

## Nordic Casemix Centre - Case #156

### Case 2011-MDC06-01 Injection Treatment of Faecal Incontinence

2014-01-08 12:07 - Anonymous

<b>Status:</b> Accepted	<b>Start date:</b> 2014-01-08
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#### Description

Last updated: 2011-04-20

Status: CLOSITEM - Closed item

Initiated: 2010-10-01

By: Wilhelm Graf, Svensk Förening för Kolorektal Kirurgi/NPK, Sweden

Expert Network 2011-03-17 - Change recommended

Board 2011-04-04 - Recommendation accepted

#### BACKGROUND

CPK ID 357

#### Problem

Faecal incontinence (diagnosis code R15.9) can be treated with submucous or intersphincteric injection of a volume expanding fluid (procedure code JHC60). The method is described by Dr Graf (chairman of the Swedish Society for Colorectal Surgery) in the enclosed document [Request for classification change Sept 30th 2010.doc](#).

The procedure is performed in outpatient care and the visit is then grouped to DRG 707O (Therapeutic rectoscopy, short therapy). The Swedish weight 2011 for this DRG is 0,0708 which corresponds to a cost of approx. 2 840 SEK but the cost of the injected fluid is 10-15 000 SEK. The initiator therefore requests a separate DRG for the procedure.

#### Analysis by NPK (former CPK)

The primary coding is correct. Possibly JHC60 can be used also for injection of Botox, but then the principal diagnosis is anal fissure. According to the present grouping logic for outpatients, JHC60 is grouped to DRG 707O (Therapeutic rectoscopy, short therapy) or more seldom, when performed under general anaesthesia, DRG 158O (Minor intestinal procedures, short therapy). The tables below show data for these DRGs from the Swedish KPP database for 2009 (see [Appendix 1](#)).

<b>DRG 707O - outliers included</b>	<b>N</b>	<b>N %</b>	<b>mean</b>	<b>cost diff</b>
Cases with JHC60	39	1,2%	14 020	321%
Other cases	3 198	98,8%	3 327	0%
<b>DRG 707O - outliers excluded</b>	<b>N</b>	<b>N %</b>	<b>mean</b>	<b>cost diff</b>
Cases with JHC60	14	0,5%	2 979	5%
Other cases	3 068	99,5%	2 842	0%
<b>DRG 158O - outliers included</b>	<b>N</b>	<b>N %</b>	<b>mean</b>	<b>cost diff</b>
Cases with JHC60	6	0,2%	24 288	124%
Other cases	2 788	99,8%	10 820	0%
<b>DRG 158O - outliers excluded</b>	<b>N</b>	<b>N %</b>	<b>mean</b>	<b>cost diff</b>
Cases with JHC60	6	0,2%	24 288	133%
Other cases	2 758	99,8%	10 421	0%

As seen from these tables, cases with JHC60 are much more expensive than the other cases, both in DRG 707O and DRG 158O. (The low cost difference in the table for DRG 707O – outliers excluded is deceptive since most of the cases with JHC60 became outliers in that DRG). However, the number of cases is very small, both in absolute and relative figures, and therefore the criteria for a DRG split are not fulfilled.

We therefore studied the alternative to transfer the cheapest cases from DRG 707O to a separate group, with the intention to get a higher weight for DRG 707O. The least expensive procedures in DRG 707O are haemorrhoid treatments, JHB20 (sclerotherapy) and JHB30 (rubber band ligation), see the tables below.

<i>Swedish cost data 2009 - outliers included</i>				
<b>DRG 707O</b>	<b>N</b>	<b>N %</b>	<b>mean</b>	<b>cost diff</b>
Cases with JHB20 or JHB30	2 793	86%	2 798	0%
Other cases	444	14%	7 597	172%
<i>Swedish cost data 2009 - outliers excluded</i>				
<b>DRG 707O</b>	<b>N</b>	<b>N %</b>	<b>mean</b>	<b>cost diff</b>
Cases with JHB20 or JHB30	2 767	90%	2 666	0%
Other cases	315	10%	4 391	65%

The criteria for a DRG split with one group for JHB20/JHB30 and one group for the other cases are fulfilled, even when the outliers are excluded. This alternative reduces the problem with JHC60 but the cases with JHC60 are still almost twice as expensive as the "Other cases" in the tables above.

We therefore studied the possibility to transfer the cases with JHC60 to another existing DRG with a suitable content and a similar average cost. DRG 158O has a suitable content but the average cost is too low, as mentioned above. We found, however, that DRG 171O (Other digestive system o. r. procedures, short therapy) is appropriate. This is a rest group in MDC 06 that already contains some endoscopic procedures and the average cost is almost identical to the cost for the JHC60 cases in DRG 707O (see the table below and [Appendix 1](#)). A transfer of JHC60 to DRG 171O will have a negligible effect on the average cost for DRG 171O – see the table below.

	<b>N</b>	<b>N %</b>	<b>mean</b>
Existing cases in DRG 171O	293	87%	14 116
Cases with JHC60 from DRG 707O	39	12%	14 020
Cases with JHC60 from DRG 158O	6	2%	24 288
Sum for "new" DRG 171O	338		14 285

After a DRG split and a transferral as mentioned above the DRG 707O content will be divided as shown in the tables below.

DRG 707O outliers included	N	N %	mean
Cases with JHB20/JHB30 (transferred to a new DRG)	2 793	86%	2 798
Cases with JHC60 (transferred to DRG 171O)	39	1%	14 020
Remaining cases in DRG 707O	405	13%	6 979
DRG 707O outliers excluded	N	N %	mean
Cases with JHB20/JHB30 (transferred to a new DRG)	2 767	90%	2 666
Cases with JHC60 (transferred to DRG 171O)	14	0,5%	2 979
Remaining cases in DRG 707O	301	10%	4 457

Note that the low cost for the cases with JHC60 in the last table above is deceptive and explained by that most of the cases are outliers in DRG 707O, but they will not be cost outliers in DRG 171O.

JHB20, JHB30 and JHC60 are typical outpatient procedures but with the present grouping logic they can be grouped to the surgical DRGs 157/158 if performed under general anaesthesia on inpatients. The average costs for these DRGs are rather high (see the table below). If the present grouping properties are withdrawn the cases will instead be grouped according to the principal diagnoses to conservative groups, JHB20/JHB30 to DRG 188/189/190 (Other digestive system diagnoses ...) and JHC60 to DRG 182/183/184A/184B (Esophagitis, gastroent & misc digest disorders ...) which seems more appropriate - see the table below.

		Average cost		
		N	untrimmed	trimmed
<b>Surgical DRGs</b>				
157	Operationer i analregionen, stomirevisioner och andra mindre tarmingrepp, komplicerat	441	52 513	36 624
158	Operationer i analregionen, stomirevisioner och andra mindre tarmingrepp, ej komplicerat	1 997	<b>28 901</b>	23 240
<b>Conservative DRGs</b>				
182	Buksmärtor och gastroenteriter, >17 år, komplicerat	11 230	31 463	24 776
183	Buksmärtor och gastroenteriter, >17 år, ej komplicerat	25 182	<b>19 744</b>	16 688
184A	Buksmärtor och gastroenteriter, 0-17 år, komplicerat	1 402	24 332	18 953
184B	Buksmärtor och gastroenteriter, 0-17 år, ej komplicerat	6 575	<b>18 858</b>	15 719
188	Andra diagnoser i matsmältningsorganen, >17 år, komplicerat	2 030	45 399	33 114
189	Andra diagnoser i matsmältningsorganen, >17 år, ej komplicerat	4 412	<b>26 446</b>	22 106
190	Andra diagnoser i matsmältningsorganen, 0-17 år	808	30 099	21 709

## Analysis summary

Cases with JHC60 (incontinence treatment) in DRG 707O or 158O are much more expensive than the other cases in these groups but they are too few for creating a separate DRG. They can, however, be transferred to DRG 171O where they fit very well, both in a medical and an economical perspective.

Cases with JHB20 or JHB30 (haemorrhoid treatment) in DRG 707O are much less expensive than the other cases in this group and the number is enough for creating a separate DRG. Such a DRG split has not been requested by the initiator but it is still necessary. Haemorrhoid treatment with sclerotherapy or rubber band ligation can be performed in any outpatient clinic without expensive investments and the incitement for "cherry picking" is obvious.

JHB20, JHB30 and JHC60 are typical outpatient procedures and they should not affect the grouping of inpatients, not even when performed under general anaesthesia.

## Suggestion by NPK

We suggest a change in the DRG grouping logic for 2012 so that:

1. outpatient cases with JHC60 (Transanal submukös eller intersfinkterisk injektion) where the principal diagnosis is anal incontinence will be grouped to DRG 171O (Andra operationer i mage och tarm, öppenvård). (JHC60 for other reasons shall remain in DRG 707O.)

1. outpatient cases with JHB20 (Injektionsbehandling av hemorrojder) or JHB30 (Gummiringligatur av hemorrojder) will be grouped to a new group, DRG 707P, with the text "Sclerotherapy/ligature of haemorrhoids, short therapy". The text for DRG 707O then has to be changed, as a suggestion to "Other therapeutic rectoscopy, short therapy".

1. JHB20, JHB30 and JHC60 will not affect the grouping of inpatients.

Technical changes to achieve these suggestions are proposed in appendix 2.

## COMMENTS

### Expert Network 2011-03-17

The meeting rejected the proposal of moving outpatient cases with JHC60 (Transanal submukös eller intersfinkterisk injektion) where the principal diagnosis is anal incontinence will be grouped to DRG 171O (Andra operationer i mage och tarm, öppenvård). (JHC60 for other reasons shall remain in DRG 707O.) Moving a case clearly not surgical to a surgical group because the used drug is expensive was not considered acceptable. Additionally, as illustrated by the Swedish calculations the outlier rules take care of most of the problem.

The meeting recommended acceptance of the proposal to separate a new DRG 707P "Sclerotherapy/ligature of haemorrhoids, short therapy" from the rest of DRG 707O that shall be renamed to "Other therapeutic rectoscopy, short therapy". Outpatient cases with JHB20 (Injektionsbehandling av hemorrojder) or JHB30 (Gummiringligatur av hemorrojder) shall be grouped to the new group, DRG 707P.

The meeting recommended acceptance of the proposal that JHB20, JHB30 and JHC60 shall not affect the grouping of inpatients by withdrawing the procedure property 06S07 from these codes. The existing property 14S03 for JHB30 may remain.

The case will be closed.

## CHANGES

### Technical change 2011-03-31

A new DRG 707P "Sclerotherapy/ligature of haemorrhoids, short therapy" is created.

A new rule is added to drglogic immediately before current rule for DRG 707O (currently 106D12013) with DRG 707P, ICD +, MDC 06, procprop1 06E08, Disch N, Dur <1, rtc 0.

The name of the DRG 707O is changed to "Sclerotherapy/ligature of haemorrhoids, short therapy".

A new procedure property 06E08 "Sclerotherapy/ligature of haemorrhoids" is created.

The procedure property 06S07 is removed from codes (and linked national version codes):

- JHSB20 'Sclerotherapy of haemorrhoids'
- JHSB30 'Rubber band ligature of haemorrhoids or prolapse of mucosa'
- JHSC60 'Transanal submucous or intersphincteric injection'

The procedure property 06E07 is removed from JHSB20 and JHSB30 and the procedure property 06E08 is added to them.

**Technical change 2011-04-07**

The name of DRG 707O must be changed to "Other therapeutic rectoscopy, short therapy".

The new rule for DRG 707P must be placed after the current rule for DRG 707O since 707P is less expensive. (The hierarchy is important when different procedures can be combined.)

**DRG change 2011-03-31**

Cases with the procedures will not be assigned to specific surgical DRG's based on the listed interventions.

Cases with JHSB20 and JHSB30 (and without codes with 06E07) are assigned to the new DRG 707P instead of 707O.

**Introduction**

2012

**Files**

Request_for_classification_change.doc	251 KB	2014-01-08	Anonymous
CPK-ID-357_Appendix_1.xls	60 KB	2014-01-08	Anonymous
CPK-ID-357_Appendix_2.doc	28 KB	2014-01-08	Anonymous
2011_MDC06-01_1.jpg	33.8 KB	2014-01-08	Anonymous
2011_MDC06-01_2.jpg	23 KB	2014-01-08	Anonymous
2011_MDC06-01_3.jpg	13.6 KB	2014-01-08	Anonymous
2011_MDC06-01_4.jpg	25.5 KB	2014-01-08	Anonymous
2011_MDC06-01_5.jpg	50.1 KB	2014-01-08	Anonymous