Nordic Casemix Centre - Case

#1005 - Defining the principles for determining OR values for ultrasound procedures

2026-03-25 15:50 - Kristiina Kahur

Status:	Further active	**Start date:**	2026-03-25
Priority:	Normal	**Spent time:**	0.00 h
Assignee:			
Category:			
Initiator:	Nordic Casemix Centre	**Target year:**	2028
MDC:	OR	**Owner / responsible:**	National organisations
Target Grouper:	Combined		

Description

With a reference to #982, it was decided in EG Spring meeting that we create a new case to allow countries to have a look and check the OR values of all ultrasound codes as they lack consistency - some have OR 1, some OR 2 but most have OR 0.

Text written by Sweden/Mats is copied here:

In the Swedish version of NordDRG, the OR property 2 has a rather low impact. Out of 4 576 rules in the table drg_logic there are only 120 rules with the letter P. Most of them (109 rules) are about endoscopy. However, the OR value can be seen as a very rough estimate of resource consumption and then we have thought of a principal thinking:

- Ultrasound procedures that require laparotomy, laparoscopy, thoracotomy, or incision of the skin could have OR 1.
- Ultrasound procedures that require endoscopy could have OR 2.
- Ultrasound procedures that are performed transcutaneous could have OR 0 (zero) except when needle biopsy is performed, then OR 2 is probably more adequate.

With this principle in mind, we tried the following six changes on our patient database for 2024:

- **AF032** Intrakoronart ultraljud och doppler (**FNDE1B** Intravascular ultrasonography of coronary arteries) *from OR 2 to OR 1*.
- **AP052** Intravasalt ultraljud (**PXDE1B** Endovascular ultrasonography) *from OR 2 to OR 1*
- **TKE20** Punktionsbiopsi av prostata med MR-ultraljudsfusionsteknik, transrektal (**KEXX00** Prostate needle biopsy) *from OR 0 to OR 2*.
- **TKE23** Punktionsbiopsi av prostata med MR-ultraljudsfusionsteknik, transperineal (**KEXX00** Prostate needle biopsy) *from OR 0 to OR 2*.
- **XGX10** Intrapleural ultraljudsundersökning (**GXDE00** Intrapleural ultrasonography) *from OR 2 to OR 1*.
- **XPX30** Endovaskulärt ultraljud (**PXDE1B** Endovascular ultrasonography) *from OR 2 to OR 1.*

The result was that we got a lot of cases in DRG Z60 ‘Annan sällsynt, eller felaktig, kombination av huvuddiagnos och åtgärd’ (DRG 477 ‘Other rare or incorrect combination of principal diagnosis and procedure’) because of the change from OR 2 to OR 1 for FNDE1B, PXDE1B and GXDE00.

The question then is whether these cases really are incorrectly primary coded or whether the grouping logic needs to be supplemented with new rules that lead to adequate descriptive DRGs.

Using this as a starting point, all countries are kindly invited to share their thoughts on three principles Mats is suggesting when it comes to determining the OR value of ultrasound procedures and check the data if they support this. If not, or if countries suggest different approach, please share via this ticket.

The task type is currently set to ‘Development initiative.’

History

#5437 - 2026-05-12 19:14 - Mats Fernström

- Attachment TC_C1048_New.xlsx added

Mats Fernström, the National Board of Health and Welfare, Sweden, 2026-05-12 (SWE ID C1048)

We have reviewed the result of the TC in case #982 and found that the original grouping of

- AF032 Intrakoronart ultraljud och doppler (FNDE1B Intravascular ultrasonography of coronary arteries),
- AP052 Intravasalt ultraljud (PXDE1B Endovascular ultrasonography)
- XGX10 Intrapleural ultraljudsundersökning (GXDE00 Intrapleural ultrasonography)
- XPX30 Endovaskulärt ultraljud (PXDE1B Endovascular ultrasonography)

provides a good description of the main problem (principal diagnosis). We also compared the individual healthcare costs with the DRG weights and found that the original grouping was OK also in a cost perspective.

Thus, we suggest a new way of principal thinking:

- The few ultrasound procedures with OR 1 are alla performed under open surgery or laparoscopy and we see no need to change the OR value for those procedures.
- Ultrasound procedures that are performed transcutaneous could have OR 0 (zero) except when needle biopsy is performed, then OR 2 is more adequate.
- Other ultrasound procedures, for example together with endoscopy, could have OR 2.

Then the following changes should be done:

- AJ077, Ultraljudsundersökning, bukvägg, (JADE1A, Ultrasound examination of groin and abdominal wall). Change OR from 2 to 0.
- TKE20, Punktionsbiopsi av prostata med MR-ultraljudsfusionsteknik, transrektal, (KEXX00, Prostate needle biopsy). Change OR from 0 to 2.
- TKE23, Punktionsbiopsi av prostata med MR-ultraljudsfusionsteknik, transperineal, (KEXX00, Prostate needle biopsy). Change OR from 0 to 2.

We have tested these changes on our latest cost database (2024) with 16,5 million outpatient visits and 1,14 million hospital stays and there was no change of the grouping at all. Thus, we see no negative effects from the change and the principal thinking seems OK.

TC_C1048 is attached.

#5491 - 2026-08-20 14:33 - Lotta Sokka

- Description updated

We support Mats's suggestion with a little moderation (see below in red):

- The few ultrasound procedures with OR 1 are all performed under open surgery or laparoscopy and we see no need to change the OR value for those procedures.
- Ultrasound procedures that are performed transcutaneous could have OR 0 (zero) except when needle or any other biopsy, injection, punction or canalization is performed, then OR 2 is more adequate.
- Other ultrasound procedures, for example together with endoscopy, could have OR 2.

We will go through the features of the ultrasound procedures in our version and in case any changes are needed, come back with a suggestion.

#5513 - 2026-09-01 14:49 - Mats Fernström

Mats Fernström, the National Board of Health and Welfare, Sweden, 2026-09-01 (SWE ID C1048)

Lotta's addition is good, thank you.

#5516 - 2026-09-01 17:07 - Kristīne Putniņa

There are 60 ultrasound codes in the LAT definition tables. When reviewing the proc prop OR according to Matsš / Lotta's opinion, we identified a need to change procprop for one of the ncsp codes: XGX96 | Cita veida intraoperatīva krūškurvja ultrasonogrāfija (plus code GXDE09 | Other intraoperative thoracic ultrasonography), OR: 2 → 1.

In addition, I identified two cases in the LAT definition table where the same procedure text has two different codes:

- JHDE00 | Transanāla ultrasonogrāfija (not coded during the 2026_7M period) and XJH00 | Transanāla ultrasonogrāfija (currently used in medical documentation). Both are mapped to plus procedure JHDE00 – Transanal ultrasonography.
- KDDE10 | Transuretrāla ultrasonogrāfija and XKD10 | Transuretrāla ultrasonogrāfija. Both are mapped to proc plus KDFD10 – Transurethral ultrasonography.

There is also XFE00 | Epikardiāla ultrasonogrāfija (ENG: Epicardial ultrasonography) and XFX30 | Epikardiāla sirds ultrasonogrāfija (ENG: Epicardial heart ultrasonography), which in our understanding, refer to the same procedure.

The procprop codes for those 3 proc pairs are identical. Therefore, we believe that one code from each pair could potentially be deleted.

Could NCC please clarify whether there is any rationale reasone for having these duplicate codes, and whether there are any contraindications to delete one of the code from each pair?

Thank you in advance for your clarification.

In common we agree to Mats's and Lotta's opinion regarding usg proc OR prop.

#5519 - 2026-09-04 12:09 - Kristīne Putniņa

- Attachment TC_LAT_case_1005.xlsx added

As we agreed at the meeting, I prepared a TC for the changes in the LAT grouper.

These include deleting 3 NCSP duplicates: KDDE10, JHDE00, XFX30. I checked the historical definition tables of 2014, and these codes have been included in our NCSP etc. list since then.

I am also asking for changes to the procrop varval values for three other procedures: XGX96 from 2 to 1 and PYFF93, ZXM00 from 0 to 1.

Previously, I only mentioned one code, but now, after the discussions with my colleagues, there are three. Therefore, I kindly ask you to check our decision from the grouper architecture point of view, to avoid any unintended impact on the grouper work. Our decision to change the procprop varval is based on the name of procedure - all three has the indication “intraoperative” or “perioperative”.

#5527 - 2026-09-07 12:57 - Malle Avarsoo

- Attachment TC_EST_case 1005.xlsx added

- Target Grouper EST added

AS agreed, Estonia checked the proposed changes for NCSP code OR values.

I agree , that OR for these codes (est version : XJH00 and XKD10) should be changed from 2 to 1 .

JHDE00	Transanal ultrasonography
KDFD10	Transurethral ultrasonography

In addition, I found one duplicate code in EST NCSP version, which should be removed :

XFX30	Südame epikardiaalne ultraheliuuring

Please find details in the file attached.

#5543 - 2026-09-09 09:29 - Kristiina Kahur

- Task type changed from Development initiative to Case

- Target year 2023 added

#5544 - 2026-09-09 09:42 - Kristiina Kahur

- Status changed from Active to Further active

- Target Grouper Combined added

- Target Grouper deleted (EST)

- Target year 2028 added

- Target year deleted (2023)

- Owner / responsible deleted (Nordic Casemix Centre)

2026-09-02 Expert group

This issue was discussed at the meeting with the main focus on the principles of how OR values are determined for ultrasound procedure codes.

In general, the countries agreed on the principles suggested by Sweden/Mats and complemented by Finland/Lotta. Norway was skeptical about given a OR 1 value to a US procedure code if the procedure is performed during the open surgery because the surgical procedure has (or at least should have) OR 1 value anyway. Estonia seconded this opinion.

In addition to SWE, LAT and EST, also other countries are encouraged to review the OR values of their national US procedure codes based on the suggested principles, and propose changes if relevant and needed.

It would be recommended to start with existing TCs to keep the changes consistent across the countries whenever possible. However, each country is free to make the final decision what kind of changes will be made in their national version.

Following error corrections were made in LAT and EST version and they will appear in 2027PR0 version:

EST:

Code XFX30 *Südame epikardiaalne ultraheliuuring* was removed (not inactivated)

LAT:

Three codes were removed (not inactivated):

JHDE00 Transanāla ultrasonogrāfija
KDDE10 Transuretrāla ultrasonogrāfija
XFX30 Epikardiāla sirds ultrasonogrāfija

No changes of OR values or any other changes were made in 2027PR tables.

Instead of creating a new ticket for each national update (which was a suggestion at the EG meeting), the task type of this ticket is changed *Development initiative → Case.* This way we can collect all updates in one ticket and discuss them all together.

We keep this ticket further open end get back to this (incl TCs already submitted by three countries) in EG Spring meeting 2027 to allow countries to (re)consider the need of OR changes of national US procedure codes.

Files

TC_EST_case 1005.xlsx	10 kB	2026-09-07	Malle Avarsoo
TC_LAT_case_1005.xlsx	40 kB	2026-09-04	Kristīne Putniņa
TC_C1048_New.xlsx	30 kB	2026-05-12	Mats Fernström