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2021/22 National Cost Collection Guidance

Volume 3: National Cost Collection – acute, mental health, improving access to psychological therapies and community services

Version 1, March 2022

Areas with significant updates since the 2021 Approved Costing Guidance have been highlighted in yellow for ease of reference. They should be reviewed in the context of the whole section.

Contents

1. Introduction

1. This document is part of the four volume 2022 National Cost Collection (NCC) Guidance. Volumes 1, 2 and 3 are integrated and cover acute, mental health and IAPT and community trust services. Volume 4[1] is sector specific and for ambulance trusts only.

2. Read *Volume 1: Overview* before reading this document.

3. Also read *Volume 2: National Cost Collection reconciliation and exclusions* before reading this document.

4. Areas where there have been significant structural changes to the standard or the costing process since the 2021 ACG have been highlighted in yellow for ease of reference. These sections should be reviewed in the context of the whole section to ensure full understanding of the change

5. NHS England and NHS Improvement are producing an NCC workbook in 2022.

6. For your main support contacts during the collection, please refer to *Volume 1: Overview*.

1.1 Collection overview

7. In line with the Costing Transformation Programme (CTP) roll out plan, community providers[2] are now mandated to submit Patient-Level information and Costing Systems (PLICS) XML files for their community and acute[3] services. Community providers should continue to submit all other services (mental health and IAPT) in the NCC workbook in 2022[4].

[1] Please note: in 2021, volume 4 related to community services, which have now been included in volume 3. Ambulance therefore becomes volume 4 for 2022.
[2] Your trust type designation is in the Trust Mandation Listing here.
[3] Sector feedback suggests that flowing acute services is preferable however if you are unable to meet this requirement, please e-mail us at costing@england.nhs.uk
[4] From 2023 mental health and IAPT will need to be submitted using PLICS XML files.

8. Providers designated as acute but having mental health or IAPT services will be required to submit PLICS XMLs files for in-scope community, mental health and IAPT services.

9. Providers designated as mental health but having acute services will be required to submit PLICS XML files for in-scope acute, IAPT and community services.

10. The PLICS extracts that should be reported at patient level for this collection (if your trust provides the relevant services) are:

    - admitted patient care (APC) complete and incomplete episodes, including regular day or night admissions and community inpatients
    - outpatients (OP) non-admitted patient care (NAPC) attendances, including ward attenders, and any community attendances reported on the commissioning dataset (CDS) and wheelchair attendances[5]
    - emergency care (EC) accident and emergency attendances, including minor injury units, urgent treatment centres and walk in centres
    - specialist ward care (SWC) adult, paediatric and neonatal critical care bed days
    - supplementary information (SI) high-cost drugs, blood products and devices, unbundled imaging and wheelchair equipment
    - mental health provider spells[6] (MHPS) complete and incomplete spells
    - mental health care contacts (MHCC) non-admitted patient care (NAPC)
    - improving access to psychological therapies (IAPT) care contact (attendances)
    - community services care contacts (CSCC) contacts in a patient's home or community setting included non-face to face contacts such as telemedicine.

11. The collection year begins on 1 April 2021 and ends on 31 March 2022.

12. Trusts should continue to follow our COVID-19 recommendations, which has been updated for the 2022 NCC.

[5] This is a soft implementation in 2022.
[6] Trusts that submit their inpatient mental health data to Hospital Episode Statistics (HES) should submit their costs on the APC XML extract. Trust that submit their inpatient mental health activity to MHSDS, costs should be submitted on the MHPS XML extract.

1.2 Specialist mental health activity in 2022

13. In 2020 and 2021, there was disquiet from stakeholders about the NCC publication as specialist mental health activity was not clearly identified. NHS England and NHS Improvement therefore carried out a project to understand how this could be rectified for 2022 so that the data produced can be used.

14. In 2021, in patient cluster assessment status 04 (PATIENT assessed but onward treatment not assigned to an Adult Mental Health Care Cluster) had a mixture of services submitted as part of that category. An example of services included were Child and Adolescent Mental Health Services (CAMHS), Forensic Services and Learning Difficulties.

15. In 2022, we request only CAMHS flows in PLICS under patient cluster assessment status 04 to enable the data to be more useful to the end user. We recognise that for some providers this may be seen as a step backwards for PLICS and may add some burden; however, we believe that the data being more useable is preferable to providers.

16. For 2023, we will ensure that all specialised mental health activity will flow as part of the PLICS datasets.

1.3 Main areas of change for 2022

17. Our aim for the 2022 collection is ‘minimum change’ to give trusts the best chance of success in submitting their mandated PLICS collection where they may have been affected by the slippage of the 2021 submission window and the ongoing COVID-19 pandemic.

18. Table 1 highlights the main changes to how costing data is collected in 2022 and details of the required compliance.

Table 1: Main changes to the 2022 National Cost Collection

Change for 2022 collection	Sector(s) affected	Required compliance	Detail
Agreed adjustments New data item in the extract specification – agreed adjustment code	All	Mandatory if agreed adjustment code is issued	In 2022 there is a new field collected in the extract specification for agreed adjustments. This will replace the previous agreed adjustment lines in the NCC workbook reconciliation as the NCC workbook reconciliation will not be used to assure NCC submissions in 2022. Trusts will still need to apply to NHS England and NHS Improvement for agreed adjustments and will be issued an agreed adjustment code. There will only be one 'Service ID' for agreed adjustments, and this will be OEADJ12. DVT rules will be generated to test the application of the agreed adjustments coding in 'AgrAdj' XML field and SerID.
New data item in the extract specification – part cost flag	Acute and community	Mandatory	The part cost flag should be populated to identify patient events where a trust can only submit part of the patient care costs due to another organisation bearing the remaining costs, with no recharge in the general ledger of provider responsible for the activity. This flag only applies to the APC and OP feed type.
New data item in the extract specification – Episode grouping	Acute and community	Mandatory	Episode grouping is the patient care group for the episode. There are nine codes that identify whether a patient episode has appropriate sufficient

Change for 2022 collection	Sector(s) affected	Required compliance	Detail
			clinical coding to have a reliable healthcare resource group (HRG) in the HRG field.
Community services has been added into the integrated data extract specification.	All	Mandatory	To reduce the burden on community providers, community services being bought into the scope of PLICS have been added into the integrated extract specification for 2022. This means integrated trusts will only have to complete one reconciliation template for their NCC. Where providers are concerned that they are unable to comply with this please contact costing@england.nhs.uk as soon as possible.
PLICS extract matching identifier (PLEMI)	All	Mandatory	The PLEMI will enable data links across a number of activity feed types from one organisation and was tested in 2020 and 2021. As a result, the compliance level has been increased to mandatory including in the CSCC feed type. The PLEMI has been removed from EC and IAPT feed types. See Annex 2.
Wheelchair services	Acute and community	Soft implementation	For 2022, trusts which can flow their wheelchair services as part of their PLICS XML files, are encouraged to do so providing this will not incur extra burden. This is a soft implementation, meaning if trusts are unable to provide these costs at

Change for 2022 collection	Sector(s) affected	Required compliance	Detail
			PLICS level they can submit at aggregate level in workbook. Providers must submit in either the workbook or PLICS, not both.
Paediatric and neonatal critical care	Acute	Mandatory	In 2022, trusts must submit paediatric and neonatal critical care using the specialist ward care (SWC) feed in the same way adult critical care is collected via the SWC feed.
Med Tech devices	Acute	Mandatory	The NHS Long Term Plan committed to accelerate the uptake of selected innovative medical devices, diagnostics and digital products to patients, by developing the MedTech Funding Mandate policy.[7] The MedTech Funding Mandate policy launched on 1 April 2021. The technologies supported by the policy in 2021/22 are: • placental growth factor-based testing – a blood test to rule out pre-eclampsia in pregnant women • SecurAcath– for securing percutaneous catheters • HeartFlow– creates a 3D model of a patient's coronary arteries and assesses the extent and location of blockages • gammaCore– a handheld device which alleviates the symptoms of severe cluster headaches MedTech tests will be collected as part of the composite cost of the clinical event and

[7] Tab 14c of Annex A in the National Tariff Workbook

Change for 2022 collection	Sector(s) affected	Required compliance	Detail
			should be submitted using collection activity PAT008. MedTech Devices will need to be separately identifiable in the 2022 NCC and collected in the supplementary information (SI) feed under CSIU2. The currency codes are as follows: • MTI001 HeartFlow • MTI002 SecurAcath • MTI003 gammaCore
Care contact identifier changed to Mandatory from Required	IAPT	Mandatory	For the PLICS 2021 collection (for 2020/21 activity data) PLICS was partially aligned to IAPT v2.0. The care contact identifier mandation status had to be lowered to Required (due to new data item only collected for part of the year).

19. Below is a summary of other changes for 2022 collection included in the extract specification, see extract specification for further details:

- EC: Data item changes to ensure alignment to relevant version of the corresponding national activity dataset (ECDS v3.0)
- MHPS: Data item changes to ensure alignment to relevant version of the corresponding national activity dataset (MHSDS v5.0)
- MHCC: Data item changes to PLICS to ensure alignment to relevant version of the corresponding national activity dataset (MHSDS v5.0)
- CSCC: Data item changes to PLICS to ensure alignment to relevant version of the corresponding national activity dataset (CSDS v1.5)
- Updates to multiple value lists defined in the reference data worksheets

1.4 Cost classification

20. For the 2022 NCC, there continues to be a requirement from NHS England and NHS Improvement executive finance team, and other national stakeholders, to collect costs using the classifications as either fixed, semi-fixed or variable.

21. We understand that at the current time, collecting this at patient-level would increase the burden on costing practitioners as well as significantly increasing the number of rows collected in PLICS.

22. We will therefore provide an extra tab in the NCC workbook to allow trusts to provide their trust cost profile of fixed, semi-fixed and variable costs by point of delivery (POD). To do this, they should use the mapping available in the integrated technical document on worksheet 2.1. This will be voluntary in 2022, but it may become mandatory in the future.

23. This cost profiling information may be used to calculate a national proportion to apply across the 2021-22 data centrally, after the PLICS data is submitted by trusts.

24. This would allow the breakdown of costs into fixed, semi-fixed and variable, while limiting the burden on trusts and resulting in no additional increase to the file sizes of PLICS datasets.

25. We acknowledge that this will not be as accurate as collecting the cost profile via the PLICS submission; however, at the current time, this is a pragmatic solution which enables all stakeholders to be considered.

26. The NCC workbook user guide will include more information on how to complete this table.

2. Medicines in 2022

27. For 2022, the cost of medicines is split between the workbook and the patient-level collection. In the latter, medicines are identifiable within the collection resource CPF005 Drugs (including high-cost drugs and more detail of high-cost drugs is given in the supplementary information (SI) feed. Table 2 details where to submit medicines information and applies to all trusts required to implement this guidance.

28. In previous years, the Specialised Commissioning Drug List was not included as part of high-cost drugs. Following requests from trusts and recent discussions with the team responsible for the Specialised Commissioning Drug List, it has been agreed that identification of these medicine costs within the NCC would create a more level playing field in terms of cost submissions for all trusts. They are now included in the SI feed.

29. The drugs list in the extract specification and NCC workbook have been updated as required. The new drugs which should not form part of the composition cost of the healthcare resource group (HRG) are listed in Annex 1.

Table 2: Collection method for medicines

Medicine type	2022 collection method	Comment
Medicines for patients designated as having legally restricted sensitive data, including IVF	Exclude and add to the relevant NCC workbook worksheet with the patient sensitivity column populated with legally restricted sensitive data (LRSD).	
	SI feed (PLICS)	Only high-cost drugs and blood products identified as not legally restricted sensitive data.

Medicine type	2022 collection method	Comment
High-cost drugs and blood products (including high-cost renal drugs)	NCC workbook	Any high-cost drugs and blood products identified as legally restricted sensitive data.
Chemotherapy drugs	CR worksheet in NCC workbook	
Homecare drugs	Excluded – reconciling item	Too burdensome to collect at aggregated level or patient level. Where a drug is both chemotherapy or high-cost drugs **and** homecare, treat it as homecare first, so the cost of all homecare drugs is excluded from the collection.
Non high-cost renal drugs	Renal worksheet in NCC workbook	
Cystic fibrosis drugs	Flow as part of PLICS	The flow of the drug cost should be part of the cost of the episode or attendance in all circumstance unless it has been listed as a high-cost drug, it should then be included on the SI feed.
Any other drug	Should be flowed as part of the cost of the clinical event for which it was issued.	

30. It may not be obvious where costs should be submitted, eg where a chemotherapy drug is also on the high-cost drugs list. See Annex 1 to understand how high-cost drugs, including IVF drugs, should flow in the collection.

3. PLICS extract matching identifier

31. The PLICS extract matching identifier (PLEMI) is an attribute that enables data linkage across a number of activity feed types from one organisation.

32. As we move more aggregate-level collections from the NCC workbook into PLICS, this will enable linkage across all costed activities matched to a particular episode/attendance/care contact/event with a unique ID and reduce the volume of data that needs to be collected from all collection stakeholders.

33. For example, if a patient is given a high-cost drug during an inpatient episode, the rows for the inpatient episode will have the same unique ID as the high-cost drug.

34. The identifier format is alphanumeric (including special characters) and has a maximum length of 50 characters.

35. Annex 2 gives examples of the inpatient journey using the PLEMI, but this identifier can be applied to all extracts collected at PLICS level.

36. The PLEMI is already established in costing systems but perhaps under a different name. If you are unsure about this, please ask your software supplier.

37. The PLEMI will be a mandated field for 2022, as detailed in the main changes table.

4. Preparing PLICS files

4.1 Patient-level costing collection activity count

38. In the extract specification for feed types APC, EC, OP, SWC, SI, MHPS, MHCC, IAPT and CSCC, you are required to submit the 'activity count'. This is the number or duration of activities undertaken, eg number of tests or duration in theatre.

39. The complete list of activity counts with the corresponding collection activity is shown in the integrated data extract specification, worksheet: Ref Data – Activities.

40. In previous years the data quality of the activity count field has been poor due to multiple pre-collection allocation drivers being assimilated into one count on the XML file.

41. For two worked examples of how to complete the activity count field, please refer to Annex 3.

4.2 Integrated extract specification

42. For the 2022 National Cost Collection, the extract specification for acute, mental health, IAPT and community services have been integrated.

43. This means there will be a single patient-level reconciliation for trusts submitting to these data feeds.

44. There will be no reconciliation statement in the NCC workbook in 2022: only an XML reconciliation.[8] An Excel version of the reconciliation will be available on the Open Learning Platform (OLP) for calculation purposes for those trusts who require it.

45. The data feeds remain spilt by the type of care being delivered. For example, APC collects admitted patient care for acute and community services

[8] Please see *NCC Volume 2 reconciliation and exclusions* for more information.

(episodes), MHPS collects admitted patient care for mental health services (spells), and CSCC collects care contacts for community services (care contacts).

46. The structure used in the 2020-21 NCC files (for the 2021 collection) has been updated for the 2022 collection and now includes the community service providers, with only one extra file type for the community care contacts. This change has been introduced to minimise the number of documents required and reduce the burden of completing multiple patient-level reconciliations for integrated trusts with acute, mental health, IAPT and community services.

47. The extract specification document will now contain worksheets for:

- four acute/community data feed types
- two mental health
- one IAPT
- one community care contacts
- one for the reconciliation
- one for specialist ward care
- the supplementary information (SI) feed type will allow data for acute, mental health and community services where relevant
- all the other worksheets in the document will comprise information that impacts any or all the individual data feeds and is clearly defined on the reference document worksheets.

48. The separately published extract specification sets out the exact structure of the CSV or XML files you need to produce for the collection: field names and formats, along with valid codes for fields where applicable. CSV extract files must be converted to XML before making your NCC submission.

Part costs

49. In some cases, patient care is provided by resources supplied from two or more provider organisations[9] without a corresponding cost recharge. From 2022 onwards, these patient events should be identified with a flag in the

[9] Provider organisations can be NHS or non-NHS.

extract specification, indicating that the costed patient event includes only part of the cost.

50. This flag has been introduced to ensure all patient events are costed within the NCC submission, but the costs of these patient events are not artificially lower as a result of these shared provider arrangements.

51. The patient events flagged as part costs must still include overheads.

52. To ensure PLICS data is useful for local and national analysis it is important to identify these events so they can be excluded or included, depending on the need of the stakeholder.

53. The patient event data item should be costed and reported by the main provider organisation. The other organisation supporting that patient event should identify the cost of the staff support or care provided and exclude this cost on the reconciliation statement.

54. Examples of where a part cost flag might be needed:

    - integrated care systems (ICS), where staff from multiple trusts contribute to the care for an ICS managed pathway
    - where national programmes contribute to patient care via staff or non-pay items rather than by funding the items via income
    - where the ongoing impact of COVID-19 services sees staff working across boundaries without reimbursement for the trust hosting the activity.

55. Where the cost of the patient event is materially appropriate, and the cost of care provided by another organisation is negligible, a part cost flag does not have to be applied.

56. It is expected that the part cost flag will predominantly apply to admitted patient care (APC) and outpatient (OP) patient events, but it could be applied to the emergency care (EC), specialist ward care (SWC) and community services care contacts (CSCC) attendance types. There will be no part cost flag shown in the SI file.

57. Only the main organisation who is recording the activity should use the part cost flag. The supporting organisation that is providing some of the resource,

should exclude the costs of the resource given in the provider-to-provider line of the reconciliation statement.

4.3 Acute, mental health and community inpatients

Collection scope

58. All inpatient episodes and hospital provider spells completed within the collection year or still open at the end of the collection year are in the scope of this collection. Further information on incomplete patient events is below.

59. An episode or spell unfinished at the end of the financial year must be collected as part of the month 12 XML file.

60. Only resources used and activities undertaken within the collection year should be included, regardless of when the hospital provider spell started or ended. For example, only costed ward care bed days within the collection year should be reported.

61. The cost of these items must be reported using the appropriate collection resource and collection activities at a patient level in the PLICS XML files. Costs and activity should be submitted by episode for APC and by occupied bed day for MHPS.

62. As part of the mandation of community, admissions reported in previous years as intermediate care bed days in the NCC workbook are in the scope of the PLICS collection but should be submitted per episode, not per bed day.

Incomplete patient episodes and spells including clinical event type

63. To identify and calculate the cost of incomplete patient episodes, refer to Standard CM2: Incomplete patient events.

64. For APC, the point of delivery (POD) submitted for an incomplete episode must be that of the episode if it were complete (see example below) so that on linking type 1 to type 2 episodes, the correct POD is in both records. The data validation tool (DVT) analyses types 1 and 2 length of stay separately from type 3.

65. For example, the admission of a patient as an emergency on 31/3/2022 at 14:40 and their discharge on 10/04/2022 should be recorded as non-elective (NEL), not non-elective short stay (NELST).

66. There are four types of episodes or spells which are collected, and these clinical events should be grouped by the ‘EpType: Episode Type’ data item.

- All episodes or spells started in a previous year (over start period) and finished in the current collection year. To correctly allocate the right proportion of costs, eg ward costs, to these spells in your costing system, calculate the proportion of the episodes or spells in days falling in-year.
- All spells started in the current collection year but incomplete at year-end (over end period).
- All spells that started and finished in the period (in period). These do not require a specific calculation at year-end.
- All spells started in a previous year and incomplete at year-end (ongoing throughout the period). To cost these long-stay patients, count the number of in-year days to ensure the in-year costs only are allocated to in-year activity.

67. Episodes or spells with a start date prior to the costing period, should flow with the actual start date of the episode or spell, so there is no change to the nationally reported episode or spell start date. You should not adjust the start date to be the start date of the costing period.

Admitted patient care episodes

68. The following types of admitted patient care (APC) should form the basis of the episodes collected in the APC PLICS data feed:

- day case electives
- ordinary electives
- ordinary non-electives
- regular day or night admissions
- community inpatients.

69. The National Costing Grouper 2021/22 attaches a core HRG to every finished consultant episode (FCE). Activity going through the grouper receiving core HRG will be reported in APC.

Episode grouping in APC

70. Community inpatients will be reported on the APC feed but may not include sufficient clinical coding to calculate an appropriate HRG. These community inpatients will be categorised using a new field: **'EpGro: Episode grouping'**.

71. Episode grouping is the patient care group for the episode and identifies whether a patient episode has sufficient clinical coding to have a reliable HRG in the HRG field. The episode groupings are shown in Table 3.

Table 3: Episode grouping defined

Episode grouping code	Episode grouping description
01	Episode with costing grouper HRG (all but undefined groups)
02	Community medical episode
03	Community surgical episode
04	Community intermediate care episode
05	Community neuro rehabilitation (long stay unit) episode
06	Other community rehabilitation episode
07	Community palliative care episode
08	Other community episode
09	Other episode with undefined group HRG

72. Acute trusts already submitting episode data at patient level are expected to use the episode grouping codes of 01 HRG data, or in some situations, code 09 UZ01Z HRG.

73. Providers of community inpatient services (including trusts designated as mental health for their primary sector and acute trusts with some community hospitals) will use codes 02-08, to add detail to the episode record. These community inpatient records ***may*** have an HRG attached, using the limited clinical coding information available.

74. High-cost drugs, devices and blood products are unbundled from the core HRG. The cost of these items must be reported using the appropriate collection resource and collection activity at a patient level in the SI extract (see Section 4.9: Supplementary information).

75. Adult, paediatric and neonatal critical care is unbundled from the core HRG. The cost of the days within the financial year of the collection must be reported using the appropriate collection resource and collection activity at a patient level in the SWC extract (see Section 4.8: Specialist ward care).

Ordinary non-elective short stays and long stays

76. All ordinary non-elective activity must be separately identified as either long or short stay by completing the input fields required by the grouper for critical care, rehabilitation and specialist palliative care length of stays. The grouper deducts these days from the core stay when processing your APC data.

77. A short stay is one day. The grouper automatically adds one day to admissions with a zero-day length of stay. All other stays are long.

Regular day or night admissions

78. Regular day or night admissions are reported in the APC collection for PLICS. Admissions for specialist palliative care, chemotherapy, radiotherapy or renal dialysis, should be reported against the relevant sections of the collection, not under regular day or night admissions.

Mental health provider spells

79. This section covers mental health provider spells (MHPS) and admitted patient care, which are the basis of the spells collected in the MHPS PLICS data feed.

80. Mental health trusts will submit both complete and incomplete costed spells for APC. Annex 4 shows an example of the purpose for trimming spell dates to match the costing period.

81. In some circumstances, a patient may:

- take home leave or mental health leave of absence for a period of 28 days or less
- have a current period of mental health absence without leave of 28 days or less which does not interrupt the hospital provider spell.

82. Providers should ensure that the reported total number of occupied bed days for a ward does not include any home leave days unless the bed is held open for that patient, ie no other patient uses the bed in their absence. This rule also applies to patients transferred temporarily to an acute provider for treatment.

4.4 Outpatients

Collection scope

83. This section covers the following types of outpatient activity and should form the basis of the activity collected in the OP PLICS data feed:
    - outpatient attendances, including ward attenders
    - procedure-driven HRGs in outpatients.

84. Outpatient attendances and procedures in outpatients should be reported by HRG and treatment function code (TFC) service identifiers at patient level.

85. The grouper may attach one or more unbundled HRGs to the core HRG produced. Only core attendances should be reported on the OP extract for acute providers.

86. Unbundled imaging HRGs that unbundle from the core HRG should be reported on the SI feed.

87. Missed appointments (did not attends – DNAs) and cancelled appointments should not be recorded, and their cost should be treated as an overhead.

88. Advice and guidance should be allocated as an overhead to the service as there is currently no specified currency for them.

General outpatients

89. Outpatient attendances in HRG4+ (WF01* and WF02*), generated from mandated fields in the outpatient Commissioning Data Set (CDS),are organised by:
    - first and follow-up attendance
    - face-to-face and non face-to-face attendance

- single and multiprofessional attendance.

90. The above terms are defined in the NHS Data Model and Dictionary.

91. Where a patient sees a healthcare professional in an outpatient clinic for a consultation, this counts as valid outpatient activity regardless of whether they receive any treatment during the attendance. NHS providers offer outpatient clinics in a variety of settings, and these should all be included in the cost collection where the cost is part of your operating expenditure.[10]

92. For the purposes of the NCC, outpatient clinical events submitted as part of the Commissioning Data Set (CDS) should be submitted as part of the OP feed. Any clinical events submitted as part of the Community Services Data Set (CSDS) should not be submitted in the OP feed.

93. The NCC does not distinguish between attendances that are pre-booked and those that are not.

94. The patient event is recorded under the same TFC for the appointment (eg a physiotherapist assessing an orthopaedic patient) regardless of whether they see the clinician they were referred to or another healthcare professional.

Maternity outpatients

95. Hospital maternity attendances should be included in the OP extract. Maternity outpatient services include:
    - hospital clinics (obstetric and midwifery)
    - midwifery antenatal (and if relevant, postnatal) care undertaken by NHS providers in GP surgeries and community-based clinics
    - ward attenders.

96. The patient-level submission should not include midwifery or other maternity community care contacts with patients in their own home. These contacts should be reported in the workbook CHS tab at average cost per unit (see Section 5: Preparing aggregated data).

[10] Exclusions apply. See *Volume 2: National Cost Collection reconciliation and exclusions.*

97. Within the appointment (regardless of whether this has included a consultation) there may be costs for:

- routine scans
- routine screens and tests.

98. Processing of maternity outpatient activity by the costing grouper may result in an outpatient procedure if the data includes the appropriate OPCS codes. Diagnostic imaging should not be unbundled from outpatient procedures; the cost should be included in the cost of the patient event and therefore not reported on the SI feed.

99. The costs of sample analysis under a separate commissioner contract (such as genetic testing, biochemistry analysis, specialist diagnostic laboratories) should not be included in the obstetrics or maternity costs.

Paediatrics

100. Providers should allocate costs and activity to paediatric TFCs in line with their NHS Data Dictionary definition: “dedicated services to children with appropriate facilities and support staff”.

101. A few patients aged 19 years and over are also cared for by specialist children’s services. Such activity, where the patient is seen by a paediatric care professional, is assumed to use resources similar to those for children rather than for adults and should be reported under the relevant paediatric TFC.

Therapy services

102. Where patients have been referred directly to a hospital therapy service[11] by a healthcare professional, including a GP, or have self-referred and are seen in a discrete therapy clinic solely for the purpose of receiving treatment, the attendance should be submitted as outpatients as reported on the Commissioning Data Set (CDS).[12]

[11] For example, physiotherapy (TFC 650), occupational therapy (TFC 651), speech and language therapy (TFC 652), dietetics (TFC 654) or orthotics (TFC 658).
[12] For community therapy services, see section 4.5

103. Where these services form part of an inpatient event or outpatient attendance in a different specialty, the costs form part of the composite costs of that episode or attendance and should not be reported as a therapy outpatient attendance.

Wheelchair attendances

104. Wheelchair services have been tested at PLICS level by early implementers in 2020 and in the voluntary collection in 2021.

105. For 2022 NCC wheelchair services is a soft implementation (non-mandatory to be submitted as part of an XML file).

106. The wheelchair outpatient attendances (attendances and home visits) will be collected in the OP extract with specific data items to identify the activity instead of relying on the treatment function code.

107. Wheelchair attendances should not be submitted within the CSCC file.

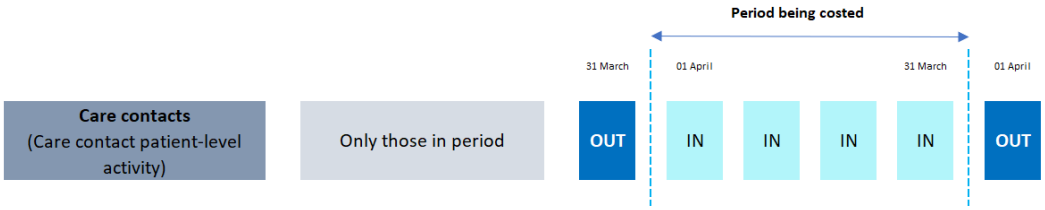
108. Wheelchair categories created for the purpose of the collection have been added to the OP table within the ref data – WCH category.

4.5 Mental health and community care contacts

Collection scope

109. All mental health care contacts (MHCC) and community services care contacts (CSCC) within the collection year are in scope of this collection as shown in Figure 1.

Figure 1: Scope of care contacts collected



110. Where a care contact starts in one costing period and ends in another (eg for night care), the start date determines whether it should be included in the cost collection, not the end date.

111. Missed appointments (DNAs) and cancelled care contacts should not be recorded and the cost should be treated as an overhead. Only attended care contacts are in scope for the PLICS collection.

112. The following community services are out of scope for PLICS in the 2022 NCC and should be collected at aggregate level in the workbook:

- direct access audiology contacts[13].
- community dental
- health visitors and community midwifery.

Mental health care contacts

113. This section covers mental health non-admitted patient care which are the contacts collected in the mental health care contact (MHCC) PLICS data feed.

114. Only the following non-cluster mental health services are included in PLICS. The cluster code should be blank in the data submission:

- Child and Adolescent Mental Health Services (CAMHS) needs based grouping code

[13] Any audiology attendance that is clinically coded and therefore generates an HRG will flow into the APC or OP feed. Audiology currency codes AS*** will stay in the workbook at aggregate level and are mainly attributable to activity delivered by acute providers.

115. Therefore, for CAMHS activities we would expect the records to be Patient cluster assessment status (PatCAS) 04 (with relevant PatCAS date ranges provided) and the adult mental healthcare cluster code and dates left blank.

116. If you provide forensic services as part of CAMHS these can also be included in PLICS. Solely forensic services should be submitted at an aggregate level in the workbook (see Section 5.1: Mental health non cluster activity).

117. Trusts that submit their acute services outpatient mental health data to HES should submit their costs on the OP XML extract. If your mental health care contacts are submitted to MHSDS, costs should be submitted on the MHCC 'Feed Type: Patient-level costing care activity type code'.

118. Learning disabilities are excluded from the NCC in 2022 and should be recorded in the appropriate line of the reconciliation statement.

119. The requirement to submit data in some fields depends on the data submitted in the patient cluster assessment status field. The relationship between those fields is as follows:

120. If PatCAS equals 01 then data should be submitted in:

- PatCAS
- PatCASStDte
- PatCASEndDte
- Cluster
- StartDateCareClust and
- EndDateCareClust.

121. If PatCAS equals 02, 03, 04 then data should ONLY be submitted in:

- PatCAS
- PatCASStDte and
- PatCASEndDte.

Community Services Care Contacts

122. This section focuses on community health services that were previously submitted at aggregate level on the CHS worksheet and where the patient activity is mandated as part of the Community Services Data Set (CSDS).

123. Specialist acute non-admitted patient care activity in the community[14] is part of the Commissioning Data Set (CDS), with a community 'location' and should be reported in the OP extract.

124. For the community sector in 2022 only, cystic fibrosis drugs and high-cost devices remain as excluded items in the National Cost Collection and therefore should be on the XML reconciliation as an agreed adjustment.[15]

125. Allied health professions (AHPs), including podiatry, are within scope of the collection. These care contacts should be submitted to CSDS and will therefore flow in PLICS on the CSCC feed.

126. The services described in this section may be provided in various locations/settings in the community, such as a patient's home, clinics, community hospitals, GP practices or health centres, and will include non-face-to-face contacts as recorded on the CSDS.

127. Community rehabilitation is within scope of the patient-level collection, however the data feed for PLICS is determined by where the activity is submitted:

    i) If your trust's community rehabilitation activity is submitted to CSDS, the costs should flow in PLICS on the CSCC feed.

    ii) If the activity is submitted to CDS it should be reported at aggregate level on the REHAB tab in the NCC workbook.

128. Community nursing PLICS should be submitted on the CSCC feed. You should identify whether the activity is for:

[14] The community location will be identifiable with an activity type location code that is in the patient's home or is a community setting. The data set is the method of identifying the cost collection file.
[15] Please e-mail costing@england.nhs.uk to request an agreed adjustment code.

- a community nurse as reported to the CSDS – for example district nurses, or
- a specialist nurse who would normally be in an acute setting but is just visiting a patient's home for specialist care. These patient events may be reported on the CSDS, and if so, should be included in the CSCC file.[16]

129. Day care facilities are a community care contact and will use duration of contact to allocate the cost. These care contacts should be submitted on the CSCC feed if your trust's activity data is submitted to CSDS.[17]

130. Several health services and checks are delivered in educational facilities. School-based children's health services include all services provided in the school setting, not just school-based nurses. Community paediatricians may also contribute to these. Only NHS-funded school-based services should be included in the NCC.

4.6 Emergency care

Collection scope

131. Emergency department (ED, formerly Accident and Emergency, A&E) attendances are categorised as:

- 'DepTyp: Emergency care department type':
  - EDs (national code 01)
  - consultant-led monospecialty A&E services (national code 02)[18]
  - other types of A&E (national code 03), including minor injury units (MIUs) and urgent treatment centres (UTCs)
  - NHS walk-in centres (national code 04)
- HRG subchapter VB emergency care.

[16] If this specialist nursing is reported on CDS, the patient events should be included on the OP feed.
[17] If your trust's activity is not submitted to CSDS and is submitted to CDS then the PLICS OP data feed should be used.
[18] May be 24-hour or non 24-hour

Exceptions

132. Emergency Care Data Set (ECDS) general practitioner streaming attendances should be costed as they form a part of the management for the emergency care department. The costs and activity of providing the service must then be excluded from the costed activity in the patient-level submission, and be reported in the reconciliation on two separate lines:

    - EXC016 Emergency Care Streaming - Provided by GPs Only
    - EXC017 Emergency Care Streaming - Excluding GP Costs.

133. Costs and activity for minor injury units (MIUs) should be reported separately only if the MIU is:

    - discrete (separate from ED) and the attendance is instead of and has not already been counted as an A&E attendance
    - not discrete but sees patients independently of the main ED.

134. Patients brought in dead (A&E patient group code 70 or ECDS discharge status SNOMED-CT code 63238001 Dead on arrival at hospital) should be coded, costed and submitted against HRG VB99Z – patient dead on arrival.

Implementation of the Emergency Care Data Set

135. NHS Digital's Emergency Care Data Set (ECDS) for urgent and emergency care is replacing the Accident and Emergency Care Data Set previously used to collect information from emergency care units across England.

136. We will continue to collect the data as we have previously, using National Costing Grouper 2021/22. This means that trusts have to map their data back to the old treatment codes for the grouper.

137. NHS Digital has released mapping guidance to help with mapping back to the investigation and treatment codes for grouping purposes.

4.7 Cystic fibrosis

138. This section covers the cystic fibrosis (CF) year-of-care banding[19] that adult and paediatric cystic fibrosis centres and other providers with network care arrangements should use for their NCC.

139. We now collect CF patient events at patient level with a CF band code against each record. We no longer collect the cost in a full or part year of care format. Adult/child splits are derived centrally.

140. The Cystic Fibrosis Trust informs trusts how each patient will be categorised for the coming year. For costing purposes, this band will be applied to all patient events in that year.

141. The grouper generates cystic fibrosis specific HRGs (DZ13*, PD13*) and these patient events should be linked to a year-of-care CF banding.

142. To help improve the quality of these year-of-care costs, providers should:

- calculate the costs for each patient event against the 2022 calendar year bands, with no further local adjustment for bands
- apply the band from the CF Trust to each patient event in that year
- ensure the data from network care providers conforms with this banding before submission.

143. Under the year-of-care banding model, each patient is allocated to one of seven bands, derived from clinical information including cystic fibrosis complications and medicine requirements.[20] Providers should access their banding data from the registry through their lead clinician.

144. Band allocations are based on data from the calendar year before the next financial year and are issued each February. The 2022 calendar year bands issued by the Cystic Fibrosis Trust in February 2022 should be used for the 2022 NCC.

[19] Within organisations the term currency may be used rather than banding.
[20] Each band describes an increasingly complex year of care. The bands are described in *Specialised Services National Definitions Set (SSNDS) Definition No10: Cystic Fibrosis Services (all ages)*, 3rd edition.

145. Cystic fibrosis is a chronic condition for which disease severity increases steadily over several years. Thus patients are unlikely to transfer between bands within a financial year.

Flowing cystic fibrosis in PLICS

146. The costs for all clinical events in 2021/22 should be submitted against the bands issued in February 2022.

147. Patients can be identified through:

- APC episodes with specific HRGs for CF - DZ13* or PD13*
- APC episodes with a primary diagnosis of cystic fibrosis although the HRGs may vary
- TFCs for adult cystic fibrosis service (TFC 343) and paediatric cystic fibrosis service (TFC 264), as described in the NHS Data Dictionary (these will mainly apply to outpatient attendances but could be applied locally to APC episodes)
- local clinic codes or wards for CF patients.

148. The following costs should be included as clinical support costs to cystic fibrosis services:

- home care support, including home intravenous antibiotics supervised by the cystic fibrosis service, home visits by the multidisciplinary team to monitor a patient's condition (eg management of totally implantable venous access devices – TIVADs), collection of mid-course aminoglycoside blood levels and general support for patient and carers[21]
- annual review investigations.

149. We are aware the very few severely ill band 5 patients will have highly variable costs. Some requiring continuous intravenous antibiotics can manage their care at home with the support of the specialist team. Others may require prolonged (six months or more) hospitalisation for their administration. Such costs should nevertheless be included.

[21] There is no requirement to collect or code homecare support independently and flow as part of the PLICS extracts. Any costs relating to home care support should be treated as an overhead to APC and NAPC activity.

150. The following should **not** be included in the calculation of cystic fibrosis costs:

- the high-cost drugs, including antifungal medicines, on Annex A worksheet 14b of the national tariff document: these should flow as part of the supplementary information (SI) feed
- unrelated care:[22] this is assigned to the relevant HRG or TFC[23]
- insertion of gastrostomy devices and of TIVADs; the associated surgical costs should be covered by the relevant separate codes
- costs associated with long-term nutritional supplementation via gastrostomy or nasogastric tube feeding: these remain within primary medical services so are therefore an exclusion, to be reported on the EXC009 line of the reconciliation
- costs associated with all other chronic non-cystic fibrosis-specific medication prescribed by general practitioners (GP) and funded from primary medical services (eg long-term oral antibiotics, pancreatic enzyme replacement therapy, salt tablets and vitamin supplements): these are also an exclusion, to be reported on the EXC009 line of the reconciliation
- neonates admitted with meconium ileus: they should be costed against the relevant HRG; annual banding should not be applied to the episode for which the neonate was admitted for initial surgical management
- patient transport services EXC005.

High-cost drugs for patients with cystic fibrosis

151. Funding for high-cost drugs is governed by national commissioning policies. The specialist centre initiates their prescription.

152. However, should they need to be used long-term (as in bands 2A to 5), the responsible GP may be prepared to continue prescribing. Under these circumstances, and where the prescribing GP recharges the provider for the

[22] Cystic fibrosis ICD10 codes are included in HRG complication and co-morbidity lists, and recognised in HRG4+ output.
[23] For example, obstetric care for a pregnant woman with cystic fibrosis, or ear, nose and throat outpatient review for nasal polyps.

actual cost of medicines received, the provider should flow the cost of the drug into PLICS as part of the SI feed type.

4.8 Specialist ward care

Flowing adult, paediatric and neonatal critical care in PLICS[24]

153. Adult, paediatric and neonatal critical care submitted via the specialist ward care (SWC) feed is now mandatory for providers already mandated for their APC patient events.

154. Community providers not yet mandated to provide acute APC patient level data, for example, adult high dependency units, should submit critical care activity in the workbook.

155. The PLICS feed type requires all costs to be submitted on a calendar bed day basis within the costing period.

156. Patients admitted to any critical care facility as defined by the NHS Data Dictionary must, in addition to their APC record, have a Critical Care Minimum Data Set (CCMDS) for adults, Paediatric Critical Care Minimum Dataset (PCCMDS) or Neonatal Critical Care Minimum Data Set (NCCMDS) record. The records are captured in the critical care mandated dataset as follows:

- CCMDS – per period
- PCCMDS or NCCMDS – per bed day.

157. The grouper produces an unbundled critical care HRG regardless of the mandated dataset it is submitted to.

- For adults, the HRG shows the highest level of care for that patient during the CCMDS period. For the adult critical care cost collection, this HRG will be shown on each submitted day of critical care.
- For paediatric and neonatal, the grouper calculates a separate HRG for each bed day. These patient bed days may therefore have a different HRG shown on each submitted day of the critical care period and you do not have to submit the number of organs supported for those bed days.

[24] For more information, see Standard CM6: Critical care.

158. A patient of any age admitted to hospital will have an APC dataset record for their hospital admission, and this produces a core HRG. If the patient's stay includes a period of critical care, this produces an unbundled critical care HRG per critical care bed day.

159. All critical care submitted via SWC is linked to APC using the PLEMI. Where the patient spent their whole admission in the critical care unit, the result of unbundling cost is an episode with zero or minimal cost allocation against a core HRG. Providers should exclude the core HRG and include all costs against the unbundled HRGs collected within the SWC feed.

160. In 2022 all critical care periods should be costed per day of the critical care period against the unbundled critical care HRG, and each day should have a separate record submitted in the SWC.

161. Part day costs can be applied to the critical care HRG if the patient is discharged directly from critical care or dies while in critical care. For patients discharged from the critical care bed to a non-critical care ward, the costs relating to the non-critical care ward should be bundled into the cost of the critical care bed day. Please refer to Standards IR1 and CM6, where explanation is given in detail on how a critical care record should be created and costed.

162. Critical care units may be discrete or in a specific area on a general ward, defined in the CCMDS, PCCMDS or NCCMDS as non-standard location using a ward area. The unit function code determines the type of ward. It is important to use the full range of unit function codes to ensure the data is accurate and comparable.

163. Where a patient is moved from a critical care area to a general ward area (or vice versa), the day of the move should be classified as a critical care bed day,[25] in the same way as the part of a calendar day is included in the critical care period for the CCMDS, PCCMDS and NCCMDS.[26]

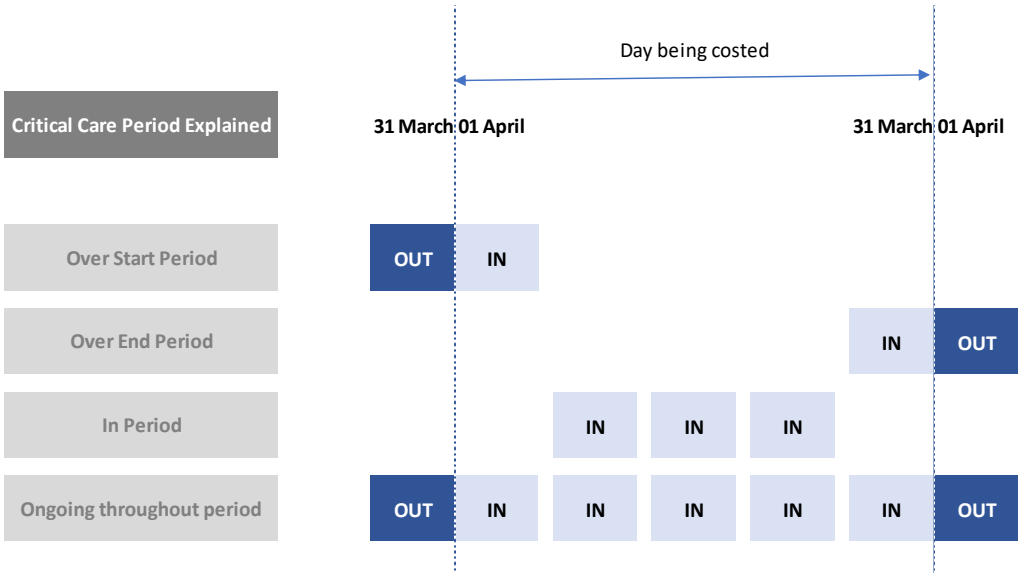
164. All collection resources and activities (including the general ward costs) should be linked to the SWC feed. The costs should be attached to the day

[25] In terms of length of stay, the day of transfer from critical care should be counted as a critical care bed day.
[26] All trusts must comply with this even if submitting aggregate critical care costs.

they occurred during the critical care episode. On the day of discharge, transfer or death, all costs relating to that patient (even if outside critical care) should be linked the critical care bed day that started at midnight of the day of discharge, transfer or death.

165. The admission or discharge date of the critical care period should be ignored if it is outside the costing period, and only the days of the critical care period within the financial year should be submitted. See Figure 2 below.

Figure 2: Critical care bed days to be reported



166. The critical care period is calculated by including the critical care local identifier. Therefore, the critical care length of stay (number of bed days) does not need to be calculated and submitted separately. It is calculated after submission by counting the number of rows per critical care local identifier submitted on the SWC feed.

167. The costs of any theatre time must be reported against the core HRG and not the unbundled critical care HRG.

- If a patient's TFC changes on their admission to a critical care unit, a new FCE will begin; theatre costs will be part of the previous FCE and will not form part of the cost for the critical care service
- If a new FCE does not start for a patient on admission to critical care or a patient is wholly under a critical care consultant from admission to

discharge, theatre costs should still be excluded from critical care and reported against the core HRG.

168. The costs of relevant high-cost drugs or high-cost blood products should be included in the SI feed only.

169. Costs for critical care periods, or part thereof, that produce an unbundled HRG of UZ01Z should be reported against UZ01Z and not apportioned elsewhere.

170. A list of trusts providing a paediatric intensive care unit (PICU) service, and the sub-set of trusts providing paediatric extracorporeal membrane oxygenation (ECMO) and extra corporeal life support (ECLS) services, are given in Annex 5.

171. The costs of adult critical care transport network services are excluded from the NCC and should be reported on EXC015.

Adult critical care

172. For the 2022 NCC, adult critical care costs are required to be submitted at patient level for mandated acute trusts, in accordance with the PLICS data extract. These costs should include those for:
    - critical care units
    - high dependency units.

173. The grouper will only output one adult critical care HRG code per critical care period. Adult critical care HRG codes reflect the number of organs supported over the critical care period.

174. For 2022, providers should submit the HRG calculated by the grouper for the period, against each bed day record in the SWC feed. Providers should submit the number of organs supported per day in field ‘OrgsSupp: Number of organ systems supported’.

175. Adult critical care outreach teams who operate outside the parameters of the adult critical care unit should be reported as a cost component of the core HRG of the patient, and **not** be reported as a separate total cost or as part of critical care. These patients will not have a CCMDS record.

176. Example patient journey scenarios illustrating the treatment of adult critical care in 2022 are shown in Annex 6.

Paediatric critical care

177. The Paediatric Critical Care Minimum Data Set (PCCMDS) version 2.0 must be used to inform the reporting of costs against the unbundled HRGs XB01Z to XB09Z. (See Annex 7 for an example of how paediatric critical care cost can be calculated.)

178. Paediatric critical care HRGs are each grouped to show the cost of a single bed day.

179. For 2022 the costs per bed day per patient should be submitted within the SWC feed.

180. Indicative relative cost weightings across the PCC HRGs are shown in Annex 7.

Neonatal critical care

181. Data supplied to the Neonatal Critical Care Minimum Data Set (NCCMDS) version 2.0 (2016 release) must be used to inform the reporting of costs against the unbundled HRGs XA01Z to XA05Z.

182. Neonatal critical care HRGs are each grouped to show the cost of a single bed day.

183. For 2022 the costs per bed day per patient should be submitted within the SWC feed.

184. HRG XA06Z relates to neonatal critical care transport and should be submitted in the NCC workbook at average unit cost per patient journey.

185. The HRGs are based on the British Association of Perinatal Medicine's categories of care 2011 standards and use minimum required staffing levels to differentiate the anticipated resource intensiveness of the care delivered. These estimated proportional cost relationships were updated in 2021 by the Neonatal expert working group with the NHS Digital Casemix Office and NHS England and NHS Improvement costing team.

186. We have adjusted the information for costing use and if you have no more detailed information from your clinical teams, you should use the following weightings as a guide to the proportions of each HRG. The cost of medical and nursing staff costs, equipment and drug costs associated with the intensity of care required for a patient will be:

- XA01Z is at least four times that of XA03Z
- XA02Z is at least twice that of XA03Z
- XA03Z and XA04Z are similar
- XA05Z is less than that of XA03Z/XA04Z but not less than that of providing a standard paediatric/neonatal bed day.

187. Diagnostics and supporting contacts from other services should be matched to the patient bed day, and not included in these weightings.

4.9 Supplementary information

188. Supplementary information will capture costs of elements that go alongside the package of care.

189. This extract should therefore include:

- high-cost drugs and blood products
- high-cost devices (formally excluded devices)
- unbundled diagnostic imaging
- wheelchair equipment.

190. High-cost drugs, high-cost blood products and high-cost devices are only submitted in the SI feed. This means no high-cost items are in any other PLICS feed.

191. Diagnostic imaging should be included as a component cost in the core episode, attendance or period, except when occurring as an outpatient attendance. In the latter setting, the clinical event (eg a scan) will have been unbundled from the core event and should be reported on the SI feed. For further detail, see NCC acute extract specification, worksheet ‘Reference data – HRGs’.

192. The currency information for high-cost drugs and blood products, high-cost devices, unbundled diagnostic imaging and wheelchairs are mandated in the extract specification, so that the alternative types of currency can be flowed as one extract without risking the lines of data being submitted without currency information.

193. However, the data validation tool will test that the currency is included in the SI record to ensure the mapping of the currencies is accurate.

High-cost drugs and blood products (CSIU 1)

194. This section covers the submission of the following drug elements:

- high-cost drugs
- high-cost blood products.

195. High-cost drugs and blood products listed on worksheet 14b of the national tariff high-cost drugs list and on the specialised commissioning drugs list should be shown separately to the core patient event.

196. The cost of these high-cost drugs and blood products should be submitted on the SI feed in the NCC using the following activities:

- BLD003 Transfusion of high-cost blood products
- PHA008 Consumption of high-cost drugs.

197. The specialised commissioning drugs list also includes hormone antagonist therapy drugs. It does not yet contain the chemotherapy drugs, as these are out of scope of the patient-level collection for 2022.

198. There are three ways drugs are reported in the NCC: patient-level high-cost drugs (PHCD), high-cost drugs (HICD) and patient-level specialised commissioning drugs (PSCD).

199. Using your organisation's local pharmacy system, you need to collect the detail of the drug or blood products issued and map the drug or blood product issue to the PLEMI as per the extract specification, recording each issue as a separate row in the SI feed.

200. You should not include the cost of high-cost drugs and blood products in core patient events in the EC, APC, OP, SWC, MHPS, MHCC, IAPT or CSCC feeds.

201. The costs submitted for high-cost drugs and blood should include only the actual costs of the drug. All other on-costs, and the costs of drugs administered with high-cost drugs or blood, should remain in the core HRG and be reported under activities:

- BLD002 Dispensing high-cost blood products
- PHA003 Dispensing high-cost drugs (on the list).

High-cost devices (CSIU 2)

202. High-cost devices are expensive and paid for on top of the national price (tariff) for the procedure in which they are used. Relatively few centres procure the devices and we recognise that the costs would not be reimbursed fairly if they were funded through the tariff alone.

203. Providers have three methods for procuring national tariff high-cost devices:

- transactional model introduced in 2016 and operated by NHS Supply Chain: orders are made by suppliers as zero cost [27]
- local procurement model used by trusts: the purchase value to the provider is invoiced to the commissioner
- MedTech innovation devices – the provider purchases the device and is reimbursed by NHS X.

204. If used at your organisation, you should also include the cost of the three MedTech innovation funded devices on the SI feed.
    - gammaCore
    - HeartFlow
    - subcutaneous engineered stabilisation device.

[27] Rather than each provider paying for the devices and being reimbursed by NHS England and NHS Improvement as before, providers now place orders with NHS Supply Chain at zero cost to them. NHS Supply Chain then places the order with suppliers and invoices NHS England and NHS Improvement.

205. A list of the trusts using these MedTech devices is available on the OLP.

206. To ensure all providers cost the inpatient HRG in the same way, high-cost devices and MedTech innovation devices should be excluded from the HRG costs and flowed as part of the SI feed.

207. The list of devices is defined in worksheet 14a of Annex A to the national tariff document and the MedTech funding mandate.

208. Each item should have a separate record and the number issued (activity count) should be included in the extract under the relevant XML field.

209. If you are unable to separately identify and map the costs of these high-cost devices, please e-mail costing@england.nhs.uk.

210. Where zero or minimal cost is to be allocated against a core HRG as a result of unbundling costs in PLICS, you should exclude the core HRG from your PLICS return and include all costs against the unbundled HRGs in the SI feed.

High-cost devices – exceptions

211. Cardiology **loop recorders** are not on the high-cost devices list. This has been queried by providers during the submission process. Loop recorders are implantable, single use devices and their cost should be matched to the patients who had one fitted. Therefore, loop recorders should be mapped to the patients who had HRG EY12A or EY12B and not included in the SI feed.

212. Cochlear implant devices are also not on the high-cost devices list, and should be included in the NCC, matched at patient level to the patients who received them, using the collection resource of medical devices, and not included on the SI feed. This will allow users of the NCC data to view the cost of the episode or spell with or without the cost of the implant.

Unbundled diagnostic imaging (CSIU 3)

213. Diagnostic imaging is unbundled from the attendance cost and should be reported separately when occurring in the following settings:

    - outpatients first/follow-up attendances

- direct access
- other.

214. The costing process in the standards requires diagnostic imaging costs to be matched to the patient attendance or episode using the diagnostic imaging collection activities.

215. On collection, however, the cost of the unbundled HRG for outpatient attendances must flow as part of the SI feed.

216. Diagnostic imaging should not be reported separately when occurring in APC or MHPS, as part of an ED or outpatient procedure (OPPROC) attendance or as part of an MHCC or IAPT contact. The costs should be included within the core episode, and you should ignore any unbundled diagnostic imaging HRGs produced by the grouper. Similarly, the costs of diagnostic imaging in critical care, rehabilitation or specialist palliative care should be included in the unbundled critical care, rehabilitation or specialist palliative care HRG. It is unlikely that diagnostic imaging scans are part of the cost of a community care contact, but if they are matched to this patient event, they should be shown as a component cost of the care contact.

217. Some diagnostic imaging is not coded in a way that generates an unbundled diagnostic imaging HRG. For example, a correctly coded obstetric ultrasound in maternity outpatients is likely to group to one of the obstetric/maternity core HRGs. Costs and activity for these scans should not be unbundled but reported within the generated core HRG.

218. Plain film X-rays have no unbundled HRG. When occurring in APC, MHPS, OP, CSCC, MHCC or IAPT settings, their costs should be included in the core attendance. If the patient has an X-ray as a result of a direct access referral, the costs should be reported separately in the workbook.

219. Diagnostic imaging linked to an outpatient event, should be linked to the outpatient event in which the imaging was requested using the PLEMI.

220. If you are unable to accurately assign a PLEMI, the cost should be treated as unmatched and recorded under 812 on the DAD worksheet.

221. The unit cost is per examination.[28]

Wheelchair services (CSUI 4)

222. Wheelchair services have been tested at PLICS level by early implementers in 2020 and in the voluntary collection in 2021.

223. For 2022 NCC wheelchair services is a soft implementation (non-mandatory to be submitted as an XML file).

224. The cost of wheelchair equipment should be entered in the SI feed. The SI feed is used to capture detailed costs of specific high-cost or highly variable cost items in the PLICS data, allowing a level of granularity below the resource level.

225. We have worked with our Wheelchair Services Costing Expert Working Group to develop a method for categorising the wheelchair equipment based on the national currencies for wheelchair equipment.

226. The costs of the wheelchair equipment should include chairs, adaptations, seating, batteries and accessories, that are part of the service package of care.

227. Using your organisation's local wheelchair system, you need to collect the detail of the wheelchair items issued in your patient-level costing system and map the cost of the equipment to the PLICS extract matching identifier (PLEMI) as per the extract specification, recording each item as a separate row in the SI feed.

228. Only the cost of the equipment issued should be recorded in the SI feed. Any cost or activity related to the clinicians issuing or fitting the wheelchair should be separately recorded in the OP feed with the matching PLEMI key.

229. The PLEMI should not match your issues of wheelchair equipment to patient events in the APC and CSCC feeds.

[28] For costing purposes, the term examination is used to include the different types of diagnostic imaging, including scans, procedures and tests as defined by HRG sub-chapters RD and RN.

230. There may be some wheelchair equipment on the SI feed that has no corresponding OP record. This is because some wheelchair equipment is issued to the patient/carer without a corresponding appointment.

231. The costs submitted on the SI feed for wheelchair equipment should include only the actual costs of the equipment. All other wheelchair on-costs – such as staff costs or overheads, the cost of fitting and the clinical cost of issuing, should remain in the outpatient attendance.

232. Each item of equipment issued to the patient should have a separate record with the corresponding Wheelchair Equipment Currency code (UnCur) included in the extract under the relevant XML field. The list of available currency codes is available on the extract specification.

233. The wheelchair collection should use the collection activities IDs COM003 Wheelchair contact and COM004 Wheelchair equipment issued.

4.10 Improving Access to Psychological Therapies

234. All IAPT care contacts (attendances) should be submitted in the PLICS files as noted below.

235. All IAPT activity recorded through the IAPT dataset v2.0 should be reported on the IAPT feed.[29] IAPT care contacts (attendances) use the same cluster definitions as other mental health contacts, but we expect most IAPT patients to fall into clusters 01 to 08.

236. Some IAPT activity may be:

- patients who are not assessed or clustered[30] (use ‘PatCAS: Patient cluster assessment status’ Code 02 and leave ‘Adult mental health care cluster code’ blank)

[29] All attended IAPT appointments within the collection year are in scope of this collection. Data for Long Term Care/IAPT integrated services pilots is not in scope.
[30] Formally submitted in XML Field ‘Cluster’ code 99

- patients where a ‘Adult mental health care cluster code’ cannot be assigned (use ‘PatCAS: Patient cluster assessment status’ Code 01 and ‘Adult mental health care cluster code’ 00).

237. All attendances within the collection year are in scope of this collection. To separate the data extract into appropriately sized files, it must be split into 12 monthly files which cover the reporting period, using the ‘Care Contact Date’ field (see ‘Section 8: Submitting PLICS files’ for further details).

238. All costs that occur for open referrals in the collection year must be reported, regardless of whether they relate to patients whose referrals have not started or have not been completed within the collection year. In addition, referrals that have started and finished in a previous reporting period and have follow up attendances in the current collection year should also flow.

239. The number of attendances relates to contacts with the patient only – face-to-face, by telephone,[31] or through other methods such as email where recorded in the IAPT dataset.

240. Only attendances with staff members within the IAPT dataset and your cost quantum should be counted.

241. Missed attendances (DNAs) and cancelled attendances should not be recorded, and the cost should be treated as an overhead.

242. We do not anticipate that the IAPT cluster costs will include any inpatient costs. Where a patient moves between mental health and IAPT, a new mental health spell/mental health care contact should be created in the MHSDS dataset.

[31] Telephone contact must replace a face-to-face contact.

5. Preparing aggregated data

243. In 2022, all trusts should submit any aggregated data in the NCC workbook. The user guide can be found on the open learning platform (OLP).

5.1 Mental health non-cluster activity

Table 4: Non-cluster activity to be submitted at aggregate level in the workbook

Service	Settings	Subcategories
Drug and alcohol services for patients without a significant mental health need	• Admitted patient care • Outpatient attendances • Community contacts	
Specialist mental health services	• Admitted patient care • Outpatient attendance • Community contacts	• Adult specialist eating disorder services • Child and adolescent eating disorder services • Gender identity disorder services • Mental health services for deaf children and adolescents • Mental health services for veterans • Specialised services for Asperger syndrome and autism spectrum disorders (all ages) • Specialist mental health services for deaf adults • Specialist perinatal mental health services (inpatient mother and baby units and linked outreach teams)

Service	Settings	Subcategories
		• Other specialist mental health inpatient services
Mental health specialist teams	• Admitted patient care • Outpatient attendance • Community contacts	• A&E mental health liaison services • Psychiatric liaison: acute hospital/nursing homes • Forensic liaison services • Other psychiatric liaison services • Criminal justice liaison • Forensic community • Psychosexual services • Prison health • Other mental health specialist teams
Forensic services	• Admitted patient care • Outpatient attendance • Community contacts	• Where a patient contact or admitted patient care event is solely forensic, this should be submitted at aggregate level in the workbook

Settings for non-cluster activity

Ordinary elective and non-elective admissions

244. For ordinary elective and non-elective admissions, costs and activity should be submitted by occupied bed day. Some admitted patient care (APC) within mental health services includes trial periods of time where patients are on home leave. They are not discharged but sent on leave to return as an admitted patient at a future date. This sometimes creates an anomaly where

their beds may be used for other admitted patients, resulting in bed occupancy levels of over 100%.

245. You should ensure that the reported total number of occupied bed days for a ward does not include any leave-day activity unless the bed is held open for that patient to return to, ie that no other patient uses the bed in their absence. This rule also applies to patients transferred temporarily to an acute provider for treatment.

246. Costs and activity for mental health services provided in day care should be submitted on the same basis as for other sector patients using these facilities.

247. Day care facilities usually have consultant input and undertake patient assessments, whereas a community mental health team group contact does not necessarily involve a consultant and patient assessments.

Mental health outpatient attendances

248. Costs and activity should be reported for attendances and non-face-to-face contacts.

249. Where consultants have a clinical caseload within a specialist team, the costs and activity should be reported against the specialist team currencies.

250. The key to determining whether activity should be reported on an outpatient or community setting is:

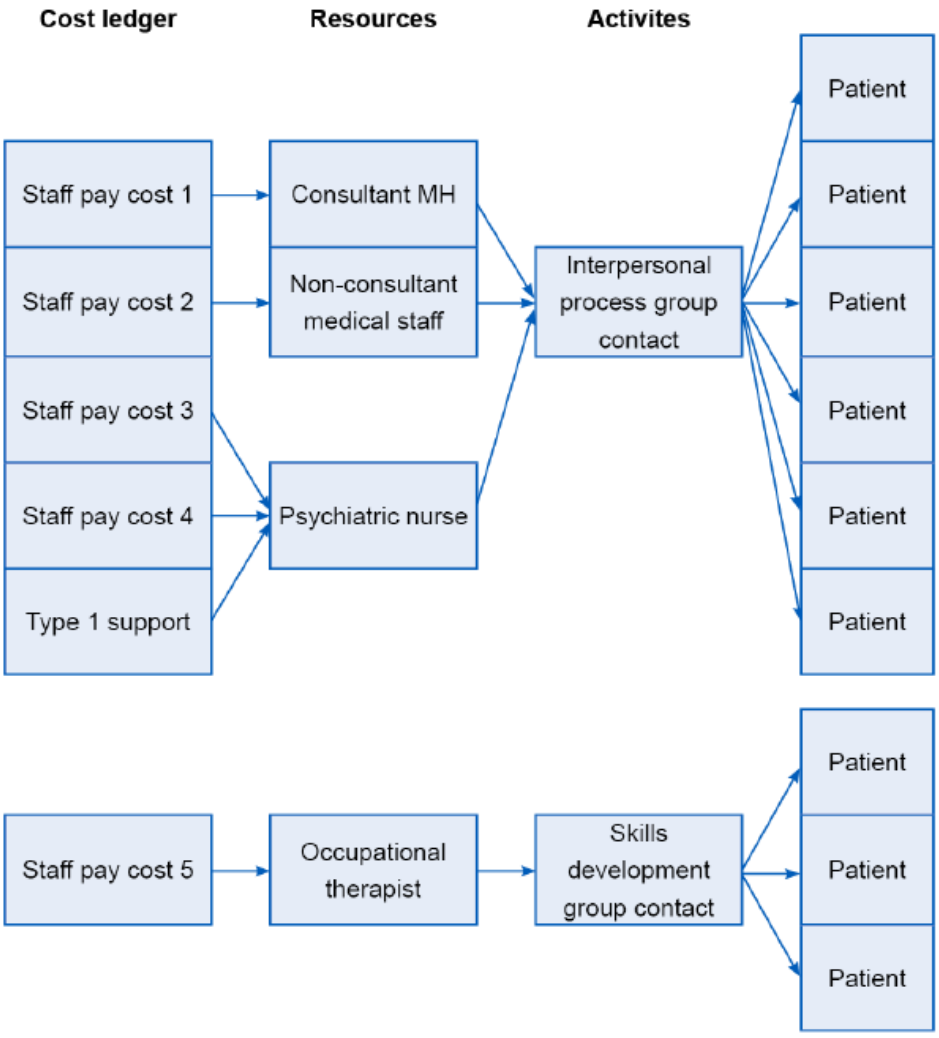
- if the appointment is booked into a clinic list for a specific clinic session (including clinics in a residential home) where a consultant sees more than one patient in that clinic and location, report it in an outpatient setting
- otherwise, it should be reported in a community setting, eg a home or domiciliary visit, or a visit to a single client in a residential home.

251. Primary consultations before the patient attends for a traditional first appointment should not be recorded as an attendance. Rather, the cost of such contacts should form part of the unit costs of contacts with service users once accepted for treatment by the relevant service.

252. Where a patient attends a group appointment, each patient counts as one attendance for that group session.

253. Where more than one staff member runs or participates in a group, the cost of the group session should reflect the staff in group, and each patient counts as one attendance for that group session, as recorded on the MHSDS. See Figure 3 for an illustrated example of cost flows for group sessions.

Figure 3: Attribution of multiple or single staff members to resources, activities and patients within group sessions



Community mental health teams

254. Costs and activity should be reported for face-to-face and non face-to-face patient contacts with consultant-led community services or community mental health teams (CMHTs). CMHTs are teams of variable sizes and include staff from qualified and unqualified disciplines, including social workers, community

mental health nurses, occupational therapists, psychiatrists, psychologists, counsellors, and community support workers (eg home helps).

255. Where integrated teams include social workers, their costs and activity should only be included in the NCC if they are NHS-funded posts. All providers should include the costs of community team contacts in the workbook.

256. It is rare for patients to meet more than one discipline within each CMHT at a time. When this does occur, you should record the attendance as two separate contacts for NCC average cost collection purposes. Figure 4 describes this process.

257. The exception to this general principle is when two or more professionals from the same discipline meet a single patient at the same time but for a different purpose (see Figure 5

Figure 4: Reporting patient contacts with multidisciplinary community mental health teams

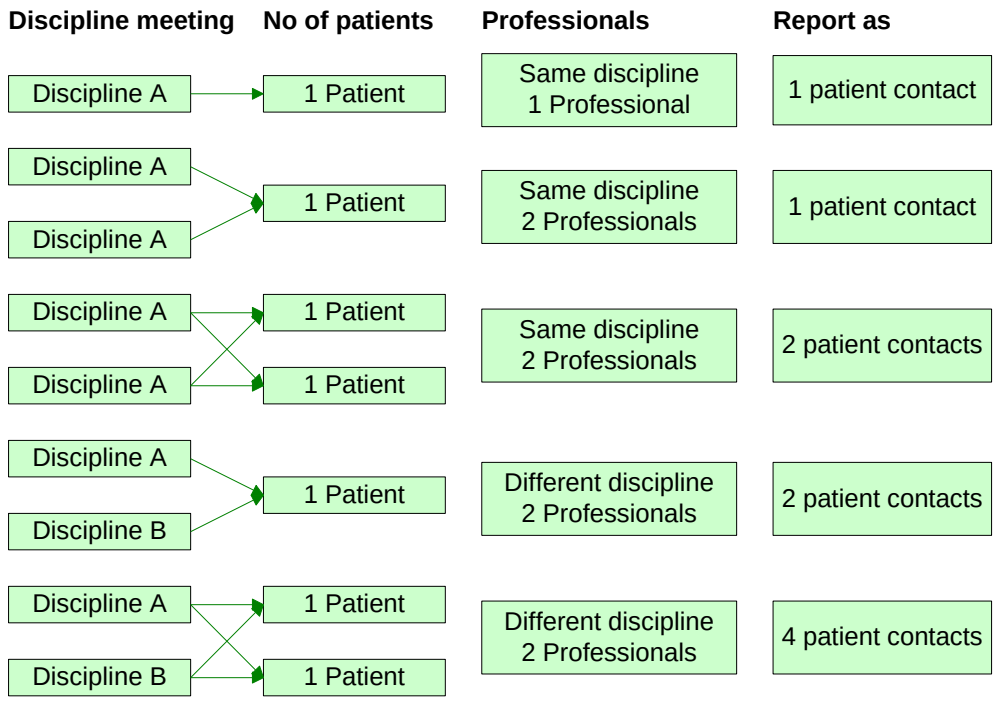
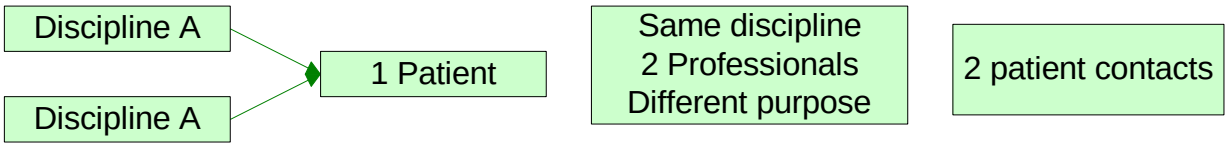


Figure 5: Reporting patient contacts with two or more professionals from the same discipline



5.2 Cancer multidisciplinary meetings

258. The National Institute for Health and Care Excellence (NICE) considers cancer multidisciplinary teams (cancer MDTs) essential to the delivery of high-quality cancer care.

259. For acute PLICS, these costs should be allocated to the cancer MDT activity and not submitted as part of the NAPC or other patient-level submission.

260. Providers should submit data against six categories of cancer MDT:

- breast
- colorectal
- local gynaecological[32]
- specialist gynaecological[33]
- specialist upper gastrointestinal
- other cancers: to include lung, haematological, brain.

261. Cancer MDT meetings bring together representatives from different healthcare disciplines on a formal timetable to discuss cancer patients. The purpose of these meetings is to review individual patients and agree individual treatment plans for initial and ongoing treatment. The core role of the cancer MDT is to resolve difficulties in diagnosis and staging, and to agree a management plan.[34]

[32] Local teams diagnose most cancers, provide treatment for some types of cancer and refer women to the specialist teams if necessary.
[33] Specialist teams provide specialist care and treatment for women with less common cancers or who require specialist treatment for other reasons.
[34] Other roles of cancer MDTs can be found in NICE's improving outcomes guidance.

262. Cancer MDT meetings are additional to, not instead of, outpatient activity. Cancer outpatient clinics are often multidisciplinary and, similarly, cancer MDTs can address one type of cancer or a group of different cancers.

263. We are aware that cancer MDTs may no longer discuss outpatients exclusively. We will continue to collect activity and costs for all patients discussed in cancer MDTs in the defined groups (above) in 2022.

264. The unit cost is per individual patient treatment plan discussed. Cancer MDTs always have a defined consultant lead who chairs the meeting and ensures treatment decisions are recorded.

265. Include consultant costs based on job plans, preparation for peer review, support staff costs and administration costs, such as arranging cancer MDT-initiated investigations and follow-up clinics. Exclude costs for follow-up actions such as communicating the cancer MDT outcome by phone to the patient.

266. Although the members of a cancer MDT may be drawn from several NHS providers, only the organisation hosting the meeting must report the costs, including its own team and support costs. The counted ‘activity unit’ becomes the host organisation’s ‘activity’.

5.3 Direct access

267. This section covers the following direct access services:

- diagnostic services
- pathology services.

268. Diagnostic and pathology services undertaken during APC, OP, CSCC or ED are included in the composite cost of this care, unless they are unbundled imaging which should be flowed into PLICS in the SI feed.

269. Where these services have been requested directly from a GP, they should be submitted at aggregate level in the NCC workbook. Pathology direct access should be reported on the DAP tab and diagnostic imaging direct access should be reported on the DAD tab.

270. Costs and activity for the direct access services should be submitted based on the number of tests.

271. You may submit costs against integrated blood sciences, or separately against clinical biochemistry, haematology and immunology, but not both.

5.4 Unbundled services overview

272. Where zero or minimal cost is to be allocated against a core HRG as a result of unbundling costs, you should exclude the core HRG and include all costs against the unbundled HRGs in the NCC workbook.

273. The following services are unbundled:

- specialist rehabilitation
- specialist palliative care
- renal dialysis
- chemotherapy
- radiotherapy.

274. Unbundled rehabilitation or specialist palliative care HRGs are only generated where care is identified as taking place under a specialist consultant or within a discrete unit.

275. The grouper outputs a core HRG and an unbundled rehabilitation HRG accompanied by a multiplier showing the days of rehabilitation within the FCE. The grouper adjusts the core length of stay for this activity.

Rehabilitation

276. You should not attempt to separately identify non-discrete rehabilitation costs during an APC stay. You should not use unbundled rehabilitation HRGs to describe the cost of activity beyond an HRG trim point for any acute or non-specified HRG. This paragraph refers to discrete specialist rehabilitation collected in the workbook on the REHAB tab. No excess bed days will be separately collected in 2022.

277. Unbundled rehabilitation should be reported under one of the following settings on the REHAB worksheet in the NCC workbook:

- APC: average unit cost per occupied bed day
- outpatient: average unit cost per attendance
- other (regular day attenders): average unit cost per day.

278. Each setting is further divided as follows:

- complex specialised rehabilitation services (CSRS) – level 1:
  - delivered by specialist NHS providers
  - increased use of resources and longer length of stays
  - CSRS that fall within this definition set and contain components relating to admitted patient rehabilitation are:
    (1) specialised spinal services (all ages)
    (2) specialised rehabilitation services for brain injury and complex disability (adult)
    (3) specialised burn care services (all ages)
    (4) specialised pain management services (adult)
- specialist rehabilitation services – level 2:
  - not designated as level 1
  - British Society of Rehabilitation medicine (BSRM) has developed criteria and checklists for identifying level 2 services that conform to the standards required of a specialist rehabilitation service
  - have the following characteristics:
    (1) multidisciplinary team of staff
    (2) consultant with specialist accreditation
    (3) more complex caseload
    (4) meets the national standards for specialist rehabilitation laid out by the appropriate royal college and specialist societies
    (5) serves a recognised role in education, training and published research for development of specialist rehabilitation in the field
- non-specialist rehabilitation services – level 3:
  - any service that is not level 1 or 2.

Specialised palliative care

279. The unbundled specialist palliative care HRGs should be reported against the following settings:

- inpatient (ordinary elective or non-elective admissions), including hospital specialist palliative care teams
- day cases and regular day or night admissions
- outpatients
- other.

280. This care should usually be reported using main specialty codes for palliative medicine (315).

281. You need to talk to your specialist palliative care team to acquire local data feeds or contact information where this is not collected by the informatics department.

282. The specialist palliative care HRG codes to be used are defined on the SPAL worksheet in the NCC workbook.

Renal dialysis for chronic kidney disease and acute kidney injury

283. For PLICS, renal dialysis should be identified and excluded from APC and OP patient-level extracts and reported on the RENAL worksheet in the NCC workbook. Standard CA3: Renal dialysis includes information about renal dialysis and should be read alongside this section.

284. Where zero or minimal cost is to be allocated against a core HRG as a result of unbundling costs in PLICS, you should exclude the core HRG from your PLICS return and include all costs against the renal dialysis HRGs in the NCC workbook.

285. APC costs for renal medicine should be mapped according to APC cost pools and not to renal dialysis, except where these costs directly relate to dialysis during APC.

286. Outpatient activities associated with each dialysis modality should be separately recorded and linked to the outpatient point of delivery, eg pathology testing or medicine prescriptions issued in clinics. The outpatient attendance HRGs should not be reported for patients attending for renal dialysis only.

287. For dialysis using a hub and spoke configuration, the activity and costs should be recorded in the submission from the NHS provider with contractual responsibility for the delivery of the care.

Renal dialysis medicines

288. Renal dialysis medicines are now included on worksheet 14b of Annex A to the proposed 2021/22 national tariff.

289. Patients sometimes require medicines to treat associated conditions. These medicine costs should be treated in the same way as any other treatment cost and be attributed at the point of delivery, or the point of commitment in outpatients, unless separately identified.

Renal patient transport services

290. Patient transport services, which are a significant cost in haemodialysis services, are excluded from the NCC and therefore must be excluded from costs reported for renal dialysis services.

Chemotherapy

291. For the NCC, the unbundled elements of chemotherapy delivery and procurement will only be collected on the CR worksheet in the NCC workbook.

292. When the patient data is run through the grouper, patients receive a core HRG and one or more extra unbundled chemotherapy HRGs that divide into two categories:

- HRGs for procurement of chemotherapy regimens according to cost band
- HRGs for the delivery of chemotherapy regimens.

293. The activity measure for the chemotherapy procurement HRGs is the number of cycles of treatment, and the unit cost is per average cycle.

294. Chemotherapy procurement HRGs are designed to cover the cost of the entire procurement service and therefore, in contrast to unbundled high-cost drugs, the cost of each HRG should include pharmacy on-costs (including indirect costs and support costs) as well as all other costs associated with

procuring each drug cycle. The cost of supportive drugs on the single, national list of drugs funded through the Cancer Drugs Fund should also be included in these HRGs.

295. The definitions in Table 5 may assist with costing the chemotherapy delivery HRGs.

Table 5: Chemotherapy delivery definitions

Definition	Explanation
Simple parenteral chemotherapy	Overall nurse time of 30 minutes and 30 to 60 minutes of chair time for the delivery of a complete cycle.
More complex parenteral chemotherapy	Overall nurse time of 60 minutes and up to 120 minutes of chair time for the delivery of a complete cycle.
Complex chemotherapy, including prolonged infusion treatment	Overall nurse time of 60 minutes and over 2 hours of chair time for the delivery of a complete cycle.
Subsequent elements of a chemotherapy cycle	Delivery of any pattern of outpatient chemotherapy regimen, other than the first attendance, ie day 8 of a day 1 and 8 regimen, or days 8 and 15 of a day 1, 8 and 15 regimen.

296. In addition to these unbundled chemotherapy HRGs, the grouper generates a core HRG (SB97Z) for a same-day chemotherapy admission or attendance if:

- chemotherapy has been given
- length of stay for the activity is less than one day
- no major procedures have taken place and the core HRG that would otherwise be generated is diagnosis driven.

297. SB97Z attracts a zero national price to ensure appropriate overall reimbursement where a patient is admitted or attends solely for delivery of chemotherapy and no additional activity has taken place. SB97Z is supplied with a mandatory zero cost in the NCC workbook, so providers should include any notional costs against the unbundled chemotherapy delivery HRGs.

298. Core SB97Z HRG activity must not be included in the PLICS return.

299. Supportive care costs for cancer patients receiving chemotherapy should be allocated according to the matching principle. Therefore:

- the costs of services directly related to the treatment of cancer, before and after surgery, should be allocated to the appropriate surgical HRG
- supportive care costs not associated with the surgical procedure should be allocated to the appropriate non-surgical cancer HRG which, if this is SB97Z, would be the unbundled chemotherapy delivery HRG assigned to that episode.

300. Chemotherapy should be reported on the NCC workbook under one of the following categories, to reflect differences in clinical coding guidance between these settings:

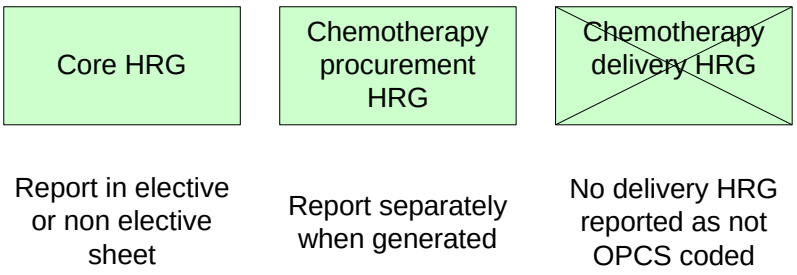
- inpatient (ordinary elective or non-elective admissions) (procurement only)
- day case and regular day or night admissions
- outpatients
- other.

Inpatient (ordinary admissions)

301. The reporting of ordinary elective or non-elective admissions should include the core HRG and the relevant chemotherapy procurement HRGs where generated. Chemotherapy delivery HRGs will not be generated because OPCS chemotherapy delivery codes are not clinically coded or grouped for ordinary admissions (see Figure 6). Delivery of chemotherapy is expected to be part of routine care on a ward and, therefore, costs should be reported as a support cost to the core HRG.

302. The costs for chemotherapy delivery in ordinary admissions, elective or non-elective, should be reported on the APC extract with the collection activity chemotherapy delivery. Costs for the chemotherapy procurement must be excluded from the APC extract for PLICS and reported on the NCC workbook only.

Figure 6: Reporting chemotherapy ordinary admissions



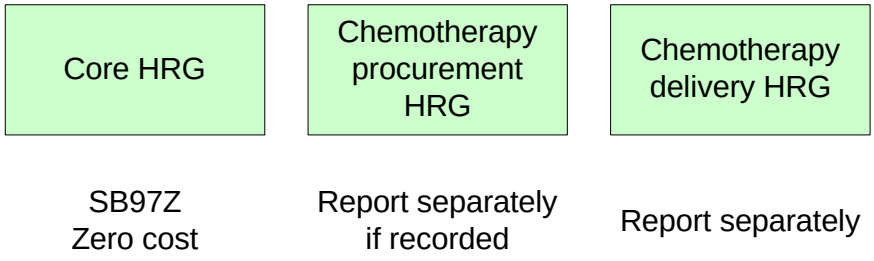
Day case and regular day or night admissions

303. The reporting of day case and regular day or night admissions solely for the delivery of chemotherapy should include an unbundled chemotherapy delivery HRG and may include an unbundled chemotherapy procurement HRG where the procurement of a cycle is recorded.

304. The core HRG SB97Z will be generated for patients admitted for same-day chemotherapy if no other significant procedure has taken place (see Figure 7).

305. Day case and regular day or night admissions coded as SB97Z should not form part of your APC submission for PLICS but instead be submitted on the CR worksheet in the NCC workbook.

Figure 7: Reporting chemotherapy day case and regular day or night attendances

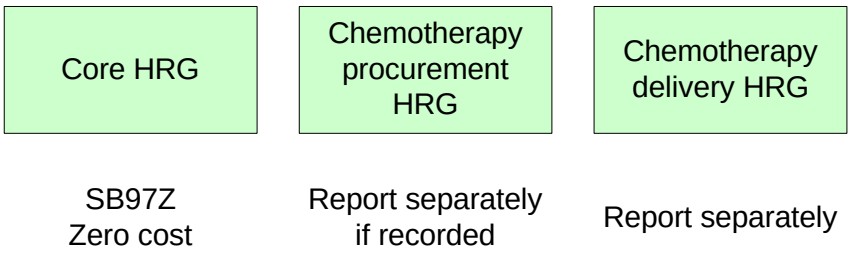


Chemotherapy outpatients

306. Outpatients attending solely for the delivery of chemotherapy should be reported as an unbundled chemotherapy delivery HRG and may be reported as an unbundled chemotherapy procurement HRG where the procurement of a cycle is recorded. The core HRG SB97Z will also be generated for patients attending for same-day chemotherapy treatment (see Figure 8).

307. These outpatient attendances should not form part of your NAPC submission for PLICS but should be recorded on the CR worksheet in the NCC workbook. Where a zero or minimal cost is to be allocated against a core HRG as a result of unbundling costs in PLICS, providers should exclude the core HRG from their PLICS return and include all costs against the unbundled HRGs in the NCC workbook.

Figure 8: Reporting chemotherapy outpatients



Other settings for chemotherapy

308. A category 'other' (which we have also provided for diagnostic imaging, high-cost drugs, radiotherapy, rehabilitation and specialist care) recognises that unbundled HRGs are independent of setting.

309. This category can be used where the service is delivered outside a hospital or cancer centre, eg at home or in a GP surgery. Care should be taken to avoid submitting APC or outpatient care as 'other' due to miscoding or software issues.

Additional guidance on chemotherapy

310. Although rare, some patients may have two regimens delivered at one attendance, resulting in two delivery HRGs. An example is a patient receiving an intrathecal component of a regimen which generates a separate procurement and delivery regimen alongside any other regimen they may be receiving.

311. Further guidance on how to treat regimens not on the national list can be found in the OPCS-4 clinical coding instruction manual.

312. Patients receiving both an infusion and oral treatment as part of a single regimen on the same day are considered to have received one delivery and

this is coded to an intravenous delivery code. Patients may also receive other intravenous and oral drugs for their cancers on the same day as their chemotherapy regimen, eg administration of bisphosphonates. The costs of these should be attributed to the relevant core HRG and not included with the chemotherapy delivery HRG.

313. To maintain consistency with national coding guidance, the OPCS procurement and delivery codes for chemotherapy should only be used where the treatment is for systemic anti-cancer therapy, ie malignancy, and not for non-malignant conditions. Certain drugs appear in both the chemotherapy regimens list and high-cost drugs list as they can be used to treat neoplasms as well as a range of other non-neoplastic conditions, eg rheumatology. These should be coded using the OPCS high-cost drug codes and not the OPCS procurement and delivery codes.

314. Current clinical coding guidance stipulates when to code delivery of oral chemotherapy (SB11Z). If a regimen includes oral and parenteral administration, the parenteral administration determines the delivery code. SB11Z is assigned to regimens made up of orally administered drugs only, and the costs should reflect current practice in light of recommendations in the National Patient Safety Agency (NPSA) report on oral chemotherapy.

315. We are aware that some supportive drugs may have a disproportionately high cost compared to the other expected costs of care within the unbundled chemotherapy procurement HRG, and that some hormonal drugs may similarly have a disproportionately high cost within the core HRG.

316. However, the cost of supportive and hormone antagonist drugs – which are any drugs given to prevent, control or relieve complications and side-effects and to improve the patient's comfort and quality of life – should also be included in these HRGs, as outlined in Table 6.

Table 6: How to treat hormone and supportive drug costs in chemotherapy

Method of delivery	Hormone treatments	Supportive drugs
As an intrinsic part of a regimen	If included in a regimen, ignore because the costs are already included in the chemotherapy procurement HRGs.	

Method of delivery	Hormone treatments	Supportive drugs
By itself	Code to the relevant admitted patient or outpatient core HRG generated (not chemotherapy specific).	Apportion over procurement bands, potentially extra delivery time and costs.
As part of supportive drug	Include costs within supportive drug costs.	N/A

Radiotherapy

317. The unbundled radiotherapy HRGs are similar in design to the unbundled chemotherapy HRGs, in that an attendance may result in two extra HRGs: one for pre-treatment planning and one for radiotherapy treatment. The data submitted to the radiotherapy dataset (RTDS) should be used as a source of data for submitting aggregated costs. This will result in most activity being reported as outpatient attendances, although the collection offers the following settings for consistency:
    - inpatient (ordinary elective or non-elective admissions)
    - day case and regular day or night admissions
    - outpatients
    - other.

318. As well as these HRGs, a core HRG (SC97Z) for a same-day external beam radiotherapy admission or attendance is generated by the grouper if:
    - external beam radiotherapy has taken place
    - the activity has a length of stay of less than one day
    - no major procedures have taken place and the core HRG which would otherwise be generated is diagnosis driven.

319. The principles described in the chemotherapy section above for SB97Z also apply to SC97Z.

320. Radiotherapy costs and activity must be identified and excluded from APC and OP patient-level extracts and reported on the CR worksheet of NCC workbook only, as per the guidance in this section.

321. Where zero or minimal cost is to be allocated against a core HRG as a result of unbundling costs in PLICS, providers should exclude the core HRG from their PLICS return and include all costs against the unbundled HRGs in the NCC workbook.

322. Activity should be allocated for each fraction of radiotherapy delivered and only one fraction per attendance should be coded. The intention in HRG4+ is that each fraction is separately counted, rather than the number of courses of treatments. However, clinical coding guidance states that only one treatment fraction should be recorded per inpatient stay.

323. Therefore, the unit of activity for ordinary admissions is per admission. However, if the patient has treatment to more than one body site, recording a treatment fraction for each area treated is permitted if a difference in resources from those for treatment of a single site can be identified. This will not be an issue for activity recorded in the radiotherapy dataset as outpatient.

324. Table 7 clarifies the grouper output for different patient settings (if providers have followed coding guidance) and the treatment of the data for NCC average costs.

Table 7: Radiotherapy outputs

Setting	HRG output from the grouper	Treatment of HRG in reference costs
Ordinary elective or non-elective admission	Core HRG + Planning HRG (one coded per admission) + Treatment HRG (one coded per admission)	Report core HRG costs separately from radiotherapy costs Report planning costs using planning HRGs Report all treatment costs for the admission using delivery HRG
Day case, regular day or night admission, and outpatients	SC97Z same-day external beam radiotherapy + Planning HRG (one coded per course of treatment) +	Report SC97Z at zero cost (all radiotherapy costs are reported in planning or treatment activity) Report unit cost of planning HRG per course of treatment

	Treatment HRG (one coded per fraction delivered every appointment)	Report average cost per fraction and number of admissions
Other (for any activity not included above)		Report planning per course and treatment per fraction

325. A first outpatient attendance may result in the two HRGs described (one planning HRG and one treatment HRG), with the follow-up attendances only resulting in the treatment HRGs and SC97Z being assigned.

326. An average unit cost per treatment course should not be reported for treatment costs in day case, regular day or night attendance, or outpatient settings. Instead, cost per fraction should be reported by HRG.

327. Supportive care costs for cancer patients receiving radiotherapy in an ordinary elective or non-elective setting should be allocated as set out above.

328. Advice from the National Cancer Action Team (NCAT) highlights the need to allocate costs according to the type of radiotherapy being delivered. There are two main types of radiotherapy:
    - external beam radiotherapy
    - brachytherapy and liquid radionuclide administration.

329. Work to develop the brachytherapy classification is ongoing. Until it is complete, brachytherapy costs are only reported within the current set of brachytherapy HRGs, not within the external beam HRGs.

5.5 Community services not submitted in PLICS

Community dental

330. Community dental services are for patients who have difficulty getting treatment in their ‘high street’ dental practice and need to be referred for treatment. The currencies for community dental services are:

- Community dental services: community dentistry for patients who are unable to access NHS dentistry locally, require specialist intervention or need a home visit. Include here the costs and activity of face-to-face dental officer activity in clinics and the screening contacts that these officers carry out in schools (each screened child constitutes a contact since each requires one-to-one activity). The unit cost is per care contact.
- General dental services: some community providers provide a full range of NHS dental treatment for patients in a high street setting. The unit cost is per attendance.
- Emergency dental services: also known as dental access services. The unit cost is per attendance.

331. In each case the unit is per care contact – regardless of the units of dental activity (UDA) that may be counted in that contact.

Health visitors and community midwifery

332. The currencies for health visitors and midwives are listed in the NCC workbook, as a tab with a separate set of reference tables.

333. Currencies for health visitors are consistent with the Healthy Child Programme.

334. Currencies N03G and N03J include safeguarding, child assessment frameworks, child protection meetings, children in need, looked-after children, serious case reviews and supporting families with complex needs. They also include public health contacts (clinics, children's centres and early years settings).

335. Family nurse partnership (FNP) programmes will be collected separately to other health visitor contacts. You should continue to report immunisations separately at full cost (including travel costs), on the same basis as they report school-based children's services.

336. Home births should be submitted using the relevant HRG in the CHS worksheet in the NCC workbook.

337. Parentcraft classes are multidisciplinary and may include health visitors, community midwives and other healthcare professionals. The cost should

include all staff present. Parentcraft classes are group sessions and the unit of activity is the number of pregnant women attending the group.

Audiology

338. Direct access audiology, where the care does not have a grouped HRG code, should be reported on the AUD tab in the workbook, using the codes starting AS.

339. Audiology attendances with a grouped HRG can be submitted in the OP file at patient level, or in the workbook OPROC tab at aggregate level.

6. Treatment of specific scenarios

6.1 Legally restricted sensitive data in PLICS 2022

340. Trusts will not be able to submit data at PLICS level for patients receiving services or treatments for which data is clinically coded as legally restricted sensitive data (LRSD).

341. Legally restricted sensitive data covers the following treatment and diagnosis categories:

- HIV and AIDS
- sexually transmitted disease
- gender reassignment
- reproductive medicine.

342. The list of excluded local specialty codes, HRGs, OPCS and ICD10 codes can be found in Annex 8.

343. For APC, EC and OP, this process is unchanged for the 2022 collection. The requirements regarding the specialty codes, HRGs, OPCS and ICD10 codes are set by NHS Digital.

344. For CSCC, currency codes relating to specialist nursing, HIV/AIDS Nursing Services should be excluded from the patient-level file, and reported at average cost per unit in the CHS tab of the NCC workbook with the patient sensitivity of ‘LRSD’. These currency codes are:

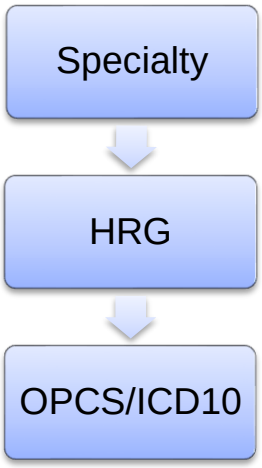
- N18AF Specialist Nursing, HIV/AIDS Nursing Services, Adult, Face to face
- N18AN Specialist Nursing, HIV/AIDS Nursing Services, Adult, Non face to face
- N18CF Specialist Nursing, HIV/AIDS Nursing Services, Child, Face to face
- N18CN Specialist Nursing, HIV/AIDS Nursing Services, Child, Non face to face.

345. For other community care contacts, if the contact is with a patient that has a known legally restricted sensitive data condition, this should also be excluded from the CSCC file and entered in the CHS table of the NCC workbook with the patient sensitivity of ‘LRSD’. For example, the HIV and AIDS nursing currency has been removed from the extract specification as these are LRSD patients. There may be contacts for infectious disease or palliative care teams for patients with HIV/AIDS these should also be put in the CHS tab of the workbook with patient sensitivity of ‘LRSD’.

346. The safeguards described in this guidance are implemented to ensure that identifiable data does not flow for patients receiving legally restricted sensitive treatments or with legally restricted sensitive diagnoses.

347. You should filter out data from the highest (specialty) to the most granular level (OPCS/ICD10 code) to ensure you capture all attendances and episodes that are excluded from the 2022 PLICS collection (see Figure 9).

Figure 9: Capturing records excluded from PLICS



348. For supplementary information (SI), only those high-cost drugs and blood products that are not indicated for treatment of a legally restricted sensitive patient can be submitted via the SI feed. The remainder should be submitted on the HCD worksheet of the NCC workbook with the patient sensitivity column populated with LRSD.

349. By identifying the records labelled with the specialties and HRGs listed in Annex 10 you will capture most of the excluded data, but we ask that you also check your episode and attendance records for the OPCS and ICD10 codes.

350. You should check all OPCS and ICD10 codes in the record, not just the primary codes.

351. The data validation tool (DVT) will check that your PLICS data does not contain any of the HRGs excluded from the PLICS return, as part of the schema validation process prevents the flow of excluded codes.

352. If any extract file includes a restricted HRG for the 2022 collection, the DVT validation process will fail.

353. NHS Digital will reject any acute PLICS XML file if it contains any of the excluded HRGs in Annex 10 as part of the file validation process.

Submitting cost data for legally restricted sensitive data

354. The cost and activity for these patients should be included at average HRG level on the relevant worksheet in the NCC workbook with the patient sensitivity column populated with LRSD.

355. APC average unit episode costs should be submitted on the LRSD worksheet, at department code (DC, EL, NEL, etc), service code (TFC) and currency code (HRG) level in the NCC workbook.

356. Outpatient average unit costs should be submitted flagged as LRSD as appropriate. The data should be submitted as an average cost by TFC and HRG level, and further defined as consultant led or non consultant-led.

357. For HIV/AIDS outpatient attendances, please submit your data using the HIV and AIDS reporting system (HARS) categories on the OPATT worksheet of the NCC workbook (see below paragraph 359).

358. If any EC attendances contain legally restricted sensitive data codes, the data relating to it should also be excluded from the submission of EC PLICS data and included in the NCC workbook.

359. For all legally restricted sensitive episodes, costs for unbundled services should be submitted on the HCD and DAD worksheet of the NCC workbook as appropriate

HIV and AIDS

360. The full mandated guidance for how to treat these currencies is available on the gov.uk website.[35] The currencies are a clinically designed year-of-care pathway for three categories of HIV adult patients (19 years and over). To support the currencies, Public Health England (PHE) introduced the (HARS).[36,37]

361. We are not collecting pathway costs for the HIV adult outpatient services in 2022. However, we are collecting the unit cost of attendances for patients with HIV or AIDS in the workbook tab OPATT, against these three categories:[38]

- category 1 (new patients)
- category 2 (stable patients)
- category 3 (complex patients).

362. The currencies do not include the provision of any antiretroviral (ARV) medicines. The medicines costs should be included in the unbundled high-cost drug HRGs and reported on the HCD worksheet of the NCC workbook. The cost of precuring and prescribing these drugs should be included in the HIV currencies.

363. Some providers may not have these categories available locally. The attendance data by category can be requested directly via HARS.

[35] See www.gov.uk/government/publications/hiv-outpatient-pathway-updated-guidance-available and www.gov.uk/government/publications/payment-by-results-hiv-outpatients-currencies
[36] www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/HIV/HIVAndAIDSReportingSystem/
[37] All providers providing the HIV outpatient pathways must submit data to HARS. The dataset supports commissioning and epidemiology of HIV adult outpatient activity.
[38] See the *Costing glossary* for definitions.

6.2 Unmatched pathology, drugs, devices, blood and radiology data

364. All unmatched pathology, drugs, blood and imaging should follow the process outlined in Standard CP4: Matching costed activities to patients: allocate any remaining unmatched activity to 'unmatched'.

365. For radiology – submit the unmatched imaging cost and activity to the IMAG worksheet in the NCC workbook. Use the TFC from the diagnostic imaging feed, the department IMAGUM, and using the appropriate radiology HRG including plain film. Only diagnostic imaging service (TFC 812) should be used where no TFC is available on the imaging feed.

366. For pathology – submit the unmatched pathology tests to the DAP worksheet in the NCC workbook, with the DAPSUM service code and submit the activity by lab type.

367. For unmatched high-cost drugs, blood and devices – submit the unmatched issues on the HCD worksheet in the NCC workbook, with the relevant service and currency code.

368. For non-high-cost drugs and blood – unmatched issues should be allocated to the relevant service as an overhead.

6.3 Miscellaneous scenarios – excluded TFCs

369. The costs relating to TFC 424 (well baby service) should be reported under TFC 501 (obstetrics service) or TFC 560 (midwifery service). The activity should be excluded.

6.4 Zero cost HRGs in PLICS

370. Zero cost HRGs are clinical events that are counted in the absence of cost because their cost is linked to an unbundled HRG.

371. Activity relating to the same patient episode is linked through the core EC/APC/OP PLICS activity records.

372. The flow of the activity records for these zero cost HRGs enables the demographic information to be taken from HES data, as shown for the examples in Table 8.

Table 8: Zero cost HRGs

HRG	Description	Rationale
PB03Z	Healthy baby	The costs relating to TFC 424 (well baby service) should be reported under TFC 501 (obstetrics service) or TFC 560 (midwifery service). The activity should be excluded.
RD97Z	Diagnostic imaging core HRG	Costs should be reported under the unbundled radiology HRG. RD97Z should be flowed within the relevant OP extract as a count of the clinical event activity.
RN97Z	Nuclear medicine core HRG	Costs should be reported under the unbundled HRG. RN97Z should be flowed within the relevant OP extract as a count of the clinical event activity.

7. Data validation tool for PLICS files

373. You must only use the NHS England and NHS Improvement data validation tool (DVT).

374. Please refer to the release notes if you are unsure if this is the DVT you are using. If you are having problems using this tool, please contact costing@england.nhs.uk and attach your log file and validation report.

375. Before submitting files to NHS Digital, you must pass them through our DVT. The exact validation checks involved will be published on our website.

376. The DVT checks the files are in the correct format for submission, mandatory fields are populated, and valid codes are entered in fields where applicable. The tool produces an output file listing any specification discrepancies that need to be amended before submission.

377. The tool first produces an output file, identifying any specification discrepancies where data quality is outside reasonable parameters. These are classified as:

    - 'submission failure' – errors that must be amended before submission. Only then will the file pass the required mandatory validations to create an XML file ready for submission to NHS Digital
    - 'warning' – for areas where data quality requires review. However, without correction the file will still create an XML file ready for submission.

378. To use the DVT your files need to be in CSV or XML format. If this is not your software's normal submission process, please contact your software provider and NHS England and NHS Improvement costing team as soon as possible to make alternative arrangements.

379. The NCC workbooks we are designing for the 2022 collection will include the existing validations.

380. Errors picked up by the validation checks that would otherwise result in a submission failure are restricted to file structures, field formats, population of mandatory fields and ensuring that valid codes have been used where applicable. Blank fields are accepted for non-mandatory fields.

381. You can find the DVT user guide on our website.

8. Submitting PLICS files

382. The extracted CSV/XML files must be passed through our DVT before being submitted to NHS Digital in the collection window.

383. The DVT converts the CSV files to XML format and will compress each monthly file. Only XML files can be submitted to NHS Digital.

384. File names must comply with the convention set out in the extract specification document; if they do not, your file will fail NHS Digital validation.

385. To separate the data extracts into appropriately sized files, split them into 12 monthly files using:

- discharge date for APC and EC
- attendance date for OP
- issue date or scan date for SI
- day being costed for the SWC
- discharge date for MHPS
- care contact date for MHCC
- care contact date for IAPT
- care contact date for CSCC.

386. For APC and MHPS, an episode or spell that is unfinished at the end of the financial year must be collected as part of the month 12 file.

387. Each trust needs to make a full submission, defined as 12 monthly files per feed for all required activity data and one reconciliation file.

8.1 Submitting data to NHS Digital

388. You must submit your PLICS files to NHS Digital via secure electronic file transfer (SEFT).

389. For this you need to ensure you are set up as a SEFT user.

390. Each organisation needs a SEFT account, and the current allowance is one user per organisation. SEFT-related queries can be sent to seft.team@nhs.net.

391. You should test your SEFT connectivity at least three months before the window opens. More details on SEFT, including the contact details for queries, are on the NHS Digital website here.

392. On uploading your files via SEFT, a green tick indicates successful transfer, not that your files have passed NHS Digital's validations. You receive the latter in an email notification from NHS Digital. Please check your junk mailbox folder if notifications are not received within 15 minutes.

393. Only **XML** files are to be submitted via SEFT to NHS Digital in the collection window, and only when all mandatory validations have been passed in the DVT.

8.2 Submission rules

394. The submission file names must comply with the file naming convention set out in the extract specification; if they do not, your files will fail validation.

395. The submitted files must contain the header message and be populated with data as specified in the specification.

396. Your file will fail validation if any mandatory data items are not populated as defined in the extract specification. Non-mandatory data items will also fail validation if the format of the data item does not match what is defined in the extract specification.

397. The data validation outcome is determined at file level, not record level. A whole file is classified as passed or failed when submitted to NHS Digital.

398. You should review and correct any files that fail validation.

399. If you submit the same file multiple times, NHS Digital will **only** use the **last** good file (ie the latest submitted file to pass validation).

400. Trusts that successfully submit their files early in the submission window may wish to improve their data and make a second submission before the window closes. This will be permitted in 2022 subject to availability of slots.[39]

401. The resubmission window runs from 30 August to 2 September 2022. Trusts may request a resubmission or the NCC team may request a resubmission from trusts where serious data quality issues have been identified.

402. Once you have submitted your files, and they have passed validation, you should not attempt to upload your files again in the collection window unless requested by NHS England and NHS Improvement.

[39] See NCC guidance Volume 1 for details about requesting an additional submission slot.

Annexes

Annex 1: Additional medicine information

Medicines flowchart: to identify the costing treatment of drugs in the National Cost Collection.

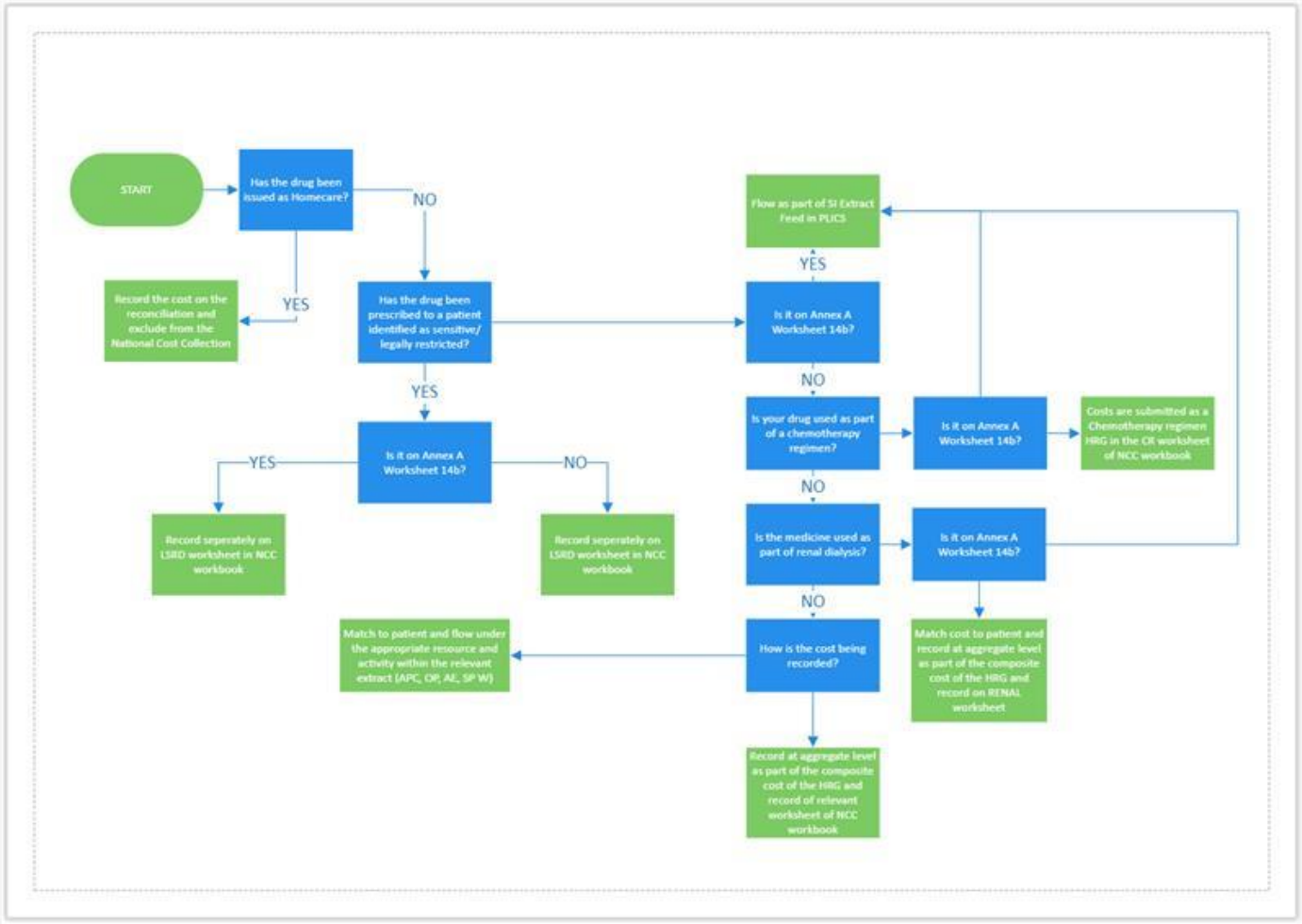


Table 9: Drugs introduced to SI Feed as a result of including specialised commissioning drugs list.

Code	Drug name	Location
PSCD001	3,4 Diaminopyridine	NLRSD - PLICS
PSCD002	Abemaciclib	NLRSD - PLICS
PSCD003	Abiraterone	NLRSD - PLICS
PSCD004	Acalabrutinib	NLRSD - PLICS
PSCD005	Albumin Bound Paclitaxel	NLRSD - PLICS
PSCD006	Alectinib	NLRSD - PLICS
PSCD007	Atezolizumab	NLRSD - PLICS
PSCD008	Autologous & Allogenic Serum Eye Drops	NLRSD - PLICS
PSCD009	Avapritinib	NLRSD - PLICS
PSCD010	Avelumab	NLRSD - PLICS
PSCD011	Axicabtagene Ciloleucel	NLRSD - PLICS
PSCD012	Azathioprine	NLRSD - PLICS
PSCD013	Bendamustine	NLRSD - PLICS
PSCD014	Berotralstat	NLRSD - PLICS
PSCD015	Binimetinib	NLRSD - PLICS
PSCD016	Blinatumomab	NLRSD - PLICS
PSCD017	Brentuximab	NLRSD - PLICS
PSCD018	Brigatinib	NLRSD - PLICS
PSCD019	Cabazitaxel	NLRSD - PLICS
PSCD020	Cabozantinib	NLRSD - PLICS
PSCD021	Carfilzomib	NLRSD - PLICS
PSCD022	Cemiplimab	NLRSD - PLICS
PSCD023	Ceritinib	NLRSD - PLICS
PSCD024	Ciclosporin	NLRSD - PLICS
PSCD025	Cipaglucosidase Alfa	NLRSD - PLICS
PSCD026	Clofarabine	NLRSD - PLICS
PSCD027	Colestilan	NLRSD - PLICS
PSCD028	Cysteamine (Mercaptamine)	NLRSD - PLICS
PSCD029	Dacomitinib	NLRSD - PLICS
PSCD030	Daratumumab	NLRSD - PLICS
PSCD031	Darolutamide	NLRSD - PLICS
PSCD032	Dinutuximab	NLRSD - PLICS
PSCD033	Durvalumab	NLRSD - PLICS
PSCD034	Encorafenib	NLRSD - PLICS
PSCD035	Entrectinib	NLRSD - PLICS
PSCD036	Enzalutamide	NLRSD - PLICS
PSCD037	Eribulin	NLRSD - PLICS
PSCD038	Everolimus (Afinitor®)	NLRSD - PLICS
PSCD039	Gemtuzumab Ozogamicin	NLRSD - PLICS

Code	Drug name	Location
PSCD040	Gilterritinib	NLRSD - PLICS
PSCD041	Glatiramer	NLRSD - PLICS
PSCD042	Granulocyte-Macrophage Colony-Stimulating Factor (Leukine® - Import)	NLRSD - PLICS
PSCD043	Human Coagulation Factor X	NLRSD - PLICS
PSCD044	Ibrutinib	NLRSD - PLICS
PSCD045	Idelalisib	NLRSD - PLICS
PSCD046	Inotuzumab Ozogamicin	NLRSD - PLICS
PSCD047	Ipilimumab	NLRSD - PLICS
PSCD048	Isatuximab	NLRSD - PLICS
PSCD049	Larotrectinib	NLRSD - PLICS
PSCD050	Lenvatinib	NLRSD - PLICS
PSCD051	Leriglitazone	NLRSD - PLICS
PSCD052	Liposomal Cytarabine-Daunorubicin	NLRSD - PLICS
PSCD053	Lonafarnib	NLRSD - PLICS
PSCD054	Lorlatinib	NLRSD - PLICS
PSCD055	Lumasiran	NLRSD - PLICS
PSCD056	Lutetium (177lu) Oxodotreotide	NLRSD - PLICS
PSCD057	Mercaptamine Hcl Viscous Eyedrops	NLRSD - PLICS
PSCD058	Mesenchymal Stem Cells (eg Prochymal®)	NLRSD - PLICS
PSCD059	Midostaurin	NLRSD - PLICS
PSCD060	Mitapivat	NLRSD - PLICS
PSCD061	Mogamulizumab	NLRSD - PLICS
PSCD062	Mycophenolate Mofetil	NLRSD - PLICS
PSCD063	Mycophenolic Acid	NLRSD - PLICS
PSCD064	Nelarabine	NLRSD - PLICS
PSCD065	Neratinib	NLRSD - PLICS
PSCD066	Nintedanib (Vargatef®)	NLRSD - PLICS
PSCD067	Niraparib	NLRSD - PLICS
PSCD068	Nivolumab	NLRSD - PLICS
PSCD069	Obiltoxaximab	NLRSD - PLICS
PSCD070	Obinutuzumab	NLRSD - PLICS
PSCD071	Odevixibat	NLRSD - PLICS
PSCD072	Olaparib	NLRSD - PLICS
PSCD073	Osimertinib	NLRSD - PLICS
PSCD074	Palbociclib	NLRSD - PLICS
PSCD075	Panitumumab	NLRSD - PLICS
PSCD076	Panobinostat	NLRSD - PLICS
PSCD077	Pegcetacoplan	NLRSD - PLICS
PSCD078	Pegylated Liposomal Doxorubicin	NLRSD - PLICS
PSCD079	Pembrolizumab	NLRSD - PLICS
PSCD080	Pemetrexed	NLRSD - PLICS
PSCD081	Pemigatinib	NLRSD - PLICS

Code	Drug name	Location
PSCD082	Peptide Receptor Radionucleotide Therapy	NLRSD - PLICS
PSCD083	Pertuzumab	NLRSD - PLICS
PSCD084	Pixantrone	NLRSD - PLICS
PSCD085	Polatuzumab	NLRSD - PLICS
PSCD086	Protein Kinase Inhibitors	NLRSD - PLICS
PSCD087	Radium-223 Dichloride	NLRSD - PLICS
PSCD088	Ramucirumab	NLRSD - PLICS
PSCD089	Ribociclib	NLRSD - PLICS
PSCD090	Rituximab Iv	NLRSD - PLICS
PSCD091	Rituximab Subcutaneous Formulation	NLRSD - PLICS
PSCD092	Rucaparib	NLRSD - PLICS
PSCD093	Selumetinib	NLRSD - PLICS
PSCD094	Setmelanotide	NLRSD - PLICS
PSCD095	Sodium Thiosulfate	NLRSD - PLICS
PSCD096	Strimvelis	NLRSD - PLICS
PSCD097	Tacrolimus	NLRSD - PLICS
PSCD098	Talimogene Laherparepvec	NLRSD - PLICS
PSCD099	Temozolomide	NLRSD - PLICS
PSCD099	Temozolomide	NLRSD - PLICS
PSCD101	Tezacaftor With Ivacaftor	NLRSD - PLICS
PSCD102	Tisagenlecleucel	NLRSD - PLICS
PSCD103	Tivozanib	NLRSD - PLICS
PSCD104	Trabectedin	NLRSD - PLICS
PSCD105	Trametinib	NLRSD - PLICS
PSCD106	Trenonacog Alpha	NLRSD - PLICS
PSCD107	Treprostinil Sodium	NLRSD - PLICS
PSCD108	Trifluridine-Tipiracil	NLRSD - PLICS
PSCD109	Venetoclax	NLRSD - PLICS
PSCD110	Vismodegib	NLRSD - PLICS
PSCD111	Von Willebrand Factor, Recombinant	NLRSD - PLICS
PSCD112	Zanubrutinib	NLRSD - PLICS
HICD0541	Abacavir + Lamivudine + Dolutegravir (Triumeq®)	LRSD - NCC Workbook
HICD0542	Abacavir + Lamivudine	LRSD - NCC Workbook
HICD0543	Atazanavir + Cobicistat (Evotaz®)	LRSD - NCC Workbook
HICD0544	Bictecravir (In Comination With Emtricitabine And Tenofovir Alafenamide)	LRSD - NCC Workbook
HICD0545	Bulevirtide	LRSD - NCC Workbook
HICD0546	Darunavir + Cobicistat	LRSD - NCC Workbook
HICD0547	Emtricitabine +Tenofovir + Darunavir + Cobicistat	LRSD - NCC Workbook

Code	Drug name	Location
HICD0548	Emtricitabine +Tenofovir +Elvitegravir + Cobicistat	LRSD - NCC Workbook
HICD0549	Emtricitabine +Tenofovir	LRSD - NCC Workbook
HICD0550	Emtricitabine + Rilpivirine + Tenofovir Alafenamide	LRSD - NCC Workbook
HICD0551	Lenacapavir	LRSD - NCC Workbook
HICD0552	Lopinavir + Ritonavir	LRSD - NCC Workbook
HICD0553	Ombitasvir/Paritaprevir/Riton Avir + Dasabuvir + Ribavirin	LRSD - NCC Workbook
HICD0554	Sofosbuvir/Ledipasvir +/- Ribavirin	LRSD - NCC Workbook
HICD0555	Sofosbuvir/Peginterferon+Ribavirin	LRSD - NCC Workbook
HICD0556	Sofosbuvir/Velpatasvir	LRSD - NCC Workbook
HICD0557	Tenofovir Alafenamide	LRSD - NCC Workbook
HICD0558	Tenofovir Alafenamide + Cobicistat + Elvitegravir + Emtricitabine	LRSD - NCC Workbook
HICD0559	Tenofovir Disoproxil + Cobicistat + Elvitegravir +Emtricitabine	LRSD - NCC Workbook
HICD0560	Tenofovir + Emtricitabine + Efavirenz	LRSD - NCC Workbook
HICD0561	Tenofovir + Emtricitabine + Rilpivirine	LRSD - NCC Workbook
HICD0562	Zidovudine + Lamivudine	LRSD - NCC Workbook
HICD0563	Zidovudine + Lamivudine + Abacavir	LRSD - NCC Workbook

Annex 2: PLEMI: examples of patient journey

Example 1: Timeline layout

Example Patient Synopsis:

Patient is admitted straight to Critical Care where they spend 5 days with Heart and Lung problems. On stabilising they are admitted to a Cardiac Ward for another 7 days. Whilst on the ward they contract Sepsis and are re-admitted to Critical Care for 3 days followed by another 8 days on a specialist Sepsis ward.

Date	2nd May	3rd May	3rd May	4th May	5th May	6th May	7th - 13th May	09th May
PLEMI	ABC12345621	ABC12345621	ABC12345621	ABC12345621	ABC12345621	ABC12345621	ABC12345621	ABC12345621
POD	ACC	ACC	ACC	ACC	ACC	ACC	NEL	NEL
Extract Spec.	SWC	SWC	SI	SWC	SWC	SWC	APC	SI
Time	1 Day	1 Day		1 Day	1 Day	1 Day	7 Days	
HRG	XC05Z - Adult Critical Care, 2 Organs Supported	XC05Z - Adult Critical Care, 2 Organs Supported	PHCD0001 - Drug A	XC05Z - Adult Critical Care, 2 Organs Supported	XC05Z - Adult Critical Care, 2 Organs Supported	XC05Z - Adult Critical Care, 2 Organs Supported	EB03C - Heart Failure or Shock, with CC Score 8-10	PHCD0002 - Drug B
Service Code/Setting	CCU06 - Cardiac surgical adult patients predominate	CCU06 - Cardiac surgical adult patients predominate		CCU06 - Cardiac surgical adult patients predominate	CCU06 - Cardiac surgical adult patients predominate	CCU06 - Cardiac surgical adult patients predominate	TFC320 - Cardiology	
Additional Info	2 Organs supported	2 Organs supported		2 Organs supported	1 Organs supported	1 Organs supported	N/A	
Cost (£)	2000	1800	600	1600	1400	1200	2,500	300
Cost in POD (£)	8,600						2,800	

Date	14th May	15th May	15th May	16th May	17th - 24th May	20th May	21st May	22nd May
PLEMI	ABC12345621	ABC12345621	ABC12345621	ABC12345621	ABC12345621	ABC12345621	ABC12345621	ABC12345621
POD	ACC	ACC	ACC	ACC	NEL	NEL	NEL	NEL
Extract Spec.	SWC	SWC	SI	SWC	APC	SI	SI	SI
Time	1 Day	1 Day		1 Day	8 Days			
HRG	XC04Z - Adult Critical Care, 3 Organs Supported	XC04Z - Adult Critical Care, 3 Organs Supported	PHCD0003 - Drug C	XC04Z - Adult Critical Care, 3 Organs Supported	WJ06B - Sepsis with Multiple Interventions, with CC Score 5-8	PHCD0004 - Drug D	PHCD0005 - Drug E	PHCD0006 - Drug F
Service Code/Setting	CCU01 - Non-specific, general adult critical care patients predominate	CCU01 - Non-specific, general adult critical care patients predominate		CCU01 - Non-specific, general adult critical care patients predominate	TFC430 - Geriatric Medicine			
Additional Info	3 Organs Supported	2 Organs Supported		1 Organs Supported	N/A	N/A	N/A	N/A
Cost (£)	3,000	2,000	500	1,000	7,000	500	400	600
Cost in POD (£)	6500				8,500			

Total Cost of Stay	
Cost in SWC (2 periods)	£14,000
Cost in APC (2 periods)	£9,500
Cost of High Cost Drugs (SI)	£2,900
	£26,400

Annex 2: PLEMI: examples of patient journey (continued)

Example 2: Feed type layout

		Date	01-May	02-May	03-May	04-May	05-May	06-May	07-May	08-May	09-May	10-May	11-May	12-May	13-May	14-May	15-May	16-May	17-May	18-May	19-May	20-May	21-May	22-May	23-May	24-May
	Support	PLEMI	ABC12345620		ABC12345620						ABC12345620						ABC12345620					ABC12345620				
		POD	A&E		ACC						NEL						ACC					NEL				
		Extract Spec.	SI		SI						SI						SI					SI				
		HRG	PHCD0001 - Blood A		PHCD0002 - Drug B						PHCD0003 - Drug C						PHCD0004 - Drug D					PHCD0005 - Drug E				
		Cost (£)	£400		£600						£300						£500					£500				
	ACC	PLEMI		ABC12345620	ABC12345620	ABC12345620	ABC12345620	ABC12345620								ABC12345620	ABC12345620	ABC12345620							
		POD		ACC	ACC	ACC	ACC	ACC								ACC	ACC	ACC							
		Extract Spec.		SWC	SWC	SWC	SWC	SWC								SWC	SWC	SWC							
		Time		1 Day	1 Day	1 Day	1 Day	1 Day								1 Day	1 Day	1 Day							
		HRG		XC05Z	XC05Z	XC05Z	XC05Z	XC05Z								XC04Z	XC04Z	XC04Z							
		Service Code/Setting		CCU06	CCU06	CCU06	CCU06	CCU06								CCU01	CCU01	CCU01							
		Additional Info		2 Organs supp	2 Organs supp	2 Organs supp	1 Organs supp	1 Organs supported								3 Organs Supp	2 Organs Supp	1 Organs Supported							
		Spell Number		IP12345	IP12345	IP12345	IP12345	IP12345								IP12345	IP12345	IP12345							
		Cost (£)		£2,000	£1,800	£1,600	£1,400	£1,200								£3,000	£2,000	£1,000							
		Cost in POD (£)						**£8,600**										**£6,500**							
	APC	PLEMI	ABC12345620																			ABC12345620				
		POD	NEL																			NEL				
		Extract Spec.	APC																			APC				
		Time	7 Days (16 midnight counts - 8 occupied bed days)																			8 Days (7 midnight counts)				
		HRG	EB03C - Heart Failure or Shock, with CC Score 8-10																			WJ06B - Sepsis with Multiple Interventions, with CC Score 5-8				
		Service Code/Setting	TFC320 - Cardiology																			TFC430 - Geriatric Medicine				
		Spell Number	IP12345																			IP12345				
		Cost (£)																	£2,500			£7,000				
		Cost in POD (£)																	**£2,800**			**£7,500**				

Annex 3: Patient-level costing collection activity count

Patient scenario: A patient attends an NHS provider via emergency care. They are triaged and require diagnostic testing for diagnosis of the problem. The patient is then transferred from emergency care onto a ward where they receive ward care. The patient then requires an operation in theatres to fit a prosthetic. Once the patient is recovered, they are discharged and continue to receive ongoing community care in their home until they are rehabilitated. The following examples show the activity counts for this patient scenario for each type of activity, at each stage of the patient care pathway.

	COLLECTION			PRE-COLLECTION		COLLECTION
	Collection Activity ID	Collection Activity Description	ActCnt Description for PLICS Collection ID	Example Allocation Driver Description (Costing Resources into Costing Activities)	Count for Cost Allocation	Count for PLICS Feed
EXAMPLE 1 – OTHER DIAGNOSTIC TESTING	ODT001	Other diagnostic testing	Number of tests	Duration of photography contact in minutes	00:15	1
				Fixed cost	£40	
				Relative weight value	0.15%	
	ODT002	Screening	Number of tests	Relative weight value	0.69%	2
				Relative weight value	2/5,000	
	ODT003	Respiratory investigations	Number of tests	Relative weight value for type of investigation	6/10,000	1
	ODT004	Other cardiac non-invasive investigations	Number of tests	Duration of contact or attendance in hours and minutes	01:00	10
				Relative weight value for type of investigation	1%	
	ODT005	Neurophysiology investigations	Number of tests	Relative weight value for type of investigation	2%	1
	ODT006	Echocardiogram (ECHO)	Number of tests	Relative weight value for type of investigation	5/10	1
	ODT007	Audiology assessments	Number of tests	Duration of contact or attendance in hours and minutes	03:00	5
	ODT008	Urodynamic investigations	Number of tests	Relative weight value for type of investigation	4/7000	1

	COLLECTION			PRE-COLLECTION		COLLECTION
	Collection Activity ID	Collection Activity Description	ActCnt Description for PLICS Collection ID	Example Allocation Driver Description (Costing Resources into Costing Activities)	Count for Cost Allocation	Count for PLICS Feed
EXAMPLE 2 – WARD CARE	WRD001	Ward care	Ward stay in hours	Duration on ward in hours	01:30	1.5
				Relative weight value or fixed cost	£2.50	
	SLA107	Critical care – ward care	Critical care ward stay in hours	Duration of contact or attendance in minutes	00:45	0.75
				Relative weight value or fixed cost	£4.50	
	MHA295	MH adult ward care – medium secure	MH inpatients stay in hours	Duration of contact or attendance in minutes	00:30	0.5

	COLLECTION			PRE-COLLECTION		COLLECTION
	Collection Activity ID	Collection Activity Description	ActCnt Description for PLICS Collection ID	Example Allocation Driver Description (Costing Resources into Costing Activities)	Count for Cost Allocation	Count for PLICS Feed
EXAMPLE 3 – THEATRES	THR001	Anaesthesia	Time into anaesthetic to time out of recovery by episode in minutes	Anaesthesia and theatre duration in hours and minutes	02:30	02:30
				Relative weight value or fixed cost	£4.50	
	THR002	Surgical care	Procedure start to procedure end in minutes	Anaesthesia and theatre duration in hours and minutes	02:30	01:00
				Procedure duration in hours and minutes	01:00	
				Recovery duration in hours and minutes	00:30	
				Actual cost as a weighting	£30.00	
				Duration in theatre in hours and minutes when perfusion performed	00:05	
				Relative weight value based on actual cost of consumables	£2.50	
	THR003	Prosthesis, implant or device insertion	Number of issues	Actual cost as a weighting	£500	1

	COLLECTION			PRE-COLLECTION		COLLECTION
	Collection Activity ID	Collection Activity Description	ActCnt Description for PLICS Collection ID	Example Allocation Driver Description (Costing Resources into Costing Activities)	Count for Cost Allocation	Count for PLICS Feed
EXAMPLE 4 – COMMUNITY CONTACT	COM001	Community care	Number of contacts (Duration of contact is 45 minutes but this is 1 contact for the activity count.)	Duration of contact in minutes in the patient's home	00:45	1

Annex 4: MHPS spell trim example

MHPS Example - Why start and end dates must be trimmed.							
Patient Scenario 1:				Patient Scenario 2:			
Mr X is admitted to hospital for a long term psychaitric stay.				Mrs Y is admitted to hospital for a short term psychaitric stay.			
Mr X is admitted on 02.11.2019				Mrs Y is admitted on 02.08.2020			
Mr X is discharged on 15.06.2021				Mrs Y is discharged on 15.08.2020			
Total months in hospital	20			Total months in hospital	1		
Total days in hopsital for whole spell	591			Total days in hopsital for whole spell	14		
Days in hopsital for FY 19/20	150			Days in hopsital for FY 19/20	0		
Days in hopsital for FY 20/21	365			Days in hopsital for FY 20/21	14		
Days in hopsital for FY 21/22	76			Days in hopsital for FY 21/22	0		
Ward Costs for 19/20	£3,000						
Ward Costs for 20/21	£30,300						
Ward Costs for 21/22	£4,000						
Total	£37,300						
Calculations for FY 20/21 and CY 2021 without trim (assuming ward stay file is ran until end of June 21)				**Calculations for FY 20/21 and CY 2021 with trim (assuming ward stay file is ran until end of June 21)**			
Occupied Beddays (OBD)	605			Occupied Beddays (OBD)	379		
Total Cost	£30,300			Total Cost	£30,300		
Av. Cost per OBD	£50			Av. Cost per OBD	£80		
Mr X Cost for 2021	£29,599			Mr X Cost for 2021	£29,181		
Mrs Y Cost for 2021	£701			Mrs Y Cost for 2021	£1,119		
Total Cost	£30,300			Total Cost	£30,300		
Calculations for FY 21/22 and CY 2022 without trim (assuming ward stay file is ran until end of June 21)				**Calculations for FY 21/22 and CY 2022 without trim (assuming ward stay file is ran until end of June 21)**			
Occupied Beddays (OBD)	591			Occupied Beddays (OBD)	76		
Total Cost	£4,000			Total Cost	£4,000		
Av. Cost per OBD	£7			Av. Cost per OBD	£53		
Mr X Cost for 2021	£4,000			Mr X Cost for 2021	£4,000		
Mrs Y Cost for 2021	£0			Mrs Y Cost for 2021	£0		
Total Cost	£4,000			Total Cost	£4,000		
When spells knitted together costs for MR X are overstated if not trimmed	£33,599						
When spells knitted together costs for MR X are not overstated if not trimmed	£33,181						
Overstatement of costs if not trimmed	£418						

Annex 5: Trusts providing a dedicated PICU service, and those that also provide paediatric ECMO and ECLS

Service	Code	Name
ECMO and ECLS service	RBS	Alder Hey Children's NHS Foundation Trust
	RQ3	Birmingham Women's and Children's NHS Foundation Trust
	RP4	Great Ormond Street Hospital for Children NHS Foundation Trust
	RJ1	Guy's and St Thomas' NHS Foundation Trust[40]
	RR8	Leeds Teaching Hospitals NHS Trust
	RT3	Royal Brompton and Harefield NHS Foundation Trust
	RTD	The Newcastle upon Tyne Hospitals NHS Foundation Trust
	RHM	University Hospital Southampton NHS Foundation Trust
	RA7	University Hospitals Bristol and Weston NHS Foundation Trust
	RWE	University Hospitals of Leicester NHS Trust
Dedicated PICU	RBS	Alder Hey Children's NHS Foundation Trust
	R1H	Barts Health NHS Trust
	RQ3	Birmingham Women's and Children's NHS Foundation Trust
	RGT	Cambridge University Hospitals NHS Foundation Trust
	R0A	Manchester University NHS Foundation Trust
	RP4	Great Ormond Street Hospital for Children NHS Foundation Trust
	RJ1	Guy's and St Thomas' NHS Foundation Trust
	RYJ	Imperial College Healthcare NHS Trust
	RJZ	King's College Hospital NHS Foundation Trust
	RR8	Leeds Teaching Hospitals NHS Trust
	RX1	Nottingham University Hospitals NHS Trust
	RTH	Oxford University Hospitals NHS Foundation Trust
	RT3	Royal Brompton and Harefield NHS Foundation Trust
	RCU	Sheffield Children's NHS Foundation Trust
	RJ7	St George's University Hospitals NHS Foundation Trust
	RTD	The Newcastle upon Tyne Hospitals NHS Foundation Trust
	RHM	University Hospital Southampton NHS Foundation Trust
	RJE	University Hospitals of North Midlands NHS Trust
	RA7	University Hospitals Bristol and Weston NHS Foundation Trust
	RWE	University Hospitals of Leicester NHS Trust

[40] Guys and St Thomas' NHS Foundation Trust merged with Royal Brompton and Harefield NHS Foundation Trust on 1 February 2021 and from this date is known as RJ1 Guys and St Thomas' NHS Foundation Trust.

Annex 6: Adult critical care – patient journey scenarios

Scenario A - Patient admitted to ACC unit for 3 days with no breaks - Same HRG - reducung number of organs supported					
Field Name	XML Field Name	Day 1	Day 2	Day 3	
Unbundled Activity Type	UnAct	ACC	ACC	ACC	
Critical Care Local Identifier	CCLI	ABC12345	ABC12345	ABC12345	
Critical Care Unit Function	CCUF	06	06	06	
Unbundled Activity Date	UnActDate	2020-01-08	2020-01-09	2020-01-10	
Number of organs systems supported	OrgsSupp	3	2	1	
Unbundled HRG	UnHRG	XC04Z	XC04Z	XC04Z	
Cost of UBACTDATE		£1,000	£750	£500	

Scenario B - Patient In ACC up to 09:00 – then discharged to ward – re-admitted to ACC on same day at 21:00 and stays there for an additional day					
		Day 1			Day 2
Field Name	XML Field Name	09:00		21:00	
Unbundled Activity Type	UnAct	ACC		ACC	ACC
Critical Care Local Identifier	CCLI	ABC23456		CDE23456	CDE23456
Critical Care Unit Function	CCUF	05	Time during the day spent in a non-ACC ward	05	05
Unbundled Activity Date	UnActDate	2020-01-08		2020-01-08	2020-01-09
Number of organs systems supported	OrgsSupp	1		1	1
Unbundled HRG	UnHRG	XC06Z		XC06Z	XC06Z
Cost of UBACTDATE		£250		£500	£1,000

Scenario C - Patient in a renal ACC unit and moved to a Cardiac ACC on the same date – Then stays for two further days					
Field Name	XML Field Name	Day 1	Day 1	Day2	Day 3
Unbundled Activity Type	UnAct	ACC	ACC	ACC	ACC
Critical Care Local Identifier	CCLI	ABC34567	CDE34567	CDE34567	CDE34567
Critical Care Unit Function	CCUF	10	06	06	06
Unbundled Activity Date	UnActDate	2020-01-08	2020-01-08	2020-01-09	2020-01-10
Number of organs systems supported	OrgsSupp	3	2	1	1
Unbundled HRG	UnHRG	XC04Z	XC05Z	XC05Z	XC05Z
Cost of UBACTDATE		£1,000	£750	£500	£250

Scenario D - Patient receiving ACC on a normal ward as no space in ACC - then moved to a Liver ACC on the same date – Then stays for a further 2 days					
Field Name	XML Field Name	Day 1	Day 1	Day2	Day 3
Unbundled Activity Type	UnAct	ACC	ACC	ACC	ACC
Critical Care Local Identifier	CCLI	ABC45678	CDE45678	CDE45678	CDE45678
Critical Care Unit Function	CCUF	90	11	11	11
Unbundled Activity Date	UnActDate	2020-01-08	2020-01-08	2020-01-09	2020-01-10
Number of organs supported	OrgsSupp	3	2	1	1
Unbundled HRG	UnHRG	XC04Z	XC05Z	XC05Z	XC05Z
Cost of UBACTDATE		£1,000	£750	£500	£250

To note - we're not proposing to collect the times - this is purely for illustrative purposes

Annex 7: Expected relative cost weightings for PCC HRGs, and an example paediatric critical care calculation

HRG	Description	Relative cost weightings
XB01Z	Paediatric Critical Care, Advanced Critical Care 5	3.0
XB02Z	Paediatric Critical Care, Advanced Critical Care 4	2.0
XB03Z	Paediatric Critical Care, Advanced Critical Care 3	1.50
XB04Z	Paediatric Critical Care, Advanced Critical Care 2	1.25
XB05Z	Paediatric Critical Care, Advanced Critical Care 1	1.0
XB06Z	Paediatric Critical Care, Intermediate Critical Care	0.75
XB07Z	Paediatric Critical Care, Basic Critical Care	0.60
XB09Z	Paediatric Critical Care, Enhanced Care	0.40

	A	B	C = A x B	D = C/ Sum C x £10 million	E = D/B

HRG	Paediatric critical care description	Cost ratio	Bed days	Weighted bed days	Total cost of weighted bed days (£)	Average unit cost per bed day (£)
XB01Z	Advanced critical care 5	**3.06**	100	306	546,233	5,462
XB02Z	Advanced critical care 4	**2.12**	150	318	567,654	3,784
XB03Z	Advanced critical care 3	**1.40**	500	700	1,249,554	2,499
XB04Z	Advanced critical care 2	**1.22**	1,000	1,220	2,177,794	2,178
XB05Z	Advanced critical care 1	**1.00**	2,000	2,000	3,570,154	1,785
XB06Z	Intermediate critical care	**0.91**	750	683	1,219,207	1,626
XB07Z	Basic critical care	**0.75**	500	375	669,404	1,339
	Total		**5,000**	**5,602**	**10,000,000**	

Annex 8: Legally restricted sensitive data

An Excel version of the LRSD tables can be found on our Open Learning platform.

Table 10: Specialty-level exclusions

Specialty	Description
HIV	All HIV outpatient attendances
FPC	Activity that takes place in a sexual and reproductive health clinic[1] is defined by code FPC in reference costs and may not be identifiable in PLICS data.

Table 11: HRG-level exclusions

HRG	Description
MC07Z	Intrauterine insemination with superovulation
MC08Z	Intrauterine insemination with superovulation, with donor
MC09Z	Intrauterine insemination without superovulation
MC10Z	Intrauterine insemination without superovulation, with donor
MC11Z	Implantation of embryo
MC12Z	Oocyte recovery
MC13Z	Donor oocyte recovery
MC14Z	Oocyte recovery with intracytoplasmic sperm injection
MC15Z	Oocyte recovery with pre-implantation genetic diagnosis
MC20Z	Surgical extraction of sperm
MC21Z	Collection of sperm
WJ10A	HIV disease with multiple interventions
WJ10B	HIV disease with single intervention, with CC score 5+

HRG	Description
WJ10C	HIV disease with single intervention, with CC score 0–4
WJ10D	HIV disease without interventions, with CC score 5+
WJ10E	HIV disease without interventions, with CC score 2–4
WJ10F	HIV disease without Interventions, with CC score 0–1
WJ04Z	Genito-urinary medicine (GUM) infections
XD38Z*	Antiretroviral drugs, Band 1

Table 12: Procedure-level exclusions

OPCS code	Description
N341	Fertility investigation of male NEC
N342	Collection of sperm NEC
N343	Male colposcopy
N344	Microsurgical epididymal sperm aspiration
N345	Percutaneous epididymal sperm aspiration
N346	Testicular sperm extraction
Q131	Transfer of embryo to uterus NEC
Q132	Intracervical artificial insemination
Q133	Intrauterine artificial insemination
Q134	Intrauterine insemination with superovulation using partner sperm
Q135	Intrauterine insemination with superovulation using donor sperm
Q136	Intrauterine insemination without superovulation using partner sperm

OPCS code	Description
Q137	Intrauterine insemination without superovulation using donor sperm
Q138	Other specified introduction of gametes into uterine cavity
Q139	Unspecified introduction of gametes into uterine cavity
Q211	Transmyometrial transfer of embryo to uterus
Q218	Other specified other introduction of gametes into uterine cavity
Q219	Unspecified other introduction of gametes into uterine cavity
Q382	Endoscopic injection into fallopian tube
Q383	Endoscopic intrafallopian transfer of gametes
Q481	Endoscopic transurethral ultrasound directed oocyte recovery
Q482	Endoscopic trans vesical oocyte recovery
Q483	Laparoscopic oocyte recovery
Q484	Transvaginal oocyte recovery
Q488	Other specified oocyte recovery
Q489	Unspecified oocyte recovery
Q561	Fertility investigation of female NEC
Q562	Fertiloscopy
U321	Human immunodeficiency virus blood test
X866	Antiretroviral drugs Band 1
X151	Combined operations for transformation from male to female
X152	Combined operations for transformation from female to male
X154	Construction of scrotum

OPCS code	Description
X158	Other specified operations for sexual transformation
X159	Unspecified operations for sexual transformation
Y961	In vitro fertilisation with donor sperm
Y962	In vitro fertilisation with donor eggs
Y963	In vitro fertilisation with intracytoplasmic sperm injection
Y964	In vitro fertilisation with intracytoplasmic sperm injection and donor egg
Y965	In vitro fertilisation with pre-implantation for genetic diagnosis
Y966	In vitro fertilisation with surrogacy
Y968	Other specified in vitro fertilisation
Y969	Unspecified in vitro fertilisation

Table 13: Diagnosis-level exclusions

ICD10 code	Description
A500	Early congenital syphilis, symptomatic
A501	Early congenital syphilis, latent
A502	Early congenital syphilis, unspecified
A503	Late congenital syphilitic oculopathy
A504	Late congenital neurosyphilis [juvenile neurosyphilis]
A505	Other late congenital syphilis, symptomatic
A506	Late congenital syphilis, latent
A507	Late congenital syphilis, unspecified

ICD10 code	Description
A509	Congenital syphilis, unspecified
A510	Primary genital syphilis
A511	Primary anal syphilis
A512	Primary syphilis of other sites
A513	Secondary syphilis of skin and mucous membranes
A514	Other secondary syphilis
A515	Early syphilis, latent
A519	Early syphilis, unspecified
A520	Cardiovascular syphilis
A521	Symptomatic neurosyphilis
A522	Asymptomatic neurosyphilis
A523	Neurosyphilis, unspecified
A527	Other symptomatic late syphilis
A528	Late syphilis, latent
A529	Late syphilis, unspecified
A530	Latent syphilis, unspecified as early or late
A539	Syphilis, unspecified
A540	Gonococcal infection of lower genitourinary tract without periurethral or accessory gland abscess
A541	Gonococcal infection of lower genitourinary tract with periurethral and accessory gland abscess
A542	Gonococcal pelviperitonitis and other gonococcal genitourinary infections
A543	Gonococcal infection of eye

ICD10 code	Description
A544	Gonococcal infection of musculoskeletal system
A545	Gonococcal pharyngitis
A546	Gonococcal infection of anus and rectum
A548	Other gonococcal infections
A549	Gonococcal infection, unspecified
A55X	Chlamydial lymphogranuloma (venereum)
A560	Chlamydial infection of lower genitourinary tract
A561	Chlamydial infection of pelviperitoneum and other genitourinary organs
A562	Chlamydial infection of genitourinary tract, unspecified
A563	Chlamydial infection of anus and rectum
A564	Chlamydial infection of pharynx
A568	Sexually transmitted chlamydial infection of other sites
A57X	Chancroid
A58X	Granuloma inguinale
A590	Urogenital trichomoniasis
A600	Herpes viral infection of genitalia and urogenital tract
A601	Herpes viral infection of perianal skin and rectum
A609	Anogenital herpes viral infection, unspecified
A630	Anogenital (venereal) warts
A638	Other specified predominantly sexually transmitted diseases
A64X	Unspecified sexually transmitted disease

ICD10 code	Description
A65X	Non-venereal syphilis
A740	Chlamydial conjunctivitis
A749	Chlamydial infection, unspecified
B171	Acute hepatitis C
B200	HIV disease resulting in mycobacterial infection
B201	HIV disease resulting in other bacterial infections
B202	HIV disease resulting in cytomegaloviral disease
B203	HIV disease resulting in other viral infections
B204	HIV disease resulting in candidiasis
B205	HIV disease resulting in other mycoses
B206	HIV disease resulting in Pneumocystis jirovecii pneumonia
B207	HIV disease resulting in multiple infections
B208	HIV disease resulting in other infectious and parasitic diseases
B209	HIV disease resulting in unspecified infectious or parasitic disease
B210	HIV disease resulting in Kaposi sarcoma
B211	HIV disease resulting in Burkitt lymphoma
B212	HIV disease resulting in other types of non-Hodgkin lymphoma
B213	HIV disease resulting in other malignant neoplasms of lymphoid, haematopoietic and related tissue
B217	HIV disease resulting in multiple malignant neoplasms
B218	HIV disease resulting in other malignant neoplasms

ICD10 code	Description
B219	HIV disease resulting in unspecified malignant neoplasm
B220	HIV disease resulting in encephalopathy
B221	HIV disease resulting in lymphoid interstitial pneumonitis
B222	HIV disease resulting in wasting syndrome
B227	HIV disease resulting in multiple diseases classified elsewhere
B230	Acute HIV infection syndrome
B231	HIV disease resulting in (persistent) generalised lymphadenopathy
B232	HIV disease resulting in haematological and immunological abnormalities, not elsewhere classified
B238	HIV disease resulting in other specified conditions
B24X	Unspecified human immunodeficiency virus (HIV) disease
F640	Transsexualism
F641	Dual-role transvestism
F642	Gender identity disorder of childhood
F648	Other gender identity disorders
F649	Gender identity disorder, unspecified
F651	Fetishistic transvestism
F656	Multiple disorders of sexual preference
F660	Sexual maturation disorder
F661	Egodystonic sexual orientation
F662	Sexual relationship disorder
F668	Other psychosexual development disorders

ICD10 code	Description
F669	Psychosexual development disorder, unspecified
N46X	Male infertility
N970	Female infertility associated with anovulation
N971	Female infertility of tubal origin
N972	Female infertility of uterine origin
N973	Female infertility of cervical origin
N974	Female infertility associated with male factors
N978	Female infertility of other origin
N979	Female infertility, unspecified
N980	Infection associated with artificial insemination
O981	Syphilis complicating pregnancy, childbirth and the puerperium
O982	Gonorrhoea complicating pregnancy, childbirth and the puerperium
O983	Other infections with a predominantly sexual mode of transmission complicating pregnancy, childbirth and the puerperium
O987	Human immunodeficiency virus (HIV) disease complicating pregnancy, childbirth and the puerperium
R75X	Laboratory evidence of human immunodeficiency virus (HIV)
R762	False-positive serological test for syphilis
Z113	Special screening examination for infections with a predominantly sexual mode of transmission
Z114	Special screening examination for human immunodeficiency virus (HIV)
Z202	Contact with and exposure to infections with a predominantly sexual mode of transmission

ICD10 code	Description
Z206	Contact with and exposure to human immunodeficiency virus (HIV)
Z21X	Asymptomatic human immunodeficiency virus (HIV) infection status
Z224	Carrier of infections with a predominantly sexual mode of transmission
Z310	Tuboplasty or vasoplasty after previous sterilization
Z311	Artificial insemination
Z312	In vitro fertilization
Z313	Other assisted fertilization methods
Z314	Procreative investigation and testing
Z315	Genetic counselling
Z316	General counselling and advice on procreation
Z318	Other procreative management
Z319	Procreative management, unspecified
Z350	Supervision of pregnancy with history of infertility
Z717	Human immunodeficiency virus (HIV) counselling
Z830	Family history of human immunodeficiency virus (HIV) disease

Annex 9: PLICS to activity dataset matching for financial year 2021/22 data (NHS Digital)

This annex provides information about the PLICS feed types which are matched to national activity datasets and information about key data items in those feed types, used for matching processes. This information provided by NHS Digital, is intended to support further understanding of the matching processes (at NHS Digital) and through that, improve the quality and use of the PLICS data submitted.

APC, EC and OP PLICS feed types

The data for the PLICS Feed types for APC, EC and OP is matched to HES (Hospital Episode Statistics) for the same financial year (CDS V6.2).

Key data items used for matching PLICS data for APC, EC and OP to HES are:

- Organisation Identifier (code of provider)
- CDS Unique Identifier.

Note: If any data for the APC, EC and OP feed types fails to match on these key data items in the first instance, then fields other than CDS Unique Identifier are used to attempt to match the record to HES (including for example the fields NHS number, postcode and date of birth).

MHPS and MHCC PLICS feed types

The data for the PLICS feed types of MHPS and MHCC is matched to MHSDS (Mental Health Services Dataset) for the same financial year (V4.1 and V5.0). There are 3 key data items for each PLICS Feed type that are vital for matching PLICS mental health data to MHSDS data for the same financial year. These are:

- Organisation Identifier (Code of provider) (MHPS and MHCC)
- Service Request Identifier and Hospital Provider Spell Identifier (for MHPS)
- Service Request Identifier and Care Contact Identifier (for MHCC)

IAPT PLICS feed type

The data for the PLICS Feed Type of IAPT is matched to IAPT (Improving Access to Psychological Therapies Data Set) for the same financial year (V2.0). There are 2 key data items that are vital for matching PLICS IAPT data to IAPT, which are:

- Organisation Identifier (Code of provider)
- Care Contact Identifier.

CSCC PLICS feed type

The data for the PLICS Feed Type of CSCC is matched to CSDS (Community Services Data Set) for the same financial year (V1.5). There are two key data items that are vital for matching PLICS Community Care Contacts data to CSDS, which are:

- Organisation Identifier (code of provider)
- Care Contact Identifier.

Additional guidance for submitting key data items

- •When submitting PLICS data, it is important trusts submit the above data items using the exact SAME values and in the SAME format as submitted in the corresponding national activity dataset for the data items listed above.
- Trusts should ensure the accuracy of these key data items to ensure good matching rates of their PLICS data to the corresponding national activity dataset.
- Failure to adhere to the above principle may result in your PLICS data being reported as not matched (when attempts are made to link to the corresponding national activity dataset). For example, if a key data item contained special characters in the national submission of activity data (ie submitted MHSDS records contained values prefixed with a colon (A:123),

but the PLICS data is submitted without a colon (A123), then this will result in a non-match.

- Trusts should also ensure the values are not truncated or reformatted for any of the above key data items.

The above reflects the current implementation and design of PLICS to activity data matching logic for FY21/22 data. This may change over time, for example as PLICS datasets change or requirements for use of the data change.

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