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User Guide: National Cost Collection 2019/20

A guide to using the data

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Introduction

- This document supplements the publication of the 2019/20 National Cost Collection by providing technical guidance to anyone wishing to analyse the data.
- 2. The first section includes examples to illustrate how the data might be used to investigate costs across the NHS.
- The second section describes the source data submitted by trusts. We have published this data in a series of comma separate variable (CSV) files which can be downloaded from the <u>National Cost Collection page</u> on the NHS England and NHS Improvement website.
- 4. We will also publish the source data submitted by trusts in the reconciliation statement¹. This return provides assurance that trusts have correctly included all costs, identified excluded services, and netted off allowable income from their cost quantum.
- 5. Following on from last year's change to previous years, we are obliged to follow NHS Digital's disclosure control rules for any data that they collect on our behalf. This year they were our collection partner for all the acute PLICS data, and as this makes up over half of the cost data collected this year, we have made the decision to apply their disclosure control principles to all of the national cost collection data.
- 6. This means that in the sources data, which is provided at an organisation>department>service code>currency level, where the activity count is less than 8 the actual figure has been replaced with a '*'. The row of data will still be available with the costs shown so you are able to reconcile to a full national quantum of costs using the source data.

¹ This will be released by NHS England and NHS Improvement when we receive all NHS England cost details

1. Analysing the costs of NHS services

7. This section contains four examples to illustrate how the reference cost data can be used to analyse and investigate costs across the NHS.

Example 1: Calculating average costs – normal delivery of a baby in an inpatient setting

8. To determine the average cost for the normal delivery of a baby in an inpatient setting, the first step is to identify the relevant HRGs (Table 1).

HRG	Description
NZ30A	Normal Delivery with CC Score 2+
NZ30B	Normal Delivery with CC Score 1
NZ30C	Normal Delivery with CC Score 0
NZ31A	Normal Delivery with Epidural or Induction with CC Score 2+
NZ31B	Normal Delivery with Epidural or Induction with CC Score 1
NZ31C	Normal Delivery with Epidural or Induction with CC Score 0
NZ32A	Normal Delivery with Epidural or Induction or with Post-partum Surgical Intervention with CC Score 2+
NZ32B	Normal Delivery with Epidural or Induction or with Post-partum Surgical Intervention with CC Score 1
NZ32C	Normal Delivery with Epidural or Induction or with Post-partum Surgical Intervention with CC Score 0
NZ33A	Normal Delivery with Epidural or Induction and with Post-partum Surgical Intervention with CC Score 2+
NZ33B	Normal Delivery with Epidural or Induction and with Post-partum Surgical Intervention with CC Score 1
NZ33C	Normal Delivery with Epidural or Induction and with Post-partum Surgical Intervention with CC Score 0
NZ34A	Normal Delivery with Epidural, Induction and with Post-partum Surgical Intervention with CC Score 2+

Table 1: Normal delivery HRGs

NZ34B	Normal Delivery with Epidural, Induction and with Post-partum Surgical Intervention with CC Score 1
NZ34C	Normal Delivery with Epidural, Induction and with Post-partum Surgical Intervention with CC Score 0

9. The second step is to identify a weighted average cost from the total activity and costs across the required settings (Table 2).

Setting	A Activity	B FCEs	National	D = A*C Total cost: activity x unit cost (£)
Non-elective inpatient long stay	151,713	151,713	3,276	497,016,647
Non-elective inpatient short stay	207,317	207,317	1,670	346,122,456
Total		359,030	2,348	843,139,103

Table 2: Calculating the average cost of a normal delivery

10. The national average unit cost of an inpatient normal delivery is £2,348. Note that these costs relate to the delivery episode itself and no additional costs are incurred for a healthy baby. If the baby requires healthcare in its own right, then this becomes a separate episode with its own costs. These figures also do not represent all the costs to the NHS of a birth, which will also include the costs of home births and other events such as GP consultations, and antenatal and postnatal outpatient attendances.

Example 2: Using the code-to-group – coeliac disease

- 11. <u>Hospital episode statistics (HES)</u> are collected by individual diagnoses or procedures. Reference costs are not.
- 12. However, the <u>code-to-group workbook</u>, published by NHS Digital, can be used to understand how HRGs are derived from a given set of ICD-10 codes for diagnoses and OPCS-4 codes for procedures. Caution is needed when using such an approach to estimate the costs of a particular diagnosis or procedure. The precise grouping to HRGs depends on other ICD-10 and OPCS-4 codes

and patient characteristics (eg age, length of stay, complications and comorbidities) present in the episode of care, and the resulting costs would be affected by other diagnoses and procedures in the HRG.

13. For example, the costs associated with coeliac disease (ICD-10 code K900) are included in one of the HRGs for non-malignant gastrointestinal tract disorders with an HRG root code of FD10 and splits dependent on length of stay and complications or co-morbidities. Once the required HRGs have been identified, the method described in Example 1 can be followed to obtain the average cost for this and clinically similar disorders.

Example 3: Comparing costs over time – cholecystectomy

14. To examine the difference between the day case and elective inpatient costs of performing a cholecystectomy (gall bladder removal) between 2005/06 and 2018/19, the first step is again to identify the relevant HRGs. However, a complicating factor when comparing reference costs between years, especially over an extended period, is that they have been collected on different versions of HRGs. Tables 3 to 6 illustrate the changes for cholecystectomy.

Table 3: Cholecystectomy HRGs under HRGv3.5 in 2005/06 reference costs

HRG	Description
G13	Cholecystectomy >69 or with CC
G14	Cholecystectomy <70 without CC

Table 4: Cholecystectomy HRGs under HRG4 in 2006/07 to 2008/09reference costs

HRG	Description
GA10A	Cholecystectomy with CC
GA10B	Cholecystectomy without CC

Table 5: Cholecystectomy HRGs under HRG4 in 2009/10 to 2011/12 reference costs

HRG	Description
GA10C	Open cholecystectomy without CC
GA10D	Laparoscopic cholecystectomy with length of stay 1 day or more without CC
GA10E	Laparoscopic cholecystectomy with length of stay 0 days without CC
GA10F	Open or laparoscopic cholecystectomy with CC

Table 6: Cholecystectomy HRGs under HRG4+ in 2012/13 to 2018/19reference costs (national cost collection in 2018/19)

HRG	Description
GA10G	Open or Laparoscopic, Cholecystectomy, 18 years and under
GA10H	Laparoscopic Cholecystectomy, 19 years and over, with CC Score 4+
GA10J	Laparoscopic Cholecystectomy, 19 years and over, with CC Score 1–3
GA10K	Laparoscopic Cholecystectomy, 19 years and over, with CC Score 0
GA10L	Open Cholecystectomy, 19 years and over, with CC Score 3+
GA10M	Open Cholecystectomy, 19 years and over, with CC Score 1–2
GA10N	Open Cholecystectomy, 19 years and over, with CC Score 0

15. Once the required HRGs for each year have been identified, the method described in Example 1 can be followed to obtain the required average cost.

Example 4: Comparing costs between trusts – normal delivery

- 16. Table 1 showed the national average unit cost for the normal delivery HRGs across all trusts. It is possible to undertake a more detailed organisation-level analysis using the source data available to download from the National Cost Collection page on the NHS England and NHS Improvement website.
- 17. Figure 1 below shows the trust-level data for a normal delivery with complications and co-morbidities score 2+ (NZ30A) in obstetrics (TFC 501) in a non-elective inpatient (long stay) setting. The national average unit cost is £3,063 but this figure shows the range of costs across trusts. The excluded providers' raw data will be published separately in a flat file alongside the national costing schedules.





2. Source Data

 We have provided the source data in CSV files alongside this publication.
 These should be downloaded from the National Cost Collection page on the NHS England and Improvement website and saved locally.

CSV file name	Contents	Zip file name
1 Data / 2 Data MFF	Organisation-level data	Organisation-level source data part 1 and organisation-level source data part 2
2 Organisation description	Data provider code, name and MFF value	Organisation-level source data part 3
3 Department description	Department code and name	Organisation-level source data part 3
4 Service description	Service code and name	Organisation-level source data part 3
5 Currency description	Currency code and name	Organisation-level source data part 3
6 Unmatched data	Unmatched imaging and pathology data	Organisation-level source data part 3
7 Excluded providers	Data for excluded providers	Organisation-level source data part 3
8 UZ01Z data	Data on UZ01Z codes	Organisation-level source data part 3
9 Memorandum data	Organisation-level memorandum data	Organisation-level source data part 3
10 Memorandum units	Activity unit for memorandum data	Organisation-level source data part 3

Table 7: CSV Files

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This publication can be made available in a number of other formats on request.

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