

Summary of Changes

HRG4+ 2022/23 National Costs Grouper
from:
HRG4+ 2021/22 National Costs Grouper

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Purpose

The purpose of this summary is to provide an overview of the main changes implemented between the HRG4+ 2021/22 National Costs Grouper and the HRG4+ 2022/23 National Costs Grouper.

Changes are broken down by:

- **Grouper Input Changes**
- **Grouper Output Changes**
- **Grouper Software Changes**
- **Grouper Algorithm Changes**
- **HRG Design Changes**

This document also includes a high-level description of design changes and HRG distribution by subchapter **Table 1**

This document is intended as a high-level summary to be used to form the basis of further analysis and investigation rather than as a comprehensive description of all differences between Grouper releases. Further HRG4+ supporting documentation is available from the National Casemix Office website: <https://digital.nhs.uk/services/national-casemix-office/downloads-groupers-and-tools>

Changes to the HRG4+ Grouper

The following changes have been implemented between the HRG4+ 2021/22 National Costs Grouper and the HRG4+ 2022/23 National Costs Grouper.

Grouper Input Changes

The Grouper now permits leading zeros to be omitted from the Critical Care Unit Function codes (CCUF) in Adult Critical Care (ACC), Neonatal Critical Care (NCC) and Paediatric Critical Care (PCC) and the Critical Care Activity Codes (CCAC) in NCC and PCC; for example: '01' may be entered as '1'.

This allows users to easily open data files in Excel (without importing to retain leading zeros) and then be able to use the file in Single Spell or process through Batch processing within the Grouper. Therefore, this change has been introduced to add functionality and will now not result in the file generating U-groups due to Excel stripping out the leading zeros.

The CCUF and CCAC code sets have therefore been updated to reflect this change, therefore when processing ACC, NCC or PCC data via Batch or Single Spell, codes without the leading zeros will be treated as valid values and will give the appropriate HRG.

It is still advised that when extracting and processing data containing CCAC and CCUF codes, you conform to the Data Dictionary format of an2 i.e. 01.

Grouper Output Changes

There are no changes to the inputs of the Grouper in this release.

Grouper Software Changes

The Visual Studio Runtime component that is included in the Grouper installation wrapper has been updated from version 14.30.30704 to 14.34.31931.

This update has been made to ensure that the latest Microsoft Visual C++ Redistributable package is installed, ensuring compatibility with security and stability fixes that Microsoft have put into the runtime libraries. This package installs Microsoft C and C++ runtime libraries which the Grouper requires.

For further information around Microsoft Visual C++ Redistributable please see the link below:

<https://docs.microsoft.com/en-US/cpp/windows/latest-supported-vc-redist?view=msvc-170>

Grouper Algorithm Changes

There are no changes to the algorithm of the Grouper in this release.

HRG Design Changes

Update of base design

The design base for the HRG4+ 2022/23 National Costs Grouper is the HRG4+ 2021/22 National Costs Grouper. However, the HRG4+ 2021/22 National Costs Grouper has been updated to include:

- Changes to the logic on ICD-10 diagnosis code **P95.X Fetal death of unspecified cause** so that HRG root **PB04 Neonatal Diagnoses, Admitted from Other**

Location or Born in Hospital is generated when the discharge method is stillbirth or died, else **UZ01Z Data Invalid for Grouping** will be generated.

- Cosmetic changes to labels and descriptions to improve clarity

Change to the number of HRGs

The total number of HRGs has not changed from the 2,900 in the HRG4+ 2021/22 National Costs Grouper.

Changes to Subchapter labels

The label of Subchapter PC and has been amended to clarify that the chapter includes mouth and dental disorders. The revised label is:

- **PC Paediatric Ear, Nose, Mouth and Throat Disorders**

This change is cosmetic and will not affect HRG grouping.

Changes to HRG labels

The labels of HRG Root **PC63 Paediatric, Ear, Nose, Mouth or Throat Disorders**, and that of its associated HRGs, have been amended to clarify that these HRGs also include mouth and dental disorders.

The label of **DZ51Z Complex Tuberculosis with length of stay 29 days or more**, has been amended to clarify that significant lengths of stay of 29 days or more are clinically indicative of the patient being treated for Complex Tuberculosis.

These changes are cosmetic and will not affect HRG grouping.

Full details of subchapter-specific changes can be found in the Chapter Summaries document that accompanies the HRG4+ 2022/23 National Costs Grouper release.

Table 1: HRG Distribution by Subchapter

The following table includes a high-level description of design changes and HRG distribution by subchapter, in the HRG4+ 2022/23 National Costs Grouper compared to the HRG4+ 2021/22 National Costs Grouper. For further details of all changes to HRG subchapters, please see the supporting documentation for the HRG4+ 2022/23 National Costs Grouper, including the Code to Group Excel workbook and the Chapter Summaries document, available on the National Casemix Office website at <https://digital.nhs.uk/services/national-casemix-office/downloads-groupers-and-tools>.

Changes made to the design of an HRG subchapter may have a significant impact on HRG grouping within other subchapters. This is especially true where changes have been made to procedure hierarchy values. Likewise, global design changes may impact HRG grouping within a subchapter even where no changes have been made to the subchapter itself.

Subchapter	NC22/23	NC21/22	Comment
AA Nervous System Procedures and Disorders	101	101	No change to HRG number or labels
AB Pain Management	16	16	No change to HRG number or labels
BZ Eyes and Periorbita Procedures and Disorders	95	95	No change to HRG number or labels
CA Ear, Nose, Mouth, Throat, Head and Neck Procedures	122	122	No change to HRG number or labels
CB Ear, Nose, Mouth, Throat, Head and Neck Disorders	12	12	No change to HRG number or labels
CD Dental and Orthodontic Procedures	23	23	No change to HRG number or labels
DX COVID-19 Infection	6	6	No change to HRG number or labels
DZ Thoracic Procedures and Disorders	176	176	No change to HRG number Label of HRG DZ51Z Complex Tuberculosis with length of stay 29 days or more updated

Subchapter	NC22/23	NC21/22	Comment
EB Cardiac Disorders	48	48	No change to HRG number or labels
EC Open and Interventional Procedures for Congenital Heart Disease	21	21	No change to HRG number or labels
ED Open Cardiac Procedures for Acquired Conditions	50	50	No change to HRG number or labels
EY Interventional Cardiology for Acquired Conditions	73	73	No change to HRG number or labels
FD Digestive System Disorders	54	54	No change to HRG number or labels
FE Digestive System Endoscopic Procedures	41	41	No change to HRG number or labels
FF Digestive System Open and Laparoscopic Procedures	115	115	No change to HRG number or labels
GA Hepatobiliary and Pancreatic System Open and Laparoscopic Procedures	27	27	No change to HRG number or labels
GB Hepatobiliary and Pancreatic System Endoscopic and Percutaneous Procedures	14	14	No change to HRG number or labels
GC Hepatobiliary and Pancreatic System Disorders	24	24	No change to HRG number or labels
HC Spinal Surgery and Disorders	74	74	No change to HRG number or labels
HD Musculoskeletal Disorders	35	35	No change to HRG number or labels
HE Orthopaedic Disorders	84	84	No change to HRG number or labels

Subchapter	NC22/23	NC21/22	Comment
HN Orthopaedic Non-Trauma Procedures	111	111	No change to HRG number or labels
HT Orthopaedic Trauma Procedures	87	87	No change to HRG number or labels
JA Breast Procedures and Disorders	35	35	No change to HRG number or labels
JB Burns Procedures and Disorders	38	38	No change to HRG number or labels
JC Skin Surgery	11	11	No change to HRG number or labels
JD Skin Disorders	10	10	No change to HRG number or labels
KA Endocrine System Procedures and Disorders	18	18	No change to HRG number or labels
KB Diabetic Medicine	12	12	No change to HRG number or labels
KC Metabolic Disorders	9	9	No change to HRG number or labels
LA Renal Procedures and Disorders	48	48	No change to HRG number or labels
LB Urological and Male Reproductive System Procedures and Disorders	149	149	No change to HRG number or labels
LD Renal Dialysis for Chronic Kidney Disease	26	26	No change to HRG number or labels
LE Renal Dialysis for Acute Kidney Injury	4	4	No change to HRG number or labels

Subchapter	NC22/23	NC21/22	Comment
MA Female Reproductive System Procedures	60	60	No change to HRG number or labels
MB Female Reproductive System Disorders	17	17	No change to HRG number or labels
MC Assisted Reproduction Medicine	11	11	No change to HRG number or labels
NZ Obstetric Medicine	55	55	No change to HRG number or labels
PB Neonatal Disorders	20	20	No change to HRG number or labels Logic amended on ICD-10 diagnosis code P95.X Fetal death of unspecified cause so HRG Root PB04 Neonatal Diagnoses, Admitted from Other Location or Born in Hospital generated when discharge method is stillbirth or died, else UZ01Z Data Invalid for Grouping generated
PC Paediatric Ear, Nose, Mouth and Throat Disorders	4	4	No change to HRG number or labels Subchapter label updated to PC Paediatric Ear, Nose, Mouth and Throat Disorders Labels of HRG Root PC63 Paediatric, Ear, Nose, Mouth or Throat Disorders , and associated HRGs, amended
PD Paediatric Respiratory Disorders	24	24	No change to HRG number or labels
PE Paediatric Cardiology Disorders	12	12	No change to HRG number or labels
PF Paediatric Gastroenterology Disorders	17	17	No change to HRG number or labels
PG Paediatric Hepatobiliary Disorders	3	3	No change to HRG number or labels
PH Paediatric Rheumatology Disorders	4	4	No change to HRG number or labels

Subchapter	NC22/23	NC21/22	Comment
PJ Paediatric Dermatology Disorders	7	7	No change to HRG number or labels
PK Paediatric Diabetology, Endocrinology and Metabolic Disorders	11	11	No change to HRG number or labels
PL Paediatric Renal Disorders	10	10	No change to HRG number or labels
PM Paediatric Haematological-Oncology Disorders	14	14	No change to HRG number or labels
PN Paediatric Non-Malignant Haematological Disorders	9	9	No change to HRG number or labels
PP Paediatric Ophthalmic Disorders	2	2	No change to HRG number or labels
PQ Paediatric Immune System Disorders	2	2	No change to HRG number or labels
PR Paediatric Nervous System Disorders	22	22	No change to HRG number or labels
PT Paediatric Mental Health Disorders	4	4	No change to HRG number or labels
PV Paediatric Trauma Medicine	7	7	No change to HRG number or labels
PW Paediatric Infectious Diseases	15	15	No change to HRG number or labels
PX Paediatric Medicine	46	46	No change to HRG number or labels
RD Diagnostic Imaging Procedures	49	49	No change to HRG number or labels

Subchapter	NC22/23	NC21/22	Comment
RN Nuclear Medicine Procedures	69	69	No change to HRG number or labels
SA Haematological Procedures and Disorders	104	104	No change to HRG number or labels
SB Chemotherapy	18	18	No change to HRG number or labels
SC Radiotherapy	30	30	No change to HRG number or labels
SD Specialist Palliative Care	10	10	No change to HRG number or labels
UZ Undefined Groups	1	1	No change to HRG number or labels
VA Multiple Trauma	24	24	No change to HRG number or labels
VB Emergency Medicine	12	12	No change to HRG number or labels
VC Rehabilitation	23	23	No change to HRG number or labels
WD Treatment of Mental Health Patients by Non-Mental Health Service Providers	9	9	No change to HRG number or labels
WF Non-admitted Consultations	8	8	No change to HRG number or labels
WH Poisoning, Toxic Effects, Special Examinations, Screening and Other Healthcare Contacts	68	68	No change to HRG number or labels
WJ Infectious Diseases and Immune System Disorders	38	38	No change to HRG number or labels

Subchapter	NC22/23	NC21/22	Comment
XA Neonatal Critical Care	6	6	No change to HRG number or labels Removal of leading zero requirements for CCUF and CCAC
XB Paediatric Critical Care	9	9	No change to HRG number or labels Removal of leading zero requirements for CCUF and CCAC
XC Adult Critical Care	7	7	No change to HRG number or labels Removal of leading zero requirements for CCUF
XD High Cost Drugs	58	58	No change to HRG number or labels
YA Neurological Imaging Interventions	11	11	No change to HRG number or labels
YC Head and Neck Imaging Interventions	3	3	No change to HRG number or labels
YD Thoracic Imaging Interventions	5	5	No change to HRG number or labels
YF Gastrointestinal Imaging Interventions	9	9	No change to HRG number or labels
YG Hepatobiliary and Pancreatic Imaging Interventions	16	16	No change to HRG number or labels
YH Musculoskeletal Imaging Interventions	11	11	No change to HRG number or labels
YJ Breast Imaging Interventions	9	9	No change to HRG number or labels
YL Urological Imaging Interventions	9	9	No change to HRG number or labels

Subchapter	NC22/23	NC21/22	Comment
YQ Vascular Open Procedures and Disorders	64	64	No change to HRG number or labels
YR Vascular Imaging Interventions	75	75	No change to HRG number or labels

The Documentation Suite

Below is a list of the various documents which are available to download from the National Casemix Office website: <https://digital.nhs.uk/services/national-casemix-office/downloads-groupers-and-tools>.

This documentation suite provides a comprehensive resource intended to help users understand HRG design concepts and logic, as well as use the Grouper.

- The **Summary of Changes** document provides an overview of the main differences between the current Grouper design and its relevant predecessor.
- The **Grouper User Manual** provides instructions on how to prepare and group data using the Grouper software application. Sample data with expected results is provided. This document is updated with each Grouper release.
- The **Chapter Summaries** document provides an overview of the scope, composition, and relevant grouping logic of individual HRG subchapters, and it highlights significant changes made in the latest HRG design.
- The **Code to Group Workbook** is an Excel workbook that embodies the casemix design. It provides details of the constituent elements that contribute to HRG grouping, and it contains reference data such as the ICD-10 and OPCS-4 codes utilised in the design, the procedure and diagnosis hierarchies pertinent to a specific design, and the Complication and Comorbidities (CC) lists for HRG subchapters. The workbook also includes information on Programme Budgeting Category (PBC) mapping as well as a comprehensive list of HRG codes and labels.

Additional documentation can be found on [The why, what and how of Casemix](#) on our website, which provides further background information relating to the work of the National Casemix Office. This section now contains **The Casemix Companion**, which is a starting point and general reference guide for anyone interested in learning about the Casemix classification system used by the NHS in England. This document provides an introduction to HRGs, Groupers, HRG4+ design concepts and grouping logic, and contains links to additional resources.