

Summary of Changes

HRG4+ 2022/23 Local Payment Grouper
from:
HRG4+ 2021/22 Local Payment Grouper

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Contents

Purpose	3
Changes to the HRG4+ Grouper	4
Changes to the HRG4+ 2022/23 Local Payment Grouper from the HRG4+ 2022/23 Consultation Grouper	4
Changes to the HRG4+ 2022/23 Local Payment Grouper from the HRG4+ 2021/22 Local Payment Grouper	4
Grouper Input Changes	4
Grouper Output Changes	4
Grouper Software Changes	5
Grouper Algorithm Changes	5
HRG Design Changes	5
Table 1: HRG Distribution by Subchapter	10
The Documentation Suite	32

Purpose

The purpose of this summary is to provide an overview of the main changes implemented between the HRG4+ 2021/22 Local Payment Grouper and the HRG4+ 2022/23 Local Payment 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 document details the changes that have been implemented between the HRG4+ 2021/22 Local Payment Grouper and the HRG4+ 2022/23 Local Payment Grouper.

These changes were first introduced in the HRG4+ 2022/23 Consultation Grouper, with some minor design updates between the HRG4+ 2022/23 Local Payment Grouper from the HRG4+ 2022/23 Consultation Grouper, and the introduction of updates required because of the update to CDS 6.3.

There have also been changes between the HRG4+ 2022/23 Consultation Grouper and the HRG4+ 2022/23 Local Payment Grouper.

Changes to the HRG4+ 2022/23 Local Payment Grouper from the HRG4+ 2022/23 Consultation Grouper

These can be summarised as follows:

- *Best Practice Flags which identified day case activity have been removed from the Grouper output. These 14 flags have been deleted as the best practice areas they identify is no-longer part of the NHS England & Improvement reimbursement policy*
- *Changes have been made because of the update to the Commissioning Data Set version 6.3 (CDS 6.3). These relate to updates to the underlying reference data used in the Casemix Design (and therefore the grouping algorithm implemented in the Grouper)*
- *The “not died” reference list used in the Specialist Palliative Care unbundled HRG design has been updated. The stillbirth DISMETH (code 5) has been removed from this list, and 2 new CDS 6.3 DISMETH codes, Patient discharged him/herself (code 6) and Patient discharged by a relative or advocate (code 7) have been added*
- *A single procedure combination code, **C518+US Ultrasound of cornea**, has been removed from the MT_OPCS List, and will no longer contribute to Multiple Trauma HRG procedure scoring logic*
- *The APC output file `fce_flag_rel` and the NAC output file `flag_rel` have been removed from the standard Grouper output files as these are redundant and have never been populated*

Changes to the HRG4+ 2022/23 Local Payment Grouper from the HRG4+ 2021/22 Local Payment Grouper

Grouper Input Changes

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

Grouper Output Changes

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.

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+ 2022/23 Local Payment Grouper is the HRG4+ 2018/19 Reference Costs design.

There are notable differences between the design base of the HRG4+ 2022/23 Local Payment Grouper and that of the HRG4+ 2021/22 Local Payment Grouper. The former is based on the HRG4+ 2018/19 Reference Costs design whilst the latter was based on the HRG4+ 2016/17 Reference Costs design. The HRG4+ 2018/19 Reference Costs design was itself based on the HRG4+ 2017/18 Reference Costs design, which differs significantly from the HRG4+ 2016/17 Reference Costs design.

The following updates have been made, which were not in the HRG4+ 2018/19 Reference Costs base design:

- Inclusion of the 4.9 update to the OPCS Classification of Interventions and Procedures Version 4, which came into effect 1 April 2020
- Updates to reflect changes to the International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10) relating to COVID-19, resulting in the inclusion of Subchapter **DX COVID-19 Infection**, the expansion of the paediatric critical care **XB_Isolation** list to include COVID-19 diagnoses, and the inclusion of COVID-19 ICD-10 codes on Complication and Comorbidity lists, where clinically appropriate
- Amendments to the Main Specialty Codes and Treatment Function Codes that were introduced with the update to CDS 6.2.0, effective for use from 1 April 2021
- 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

- Amendments to the underlying Casemix reference data in response to updates to CDS 6.3, introduced for use from 1 April 2022 and mandatory for use from April 2023. To note, the NCO have not implemented any proposed deletions at this stage, thus the grouping algorithm will not U group activity which uses any codes proposed for deletion, e.g. ADMIMETH Code 28. This is irrespective of whether organisations have transitioned to the updated schema.

The following codes, introduced in CDS 6.3, have been added to the underlying reference data. These are now considered as valid values with relation to the mandatory Grouper input field:

○ ADMISORC	37	Court
○ ADMISORC	40	Penal establishment
○ ADMISORC	42	Police Station / Police Custody Suite
○ ADMISORC	55	Care Home with Nursing
○ ADMISORC	56	Care Home without Nursing
○ DISDEST	40	Penal establishment
○ DISDEST	42	Police Station / Police Custody Suite
○ DISDEST	55	Care Home with Nursing
○ DISDEST	56	Care Home without Nursing
○ DISDEST	89	Organisation responsible for forced repatriation
○ DISMETH	6	Patient discharged him/herself
○ DISMETH	7	Patient discharged by a relative or advocate
○ SEX	X	Not known (person stated gender code not recorded)

New HRG subchapter

A new subchapter specific to head and neck imaging interventions, **YC Head and Neck Imaging Interventions**, has been created, by mapping new procedure combination codes, and remapping existing OPCS-4 procedure codes, from Subchapters **CA Ear, Nose, Mouth, Throat, Head and Neck Procedures** and **KA Endocrine System Procedures and Disorders**. With this change, imaging interventions undertaken on the head and neck are now mapped to HRGs within Chapter **Y Vascular Procedures and Disorders and Imaging Interventions**, alongside the other imaging interventions.

Change to the number of HRGs

The total number of HRGs has increased by a nett of 62 from 2,838 in the HRG4+ 2021/22 Local Payment Grouper, to 2,900 in the HRG4+ 2022/23 Local Payment Grouper. This is as a result of changes in the underlying base design, as well as the inclusion of the 2 new bilateral cataract HRGs, to support clinical and policy requirements.

Changes to chapter and subchapter labels

Several HRG chapter and subchapter labels have been amended to ensure that all labels accurately reflect the content of the chapter or subchapter. These changes are cosmetic and will not affect HRG grouping.

Changes to HRG labels

Several HRG labels have been amended to ensure that all HRG descriptions accurately reflect the content of the HRG. Many of the label changes are the direct result of utilising

OPCS-4.9 in the HRG design. These changes are cosmetic and will not affect HRG grouping.

Cross-chapter design changes

Utilisation of OPCS-4.9

The latest version of the OPCS Classification of Interventions and Procedures (OPCS-4), OPCS-4.9, which came into effect 1 April 2020, was accommodated into the HRG4+ 2021/22 Local Payment Grouper. There are differences in how the OPCS-4.9 update has been utilised in the HRG4+ 2022/23 Local Payment Grouper, as a result of the fact that the baseline design is different.

Updates to NICE guidance

Over 200 National Institute for Health and Clinical Excellence (NICE) Interventional Procedures Guidances (IPGs) were updated to reflect changes to the OPCS-4 classification made as part of the 4.9 update. These IPGs were reviewed to assess whether it was necessary to amend the HRG design to take into account changes in clinical coding. Where clinically appropriate, the design has been amended to support clinical coding guidance, as per national coding rules, and as issued by NICE.

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+ 2022/23 Local Payment Grouper in the same way they were in the HRG4+ 2021/22 Local Payment 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 Paediatric Critical Care design within the HRG4+ 2022/23 Local Payment Grouper.

Clinical Classifications review

There is a continued requirement to ensure that the HRG design is supported by, and supportive of, coding guidance. A review of coding guidance and rules was therefore undertaken when developing the HRG4+ 2018/19 Reference Costs design, the baseline design used for the HRG4+ 2022/23 Local Payment Grouper.

In addition, 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+ 2022/23 Local Payment 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.

OPCS- 4 Other specified (-.8) global review

A cross-chapter review of **OPCS-4 .8 Other specified** procedure codes was undertaken, which resulted in the remapping of some **.8 Other specified** codes, and the creation of combination codes to identify specific procedures using a **.8 Other specified** procedure code, plus specific subsidiary approach or site codes, to enable improved mapping to HRGs.

OPCS-4 Unspecified (-.9) global review

A cross-chapter review of **OPCS-4 .9 Unspecified** procedure codes was undertaken, to ensure poorly coded **.9 Unspecified** procedure codes do not group to a higher expected resource HRG than activity with a more specific code, from the same OPCS code category.

Deletion of paired procedure combination codes

After clarifying OPCS-4 clinical coding guidance relating to the sequencing of codes, 41 paired procedure combination codes have been deleted from the HRG design. Escalation lists and logic have been amended to ensure that the procedures previously classified by the now-deleted codes continue to contribute to HRG escalation, where appropriate.

Update of procedure combination code descriptions

The code descriptions of some combination codes have been amended to ensure they accurately reflect the individual OPCS-4 procedure codes contained therein. These changes are cosmetic and will not affect HRG grouping.

Updates to logic and lists

Updates to procedure hierarchy (PH) values

The Grouper uses PH values to determine the highest expected resource procedure in a patient record during grouping. A global review of PH values was undertaken to ensure appropriate HRG mapping, resulting in significant changes to PH values in the HRG4+ 2022/23 Local Payment Grouper when compared to the HRG4+ 2021/22 Local Payment Grouper.

Updates to diagnosis hierarchy (DH) values

The Grouper uses DH values to determine the spell primary diagnosis, where there are multiple FCEs within a spell, with different primary diagnoses. A global review of DH values was undertaken to ensure appropriate HRG mapping, resulting in significant changes to DH values in the HRG4+ 2022/23 Local Payment Grouper when compared to the HRG4+ 2021/22 Local Payment Grouper.

Updates to multiple-procedure escalation list membership

A global review of the membership of lists used in multiple-procedure escalation logic was undertaken, to remove redundant OPCS-4 procedure codes and procedure combination codes from lists, and to ensure a consistent approach was applied to the creation of all lists used in multiple-procedure escalation logic. Additionally, the list value of some OPCS-4 procedure codes and procedure combination codes have been updated, where appropriate, to ensure the expected resource use associated with these procedures is accurately reflected in the HRG design.

Updated Interventions list

The Interventions list has been updated to include all procedure codes for which maximum length of stay logic is applied, and to delete those codes where maximum length of stay logic has been removed.

Updates to list names and list descriptions

The list name and/or list description of various lists used in HRG grouping logic have been amended for accuracy, and/or to ensure consistency across the HRG design. These changes are cosmetic and will not affect HRG grouping.

Updates to documentation flag IDs and documentation flag descriptions

The documentation flag ID and/or documentation flag description of various documentation flags used in HRG grouping logic have been amended for accuracy, and/or to ensure

consistency across the HRG design. These changes are cosmetic and will not affect HRG grouping.

Amendments to accommodate new NICE guidance

National Institute for Health and Clinical Excellence (NICE) guidance is reviewed annually to assess whether it is appropriate to amend the HRG design to accommodate new technology and innovation. Where appropriate, the design has been amended to accommodate coding guidance as per national coding rules, and as issued by NICE. This includes the remapping of existing codes and the creation of procedure combination codes, where appropriate.

Changes to Best Practice flags

The Best Practice Flag **BP50 Timely access to coronary angiography (NSTEMI)** has been updated to include 4 new eligible HRGs:

- **EY44A, Very Complex Percutaneous Transluminal Coronary Angioplasty, with CC Score 12+**
- **EY44B, Very Complex Percutaneous Transluminal Coronary Angioplasty, with CC Score 8-11**
- **EY44C, Very Complex Percutaneous Transluminal Coronary Angioplasty, with CC Score 4-7**
- **EY44D, Very Complex Percutaneous Transluminal Coronary Angioplasty, with CC Score 0-3**

In addition, the following 14 Best Practice Flags that identified day case activity which was differentially reimbursed under the National Payment System have now been deleted. They are no longer required, and as such, will not be output by the Grouper.

- BP28 Simple mastectomy
- BP32 Axillary clearance
- BP63 Autograft anterior cruciate ligament reconstruction
- BP68 Endoscopic insertion of prosthesis into ureter
- BP73 Optical urethrotomy
- BP77 Transluminal operations on iliac and femoral artery
- BP79 Laparoscopic hysterectomy and/or oophorectomy and salpingectomy
- BP87 FESS Endoscopic Uncinectomy, Anterior and Posterior Ethmoidectomy
- BP88 Repair of rectal mucosal prolapse
- BP91 Posterior excision of lumbar disc-prolapse including microdiscectomy
- BP92 Cystostomy and insertion of suprapubic tube into bladder
- BP94 Endoscopic laser fragmentation of calculus of kidney
- BP95 Endoscopic resection of prostate (TURP)
- BP96 Resection of prostate by laser

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 Local Payment Grouper compared to the HRG4+ 2021/22 Local Payment Grouper. For further details of all changes to HRG subchapters, please see the supporting documentation for the HRG4+ 2022/23 Local Payment 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	P22/23	P21/22	Comment
AA Nervous System Procedures and Disorders	101	101	<p>No change to HRG number or labels</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Addition of logic to ensure escalation of complex mid-brain tumour surgery and subdural haematoma via craniotomy surgery to higher expected resource HRGs ➤ Impact of expansion of pain diagnosis and Pain Management TFC logic (see Subchapter AB Pain Management) ➤ Remapping and amendment of logic applied to neurostimulator procedures to map to appropriate HRGs, depending on condition treated ➤ Remapping of procedures relating to intracranial pressure monitoring to better reflect resource use ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to AA_CC list

Subchapter	P22/23	P21/22	Comment
AB Pain Management	16	13	<p>A nett increase of 3 HRGs</p> <p>4 new HRGs:</p> <ul style="list-style-type: none"> ▪ AB25Z Nerve Block or Destruction of Nerve, Under Image Control, for Pain Management ▪ AB26Z Nerve Block or Destruction of Nerve, for Pain Management ▪ AB27Z Injection of Therapeutic Substance into Joint Under Image Control for Pain Management, and ▪ AB28Z Injection of Therapeutic Substance into Joint for Pain Management <p>created to introduce differentiation based on whether the procedure was undertaken using image control, resulting in deletion of 2 existing HRGs and nett increase of 2 HRGs</p> <p>New HRG AB24Z Alteration of Function of Nerve for Pain Management created specific to application of capsaicin patch(es)</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Expansion of pain diagnosis list and logic including adult and child Pain Management TFC checks, ensuring all relevant pain management procedures map to HRGs in this subchapter for both admitted patients and outpatients ➤ Remapping and amendment of logic of neurostimulator procedure codes to ensure mapping to appropriate HRGs depending on condition treated
BZ Eyes and Periorbita Procedures and Disorders	95	94	<p>A nett increase of 1 HRG</p> <p>New HRG BZ74Z Minor Ocular Motility Procedures replaces now-deleted equivalent adult/child specific HRGs, leading to nett decrease of 1 HRG</p> <p>2 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</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Remapping of codes to more appropriately reflect expected resource use, based on clinical review: injection into eye, operations involving scleral implants, operations on the canthus, operations on the oblique inferior muscles, plaque radiotherapy, prosthetic replacement of eyeball, and removal of foreign body from eye procedures ➤ Remapping of codes and amendment of logic to more appropriately reflect expected resource use, resulting from review of outpatient procedures e.g., ophthalmic tests and drug injections ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to BZ_CC list

Subchapter	P22/23	P21/22	Comment
CA Ear, Nose, Mouth, Throat, <u>Head</u> and Neck Procedures	122	120	<p>A nett increase of 2 HRGs</p> <p>3 new HRGs,</p> <ul style="list-style-type: none"> ▪ CA01A Complex, Head or Neck Procedures, with CC Score 7+ ▪ CA01B Complex, Head or Neck Procedures, with CC Score 3-6 and ▪ CA01C Complex, Head or Neck Procedures, with CC Score 0-2 <p>created to introduce CC splits, replacing the single, now-deleted HRG, resulting in a nett increase of 2 HRGs</p> <p>2 new HRGs, CA60C Tonsillectomy, 4 years and over and CA60D Tonsillectomy, 3 years and under, created, replacing the now-deleted, adult/child specific HRGs, to better reflect the expected resource difference between pre-school and older patients, resulting in no nett increase in number of HRGs</p> <p>Chapter/subchapter descriptions and labels of CA01*-CA05* HRGs updated to clarify that chapter / subchapter/ HRGs also include procedures on tissue of head</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Remapping of codes and addition of escalation logic on examination under anaesthetic procedures, to differentiate expected resource use between local and general anaesthetic ➤ Remapping of codes and amendment of logic as result of outpatient procedure review e.g., for audiology and maintenance of tracheostomy tubes, to appropriately reflect expected resource use of such tests ➤ Remapping of several mouth reconstruction and maxillofacial surgery procedures to better reflect clinical practice ➤ Impact of creation of new procedure combination codes, remapping of existing codes, and addition of logic to map head and neck imaging intervention activity to new Subchapter YC Head and Neck Imaging Interventions ➤ Impact of replacing procedure combination code to remap activity to new HRG YQ43Z Biopsy of Temporal Artery from head and neck HRGs ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to CACB_CC list
CB Ear, Nose, Mouth, Throat, <u>Head</u> and Neck Disorders	12	12	<p>No change to HRG number</p> <p>Chapter/subchapter descriptions and labels of CB01*-CB02* HRGs updated to clarify that chapter / subchapter/ HRGs also include disorders of the head (excluding brain)</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to CACB_CC list

Subchapter	P22/23	P21/22	Comment
CD Dental and Orthodontic Procedures	23	23	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Multiple teeth escalation logic added to OPCS-4 code F10.5 Extraction of retained root of tooth
DX COVID-19 Infection	6	6	No change to HRG number or labels Global design changes may impact the activity within this subchapter
DZ Thoracic Procedures and Disorders	176	176	No change to HRG number HRG DZ32Z Field Exercise Test or Measurement of Fractional Exhaled Nitric Oxide label updated In addition to global design changes, the following changes have been made: ➤ Remapping to ensure all histoplasmosis diagnosis codes, for adults, map to this subchapter from base HRG root EB14 Other Acquired Cardiac Conditions ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to DZ_CC list
EB Cardiac Disorders	48	48	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Impact of code remapping to ensure all histoplasmosis diagnosis codes for adult patients map to base HRG root DZ11 Lobar, Atypical or Viral Pneumonia ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to EB_CC list
EC Open and Interventional Procedures for Congenital Heart Disease	21	21	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Remapping of percutaneous procedure codes inherently used to treat congenital heart disease directly to this subchapter from Subchapter EY Interventional Cardiology for Acquired Conditions ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to EC_CC list

Subchapter	P22/23	P21/22	Comment
ED Open Cardiac Procedures for Acquired Conditions	50	48	<p>A nett increase of 2 HRGs</p> <p>Aortic repair procedure HRGs redesigned across both cardiac and vascular subchapters. Most complex cardiac surgery single HRG deleted, and replaced with 3 new HRGs,</p> <ul style="list-style-type: none"> ▪ ED16Z Hybrid Repair of Descending Thoracic Aorta or Aortic Arch ▪ ED17Z Very Complex Repair of Descending Thoracic Aorta or Aortic Arch, and ▪ ED18Z Complex Repair of Descending Thoracic Aorta or Aortic Arch, <p>resulting in nett increase of 2 HRGs</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Remapping of codes and addition of escalation logic to reach the new aortic repair HRGs, ensuring that expected resources associated with aortic arch repair and hybrid surgery are appropriately reflected in the HRG design ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to EDEY_CC list
EY Interventional Cardiology for Acquired Conditions	73	65	<p>A nett increase of 8 HRGs</p> <p>2 new HRG roots (EY14, Implantation of Cardioverter Defibrillator with Cardiac Resynchronisation Therapy, with Extraction or Major Open Procedure, and EY15, Implantation of Cardioverter Defibrillator, with Extraction or Major Open Procedure, created to specifically identify additional expected resource usage of patients that have implantation of ICD or ICD-CRT alongside major surgery (e.g. CABG or valve repair), or complex patients that require device extraction before renewal, leading to a nett increase of 4 HRGs</p> <p>A new HRG root EY44, Very Complex Percutaneous Transluminal Coronary Angioplasty, created to accommodate multiple complex percutaneous coronary interventions (PCI), including introduction of escalation logic, leading to a nett increase of 4 HRGs</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Impact of code remapping of percutaneous procedures inherently used to treat congenital heart disease directly to Subchapter EC Open and Interventional Procedures for Congenital Heart Disease ➤ Remapping of codes and addition of logic to reflect the additional expected resource use of catheterisation of both sides of the heart and percutaneous heart biopsies ➤ Procedure combination codes created for temporary pacing to ensure that these (routinely part and parcel) procedures do not escalate activity to a higher expected resource HRG ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to EDEY_CC list

Subchapter	P22/23	P21/22	Comment
FD Digestive System Disorders	54	54	<p>No change to HRG number or labels</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none">➤ Amendment to FDFEFFYF_CC list to accommodate carcinoid syndrome, septic shock, SIRS and paediatric-specific CCs➤ Remapping of 3 congenital atresia diagnosis codes from UZ01Z Data Invalid for Grouping to this subchapter, to reflect that although extremely rare in adulthood, there is no coding guidance restricting their use for adult patients

Subchapter	P22/23	P21/22	Comment
FE Digestive System Endoscopic Procedures	41	37	<p>A nett increase of 4 HRGs</p> <p>Review has resulted in the deletion of 10 HRGs and replacement with 14 new HRGs, a nett increase of 4 HRGs. This includes, new HRGs specific to intermediate therapeutic endoscopic procedure; remapping of codes where appropriate; addition of image control escalation logic; deletion of child age split and replaced with age splits that differentiate expected resource use between pre- and school-aged children; redesign of combined upper and lower gastrointestinal tract endoscopy HRGs to differentiate expected resource use between colonoscopy and sigmoidoscopy.</p> <p>The new HRGs / HRG roots are:</p> <ul style="list-style-type: none"> ▪ FE02F Major Therapeutic Endoscopic, Upper or Lower Gastrointestinal Tract Procedures, 18 years and under ▪ FE03 Intermediate Therapeutic Endoscopic, Upper or Lower Gastrointestinal Tract Procedures, (2 HRGs) ▪ FE23 Endoscopic or Intermediate, Upper Gastrointestinal Tract Procedures, (2 HRGs) ▪ FE37 Endoscopic or Intermediate, Lower Gastrointestinal Tract Procedures; (2 HRGs) ▪ FE40Z Therapeutic, Upper Gastrointestinal Tract Endoscopic Procedure with Colonoscopy, 19 years and over ▪ FE41Z Diagnostic, Upper Gastrointestinal Tract Endoscopic Procedure with Colonoscopy, with Biopsy, 19 years and over ▪ FE42Z Diagnostic, Upper Gastrointestinal Tract Endoscopic Procedure with Colonoscopy, 19 years and over ▪ FE43Z Therapeutic, Upper Gastrointestinal Tract Endoscopic Procedure with Sigmoidoscopy, 19 years and over ▪ FE44Z Diagnostic, Upper Gastrointestinal Tract Endoscopic Procedure with Sigmoidoscopy, with Biopsy, 19 years and over ▪ FE45Z Diagnostic, Upper Gastrointestinal Tract Endoscopic Procedure with Sigmoidoscopy, 19 years and over ▪ FE46Z Upper Gastrointestinal Tract Endoscopic Procedure, with Colonoscopy or Sigmoidoscopy, 18 years and under <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Amendment to FDFFFFYF_CC list to accommodate carcinoid syndrome, septic shock, SIRS and paediatric-specific CCs
FF Digestive System Open and Laparoscopic Procedures	115	112	<p>A nett increase of 3 HRGs</p> <p>New HRG FF43Z Minimal Anal Procedures created to accommodate destruction of haemorrhoid procedures (now remapped from HRG root FF42 Minor Anal Procedures to better reflect expected resource use). As a result, both HRGs in FF42* Minor Anal Procedures deleted and replaced by an all-age HRG, FF42Z Minor Anal Procedures, leading to no nett change in HRG numbers</p>

Subchapter	P22/23	P21/22	Comment
			<p>A new HRG root, FF70 Multiple Very Complex Gastrointestinal Tract Procedures, created to improve identification of highly complex gastrointestinal surgery activity, leading to a nett increase of 3 HRGs</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Amendment to FDFFFFYF_CC list to accommodate carcinoid syndrome, septic shock, SIRS and paediatric-specific CCs ➤ Changes made to logic (escalation, diagnosis-qualified, and incontinence) to acknowledge additional expected resource use linked to robotic surgery, and to better reflect the care of patients suffering from incontinence ➤ New procedure combination codes created, and percutaneous abdominal biopsy codes remapped to a new HRG in Subchapter YF Gastrointestinal Imaging Interventions: YF05Z Percutaneous Biopsy of Lesion of Abdominal Cavity ➤ New procedure combination codes created to identify transanal minimally invasive surgery (TAMIS) and transanal endoscopic microsurgery (TEMS), to identify specific low-resource nerve stimulation tests, and to appropriately accommodate subcutaneous implantation of a battery-powered ascites catheter drainage system. Some of this activity now maps to HRGs in other subchapters ➤ Remapping of codes relating to colostomy and jejunostomy to better reflect the expected resource use associated with these procedures ➤ Logic and lists created/amended to enable/ensure HRG escalation of intestinal surgery where intestinal fistula and/or long-term parenteral nutrition recorded; appropriate HRG escalation of bariatric surgery procedures (including sleeve gastrectomy where appropriate, and not part and parcel procedures); and patients treated for faecal incontinence grouping to faecal incontinence HRG only when length of stay is 1 day or less
GA Hepatobiliary and Pancreatic System Open and Laparoscopic Procedures	27	27	<p>No change to HRG number or labels</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Remapping of drainage procedures to reflect that clinical treatment has progressed in recent years reducing expected length of stay and concomitant expected resource use ➤ Amendment to GAGBGCYF_CC list to better accommodate carcinoid syndrome, septic shock, SIRS and addition of paediatric-specific CCs
GB Hepatobiliary and Pancreatic System Endoscopic and Percutaneous Procedures	14	14	<p>No change to HRG number or labels</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Amendment to GAGBGCYF_CC list to better accommodate carcinoid syndrome, septic shock, SIRS and addition of paediatric-specific CCs ➤ Procedure combination code created to classify EUS biopsy of ampulla of Vater and mapped to HRG root GB12 Endoscopic Ultrasound Examination, of Hepatobiliary or Pancreatic Duct, with Biopsy or Cytology

Subchapter	P22/23	P21/22	Comment
GC Hepatobiliary and Pancreatic System Disorders	24	24	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Amendment to GAGBGCYG_CC list to better accommodate carcinoid syndrome, septic shock, SIRS and addition of paediatric-specific CCs
HC Spinal Surgery and Disorders	74	74	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Impact of expansion of pain diagnosis and Pain Management TFC logic (see Subchapter AB Pain Management) ➤ Remapping of procedures codes for both excision and interbody fusion to reflect that these represent 2 procedures being undertaken concurrently, so have additional expected resource use compared to when undertaken individually ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to HC_CC list
HD Musculoskeletal Disorders	35	35	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to HD_CC list
HE Orthopaedic Disorders	84	84	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to HEHNHT_CC list
HN Orthopaedic Non-Trauma Procedures	111	111	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Body site of tibialis anterior deleted from knee orthopaedic site list and added to foot orthopaedic site list, impacting on formation of procedure combination codes, and the HRG derived ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to HEHNHT_CC list
HT Orthopaedic Trauma Procedures	87	87	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Body site of tibialis anterior deleted from knee orthopaedic site list and added to foot orthopaedic site list, impacting on formation of procedure combination codes, and the HRG derived ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to HEHNHT_CC list
JA Breast Procedures and Disorders	35	35	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to JAJD_CC list

Subchapter	P22/23	P21/22	Comment
JB Burns Procedures and Disorders	38	38	No change to HRG number or labels In addition to global design changes, the following changes have been made: <ul style="list-style-type: none"> ➤ Update to burns logic to acknowledge complex clinical nature of treating electric/lightning burns ➤ Addition of septic shock diagnosis codes to JB_CC list
JC Skin Surgery	11	12	A nett decrease of 1 HRG Paediatric age splits on Minor and Intermediate skin procedure HRGs amended from 12 years and under/13 years and over, to 18 years and under/19 years and over, to more appropriately reflect clinical treatment of paediatric patients, resulting in deletion of 4 HRGs and creation of 4 HRGs to replace them. The new HRG roots are: <ul style="list-style-type: none"> ▪ JC42 Intermediate Skin Procedures, (2 HRGs) ▪ JC43 Minor Skin Procedures, (2 HRGs) HRG JC47Z Phototherapy or Photochemotherapy created to replace 2 now-deleted HRGs for the same procedures that previously split activity based on patient age, resulting in nett decrease of 1 HRG HRG label JC40Z Very Major Skin Procedures updated to reflect content Global design changes may impact the activity within this subchapter
JD Skin Disorders	10	10	No change to HRG number or labels Global design changes may impact the activity within this subchapter
KA Endocrine System Procedures and Disorders	18	18	No change to HRG number Subchapter description updated to clarify it also contains procedure-driven HRGs In addition to global design changes, the following changes have been made: <ul style="list-style-type: none"> ➤ Remapping of head and neck imaging intervention codes to new subchapter YC Head and Neck Imaging Interventions from HRGs within this subchapter ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to KA_CC list
KB Diabetic Medicine	12	12	No change to HRG number or labels In addition to global design changes, the following changes have been made: <ul style="list-style-type: none"> ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to KBKC_CC list
KC Metabolic Disorders	9	9	No change to HRG number or labels In addition to global design changes, the following changes have been made: <ul style="list-style-type: none"> ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to KBKC_CC list

Subchapter	P22/23	P21/22	Comment
LA Renal Procedures and Disorders	48	48	<p>No change to HRG number or labels</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Amendment to CC list to accommodate carcinoid syndrome ➤ Remapping of congenital renal agenesis and potter syndrome diagnosis codes from UZ01Z Data Invalid for Grouping to base HRG root LA09 General Renal Disorders, to reflect that although extremely rare in adulthood, there is no coding guidance preventing them from being used for adult patients ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to LA_CC list
LB Urological and Male Reproductive System Procedures and Disorders	149	149	<p>No nett increase in HRG number</p> <p>HRG label LB71Z Complex Pelvic Clearance Procedures updated to clarify HRG content</p> <p>HRG LB49Z High Intensity Focused Ultrasound (Male and Female) deleted on clinical advice, and 3 procedure codes that mapped to this HRG remapped</p> <p>HRG LB81Z Complex Open Urethra Procedures created to accommodate urethroplasties that involve complex grafts, leading to a nett increase of 1 HRG</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Logic to generate LB46Z Live Donation of Kidney updated ➤ New procedure combination codes created to ensure that procedures performed for female pelvic organ prolapse and stress urinary incontinence map to appropriate HRGs ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to LB_CC list
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	48	<p>A nett increase of 12 HRGs</p> <p>New HRG MA48Z Medical Treatment of Ectopic Pregnancy created to identify this specific treatment, which includes a significant drug cost, resulting in a nett increase of 1 HRG</p> <p>7 new HRGs created to identify activity largely undertaken at gynaecological “one-stop” clinics and to differentiate these based on expected resource use associated with undertaking multiple exams or minor procedures concurrently:</p> <ul style="list-style-type: none"> ▪ MA41Z Transvaginal Ultrasound with Biopsy and Implantation of Intrauterine Device ▪ MA42Z Transvaginal Ultrasound with Implantation of Intrauterine Device ▪ MA43Z Transvaginal Ultrasound with Salpingography ▪ MA44Z Salpingography ▪ MA45Z Diagnostic Hysteroscopy with Transvaginal Ultrasound ▪ MA46Z Diagnostic Hysteroscopy with Transvaginal Ultrasound, with Biopsy

Subchapter	P22/23	P21/22	Comment
			<ul style="list-style-type: none"> ▪ MA47Z Diagnostic Hysteroscopy with Transvaginal Ultrasound and Implantation of Intrauterine Device <p>1 new HRG root, MA09* Intermediate, Laparoscopic or Endoscopic, Upper Genital Tract Procedures, (2 HRGs) created to replace a single, now-deleted HRG, to incorporate CC splits, leading to a nett increase of 1 HRG</p> <p>HRGs relating to abortion and miscarriage care redesigned, resulting in 10 new HRGs created to replace 7 now-deleted HRGs, leading to a nett increase of 3 HRGs.</p> <p>These new HRGs / HRG roots better align with current clinical practice, and are:</p> <ul style="list-style-type: none"> ▪ MA50Z Surgical, Abortion or Miscarriage Care, over 20 weeks Gestation ▪ MA51Z Surgical, Abortion or Miscarriage Care, from 14 to 20 weeks Gestation ▪ MA52 Surgical, Abortion or Miscarriage Care, under 14 weeks Gestation; (2 HRGs) ▪ MA53Z Medical, Abortion or Miscarriage Care, over 20 weeks Gestation ▪ MA54Z Medical, Abortion or Miscarriage Care, from 14 to 20 weeks Gestation ▪ MA55 Medical, Abortion or Miscarriage Care, from 9 to under 14 weeks Gestation; (2 HRGs) ▪ MA56 Medical, Abortion or Miscarriage Care, under 9 weeks Gestation; (2 HRGs) <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Multiple-procedure logic expanded to include escalation of minor endoscopic/laparoscopic procedures and gynaecological fistula and vaginal vault repair procedures ➤ Gynaecological malignancy diagnosis logic reviewed and enhanced to better reflect care of patients with cancer ➤ New procedure combination codes for gynae exams under anaesthetic created and mapped to base HRG root of MA22Z Minor Lower Genital Tract Procedures, to reflect additional expected resource costs associated with GA ➤ New procedure combination codes created to ensure procedures performed for female pelvic organ prolapse and stress urinary incontinence map to appropriate HRGs ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to MAMB_CC list
MB Female Reproductive System Disorders	17	17	<p>No change to HRG number or labels</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Redesign of abortion and miscarriage care procedure HRGs, resulting in abortion diagnosis codes remapped to base HRG root MB08 Threatened or Spontaneous Miscarriage ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to MAMB_CC list
MC Assisted Reproduction Medicine	11	11	<p>No change to HRG number or labels</p> <p>Global design changes may impact the activity within this subchapter</p>

Subchapter	P22/23	P21/22	Comment
NZ Obstetric Medicine	55	55	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ New procedure combination codes created for procedures performed to treat postpartum haemorrhage and mapped accordingly within existing HRG design. These codes have also been added to postpartum surgical intervention list, alongside uterine artery embolisation ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to NZ_CC list
PB Neonatal Disorders	20	20	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Expansion of septic shock and SIRS with organ failure diagnosis codes to PB_CC list
PC Paediatric Ear Nose and Throat Disorders	4	4	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PC_CC list
PD Paediatric Respiratory Disorders	24	24	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Remapping of histoplasmosis diagnosis codes for children from this subchapter to HRG root PW16 Paediatric Major Infections , to more appropriately reflect that these are a type of major infection ➤ Addition of SIRS with organ failure diagnosis codes to PD_CC list
PE Paediatric Cardiology Disorders	12	12	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Remapping of histoplasmosis diagnosis codes for children from this subchapter to HRG root PW16 Paediatric Major Infections , to more appropriately reflect that these are a type of major infection ➤ Addition of SIRS with organ failure diagnosis codes to PE_CC list
PF Paediatric Gastroenterology Disorders	17	17	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PF_CC list
PG Paediatric Hepatobiliary Disorders	3	3	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PG_CC list
PH Paediatric Rheumatology Disorders	4	4	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PH_CC list

Subchapter	P22/23	P21/22	Comment
PJ Paediatric Dermatology Disorders	7	7	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PJ_CC list
PK Paediatric Diabetology, Endocrinology and Metabolic Disorders	11	11	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PK_CC list
PL Paediatric Renal Disorders	10	10	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PL_CC list
PM Paediatric Haematological-Oncology Disorders	14	14	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PM_CC and PM_PM45_CC lists
PN Paediatric Non-Malignant Haematological Disorders	9	9	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PN_CC list
PP Paediatric Ophthalmic Disorders	2	2	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PP_CC list
PQ Paediatric Immune System Disorders	2	2	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PQ_CC list
PR Paediatric Nervous System Disorders	22	22	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PR_CC list

Subchapter	P22/23	P21/22	Comment
PT Paediatric Mental Health Disorders	4	4	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PT_CC list
PV Paediatric Trauma Medicine	7	7	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PV_CC list
PW Paediatric Infectious Diseases	15	15	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Remapping of histoplasmosis diagnosis codes for children from Subchapters PD Paediatric Respiratory Disorders , and PE Paediatric Cardiology Disorders , to HRG root PW16 Paediatric Major Infections , to more appropriately reflect that these are a type of major infection ➤ Addition of SIRS with organ failure diagnosis codes to PW_CC list
PX Paediatric Medicine	46	46	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to PX_CC list
RD Diagnostic Imaging Procedures	49	47	A nett increase of 2 HRGs New HRG RD98Z Admission or Attendance for Diagnostic Imaging under General Anaesthetic created specifically to accommodate patients admitted for a diagnostic imaging or nuclear medicine scan under general anaesthetic, resulting in a nett increase of 1 HRG HRG RD28Z Complex Computerised Tomography Scan deleted and replaced by RD60Z Cardiac Computerised Tomography Scan and RD61Z Colon Computerised Tomography Scan , to appropriately differentiate expected resource use between these types of complex CT scans, leading to a nett increase of 1 HRG In addition to global design changes, the following changes have been made: ➤ Logic for existing “empty core” HRG amended so it is only generated where length of stay is zero days. HRG label updated from RD97Z Admission or Attendance for Diagnostic Imaging to RD97Z Same Day Diagnostic Imaging Admission or Attendance ➤ Remapping of T-tube cholangiography to unbundled HRG root RD30 Contrast Fluoroscopy Procedures with duration of less than 20 minutes from core HRG root YG12 Other Percutaneous Diagnostic, Hepatobiliary or Pancreatic Procedures to better reflect that this is a diagnostic imaging scan

Subchapter	P22/23	P21/22	Comment
RN Nuclear Medicine Procedures	69	69	<p>No change to HRG number</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Logic for existing “empty core” HRG RN97Z Admission or Attendance for Nuclear Medicine, amended so it can only be generated where length of stay is zero days. Both TFC 812 Diagnostic Imaging and TFC 371 Nuclear Medicine can be used to generate the HRG. HRG label amended to RN97Z Same Day Nuclear Medicine Admission or Attendance
SA Haematological Procedures and Disorders	104	104	<p>No change to HRG number or labels</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to SA_CC list
SB Chemotherapy	18	18	<p>No change to HRG number or labels</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Logic amended for existing “empty core” HRG SB97Z Same Day Chemotherapy Admission or Attendance so that it can be reached without a chemotherapy OPCS procedure code when a secondary diagnosis of Z51.1 Chemotherapy session is recorded (only to be recorded when a patient is solely admitted for this treatment)
SC Radiotherapy	30	30	<p>No change to HRG number or labels</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Logic amended for existing “empty core” HRG SC97Z Same Day Radiotherapy Admission or Attendance (excluding Brachytherapy) so that it can be reached without a radiotherapy OPCS procedure code when a secondary diagnosis of Z51.0 Radiotherapy session is recorded (only to be recorded when a patient is solely admitted for this treatment)
SD Specialist Palliative Care	10	10	<p>No change to HRG number or labels</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Content of “not died” reference list amended to remove ‘stillbirth’, DISMETH 5, and include new CDS 6.3 codes, ‘Patient discharged him/herself’, DISMETH 6, and ‘Patient discharged by a relative or advocate’ DISMETH 7, (a change from the HRG4+ 2022/23 Consultation Grouper)

Subchapter	P22/23	P21/22	Comment
UZ Undefined Groups	1	1	<p>No change to HRG number or label</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ ICD-10 codes within chapter block P00-P04 Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery still generate HRG UZ01Z Data Invalid for Grouping, but have been remapped to Error Category UZ01 Invalid Primary Diagnosis ➤ Remapping of several congenital diagnosis codes from HRG UZ01Z Data Invalid for Grouping to HRGs in Subchapters FD, LA and WH to reflect that although extremely rare in adulthood, there is no coding guidance restricting their use for adults
VA Multiple Trauma	24	24	<p>No change to HRG number</p> <p>Labels of VA10* HRGs updated from “with no interventions” to “with Intervention Score 0”, to reflect that there may be procedures recorded, but not from the multiple trauma procedure list</p> <p>In addition to global design changes:</p> <ul style="list-style-type: none"> ➤ Logic review has resulted in removal of several non-specific and/or superficial injury diagnosis codes from multiple trauma logic and lists ➤ Removal of several procedures from multiple trauma lists ➤ Rescaling of MT_OPCS_Value and MT_ICD_Value lists to reflect revised procedure and diagnosis hierarchies ➤ Removal of singleton non-body-site-specific procedures (which require a site qualifier to be recognised in the multiple trauma HRG design) ➤ Removal of procedure combination code, C518+US Ultrasound of cornea, from MT_OPCS List (a change from the HRG4+ 2022/23 Consultation Grouper)
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	<p>No change to HRG number or labels</p> <p>Global design changes may impact the activity within this subchapter</p>
WF Non-admitted Consultations	8	8	No change to HRG number or labels

Subchapter	P22/23	P21/22	Comment
WH Poisoning, Toxic Effects, Special Examinations, Screening and Other Healthcare Contacts	68	68	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ 5 congenital diagnosis codes remapped from HRG UZ01Z Data Invalid for Grouping to base HRG root WH15 Special Screening, Examinations or Other Genetic Disorders , to reflect that, although extremely rare for a patient to survive to adulthood with these conditions, there are no national coding rules preventing the use of congenital diagnosis codes in adults ➤ Addition of septic shock and SIRS with organ failure diagnosis codes to WH_CC list
WJ Infectious Diseases and Immune System Disorders	38	38	No change to HRG number or labels In addition to global design changes, the following changes have been made: ➤ Addition of SIRS with organ failure diagnosis codes to WJ_CC list
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 U07.1 COVID-19, virus identified, U07.2 COVID-19, virus not identified and U07.5 Multisystem inflammatory syndrome associated with COVID-19 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 In addition to global design changes, the following changes have been made: ➤ New procedure combination codes created as part of the redesign of aortic aneurysm surgery and mapped to base HRG root YA03 Percutaneous Transluminal Embolisation of, Single Small or Medium, Intracranial or Extracranial Aneurysm ➤ YAYQYR_CC list updated to include septic shock, SIRS and paediatric-specific CCs

Subchapter	P22/23	P21/22	Comment
YC Head and Neck Imaging Interventions	3	N/A	<p>A nett increase of 3 HRGs</p> <p>A new subchapter for head and neck imaging interventions. New procedure combination codes classifying imaging interventions are mapped to this subchapter, and existing codes from Subchapters CA Ear, Nose, Mouth, Throat, Head and Neck Procedures and KA Endocrine System Procedures and Disorders remapped to this subchapter, which contains 3 new HRGs:</p> <ul style="list-style-type: none"> ▪ YC01Z Percutaneous Core Needle Biopsy of Lesion of, Head or Neck ▪ YC02Z Percutaneous Fine Needle Aspiration Biopsy of Lesion of, Head or Neck ▪ YC10Z Percutaneous Therapeutic, Head or Neck Procedures
YD Thoracic Imaging Interventions	5	5	<p>No change to HRG number or labels</p> <p>Global design changes may impact the activity within this subchapter</p>
YF Gastrointestinal Imaging Interventions	9	8	<p>A nett increase of 1 HRG</p> <p>New HRG YF05Z Percutaneous Biopsy of Lesion of Abdominal Cavity created to accommodate several new procedure combination codes specific to image guided biopsy of abdominal organs e.g., omentum, peritoneum.</p> <p>HRG labels of YF03* and YF04* percutaneous drainage procedure HRGs updated for clarity to “Abdominal Lesion” (rather than “Abdominal Abscess”)</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Procedure combination codes for percutaneous imaging intervention procedures deleted and replaced with more relevant procedure combination codes, and mapped to HRG root YF04 Single Percutaneous Drainage of Abdominal Lesion Procedure ➤ Amendment of FDFEFFYF_CC list to accommodate carcinoid syndrome, septic shock, SIRS and paediatric-specific CCs
YG Hepatobiliary and Pancreatic Imaging Interventions	16	16	<p>No change to HRG number or labels</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Remapping of T-tube cholangiography from core HRG root YG12 Other Percutaneous Diagnostic, Hepatobiliary or Pancreatic Procedures to unbundled HRG root RD30 Contrast Fluoroscopy Procedures with duration of less than 20 minutes to reflect that this is a diagnostic imaging procedure ➤ Amendment to GAGBGCYF_CC list to better accommodate carcinoid syndrome, septic shock, SIRS and addition of paediatric-specific CCs

Subchapter	P22/23	P21/22	Comment
YH Musculoskeletal Imaging Interventions	11	8	<p>A nett increase of 3 HRGs</p> <p>Paediatric age splits added to aspiration and biopsy HRGs within this subchapter, leading to a nett increase of 3 HRGs (3 deleted, 6 created).</p> <p>The new HRG roots are:</p> <ul style="list-style-type: none"> ▪ YH30* Percutaneous Aspiration of Joint; (2 HRGs) ▪ YH31* Percutaneous Biopsy of Lesion of Bone; (2 HRGs) ▪ YH32* Percutaneous Biopsy of Lesion of Muscle or Connective Tissue; (2 HRGs) <p>The HRG labels within this subchapter have been updated to state "Percutaneous" (rather than "Image Guided")</p> <p>Global design changes may impact the activity within this subchapter</p>
YJ Breast Imaging Interventions	9	12	<p>A nett decrease of 3 HRGs</p> <p>Several HRGs redesigned to more appropriately reflect clinical care, resulting in deletion of 5 HRGs that differentiated unilateral from bilateral procedures and replacement with 3 new HRGs based on type of activity or image control used:</p> <ul style="list-style-type: none"> ▪ YJ13Z Ultrasound Guided Core Needle Biopsy of Lesion of Breast ▪ YJ14Z Stereotactic Core Needle Biopsy of Lesion of Breast ▪ YJ15Z Fine Needle Aspiration of Lesion of Breast <p>resulting in a nett decrease of 2 HRGs</p> <p>Surgical procedure HRG YJ10Z Wire Guided Biopsy of Lesion of Breast deleted from this subchapter. Activity that previously mapped to this HRG remapped to HRGs in Subchapter JA Breast Procedures and Disorders. This change has resulted in a nett decrease of 1 HRG</p> <p>Labels of remaining breast imaging intervention HRGs within this subchapter updated for clarity</p> <p>Global design changes may impact the activity within this subchapter</p>
YL Urological Imaging Interventions	9	8	<p>A nett increase of 1 HRG</p> <p>New HRG YL30Z Percutaneous Ablation of Lesion of Prostate created to enable all types of percutaneous ablation procedures on the prostate to be separately identified</p> <p>Existing ablation HRGs relabelled to YL01Z Complex Percutaneous Ablation of Lesion of Kidney and YL02Z Standard Percutaneous Ablation of Lesion of Kidney, to reflect all types of ablation procedures that map to these HRGs</p> <p>Global design changes may impact the activity within this subchapter</p>

Subchapter	P22/23	P21/22	Comment
YQ Vascular Open Procedures and Disorders	64	60	<p>A nett increase of 4 HRGs</p> <p>Cross-chapter review and redesign of aortic aneurysm repair procedures has led to deletion of 5 HRGs, replaced with 8 new HRGs that better differentiate between the type of aortic aneurysm being repaired (abdominal, suprarenal and thoracoabdominal aortic aneurysms), resulting in a nett increase of 3 HRGs.</p> <p>The new HRGs / HRG roots are:</p> <ul style="list-style-type: none"> ▪ YQ06Z Open Repair of Thoracoabdominal Aortic Aneurysm ▪ YQ07 Open Repair of Suprarenal Aortic Aneurysm; (2 HRGs) ▪ YQ08 Complex Open Repair of Abdominal Aortic Aneurysm; (2 HRGs) ▪ YQ09 Standard Open Repair of Abdominal Aortic Aneurysm; (3 HRGs) <p>A new procedure-specific HRG, YQ43Z Biopsy of Temporal Artery, created to enable identification of this activity</p> <p>Amputation HRG labels updated for clarity to YQ20* Multiple Limb Amputation Procedures</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Remapping of codes and addition of escalation logic to reach the new aortic repair HRGs, to ensure that expected resource, particularly that associated with revisional surgery and for diagnoses of aortic dissection or infection, are appropriately reflected in the HRG design ➤ Remapping of the procedure open insertion of CV catheter from HRG root YR40 Insertion of Non-Tunnelled Central Venous Catheter to HRG root YQ41 Open Operations, on Other or Unspecified Blood Vessels on clinical advice ➤ YAYQYR_CC list updated to include septic shock, SIRS and paediatric-specific CCs
YR Vascular Imaging Interventions	75	58	<p>A nett increase of 17 HRGs</p> <p>Cross-chapter review and redesign, including creation of new procedure combination codes and remapping of procedure codes for aortic aneurysm repair, has led to deletion of 4 HRGs and replacement with 14 new HRGs that better differentiate between the type of aortic aneurysm being repaired (thoracic, abdominal or thoracoabdominal aortic aneurysms), resulting in a nett increase of 10 HRGs.</p> <p>The new HRGs / HRG roots are:</p> <ul style="list-style-type: none"> ▪ YR60Z Complex Endovascular Repair of Thoracoabdominal Aortic Aneurysm using Branched Stent Graft ▪ YR61Z Standard Endovascular Repair of Thoracoabdominal Aortic Aneurysm using Branched Stent Graft ▪ YR62* Complex Endovascular Repair of Thoracoabdominal Aortic Aneurysm using Fenestrated Stent Graft; (2 HRGs) ▪ YR63* Standard Endovascular Repair of Thoracoabdominal Aortic Aneurysm using Fenestrated Stent Graft; (2 HRGs)

Subchapter	P22/23	P21/22	Comment
			<ul style="list-style-type: none"> ▪ YR64* Complex Endovascular Repair of Thoracic Aortic Aneurysm; (2 HRGs) ▪ YR65* Standard Endovascular Repair of Thoracic Aortic Aneurysm; (2 HRGs) ▪ YR66* Complex Endovascular Repair of Abdominal Aortic Aneurysm; (2 HRGs) ▪ YR67* Standard Endovascular Repair of Abdominal Aortic Aneurysm; (2 HRGs) <p>Paediatric age splits, including those for older and younger children, added to the vascular access HRGs within this subchapter, leading to a nett increase of 5 HRGs (5 deleted, replaced with 10). The new HRGs are:</p> <ul style="list-style-type: none"> ▪ YR40C Insertion of Non-Tunnelled Central Venous Catheter, between 6 and 18 years ▪ YR40D Insertion of Non-Tunnelled Central Venous Catheter, 5 years and under ▪ YR42C Peripheral Insertion of Central Venous Catheter, between 6 and 18 years ▪ YR42D Peripheral Insertion of Central Venous Catheter, 5 years and under ▪ YR43C Attention to Central Venous Catheter, between 6 and 18 years ▪ YR43D Attention to Central Venous Catheter, 5 years and under ▪ YR44C Removal of Central Venous Catheter, between 6 and 18 years ▪ YR44D Removal of Central Venous Catheter, 5 years and under ▪ YR45A Insertion of Subcutaneous Port, 19 years and over ▪ YR45B Insertion of Subcutaneous Port, 18 years and under <p>New HRG YR58Z Injection Sclerotherapy of Peripheral Arteriovenous Malformation created to accommodate this procedure, leading to a nett increase of 1 HRG</p> <p>HRG YR59Z Prostate Artery Embolisation created in support of NICE guidance, leading to nett increase of 1 HRG</p> <p>Labels of YR14* and YR15* stent procedure HRGs updated to “Stent” from “Metal Stent” for clarity</p> <p>In addition to global design changes, the following changes have been made:</p> <ul style="list-style-type: none"> ➤ Remapping of the procedure open insertion of CV from HRG root YR40 Insertion of Non-Tunnelled Central Venous Catheter to HRG root YQ41 Open Operations, on Other or Unspecified Blood Vessels on clinical advice ➤ YAYQYR_CC list updated to include septic shock, SIRS and paediatric-specific CCs

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.