Nordic Casemix Centre - Case #217

Task # 10 (Closed): Delivery of major update proposals for NordDRG 2015

Cardiac arrest

2014-01-29 13:24 - Anonymous

Status:	Accepted	**Start date:**	2014-01-27
Priority:	Major	**Spent time:**	0.00 hour
Assignee:	Martti Virtanen		
Category:			
Target version:	Expert Group 2014		
Initiator:	Sweden	**Target year:**	2015
MDC:	MDC05	**Owner** / **responsible:**	Nordic Casemix Centre
Target Grouper:	SWE	**Old forum status:**	

Description

Initiated: 2014-01-27 again, postponed on Expert Network 2011-03-17

Initiator: Ralph Dahlgren, Mats Fernström, Mona Heurgren

Responsible at National organization:

Sent to NordDRG Forum: 2014-01-27

Status: Posponed Item

Problem

The initiator pointed out that a case with the principal diagnos I46.0 (Cardiac arrest with successful resuscitation) is grouped to E48E Hjärtstillestånd, oförklarat, ej komplicerat (Former DRG 129 Cardiac arrest, unexplained) and if a coronary angiography (AF037) is performed the case is grouped to DRG E43C Cirkulationssjukdomar med hjärtkateterisering, med komplicerande diagnos (Former DRG 124 Diagnostic percutan cardiac procedure w circulatory complex dx.

We first tackled this as a hierarchy problem for DRG E48 (129) and E43C (124). Sweden tested that solution on the Swedish Patient register and found that some cases in other DRG were DRG (121, 123 and 124), were transferred to DRG E48E (Former 129).

Is such a transferral wanted in a medical perspective? Is it really more important to describe that the patients have a cardiac arrest (DRG 129) than that they have a myocardial infarction (DRG 121 & 123) or that they have had an intervention (DRG 124)? These questions made us look at the content in DRG E48E (Former 129).

We found that it was obviously wrong that R960 and R961 are grouped to DRG E48E (former DRG129) because R96 excludes cardiac death. R96 should be handled like R98 (Unattended death).

The remaining codes (I46) are probably associated with cardiac infarction in most cases and the reason why the cases with these codes not are grouped to the infarction groups (DRG 121-123) was probably depending on under coding. We found it especially strange that patients that have survived the cardiac arrest (the I460 cases) not have got a more precise diagnosis.

Expert Network 2011-03-17

The meeting recommended acceptance of that the diagnosis R96.0 and R96.1 should be grouped to MDC 23 and should have the same properties as R 98.

The case will be postponed for further investigation of the diagnosis I46.xx by Sweden. See Case 2011-MDC05-01 Cardiac arrest [[http://documents.norddrg.net/issues/150]].

Analysis

CPK Sweden 2014-01-27

Examination of all the cases in KPP 2012 in DRG E48A and E48E there is an overwhelming majority of those where it is possible to suspect that there are errors in the primary classification.

Of the cases that were in the KPP 2012 for DRG E48E and E48C, total 526 cases, so was I46.9 Hjärtstillestånd, ospecificerat (Cardiac arrest, unspecified) primary diagnosis in 376 cases, I46.1 Plötslig hjärtdöd (sudden cardiac death) in cases 28 and I46.0 Hjärtstillestånd med framgångsrik hjärt-lungräddning (Cardiac arrest with successful resuscitation) primary diagnosis in 122 cases.

Among I46.0 Hjärtstillestånd med framgångsrik hjärt-lungräddning (Cardiac arrest with successful resuscitation) so can 105 patients clearly be judged to have died from other illnesses considering the secondary diagnosis, costs and duration of stay. The diagnosis include ischemic heart disease, heart failure, amyloidosis to take a few examples. One main diagnosis was ok, 6 main diagnoses were more difficult to assess when there was a discrepancy between the length of stay, costs of care, number of diagnosis and procedure codes.

Suggestion

The Swedish National Board of Health and Welfare and it´s Swedish collaboration partners 2014-01-27

wants the technical changes to be made such as that I46.0 alone should have a new PDGPROP. This PDGPROP should make I46.0 to group to a new DRG, DRG Z55 in both outpatient and inpatient care. The DRG should be called "Rare or incorrect principal diagnosis". This is irrespective of any procedure codes or not.

Decided changes

The Swedish National Board of Health and Welfare and it´s Swedish collaboration partners 2014-01-27

DRG change

Cases from both DRG E48E and E48C will be grouped to the new DRG Z55 Sällsynt eller felaktig huvuddiagnos (Rare or incorrect principal diagnosis)

Technical change

I46.0 alone should have a new PDGPROP. The new PDGPROP should be 00P03 Rare or incorrect principal diagnosis. A new DRG should be created both in outpatient and inpatient. The new DRG should be "DRG Z55 Sällsynt eller felaktig huvuddiagnos (Rare or incorrect principal diagnosis) and new rows in DRGlogic should be created before DRG Z76O. The column mdc is left empty so that we can use the rule even for diagnosis codes from other mdc in the future.

Introduction:

NordDRG [2015] [SWE]

History

#1 - 2014-01-29 13:27 - Anonymous

- Description updated

- Parent task deleted (#150)

#2 - 2014-02-05 12:35 - Anonymous

- Priority changed from Normal to Major

- Start date changed from 2014-01-29 to 2014-01-27

- Old forum status deleted (ACTITEM - Active item)

#3 - 2014-02-06 13:03 - Anonymous

- Assignee set to Martti Virtanen

#4 - 2014-03-11 12:21 - Anonymous

- Case type deleted (Major)

#5 - 2014-03-14 11:21 - Anonymous

- Parent task set to #10

#6 - 2014-03-19 12:51 - Martti Virtanen

2014-03-19 Martti Virtanen

This model has already been invented in NordDRG.

Case 2000-MDC18-01 B95-B97 'Bacterial, viral and other infectious agents'

Case 2005-GEN-01 Undesirable assignment of stays to DRG 477/468 when the primary diagnosis is invalid

Both cases use diagnosis category 99M00 that results in DRG 470 (Z71O/Z71E in SWE). The diagnosis B95-B97 are quite similar to the codes discussed here.

The simples solution is that I46.0 will have diagnosis category 99M00.

However, if this turns to be only Swedish model, then I support the use of the principal diagnosis property. But are the new DRG's really needed?

#7 - 2014-03-24 13:34 - Anonymous

Comment Expert Group 2014-03-24

I4600 as principal diagnosis is not correct coding. The cause of the Cardiac arrest should be known at least after the first night at hospital.

There will not be done any general change to all versions of NordDRG.

Sweden will decide what they will do.

#8 - 2014-03-28 11:12 - Martti Virtanen

2014-03-27 Martti Virtanen

The proposal for change in all NordDRG versions was rejected by Expert Group. This is about forcing a correction to primary coding with DRG. I46.0 is still used to some extent in all countries, even Sweden.

However, if Sweden feels necessary to do this change, it can be performed with the following changes. The group is now limited to hospital inpatients staying overnight. This would be a DRG that would not be reimbursed (a subtype of DRG 470). Thus the theoretical difference to DRG Z71N 'Invalid principal dx' is minimal. Thus I would recommend to use the same DRG with another rule.

Technical change

A new PDGPROP 00P03 'Principal dx not usable for hospital inpatient'

This property is given to I4600 'Cardiac arrest with successful resuscitation'

A new preMDC rule is created in SWE Drglogic. It is placed immediately after current rule 000D0041 for DRG Z71N. The rule is a copy of current rule 000D0041 (with the DRG Z71N) but PDGPROP will be 00P03, DGCAT will be empty and DUR '>1'

DRG change

Patient cases with I4600 in SWE will be assigned to DRG Z71N as inpatients staying overnight at hospital. The outpatients and short stay inpatients will still be assigned to MDC 06 DRG's as before.

#9 - 2014-04-09 13:57 - Ralph Dahlgren

There has after diskussion in Sweden been decided that the cases with I460 as main diagnosis should be grouped to DRG Z60N (Former DRG 477).
The text for the new property we still think is better as suggested from the beginning "00P03 Rare or incorrect principal diagnosis".
We also want the ord i DRGlogic to be just above the rule for DRG E48A ord 405D280000 Hjärtstillestånd, oförklarat, mycket komplicerat. This new rule for I460 will have ord 405D27999.
MvH Ralph

#10 - 2014-04-15 14:55 - Martti Virtanen

2014-04-15
The name of the proberty is not important. However, the dx is neither rare (at least not in other countries than Sweden) nor incorrect (according to WHO) but it should not be used for hospital inpatients because they should have some other more precise dx.

The placing of the rule has an effect. Acorrding to my and your original proposal it would be one of the preMDC error rules being used before all other rules.
The new proposal places the rule among MDC 5 rules. The only practical difference is that if I460 is used as principal dx the cases can be assigned to circulatory surgical groups and with secondary dx of myocardial infarction (I21-I23)to DRG's E40-E42 (123-125).
In addtion theoretically cases with this principal dx could be assigned to transplantation groups.
Is this your intention?

#11 - 2015-02-06 10:37 - Anonymous
- Status changed from Active to Further active

#12 - 2016-08-30 11:15 - Anonymous
- Status changed from Further active to Accepted

Files

CPK ID 358 to Forum decision.xlsx	19.3 KB	2014-01-29	Anonymous