admission report is sent.
Result	End of hospital stay is cancelled. Use case TC.S1 "Evaluate and send notification [AN SLHJ]" is activated.
Alternative actions	
Remarks	The same procedure ID as for the first sent notification [SLHJ] is used. Subsequently, the user enters the correct registration.



<i>2.6.1.2 Use case RE_S3</i>	Correct end of hospital stay and send notification [RE_SLHJ]"
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about the wrong registration about end of hospital stay and consequently, a wrong notification
Conditions for initiation	Notification has been sent [SLHJ]
Reason for initiation	User actor corrects the wrong registration about end of hospital stay <ul style="list-style-type: none"> <li>- Wrong entry of hospital department</li> <li>- Wrong entry of time of leave</li> </ul>
Actions	<ol style="list-style-type: none"> <li>1. User actor: corrects the wrong registration about end of hospital stay.</li> <li>2. System actor: activates Use case <a href="#">TC.S1</a> "Evaluate and send notification" [AN SLHJ]. No request for admission report is sent</li> </ol>
Result	End of hospital stay is corrected Use Case <a href="#">TC.S1</a> "Evaluér og send Advis[RE SLHJ]" er aktiveret.
Alternative actions	
Remarks	The same procedure ID as for the first sent notification [SLHJ] is used. Subsequently, the user enters the correct registration.

2.6.2 Use case K3	Receive notification about the patient's discharge [SLHJ]
Initiator	System actor: notification [SLHJ]
Purpose, description and demarcation	To receive notification about discharge of a citizen in order to resume the citizen's care services.
Conditions for initiation	A notification has previously been received about a patient's admission (notification[STAA]), notification[STIN])
Reason for initiation	System actor receives the notification[SLHJ].
Actions	<ol style="list-style-type: none"> <li>1. System actor: receives and evaluates notification [SLHJ] (TC.K1)</li> <li>2. System actor: Loads and shows notification[SLHJ] (TC.K3).</li> <li>3. User actor is informed that the citizen is discharged and sent home</li> <li>4. System actor or User actor: resumes the citizen's care services [SLHJ] (TC.K4)</li> <li>5. System actor: evaluates notification [SLHJ] (TC.K4)</li> </ol>
Result	The citizen is discharged from the hospital and is back home. Notification [SLHJ] is received, evaluated and shown in the recipient system. The users paused care services is resumed.
Alternative actions	
Remarks	It is up to the recipient system to set up rules to resume care services automatically when receiving a notification[SLHJ].

<i>2.6.2.1 Use case AN_K3</i>	Receive notification about cancelled end of hospital stay [AN_SLHJ]
Initiator	System actor: notification[AN_SLHJ]
Purpose, description and demarcation	To receive notification about the wrongly received notification[SLHJ]
Conditions for initiation	Notification [SLHJ] is received
Reason for initiation	System actor receives notification[AN_SLHJ].
Actions	<ol style="list-style-type: none"> <li>1. System actor: receives and evaluates notification[AN_SLHJ] (TC.K1)</li> <li>2. System actor: loads and shows notification[AN_SLHJ] (TC.K3)</li> <li>3. User actor is informed that a previously received notification [SLHJ] is cancelled</li> <li>4. User actor/System actor: if necessary, pausing resumed care services</li> <li>5. System actor: evaluates notification[AN_SLHJ] (TC.K4)</li> </ol>
Result	End of hospital stay is cancelled Notification [AN_SLHJ] is received, evaluated and shown in the recipient system. The citizen's resumed care services are paused.
Alternative actions	
Remarks	

<i>2.6.2.2 Use case RE_K3</i>	Modtag advisering om rettet afslutning af sygehusophold ad- vis[RE_SLHJ]
Initiator	System actor: notification[RE_SLHJ]
Purpose, description and demarca- tion	To receive corrections to an already received notification[SLHJ].
Conditions for initiation	Notification [SLHJ] is received
Reason for initiation	System actor receives notification[RE_SLHJ].
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification[ [RE_SLHJ] (TC.K1)</li> <li>2. System actor: Loads and shows notification[RE_SLHJ] (TC.K3)</li> <li>3. User actor is informed that a previously received notification [SLHJ] is corrected</li> <li>4. User actor/System actor: if necessary, corrects resumed care ser- vices</li> <li>5. System actor: evaluates notification[RE_SLHJ] (TC.K5)</li> </ol>
Result	Information about end of hospital stay is corrected Notification[RE_SLHJ] is received, evaluated and shown in the recipient system.
Alternative actions	
Remarks	

## 2.7 Use case 4: Start leave

2.7.1 Use case S4	Start leave for the patient and send notification[STOR]
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To notify relevant actors that an admitted patient is sent on leave
Conditions for initiation	The patient is admitted to the hospital
Reason for initiation	The patient is sent on leave from hospital
Actions	<ol style="list-style-type: none"> <li>1. User actor: registers the admitted patient as “on leave”</li> <li>2. System actor: activated use case TC.S1 “Evaluate and send notification [STOR]”. No request for admission report is sent.</li> </ol>
Result	<p>The patient is at home on leave</p> <p>Use case TC.S1 “Evaluate and send notification [STOR]” is activated.</p>
Alternative actions	<p>1a. User actor enters the wrong personal identification number during the registration. See use case ANS4</p> <p>1b. User actor enters the wrong time of ‘start of leave’ RE_S4</p> <p>1c. User actor may remove ‘start of leave’ because the patient’s leave is cancelled. See use case AN_S4</p>
Remarks	<p>Ahead of sending, the hospital system can, if necessary, validate if an admission report has been received. This way, notifications about leave will not be sent if the patient does not receive care services from the municipality.</p> <p>Notification about the patient’s leave should be sent as a service announcement to the recipient who is then informed about a patient’s leave in case relatives or the patient him-/herself makes an enquiry during the leave. Responsibility of treatment for a patient on leave lies with the hospital and it should be coordinated if other providers than the hospital are to provide services during the patient’s leave.</p> <p>Leave notifications are only sent when the patient is registered as “on leave at home”. Leave in case of double admission (admission in both a psychiatric department and somatic department) should therefore not trigger leave notifications<sup>3</sup>.</p>

<sup>3</sup> It is yet to be decided if a distinction should be made between a patient who is sent home on leave or is on leave in the psychiatric department.

<i>2.7.1.1 Use case AN S4</i>	Cancel start of leave and send notification[AN_STOR]”
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about the wrongly sent notification[STOR]
Conditions for initiation	Notification has been sent [STOR]
Reason for initiation	The user cancels leave
Actions	1. User actor: leave 2. System actor: activates Use case TC.S1_”Evaluate and send notification” [AN SLHJ]. No request for admission report is sent.
Result	Leave is cancelled Use case TC.S1_”Evaluate and send notification” [AN_STOR] is activated.
Alternative actions	
Remarks	The same procedure ID as for the first sent notification [STOR] is used. Subsequently, the user enters the correct registration.

<i>2.7.1.2 Use case RE S4</i>	Correct start of leave and send notification[RE_STOR]
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about the wrong registration about leave and thereby the wrong notification[STOR]
Conditions for initiation	Notification has been sent [STOR] Notification [STOR] is the last sent notification
Reason for initiation	User actor corrects the wrong registration about leave <ul style="list-style-type: none"> <li>- Wrong entry of hospital department</li> <li>- Wrong entry of time of leave</li> </ul>
Actions	1. User actor: corrects the wrong registration about leave 2. System actor: activates Use case TC.S1 "Evaluate and send notification" [RE_STOR]. No request for admission report is sent.
Result	Information about leave is corrected and is now correct. Use case TC.S1 "Evaluate and send notification[STOR]" is activated with a request that no new admission report is sent from the recipient system
Alternative actions	
Remarks	Only corrections for the hospital department and/or time should trigger the notification [RE_Type]. Entry of the wrong patient/personal identification number should trigger cancellation (notification [AN_Type]). No cancellations should be sent in advance of the corrections. The same procedure ID as for the first sent notification [STOR] is used.

<b>2.7.2 Use case K4</b>	<b>Receive notification about start of leave</b>
Initiator	System actor: Notification[STOR]
Purpose, description and demarcation	To be informed that an admitted citizen is on leave from their admission.
Conditions for initiation	Previously, a notification about the patient's hospital stay (notification[STIN]) has been received
Reason for initiation	System actor receives the notification[STOR]
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification[STOR] (TC.K1)</li> <li>2. System actor: Loads and shows notification [STIN] (TC.K3)</li> <li>3. The User actor is informed that an admitted patient is sent on leave from their admission</li> <li>4. System actor: evaluates the notification[STOR] (TC.K4)</li> </ol>
Result	The citizen is on leave from their admission Notification [STOR] is received, evaluated and shown in the recipient system
Alternative actions	
Remarks	Notification about the patient's leave should be sent as a service announcement to the recipient who is then informed about a patient's leave in case relatives or the patient him-/herself makes an enquiry during the leave. Responsibility of treatment for a patient on leave lies with the hospital and it should be coordinated if other providers than the hospital are to provide care services during the patient's leave.



<i>2.7.2.1 Use case AN K4</i>	Receive notification about cancelled start of leave [AN_STOR]
Initiator	System actor: Notification[AN_STOR]
Purpose, description and demarcation	To receive notification about the wrongly received notification[SLHJ]
Conditions for initiation	Notification [STOR] is received
Reason for initiation	System actor receives notification[AN_STOR].
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification[AN_STOR] (TC.K1)</li> <li>2. System actor: Loads and shows notification[AN_STOR] (TC.K3)</li> <li>3. User actor: Is informed that a previously received notification [STOR] is cancelled</li> <li>4. System actor: Evaluates notification[AN_STOR]. (TC.K4)</li> </ol>
Result	<p>Leave is cancelled</p> <p>Notification[AN_STOR] is received, evaluated and shown in the recipient system.</p>
Alternative actions	
Remarks	

<i>2.7.2.2 Use case RE K4</i>	Receive notification about corrected start of leave [RE_STOR]
Initiator	System actor: Notification[RE_STOR]
Purpose, description and demarcation	To receive corrections to an already received notification[STOR]
Conditions for initiation	Notification [STOR] is received  Notification [STOR] is the last received notification
Reason for initiation	System actor receives notification[RE_STOR].
Actions	1. System actor: Receives and evaluates notification[RE_STOR] (TC.K1) 2. System actor: Loads notification[RE_STOR], which replaces the previously received notification (TC.K3) 3. System actor: Evaluates notification[RE_STOR]. No new admission report is sent (TC.K4)
Result	Notification[RE_STOR] is received, evaluated and loaded in the recipient system. Admission report is not automatically sent (TC.K4)
Alternative actions	
Remarks	

## 2.8 Use case 5: End leave

2.8.1 Use case S5	Receive patient who has been on leave and send notification [SLOR]
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To notify the relevant actors about the patient being returned to the hospital from leave.
Conditions for initiation	The patient is on leave. Notification has been sent [STOR]
Reason for initiation	The patient has returned to the department after leave.
Actions	<ol style="list-style-type: none"> <li>1. User actor: Ends admitted patient's leave</li> <li>2. System actor: activates Use Case TC.S1_ "Evaluate and send notification[SLOR]". No request for admission report is sent.</li> </ol>
Result	The patient is admitted and stays at the hospital. Use Case TC.S1_ "Evaluate and send notification[SLOR]" is activated.
Alternative actions	<p>1a. User actor enters the wrong personal identification number during the registration. See Use Case AN_S5</p> <p>1b. User actor enters the wrong time of end of leave RE S5</p>
Remarks	

<i>2.8.1.1 Use case AN_S5</i>	Cancel ended leave and send notification[AN_SLOR]
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about the wrongly sent notification[SLOR]
Conditions for initiation	Notification has been sent[STOR]
Reason for initiation	The user cancels end of leave
Actions	1. User actor: Cancels end of leave 2. System actor: Activates Use Case TC.S1 “Evaluate and send notification [AN SLOR]”. No request for admission report is sent.
Result	End of leave is cancelled.  Use Case TC.S1_”Evaluate and send notification[AN_SLOR]” is activated
Alternative actions	
Remarks	The same procedure ID as for the first sent notification [SLOR] is used.  Subsequently, the user enters the correct registration.

<i>2.8.1.2 Use case RE S5</i>	Correct ended leave and send notification[RE_SLOR]
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about the wrong registration about leave and thereby the wrong notification[SLOR]
Conditions for initiation	Notification[STOR] has been sent.  Notification[SLOR] is the last sent notification.
Reason for initiation	User actor corrects the wrong registration about leave <ul style="list-style-type: none"> <li>- Wrong entry of hospital department</li> <li>- Wrong entry of time of leave</li> </ul>
Actions	<ol style="list-style-type: none"> <li>1. User actor: Corrects the wrong registration about end of leave</li> <li>2. System actor: Activates Use Case TC.S1_” Evaluate and send notification[RE_SLOR]”. No request for admission report is sent.</li> </ol>
Result	Information about the leave is corrected and is now correct.  Use case TC.S1_” Evaluate and send notification[SLOR]” is activated with a request that no new admission report is sent from the recipient system
Alternative actions	
Remarks	<p>Only corrections for the hospital department and/or time should trigger the notification[RE_Type]. Entry of wrong patient/personal identification number should trigger the cancellation (notification[AN_Type]).</p> <p>No cancellations should be sent in advance of the corrections.</p> <p>The same procedure ID as for the first sent notification [SLOR] is used.</p>

2.8.2 Use case K5	Receive notification about end of leave
Initiator	System actor: notification[SLOR]
Purpose, description and demarcation	To be informed that a citizen who has been on leave during admission has now returned to hospital.
Conditions for initiation	A notification has previously been received about the patient's leave (notification [STOR])
Reason for initiation	System actor receives notification[SLOR]
Actions	1. System actor: receives and evaluates notification[SLOR] (TC.K1) 2. System actor: loads and shows notification[SLOR] (TC.K3) 3. User actor is informed that a citizen who is on leave from admission has returned to hospital for continuous admission. System actor: evaluates notification[SLOR] (TC.K4)
Result	The citizen is admitted.  Notification[SLOR] is received, evaluated and shown in the recipient system.
Alternative actions	
Remarks	

<i>2.8.2.1 Use case AN_K5</i>	Receive notification about cancelled ended leave [AN_SLOR]
Initiator	System actor: notification [AN_SLOR]
Purpose, description and demarcation	To receive notification about a wrongly received notification[SLOR]
Conditions for initiation	Notification [SLOR] is received
Reason for initiation	System actor receives notification [AN_SLOR]
Actions	<ol style="list-style-type: none"> <li>1. System actor: receives and evaluates notification [AN_SLOR] (TC.K1)</li> <li>2. System actor: loads and shows notification [AN_SLOR] (TC.K3)</li> <li>3. System actor: is informed that a previously received notification is cancelled</li> <li>4. System actor: evaluates notification[AN_SLOR] (TC.K4)</li> </ol>
Result	End of leave is cancelled, Notification [AN_SLOR] is received, evaluated and shown in the recipient system.
Alternative actions	
Remarks	

<i>2.8.2.2 Use case RE_K5</i>	Receive correction for ended leave [RE_SLOR]
Initiator	System actor: notification [RE_SLOR]
Purpose, description and demarcation	To receive corrections to an already received notification [SLOR]
Conditions for initiation	Notification [SLOR] is received Notification [SLOR] is the last received notification.
Reason for initiation	System actor receives notification [RE_SLOR]
Actions	1. System actor: receives and evaluates notification [RE_SLOR] (TC.K1) 2. System actor: loads and shows notification [RE_SLOR], which replaces the previously received notification (TC.K3) 3. User actor evaluates notification [RE_SLOR]. New admission report is not sent (TC.K4)
Result	Notification [RE_SLOR] is received, evaluated and shown in the recipient system. Admission report is not automatically sent.
Alternative actions	
Remarks	



## 2.9 Use case 6: Transfers within the same hospital

2.9.1 Use case S6.1	Transfer patient to another department at the same hospital (original department)
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To transfer the patient to another department at the same hospital
Conditions for initiation	The patient is admitted to the hospital (acute ambulant or admitted) but is referred to another department at the same hospital.
Reason for initiation	The patient is discharged from the department in order to be admitted in another department at the same hospital.
Actions	1. User actor: Transfers the patient to another department at the same hospital.
Result	The patient is transferred to another department at the same hospital.
Alternative actions	<p>1a. User actor discharges the patient without any specification indicating that the patient is transferred. In this case, Use Case TC.S1_”Evaluate and send notification [SLHJ] is activated. <b>This is unintended and should be avoided.</b></p> <p>1b. User actor enters the wrong personal identification number during the registration.</p> <p>1c. User actor must revoke the transfer because the patient is not able to the transferred anyway.</p>
Remarks	<p>No notification about discharge is sent because the patient is still admitted in another department.</p> <p>Since no notification is sent from the original department there will be no notification which can be corrected/cancelled in case of wrongful registration.</p>

2.9.2 Use case S6.2	Receive patient from another department at the same hospital
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To admit the transferred patient
Conditions for initiation	The patient is referred to be transferred to another department at the same hospital.
Reason for initiation	The patient is present at the department after being transferred from another department at the same hospital.
Actions	1. User actor: Registers the patient who is attended from another department (Transfer)
Result	The patient is admitted at a new department at the same hospital. Use Case TC.S1 "Evaluate and send notification[STIN] is activated.
Alternative actions	1a. The User actor enters the wrong personal identification number during the registration. See Use Case AN_S1 1b. User actor enters the wrong hospital department or time of hospital stay. See use case RE S1
Remarks	The same Procedure ID is used.

## 2.10 Use case 7: Transfers within the same region

In case of transfer from one hospital to another within the same region, a distinction should be made between:

1. **Use case S7.1a:** The hospital is responsible for the transportation of the patient from hospital A to hospital B (most likely) → No notification to the municipality is sent (or another recipient) from the initial department.
2. **Use case S7.1b:** The patient is responsible for the transportation from hospital A to hospital B (less likely) → A notification is sent to the municipality (or another recipient) from the initial department.

In scenario B the hospital cannot be sure that the patient turns up at hospital B. **Hospital A therefore discharges the patient to other than the home/primary sector.**

2.10.1 Use case S7.1a	Transfer patient to another hospital in the same region (The initial hospital is responsible for the transfer/transportation)
Initiator	User actor: Nurse/secretary at the hospital (at the initial hospital)
Purpose, description and demarcation	To transfer the patient to another hospital in the same region without sending a notification which indicates that the patient has been discharged and sent home.
Conditions for initiation	The patient is present at the hospital (acute ambulant or admitted) but is referred to be transferred to another hospital in the same region.
Reason for initiation	The patient is discharged from hospital in order to be admitted to another hospital in the same region.
Actions	1. User actor: Discharges patient in order to transfer the patient to another hospital in the same region.
Result	The patient is discharged in order to be admitted at another hospital in the same region.
Alternative actions	1a. User actor discharges the patient without indication that the patient is transferred to another hospital. In this case, use case TC.S1 "Evaluate and send notification"[SLHJ] is activated. <b>This is unintended and should be avoided.</b> 1b. User actor enters the wrong personal identification number during the registration 1c. User actor has to cancel the transfer because the patient cannot be transferred after all.
Remarks	<b>Notification of end hospital stay is unnecessary in the communication flow and must not be sent.</b>  The use case above also includes the scenarios where the patient is discharged and sent to hospice. Upon the patient's arrival, hospice sends notification[STIN]. See use case <u>S7.2</u>  Since no notification is sent from the initial department, there is no notification which can be corrected/cancelled in case of errors in the registration.

2.10.2 Use case S7.1b	Transfer a patient to another hospital in another region (initial hospital, the patient is responsible for transportation) [SLAN]
Initiator	User actor: Nurse/secretary at the hospital (at the initial hospital)
Purpose, description and demarcation	To transfer the patient to another hospital in the same region.
Conditions for initiation	The patient is present at the hospital (acute ambulant or admitted) but is referred to be transferred to another hospital in the same region. It is agreed that the patient arranges transport to another hospital for him-/herself.
Reason for initiation	The patient is discharged from hospital in order to be admitted to another hospital in the same region.
Actions	1. User actor: Discharges patient in order to transfer the patient to another hospital in the same region. 2. System actor activates use Case TC.S1.” Evaluate and send notification [SLAN]. No request for admission report is sent.
Result	The patient is discharged and sent to other than home/primary sector in order to be admitted at another hospital in the same region. Use case TC.S1 ”Evaluate and sent notification[SLAN] is activated.
Alternative actions	1a. User actor enters the wrong personal identification number during the registration/discharge. See use case AN S3. 1b. User actor enters the wrong type of discharge 1c. User actor cancels the transfer because the patient’s situation has changed. See use case AN S3.
Remarks	The use case above also includes the scenarios where the patient is discharged and sent to hospice. Upon the patient’s arrival, hospice sends notification[STIN]. See use case S1  The planned transfer should be communicated to the municipality (other recipient) in the care procedure plan and/or the correspondence message.

<b>2.10.2.1 Use case AN S7.1b</b>	<b>Cancel end of hospital stay to other than home/primary sector and send notification[AN SLAN]</b>
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about the wrongly sent notification. [AN SLAN]
Conditions for initiation	Notification has been sent [SLAN]
Reason for initiation	The user cancels end of hospital stay to other than the home/primary sector
Actions	1. User actor: cancels end of hospital stay to other than the home/primary sector 2. System actor: activates Use case TC.S1_”Evaluate and send notification” [AN SLAN]. No request for admission report is sent.
Result	End of hospital stay to other than the home/primary sector is cancelled. Use case TC.S1_”Evaluate and send notification [AN SLAN]” is activated.
Alternative actions	
Remarks	The same procedure ID as for the first sent notification [SLAN] is used. Subsequently, the user enters the correct registration.

<b>2.10.2.2 Use case RE S7.1b</b>	<b>Correct end of hospital stay to other than the home/primary sector and send notification [RE_SLAN]”</b>
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about the wrong registration about end of hospital stay to other than home/primary sector and consequently, a wrong notification
Conditions for initiation	Notification has been sent [SLAN]
Reason for initiation	User actor corrects the wrong registration about end of hospital stay to other than home/primary sector
Actions	<ol style="list-style-type: none"> <li>1. User actor: corrects the wrong registration about end of hospital stay.</li> <li>2. System actor: activates Use case <a href="#">TC.S1</a> ”Evaluate and send notification” [AN_SLAN]. No request for admission report is sent</li> </ol>
Result	End of hospital stay to other than home/primary sector is corrected Use Case <a href="#">TC.S1</a> ” Evaluate and send notification[RE_SLAN] is activated.
Alternative actions	
Remarks	The same procedure ID as for the first sent notification [SLAN] is used. Subsequently, the user enters the correct registration.

2.10.3 Use case K7.1b	Receive notification about the patient's end of hospital stay to other than the home/primary sector [SLAN]
Initiator	System actor: notification [SLAN]
Purpose, description and demarcation	To receive notification about the patient's end of hospital stay to other than home/primary sector.
Conditions for initiation	A notification has previously been received about a patient's admission (notification[STAA]), notification[STIN])
Reason for initiation	System actor receives the notification[SLAN].
Actions	<ol style="list-style-type: none"> <li>1. System actor: receives and evaluates notification [SLAN] (TC.K1)</li> <li>2. System actor: Loads and shows notification[SLAN] (TC.K3).</li> <li>3. User actor is informed about the patient's end of hospital stay to other than the home/primary sector</li> <li>4. System actor: evaluates notification [SLAN] (TC.K4)</li> </ol>
Result	The citizen is discharged to other than home/primary sector. Notification [SLAN] is received, evaluated and shown in the recipient system. The users care services is still paused.
Alternative actions	
Remarks	

<b>2.10.3.1 Use case AN K7.1b</b>	<b>Receive notification about cancelled end of hospital stay to other than home/primary sector [AN_SLAN]</b>
Initiator	System actor: notification[AN_SLAN]
Purpose, description and demarcation	To receive notification about the wrongly received notification[SLAN]
Conditions for initiation	Notification [SLAN] is received
Reason for initiation	System actor receives notification[AN_SLAN].
Actions	<ol style="list-style-type: none"> <li>1. System actor: receives and evaluates notification[AN_SLAN] (TC.K1)</li> <li>2. System actor: loads and shows notification[AN_SLAN] (TC.K3)</li> <li>3. User actor is informed that a previously received notification [SLAN] is cancelled</li> <li>4. System actor: evaluates notification[AN_SLAN] (TC.K4)</li> </ol>
Result	End of hospital stay to other than home/primary sector is cancelled Notification [AN_SLAN] is received, evaluated and shown in the recipient system. The citizen's care services are still paused.
Alternative actions	
Remarks	



<b>2.10.3.2 Use case RE K7.1b</b>	<b>Receive notification about corrected end of hospital stay to other than the home/primary sector [RE_SLAN]</b>
Initiator	System actor: notification[RE_SLAN]
Purpose, description and demarcation	To receive corrections to an already received notification[SLAN].
Conditions for initiation	Notification [SLAN] is received
Reason for initiation	System actor receives notification[RE_SLAN].
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification[RE_SLAN] (TC.K1)</li> <li>2. System actor: Loads and shows notification[RE_SLAN] (TC.K3)</li> <li>3. User actor is informed that a previously received notification [SLAN] is corrected</li> <li>4. System actor: evaluates notification[RE_SLAN] (TC.K5)</li> </ol>
Result	<p>Information about end of hospital stay to other than home/primary sector is corrected</p> <p>Notification[RE_SLAN] is received, evaluated and shown in the recipient system.</p>
Alternative actions	
Remarks	

2.10.4 Use case S7.2	Receive patient from another hospital in the same region and send notification[STIN]
Initiator	User actor: Nurse/secretary at the hospital (receiving hospital)
Purpose, description and demarcation	To admit the transferred patient and notify relevant actors about this.
Conditions for initiation	The patient is referred to be transferred from another hospital in the same region.
Reason for initiation	The patient attends the department after transfer from another hospital in the same region.  An admission report from the initial hospital has been received.
Actions	1. User actor: Registers the patient who is received from another hospital and admits the patient. 2. System actor: Activates use case TC.S1_”Evaluate and send notification[STIN]”. As the patient is transferred from another hospital in the same region, a request that no new admission report should be sent is added to the notification.
Result	The patient is admitted to hospital in the same region. Use case TC.S1_” Evaluate and send notification[STIN]” is activated with a request that no new admission report is sent from the recipient system.
Alternative actions	1a. User actor enters the wrong personal identification number during the registration. See use case AN_S1  1b. Use provider enters wrong acute ambulant as hospital stay. See use case AN_S2  1c. User actor enters wrong hospital department or time of hospital stay. Use case RE_S1
Remarks	The same procedure ID is used

2.10.5 Use case K7	Receive notification about admission in another hospital in the same region (transfer) <sup>4</sup>
Initiator	System actor: notification[STIN]
Purpose, description and demarcation	To be informed that a citizen has been transferred to another hospital in the same region.
Conditions for initiation	Notification of the patient's admission to hospital has previously been received (notification[STAA], notification[STIN])
Reason for initiation	System actor receives notification[STIN] from the receiving department
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification[STIN] (TC.K1)</li> <li>2. System actor: Loads and shows notification[STIN]" (TC.K3)</li> <li>3. User actor is informed that a citizen is admitted at a new hospital in the same region.</li> <li>4. System actor: Evaluates notification[STIN] (TC.K4) and does not automatically send admission report.</li> </ol>
Result	<p>The citizen is absent/admitted to another hospital.</p> <p>Notification[STIN] has been received, evaluated and shown in the recipient system.</p> <p>New admission report is not automatically sent.</p>
Alternative actions	
Remarks	<p>The same procedure ID is used.</p> <p>If the patient took care of transport from hospital A to hospital B him-/herself the municipality (or other recipient) receives a notification [SLHJ] ahead of the new notification [STIN].</p> <p>If the patient is discharged and sent to hospice, notification[STIN] is received from hospice.</p>

<sup>4</sup> Attention: The recipient system might have an open (not ended) admission registered (the old procedure ID).

## 2.11 Use case 8: Transfer between regions<sup>5</sup>

This use case describes how notification[SLAN] is handled in case of transfers between regions. There is no distinction between if the hospital or the patient is responsible for the transport between the hospitals.

<b>2.11.1 Use case S8.1</b>	<b>Transfer patient to another hospital in another region (initial hospital) [SLAN]</b>
Initiator	User actor: Nurse/secretary at the hospital (at the initial hospital)
Purpose, description and demarcation	To transfer the patient to another hospital in another region.
Conditions for initiation	The patient is present at the hospital (acute ambulant or admitted) but is referred to be transferred to another hospital in another region.
Reason for initiation	The patient is discharged to other than home/primary sector from hospital in order to be admitted to another hospital in another region.
Actions	1. User actor: Discharges patient to other than home/primary sector in order to transfer the patient to another hospital in another region. 2. System actor: Activates use case TC.S1 "Evaluate and send notification[SLAN]". No request for admission report is sent.
Result	The patient is discharged in order to be admitted at another hospital in another region. Use case TC.S1 "Evaluate and send notification[SLAN]" is activated.
Alternative actions	1a. User actor enters the wrong personal identification number during the registration/discharge. See use case AN_S3. 1b. User actor enters the wrong type of discharge 1c. User actor cancels the transfer because the patient's situation has changed. See use case AN_S3.
Remarks	The use case above also includes the scenarios where the patient is discharged and sent to hospice. Upon the patient's arrival, hospice sends notification[STIN]. See use case S1.  The planned transfer should be communicated to the municipality (other recipient) in the care procedure plan and/or the correspondence message.

<sup>5</sup> Transfers between private and public hospitals are handled as transfers between regions

<b>2.11.1.1 Use case AN S8.1</b>	<b>Cancel end of hospital stay to other than the home/primary sector and send notification [AN_SLAN]</b>
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about the wrongly sent notification. [AN_SLAN]
Conditions for initiation	Notification has been sent [SLAN]
Reason for initiation	The user cancels end of hospital stay to other than home/primary sector
Actions	<ol style="list-style-type: none"> <li>1. User actor: cancels end of hospital stay to other than home/primary sector</li> <li>2. System actor: activates Use case TC.S1_ "Evaluate and send notification" [AN_SLAN]. No request for admission report is sent.</li> </ol>
Result	End of hospital stay to other than the home/primary sector is cancelled. Use case TC.S1_ "Evaluate and send notification [AN_SLAN]" is activated.
Alternative actions	
Remarks	The same procedure ID as for the first sent notification [SLAN] is used. Subsequently, the user enters the correct registration.

<b>2.11.1.2 Use case RE S8.1</b>	<b>Correct end of hospital stay to other than home/primary sector and send notification [RE_SLAN]"</b>
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about the wrong registration about end of hospital stay to other than home/primary sector and consequently, a wrong notification
Conditions for initiation	Notification has been sent [SLAN]
Reason for initiation	User actor corrects the wrong registration about end of hospital stay to other than the home/primary sector
Actions	<ol style="list-style-type: none"> <li>1. User actor: corrects the wrong registration about end of hospital stay.</li> <li>2. System actor: activates Use case <a href="#">TC.S1</a> "Evaluate and send notification" [AN_SLAN]. No request for admission report is sent</li> </ol>
Result	End of hospital stay to other than home/primary sector is corrected Use Case <a href="#">TC.S1</a> " Evaluate and send notification[RE_SLAN]" is activated.
Alternative actions	
Remarks	The same procedure ID as for the first sent notification [SLAN] is used. Subsequently, the user enters the correct registration.

<b>2.11.2 Use case K8.1</b>	<b>Receive notification about the patient's end of hospital stay to other than home/primary sector [SLAN]</b>
Initiator	System actor: notification [SLAN]
Purpose, description and demarcation	To receive notification about the patient's end of hospital stay to other than home/primary sector.
Conditions for initiation	A notification has previously been received about a patient's admission (notification[STAA]), notification[STIN])
Reason for initiation	System actor receives the notification[SLAN].
Actions	<ol style="list-style-type: none"> <li>1. System actor: receives and evaluates notification [SLAN] (TC.K1)</li> <li>2. System actor: Loads and shows notification[SLAN] (TC.K3).</li> <li>3. User actor is informed about the patient's end of hospital stay to other than the home/primary sector</li> <li>4. System actor: evaluates notification [SLAN] (TC.K4)</li> </ol>
Result	The citizen is discharged to other than home/primary sector. Notification [SLAN] is received, evaluated and shown in the recipient system. The citizen's care services are still paused.
Alternative actions	
Remarks	

<b>2.11.2.1 Use case AN K8.1</b>	<b>Receive notification about cancelled end of hospital stay to other than home/primary sector [AN_SLAN]</b>
Initiator	System actor: notification[AN_SLAN]
Purpose, description and demarcation	To receive notification about the wrongly received notification[SLAN]
Conditions for initiation	Notification [SLAN] is received
Reason for initiation	System actor receives notification[AN_SLAN].
Actions	<ol style="list-style-type: none"> <li>1. System actor: receives and evaluates notification[AN_SLAN] (TC.K1)</li> <li>2. System actor: loads and shows notification[AN_SLAN] (TC.K3)</li> <li>3. User actor is informed that a previously received notification [SLAN] is cancelled</li> <li>4. System actor: evaluates notification[AN_SLAN] (TC.K4)</li> </ol>
Result	End of hospital stay to other than home/primary sector is cancelled. Notification [AN_SLAN] is received, evaluated and shown in the recipient system. The citizen's care services are still paused.
Alternative actions	
Remarks	



<b>2.11.2.2 Use case RE K8.1</b>	<b>Receive notification about corrected end of hospital stay to other than home/primary sector [RE_SLAN]</b>
Initiator	System actor: notification[RE_SLAN]
Purpose, description and demarcation	To receive corrections to an already received notification[SLAN].
Conditions for initiation	Notification [SLAN] is received
Reason for initiation	System actor receives notification[RE_SLAN].
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification[RE_SLAN] (TC.K1)</li> <li>2. System actor: Loads and shows notification[RE_SLAN] (TC.K3)</li> <li>3. User actor is informed that a previously received notification [SLAN] is corrected</li> <li>4. System actor: evaluates notification[RE_SLAN] (TC.K5)</li> </ol>
Result	<p>Information about end of hospital stay to other than home/primary sector is corrected</p> <p>Notification[RE_SLAN] is received, evaluated and shown in the recipient system.</p>
Alternative actions	
Remarks	

2.11.3 Use case S8.2	Receive patient from another hospital in another region and send notification [STIN]”.
Initiator	User actor: Nurse/secretary at the hospital (at the receiving hospital)
Purpose, description and demarcation	To admit the transferred patient and notify relevant actors about this.
Conditions for initiation	The patient is referred to be transferred from another hospital in another region.
Reason for initiation	The patient is present at the hospital after transfer from another hospital in another region.
Actions	<p>1. User actor: Registers the patient as attended from another hospital and admits the patient</p> <p>2. System actor: Activates use case TC.S1 ”Evaluate and send notification[STIN]”. As the patient is transferred from another hospital in another region, a request that a new admission report should be sent is added to the notification.</p>
Result	<p>The patient is admitted to a new hospital in another region.</p> <p>Use case TC.S1 ”Evaluate and send notification [STIN]” is activated with a request to the recipient system that a new admission report <u>must</u> be sent.</p>
Alternative actions	<p>1a. User actor enters the wrong personal identification number during the registration. See use case AN_S1</p> <p>1b Use provider enters wrong acute ambulant as hospital stay. See use case AN_S2</p> <p>1c. User actor enters wrong hospital department or time of hospital stay → RE S1</p>
Remarks	A new procedure ID is used

2.11.4 Use case K8	Receive notification about admission in another hospital in another region (transfer) <sup>6</sup>
Initiator	System actor: notification[STIN]
Purpose, description and demarcation	To be informed that a citizen has been transferred to another hospital in another region and send admission report to the receiving hospital.
Conditions for initiation	Previously, a notification about the patient's admission to the hospital (notification[STAA], notification[STIN]) has been received
Reason for initiation	System actor receives notification [STIN] from the receiving hospital.
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification[STIN] (TC.K1)</li> <li>2. System actor: Loads and shows notification[STIN]" (TC.K3)</li> <li>3. User actor is informed that a citizen is admitted at a new hospital in another region.</li> <li>4. System actor: Evaluates notification[STIN] and automatically sends admission report (TC.K4).</li> <li>5. User actor: If required, sends admission report manually</li> </ol>
Result	<p>The citizen is absent/admitted to another hospital.</p> <p>Notification[STIN] has been received, evaluated and shown in the recipient system.</p> <p>Automatic admission report has been sent.</p> <p>If required, admission report has been sent manually.</p>
Alternative actions	
Remarks	<p>If the patient took care of transport from hospital A to hospital B him-/herself the municipality (or other recipient) receives a notification [SLHJ] ahead of the new notification [STIN].</p> <p>If the patient is discharged and sent to hospice, notification[STIN] is received from hospice.</p>

<sup>6</sup> Attention: The recipient system might have an open (not ended) admission registered (the old procedure ID).

## 2.12 Use case 9: Death

2.12.1 Use case S9.1	Register the patient who has died during arrival [MORS]
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To register the patient as dead and notify relevant actors about this.
Conditions for initiation	The patient is not present at the hospital.
Reason for initiation	The patient is dead upon arrival
Actions	1. User actor: Registers the patient as dead som død 2. System actor: Activates Use case TC.S1_”Evaluate and send notification[MORS]”. No request for an admission report is sent.
Result	The patient is dead Use Case TC.S1_”Evaluate and send notification[MORS]” is activated.
Alternative actions	1a. User actor enters the wrong personal identification number during the registration. See use case AN_S9 1b. User actor enters wrong time of death. See use case RE_S9 1c. User actor has to annul ”death” because the patient is not dead anyway. See use case AN_S9
Remarks	

2.12.2 Use case S9.2	Register the patient who dies during admission in hospital [MORS]
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To register the patient as dead and notify relevant actors about this
Conditions for initiation	The patient is admitted to the hospital acute ambulant or admitted
Reason for initiation	Patient dies during the stay at the hospital.
Actions	1. User actor: Registers the patient as dead 2. Activates Use case TC.S1_ "Evaluate and send notification[MORS]". No request for an admission report is sent.
Result	The patient is dead. Use Case TC.S1_ "Evaluate and send notification[MORS]" is activated.
Alternative actions	1a. User actor enters wrong personal identification number during the registration. See use case AN_S9 1b. User actor enters wrong time of death. See use case RE_S9 1c. User actor has to annul "death" because the patient is not dead anyway. See use case AN_S9
Remarks	

<i>2.12.2.1 Use case AN S9</i>	Cancel death and send notification [AN_MORS]"
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about a wrongly sent notification [MORS]
Conditions for initiation	Notification has been sent[MORS]
Reason for initiation	The use cancels death because the wrong patient was selected or if the patient is not dead anyway.
Actions	1. User actor: cancels death 2. System actor: Activates Use case TC.S1_ "Evaluate and send notification[AN_MORS]". No request for admission report is sent.
Result	Death is cancelled Use Case TC.S1_ "Evaluate and send notification[AN_MORS]" is activated.
Alternative actions	
Remarks	The same procedure ID as for the first sent notification [MORS] is used. Subsequently, the user enters the correct registration.

<i>2.12.2.2 Use case RE S9</i>	Correct death and send notification[RE_MORS]”
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To correct and notify relevant actors about wrong registration of death and thereby wrong notification (not wrong personal identification number)
Conditions for initiation	Notification has been sent[MORS] Notification[MORS] is the last sent notification.
Reason for initiation	User actor corrects the wrong registration about death  - Wrong entry of hospital department - Wrong entry of time of death
Actions	1. User actor: Corrects the wrong information about death 2. System actor: Activates Use case TC.S1_”Evaluate and send notification[RE_MORS]”. No request for admission report is sent.
Result	Information about death is corrected and is now correct.  Use case TC.S1_” Evaluate and send notification[RE_MORS]” is activated with a request that no new admission report is sent from the recipient system
Alternative actions	
Remarks	Only corrections for hospital department and/or time should trigger notification[RE_Type]. Entry of wrong personal identification number should trigger cancellation (notification[AN_Type]).  No cancellations should be sent in advance of the corrections.  The same procedure ID as for the first sent notification [MORS] is used

2.12.3 Use case K9	Receive notification about death
Initiator	System actor: notification[MORS]
Purpose, description and demarcation	To receive notification about the death of a patient.
Conditions for initiation	The citizen is not at home but has left home (on his/her way to the hospital) or is in the hospital.
Reason for initiation	System actor receives notification[MORS].
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification[MORS] (TC.K1)</li> <li>2. System actor: Loads and shows notification[MORS]" (TC.K3)</li> <li>3. User actor is informed that a citizen is dead.</li> <li>4. System actor: Evaluates notification[MORS] (TC.K4)</li> </ol>
Result	<p>The citizen is dead</p> <p>Notification [MORS] has been received, evaluated and shown in the recipient system.</p>
Alternative actions	
Remarks	Notification about death can potentially be sent on wrong personal identification number, which triggers AN_MORS. The recipient system is advised to use final registration for patient status death through the CPR-interface.



<i>2.12.3.1 Use case AN_K9</i>	Receive notification about cancelled death [AN_MORS]
Initiator	System actor: notification[AN_MORS]
Purpose, description and demarcation	To receive notification about a wrongly received notification[MORS]
Conditions for initiation	Notification[MORS] is received
Reason for initiation	System actor receives notification [AN_MORS].
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification [AN_MORS] (TC.K1)</li> <li>2. System actor: loads and shows notification [AN_MORS] (TC.K3)</li> <li>3. 3. User actor is informed that a previously received notification [MORS] is cancelled System actor: evaluates notification[AN_MORS] (TC.K4)</li> </ol>
Result	<p>Death is cancelled</p> <p>Notification[AN_MORS] has been received, evaluated and shown in the recipient system.</p>
Alternative actions	
Remarks	

<i>2.12.3.2 Use case RE K9</i>	Receive notification about corrected death [MORS]
Initiator	System actor: notification[RE MORS]
Purpose, description and demarcation	To receive corrections to an already received notification[MORS]
Conditions for initiation	Notification [MORS] is received  Notification[MORS] is the last received notification.
Reason for initiation	System actor receives notification[RE MORS].
Actions	1. System actor: receives and evaluates notification [RE_SLOR] (TC.K1) 2. System actor: loads notification [RE_SLOR], which replaces the previously received notification (TC.K5)  3. User actor: evaluates notification [RE_SLOR]. New admission report is not sent (TC.K4)
Result	Notification[RE_MORS] is received, evaluated and loaded in the recipient system. Admission report is not automatically sent.
Alternative actions	
Remarks	Only corrections for the hospital department and/or time should trigger the notification[RE_Type].  Entry of wrong personal identification number should trigger the cancellation (notification[AN_Type]).  The same procedure ID is used.

## 2.13 Use case 10: Change of type of hospital stay (from acute ambulant to admitted)

2.13.1 Use case S10	Admit patient who is registered as acute ambulant [STIN]
Initiator	User actor: Nurse/secretary at the hospital
Purpose, description and demarcation	To admit the acute ambulant patient and notify relevant actors about the changed hospital status of the patient.
Conditions for initiation	The patient is referred to admission during his/her acute ambulant hospital stay.  Notification has already been sent[STAA]  The patient is not transferred from another hospital.
Reason for initiation	The patient has arrived from acute ambulant department to a new department to be admitted.
Actions	<ol style="list-style-type: none"> <li>1. User actor: register the patient as present and admitted</li> <li>2. System actor: Activates use case TC.S1 "Evaluate and send notification[STIN]". No request for admission report is sent.</li> </ol>
Result	<p>The patient is admitted.</p> <p>Use Case TC.S1 Evaluate and send notification[STIN]" is activated.</p>
Alternative actions	<p>1a. User actor enters the wrong personal identification number during the registration/admission → See use case AN_S1</p> <p>1b. User actor enters the wrong hospital department or time of hospital stay → RE_S1</p>
Remarks	

2.13.2 Use case K10	Receive notification about changed status for an acute ambulant citizen [STIN] <sup>7</sup>
Initiator	System actor: notification [STIN]
Purpose, description and demarcation	To be informed that a citizen who was an acute ambulant patient has now been admitted.
Conditions for initiation	Notification has already been received [STAA]
Reason for initiation	System actor receives notification[STIN].
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates notification[STIN] (TC.K1)</li> <li>2. System actor: Loads and shows notification[STIN]" (TC.K3)</li> <li>3. User actor is informed that a citizen is admitted.</li> <li>4. System actor: Evaluates notification[STIN] but does not automatically send admission report (TC.K4).</li> </ol>
Result	<p>The citizen is admitted</p> <p>Notification[STIN] has been received, evaluated and shown in the recipient system.</p>
Alternative actions	
Remarks	

<sup>7</sup> Opmærksomhedspunkt: Modtagersystemet kan have en "ikke lukket indlæggelse" (det gamle forløbsID).

### 3 Technical use cases

In this paragraph, the following technical use cases are described:

1. Use case TC.S1: Evaluate and send notification[Type] (sender)
2. Use case TC.K1: Receive and evaluate notification[Type] (recipient)
3. Use case TC.K2: Discard notification [Type] (recipient)
4. Use case TC.K3: Load and show notification[Type] (recipient)
5. Use case TC.K4: Evaluate notification[Type] and send admission report if necessary (recipient)
6. Use case TC.K5: Load notification[Type] (recipient)

The technical use cases refer to a number of notification types. An overview can be found in appendix I.

<b>3.1.1 Use case TC.S1</b>	<b>Evaluate and send notification[Type]</b>
Initiator	User actor
Purpose, description and demarcation	To evaluate whether a registration in the system should trigger a sent notification and afterwards send the notification.
Conditions for initiation	User actor performs an action in the system.
Reason for initiation	
Actions	<ol style="list-style-type: none"> <li>1. User actor: Performs an action in the system</li> <li>2. System actor: Evaluates whether to send a notification</li> <li>3. System actor: Based on the evaluation, sends a notification of the type of notification[Type]</li> </ol> <p>The notification is populated with content as described in the standard</p>
Result	<p>The system has sent notification of the type:</p> <p>[STAA] [AN_STAA] [RE_STAA]  [STIN] [AN_STIN] [RE_STIN]  [SLHJ] [AN_SLHJ] [RE_SLHJ]  [SLAN] [AN_SLAN] [RE_SLAN]  [MORS] [AN_MORS] [RE_MORS]  [STOR] [AN_STOR] [RE_STOR]  [SLOR] [AN_SLOR] [RE_SLOR]</p>
Alternative actions	
Remarks	<p>Type of hospital stay must be visible. There is a distinction between acute ambulant and admitted. Today, these contact types are used in all PAS/EPR systems, however, new types of contacts or updates to current contact types are possible in the future. Therefore, the new notification standard must be able to handle future contact types or changes to current needs. This is handled by the qualification list on the external classification server.</p> <p>In the case of cancelled or corrected notification, an admission report is never requested.</p> <p>Remark concerning corrections: Corrections are only sent to the most recent sent notification. If a correction is made for, for example, the time of admission of a patient who has been discharged, this correction should not be sent.</p>

3.1.2 Use case TC.K1	Receive and evaluate notification[Type]
Initiator	System actor
Purpose, description and demarcation	To receive notification[Type] and evaluate whether it should be i) discarded, ii) loaded and shown to the User actor, or iii) loaded
Conditions for initiation	
Reason for initiation	Notification is received[Type]
Actions	<ol style="list-style-type: none"> <li>1. System actor: Receives and evaluates whether notification[Type] should be <ol style="list-style-type: none"> <li>a. Discharged (not legal authority to receive it) → Use case TC.K2 is activated</li> <li>b. Loaded and shown: notification[Type] + notification[AN_Type] → Use case TC.K3 is activated</li> <li>c. Loaded: notification[RE_Type] (corrections to a notification previously received) → Use case TC.K4 is activated</li> </ol> </li> </ol> <p>The notification with content as described in the standard is received</p>
Result	<p>The system has received and evaluated a notification of the type:</p> <p>[STAA] [AN_STAA] [RE_STAA]</p> <p>[STIN] [AN_STIN] [RE_STIN]</p> <p>[SLHJ] [AN_SLHJ] [RE_SLHJ]</p> <p>[SLAN] [AN_SLAN] [RE_SLAN]</p> <p>[MORS] [AN_MORS] [RE_MORS]</p> <p>[STOR] [AN_STOR] [RE_STOR]</p> <p>[SLOR] [AN_SLOR] [RE_SLOR]</p> <p>One of the following use cases is activated: TC.K2, TC.K3, TC.K4</p>
Alternative actions	
Remarks	A receipt must be sent for all notifications received, including the notifications which are discarded. (TC.K2)

3.1.3 Use case TC.K2	Discard notification
Initiator	System actor
Purpose, description and demarcation	To discard a notification[Type], because the citizen does not receive care services that legally authorises receipt of notification [Type]
Conditions for initiation	Notification[Type] is received and evaluated (TC.K1)
Reason for initiation	TC.K1 is executed
Actions	<ol style="list-style-type: none"> <li>1. System actor: Discards notification[Type], because the citizen does not receive care services that legally authorises receipt of the notification.</li> </ol>
Result	<p>The system has discarded notification of the type:</p> <p>[STAA]  [STIN]  [SLHJ]  [SLAN]  [MORS]  [STOR]  [SLOR]</p>
Alternative actions	
Remarks	A receipt must be sent that the discarded notification has been received (CTL03).

3.1.4 Use case TC.K3	Load and show notification[Type] + notification[AN_Type]
Initiator	System actor
Purpose, description and demarcation	To load and notify User actor that notification is received [Type] + notification[AN_Type].
Conditions for initiation	Notification[Type] or notification[AN_Type] is received and evaluated (TC.K1)
Reason for initiation	TC.K1 is executed.
Actions	<ol style="list-style-type: none"> <li>1. System actor: Loads notification[Type] or notification[AN_Type] in the system</li> <li>2. System actor: Shows notification[Type] or notification[AN_Type] to User actor.</li> <li>3. System actor: Activates TC.K4</li> </ol> <p>The notification with content as described in the standard is received</p>
Result	<p>The system has loaded and shown notification of the type:</p> <p>[STAA] [AN_STAA]  [STIN] [AN_STIN]  [SLHJ] [AN_SLHJ]  [SLAN] [AN_SLAN]  [MORS] [AN_MORS]  [STOR] [AN_STOR]  [SLOR] [AN_SLOR]</p>
Alternative actions	
Remarks	



3.1.5 Use case TC.K4	Evaluate notification[Type] and send admission report if necessary
Initiator	System actor
Purpose, description and demarcation	To send admission report if this is requested in the notification [Type]
Conditions for initiation	Notification[Type] is loaded in the system
Reason for initiation	TC.K3 is executed.
Actions	1. System actor: Evaluates notification[Type] with requested admission report 2. System actor: Sends admission report if requested
Result	The system has evaluated and sent admission report if necessary
Alternative actions	
Remarks	

3.1.6 Use case TC.K5	Load corrected notification[RE_Type]
Initiator	System actor
Purpose, description and demarcation	To load notification[RE_Type] in the system with or without notifying the User actor
Conditions for initiation	Notification[RE_Type] is received and evaluated (TC.K1)
Reason for initiation	TC.K1 is executed.
Actions	1. System actor: Loads notification[RE_Type]
Result	<p>The systemet has loaded a notification of the type:</p> <p>[RE_STAA]</p> <p>[RE_STIN]</p> <p>[RE_SLHJ]</p> <p>[RE_SLAN]</p> <p>[RE_MORS]</p> <p>[RE_STOR]</p> <p>[RE_SLOR]</p> <p>The notification with content as described in the standard is received</p>
Alternative actions	
Remarks	The individual system and municipality has to assess how corrections should be loaded and shown to the user.

## 4 Corrections

In this section, use case corrections will be documented continuously.

Version	Date	Responsible	Description
0.9.2	24.06.2020	Karina Lorenzen	Note to use case K9 is added. Use case 2.6.1.2 and 2.6.2.2 is added. Appendix 2 is removed
0.9.3	09.10.2020	Karina Lorenzen	Use case S7b og use case S8.1 is corrected to the new notification [SLAN] Technical use cases are adjusted

## Appendix I (change of status - sender of notification)

End status	Triggered by what action in the clinic	Change of status (HL7)	Start status (HL7)	Type of notification	Request for DIS16	Use case
active	Admit patient	activate	null/new	STIN	Yes	S1
active	Receive acute ambulant patient	Activate	Null/new	STAA	Yes	S2
completed	Discharge and sent patient home/ <u>to other than home</u>	complete	Active	SLHJ/ <u>SLAN</u>	No	S3/ <u>S7.1b and S8.1</u>
suspended	Start leave for patient	suspend	Active	STOR	No	S4
active	End leave for patient	resume	Suspended	SLOR	No	S5
Active (completed?)	The patient is transferred to <u>another department in the same hospital</u> (original department)	revise/complete	Active	TCS1 is not activated.		S6.1
active	The patient is received in <u>another department in the same hospital</u> (new department)	revise/activate	Active/New	TC_S1 is not activated.		S6.2
Active (completed?)	The patient is transferred to <u>another hospital in the same region</u> (original hospital)	revise/complete	Active	TC_S1 is not activated		S7.1
active	The patient is received on <u>another hospital in the same region</u> (new hospital)	revise/activate	Active/New	STIN	No	S7.2
completed	The patient is transferred to <u>another hospital/other region</u> (original hospital/region)	complete	Active	TC_S1 is not activated		S8.1
active	The patient is transferred to <u>another hospital/other region</u> (new hospital)	activate	New	STIN	Yes	S8.2
completed	The patient is dead upon arrival	complete	null/new	MORS	No	S9.1
completed	The patient dies during hospital stay	complete	Active	MORS	No	S9.2
cancelled	Cancellation	nullify	Active	ANSTIN	No	AN
cancelled	Correction	revise		ANSTAA	No	RE