

Summary of Changes

HRG4+ 2021/22 National Costs Grouper
from:
HRG4+ 2020/21 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+ 2020/21 National Costs Grouper and the HRG4+ 2021/22 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+ 2020/21 National Costs Grouper and the HRG4+ 2021/22 National Costs Grouper.

Grouper Input Changes

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

Grouper Output Changes

There has been a number of changes made to the Grouper output files for Admitted Patient Care (APC) and Non-Admitted Consultations (NAC).

The APC output file **fce_flag_rel** and the NAC output file **flag_rel** have been removed from the Grouper outputs as these are redundant and have never been populated.

With the move to PLICS (National Costs collection) from the Reference Costs collection, the report outputs in the Grouper were removed in the HRG4+ 2020/21 National Costs Grouper, similarly trimpoints were no longer required to generate excess bed days. Previously these were set at default levels but have been removed in the HRG4+ 2021/22 National Costs Grouper.

As a result, there are a number of fields in the APC output files that are no longer required for Costing submission purposes. The following fields are present in the output files but are no longer populated.

ReportingEPIDUR (output files **fce** and **fce_rel**)

FCETrimpoint (output files **fce** and **fce_rel**)

FCEExcessBeddays (output files **fce** and **fce_rel**)

ReportingSpellLOS (output files **fce**, **spell** and **spell_rel**)

SpellTrimpoint (output files **fce**, **spell** and **spell_rel**)

SpellExcessBeddays (output files **fce**, **spell** and **spell_rel**)

The above output fields have also been removed from the Episode and Spell output windows in the APC Single Spell GUI.

Grouper Software Changes

The Grouper installation wrapper has been updated to include the option for users to install the Visual Studio Runtime component.

This update has been made to ensure that the required 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+ 2021/22 National Costs Grouper is the HRG4+ 2020/21 National Costs Grouper. However, the HRG4+ 2021/22 National Costs Grouper has been updated to include:

- The accommodation of new Main Specialty and Treatment Function Code sets that became mandatory for use from 1 April 2021
- Changes relating to the annual updates of ICD-10 and OPCS-4 National Clinical Coding Standards and Guidance
- The introduction of 2 new HRGs within Subchapter **BZ Eyes and Periorbita Procedures and Disorders**, to support the appropriate identification of Bilateral Phacoemulsification Cataract Extraction and Lens Implant
- Cosmetic changes to labels and descriptions to improve clarity

Change to the number of HRGs

The total number of HRGs has increased by a net of 2 from 2,898 in the HRG4+ 2020/21 National Costs Grouper to 2,900 in the HRG4+ 2021/22 National Costs Grouper. This is as a result of the inclusion of 2 new bilateral cataract HRGs, to support clinical and policy requirements.

Changes to Chapter labels

The label of Chapter C and has been amended to clarify that the chapter includes dental procedures and disorders. The revised label is:

- **C Ear, Nose, Mouth, Throat, Head, Neck and Dental**

This change is cosmetic and will not affect HRG grouping.

Changes to HRG labels

The labels of HRG roots **CB01 Malignant, Ear, Nose, Mouth, Throat, Head or Neck Disorders** and **CB02 Non-Malignant, Ear, Nose, Mouth, Throat, Head or Neck Disorders**, and that of their associated HRGs, have been amended to clarify that these HRGs also include disorders of the bones and soft tissue of the head. These changes are cosmetic and will not affect HRG grouping.

Cross-chapter design changes

Updates to national clinical coding standards

The ICD-10 and OPCS-4 National Clinical Coding Standards and Guidance are updated annually. Changes to coding standards and guidance are reviewed for their potential impact on the HRG design, and changes to design logic may be made to ensure compliance with the latest coding standards and guidance. Several changes have been made in the HRG4+ 2021/22 National Costs Grouper to incorporate coding updates, including changes to how procedures for the treatment of female pelvic organ prolapse, and stress urinary incontinence, are mapped within the HRG design.

Utilisation of ICD-10 emergency use diagnosis codes

International Classification of Diseases, 10th Revision (ICD-10) emergency use diagnosis codes relating to COVID-19 have been utilised in the HRG4+ 2021/22 National Costs

Grouper in the same way as in the HRG4+ 2020/21 National Costs Grouper, with the inclusion of Subchapter **DX COVID-19 Infection**. In addition, ICD-10 diagnosis codes **U07.1 COVID-19, virus identified**, **U07.2 COVID-19, virus not identified** and **U07.5 Multisystem inflammatory syndrome associated with COVID-19** have been added to the **XB_Isolation** list used in the Subchapter **XB, Paediatric Critical Care** design, within the HRG4+ 2021/22 National Costs Grouper.

Full details of subchapter-specific changes can be found in the Chapter Summaries document that accompanies the HRG4+ 2021/21 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+ 2021/22 National Costs Grouper compared to the HRG4+ 2020/21 National Costs Grouper. For further details of all changes to HRG subchapters, please see the supporting documentation for the HRG4+ 2021/22 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-grouper-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	NC21/22	NC20/21	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	93	A nett increase of 2 HRGs New HRGs BZ35A Bilateral Phacoemulsification Cataract Extraction and Lens Implant, with CC Score 2+ and BZ35B Bilateral Phacoemulsification Cataract Extraction and Lens Implant, with CC Score 0-1 created to accommodate these procedures when undertaken in clinically appropriate circumstances
CA Ear, Nose, Mouth, Throat, Head and Neck Procedures	122	122	No change to HRG number Chapter label updated to C Ear, Nose, Mouth, Throat, Head, Neck and Dental
CB Ear, Nose, Mouth, Throat, Head and Neck Disorders	12	12	No change to HRG number Chapter label updated to C Ear, Nose, Mouth, Throat, Head, Neck and Dental Labels of HRG roots CB01 Malignant, Ear, Nose, Mouth, Throat, Head or Neck Disorders and CB02 Non-Malignant, Ear, Nose, Mouth, Throat, Head or Neck Disorders , and their associated HRGs amended to clarify that these HRGs also include disorders of bones and soft tissue of head

Subchapter	NC21/22	NC20/21	Comment
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 or labels
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

Subchapter	NC21/22	NC20/21	Comment
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
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

Subchapter	NC21/22	NC20/21	Comment
LB Urological and Male Reproductive System Procedures and Disorders	149	149	No change to HRG number or labels New procedure combination codes created to ensure procedures performed for female pelvic organ prolapse and stress urinary incontinence map to appropriate HRGs within this subchapter
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
MA Female Reproductive System Procedures	60	60	No change to HRG number or labels New procedure combination codes created to ensure procedures performed for female pelvic organ prolapse and stress urinary incontinence map to appropriate HRGs within this subchapter Replacement of procedure combination code to classify misoprostol per rectum to map to appropriate medical abortion and miscarriage care HRGs
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
PC Paediatric Ear Nose and Throat Disorders	4	4	No change to HRG number or labels
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

Subchapter	NC21/22	NC20/21	Comment
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
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

Subchapter	NC21/22	NC20/21	Comment
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
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 The new procedure combination code created for female pelvic organ prolapse and stress urinary incontinence procedures added to multiple trauma MT_OPCS_Value list
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

Subchapter	NC21/22	NC20/21	Comment
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
XA Neonatal Critical Care	6	6	No change to HRG number or labels
XB Paediatric Critical Care	9	9	No change to HRG number or labels The ICD10 codes <i>U07.1 COVID-19, virus identified, U07.2 COVID-19, virus not identified</i> and <i>U07.5 Multisystem inflammatory syndrome associated with COVID-19</i> added to XB_Isolation list
XC Adult Critical Care	7	7	No change to HRG number or labels
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

Subchapter	NC21/22	NC20/21	Comment
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
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.
- The **Casemix Companion** 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 it contains links to additional resources.