Nordic Casemix Centre - Case #629
Emergency care for short stay cases in DRG

2019-02-14 17:59 - Kristin Dahlen

Status:	Accepted		**Start date:**	2019-02-14
Priority:	Major		**Spent time:**	0.00 hour
Assignee:	Kristin Dahlen			
Category:				
Target version:	Target version 2019			
Initiator:	Norway		**Target year:**	2020
MDC:	GEN		**Owner / responsible:**	National organisations
Target Grouper:	NOR		**Old forum status:**	

Description

Problem

In order to support a desired intensified investigation of emergency care cases in hospitals, and to reduce incentives for overnight admissions, we have implemented a logic taken into consideration information on emergency care (hastegrad akutt). This information is reported to the Norwegian patient registry and is used in DRG-grouping.

Emergency care cases without admission are in many cases more expensive than short planned outpatient visits (DRGs 9##). We have therefore created a number of DRGs that covers short emergency care cases (980 DRGs).

980A   ØH-relaterte tilstander i nervesystemet uten overnatting - MDC 01
980C   ØH-relaterte øre-nese-hals-tilstander uten overnatting - MDC 03
980D   ØH-relaterte tilstander i nedre luftveier uten overnatting - MDC 04
980E   ØH-relaterte hjerte- og kartilstander uten overnatting - MDC 05
980F   ØH-relaterte tilstander i fordøyelsessystemet uten overnatting - MDC 06
980H   ØH-relaterte muskel- og skjelettilstander uten overnatting - MDC 08
980T   ØH-relaterte rusmiddelfremkalte og psykiatriske tilstander som krever somatisk behandling uten overnatting - MDC 19
980U   Skader, forgiftninger og utilsiktede medikamentvirkninger uten overnatting - MDC 21
980X   Andre ØH-relaterte tilstander uten overnatting - MDC 40

Suggestion

This case is mainly reported as information to other countries, but we also appreciate any comments you might have on this issue.

History

#1 - 2019-02-15 09:19 - Ralph Dahlgren

2019-02-15 Ralph Dahlgren

This way of creating new DRG for emergency care sounds interesting. Norway must have Technical Changes for the Norwegian DRGlogic, is it possible that you can provide these so that we in Sweden can look at them and see if we can test them on Swedish data?

#2 - 2019-02-15 10:14 - Kristiina Kahur

2019-2-15 Kristiina Kahur

Ralph has been quick enough to provide comments already.
I would be also interested in description of technical changes to see what are the drivers which determine these specific cases of EC short therapy anda also to see any other information related to grouping rules.
It would be also interesting to know why did you opt for those MDCs and not for any others.

#3 - 2019-02-15 17:02 - Kristin Dahlen

- File Technical specification_acute care_20190215.xls added

Thank you for positive feedback. As you can see from the logic tables there are two different kind of rules/patientgroups in these DRGs. The rules for inpatients (not staying over night) are based on a set of emergency care related diagnosis established in 2014. In 2019 we also included outpatient visit in the DRGs. For this short stays we have a more limited list of diagnosis, and administrative information on emergency care is required. More information can be found in chapter 3.5 in this document (unfortunately only in Norwegian) [[https://helsedirektoratet.no/Documents/Finansieringsordninger/Innsatsstyrt%20finansiering%20%28ISF%29%20og%20DRG-systemet/ISF%202019/ISF%202019%20-%20Grunnlagsdokumentet.pdf]].

#4 - 2019-02-20 09:47 - Mats Fernström

Mats Fernström, NPK Sweden 2019-02-20
To fully understand this and to avoid misunderstandings, I would like you to supplement your technical changes with IN and OUT in the IN/OUT columns.

#5 - 2019-02-21 16:03 - Kristin Dahlen

- File Technical specification_acute care_20190221.xls added

The technical description is now changed. For you all the rules will be "IN".

#6 - 2019-03-06 15:23 - Martti Virtanen

- File Technical changes case #629.xlsx added

2019-03-06 NCC (MV)
This proposal is incomplete.
1) The rules use a property 90X20 that does not exist. It must be added and given to some primary codes or otherwise corrected.
2) There are DRG's that have new names, but DRG's with the same code but different text already exist.
It would be interesting to know what is the basis of selecting the diagnoses wiht 40P81. The same is valid also for 40P80 althoug that has existed for some time.

#7 - 2019-03-27 16:04 - Martti Virtanen

- Status changed from Active to Further active

2019-03-11 Expert group
Expert group postponed the case for further information from Norway

#8 - 2020-03-06 13:39 - Kristin Dahlen

- File DRGlogic.jpg added

This solution was implemented in the Norwegian DRG-logic from 2018, and the case was ment mostly for information.

The solution has two main purposes, 1) to reduce the incentives for overnight admissions and 2) to separate this more expensive cases from the

short, planned outpatient visits. We therefore created nine new DRGs (980#).

For 2020 we have done some minor changes, described below:

The DRG's now requires administrative information describing that this an emergency case (in Norway "hastegrad akutt") for all the cases. For 2019 this information was only used for outpatient visits. For inpatient visits in 2019 we only used a list of potentially emergency care diagnosis not taking into consideration administrative information on emergency care.

The diagnosis list is now the second criteria for grouping to 980# DRGs. This mean that inpatient stays under 5 hours and outpatient visits are fully equated in this system.

Beside this there is an extended list of potential immediate help conditions for inpatient stays over 5 hours with same day discharge, compared to the list for outpatient stays. The list of diagnosis was mainly created from empiric patientdata taking the most common diagnosis used on emergency care patients. We have also discussed, and refined, the criteria together with the hospitals.

The figure below gives a schematic overview of the DRG-logic:
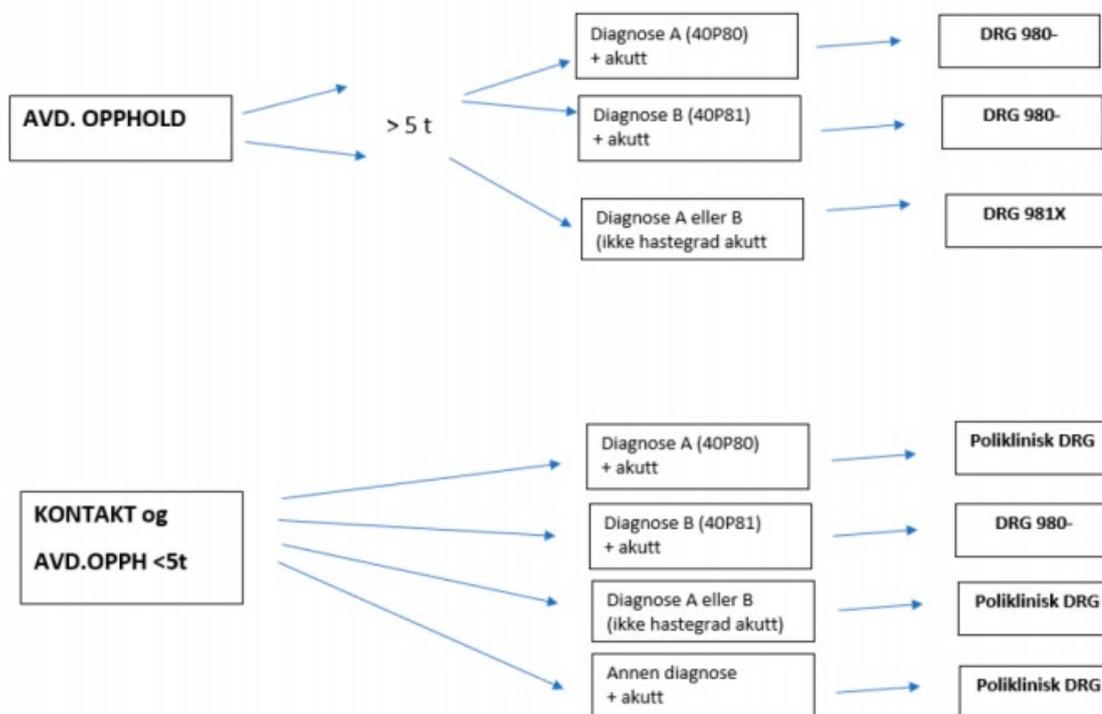
#9 - 2020-03-09 15:12 - Kristin Dahlen
- File Acute care DRGs_Norway.xlsx added

With reference to the questions in the expert group meeting, please find the updated DRG-tables, showing both the duration, the properties and the diagnosis for the acute care DRGs (980 DRGs) (see table 'Acute care DRGs_Norway.xlsx).

For duration we use these rules:

All outpatient contacts get 'DRGGrupperingVarighet'=0 (duration=0)
Inpatient cases less than 5 hours get 'DRGGrupperingVarighet'=0 (duration=0)

Inpatient cases more than 5 hours (not staying overnight) get 'DRGGrupperingVarighet'=0 (duration=1)

#10 - 2020-03-11 12:12 - Martti Virtanen

- Status changed from Further active to Accepted

2020-03-09 Expert group

The case was accepted for Norway.

Currently the solution that makes the rules work for Nor version is that there will be in Norway special reporting of length of stay as follows:

Outpatient length of stay = 0 - irrespective of the actual time spent at the hospital

Inpatient with true length of stay < 5 hour: length of stay = 0

Inpatient with true length of stay 5 hours or more: length of stay=(date of discharge) - (date of admission) + 1 (NordDRG standard)

Since the true length of stay (inpatient or outpatient) is more and more available, it is possible to modify the NordDRG to use exact length of stay instead of of the so called brutto hospital days {=(date of discharge) - (date of admission) + 1 (NordDRG standard)}.

The calculation would then be length of stay {in days} = [(date of discharge + time of discharge)-(date of admission+ time of admission){in hours}]/24.

If any of the countries is interested, it the new NDMS this can be performed in country specific rules. (In this Norwegian example the rules at issue would state DUR <0.21 (days).

The 5 hours would be 0.208 days

For this to function, the grouper(s) have to be adjusted for the presence of decimals in the duration data and definition.

Files

Technical specification_acute care_20190215.xls	742 KB	2019-02-15	Kristin Dahlen
Technical specification_acute care_20190221.xls	742 KB	2019-02-21	Kristin Dahlen
Technical changes case #629.xlsx	556 KB	2019-03-06	Martti Virtanen
DRGlogic.jpg	45.9 KB	2020-03-06	Kristin Dahlen
Acute care DRGs_Norway.xlsx	202 KB	2020-03-09	Kristin Dahlen