| medcom | ID and process                 | ID and title                     | Init | Version | Date         |
|--------|--------------------------------|----------------------------------|------|---------|--------------|
| meacom | 4.1. Preparation and modifica- | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |
|        | tion of a MedCom standard      |                                  |      |         |              |

# HOSPITALNOTIFICATION

USE CASES

| medcom | ID and process  | Title                            | Init | Version | Date         |
|--------|---|----------------------------------|------|---------|--------------|
| medeom | 4.1 Preparation and modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

| Versioning |          |  |  |
|------------|----------|--|--|
| Version    | Initials | Date   | Description  |
| 1.0        | MBK      | 26-01-2021   | Release of use cases   |
| 1.0.1      | MBK      | 03-02-2021   | Minor corrections  |
| 2.0.0      | МВК      | October 2022   | 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 technical actions that lie before and after the user's interaction with the system, and which were previously covered by the current document, are generic across Med-Com standards, these have been transferred (in an expanded version) to a new independent document. |
| 2.0.1      | MBK      | November 2022  | Uniformity in the use of English (HospitalNotification) vs.  Danish (Advis om sygehusophold) naming.   |
| 3.0.0      | МВК      | January 2023  Correction to rule S.BR26: Validation mechalon only be used for leave notifications, so that that recipient systems which cannot send a port receive notification of completion. |  |

| medcom | ID and process                | Title                            | Init | Version | Date         |
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| meacom | 4.1 Preparation and modifica- | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |
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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 onb 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         |
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#### 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  |
| Desires es malatada esca |   |
| 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      |
| Duainaga valatad in trav | 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        |
|                          | technical part of the system and its business-related part of the system in an inbound direction. |
| 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-      |
| rechilicariii tray       | 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:   |
| Wicssage now             | - 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             |
| 7.01.777                 | MedCom's positive acknowledgment CTRL ((X)CTL03).   |
|                          | medoon 5 positive definomedyment of the ((x) of Eoo).   |

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).

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| 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>".

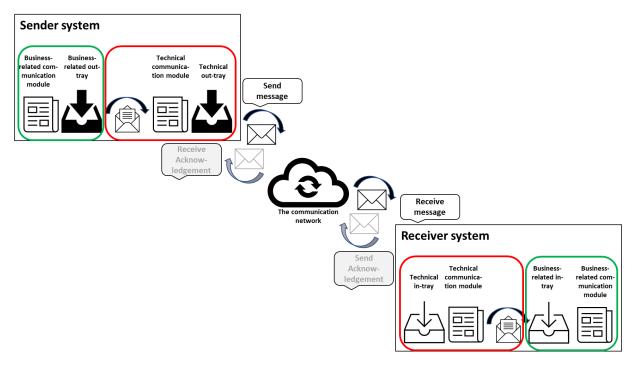


Figure 1 Illustration of message flow

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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 below<sup>1</sup>.

\_

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

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| 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         |
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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.

| D and process                | Title  | Init   | Version  | Date   |
|------------------------------|--|--|--|--|
| .1 Preparation and modifica- | HospitalNotification – use cases                                   | MBK  | 3.0.0  | January 2023   |
| ١.                           | o and process  1 Preparation and modification of a MedCom standard | 1 Preparation and modifica- HospitalNotification – use cases | 1 Preparation and modifica- HospitalNotification – use cases MBK | 1 Preparation and modifica- HospitalNotification – use cases MBK 3.0.0 |

# 2 Overview of use cases

# 2.1 Overview of primary and alternative use cases

| Incident  | HospitalNotifi-<br>cation type | Request for<br>DIS16 | Sender (S)<br>use case | Receiver<br>(R) use |
|---|--------------------------------|----------------------|------------------------|---------------------|
| Start adm   | l<br>ission                    |                      |                        | case                |
| Delication admitted   | [OTIN]                         | V                    | 01                     | D1                  |
| 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)                             | [OTINI]                        | NI -                 | 01.41                  | D1 11               |
| Patient is admitted   | [STIN]                         | No                   | <u>\$1.A1</u>          | <u>R1.A1</u>        |
| - After prior admission to another hospital in the            |                                |                      |                        |                     |
| same region (transfer between hospitals in the                |                                |                      |                        |                     |
| same region)  |                                |                      |                        |                     |
| - After a previous acute ambulant hospital stay at the        |                                |                      |                        |                     |
| same hospital   |                                |                      | 04.40                  |                     |
| Patient is admitted after prior admission to another depart-  | -                              | -                    | <u>S1.A2</u>           | -                   |
| ment at the same hospital (internal transfer)                 | [07.41]                        |                      |                        |                     |
| The patient is referred to an acute ambulant hospital stay    | [STAA]                         | Yes                  | <u>S2</u>              | <u>R2</u>           |
| Leave   |                                |                      |                        |                     |
| 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 (refe  | erring company)                |                      |                        |                     |
| 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.       |                                |                      |                        |                     |
| 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   |                                |                      |                        |                     |
| <u>The patient</u> is responsible for the transfer/transport. |                                |                      |                        |                     |
| End admi  |                                |                      |                        |                     |
| 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                        |                                |                      |                        |                     |
| Death   |                                |                      |                        |                     |
| Patient dies  | [MORS]                         | No                   | <u>S7</u>              | <u>R7</u>           |
| - Upon arrival  |                                |                      |                        |                     |
| - During hospital stay  |                                |                      |                        |                     |
| - During leave  |                                |                      |                        |                     |
| Manual end of h   | ospital stay                   |                      |                        |                     |
| Manual end of hospital stay in recipient system               |                                | =                    | =                      | <u>R8</u>           |

| medcom | ID and process  | Title                            | Init | Version | Date         |
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#### 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 already been sent.  | <u>S.CANC</u>       | <u>R.CANC</u>    |
| There is a need to correct a HospitalNotification which has already been sent. | <u>S.CORR</u>       | <u>R.CORR</u>    |

## 2.3 Technical validation of legal basis for reception

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

| medcom | ID and process                | Title                            | Init | Version | Date         |
|--------|-------------------------------|----------------------------------|------|---------|--------------|
| meacom | 4.1 Preparation and modifica- | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |
|        | tion of a MedCom standard     |                                  |      |         |              |

#### 3 Use cases

#### 3.1 Patient is admitted

3.1.1 S1: Admit patient and send HospitalNotification [STIN]

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

| D and process                | Title  | Init   | Version  | Date   |
|------------------------------|--|--|--|--|
| .1 Preparation and modifica- | HospitalNotification – use cases                                   | MBK  | 3.0.0  | January 2023   |
| ١.                           | o and process  1 Preparation and modification of a MedCom standard | 1 Preparation and modifica- HospitalNotification – use cases | 1 Preparation and modifica- HospitalNotification – use cases MBK | 1 Preparation and modifica- HospitalNotification – use cases MBK 3.0.0 |

| 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 HospitalNotification [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                      | 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.   |
|                              | <ol> <li>System operator: Evaluates positively that an admission note must be requested (XDIS16) cf. Rules for the sending system on which the use cases are based.</li> </ol>  |
|                              | System operator: Based on the evaluation, places a HospitalNotification [STIN] with request for admission repot (XDIS16) in <a href="mailto:the system's business-related out-tray">the system's business-related out-tray</a>  |
| Result                       | The patient is admitted.  |
|                              | The System operator has placed a HospitalNotification [STIN] in the system's business-related out-tray with a request for an admission note (XDIS16).   |
| Alternative actions          | <ul> <li>2a System operator evaluates negatively that HospitalNotification [STIN] must be sent, as the patient has been transferred from another department at the same hospital of. Rules for the sending system on which the use cases are based. See alternative use case S1.A2.</li> <li>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 of. Rules for the sending system on which the use cases are based. See alternative use case S1.A1</li> </ul> |
| Corrective actions  Comments | 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 <a href="S.CANC">S.CANC</a> 1b End use has mistakenly registered the patient as "admitted" instead of "acute ambulant", see use case <a href="S.CANC">S.CANC</a> 1c End user has registered the wrong hospital department or time, see use case <a href="S.CORR">S.CORR</a> Not relevant   |
| OOMINENIO                    | TACTICIEVALIT   |

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

- Patient is admitted after prior admission to another hospital in the same region (transfer between regions)
- Patient is admitted after a previous acute ambulant hospital stay

| medcom | ID and process  | Title                            | Init | Version | Date         |
|--------|---|----------------------------------|------|---------|--------------|
| meacom | 4.1 Preparation and modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

| 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   | 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.  |
|   | <ol> <li>System operator: Evaluates negatively that an admission note (XDIS16) must<br/>be requested, cf. Rules for the sending system on which the use cases are<br/>based.</li> </ol>  |
|   | System operator: Based on the evaluation, places a HospitalNotification [STIN] without request for admission note (XDIS16) in the system's business-related out-tray   |
| Result  | Patient is admitted.  System operator has placed a HospitalNotification [STIN] in <a href="the-system's business-related out-tray">the system's business-related out-tray</a> 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 <a href="S.CANC">S.CANC</a> 1b End use has mistakenly registered the patient as "admitted" instead of "acute ambulant", see use case <a href="S.CANC">S.CANC</a> 1c End user has registered the wrong hospital department or time, see use case <a href="S.CORR">S.CORR</a> |
| Comments  | Not relevant   |

| medcom | ID and process  | Title                            | Init | Version | Date         |
|--------|---|----------------------------------|------|---------|--------------|
| meacom | 4.1 Preparation and modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

## 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   | End user: Registers the patient as present and admitted   |
|   | 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 the system's business-related out-tray  |
| Corrective actions  | Not relevant  |
| Comments  | Not relevant  |

| medcom | ID and process  | Title                            | Init | Version | Date         |
|--------|---|----------------------------------|------|---------|--------------|
| meacom | 4.1 Preparation and modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

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

- 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 Conditions for initiation | To be informed that a citizen has been admitted to the hospital  The citizen is registered as admitted to a hospital.  The system operator has evaluated positively that HospitalNotification [STIN] must be placed in the system's business-related in-tray cf. R.PC |
| Reason for initiation             | System operator has placed a formatted HospitalNotification [STIN] in the system's business-related in-tray   |
| 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 the system's business-related out-tray   |
|                                   | 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 the system's business-re-  |
| Alternative actions               | 2a System operator evaluates negatively that an admission note must be sent, cf. re-  |
| Corrective actions                | quest in HospitalNotification [STIN]. See alternative use case R1.A1  Not relevant  |
| Comments                          | It is up to the receiving system to set up rules for any automatic pausing of services  |
| Comments                          | when receiving a HospitalNotification [STIN]  |

| medcom | ID and process  | Title                            | Init | Version | Date         |
|--------|---|----------------------------------|------|---------|--------------|
| medeom | 4.1 Preparation and modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

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

- 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 | <u>R1</u>  |
| case is an alternative to               |  |
| Actions                                 | 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.   |
|   | 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 <a href="the system's business-related out-tray.">the system's business-related out-tray.</a> |
| 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 modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

# 3.2 Patient is referred to acute ambulant hospital stay

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

| 2.7 S2: Register patient as acute ambulant and send HospitalNotification [STAA]  Jse case S2 Register patient as acute ambulant and send HospitalNotification [STAA] |  |  |  |
|--|--|--|--|
| Use case 52  | 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  | 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.   |  |  |
|  | <ol> <li>System operator: Based on the evaluation, places a HospitalNotification<br/>[STAA] with a request for an admission note (XDIS16) in the system's business-related out-tray</li> </ol>   |  |  |
| Result   | The patient is at the hospital for acute ambulant contact.   |  |  |
|  | The system operator has placed a HospitalNotification [STAA] in the system's business-related out-tray 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 <a href="S.CANC">S.CANC</a> 1b End use has mistakenly registered the patient as "acute ambulant" instead of "admitted", see use case <a href="S.CANC">S.CANC</a> 1c End user has registered the wrong hospital department or time, see use case <a href="S.CORR">S.CORR</a> |  |  |
| Comments   | Not relevant   |  |  |

| medcom | ID and process  | Title                            | Init | Version | Date         |
|--------|---|----------------------------------|------|---------|--------------|
| meacom | 4.1 Preparation and modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

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

| <i>3.2.2 R2: Receive Hospital</i> .<br>Use case R2 | Notification [STAA] and send admission note  Receive HospitalNotification [STAA] and send admission note   |
|--|--|
| USE Case NZ  | receive Hospitali votinication to 1201 and seria autilission 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 the system's business-related in-tray of. R.PC |
| Reason for initiation                              | System operator has placed a formatted HospitalNotification [STAA] in the system's business-related in-tray  |
| 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 the system's business-related out-tray  |
|  | System operator: Imports HospitalNotification [STAA] and notifies the end user that HospitalNotification' [STAA] has been received.  |
|  | 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 the system's business-related 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 modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

# 3.3 Patient goes on leave from his hospital stay

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

| 3.3.1 S3: Register the patie 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                                  | 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.  |
|  | <ol> <li>System operator: Evaluates negatively that an admission note must be requested (XDIS16) cf. Rules for the sending system on which the use cases are based.</li> </ol>  |
|  | System operator: Based on the evaluation, places a HospitalNotification [STOR] without request for admission note (XDIS16) in <a href="the system's business-related out-tray">the system's business-related out-tray</a>   |
| Result                                   | Patient is on leave from his hospital stay  |
|  | The system operator has placed a HospitalNotification [STOR] in the system's business-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 [STOR] concerning wrong patient, see use case S.CANC      1b End user mistakenly registered the patient as 'on leave', see use case S.CANC      1c End user has registered the wrong hospital department or time, see use case S.CORR                                  |
| 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 addresses 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 hospital, 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 modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

3.3.2 R3: Receive HospitalNotification [STOR]

| <i>3.3.2 R3: Receive Hospital</i><br>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 the system's business-related in-tray cf. R.PC  |
| Reason for initiation                            | System operator has placed a formatted HospitalNotification [STOR] in the system's business-related in-tray   |
| Actions  | System operator: Evaluates negatively that an admission note (XDIS16) must be sent, cf. request in HospitalNotification [STOR]  |
|  | System operator: Imports HospitalNotification [STOR] and notifies end user that HospitalNotification [STOR] has been received.  |
|  | 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 <a href="mailto:the system's business-related out-tray">the system's business-related out-tray</a> .   |
| 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 addresses 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 hospital, are to provide services during the leave. |

| medcom | ID and process  | Title                            | Init | Version | Date         |
|--------|---|----------------------------------|------|---------|--------------|
| meacom | 4.1 Preparation and modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

# 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                   | End user: Register patient as returned from leave   |
|                           | System operator: Evaluates positively that HospitalNotification [SLOR] must be sent cf. Rules for the sending system on which the use cases are based.  |
|                           | <ol> <li>System operator: Evaluates negatively that an admission note must be requested (XDIS16) cf. Rules for the sending system on which the use cases are based.</li> </ol>  |
|                           | System operator: Based on the evaluation, places a HospitalNotification [SLOR] without request for admission note (XDIS16) in <a href="mailto:the system's busi-ness-related out-tray">the system's busi-ness-related out-tray</a>  |
| Result                    | Patient has returned to the hospital after leave.   |
|                           | The system operator has placed a HospitalNotification [SLOR] in the system's business-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 [SLOR] concerning the wrong patient, see use case S.CANC  1b End user mistakenly registered the patient as 'end leave', see use case S.CANC  1c End user has registered the wrong hospital department or time, see use case S.CORR |
| Comments                  | Not relevant.   |

| medcom | ID and process  | Title                            | Init | Version | Date         |
|--------|---|----------------------------------|------|---------|--------------|
| meacom | 4.1 Preparation and modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

3.4.2 R4: Receive HospitalNotification [SLOR]

| 3.4.2 R4: Receive Hospital |  |
|----------------------------|--|
| 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 <a href="mailto:the system's business-related in-tray">the system's business-related in-tray</a> cf. R.PC                            |
| Reason for initiation      | System operator has placed a formatted HospitalNotification [SLOR] in the system's business-related in-tray  |
| Actions                    | System operator: Evaluates negatively that an admission note (XDIS16) must be sent, cf. request in HospitalNotification [SLOR]   |
|                            | System operator: Imports HospitalNotification [SLOR] and notifies end user that HospitalNotification [SLOR] has been received.   |
|                            | 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 <a href="mailto:the system's business-related out-tray">the system's business-related out-tray</a> .  |
| 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], see use case R6. 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], see use case R7. HospitalNotification [SLOR] may have been received prior to HospitalNotification [SLHJ].                         |

| D and process                | Title  | Init   | Version  | Date   |
|------------------------------|--|--|--|--|
| .1 Preparation and modifica- | HospitalNotification – use cases                                   | MBK  | 3.0.0  | January 2023   |
| ١.                           | o and process  1 Preparation and modification of a MedCom standard | 1 Preparation and modifica- HospitalNotification – use cases | 1 Preparation and modifica- HospitalNotification – use cases MBK | 1 Preparation and modifica- HospitalNotification – use cases MBK 3.0.0 |

#### 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 patient 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                   | 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 the system's business-related out-tray   |  |  |  |  |
| Alternative actions       | <b>1a</b> End user terminates the patient, as the patient wants to take care of the transfer/transport himself, see use case S6.  |  |  |  |  |
| Corrective actions        | Not relevant  |  |  |  |  |
| Comments                  | No notification of termination (HospitalNotification [SLHJ] is sent, as the patient continues his admission. The receiving hospital sends HospitalNotification about admission (see use case S1) to inform relevant parties 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 modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

## 3.6 Patient is discharged to home/primary sector

#### 3.6.1 S6: End/discharge patient and send HospitalNotification [SLHJ]

- 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 collaborators 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                   | 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 requested (XDIS16)  |
|                           | System operator: Based on the evaluation, places a HospitalNotification [SLHJ] without request for admission note (XDIS16) in the system's business-related out-tray   |
| Result                    | The patient is discharged to home/primary sector.  |
|                           | System operator has placed a Hospital Notification (SLHJ] in the system's business-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 [SLHJ] concerning wrong patient, see use case S.CANC      1b End user mistakenly discharged the patient, see use case S.CANC      1c End user has registered the wrong hospital department or time, see use case S.CORR |
| 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/primary sector and must not be used in the event of transfers (unless the patient manages the transfer himself) or death.  |

| medcom | ID and process  | Title                            | Init | Version | Date         |
|--------|---|----------------------------------|------|---------|--------------|
| meacom | 4.1 Preparation and modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

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 the system's business-related in-tray cf. R.PC |
| Reason for initiation     | System operator has placed a formatted HospitalNotification [SLHJ] in <a href="the system's business-related in-tray">the system's business-related in-tray</a>   |
| 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.  |
|                           | 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 the system's business-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 services upon receipt of HospitalNotification [SLHJ].   |

| medcom | ID and process  | Title                            | Init | Version | Date         |
|--------|---|----------------------------------|------|---------|--------------|
| meacom | 4.1 Preparation and modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

#### 3.7 Patient dies

#### 3.7.1 S7: Send HospitalNotification [MORS] in the event of the patient's death

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

| 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.  Patient is either on his way to the hospital or is staying at the hospital Patient dies  Actions  1. End user: Registers the patient as dead  2. System operator: Evaluates positively that HospitalNotification [MORS] 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 must be requested (XDIS16)  4. System operator: Based on the evaluation, places a HospitalNotification [MORS] without request for admission note (XDIS16) in the system's business-related out-tray.  Result  The patient is dead.  System operator has placed a HospitalNotification [MORS] in the system's business-related out-tray without request for an admission note (XDIS16)  Alternative actions  Not relevant  Ta End user has registered the wrong personal identification number as admitted and thus activated sending of HospitalNotification [MORS] concerning wrong patient, see use case SCANC  1a End user has registered the wrong hospital department or time, see use case SCANC  1b End user mistakenly registers the patient as dead, see use case SCANC  1b End user has registered the wrong hospital department or time, see use case SCONC  1b End user has registered the wrong hospital department or time, see use case | Use case S7               | Send HospitalNotification [SLHJ] in the event of the patient's death   |  |  |  |
|--|---------------------------|--|--|--|--|
| 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  Patient dies  Actions  1. End user: Registers the patient as dead  2. System operator: Evaluates positively that HospitalNotification [MORS] 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 must be requested (XDIS16)  4. System operator: Based on the evaluation, places a HospitalNotification [MORS] without request for admission note (XDIS16) in the system's business-related out-tray  Result  The patient is dead.  System operator has placed a HospitalNotification [MORS] in the system's business-related out-tray without request for an admission note (XDIS16)  Alternative actions  Not relevant  Ta End user has registered the wrong personal identification number as admitted and thus activated sending of HospitalNotification [MORS] concerning wrong patient, see use case S.CANC  1b End user mistakenly registers the patient as dead, see use case S.CANC  1c End user has registered the wrong hospital department or time, see use case S.CANC  | Initiator                 | End user: Nurse/secretary at the hospital  |  |  |  |
| Patient dies   | Purpose                   | HospitalNotification [MORS]) cf. Rules for the sending system on which the use cases are based.  |  |  |  |
| Actions  1. End user: Registers the patient as dead  2. System operator: Evaluates positively that HospitalNotification [MORS] 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 must be requested (XDIS16)  4. System operator: Based on the evaluation, places a HospitalNotification [MORS] without request for admission note (XDIS16) in the system's business-related out-tray  Result  The patient is dead.  System operator has placed a HospitalNotification [MORS] in the system's business-related out-tray without request for an admission note (XDIS16)  Alternative actions  Not relevant  Ta End user has registered the wrong personal identification number as admitted and thus activated sending of HospitalNotification [MORS] concerning wrong patient, see use case S.CANC  To End user has registered the wrong hospital department or time, see use case S.CANC  To End user has registered the wrong hospital department or time, see use case S.CANC  | Conditions for initiation | Patient is either on his way to the hospital or is staying at the hospital   |  |  |  |
| 1. End user: Registers the patient as dead  2. System operator: Evaluates positively that HospitalNotification [MORS] 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 must be requested (XDIS16)  4. System operator: Based on the evaluation, places a HospitalNotification [MORS] without request for admission note (XDIS16) in the system's business-related out-tray  Result  The patient is dead.  System operator has placed a HospitalNotification [MORS] in the system's business-related out-tray without request for an admission note (XDIS16)  Alternative actions  Not relevant  Ta End user has registered the wrong personal identification number as admitted and thus activated sending of HospitalNotification [MORS] concerning wrong patient, see use case S.CANC  1b End user mistakenly registers the patient as dead, see use case S.CANC  1c End user mistakenly registers the patient as dead, see use case S.CANC  1c End user has registered the wrong hospital department or time, see use case S.CANC  | Reason for initiation     | Patient dies   |  |  |  |
| be sent, cf. Rules for the sending system on which the use cases are based.  3. System operator: Evaluates negatively that an admission note must be requested (XDIS16)  4. System operator: Based on the evaluation, places a HospitalNotification [MORS] without request for admission note (XDIS16) in the system's business-related out-tray  Result  The patient is dead.  System operator has placed a HospitalNotification [MORS] in the system's business-related out-tray without request for an admission note (XDIS16)  Alternative actions  Not relevant  Ta End user has registered the wrong personal identification number as admitted and thus activated sending of HospitalNotification [MORS] concerning wrong patient, see use case S_CANC  1b End user mistakenly registers the patient as dead, see use case S_CANC  1c End user has registered the wrong hospital department or time, see use case S_CANC  | Actions                   | End user: Registers the patient as dead  |  |  |  |
| 4. System operator: Based on the evaluation, places a HospitalNotification [MORS] without request for admission note (XDIS16) in the system's business-related out-tray.  Result  The patient is dead.  System operator has placed a HospitalNotification [MORS] in the system's business-related out-tray without request for an admission note (XDIS16)  Alternative actions  Not relevant  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 S.CANC  1b End user mistakenly registers the patient as dead, see use case S.CANC  1c End user has registered the wrong hospital department or time, see use case S.CORR  |                           | -,,  |  |  |  |
| [MORS] without request for admission note (XDIS16) in the system's business-related out-tray  The patient is dead.  System operator has placed a HospitalNotification [MORS] in the system's business-related out-tray without request for an admission note (XDIS16)  Alternative actions  Not relevant  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 S.CANC  1b End user mistakenly registers the patient as dead, see use case S.CANC  1c End user has registered the wrong hospital department or time, see use case S.CORR  |                           | .,,  |  |  |  |
| System operator has placed a HospitalNotification [MORS] in the system's business-related out-tray without request for an admission note (XDIS16)  Alternative actions  Not relevant  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 S.CANC  1b End user mistakenly registers the patient as dead, see use case S.CANC  1c End user has registered the wrong hospital department or time, see use case S.CORR  |                           | [MORS] without request for admission note (XDIS16) in the system's busi-   |  |  |  |
| Alternative actions  Not relevant  Ta End user has registered the wrong personal identification number as admitted and thus activated sending of HospitalNotification [MORS] concerning wrong patient, see use case S.CANC  1b End user mistakenly registers the patient as dead, see use case S.CANC  1c End user has registered the wrong hospital department or time, see use case S.CORR   | Result                    | The patient is dead.   |  |  |  |
| 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 S.CANC  1b End user mistakenly registers the patient as dead, see use case S.CANC  1c End user has registered the wrong hospital department or time, see use case S.CORR  |                           |  |  |  |  |
| 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>   | Alternative actions       | Not relevant   |  |  |  |
| Comments Not relevant  | Corrective actions        | thus activated sending of HospitalNotification [MORS] concerning wrong patient, see use case <u>S.CANC</u> <b>1b</b> End user mistakenly registers the patient as dead, see use case <u>S.CANC</u> <b>1c</b> End user has registered the wrong hospital department or time, see use case |  |  |  |
|  | Comments                  | Not relevant   |  |  |  |

| medcom | ID and process  | Title                            | Init | Version | Date         |
|--------|---|----------------------------------|------|---------|--------------|
| meacom | 4.1 Preparation and modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

#### 3.7.2 R7: Receive HospitalNotification [MORS]

- 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 the system's business-related in-tray cf. R.PC  |
| Reason for initiation     | System operator has placed a formatted HospitalNotification [MORS] in <a href="mailto:the system's">the system's</a> <a href="mailto:business-related in-tray">business-related in-tray</a> |
| Actions                   | System operator: Evaluates negatively that an admission note (XDIS16) must be sent, cf. request in HospitalNotification [MORS]  |
|                           | System operator: Imports HospitalNotification [MORS] and notifies end user that HospitalNotification [MORS] has been received.  |
|                           | 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 the system's business-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 modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

## 3.8 Manually end the citizen's stay at the hospital

#### 3.8.1 R8: Manually end the citizen's stay at the hospital

- 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 HospitalNotification [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.  |  |  |  |

| D and process                | Title  | Init   | Version  | Date   |
|------------------------------|--|--|--|--|
| .1 Preparation and modifica- | HospitalNotification – use cases                                   | MBK  | 3.0.0  | January 2023   |
| ١.                           | o and process  1 Preparation and modification of a MedCom standard | 1 Preparation and modifica- HospitalNotification – use cases | 1 Preparation and modifica- HospitalNotification – use cases MBK | 1 Preparation and modifica- HospitalNotification – use cases MBK 3.0.0 |

## 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 number or HospitalNotification type   |
| Actions                   | 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.  |
|                           | 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 <a href="the system's business-related out-tray">the system's business-related out-tray</a>                     |
| Result                    | Error has been corrected.  |
|                           | System operator has placed a HospitalNotification (AN_XX] in the system's business-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 modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

4.1.2 R.CANC: Receive HospitalNotification [AN\_XX]

| Use case R.CANC           | Receive HospitalNotification [AN_XX]   |
|---------------------------|--|
| USE Case R.CAINC          | Receive Hospitalinotification [AN_AA]  |
| 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 <a href="mailto:the system's">the system's</a> business-related in-tray   |
| Actions                   | System operator: Evaluates negatively that an admission note (XDIS16) must be sent, cf. request in HospitalNotification [AN_XX]  |
|                           | 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.   |
|                           | 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 modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

## 4.2 Corrections

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

|                           | oital 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-<br>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.  |
|                           | System operator: Evaluates negatively that an admission note (XDIS16) must be requested, as it is a correction   |
|                           | <ol> <li>System operator: Based on the evaluation, places a HospitalNotification<br/>[RE_XX] without request for admission note (XDIS16) in <a href="the system's busi-ness-related out-tray">the system's busi-ness-related out-tray</a></li> </ol> |
| Result                    | Error has been corrected.  |
|                           | System operator has placed a HospitalNotification (RE_XX] in the system's business-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 modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

4.2.2 R.CORR: Receive HospitalNotification [RE XX]

|                           | pitalNotification [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 <a href="mailto:the system's">the system's</a> <a href="mailto:business-related in-tray">business-related in-tray</a> |
| Actions                   | System operator: Evaluates negatively that an admission note (XDIS16) must be sent, cf. request in HospitalNotification [RE_XX]  |
|                           | 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 message which has been corrected.   |
|                           | End user: Accesses HospitalNotification [RE_XX]  |
| Result                    | 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 modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

## 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 "General technical use cases".

| medcom | ID and process  | Title                            | Init | Version | Date         |
|--------|---|----------------------------------|------|---------|--------------|
| meacom | 4.1 Preparation and modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

# 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 the system's business-related in-tray, 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 the system's business-related in-tray.   |
| Actions                     | 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.  |
|                             | System operator: Evaluates HospitalNotification positively against the standard's profiling.  |
|                             | <ol> <li>System operator: Checks that HospitalNotification is marked to receive an acknowledge-<br/>ment cf. rules as described in "General technical use cases", and logs/marks that a posi-<br/>tive acknowledgement must be sent (ACK AA)</li> </ol>   |
|                             | 4. System operator: Sets message state as "Validated"   |
|                             | 5. System operator: Formats message content according to the system's message format.   |
|                             | 6. Evaluates positively that HospitalNotification must be placed in <a href="the system's business-related in-tray">the system's business-related in-tray</a> 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 the system's business-related in-tray, and logged/marked for a positive acknowledgement to be sent. Message state is set to "Validated"   |
| Alternative actions         | <ul> <li>2a System operator rejects HospitalNotification due to technically invalid content, see General technical use cases'</li> <li>2b System operator rejects HospitalNotification due to a technical error in the receiving system (see General technical use cases')</li> <li>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 R.PC.A1</li> </ul> |
|                             |   |
| Corrective actions Comments | Not relevant  The use case supplements the other technical actions that lie before and after the end user's interaction 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 modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

#### 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 | R.PC  |
| 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 <a href="mailto:the-system/s-business-related-in-tray">the system/s-business-related in-tray</a> .   |
| 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 interaction 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, positively acknowledge receipt of HospitalNotification (if the other conditions for initiation for this are present). |

| medcom | ID and process  | Title                            | Init | Version | Date         |
|--------|---|----------------------------------|------|---------|--------------|
| medeom | 4.1 Preparation and modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

# 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 HospitalNotification    | 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 patient/CPR no or wrong type of Hospital-Notification) | AN_XX                           | No                                  |

| medcom | ID and process  | Title                            | Init | Version | Date         |
|--------|---|----------------------------------|------|---------|--------------|
| meacom | 4.1 Preparation and modification of a MedCom standard | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |

#### 6.1.2 Other rules regarding sending of HospitalNotification

| 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, 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 | 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 (Korrespondancemeddelelse)  |
| S.BR18 | Concerning transfers (receiving hospital): If a patient has been transferred from one hospital to another 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 another hospital in the same region, a new HospitalNotification [STIN] is sent from the receiving hospital, without a request for an admission note (XDIS16).  |
| S.BR20 | <b>Cancellations</b> 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.  |
| 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 <b>addressed to the patient's municipality of residence</b> .  |
| 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- | HospitalNotification – use cases | MBK  | 3.0.0   | January 2023 |
|        | tion of a MedCom standard     |                                  |      |         | ĺ            |

## 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 <b>notified</b> /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 <b>automatic pause/resumption of services</b> upon re-  |
|       | ception 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.  |