2020 National Cost Collection guidance

Volume 5i: National Cost Collection – mental health

September 2020

Contents

1. Introduction

1. This document is one of the seven volumes of the National Cost Collection (NCC) guidance for the financial year 2019/20 which is being published in volumes 1-7.

2. You should have read *Volume 1: Overview* before reading this document.

3. You should also read *Volume 2: National Cost Collection reconciliation and exclusions*.

4. You should also read *Volume 7: Data submission*.

5. You should read the mental health extract specification in conjunction with this document.

6. If you are a provider of improving access to psychological therapies (IAPT) you must also read Volume 5ii to ensure you can complete your full mandated submission.

7. As the financial year 2019/20 is the first year of mandated PLICS for the mental health sector, NHS England and NHS Improvement facilitated a collection of limited change to enable those providers that have not participated in a voluntary collection the best opportunity of success by working from a stable foundation of guidance and collection.

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

1.1 Mental health collection overview

9. This section provides an overview of the NCC which will be submitted in January 2021.

10. The PLICS extracts that should be reported at patient level for the collection year 1 April 2019 to 31 March 2020 are:

[1] https://improvement.nhs.uk/resources/approved-costing-guidance-2020/

- MHPS (mental health provider spells) – complete and incomplete spells
- MHCC (mental healthcare contacts) – non-admitted patient care contacts.

11. In addition, we have introduced mental health learning disabilities services into the existing PLICS extracts for the FY2019-20 collection.

1.2 Reasons for changes to FY2019-20 National Cost Collection

12. The aim of the 2020 collection is 'minimum change' to give mental health trusts the best opportunity of success in their first mandated PLICS collection. We have only made changes to address the following:
    - introduction of ANANA codes by NHS Digital
    - serious data quality issues identified during pilot and voluntary collection.

13. If you are concerned about collecting the new fields, please email costing@improvement.nhs.uk citing 'DC – new collection fields' in the subject field.

1.3 Main changes for 2020

14. Table 1 highlights the main changes to how costing data will be collected in January 2021.

Table 1: Main changes to the FY2019/20 National Cost Collection

Change for 2020 collection	Detail
Spell type field added to MHPS feed	Field to indicate whether the spell completed within the financial year or is still open at the end of the financial year.
Patient cluster assessment status field added to MHPS and MHCC feeds	Field to indicate whether the patient has either been assigned an ADULT MENTAL HEALTHCARE CLUSTER CODE that is still within the assessment period, was assessed but not accepted into service or has not been assessed or clustered, or their treatment is not a clustered mental health service.
Patient cluster assessment status start date added to MHPS feed	The start date for the patient cluster assessment status.

Patient cluster assessment status end date added to MHPS feed	The end date for the patient cluster assessment status.
Start date (care cluster assignment period) added to MHPS feed	The date on which the assignment of a patient to a Care Cluster started.
End date (care cluster assignment period) added to MHPS feed	The date on which a patient's assignment to a care cluster ended.
Homecare drugs	Reporting of the costs is no longer required. These items return to being reconciliation items only.
AE – HCD	Bundling of HCD costs into AE attendance tab within the worksheet is no longer required.
Organisation identifier (Code of submitting organisation) – revised	Organisation ID extended to allow 3 or 5 characters to allow for ANANA Org ID Organisation identifier (Code of submitting organisation) codes (submitter)

1.4 Horizon scanning for future collections

15. We plan to introduce some items to the NCC mental health submissions in future years. Those listed below have already been introduced or updated in the FY2019/20 NCC acute collection, as detailed in Volume 3: National cost collection – acute. [2]

16. These items are included in the FY2019-20 NCC acute collection but have yet to be introduced to the mental health FY 2019/20 NCC:

- PLICS extract matching identifier (PLEMI)
- supplementary information feed (SI)
- specialist ward care (SWC)
- legally sensitive data.

PLICS extract matching identifier (PLEMI)

17. The PLEMI is an attribute that enables data linkage across all the activity feed types from one organisation.

[2] https://improvement.nhs.uk/resources/approved-costing-guidance-2020/

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

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

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

21. The PLEMI will not be used in the mental health FY2019-20 NCC submission but will be in future years.

Supplementary information feed (SI)

22. In the FY2018/19 Acute NCC, the cost of high-cost drugs, high-cost blood products and unbundled imaging appeared in both the NCC workbook and the PLICS data causing:

    - significant burden on all NCC stakeholders
    - the data validation tool to be used differently from how it was developed to be used (aggregated PLICS into the NCC workbook)
    - excessive stress on the NCC workbook that slowed and reduced performance.

23. To circumvent the above, with one of our CEWGs we have developed a new PLICS feed, called ‘supplementary information (SI)’ for the FY2019/20 acute NCC. This will capture costs of elements that go alongside the package of care.

24. For the FY2019-20 acute NCC the extract will include:

    - high-cost drugs and blood products
    - excluded devices
    - unbundled diagnostic imaging.

25. High-cost drugs, high-cost blood products and excluded devices will only be submitted in the acute NCC SI feed. This means no high-cost items will be in any other acute PLICS feed.

26. The SI feed type will not be available for the mental health NCC submission in the FY2019/20 collection but will be in future years.

Specialised ward care (SWC)

27. For the FY2019-20 acute NCC the adult critical care costs are to be submitted on a calendar bed day basis within the costing period.

28. Critical care is linked to APC using the PLEMI.

29. The SWC feed will be expanded in future years to include rehabilitation, palliative care and other specialised wards.

30. The SWC feed type will not be available for the mental health NCC submission in the FY2019-20 collection but will be in future years.

Legally sensitive data

31. In the FY2019-20 acute NCC submission trusts will not be able to submit sensitive/legally restricted data at PLICS level.

32. Sensitive/legally restricted data covers the following treatment and diagnosis categories:

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

33. The safeguards are implemented so that identifiable data does not flow for patients receiving sensitive/legally restricted treatments or with sensitive/legally restricted diagnoses.

34. Where mental health providers submit data at PLICS level for these services in future collections, sensitive/legally restricted data will not be submitted. Mental health trusts are not required to identify or restrict flow of their data in

the FY2019-20 collection for their patients receiving legally restricted treatments or those with a legally restricted diagnosis.

35. Mental health trusts providing acute or community services do not need to restrict their patients' data, due to the mental health 2020 NCC being submitted at an aggregate level for these services.

2. Cost collection resources and activities

36. This section describes the resources and activities you should use to report your costs for the FY2019-20 NCC.

37. Tables 2 and 3 below list the collection resources and activities respectively.

38. These tables are presented in the extract specification for mental health providers[3] and more information can be found in that document.

Table 2: Collection resources

Collection resource ID	Collection resource description
CPF002	Consultants
CPF005	Drugs (excluding high-cost drugs)
CPF011	Other doctors
CPF017	Specialist nurses and advanced nurse practitioners
CPF022	Nurses, operating department clinical staff and healthcare support staff
CPF023	Professional and technical staff
CPF024	Supplies and services – non-patient specific
CPF029	Medical devices
CPF030	Supplies and services – patient specific
CPF032	Pharmacy
CPF033	Multidisciplinary meeting co-ordinators
CSC004	Patient support costs (pay)

[3] See https://improvement.nhs.uk/resources/approved-costing-guidance-2020/ for extract specification.

Collection resource ID	Collection resource description
CSC005	Patient support costs (non-pay)
CSC006	CNST payment

Table 3: Collection activities

Collection activity ID	Collection activity description
COM001	Community care
COM002	Issuing equipment
COM003	Wheelchair contact
COM004	Wheelchair equipment issued
DEN001	Dental care
EMC001	Emergency care
MDT001	Other multidisciplinary team meetings
ODT002	Screening
ODT003	Respiratory investigations
ODT004	Other cardiac non-invasive investigations
ODT005	Neurophysiology investigations
ODT006	Echocardiogram (ECHO)
ODT007	Audiology assessments
ODT008	Urodynamic investigations
GRP001	Group session
OUT001	Outpatient care
OUT002	Outreach contacts
OUT003	Supporting contacts
OUT004	Telemedicine contacts
OUT005	CPA meetings
PAT001	Biochemistry

Collection activity ID	Collection activity description
PAT002	Haematology
PAT003	Immunology
PAT004	Cellular sciences
PAT005	Genetics
PAT006	Microbiology
PAT007	All other tests
PHA004	Dispensing other drugs (directly to patients)
PHA005	Pharmacy (other activity)
PHA006	Dispensing non-patient identifiable drugs
RAD002	Chemotherapy delivery
SPS001	Endoscopy
SPS003	Cardiac catheterisation laboratory
SPS004	Other specialist procedure suites
THR001	Anaesthesia
THR002	Surgical care
THR003	Prosthesis, implant or device insertion
WRD001	Ward care
SUP001	Other support services

3. Changes to medicines and devices for FY2019-20

39. For FY2019-20 the guidance on recording the cost of medicines is split between the workbook and the MHPS and MHCC feeds, based on the guidance in this section.

40. For drugs provided to mental health service, use the approved costing guidance costing methodology in Standard CM10: Pharmacy and medicines to allocate your costs at a patient level within your mental health provider spells and care contacts feeds.

41. The National Tariff funds specific high-cost drugs and blood products (HCDs) separately from the core attendance/episode and so the costs have historically been excluded from the cost collection.

42. These blood products and drugs are listed in worksheet 13b of Annex A to the National Tariff document and need to be reported on the HCD tab of the NCC workbook.

43. HCD costs are no longer required to be bundled into AE attendance within the worksheet in the NCC workbook.

44. You should not match HCDs to patients in the MHCC and MHPS feeds.

45. Submitted costs for HCDs should be the actual costs of the drug, including aseptic unit preparation costs. All other pharmacy on-costs and the costs of drugs administered with HCDs should remain in the core HRG, spell or contact.

46. Mental health trusts providing acute or community health services should follow Table 4 below for how to treat medicines costs in the mental health FY2019-20 NCC submission.

Table 4: Collection method for medicines

Medicine type	FY2019-20 collection method	Comment
High-cost drugs (HCD) and blood products (inclusive of high-cost renal/ chemotherapy drugs)	NCC workbook HCD tab	High-cost drugs and blood products identified
Renal non high-cost drugs	RENAL worksheet in NCC workbook	Renal drugs not on the HCD worksheet 13b
Non high-cost chemotherapy drugs	CHEMOTHERAPY worksheet (CR) in NCC workbook	Chemotherapy drugs not on the HCD worksheet 13b
Homecare drugs	Excluded – reconciling item	Too burdensome to collect at aggregated level or patient level
Cystic fibrosis drugs	Record in NCC workbook	The flow of the drug cost should be recorded in the NCC workbook as part of the core clinical event unless it is an HCD, in which case it should be included on the HCD tab of the HCD worksheet

3.1 High-cost devices

47. In 2016 a system was introduced for buying and supplying high-cost medical devices in specialised services.[4] The new system is operated by NHS Supply Chain. The approach is a transactional model. Rather than each provider paying for the devices and being reimbursed by NHS England as before, providers place orders with NHS Supply Chain at zero cost to them. NHS Supply Chain then places the order with suppliers and invoices NHS England.

48. The system covers all 'high-cost tariff excluded devices' in the list of high-cost devices in the 2020/21 national tariff.[5] These are expensive devices paid for on top of the national price (tariff) for the procedure in which they are used. This is because relatively few centres procure these devices and we

[4] www.england.nhs.uk/commissioning/spec-services/key-docs/medical-devices/
[5] Worksheet 13a of Annex A of the National Tariff workbook.

recognise that the costs would not be reimbursed fairly if they were simply funded through the tariff.

49. To ensure all providers cost the inpatient HRG in the same way, the costs of the high-cost devices listed in Annex A of the National Tariff workbook should be excluded from the HRG costs. The cost of these devices should be excluded in the reconciliation statement. The detail of the costs and numbers of devices should be included in the drugs and devices worksheet as in previous years.

50. If you are unable to identify and exclude the costs of these high-cost devices, please e-mail costing@improvement.nhs.uk so we are aware some costs may be inflated in your organisation.

51. Continuous positive airway pressure (CPAP) and bilevel positive airway pressure (BiPAP) machines are not on the high-cost devices list. The cost of these machines is usually under a pass-through agreement with the commissioner. The income for these machines should therefore net off to zero and not inflate the cost of the attendance.

52. Cardiology loop recorders are another type of device that is not on the high-cost devices list. Loop recorders are implantable, single use devices and therefore their cost should be matched to the patients who had one fitted, ie any loop recorders should be mapped to the patients who had HRG EY12A or EY12B.

4. Preparing PLICS files for mental health services

53. The extract file specification[6] sets out the exact structure of the XML files you need to produce for the collection: the field names and formats, along with valid codes for certain fields where applicable.

54. Activity costed and submitted as part of the PLICS MHPS and MHCC feeds will not need to be submitted as aggregate costings in the workbook. Trusts will only need to submit their data once via either the MHPS and MHCC feeds or as aggregate data in the workbook. See Section 5 for the list of activity we expect to be submitted at an aggregate level via the workbook.

55. Only adult mental healthcare cluster codes are submitted within the PLICS XML feeds, not:

    - the forensic mental healthcare cluster code[7]
    - the forensic pathway
    - the learning disabilities care cluster codes.[8]

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

[6] https://improvement.nhs.uk/resources/approved-costing-guidance-2020/
[7] https://www.datadictionary.nhs.uk/data_dictionary/attributes/f/forensic_mental_health_care_cluster_code_de.asp?shownav=1
[8] https://www.datadictionary.nhs.uk/data_dictionary/attributes/l/le/learning_disabilities_care_cluster_code_de.asp?shownav=1

4.1 Mental health provider spells (MHPS)

Collection scope

56. This section covers MHPS/admitted patient care which are the basis of the spells collected in the MHPS PLICS data feed.

57. The collection year begins on 1 April 2019 and ends on 31 March 2020. All MHPS completed within the collection year, or hospital provider spells still open at the end of the collection year, are in scope of this collection.

58. Mental health trusts will submit both complete and incomplete costed spells for admitted patient care. You should follow the below guidance for costing and submitting your mental health inpatient spells.

59. 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 that are within the collection year should be reported.

60. 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.

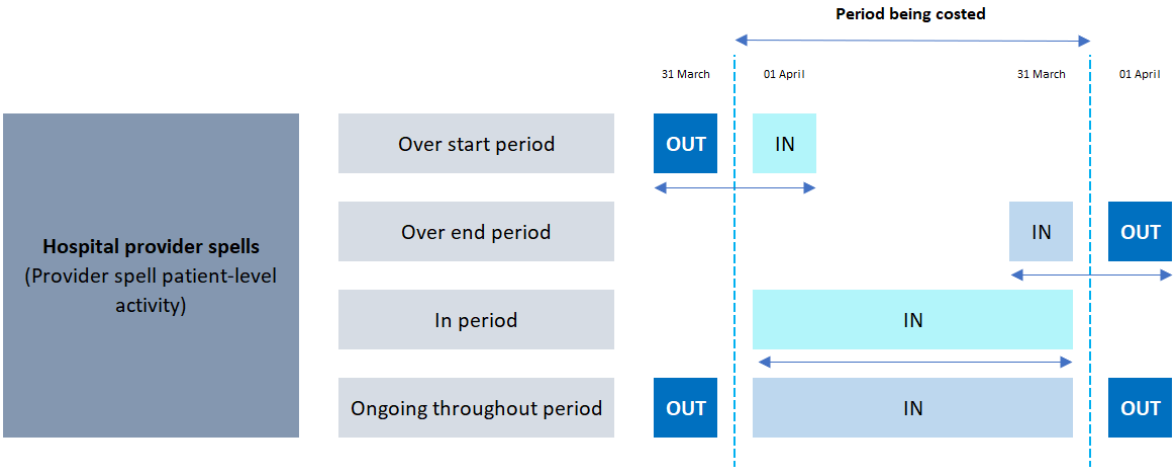
61. The cost of these items must be reported using the appropriate collection resource and collection activity at a patient level in the PLICS XML files. Costs and activity should be submitted by occupied bed day.

62. Providers 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.

Incomplete hospital provider spells

63. Figure 1 shows which part of a spell should be costed in the collection year.

Figure 1 incomplete hospital provider spells



64. To identify and calculate the cost of incomplete patient spells refer to Standard CM2: Incomplete patient events.

65. There are four types of event:

- All 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 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 period). To cost these long-stay patients, count the number of in-year days to ensure the in-year costs are only allocated to in-year activity.

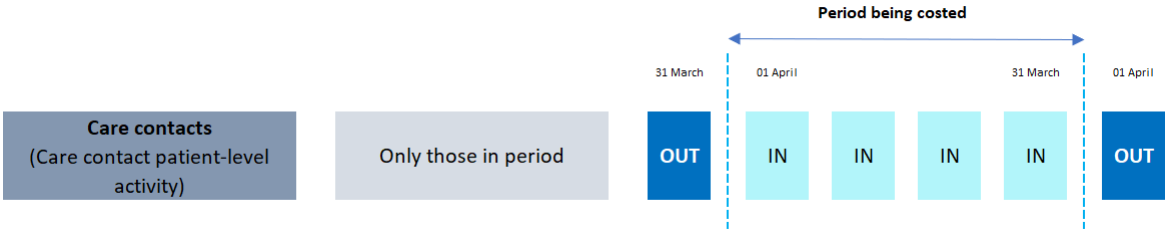
4.2 Mental healthcare contacts (MHCC)

Collection scope

66. This section covers MHCC/non-admitted patient care which are the basis of the contacts collected in the MHCC PLICS data feed.

67. The collection year begins on 1 April 2019 and ends on 31 March 2020. All MHCC completed within the collection year are in scope of this collection.

Figure 2: Scope of care contacts collected



68. Mental health providers should cost their services using the costing principles set out in the *Approved Costing Guidance*[9] and the mental health costing standards.[10]

69. For non-admitted patient care – covering outpatients, day care and community – costs and activity should be reported for attendances and non face-to-face contacts.

70. Where integrated teams include social workers, their costs and activity should only be included in the MHCC feed if they are NHS-funded posts. All providers should include the costs of community teams' contacts with inpatients within the MHCC feed.

71. 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).

[9] See *The costing principles*: https://improvement.nhs.uk/resources/approved-costing-guidance/
[10] https://improvement.nhs.uk/resources/approved-costing-guidance-2019/

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

73. It is rare for patients to see more than one discipline (ie qualified professional staff group within each CMHT) at a time. When this does occur, the attendance should be costed in line with Standard CM14: Group sessions (see Figure 3 below).

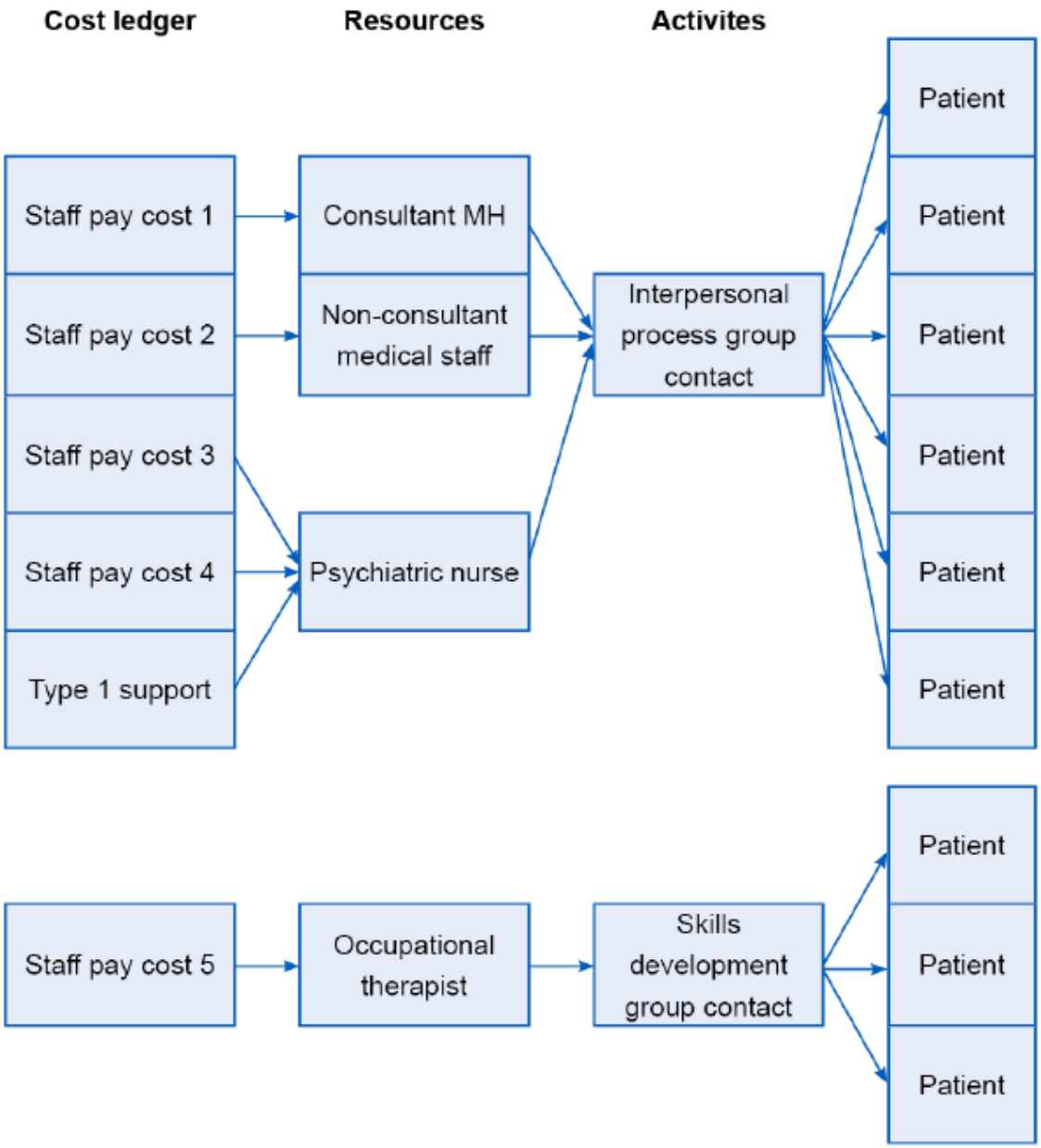
74. Costs and activity for mental health services provided in daycare facilities[11] should be submitted on the same basis as for other patients using these facilities.

75. Daycare facility contacts are usually considered to have consultant input and to involve patient assessments, whereas CMHT group contacts do not necessarily involve a consultant and patient assessments.

76. Where consultants have a clinical caseload within a specialist team, the costs and activity should be reported against the specialist team currencies in the NCC workbook mental health other services (MH) tab.

[11] www.datadictionary.nhs.uk/data_dictionary/nhs_business_definitions/d/day_care_facility_de.asp?shownav=1

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



4.3 Mental health extract specification – new fields

77. Feedback from the 2018/19 collection from early implementor trusts, software suppliers and partner organisations, identified difficulty in analysing, matching and costing mental health provider spells. To help fix the issue of duplicate matches and to better analyse the unique elements of each spell, six fields have been added to the extract specification. These are:

    - spell type field

- patient cluster assessment status field
- patient cluster assessment status start date
- patient cluster assessment status end date
- start date (care cluster assignment period)
- end date (care cluster assignment period).

See Appendix 1 for example mental health patient journeys which show different scenarios and examples of data to be submitted for those scenarios.

78. Overall, you are costing a provider spell (or the portion of which falls in the financial year that is being costed). Therefore, the date range will always be the spell start date to the discharge date.

79. Please note you cannot submit a discharge date after the 31st March 2020. In instances where the discharge date falls after the 31st of March 2020 either because the patient has been discharged after 31st of March 2020 or the spell is ongoing you should record the discharge date as 2020-03-31

80. The spell type field has been added to the MHPS feed. This field indicates whether the spell was completed within the financial year or is still open at the end of the financial year.

    - 1 Started in previous financial year and ended in reporting financial year (ended)
    - 2 Started but not ended during reporting financial year (open)
    - 3 Started and ended in reporting financial year (ended)
    - 4 Started in previous financial year but did not end in reporting financial year (open).

81. The patient cluster assessment status field has been added to the MHPS and MHCC feeds. This field indicates whether the patient has either been assigned an ADULT MENTAL HEALTHCARE CLUSTER CODE that is still within the assessment period, was assessed but not accepted into service or has not been assessed or clustered, or their treatment is not a clustered mental health service.

    - 01 PATIENT assessed and assigned an Adult Mental Health Care Cluster

- 02 PATIENT not assessed or assigned an Adult Mental Health Care Cluster (Cluster 99)
- 03 PATIENT assessed but not accepted into the Mental Health Service (IA98)
- 04 PATIENT assessed but onward treatment not assigned an Adult Mental Health Care Cluster.

82. Only a value of 01 will result in an adult mental health cluster code being submitted. For all other values (02, 03 and 04) the adult mental healthcare cluster code should be left blank.

83. The patient cluster assessment status start date has been added to the MHPS feed. The start date for the patient cluster assessment status may be the date the patient is admitted to an inpatient ward (therefore it will be the same as the spell start date) or when a patient cluster assessment status code is changed.

84. The patient cluster assessment status end date has been added to the MHPS feed. The end date for the patient cluster assessment status may be the date of discharge from an inpatient ward (therefore it will be the same as the discharge date) or when a patient cluster assessment status code is changed.

85. The start date (care cluster assignment period) has been added to the MHPS feed. It is the date a patient's assignment to a care cluster started. This date will be restricted to the spell start date where a cluster was assigned prior to admission to the inpatient ward.

86. End date (care cluster assignment period) added to MHPS feed. It is the date a patient's assignment to a care cluster ended. This date will be restricted to the spell discharge date.

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

    - If PatCas equals 01 then data should be submitted in PatCas PatCASStDte, PatCASEndDte, Cluster, StartDateCareClust and EndDateCareClust

- If PatCas equals 02, 03, 04 then data should ONLY be submitted in PatCas, PatCASStDte and PatCASEndDte

5. Preparing aggregated data for mental health services

88. Mental health trusts should not use NCC workbook MHCC or SECUREMH worksheet unless agreed in advance with us. In most instances, all provider spells and care contacts[12] should be submitted in PLICS files, as noted above in Section 4.

89. There are some circumstances, where the clinical event cannot form part of your patient-level submissions because:

    - the activity cannot be clustered and therefore should be submitted in the NCC workbook MH worksheet
    - the activity is not in scope of the NCC and therefore should be included in the reconciliation.

90. The following sections provide collection guidance on those services not in scope of patient-level extracts for 2019/20.

5.1 Services to be included in the NCC workbook at aggregate level

91. Table 5 outlines what services should be included in the NCC workbook at aggregate level and which worksheet tab they should be recorded in.

[12] Including NAPC.

Table 5: Services submitted in the NCC workbook

Service	Settings	Worksheet	Subcategory (if applicable)
Children and adolescent (CAMHS)	• Admitted patient care[13] • Daycare facilities • Outpatient attendances[14] • Community contacts	MH	
Drug and alcohol services	• Admitted patient care • Outpatient attendances • Community contacts	MH	• Alcohol services • Drug services
Mental health specialist teams[15]	Not required	MH	• A&E mental health liaison services • Criminal justice liaison services • Forensic community • Forensic liaison services • IAPT • Other mental health specialist teams • Other psychiatric liaison services • Prison health children and adolescents • Psychiatric liaison – acute hospital/nursing homes • Psycho – sexual services

[13] Described as a provider spell in PLICS.
[14] Described as a care contact in PLICS.
[15] Most cost and activity data for services undertaken by mental health specialist teams (MHSTs), using currencies based on the annual national survey of investment in adult mental health services, should be included in the MHPS and MHCC PLICS feeds.

Service	Settings	Worksheet	Subcategory (if applicable)
Secure mental health services	Not required	MH	• High-dependency secure provision, learning disabilities • High-dependency secure provision, mental health or psychosis • High-dependency secure provision, personality disorder • High-dependency secure provision, women's services • Child and adolescent low secure services • Child and adolescent medium secure services • Child and adolescent high secure services
Specialist Mental health services	• Admitted patient care • Outpatient attendance • Community contacts	MH	• 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's syndrome and autism spectrum disorder (all ages) • Specialist mental health services for deaf adults • Specialist perinatal mental health services (inpatient mother and baby units and linked outreach teams) • Other specialist mental health inpatient services

5.2 Collection scope for non-PLICS services by point of delivery.

Ordinary elective and non-elective admissions (APC)[16]

92. For ordinary elective and non-elective admissions, costs and activity should be submitted by occupied bed day.

93. Some APC within mental health services include trial periods of home leave. The patient is not discharged but on leave to return as an admitted patient at a future date. This sometimes creates an anomaly as while the patient is on leave their bed may be used for other admitted patients, resulting in bed occupancy levels over 100%.

94. 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 – that is, no other patient uses the bed in their absence. This rule also applies to patients transferred temporarily to an acute provider for treatment.

95. Costs and activity for mental health services provided in daycare facilities[17] should be submitted on the same basis as for other patients using these facilities.

96. Daycare facility contacts are usually considered to have consultant input and to involve patient assessments, whereas CMHT group contacts do not necessarily involve a consultant and patient assessments.

Mental health outpatient attendances[18]

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

98. Missed appointments (DNAs) should not be recorded and their cost should be treated as an overhead.

[1616] Described as a provider spell in PLICS
[17] www.datadictionary.nhs.uk/data_dictionary/nhs_business_definitions/d/day_care_facility_de.asp?shownav=1
[18] Described as a care contact in PLICS.

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

100. The key to determining whether activity should be reported as in an outpatient or community setting is:

- if the appointment is booked onto 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 session and location, then report it as in an outpatient setting
- otherwise, report it as in a community setting, eg a home or domiciliary visit, or as a visit to a single client in a residential home.

101. 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.

102. Payments for domiciliary visits are now only made in limited circumstances, or to consultants who have chosen to retain the old consultant contract (Section 12(2) 2003[19]). Please contact costing@improvement.nhs.uk for guidance on this.

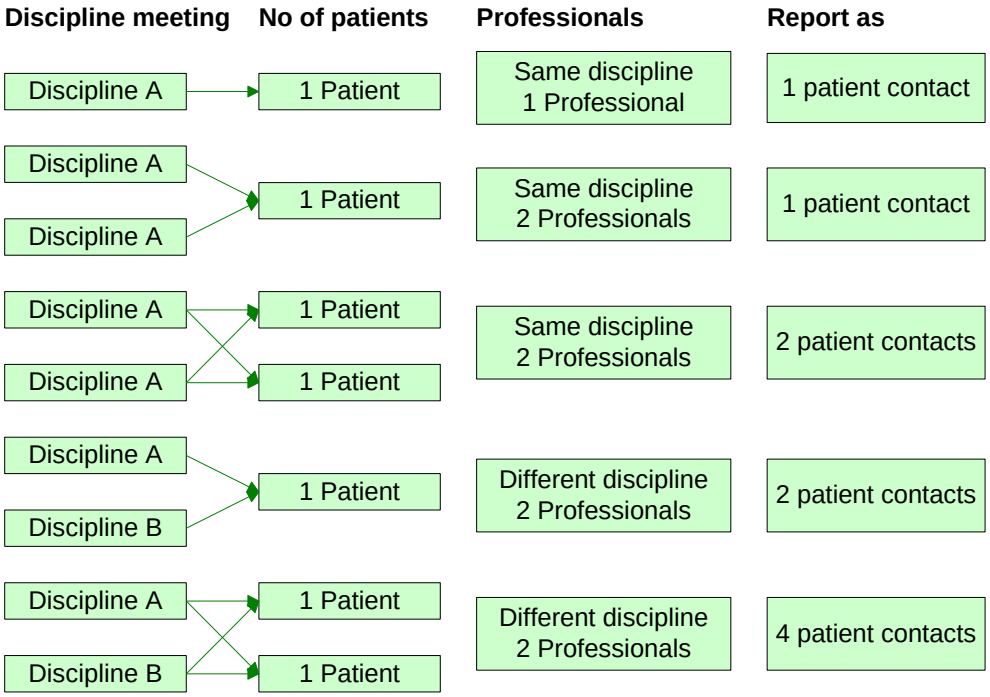
Contacts in the community

103. Costs and activity should be reported for face-to-face and non face-to-face patient contacts with consultant-led community services or CMHTs. CMHTs vary in size 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).

104. When patients meet more than one discipline (ie qualified professional staff group within each CMHT) at a time you should record the attendance as two separate contacts for NCC average cost collection purposes. Figure 4 shows this process.

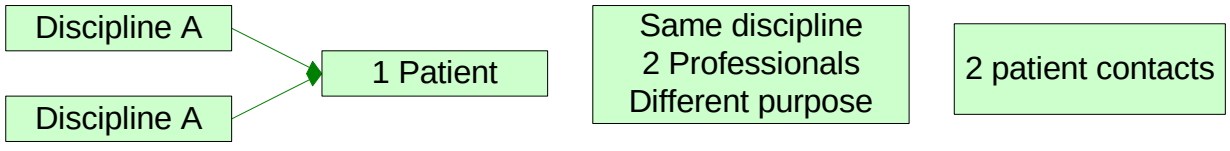
[19] http://www.nhsemployers.org/~/media/Employers/Documents/Pay%20and%20reward/Consultant_Contract_V9_Revised_Terms_and_Conditions_300813_bt.pdf

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



105. 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 5: Reporting patient contacts with two or more professionals from the same discipline



5.3 Specific mental health services not in scope of PLICS and aggregated cost collection

106. Table 6 outlines which services should not be included in your patient-level extracts or NCC workbook at aggregate level.

107. The cost of the total service provision should be included in the reconciliation as a reduction to your operating expenditure.

Table 6: Services not in scope of PLICS collection

Cost groups	Service description
Own-patient care (out of scope)	• Physical healthcare, eg sexual health • Any patients not thought to have a mental illness, eg: – some alternative therapy services – some counselling services • Learning disabilities and autism spectrum disorder services provided only at a primary care level • Prison health services (physical healthcare only) • Mental health specified services: acquired brain injury and neuropsychiatry • Named provider services: fixated threat assessment centre – Barnet, Enfield and Haringey Mental Health NHS Trust
Other activities	• Activities contracted in from other providers, eg psychiatric liaison services • Out-of-area placements, both the receiving provider and sending provider
Reconciling items (no corresponding activity)	• Services with no activity captured

6. Preparing aggregated data for community health services

108. This section focuses on services for which data is submitted on the CHS worksheet.

6.1 Activity estimation in community sector

109. Not all community providers have fully automated systems. Therefore:

- they may use appropriate sample data to ascertain annual activity when reporting the information covered in this section
- no minimum sample time is stipulated but the sample should reflect annual activity in a service area
- if this is not feasible, providers may use informed clinical estimates.[20]

110. 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.

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

6.2 Community care in an acute setting

112. Some services may be provided in or by acute hospitals. All costs should be submitted under CHS unless these services are provided as part of an APC episode or outpatient attendance. If the latter, the costs should be reported within the composite cost of the APC or outpatient attendance HRG.

[20] Evidence of the data source should be retained.

113. Specialist or acute staff may attend patients in community settings. This reflects the less defined service boundaries in the new models of health services delivery. For several services this can mean staff who provide services on wards in acute hospitals also do so in other settings to give patients continuity of care. You should work towards using the dataset recorded as the defining location for the activity – as within the Community Services Data Set (CSDS)/Commissioning Data Set (CDS).

6.3 Definition of outpatient versus community care contact

114. No information standard defines the difference between an outpatient attendance and a community care contact. As defined in Community standard CM3: Non-admitted patient care,[21] a healthcare professional travelling to a community location (eg the patient's home) to see one patient should be treated as a community contact for costing. This is recorded on the CSDS. Where a clinician travels to a community location to see more than one patient in a planned session, this should be treated as one of the following:
    - if recorded on the CSDS: a community care contact and reported on the CHS worksheet
    - if recorded on the CDS: an outpatient attendance and reported on the OPATT worksheet.

6.4 Community services definitions

115. The currency for community services is the number of care contacts[22] within the costing period unless otherwise stated.

116. The following should be treated as an overhead to the service and therefore not counted:
    - did not attend (DNA)
    - meetings held between clinical staff about the patient but **not** involving the patient or their proxy

[21] See also the *Costing glossary*.
[22] www.datadictionary.nhs.uk/data_dictionary/classes/c/care_contact_de.asp?shownav=1

- telephone contacts and telemedicine messages solely to inform a patient of their results.

117. Where both the patient and relative/carer are present, one patient contact should be recorded.[23]

118. Only non face-to-face contacts[24] by care professionals that directly support diagnosis and/or care planning and replace a face-to-face contact should be included in the collection.

119. The activity measure for group sessions is the number of patients in the group. If two clinicians deliver a group session for 10 patients, each clinician records 10 contacts for that group, and 20 contacts should be reported for that session.

6.5 Allied health professionals

120. The FY2019-20 NCC covers activity provided by the following allied health professionals (AHPs), subdivided into adult/child and group/one-to-one currencies:[25]

- dietitians
- occupational therapists
- physiotherapists
- podiatrists
- speech and language therapists
- other therapists not listed above.[26]

6.6 Podiatry

121. The currencies for community podiatry services are:[27]

[23] For example, if a health visitor sees the parent, child or both, this should be recorded as one contact.
[24] www.datadictionary.nhs.uk/data_dictionary/attributes/c/cons/consultation_medium_used_de.asp?shownav=1
[25] www.datadictionary.nhs.uk/data_dictionary/attributes/c/card/care_professional_staff_group_for_community_care_de.asp?shownav=1
[26] A full list of therapist types can be found in the NHS Data Dictionary: https://www.datadictionary.nhs.uk/data_dictionary/attributes/c/card/care_professional_type_de.asp?shownav=1
[27] A full definition of the currencies can be found in the *Costing glossary*.

- tier 1: general podiatry
- tier 2: minor surgery
- tier 3: complex foot disease
- specialist care 1
- specialist care 2
- other non-core podiatry.

122. Podiatry services provided in a hospital outpatient setting or another acute provider setting should be recorded on the CHS worksheet using the more descriptive currencies above, and not on the outpatient attendance (OPATT) worksheet. This makes the costing of podiatry services consistent and comparable irrespective of the sector providing them.

123. Nail procedures performed by a podiatrist in an outpatient setting and grouping to the JC43 HRGs should be reported on the outpatient procedure (OPROC) worksheet and not the outpatient attendance (OPATT) worksheet or the CHS worksheet.

6.7 Audiology

124. This section covers audiology attendances[28] and services delivered within discrete audiology departments.[29] Audiology costs in the FY2019-20 are collected on a single worksheet in the community NCC workbook.

125. This section should be read alongside the new Standard CM22: Audiology services within the costing methods.[30]

126. The currencies are outlined in Table 7 below.

[28] www.datadictionary.nhs.uk/version2/data_dictionary/classes/a/amb/audiology_attendance_de.asp?sho
[29] See Standard CM22: Audiology services for more information.
[30] https://improvement.nhs.uk/resources/approved-costing-guidance-2020/

Table 7: Audiology currencies

Audiology currency code	Currency description	Comments
AS01	Fitting of hearing aid, adult	The unit cost is per fitting.
AS02	Fitting of hearing aid, child	
AS03	Fitting of hearing aid, child, specialist audiology services	
AS04	Fitting of hearing aid or device for tinnitus	
AS05	Hearing aid, adult, any qualified provider contract	Costs of repairs, moulds, tubes, etc should be included in the fitting or aftercare services rather than against the actual hearing aid.
AS06	Hearing aid, adult, other contract	
AS07	Hearing aid, child	
AS08	Follow-up, adult, face-to-face	AS08
AS09	Follow-up, child, face-to-face	AS09
AS10	Follow-up, non face-to-face	AS10
AS11	Implant aftercare	The unit cost is per event of aftercare.[31]
AS12	Maintenance and programming, bone anchored hearing aid	
AS13	Maintenance and programming, cochlear implant	
AS14	Rehabilitative audiology service, one to one	
AS15	Rehabilitative audiology service, group	

[31] The cost may include cleaning advice; cleaning aids; battery removal or replacement for patients with limited dexterity; replacement of tips, domes, wax filters and tubing; required replacement or modification of ear moulds; repair or replacement of faulty hearing aids on a like-for-like basis; and provision of patient information. The separate currencies covering the maintenance and programming of bone-anchored hearing aids (BAHA) and cochlear implant are not part of the CA39*, CA40* or CA41* HRG costs, which are the HRGs for surgical implantation.

Audiology currency code	Currency description	Comments
ASNNS	Newborn hearing screening programme attendance	
CA37A	Audiometry or hearing assessment, 19 years and over	Providers should report activity using these codes as cost per hearing assessment.
CA37B	Audiometry or hearing assessment, between 5 and 18 years	
CA37C	Audiometry or hearing assessment, 4 years and under	
CA43Z	Balance assessment	

Newborn hearing screening

127. You should report the unit cost per NHS newborn hearing screening programme attendance.

128. The costs of interventions resulting from these screening attendances should be included as part of the composite APC or outpatient cost against the appropriate HRG and not in the CHS worksheet.

Other audiology services

129. Audiology departments provide a range of rehabilitative services, eg auditory processing disorders, communication groups, environmental aids sessions, lip reading, relaxation classes and vestibular rehabilitation therapy. If their costs do not fit with any of the other currencies in this section, they should be included against one of the following currencies:

- rehabilitative audiology services (one-to-one) – the unit cost per care contact
- rehabilitative audiology services (group) – the unit cost per group session.

130. The following HRGs should be reported on the new audiology worksheet only:

- CA38A Evoked potential recording, 19 years and over
- CA38B Evoked potential recording, 18 years and under

- CA39Z Fixture for bone-anchored hearing aids
- CA40Z Fitting of bone-anchored hearing aids
- CA41Z Bilateral cochlear implants
- CA42Z Unilateral cochlear implant.

6.8 Daycare facilities

131. Daycare facilities[32] for older, stroke and other patients are included in the NCC. Facilities for patients with learning disabilities are excluded for community and acute service providers in FY2019-20.[33]

132. The unit cost is per patient day, counted to the nearest half day where applicable.

6.9 Single condition community rehabilitation teams

133. This section is for single condition community rehabilitation teams (such as stroke or neuro rehabilitation teams), which are excluded from intermediate care and do not meet the definitions for the unbundled rehabilitation HRGs.

134. Community rehabilitation teams usually include healthcare professionals providing ongoing care to patients in a community setting. The services include nursing and a range of therapy services, but exactly which are provided will depend on a patient's needs. Teams may operate from both hospital and community bases, but this has no relevance to the submission. Care must be taken not to double-count any activity reported using the unbundled rehabilitation HRGs.

135. The activity measure is the number of team contacts in a financial year – for example, one patient seen by a nurse for three days, twice by a physiotherapist and twice by a speech and language therapist represents seven team contacts. This example assumes that team members only see patients on a team basis; that is, total clinical caseload for that professional relates solely to team activity. Where members of a clinical team also see patients in another capacity (eg as a speech and language therapist), costs

[32] www.datadictionary.nhs.uk/data_dictionary/nhs_business_definitions/d/day_care_facility_de.asp?shownav=1

[33] See the mental health collection guidance for the inclusion of day care for patients with learning disabilities in the NCC.

and activity should not be reported as part of the community rehabilitation team activity but elsewhere in the collection using the relevant currency, eg community speech and language therapy.

136. The collection for community rehabilitation teams is categorised as one of:
    - stroke community rehabilitation teams
    - neuro community rehabilitation teams
    - other single condition community rehabilitation team.

6.10 Intermediate care

137. Intermediate care[34] is a range of integrated services for adults aged 19 and over that are time-limited to six weeks maximum. The services promote faster recovery from illness/surgery; prevent unnecessary acute hospital admission and premature admission to long-term residential care; support timely discharge from hospital; and maximise independent living.

138. Services are predominantly provided by healthcare professionals in multidisciplinary teams (led by a senior clinician) who develop an intermediate care plan for each patient.

139. Services that can contribute to the intermediate care function include:
    - rapid response teams including admission avoidance schemes[35]
    - residential rehabilitation in a setting such as a residential care home or community hospital
    - supported discharge or support in a patient's own home
    - day rehabilitation.

140. Where a service is provided to patients with conditions covered by the mental healthcare clusters, the costs and activity should be included in those clusters.[36]

[34] http://webarchive.nationalarchives.gov.uk/20130107105354/http:/www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@pg/documents/digitalasset/dh_103154.pdf

[35] Admission avoidance schemes regardless of location should be included in crisis response.

[36] https://www.datadictionary.nhs.uk/data_dictionary/attributes/a/add/adult_mental_health_care_cluster_code_de.asp?shownav=1

141. The intermediate care currencies are:

- crisis response services
- home-based services[37]
- bed-based services.

142. These currencies **exclude** the following services which should be reported on the reconciliation statement[38] and their activity ignored:

- NHS continuing healthcare and NHS-funded nursing care
- reablement services
- intermediate care delivered to children aged under 18.

143. These currencies also exclude the following services which should be submitted elsewhere in the community NCC workbook as described:

- early supported discharge in hospital – as an overhead to the appropriate APC HRGs
- single condition rehabilitation (eg stroke) – on the REHAB tab in the community NCC workbook
- non-specialist stroke and neuro rehabilitation services – under the relevant community rehabilitation category
- mental health crisis resolution services, rehabilitation or intermediate care – on the MH tab
- general community hospital beds not designated as intermediate care – on the APC tab
- general district or specialist nursing services[39] – on the CHS worksheet.

144. Intermediate care services are typically jointly commissioned by the clinical commissioning group and local authority. Pooled or unified budgets are sometimes excluded from the NCC average costs (see Annex 1 in *Volume 1: Overview*), but you are encouraged to identify and include activity and costs for all the discrete healthcare elements of the intermediate care service the NHS provides.

[37] Early supported discharge in the home should be included in home-based services.
[38] See *Volume 2: National Cost Collection reconciliation and exemptions*.
[39] Including community matrons or active case management teams.

6.11 Medical and dental services

Community dental

145. Community dental services are for patients who have difficulty getting treatment in their 'high street' dental practice and who 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.

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

6.12 Health visitors and midwifery

147. **Error! Reference source not found.**8 lists the currencies for health visitors and midwives.

148. Currencies for health visitors are consistent with the Healthy Child Programme.[40]

149. 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).

[40] www.gov.uk/government/publications/healthy-child-programme-0-to-19-health-visitor-and-school-nurse-commissioning

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

151. **Note:** Home births should be submitted using the relevant HRG in the CHS worksheet in the community NCC workbook.

Table 8: Health visitor and midwifery currencies

Health visitor and midwifery currency codes	Currency description
N03A	Health visitor, antenatal review (1 h)
N03B	Health visitor, new baby review (2 h)
N03C	Health visitor, 6 to 8 week check (1 h)
N03D	Health visitor, 1 year review (1 h)
N03E	Health visitor, 2 to 2.5 year review (2 h)
N03F	Health visitor, other clinical intervention (to provide parenting support on specific issues, eg breast feeding, postnatal depression)
N03G	Health visitor, other statutory contact, face-to-face
N03J	Health visitor, other statutory contact, non face-to-face
N03N	Health visitor, immunisation
N03P	Family nurse partnership programme visit
N03PC	Parentcraft
N01A	Community midwife, antenatal visit
N01P	Community midwife, postnatal visit
NZ16Z	Antenatal routine observation
NZ17A	Antenatal false labour, including premature rupture of membranes, with CC Score 2+
NZ17B	Antenatal false labour, including premature rupture of membranes, with CC score 0–1
NZ18A	Antenatal complex disorders with CC score 2+

Health visitor and midwifery currency codes	Currency description
NZ18B	Antenatal complex disorders with CC score 0–1
NZ19A	Antenatal major disorders with CC score 2+
NZ19B	Antenatal major disorders with CC score 0–1
NZ24A	Antenatal therapeutic procedures, including induction, with CC score 2+
NZ24B	Antenatal therapeutic procedures, including induction, with CC score 0–1
NZ25Z	Labour without specified delivery
NZ30A	Normal delivery with CC score 2+
NZ30B	Normal delivery with CC score 1
NZ30C	Normal delivery with CC score 0
NZ31A	Normal delivery with epidural or induction, with CC score 2+
NZ31B	Normal delivery with epidural or induction, with CC score 1
NZ31C	Normal delivery with epidural or induction, with CC score 0
NZ32A	Normal delivery with epidural and induction, or with post-partum surgical intervention, with CC score 2+
NZ32B	Normal delivery with epidural and induction, or with post-partum surgical intervention, with CC score 1
NZ32C	Normal delivery with epidural and induction, or with post-partum surgical intervention, with CC Score 0
NZ33A	Normal delivery with epidural or induction, and with post-partum surgical intervention, with CC score 2+
NZ33B	Normal delivery with epidural or induction, and with post-partum surgical intervention, with CC score 1
NZ33C	Normal delivery with epidural or induction, and with post-partum surgical intervention, with CC score 0
NZ34A	Normal delivery with epidural, induction and post-partum surgical intervention, with CC score 2+
NZ34B	Normal delivery with epidural, induction and post-partum surgical intervention, with CC score 1

Health visitor and midwifery currency codes	Currency description
NZ34C	Normal delivery with epidural, induction and post-partum surgical intervention, with CC score 0
NZ40A	Assisted delivery with CC score 2+
NZ40B	Assisted delivery with CC score 1
NZ40C	Assisted delivery with CC score 0
NZ41A	Assisted delivery with epidural or induction, with CC score 2+
NZ41B	Assisted delivery with epidural or induction, with CC score 1
NZ41C	Assisted delivery with epidural or induction, with CC score 0
NZ42A	Assisted delivery with epidural and induction, or with post-partum surgical intervention, with CC score 2+
NZ42B	Assisted delivery with epidural and induction, or with post-partum surgical intervention, with CC score 1
NZ42C	Assisted delivery with epidural and induction, or with post-partum surgical intervention, with CC score 0
NZ43A	Assisted delivery with epidural or induction, and with post-partum surgical intervention, with CC score 2+
NZ43B	Assisted delivery with epidural or induction, and with post-partum surgical intervention, with CC score 1
NZ43C	Assisted delivery with epidural or induction, and with post-partum surgical intervention, with CC score 0
NZ44A	Assisted delivery with epidural, induction and post-partum surgical intervention, with CC score 2+
NZ44B	Assisted delivery with epidural, induction and post-partum surgical intervention, with CC score 1
NZ44C	Assisted delivery with epidural, induction and post-partum surgical intervention, with CC score 0

6.13 Parentcraft

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

include that for all staff present. Parentcraft classes are group sessions and the unit of activity is the number of pregnant women attending the groups.[41]

6.14 Nursing

Specialist nursing services[42]

153. Specialist nursing services are disaggregated by the bands in Table 9, split further by adult or child and face-to-face or non face-to-face.

Table 9: Specialist nursing service bands

National code	Description	Comment
N06	Active case management (community matrons)	
N07	Arthritis nursing/liaison	
N08	Asthma and respiratory nursing/liaison	
N09	Breast care nursing/liaison	
N10	Cancer related	
N11	Cardiac nursing/liaison	
N12	Children's services	
N14	Continence services	Exclude costs relating to regular delivery of supplies (eg continence pads, stoma bags) direct to the patient. These should be reported on the reconciliation template.
N15	Diabetic nursing/liaison	
N16	Enteral feeding nursing services	
N17	Haemophilia nursing services	

[41] Fathers and birthing partners should not be included in the number of those attending.
[42] You should make every effort to map district nursing services to the appropriate specialist nursing bands. Only if this is not possible, or the care provided is standard district nursing, should you report against district nursing, split by face-to-face and non face-to-face.

National code	Description	Comment
N18	HIV/AIDS nursing services	Includes follow-up of HIV care, psychosocial support, treatment support for individuals starting or switching therapy, etc.
N19	Infectious diseases	
N20	Intensive care nursing	
N21	Palliative/respite care	
N22	Parkinson's and Alzheimer's nursing/liaison	
N24	Stoma care services	See comment against N14: Continence services.
N25	Tissue viability nursing/liaison	
N26	Transplantation patients nursing service	Includes patients on pre and post-transplantation programmes.
N27	Treatment room nursing services	To be used by nursing staff based in GP surgeries.
N28	Tuberculosis specialist nursing	
N29	Other specialist nursing	Eg sickle cell

6.15 Community services for children, including nursing[43]

154. As well as specialist nursing services, the NHS provides a range of other nursing services for children, including:

- vulnerable children support, including child protection and family therapy
- development services for children, including psychology
- paediatric liaison
- other child nursing services not included in specialist nursing and school-based child health services, including looked-after children nurses.

[43] Community consultant-led paediatric services should be reported on the OPATT worksheet in the community NCC workbook under TFC 290, not in the CHS worksheet.

155. These services should be reported as one composite group using the activity measure of total community contacts in the NCC average cost year.

6.16 Child protection services[44]

156. The following should be noted for child protection services:[45]

- the cost of child protection is a support cost to all services for children
- included activity should relate to the number of total face-to-face contacts, not the number of children on the register
- funding from non-NHS bodies should be netted off incurred expenditure
- the cost of advisory services where there is no contact with children should be apportioned between the service areas that receive advice
- activity relating to meetings about the patient is not counted for NCC average costs and should be treated as an overhead.

6.17 School-based children's health services

157. 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. For NCC average costs, school-based services are spilt into:

- **Core services**[46] which are divided into one-to-one, group single professional and group multiprofessional.
- **Other services** which are divided into one-to-one, group single professional, group multiprofessional.
- **Vaccination programmes:** the unit cost is average per vaccination. Two vaccinations from a course of three given in the year counts as two, which allows incomplete courses to be recorded. You need to appreciate that the average costs of at least four different vaccination programmes are collected.[47]

[44] This applies to all child protection teams, including those with consultants and nurses as members.
[45] These services are separate from those performed by community paediatricians.
[46] Including school entry review and year 6 obesity monitoring.
[47] Fluenz, Men ACWY, school leaver booster and HPV.

- **Special schools nursing**: the unit of activity is a patient contact.

6.18 Wheelchair services[48]

158. Wheelchair services are spilt into two categories:
    - needs-based currencies for non-complex wheelchair services covering assessment, equipment, review, and repair and maintenance
    - specialised complex wheelchair services commissioned by NHS England and NHS Improvement, which should be separately reported on the basis of unit cost per registered user.

159. They are further spilt between adults (aged 19 and over) and children (up to and including 18 years). Table 10 explains the currencies and gives definitions and example.

[48] Please see Community standard CM19: Wheelchair services for more information.

Table 10: Wheelchair currencies, definitions and examples

Cat code	Unit	Activity	Definition	Examples
WC01	Per episode of care	Low need – assessment	Limited need allocation of clinical time. Most of the activity expected to fall into this category. Can be met through telephone triage or review of referral materials provided by a competent referrer.	Occasional user of wheelchair with relatively simple needs that can be readily met. Do not have postural or special seating needs. Physical condition is stable or not expected to change significantly. Assessment does not typically require specialist staff (generally self-assessment or telephone triage supported by health/social care professional or technician). Limited (or no) requirement for continued follow-up/review.
WC02		Medium need – assessment	A higher allocation of clinical time to conduct a comprehensive assessment for the prescription of a manual chair, including an allocation of time to both therapist and rehabilitation engineer.	Daily user of wheelchair or use for significant periods on most days. Have some postural or seating needs. Physical condition may be expected to change (eg weight gain/loss, some degenerative conditions). Comprehensive, holistic assessment by skilled assessor required. Regular follow-up/review.
WC03		High need – manual assessment	This currency involves a higher allocation of clinical time than the medium currency. This also	Permanent users who are full dependent on their wheelchair for all mobility needs.

Cat code	Unit	Activity	Definition	Examples
WC04		High need – powered assessment	includes the use of staff who have a higher and more specialist sill set. A longer assessment to allow a comprehensive assessment for the prescription of a power chair, including an allocation of time for both therapist and rehabilitation engineer.	Physical condition may be expected to change/degenerate over time. Very active users requiring ultra-lightweight equipment to maintain high level of independence. Initial assessment for all children. Comprehensive, holistic assessment by skilled assessor required. Regular follow-up/review with frequent adjustment required/expected.
WC05	Per chair issued (delivery of a complete 'equipment package' f the wheelchair, necessary cushions, seating systems, belts or harnesses, modifications and accessories with activity selected based on the highest level of accessory issued)	Low need – equipment	A basic wheelchair package that includes a standard cushion and one accessor and modification.	Equipment requirements – basic wheelchair (self or attendant propelled. Standard cushion, up to one accessory and up to one modification.
WC06		Medium need – equipment	A higher allocation of equipment and modifications.	Equipment requirements – configurable, lightweight or modular wheelchair (self or attendant propelled) Low-to-medium pressure-relieving cushions, basic buggies, up to two accessories and up to two modifications.
WC07		High need – manual equipment	More complex and customised.	Equipment requirements – complex manual or powered equipment including tilt-in-place or fixed-frame chairs, seating systems of different chassis, high pressure-relieving cushions, specialist buggies, multiple accessories, multiple and/or complex modifications and needs are met by customised equipment.
WC08		High need – powered equipment		

Cat code	Unit	Activity	Definition	Examples
WC09	Per registered user per year	All needs – manual repair and maintenance (R&M)	The tariff has assumed that services will be outsourced to another organisation.	The unit cost for each chair can be calculated using the total R&M budget against activity for the period. Allocation of costs to these currencies should be made on the basis of: • parts and labour for repair of wheelchairs • delivery or collection of chairs to or from users • costs associated with scrapping chairs at end of their useful life • annual planned preventive maintenance for power-chair users. In calculating the average R&M unit cost per chair, use a combination of low, medium and high needs categorisation. This only applies to manual wheelchairs.
WC10		All needs – powered R&M		
WC11	Per review	All needs – review	This involves the review of a patient.	This could be planned or via an emergency route when the patient's condition or equipment changes. A review that results in the patient being provided with additional equipment or modification incurs a separate charge.
WC12	Per item	All needs – review substantial	A review following a modification/new accessory or resulting in a completely new follow-up assessment if a new wheelchair is required. These specialist modifications (without supply of the chair) should be included in this category. The unit of activity should be the	All needs – review substantial accessory (a review of existing equipment issued to the service user followed by a minor modification/onward referral to R&M/new accessory – cushion or seat backs). If (as arising from the review) a completely new assessment or new wheelchair is required, this is recorded in the assessment and equipment pathways as a new episode of care. It may include: • chair

Cat code	Unit	Activity	Definition	Examples
			number of chairs modified (regardless of the number of modifications included).	• cushioning • accessories • wheelchair therapies and/or rehabilitation engineer/technician time to perform modifications to the chair and fitting of accessories • clinical time associated with checking of modifications and handover of equipment.
WC13	Per review	Specialised complex wheelchair services	More complex and customised.	A higher allocation of equipment modifications. Cost per chair not per modification.
WC14		Equipment, specialist modification without supply	This involves a review of the patient.	A higher allocation of equipment and modifications. Seating systems on different chassis/high pressure-relieving cushions/specialist buggies/multiple accessories/multiple and/or complex. Wheelchair not supplied.

7. Preparing aggregated data for acute services

160. This section covers:

- emergency departments
- admitted patient care
- outpatient services
- critical care
- cystic fibrosis
- unbundled imaging.

7.1 Emergency departments (including A&E, minor injury units and walk-in centres)[49]

160. In 2019, NHS Digital's Emergency Care Data Set (ECDS) for urgent and emergency care replaced the Accident and Emergency CDS previously used to collect information from emergency departments (EDs) across England.

161. All activity from 1 April 2019 must be reported using CDS 6.2.2 Type 011 ECDS.

162. ED attendances are categorised as follows:

- department type:[50]
  - EDs (national code 01)
  - consultant-led monospecialty A&E services (national code 02)[51]
  - other types of A&E (national code 03) which include minor injury units (MIUs) and urgent care centres
  - NHS walk-in centres (national code 04)

[49] See Acute standard CM4: Emergency department attendances.
[50] www.datadictionary.nhs.uk/data_dictionary/attributes/a/acc/accident_and_emergency_department_type_de.asp
[51] May be 24-hour or non 24-hour.

- healthcare resource group (HRG) – VB emergency care
- post-ED pathway:
  - patients who are admitted for further investigation or treatment rather than discharged from A&E
  - patients who are not admitted but are discharged or die while in A&E.

163. ECDS streaming attendances should not be counted and costed.

164. Costs and activity for MIUs should be reported separately only if the MIU is:
    - discrete, 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.

165. A&E mental health liaison services should be reported as cost per patient contact on the MH worksheet in the NCC workbook using the currency MHSTAEA or MHSTAEC, not in the A&E worksheet.

166. The costs of activity typically unbundled from attendances, eg diagnostic imaging, should be included in the core A&E HRGs. The grouper determines a single HRG for each A&E attendance record.

167. Patients brought in dead (A&E patient group code 70)[52] should be coded, costed and submitted against HRG VB99Z – patient dead on arrival.

7.2 Admitted patient care

168. This section covers the following types of admitted patient care (APC):
    - daycase electives53
    - ordinary electives[54,55]
    - ordinary non-electives[56]

[52] www.datadictionary.nhs.uk/data_dictionary/attributes/a/a_and_e_patient_group_de.asp?shownav=1
[53] www.datadictionary.nhs.uk/data_dictionary/attributes/p/pati/patient_classification_de.asp?shownav=1
[54] www.datadictionary.nhs.uk/data_dictionary/attributes/p/pati/patient_classification_de.asp?shownav=1
[55] www.datadictionary.nhs.uk/data_dictionary/nhs_business_definitions/e/elective_admission_de.asp?shownav=1
[56] All national codes excluding 11, 12 and 13 at www.datadictionary.nhs.uk/data_dictionary/attributes/a/add/admission_method_de.asp?shownav=1

- regular day or night admissions.[57]

169. Mental health trusts providing acute or community health services must submit their APC costs by finished consultant episode (FCE), treatment function code (TFC) and HRG.

170. The HRG4+ 2018/19 reference cost grouper being used in 2020 attaches a core HRG to every FCE.

171. You only report core HRGs on the DC or IP worksheet in the NCC workbook, and the costs of unbundled HRGs separately on the HCD, REHAB or SPAL worksheets.

172. Regular day or night admissions[58] are reported on the DC worksheet in the NCC workbook.

Ordinary non-elective short stays and long stays

173. All ordinary non-elective activity must be separately identified as long or short stay by completing the input fields required by the grouper for critical care, rehabilitation and specialist palliative care length of stays. On processing the inpatient non-elective activity through the grouper, it deducts these days from the core stay.

174. A short stay is one day. The grouper automatically adds one day to admissions with a zero day length of stay. All other stay lengths are long (number of inlier bed days plus excess bed days divided by the number of FCEs).

Excess bed days and trim points

175. Community providers that submit APC activity should use the trim points included in the HRG4+ 2018/19 grouper and supporting documentation to calculate HRG length of stay and associated excess bed days, and submit these in the NCC workbook.

[57] www.datadictionary.nhs.uk/data_dictionary/attributes/p/pati/patient_classification_de.asp?shownav=1
[58] www.datadictionary.nhs.uk/data_dictionary/attributes/p/pati/patient_classification_de.asp?shownav=1

176. The cost per day for excess bed days must only include costs associated with the excess bed days. Unbundled costs must be excluded from the excess bed-day costs.

177. Generally, patient care is less intensive during the excess bed days than at the beginning of the FCE and as a result costs for these days are less than those for the inlier bed days.

Therapy services in admitted patient care

178. Where these services form part of an APC episode or outpatient attendance in a different specialty, the costs are part of the composite costs of that episode or attendance.

7.3 Outpatient services

179. This section covers:

- outpatient attendances, including ward attendances
- procedure-driven HRGs in outpatients.

180. Outpatient attendances and procedures in outpatients should be reported by HRG and TFC currencies at average cost by HRG and TFC.

181. The grouper may attach one or more unbundled HRGs to the core HRG produced. Only core attendances should be reported on the OPATT worksheet in the NCC workbook.

182. Unbundled HRGs should be reported separately in the appropriate worksheet in the NCC workbook.

183. Refer to Community standard CM3: Non-admitted patient care for the acute costing methods.[59]

[59] https://improvement.nhs.uk/resources/approved-costing-guidance-standards

Outpatient attendances

184. Outpatient attendances[60] in HRG4+ (WF01* and WF02*), generated from a number of mandated fields in the outpatient CDS, are organised by:

- first and follow-up attendance[61]
- face-to-face and non face-to-face attendance
- single and multiprofessional attendance
- advice and guidance
- consultant-led and non consultant-led[62] in accordance with the mandatory outpatient attendance CDS type 020.[63]

185. Where a patient sees a healthcare professional in an outpatient clinic for a consultation, this counts as valid outpatient activity regardless of whether or not 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 NCC where the cost is part of your operating expenditure.

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

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

188. A patient attending a ward for examination or care is counted as an outpatient attendance if they are seen by a doctor. If seen by a nurse, they are counted as a ward attendance. Costs and activity for ward attendances should be reported as non consultant-led outpatient attendances under the appropriate TFC.

[60] www.datadictionary.nhs.uk/data_dictionary/nhs_business_definitions/o/out-patient_attendance_consultant_de.asp?shownav=1
[61] www.datadictionary.nhs.uk/data_dictionary/nhs_business_definitions/o/out-patient_attendance_consultant_de.asp?shownav=1
[62] Consultant-led activity occurs when a consultant retains overall clinical responsibility for the service, team or treatment. They do not necessarily need to be present.
[63] Clinics run by GPs with a special interest, or specialist therapists, normally take patients from what would have been a consultant list and are classed as consultant-led activity.

189. Where single professionals see a patient consecutively as part of the same clinic, this should be reported as two separate attendances.[64]

190. Telephone contacts and telemedicine messages solely to inform patients of results are excluded.

191. Where you cannot distinguish between face-to-face and non face-to-face activity, you should report all costs for a particular TFC as face-to-face activity only.

192. No requirement stipulates that only those patients who have had a face-to-face contact can be counted as having subsequent non face-to-face contacts.

Outpatients without patient present

193. Outpatient activity is only valid if it entails direct contact with the patient or with a proxy for the patient, such as the parent of a young child.

194. A contact with a proxy only counts if it is instead of contact with the patient, and the proxy can ensure more effectively than the patient that the specified treatment is followed.

195. Meetings between clinical staff about the patient but **not** involving the patient or their proxy should not be recorded as a care contact. Costs should be treated as an overhead to the service.

196. Advice and guidance conversations with GPs where commissioned separately are an exception to this rule. The costs of contacts **about** the patient should be treated as an overhead to the service.

Multiprofessional attendances

197. Multiprofessional attendances are defined as multiple care professionals (including consultants) seeing a patient together, in the same attendance, at the same time and when two or more of these professionals are consultants from different main specialties.

[64] As a first and a follow-up attendance if the healthcare professionals are in the same team, and two first attendances if they are in different teams.

198. This definition applies when a patient benefits in terms of care and convenience from accessing the expertise of two or more healthcare professionals at the same time. The clinical input to multiprofessional or multidisciplinary attendances must be shown in the clinical notes or other documentation.

199. It does not apply:

- if one professional is simply supporting another, clinically or otherwise
- where a patient sees single professionals consecutively as part of the same clinic.

200. Multidisciplinary meetings should not be recorded as multidisciplinary attendances.

Therapy services in outpatients

201. Where patients have been referred directly to a therapy service, such as physiotherapy (TFC 650), occupational therapy (TFC 651), speech and language therapy (TFC 652), dietetics (TFC 654) and orthotics (TFC 658), by a healthcare professional including a GP, or have self-referred and are seen in a discreet therapy clinic solely for the purpose of receiving treatment, the attendances should be submitted on the OPATT worksheet under the TFC denoting the therapy service.

7.4 Critical care

202. Critical care aggregated costs are collected separately for:

- adult critical care
- paediatric critical care
- neonatal critical care.

203. Where a mental health trust provides critical care for adult, neonatal or paediatric activity, costs must not be reported in the patient-level extracts for PLICS. These must be reported in the NCC workbook only. This includes neonatal critical care transportation.

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

205. A patient who is admitted to hospital will have an APC dataset record for their hospital admission, which will produce a core HRG and may also produce unbundled HRGs, eg for high-cost drugs or diagnostic imaging. Patients admitted to any critical care facility as defined by the NHS Data Dictionary[65] must, in addition to their APC record, have a Critical Care Minimum Data Set record, which will produce an unbundled critical care HRG per critical care bed day. The critical care datasets are:

- Critical Care Minimum Data Set (CCMDS)[66]
- Paediatric Critical Care Minimum Data Set (PCCMDS; version 2.0)[67]
- Neonatal Critical Care Minimum Data Set (NCCMDS; version 2.0).[68]

Critical care periods

206. The number of critical care periods[69] that have occurred in each hospital spell is also collected in the critical care worksheet. A critical care period is a continuous period of care or assessment within a hospital provider spell during which a patient receives critical care in a ward or unit with a valid critical care unit function code.[70] A new critical care period begins with each new admission or a transfer between wards/units with different unit function codes. Each critical care period will have its own minimum dataset record.

207. Discrepancies can arise when counting critical care bed days for all types of critical care services activity. For reference costs, counting of adult, neonatal

65 www.datadictionary.nhs.uk/data_dictionary/attributes/c/cou/critical_care_unit_function_de.asp?shownav=0

66 http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_124290.pdf

67 http://content.digital.nhs.uk/isce/publication/scci0076

68 http://content.digital.nhs.uk/isce/publication/scci0075

69 www.datadictionary.nhs.uk/data_dictionary/classes/c/critical_care_period_de.asp?shownav=1

70 Critical care unit function definitions are available at: www.datadictionary.nhs.uk/data_dictionary/attributes/c/cou/critical_care_unit_function_de.asp?shownav=0

or paediatric critical care should follow the examples in **Error! Reference source not found.**. All bed days for the reporting period should be counted, including critical care bed days for incomplete episodes.

Table 11: Critical care bed-day count examples

	Critical care admission date and time	Critical care discharge date and time	Count
Patient with different dates for critical care admission and discharge	5 November 13:00	7 November 10.30	3 critical care bed days
Patient with same date for critical care admission and discharge	5 November 13:00	5 November 22:00	1 critical care bed day

208. Given this counting convention, a critical care bed vacated and subsequently occupied by a second patient over the course of 24 hours should be counted as two critical care bed days. On a day where a patient is transferred between critical care wards that have different critical care unit function codes, one bed day should be counted for each unit function type.

Costing critical care

209. The costs for stays in critical care should be included in the per bed-day critical care HRGs and not in the composite cost and length of stay for the APC core HRG. The key principle is that critical care represents the highest level of complexity, and only the daily costs of providing critical care (care activity described by the CCMDS data) should be recorded against the unbundled critical care HRG. Meanwhile, costs relating to treating the patient's condition (captured by OPCS and ICD-10 codes as part of the main APC data), including any surgery or theatre irrespective of setting, should be reported against the core HRG.

210. We would expect the following costs to be included in the cost per critical care bed day:

- medical staff

- nursing and other clinical staff
- therapies
- ward consumables
- drugs (excluding high-cost drugs)
- blood and blood products (excluding high-cost drugs)
- costs for diagnostics undertaken while the patient is in critical care where these are not covered in the core HRG, eg critical care nursing staff accompanying a patient to a scan
- medical and surgical equipment.

211. 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 admission to a critical care unit, a new FCE will begin and theatre costs will not form part of the total cost for the critical care service. But even if a new FCE does not start on admission to critical care, or is wholly within critical care under a critical care consultant from admission to discharge, theatre costs should still be excluded from critical care and reported against the core HRG.

212. The costs of relevant high-cost drugs or high-cost blood products should be included in the unbundled high-cost drugs HRGs reported in the NCC workbook and not in the critical care worksheet in the NCC workbook as part of the composite cost of critical care activity.

213. Costs for critical care days that produce an unbundled HRG of UZ01Z should be reported against UZ01Z and not apportioned elsewhere.

Adult critical care

214. Adult critical care HRGs are based on the total number of organs supported in a critical care period. The CCMDS collects a wider range of organ support information. Reference costs use these organ support categories to classify cost and activity data.

215. The grouper will only output one HRG per critical care period. This HRG signifies the total number of organs supported, from zero to six, in that critical care period. Only if there is more than one critical care period will there be more than one critical care HRG in the episode.

216. Reference costs for adult critical care are differentiated by all critical care unit functions[71] in the CCMDS:

- 01 Non-specific general adult critical care patients predominate
- 02 Surgical adult patients (unspecified specialty)
- 03 Medical adult patients (unspecified specialty)
- 05 Neurosciences adult patients predominate
- 06 Cardiac surgical adult patients predominate
- 07 Thoracic surgical adult patients predominate
- 08 Burns and plastic surgery adult patients predominate
- 09 Spinal adult patients predominate
- 10 Renal adult patients predominate
- 11 Liver adult patients predominate
- 12 Obstetric and gynaecology critical care patients predominate
- 90 Non-standard location using a ward area
- 91 Non-standard location using the operating department.

217. Trusts that cannot differentiate their costs should use national code 01.

218. For each of these critical care unit functions, the unit cost per bed day, total number of critical care bed days and number of critical care periods should be reported.

219. Data for patients 18 years and under but treated in adult critical care units will generate adult critical care HRGs. Activity and costs should be reported as part of the adult critical care costs.

220. Many trusts have adult critical care outreach teams that operate outside the parameters of the discrete adult critical care unit. These teams support general ward staff in caring for higher acuity patients, facilitate admission to and discharge from critical care, help avoid unnecessary critical care admissions, share clinical skills and follow up patients to monitor outcomes and services. Trusts should include outreach post-acute care enablement

[71] www.datadictionary.nhs.uk/data_dictionary/attributes/c/cou/critical_care_unit_function_de.asp?shownav=1

(PACE) teams as an overhead to APC, and not report them as a separate total cost or as part of critical care.

Paediatric critical care

221. The FY2019-20 NCC requires submission of paediatric critical care costs by the critical care function, in accordance with the NHS Data Dictionary:[72]

- 04 Paediatric intensive care unit (paediatric critical care patients predominate)
- 16 Ward for children and young people
- 17 High-dependency unit for children and young people
- 18 Renal unit for children and young people
- 19 Burns unit for children and young people
- 92 Non-standard location using the operating department for children and young people.

222. Trusts that cannot differentiate their costs should use national code 04.

223. Costs should be reported against the unbundled HRGs XB01Z to XB09Z, which are supported by version 2.0 of the PCCMDS.[73] Details of these HRGs are:

- XB01Z is solely for use for extracorporeal membrane oxygenation (ECMO) or extracorporeal life support (ECLS), both of which are nationally commissioned from the designated providers listed in Table . It is therefore expected that most activity and costs will be reported by these providers. However, any provider whose data generates this HRG should report activity and costs for this.

Table 12: Trusts that provide ECMO and ECLS service

Code	Name
RBS	Alder Hey Children's NHS Foundation Trust

[72] www.datadictionary.nhs.uk/data_dictionary/attributes/c/cou/critical_care_unit_function_de.asp?shownav=1

[73] http://content.digital.nhs.uk/media/22151/00761132015spec/pdf/00761132015spec.pdf

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
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 NHS Foundation Trust
RWE	University Hospitals of Leicester NHS Trust

- **XB02Z to XB05Z** relate to intensive care. The providers listed in **Table** have paediatric intensive care units (PICU) and are therefore expected to account for most activity and cost in these HRGs. These providers would be expected to return reference costs for all HRGs (XB02Z to XB09Z), and not to assign costs to a limited number of HRGs.

Table13: Providers with a dedicated PICU

Code	Name
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

Code	Name
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
RTR	South Tees Hospitals 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 NHS Foundation Trust
RWE	University Hospitals of Leicester NHS Trust

- **XB06Z to XB07Z** relate to high-dependency care. This care can be delivered on children's wards, as well as in designated high-dependency (HDU) and intensive care units. All providers whose PCCMDS data generates these HRGs should submit these costs.
- **XB08Z** relates to paediatric critical care transport.
- **XB09Z** relates to paediatric critical care, enhanced care. It represents the resources involved in providing critical care in a PICU or HDU to children who do not trigger any of the PCCMDS activity codes required for grouping to XB01Z to XB07Z.

224. HRGs XB06Z to XB07Z and XB09Z can be derived in a variety of settings. Therefore, costs for delivery of critical care on children's wards should be included and underpinned by the completion of a PCCMDS record. Take care to ensure these costs are not double-counted against the APC core HRG. It is expected that activity occurring in children's wards would be limited to XB06Z to XB07Z.

225. Unit costs for XB01Z to XB07Z and XB09Z are per occupied bed day (applying the counting convention in paragraphs 206 to 208), with each occupied bed day producing an HRG (ie one HRG per day).

226. Unit costs for XB08Z are per patient journey.

227. In 2006, the National Casemix Service analysed the results of an observational study of staff resource costs in 10 PICUs. The work is discussed in the *National report of the Paediatric Intensive Care Audit Network (PICANET), January 2004 – December 2006.*[74] The relative staff resource costs across HRGs arising from this work, and a worked example of how trusts might use these to benchmark their own reference costs returns before submission, are shown in Table 14 below. In this example, we assume a hypothetical PICU is delivering 5,000 bed days of activity a year at a cost of £10 million. The staff resource costs are expressed as a cost ratio with XB05Z as the reference HRG with a value of 1.00.

Table 14: Using benchmark cost ratios to inform paediatric critical care reference costs

		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

[74] www.picanet.org.uk/wp-content/uploads/sites/25/2018/05/Wales-PICANet-Annual-Report-2017-Anonymised.pdf

HRG	Paediatric critical care description	A Cost ratio	B Bed days	C = A x B Weighted bed days	D = C/ Sum C x £10 million Total cost of weighted bed days (£)	E = D/B Average unit cost per bed day (£)
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**	

232. Trusts may wish to use the cost ratios above to help compile their reference costs. However, the ratios are indicative and if trusts can provide their own robust cost apportionments, they should use these. The ratios were obtained from a study in PICUs with a higher nursing input to a patient requiring a higher dependency level of care than might be delivered to the same patient in an HDU or ward setting. As a consequence, reference costs for delivering high-dependency levels of care outside PICUs would be expected to be lower.

233. XB09Z was introduced to the HRG design after this costing analysis had been completed, and therefore no ratio is available to support costing. However, days in this HRG are expected to be roughly equivalent to ward-based care, ie a standard paediatric bed day.

234. HRG UZ01Z is available for data which is invalid for grouping.

Neonatal intensive care

235. Data from the Neonatal Critical Care Minimum Data Set (NCCMDS)[75] version 2.0 (2016 release)[76] must be used to inform the reporting of reference costs against the unbundled HRGs XA01Z to XA06Z from 2016/17 onwards.

236. Cost and activity must be submitted by the following three facility types:

- 13 Neonatal intensive care unit
- 14 Facility for babies on a transitional care ward
- 15 Facility for babies on a maternity ward.

237. If trusts are unable to differentiate between the facility types, data must be submitted as unit 13, neonatal intensive care.

238. Unit costs for XA01Z to XA05Z are per occupied bed day (applying the counting convention in paragraphs 206 to 208), with each occupied bed day producing an HRG (ie one HRG per day).

239. XA06Z relates to neonatal critical care transport. The unit cost is per patient journey.

240. The HRGs are based on the British Association of Perinatal Medicine's categories of care 2011 standards[77] and use minimum required staffing levels to differentiate the anticipated resource-intensiveness of delivered care. Costs (particularly staffing) should be apportioned to reflect the requirements of the different neonatal HRGs. As a guide, it would usually be expected that the cost of:

- XA01Z would be at least four times the cost of XA03Z
- XA02Z would be at least twice the cost of XA03Z
- XA03Z and XA04Z would be similar.

[75] https://www.datadictionary.nhs.uk/data_dictionary/messages/supporting_data_sets/data_sets/neonatal_critical_care_minimum_data_set_fr.asp?shownav=1

[76] Version 2.0 of the NCCMDS was mandated for local recording from 1 December 2016. Appropriate annualisation of data for December 2016 to March 2017 must take place to ensure that activity and cost data reflect the full year.

[77] https://www.bapm.org/resources/categories-care-2011

XA05Z would be lower than the cost of XA03Z/XA04Z but would not usually be expected to be less than the cost of providing a standard paediatric/ neonatal bed day.

7.1 Cystic fibrosis

161. This section covers cystic fibrosis services. It is important to note that for mental health providers there is no longer a requirement to submit the year-of-care currency.

162. For FY2019-20, cystic fibrosis should be included in the APC or OPPATT worksheet in the NCC workbook using the following TFCs:

- 264 Paediatric cystic fibrosis service
- 343 Adult cystic fibrosis service.

7.2 Unbundled diagnostic imaging

241. 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.

242. 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.

243. On collection, however, the cost of the unbundled HRG needs to be reported in the NCC workbook within the diagnostic imaging tab.

244. Diagnostic imaging should not be reported separately when occurring in APC or as part of an ED or outpatient procedure (OPPROC) attendance. Its 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.

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

246. Plain film X-rays have no unbundled HRG. When occurring in admitted patient or outpatient settings, their costs should be included in the core attendance. If patient's X-ray is the result of a direct access referral, they should be reported separately.

247. The unit cost is per examination.

8. Treatment of specific scenarios

8.1 Unmatched pathology and radiology data[78]

248. In 2019, we recognised that it was unclear what should be done with unmatched pathology and radiology costs, and we issued instructions to submit unmatched pathology and radiology data in the DA and IMAG worksheets in the NCC workbook as appropriate.

249. This data has now been analysed and totals £97.4 million for pathology and £115.5 million for radiology.

250. We aim to publish the unmatched data submitted in 2019 and use it together with the CAT submissions and the assurance programme to work with trusts that have high levels of unmatched costs to ensure improvements are made. We will build unmatched data validations into our analysis in FY2019-20.

251. Trusts should continue to work towards improving their matching rates by determining what further information fields they can use to match data to the lowest level possible before submitting it as unmatched.

Submitting cost data for unmatched pathology and radiology.

252. In FY2019-20, all unmatched pathology and imaging should follow the process outlined in Standard CP4: Matching costed activities to patients: allocate any remaining unmatched activity to 'unmatched' and use the TFC from the diagnostic imaging feed; if there is no TFC, use '812' for reporting. For:

- radiology – use the IMAG worksheet and department IMAGUM and submit using the appropriate radiology HRG including plain film. Only TFC 812 should be used

[78] Treat all other unmatched data in the same way as in previous collections.

- pathology – use the DAPS worksheet and DAPSUM service code and submit the activity by lab type.

8.2 Miscellaneous scenarios – excluded TFCs

253. The costs relating to TFC 424 (well babies) should be reported under TFC 501 (obstetrics) or TFC 560 (midwife episodes). The activity should be excluded.

254. The costs and activity related to TFC 700 (learning disability) should be excluded.

8.3 Zero cost HRGs

255. Zero cost HRGs are those clinical events that are counted in the absence of cost because their cost is linked to an unbundled HRG and can be found in Table 15.

256. Zero costs HRGs should be recorded in the NCC workbook with the appropriate activity volume. No cost should be recorded.

Table 15: Zero cost HRGs

HRG	Description	Rationale
PB03Z	Healthy baby	Costs should be reported as part of the maternity delivery episode. PB03Z should be flowed within the relevant in APC tab of the NCC workbook as a count of the clinical event activity.
RD97Z	Diagnostic imaging core HRG	Costs should be reported under the unbundled radiology HRG. RD97Z should be flowed within the relevant OPPROC tab of the NCC workbook 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 OPPROC tab of the NCC workbook as a count of the clinical event activity.

9. Submitting PLICS files

260. You should also read *Volume 7: Data submission*, which provides details of submission scheduling.

261. The extracted files must be passed through the NHS England and NHS Improvement data validation tool[79] (DVT; see Section 10) before being submitted to NHS Digital in the relevant collection window.

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

263. 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.

264. To separate the data extracts into appropriately sized files, they must be split into 12 monthly files which cover the reporting period, using the:
    - discharge date for MHPS
    - care contact date for MHCC
    - appointment date for IAPT

265. A spell that is unfinished at the end of the financial year must be collected as part of the month 12 file.

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

267. Table 16 outlines the files each provider should submit.

[79] The DVT user guide can be found in NCCG Volume 7 Section 8.

Table 16: Number of PLICS files to be submitted

Services delivered		Files to be submitted				
Mental health	IAPT	MHPS	MHCC	IAPT	REC[80]	Total files
YES	YES	12	12	12	2	38
YES	NO	12	12	0	1	25
NO	YES	0	0	12	1	13

9.1 Submitting data to NHS Digital

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

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

270. Each organisation needs a SEFT account and the current allowance is one user per organisation.[81] SEFT-related queries can be sent to seft.team@nhs.net.

271. 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

272. 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.

273. 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.

[80] MHREC for PLICS MH or IAPTREC for PLICS IAPT
[81] We have asked NHS Digital to investigate if SEFT could support multiple users within one organisation. If this is found to be possible, we will let you know through our normal communication channels.

9.2 Submission rules

274. The files that make up a full submission are given in Table 16 above

275. 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.

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

277. Your file will fail validation if any mandatory data items are not populated as defined in the extract specification.

278. 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.

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

280. 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).

281. 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 2020 subject to availability of slots[82] .

282. As there is no resubmission window, the NCC team may request a subsequent submission later in the planned submission window[83] , where we identify serious data quality issues.

283. Once you have submitted your files, and they have passed validation, you should not attempt to upload your files again in the initial submission period unless requested by NHS England and NHS Improvement.

284. **There are no resubmission windows for the PLICS Mental Health and PLICS IAPT collection for the financial year 2019/20.**

[82] See NCCG Vol 7 for details to request an additional submission slot
[83] 11/01/2021-29/01/2021

10. Data validation tool for PLICS files

285. You should only use our DVT: 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@improvement.nhs.uk and attach your log file and validation report.

286. Before submitting files, you must pass them through our DVT. The exact validation checks involved will be published on our website.[84]

287. 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 file specification discrepancies that need to be amended before submission.

288. The tool first produces an output file, identifying any file 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.

289. To use the DVT your files need to be in CSV format. If this is not your software's normal submission process, please contact your software provider and us as soon as possible to make alternative arrangements.

290. The NCC workbooks we are designing for the FY2019-20 collection will include the existing validations. A full review of the existing validations within

[84] https://improvement.nhs.uk/resources/approved-costing-guidance-2020/

the workbook will be carried out, and details of current validations and any changes are published in *Volume 7: Data submission*.[85]

291. 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. We may bring in further quality validations in 2020 as part of the DVT; you should refer to the DVT business rules for clarification.

[85] https://improvement.nhs.uk/resources/approved-costing-guidance-2020/

Appendix 1: Mental health patient journey scenarios

MH%20Patient%20Journey%20Scenarios%

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

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