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Approved Costing Guidance 2022 – Standards

Integrated costing methods

Version 1, March 2022

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

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 $^{^{\}rm 1}$ CM11 and CM12 Redacted, CM15 now part of CP2 and CM20 no longer prescribed, see Self Help Extensions

What you need to implement these standards

Before you implement the costing methods in this document, you should read and understand:

- Standard IR1: Collecting information for costing
- Standard CP3: Allocating costs to activities

For CM2: Incomplete patient events you will also need to read and understand:

Standard CP4: Matching

To successfully implement the costing methods, they should be used in conjunction with the technical document. You will be required to use the following spreadsheets:

- Spreadsheet IR1.2: Field requirements for the activity feeds
- Spreadsheet CP2.1: Standardised cost ledger
- Spreadsheet CP3.1: Resource list
- Spreadsheet CP3.2: Activity list
- Spreadsheet CP3.3: Methods to allocate resources to activities

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

There are separate requirements for CM35: Education and Training. They have been included in this standard. You will require E&T costs at cost centre/expense code level adjusted for 2021/22, 2021/22 E&T activity information, including programme schedules, and 2021/22 E&T income.

CM1: Medical staffing²

Purpose: To ensure all activity delivered by medical staff is costed consistently

Objective

- 1. To ensure all medical staffing costs are allocated in the correct proportion to the activities they deliver, using an appropriate cost allocation method.
- To map the APC medical staffing costs to their named activity where available 2. and to map NAPC medical staffing costs to their named activity as a permissible substitution.

Scope

3. This standard applies to all medical staffing costs.

Overview

- 4. Medical staff form a large proportion of many organisation's costs, and where the service is medically led, their input is essential to the patient care. In some services, they are likely to deliver a significant proportion of patient-facing activities. In others, they provide a smaller proportion of patient facing care, but are important to the decision-making and clinical responsibility. You should allocate medical staff costs, as for other staff groups, to the right resources and activities.
- 5. If clinicians are to use patient-level costing effectively to improve services, they need to be confident that their activity is costed appropriately. You should work with the lead consultant or designated person to obtain the best possible information for allocation of cost to services.

² The term medical staff applies to doctors of all grades, including general practitioners and locums.

- To accurately cost medical staff activities, you need to know which activities 6. each medical staff group in your organisation delivers. For example, you need to differentiate between ward rounds, ward care, outpatient clinic, appointments or community contacts, care programme approach (CPA) meetings and specialist work such as theatre sessions.
- 7. You should allocate consultant costs to the activities they have contributed to.
 - Where they work within a team, their costs may be allocated across the team activity.
 - If they work across a whole treatment function code (TFC) their costs may be allocated across all activity in that TFC.
 - As a permissible substitution, where you have confidence in your data allocating patients to the named consultant or their GMC number, you can allocate the consultant costs to their own activity.
- 8. You also need to understand which of the activities delivered by medical staff are patient-facing, and which are 'other' activities: these include research and development (R&D), and education and training (E&T).

Approach

Information requirements

- 9. Information on medical staffing activities will be available from the patient administration system (PAS) data and also from the service area. Use both these sources to understand where the medical staff work and discuss the best source of information for allocating cost.
 - PAS data will include a named consultant as responsible for each patient event, for the majority of patient events. (Other healthcare professionals may also be identified as the named person, particularly in mental health and community services.) The Commissioning Data Set (CDS), Community Services Data Set (CSDS) and Mental Health Services Data Sets (MHSDS) include the consultant code (or other ID) in the 'healthcare professional local identifier' field to show the clinical responsibility for the patient. This is built into both the admitted patient care (APC) and nonadmitted patient care (NAPC) feeds (feeds 1 and 3).

- The service area will have information on where the medical staff spend their time, for example, consultant job plans or non-consultant medical staff rotas. Use these as relative weight values (RWV) to allocate cost to the relevant services.
- 10. Each patient admission may have multiple episodes of care with the treatment function code (TFC) changing from one to the next. Each episode should have a cost for medical staff in the relevant treatment function associated with it.
- 11. If you are already costing medical staff activity at patient level using name or GMC number, and linking this to the individual consultant, you may continue to do so and document it in your ICAL; this approach is a permitted substitution.
- 12. If you are using this method, you will need to identify activity that does not incur a named consultant cost and ensure the cost of medical staffing is allocated to these patients from the relevant area.
- 13. You should avoid double counting the costed resources to the patient that is, from both the named professional costing and the standard non-medical staff process.

Specialist cost centres and expense codes

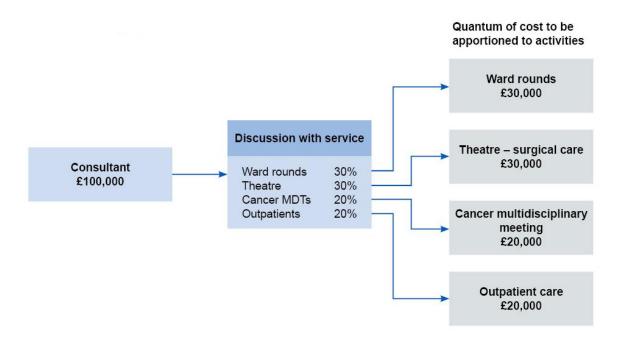
- 14. Map your medical staffing costs to resources via the mapping in Spreadsheet CP2.1: the standardised cost ledger, according to the service in which the staff work. This may be:
 - within a service cost centre
 - at specialty level
 - a local service team category
- 15. Use the list of main cost centres shown in table CM1.1. You may also use other cost centres where relevant: for example, R&D and E&T.

Table CM1.1: list of main cost centres used for medical staff in the standardised cost ledger.

Cost centre (CC)	CC description
XXX016	Diagnostic imaging/Radiography - by modality
XXX017	Pathology - by lab
XXX029	National screening programmes
XXX049	Medical Staffing - by Specialty
XXX050	Medical Staffing – Anaesthetics
XXX057	GP and Primary Care Services
XXX070	Accident and Emergency
XXX579	MH Medical Staffing by speciality

- 16. Customising your cost ledger: these cost centres are designed to show the resource mapping used for medical staff, but the mapping rows can be repeated for different service areas, changing the XXX to an identifiable local code and adding the service name.
- 17. You should use the expense codes for consultant and other grades of medical staff shown in Spreadsheet CP2.1: the standardised cost ledger.
- 18. You should disaggregate the proportions of time spent in different areas to set up your customised cost ledger (see Figure CM1.1). Disaggregating the cost at this stage enables a streamlined flow of cost to activities.
- 19. Please note: consultant 'programmed activities' (PA) are not all patient facing. They may have PA for education & training, research & development, clinical leadership or other project work – called 'special programmed activities' (SPA). These activities should be allocated across the service or other area rather than allocated to their patient facing work.

Figure CM1.1: Identifying the correct quantum of cost to be apportioned to activities³



- An example template for gathering this information is included in the integrated costing assurance log (ICAL) worksheet 23: CM1 Medical Staffing % split.
- 21. For some consultant medical staff, the percentage split of consultant medical staffing costs by activity type may be divided further for specific groups of patients. For example, orthopaedic surgeons split into hips, knees, trauma etc.
- 22. Do not apportion the same percentage split to all activity types unless evidence suggests that is appropriate. You must document the rationale for the percentage split you use in ICAL worksheet 24: CM1 consultant % reasoning.
- 23. Do not use consultant job plans as a basis to allocate non-consultant medical staffing costs. Allocate those costs based on discussions with the lead for those staff groups⁴ and other information sources.

³ This figure does not include any non-patient facing or 'SPA' activities.

⁴ There will usually be a consultant responsible for non-consultant medical staff, and administration support.

Resources

- 24. Medical staffing costs should use the following resource IDs:
 - MHR253 Consultant – mental health
 - SGR062 Consultant
 - SGR064 Consultant – anaesthetist
 - SGR063 Non-consultant medical staff
 - SGR065 Non-consultant medical staff – anaesthetist
 - SGR077 General Practitioner - secondary care
 - CMR313 General Practitioner - primary care.
- 25. Mental health consultants (resource ID: MHR253), must be separated from other consultants (resource ID: SGR062), within the costing system as they have distinct areas of work, such as psychiatry, forensic psychology, neuropsychology, etc.
- 26. This separation of mental health consultants improves reporting at integrated providers that have staff from both physical and mental health specialties. For example, to provide physical health support for post-traumatic stress disorder (PTSD) in a mental health centre, or child psychiatry, in a physical health children's centre.
- 27. General practitioners and junior doctors work in community wards and community hospitals, with some community providers having no consultant led services. You should ensure the resources are appropriately identified, so you can identify the activities the different types of medical staff provide in the costed patient events.

Activities

28. Review the prescribed list of activities in Spreadsheet CP3.2 and identify those your medical staff deliver. Some common activities for medical staff are shown in table CM1.2, but depending on the specialty/service area, medical staff may perform a wider range of activities.

Table CM1.2: excerpt from spreadsheet CP3.2: list of activities, showing medical staff activities⁵.

Activity ID	Activity
SLA121	ED - medical care
SLA135	Outpatient care
SLA136	Outpatient procedure and treatment room care
MHA269	Psychological therapy care
MHA279	Electro-convulsion therapy
MHA291	Home based MH care/crisis intervention
SPA155	Research and development
SGA079	Theatre - anaesthetic care
SGA081	Theatre - surgical care
SLA097	Ward care
SLA098	Ward round

29. Allocate the costs of non-consultant medical staff across all the appropriate patient-facing activities in accordance with Standard CP3: Allocating costs to activities.

Ward rounds

30. Ward rounds are regular or planned acute consultant visits to the ward to review a range of patients sequentially. They can also involve nurses, nonconsultant medical staff, social workers, care programme leads, therapists, and other staff. (Note: where material, the costs of all these staff should be identified as part of the activity ID: SLA098 - ward round).

⁵ See also section on GP services below.

- 31. If the clinical service deems all ward rounds to be identical, the allocation of activity to patient-level can be based on the number of patients alone. No further information is needed.
- 32. As a superior method SCM49 Ward round allocations varied by time spent with different patient groups, if medical staff in your organisation care for patients with different treatment function codes (TFCs), or other specific characteristics, and ward rounds vary in duration because of this, find out from discussions with medical staff what the average duration of a ward round is for the different patient groups.
- 33. As a further superior method SCM71, if you are able to access patient-level data on time spent with each patient from clinical notes systems or other data source, you can use actual duration for allocation of cost⁶. However, you should ensure the data quality is sufficient, as it is recognised that the duration of time spent with a patient is not the most important thing recorded in clinical notes. Both these methods are shown in Spreadsheet CP3.5: Superior and alternatives.
- 34. Anaesthetists may also do pre-surgery ward rounds⁷ for patients due to go into theatre. Work with the anaesthetic teams to use this information to develop an RWV assigning these patients an appropriate element of anaesthetist costs.
- 35. Community hospital wards may also have ward rounds led by non-consultant medical staff and/or the general practitioners responsible for the wards but these may have a less formal process. You should agree with your services whether the medical staff visits to the wards are best costed as ward rounds (i.e. separate formal time spent with each patient) or a more fluid model of ward care is used.
- 36. Mental health medical staff may also operate a different model of ward round, spending proportions of time with patients more informally on a ward, although some will do formal rounds. The informal model is called 'Ward Care' for costing purposes.

⁶ The costing system will use this duration proportionally by patient within the period costed, so there should be no need to adjust for over or under-allocated time by session.

⁷ Anaesthetists may alternatively do this review in 'pre-op outpatient clinics'.

Ward care

- 37. Where medical staff of all grades are continually interacting with the patients on a ward, this is called 'ward care' for costing purposes. For example, junior doctors on a surgical ward, all grades of medical staff on general medical wards, and for mental health inpatient units.
- 38. Community wards may have general practitioners or junior doctors operating either ward rounds or ward care.
- 39. Where medical staff perform minor procedures on the ward, this should be included in the ward care activity. If the procedures are significant in duration, you should obtain the patient-level information and include it on Feed 13: Theatres, and any material consumable costs on Feed 15: Prostheses and other high-cost items. See also Standard CM5 Theatres and special procedure suites, and Standard CM21 Clinical non-pay items.

Supporting contacts

- 40. Supporting contacts are contacts with a patient outside the usual budgeted area. This is superior method SCM33 Supporting contacts allocated at patient level.
- 41. For medical staff, inpatient supporting contacts would include ward visits additional to the regular ward rounds or ward care, or to a ward that is not their normal area. NAPC supporting contacts would include a consultant attending specific patients at another TFC outpatient clinic.
- 42. Use Feed 7: Supporting contacts, in accordance with Spreadsheet IR1.2. These activities on inpatient wards can have different formats, but the most frequent for medical staff are shown in table CM1.3: Excerpt from Spreadsheet CP3.2 showing the activities relating to supporting contacts:
- 43. MH Care programme approach (CPA) meetings, where one patient and multiple professionals meet to agree the formal care plan. These usually take place annually but may be more frequent. The feed for this meeting is in the NAPC feed (mental health feed 3b) and the contact is recorded in the MHSDS. There is a separate activity for CPA meetings in response to the

need for identifying them separately to standard NAPC contacts. Use activity ID: MHA261; CPA meeting.

Table CM1.3 Excerpt from Spreadsheet CP3.2 showing the activities relating to supporting contacts by medical staff

Activity ID	Activity
MHA258	Supporting contact 1:1 – inpatient unit
MHA261	CPA meeting

Non-admitted patient care⁸ and outreach care

- 44. The NAPC feeds (feed 3a, 3b and 3c) will record these events at patient level. They can include formal booked clinics or home visits, drop-in clinics, and adhoc contacts.
- 45. Many medical staff NAPC contacts are consultations only, so you should use the activity ID: SLA135 outpatient care. There are other types of NAPC contacts, especially for mental health and community services.
- 46. Some appointments include procedures during the NAPC contact. For example, pain management consultants give pain-relief injections. The activity should reflect activity ID: SLA136 Outpatient procedure and treatment room care. The procedure should also be clinically coded on the outpatient record: you can use the clinical coding to identify where and when this activity should be applied.
- 47. Anaesthetists may be involved in, or run, pre-operative, pain management or critical care clinics. Work with anaesthetists to find out if they are involved in outpatient care and if they perform any procedures. Use this information to develop RWV to assign an appropriate element of anaesthetist costs to the patients that received the care.

⁸ See also Integrated Standard CM3: Non-admitted patient care, for more information. For Emergency department care, see below.

Telemedicine (non-face-to-face) contacts

- 48. These can include telephone and video consultation contacts (telemedicine), and other types of non-face-to-face contacts recorded on Feeds 3a, 3b, and 3c: NAPC, using the data field 'consultation medium used'⁹. The costing definitions of these contacts are given in Table CM1.4.
- 49. The definitions and codes for 'consultation medium used' are given in the NHS Data Dictionary.¹⁰

Table CM1.4: Excerpt from Spreadsheet CP3.2 showing activities related to telemedicine (non face-to-face) contacts

Activity ID	Activity	Activity description
SLA149	Telemedicine contact	Telephone call, audio/visual call made in place of a face-to-face contact
SLA102	Other non-face-to- face contact	Other non-face-to-face contact that is not telemedicine, eg text, email, online medicine module, etc

Emergency departments (ED)

- 50. ED consultants work across the whole emergency department and have no named activity in the PAS record. Use activity ID: SLA121 EDED medical care for these staff, which has a different allocation method than other consultant services.
- 51. If you have information on the time spent with specific patients, you may use this as superior method SCM72 ED patient-level acuity, as shown on Spreadsheet CP3.5. For example: allocate additional resources to patients treated in the resuscitation room using information in the patient record to show the acuity.

⁹ We appreciate that some methods of communication are widely used, such as text and email, but contacts using them are not recorded. As recording protocols for these contacts are part of the patient pathway, we have included them in the standard. If you are not yet recording these contacts and this activity is material, we recommend you work with your informatics team to support the development of an appropriate recording method for the clinical teams, and document what is counted in ICAL worksheet 3: Local activity definitions.

¹⁰www.datadictionary.nhs.uk/data_dictionary/attributes/c/cons/consultation_medium_used_de.asp?s hownav=1?query=%22consultation+medium+used%22&rank=100&shownav=1

- 52. Liaison: Where MH medical staff¹¹ work with ED departments or physical health consultants work in MH trusts, their cost should be identifiable as to the activity it relates to. The working definitions of these activities are given in Table CM1.5.
- 53. If this activity lies within a different organisation, the cost should be shown in the reconciliation statement under 'other activities' and not be allocated over your organisation's own patient care. See Standard CM8 clinical and commercial services for more information.

Table CM1.5: Excerpt from Spreadsheet CP3.2 showing activities related to ED care

Activity ID	Activity	Activity description
SLA121	ED – medical care	Medical care provided during ED attendance
SLA153	ED – mental health liaison care	Time spent by mental healthcare professionals within ED and emergency care facilities

54. Where activity is not available for this service, you should disaggregate the cost before it is entered into the cost ledger, so the cost is not allocated to your organisation's own activity.

Resource activity combinations

55. Table CM1.6 below is an excerpt¹² from Spreadsheet CP3.3 showing the resource and activity links to use for consultant and non-consultant medical staffing.

¹¹ Other mental healthcare staff may provide care for this service. Use the relevant resource and activity ID shown in Table CM1.4.

¹² Please note all excerpts in this standard are for illustrative purposes only. Spreadsheet CP3.3 gives a full list of resource and activity links.

Table CM1.6: Excerpt from Spreadsheet CP3.3 showing example resource and activity combinations for consultant and non-consultant medical staffing costs

	Activity									
Resource	ED – medical care	Ward round	Research and development	Outpatient care	Outpatient procedure and treatment room	Endoscopy	Theatre – surgical care	Theatre - recovery	Electro- convulsive therapy	Psychological therapy care
Consultant	£X	£X	£X	£X	£X	£X	£X	£X		
Consultant – anaesthetist		£X	£X	£X	£X	£X	£X	£X	£X	
Consultant mental health			£X	£X					£X	£X
Non-consultant medical staff	£X	£X	£X	£X	£X	£X	£X		£X	£X
Non-consultant medical staff – anaesthetist		£X	£X		£X	£X		£X	£X	
GP – secondary care	£X	£X	£X	£X	£X	£X	£X		£X	£X

Other considerations

Theatres

56. For information on medical staff in theatres, refer to Standard CM5: Theatres and special procedure suites.

Critical care

- 57. Critical care consultant (anaesthetist intensivist) medical staffing cost should be allocated across critical care patients in the relevant ward/unit, based on the duration of their critical care stay. The cost should be identifiable for each bed day. See Standard CM6: Critical care for more information, including how to treat medical staff involvement in critical care transport.
- 58. If the patient in critical care is visited by a non-critical care consultant during a ward round or other visit, that ward round or supporting contact should be costed and included in the cost of the critical care stay.

Clinical support services

Pathology

- 59. Most pathology consultants specialise in a particular field, such as haematopathology or forensic pathology. They conduct tests, examine biological samples, and collaborate with other physicians to diagnose illnesses. Some will have patient consultations, but not all, therefore allocating cost based solely on patient contact is not always relevant. You should disaggregate their costs to separate any patient contact time from laboratory work and post-mortems.
- 60. As superior method SCM73 Pathology allocation by test, you can add an RWV for acuity of tests to the consultant costs – see Spreadsheet CP3.5: Superior and alternatives.

Diagnostic imaging

61. Radiologists specialise in diagnosing and treating disease and injury using medical imaging techniques such as X-rays, computed tomography (CT), magnetic resonance imaging (MRI), nuclear medicine, positron emission tomography (PET), fusion imaging and ultrasound. A significant proportion of medical staff time in diagnostic imaging is for

- reporting on the imaging scans. You should understand whether variation in the reporting time is consistent or variable by type of scan and allocate cost accordingly.
- 62. The radiologists may also deliver interventional radiology which has their named patient events recorded in the PLICS feeds. They will work with surgeons in theatre when the procedure is image guided or perform their own procedures using high cost devices such as stents¹³.
- 63. You should work with the department to ensure medical staff costs are allocated appropriately to all their activities. To do this, you should customise your general ledger to cost ledger mapping (or general ledger to resource mapping) process, so the different types of service are identifiable.
- 64. As a superior method SCM74 Diagnostic Imaging allocation by imaging scan, you can add an RWV for acuity of scans to the consultant costs. See Spreadsheet CP3.5: Superior and alternatives.
- 65. Use Spreadsheet CP3.3 to identify the diagnostic imaging activities that the consultant resource is linked to.

Non-clinical activities – special programmed activities

- 66. Education and training (E&T) activities should be costed in line with the E&T transitional method and documented in ICAL worksheet 21 Education and Training. Identify E&T using activity ID: SPA154; Education and training.
- 67. E&T activities should not be matched to patients but reported under the 'education and training' cost group.
- 68. Research and development (R&D) activities should be costed using your current methods and documented in ICAL worksheet 20: Research and development. Identify R&D using activity ID: SPA155; Research and development.
- 69. R&D activities should not be matched to patients but reported under the 'research and development' cost group.
- 70. Other non-clinical activities should be allocated to clinical activities using the actual cost of the clinical activity as an RWV.

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¹³ See Standard CM21: Clinical non pay items for more information on treatment of high cost items.

CM2: Incomplete patient events14

Purpose: To ensure incomplete patient events are costed consistently, in-year costs are allocated to in-year activity

Objective

- To ensure consistent costing of episodes¹⁵ that are:
 - started in a previous costing period and completed in the current costing period (ended)
 - started in a previous costing period but not completed in the current costing period (open)
 - started in the current costing period but not completed in the current costing period (open).
- 2. To address other issues relating to incomplete patient events – for example, where a medicine is dispensed, or a diagnostic test is carried out in a costing period different from the one to which it relates.
- 3. To ensure:
 - there is full reconciliation to the audited accounts
 - the cost of completed events is not inflated by the costs of incomplete events
 - when the multi-year events are completed, the full costs can be derived by looking at multiple years of patient-level data.

¹⁴ These are often known as 'work in progress (WIP)'. Our change in terminology acknowledges that as the NHS is a service organisation it is not appropriate to use manufacturing terminology.

¹⁵ For National Cost Collection (NCC) purposes, these three types of incomplete episodes relate to the 'episode types' identifiable as not complete in the NCC guidance Volume 3 and the NCC data extract specification.

Scope

- 4. This standard applies to all patients who are:
 - not discharged at the end of the costing period or
 - admitted before the beginning of the costing period.
- 5. This includes admitted and non-admitted patient care, and ED attendances.

Overview

- 6. All patient events could start in one costing period and finish in another. The majority area where this happens, is in APC.
- 7. Episode is the most detailed recorded level of APC, and all sectors with admission units should cost at this level.
- 8. As defined in the NHS Data Dictionary, an episode¹⁶ is a period of activity during which a named care professional is responsible for the patient.
- 9. An episode starts when the patient is admitted or when their care is transferred. Examples of transfers of care are:
 - A <u>consultant</u> transfer occurs when the responsibility for a <u>patient</u> transfers from one <u>consultant</u> (or <u>general medical practitioner</u> acting as a <u>consultant</u>) to another within a <u>hospital provider spell</u>¹⁷. In this case, one <u>consultant</u> <u>episode (hospital provider)</u> will end and another one will begin (from NHS Data Dictionary).
 - A transfer of responsibility may occur from a <u>consultant</u> to the <u>patient</u>'s own <u>general medical practitioner</u> (not acting as <u>consultant</u>) with the <u>patient</u> still in a <u>ward</u> or <u>care home</u> to receive nursing care. In this case, the <u>consultant</u> <u>episode (hospital provider)</u> will end and a <u>nursing episode</u>¹⁸ will begin (from NHS Data Dictionary).

¹⁶ For definition of Consultant Episode (Hospital Provider) see;

https://www.datadictionary.nhs.uk/data_dictionary/nhs_business_definitions/c/consultant_episode_(hospital_provider)_de.asp?shownav=1?query=%22consultant+episode%22&rank=100&shownav=1
 For definition of a Hospital Provider Spell see:

https://www.datadictionary.nhs.uk/data_dictionary/nhs_business_definitions/h/hospital_provider_spell de.asp?shownav=1?query=%22spell%22&rank=100&shownav=1

¹⁸ For definition of Nursing Episode see:

https://www.datadictionary.nhs.uk/data_dictionary/nhs_business_definitions/n/nursing_episode_de.as p?shownav=1?query=%22nursing+episode%22&rank=100&shownav=1

- A consultant leaves the organisation and the patient is transferred to another care professional. A long-stay patient may have many such transfers:
- when the named care professional changes due to a change in the responsibility for the patient, a new episode may start under the newly responsible care professional – for example, when a patient transfers from a paediatric to an adult service
- when the named care professional changes due to a change in the patient's condition, a new episode may start under the newly responsible care professional.
- 10. Community care (and other settings) may record a named care professional who is not a consultant. In this case, a consultant name is not required for costing, and the most appropriate costs of the named care professional should be allocated to the patient.
- 11. A spell is defined as a currency, representing the period between admission and discharge from a hospital unit.¹⁹ Each spell will include at least one episode. For the mental health sector, spells is the measure that is submitted for the PLICS APC file in the National Cost Collection.
- 12. An incomplete patient event is defined as one where the patient's current episode is ongoing that is, they are still in a bed at midnight on the last day of the current costing period.
- 13. If an episode is incomplete, the spell will also be incomplete, but the incomplete episode will not be costed separately from the complete episodes within the same spell. A spell may have one or more complete episodes and an incomplete episode.
- 14. Costing an episode based on its start and end dates means a patient whose care started in an earlier costing period will be recognised as having costs incurred during the costing period; and patients discharged after the end of the costing period can be identified and costs allocated according to when they were incurred.
- 15. If costs in the current costing period are allocated to discharged patients only, those yet to be discharged will not incur any cost. Incomplete episodes will be

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¹⁹ As defined in the NHS Data Dictionary.

- under-costed, and the costs of complete episodes inflated by those absorbed from the incomplete episodes.
- 16. Note: A change of ward does not start a new episode. See integrated standard CM13: Admitted patient care, for further information.

Approach

- 17. To accurately cost your organisation's activities, it is important that only resources consumed in delivering the event are allocated to the event. To achieve this, costs need to be allocated to all patient events regardless of whether they are complete or incomplete at the end of the costing period.
- 18. We know that 'work in progress' (WIP) is included in the financial accounts. Organisations are required to follow the principles of IAS18 in relation to revenue recognition; for example, income relating to partially completed episodes at the financial year-end should be apportioned across the financial years on a pro-rata basis. Costs of treatment are then accumulated as they are incurred.
- 19. Given the timing of the completion of the final accounts and cost data, the values for work in progress and for incomplete patient events will be different. There is no requirement to reconcile them, though the incomplete patient events cost data may help future assessments of income due for annual accounts purposes.

Calculating incomplete patient events

- 20. Incomplete patient events need to be calculated each time you run your costing model to derive patient-level costs. You should work with your informatics team to arrange a suitable way to do this, in conjunction with your costing software.
- 21. You should ensure that your admitted patient care (APC), ward stay (WS) and other feeds can recognise the incomplete events as valid patient records and bring them into the costing system. They should not be rejected during data quality checks: for example, validation checks on the discharge date or discharge flag fields.
- 22. To calculate incomplete events for APC for an in-year costing period, use Feed 1a, 1b or 1c: APC, and Feed 4: Ward Stay, as required for your sector (see

- Spreadsheet IR1.2).²⁰ One way to do this is to put the date of the end of the costing period in the 'discharge date' field.²¹
- 23. The APC feeds should then include information relating to patients still in a bed at midnight on the last day of the costing period.
- 24. Patients not discharged at the end of the costing period are identified by the derived field 'patient discharge flag' in the APC feeds; see Spreadsheet IR1.2
- 25. To calculate incomplete events for emergency department (ED/MIU/WIC) attendances for an in-year cost period, use Feed 2: Urgent care (ED/MIU/WIC). You should consider the materiality of this information and ensure that incomplete patient events for the largest service are calculated first.
- 26. To calculate incomplete events for NAPC patient events for an in-year cost period, use the relevant NAPC feed. You should consider the materiality of this information and ensure that incomplete patient events for the largest service are calculated first.
- 27. Incomplete patient events are included in the matching process to ensure costed activities such as medicines dispensed, can be matched to incomplete episodes.
- 28. You should ensure that patients admitted before the start of the costing period are also included in the PLICS feeds.
- 29. For local reporting purposes, patient-level cost users should follow the example in Table CM2.1.

Table CM2.1: Example of incomplete patient events in a reporting dashboard

Specialty X	Cost (£)	Income (£)
Patients discharged	100	90
Patients not discharged	60	
Total costs incurred in month on delivering patient care	160	

²⁰ See Standard IR1: Collecting information for costing for more information on this feed.

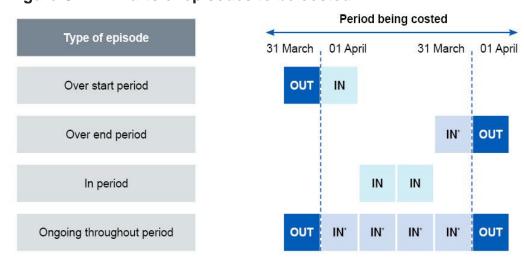
23 | CM2: Incomplete patient events

²¹ Ensure this substitute date is replaced with the actual discharge date or a revised substitute date at next calculation.

Allocating costs to year-end incomplete patient events

- 30. Figure CM2.1 below shows which part of an episode should be costed in the costing period, and includes four types of event²²:
 - all episodes that 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 episodes, in your costing system count the number of in-year days
 - all episodes that started in the current collection year but incomplete at yearend (over end period)
 - all episodes that started and finished in the period (in period); these do not require a specific calculation at year-end
 - all episodes started in a previous year and incomplete at year-end (ongoing throughout period); to cost these long-stay patients, in your costing system count the number of in-year days to ensure the in-year costs are only allocated to in-year activity.
- 31. Where an expensive prosthesis is used in a cross-year episode, you need to use the 'date of implant' field in Feed 15: Prostheses and other high-cost items, in column D in Spreadsheet IR1.2 and allocate this cost to the correct part of the episode. For example, if the episode spans 26 March XX to 6 April XY, and the prosthesis was inserted on 26 March XX, the prosthesis cost should be assigned to the part of the episode that falls in year XX.

Figure CM2.1: Parts of episodes to be costed



^{*} Incomplete episodes in costing period (this may be the collection year).

²² This information aligns to the NCC guidance Volume 3 for Episode Type.

Matching costed activities to incomplete patient events

- 32. As information regarding incomplete patient events is included in the master feeds, and because the auxiliary patient-level feed(s) include all activity inmonth, the matching rules in columns K to N in Spreadsheet CP4.1 will ensure costed activities from other patient-level feeds, such as medicines dispensed or diagnostics, will match to the incomplete event.
- 33. Where activities take place in a different year from the inpatient episode, ²³ outpatient attendance or contact to which they relate, this costed activity shows up in the costing system as unmatched. However, this is not a true unmatched activity; rather it cannot be matched because matching is not done across years.
- 34. Review all activity that is unmatched at year-end to identify why it is unmatched. See Standard CP4: Matching costed activities to patients for more information on this.
- 35. Where you identify that costed activity is unmatched because the episode, attendance or contact to which it relates is in a different costing year, you should flag it as 'unmatched incomplete patient event'. Then report this under incomplete patient events, not under unmatched. The time spent doing this should be proportional to the value of the unmatched activity for your organisation, in line with the costing principles.

25 | CM2: Incomplete patient events

²³ This only applies where diagnostic tests are done for the spell but occur before the spell starts or after it ends.

CM3: Non-admitted patient Care Updated for community services 2022

Purpose: To ensure all types of non-admitted patient care (NAPC)²⁴ activity are costed consistently

Objective

- To cost non-admitted care services to service team sessions, 25 then allocate 1. the costs to the patients attending that clinic or visited in the community.
- 2. To cost all NAPC based on the staff present:
 - to allocate the cost to the patients, based on the duration²⁶ of the contact.
- 3. To ensure all types of NAPC activity are costed correctly, including consultations, talking therapies, procedures, physical therapies, telemedicine and community care contacts.

Scope

- This standard applies to all NAPC activity, including
 - hospital outpatient clinic appointments
 - clinical settings such as health centres or community mental health outpatient appointments, including day care
 - contacts in the patient's residence or other non-clinical locations for specialist care, community care and mental health care contacts²⁷

²⁴ NAPC is used throughout this standard to cover all forms of non-admitted patient contacts.

²⁵ A service team session is a defined period of time where one or more care professionals see a sequential list of patients. It could be a day in the community, a 4-hour session, or defined as a formal clinic depending on the sector and the available information.

²⁶ See definition of 'duration' as given in this standard, paragraph 9.

²⁷ These home visits are sometimes known as 'domiciliary visits.

- attendances to a ward without admission (ward attenders).
- 5. For further guidance on costing maternity, chemotherapy, and radiotherapy NAPC contacts (hospital-based and community), please see:
 - Standard CM24: Maternity services
 - Standard CM25: Chemotherapy services²⁸
 - Standard CM26: Radiotherapy services²⁹.
- 6. Emergency care attendances to a 24-hour unit (also known as accident and emergency departments or emergency department (ED)) or non-24-hour unit (including minor injury units, walk in centres, and urgent treatment centres) are out of the scope of this standard. Please refer to Standard CM4: Emergency department attendances.

Overview

- 7. NAPC occurs in many settings, including formal outpatient clinics held in hospitals, community or mental health centres, and the patient's residence. Some events are booked in advance; others are 'drop-in'.
- 8. The terminology for NAPC is defined by the NHS Data Model and Dictionary. The national dataset definitions are used for costing, as all organisations that supply a service should submit to the relevant national dataset. These are described in Standard IR1: Collecting activity for costing.
- 9. NAPC activity should be costed based on which clinical staff are in the clinic, service team session or actual care contact with the patient.³⁰ Other costs relevant to NAPC include:
 - Clinical support and administration costs specific to the service. These should be allocated to all patient events equally in the service using the appropriate cost allocation method.

²⁸ This standard will be published during 2022/2023

²⁹ This standard will be published during 2022/2023

³⁰ This does not include staff present for education and training purposes.

- Outpatient departments that are often managed as a central team. These should be allocated to the patients who used the function, using the duration of their NAPC appointment.
- Community care contacts and procedures that take place outside the clinic setting, eg in a patient's residence, or in a community clinical setting. Costs should include travel and must also be allocated using the duration of the contact. The duration should not include time spent travelling to/from the patient.³¹.
- Non face-to-face (also called 'telemedicine') contacts. These are an essential part of patient care and are increasing in number; they should therefore be included as patient events.³² Costs are allocated using the duration of the contact but should not be allocated the costs of support nursing, consumables, or other elements of an outpatient department.
- 10. Duration is defined for costing as the time recorded in minutes in the patient administration system, that the patient is in the care of a clinician for nonadmitted patient care. Travel to/from the patient, and preparatory/post-contact administration time is not included. This definition is consistent with the definitions in the NHS Data Model and Dictionary. 33 34
- 11. The patient costs allocation using 'duration' of the patient event in minutes should use the duration of patient events that took place, proportionally, so all costs are allocated for the period. Empty slots, did not attends (DNAs), cancellations, and cancelled clinics, should not be costed separately.
- 12. Different services and clinics may use varying staffing numbers, types, and professional bands across different sessions, and within each session. Where the clinical area has materially variable staffing or other resources you can cost the service team sessions using superior costing method (SCM62)35. This will

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³¹ Please see NHS Data Model and Dictionary.

³² If this activity is not recorded in or submitted to the national datasets, work with your informatics teams to progress this. Non face-to-face contacts may form a large part of 'hidden activity', as discussed in Standard IR1: Collecting information for costing. It is essential to include this activity as care models change, so the cost and outcome benefits can be understood.

https://datadictionary.nhs.uk/data_elements/clinical_contact_duration_of_care_contact.html?hl=durati

³⁴ https://datadictionary.nhs.uk/data_elements/expected_duration_of_appointment.html

³⁵ See Spreadsheet CP3.5 Superior and alternatives.

require local information on staffing detail³⁶, and then allocation of the session cost to the patients.

Approach

Information requirements

- 13. Costing NAPC activities requires information from the local source that supplies the national datasets listed in Table CM3.1, in accordance with Standard IR1: Collecting information for costing and Spreadsheet IR1.2.
- 14. Where there is no national dataset for the service area, local information should be used.

Table CM3.1: NAPC information feeds and the source data

PLICS information feeds	Feed reference	Source data
NAPC acute and community outpatients	3a	Commissioning Data Set (CDS)
NAPC mental health	3b	Mental Health Services Data Set (MHSDS)
Improving Access to Psychological Therapies	16	Improving Access to Psychological Therapies Data Set (IAPT)
NAPC community: for community care contacts and community clinic attendances	3c	Community Services Data Set (CSDS)
NAPC community midwifery (see Standard CM24: Maternity Services)	3d	Maternity Services Data Set (MSDS)
NAPC home births (see Standard CM24: Maternity Services)	3e	Maternity Services Data Set (MSDS)

15. You should bring all NAPC patient events into the costing system including:

³⁶ A service team session is a defined period of time where one or more care professionals see a sequential list of patients. It could be a day in the community, or a 4-hour session, or defined as a formal clinic depending on the sector and the available information.

- home visits
- ward attenders where the patient attends a ward without being admitted, often for specialist nursing input³⁷
- day care
- home births, as these are not admissions to a hospital (see also Standard CM24: Maternity services)
- separate, sequential contacts recorded as part of a team clinic or 'onestop shop', as long as they are recorded according to the Data dictionary requirements and NHS commissioning rules
- where a therapy service has a discrete referral list, and also supports another service. For example, a senior physiotherapist may have their own clinics – this is a discrete service. They may also see patients in an orthopaedic clinic where they are still the only professional seeing the patient - this would not be a discrete clinic but is counted – in this case, as an orthopaedic contact.
- 16. The following data fields in Spreadsheet IR1.2 record the duration of the patient event for costing:
 - CDS (feed 3a): field 'expected duration of appointment'
 - MHSDS (feed 3b): field 'clinical contact duration of care contact'
 - CSDS (feed 3c): field 'clinical contact duration of care contact'
 - IAPT dataset (feed 16): this does not have a field for the duration of contact; you need to calculate the duration locally
 - MSDS (feed 3d): field 'clinical contact duration of care activity'.
- 17. Column D in the NAPC feeds in Spreadsheet IR1.2 contains the fields for each attendance/contact.
- 18. Duration of the NAPC patient event is an essential driver of cost. There are two recognised types of duration:
 - 'expected duration': the planned or 'booked' slot for the appointment usually built into the clinic/diary template. This term is used in the CDS.

³⁷ But the care given can be from any clinical professional groups.

- 'actual duration': the actual time the patient is with the clinician. This term is used in the CSDS, the MSDS and the MHSDS.
- 19. The duration value should exclude administration time before or after the patient contact and the care professional's travel time to and from the location.38
- 20. Acute services should use 'expected' or 'booked' duration for the allocation as they are typically standard-length appointment slots, and so will be a reasonable allocation of cost. As a superior method (SCM59)³⁹, you can use actual duration. This is particularly beneficial to the costs if:
 - the time spent with patients is materially variable across a costed session, or
 - you have accurate information to allocate based on actual duration.
- Mental health services should use actual duration because of the variability of time spent with each patient during one costed session.
- 22. Some NAPC patient events will go over midnight; for example, a community nurse night-sitting service. The costing system should use the start of the attendance for the costed record, to ensure it is identified with other NAPC records in the same month.
- 23. If your organisation does not record the duration of attendance in minutes for a particular service, work with your services and informatics teams to develop this information. In the meantime, continue to use your current method for costing outpatient activity and record this in the integrated costing assurance log (ICAL) worksheet 14: Local costing methods.

Outpatient procedures

- 24. Outpatient procedures performed in acute and community clinics that are recorded on the CDS should be clinically coded and grouped to show the healthcare resource group (HRG).
- 25. Procedure coding will indicate additional cost for consumables, but this may not be material. Discuss whether there are material costs of consumables or

³⁸ The clinical contact duration of care activity is a defined field in NHS datasets. For more information please see the **Data Dictionary**

³⁹ See Spreadsheet CP3.5 Superior and alternatives.

- equipment with the service team and if relevant use relative weight values to allocate to patients. See CM21: Clinical non-pay items.
- 26. Where OPCS codes are used, clinical coders⁴⁰ will apply the codes to the patient record or agree on a set template of codes for the administration team to apply to the NAPC patient record. 41. SNOMED-CT codes will be applied to the patient record by the healthcare professional.

Home visits

- 27. Home visits are identified in the information feeds (feeds 3a, 3b, 3c, 3d and 3e) using the field 'activity type location code'.
- 28. There is no national definition of what a community service is. Home visits are provided by acute (specialist), mental health and community care professionals.
- 29. For costing purposes, we have elected to use the national dataset that the patient events are submitted to, to define whether a service is a community care contact community services data set (CSDS) or a specialist contact on the commissioning Data Set (CDS). This will aid activity reconciliation during the National Cost Collection.
- 30. A 'community care contact', is a contact made by a community care professional with a patient for the delivery of care. This care contact is not carried out by an acute, specialist team.
- 31. For costing, you should understand the nature of the team providing the services so the data can be built into the correct feed and costed accordingly:
 - Where the organisation provides consultant-led or non-consultant-led specialist/acute services in the community, this would be included in the Outpatient (CDS) and should use feed 3a. These will be costed as part of the acute services and will include specialist acute care professionals attending the patient in their home.
 - Where the patient event is part of mental health services, it will be included in the Mental Health Services Data set (MHSDS) and use feed 3b. This will include care professionals in community mental

⁴⁰ Clinical coding of outpatient attendances is not mandatory, but organisations have locally arranged for clinical coding to support an accurate patient record and enable more appropriate reimbursement from the Payment by Results/National tariff payment system.

⁴¹ We recognise that clinical coders are not responsible for ensuring the templates are completed correctly.

- health teams, but may also include specialist mental health professionals.
- Where a provider organisation is commissioned to provide district nursing, community allied health professionals or other care as a community service, it is expected that they will submit this data to the Community Services Data Set (CSDS) and use feed 3c. This is the feed source for community care contacts.
- Where the provider (usually an acute organisation) provides community midwifery home visits and manages home births, this will be included in the Maternity Services Data Set (MSDS) and brought into PLICS on feed 3d. As the MSDS is relatively new, some organisations have built this data into the CDS. You should ensure these patient events are not duplicated in feed 3a and feed 3d within the costing system.

32. For example:

- a district nurse providing wound dressings as part of the community service, will be reported using the 'activity location type code' of 'A01 patient's home' as a home visit on the CSDS (feed 3c), and costed as a community care contact
- a specialist paediatric oncology nurse based in hospital would also be recorded using the 'activity location type code' of 'A01 patient's home' as a home visit – but this should be on the CDS (feed 3a). This is specialist work that takes place in the patient's residence, rather than a 'community' contact.

Ward attenders

33. Ward attenders see a clinician in the ward location without the need for admission. They are treated as 'outpatients' for costing and commissioning purposes and are identified in the information feeds 3a, 3b, 3c and 3d using the field 'activity type location code' of E02 Ward (nursing and other nonmedical professionals).

Day care

34. Day care facilities do not have hospital beds. Patients with a range of physical and mental health needs attend sessions for therapeutic and social benefit to their health.

- 35. The activity type location code of H01 Day Centre is the national method of identification, but day care may be commissioned using other fields or local identification codes.
- 36. Day care should also be costed using the duration of the patient contact. As day care is typically several hours long, the duration of contact will be greater than most types of NAPC, and allocation using the duration will show the greater proportion of cost needed to operate the service.
- 37. Most day care is given as a group, so the cost of the session should be allocated across all the patients that attended. See CM14 Group sessions for more information.

Data quality and hidden activity

- The CDS, CSDS, MHSDS, IAPT and MSDS datasets require all NAPC contacts to be recorded. However, the quality and completeness of the data in some areas are known to be variable. If fields required for PLICS are not completed fully on your NAPC information feeds (as shown in Table CM3.1), the information may be available from data not included in the main national datasets⁴². You should use this information to guide discussions with clinical and service leads and enable you to enter local patient-level data into your NAPC feed(s).
- 39. You may need to create proxy records for services that do not keep an electronic record of patient contacts, as a temporary solution until an electronic patient record is in place. See Costing learning extension: Managing information for costing for more details.

Data on staff involved

40. The CDS (feed 3a) for acute services includes the HRG field to identify multiprofessional and multidisciplinary activity separately from single professional activity but it does not determine who was present. If the different staff types are considered material, you will need to obtain information from the service about who was present at the attendance to ensure the correct costs are allocated to the right patient.

⁴² See also Standard IR1: Collecting information for costing for how to work with missing data or poor data quality.

- 41. The CSDS, MHSDS and IAPT, and MSDS datasets do not currently contain suitable fields to identify multi-professional and multidisciplinary activity separately from single professional activity. You may need to collect additional information about who else is present in a clinic or care contact to ensure the correct costs are allocated to the right clinic or service and build this into your NAPC feeds, using the 'multidisciplinary flag' and 'multi-professional flag' data items. Use this information to construct relative weight values to allocate the appropriate staff costs to contacts.⁴³
- 42. See Table CM3.2 for fields in Feed 3a: NAPC, indicating staff involved.

Table CM3.2: Excerpt from Spreadsheet IR1.2 showing fields in Feed 3a: NAPC, for staff involved in NAPC contacts

Field name	Field description
Care professional local identifier	A unique local 'care professional identifier' within a healthcare provider that may be assigned automatically.
Consultant-led or non consultant-led	Is the lead healthcare professional a consultant? Yes or No
Healthcare professional code	Derived from either the General Medical Council (GMC) reference number for general medical practitioners, or the General Dental Council registration number for general dental practitioners (where the dentist does not have a GMC reference number). Where the consultant is not the responsible professional, use the local code for the responsible professional.
Clinic code	Clinic or facility identifier. (Alongside the clinic code, the clinic name may identify the lead healthcare professional.)
Multi-professional contact	Used to identify where a multiple staff resource is used. This is not currently available on the CSDS but is a requirement for costing.
Multi-professional flag	Flag for multi-professional clinics (clinics with more than one clinical professional, each from different services).
Multidisciplinary flag	Flag for multidisciplinary clinics (clinics with more than one clinical professional, from the same service but performing different tasks within the patient event).

43. Be aware that a clinic may be assigned to the consultant or lead care professional with overall responsibility for it. This person is not necessarily

⁴³ We acknowledge this information is currently not collected widely.

present in the clinic, or may only be physically present in some patient contacts in that clinic.

Other NAPC data sources

- 44. The information feeds for some discrete services in the organisation may be separate from those showing contacts in the CDS, CSDS, MHSDS, IAPT and MSDS. Examples include:
 - sexual health (see Community standard CM16: Sexual health services)
 - dentistry (see Community standard CM17: Dental services)
 - assisted reproduction/fertility
 - fetal/foetal medicine
 - learning disabilities
 - addiction services, including drug and alcohol
 - perinatal mental health services
 - mental health liaison.
- 45. Information on what took place during these contacts will be recorded on a local electronic system, or paper pro forma completed by clinical staff, which is entered into an electronic system by administrators. These datasets, where available, should be brought into the costing system in accordance with Standard IR1: Collecting information for costing, and the appropriate costing method used for the detail of the costing process.
- 46. Procedures performed during these patient events should be recorded by OPCS procedure codes (hospital care) or SNOMED-CT codes.⁴⁴ However, there may be other coding models used – for example, community dental services have separate treatment coding structures that show a course of treatment and show the unit of dental activity (UDA) for commissioning purposes. (See Standard CM17: Dental services)
- 47. If you think the quality of the electronic data for any NAPC service is not good enough for costing, get a blank pro forma (may be known locally as a routing slip, coding forms, outpatient procedure records) and use it to guide discussions with clinical and service leads about the most commonly performed

⁴⁴ SNOMED-CT is mandated for all NHS providers from April 2020.

procedures. You can then identify the materiality of the cost for the clinical nonpay items and the staff involved in performing them.

Specialist cost centres and expense codes

48. In the standardised cost ledger, the cost centres for NAPC services include:

-	XXX075	Outpatients department
-	XXX076	Midwifery – outpatients
-	XXX610	Community Rehabilitation Units (Outpatients)
-	XXX524	LD Learning Disabilities services non admitted
-	XXX528	CAMHS non admitted – Other
-	XXX530	Assertive outreach
-	XXX543	MH Adult Services - non admitted
-	XXX572	CAMHS LD Learning Disabilities services non admitted
-	XXX607	District Nursing
-	XXX621	Children's Community Service

49. Use expense codes appropriate for the staff type and band. You may need to disaggregate the costs of staff covering more than one unit or service area, to ensure the correct flow of cost to resources.

Resources

50. NAPC activities can involve a wide range of healthcare professional resources, including consultants, nurses, therapists, psychiatrists, radiographers, and clinical scientists. You should map the cost to the appropriate resource for the type of staff conducting the contact.⁴⁵ These will include:

-	CMR301	Health Visitor
-	CMR314	Wheelchair and rehab: therapist
-	MDR034	Optometrist
-	MDR038	Orthotist
-	MDR039	Audiologist
-	MDR055	Chiropodist and podiatrist

⁴⁵ Refer to Spreadsheet CP3.1 for more information.

MHR253 Consultant mental health

MHR260 Counsellor

SGR062 Consultant

- SGR063 Non consultant medical staff

SGR064 Consultant - anaesthetist/intensivist

SLR081 Nurse

SLR083 Advanced nurse practitioner

- SLR085 Midwife

- SLR090 **Psychologist**

- THR003 **Physiotherapist**

- THR007 Speech and language therapist

THR009 **Psychotherapist**

THR014 Family therapist

- 51. As a permitted substitution (SCM48), you can use healthcare professionals' individual costs, identified from a payroll data source, in the costing system to calculate the staff cost per contact. See Spreadsheet CP3.5: Superior and alternatives for more information.
- 52. Some NAPC contacts may require input from a healthcare professional who is not a member of the regular clinic staff- for example, minor surgery may require an anaesthetist or practitioner. Where material, their cost needs to be included for the relevant patient, based on the duration of the patient event. As a superior method (SCM33), this information can be brought into the costing system using Feed 7: Supporting contacts.

Activities

- 53. Non-admitted care services relate to the type of care given and may include more than one activity within each contact.
- 54. Review the list of activities in Spreadsheet CP3.2 and determine those which are relevant for the service. You can then identify how they may be mapped automatically using the information on your NAPC feeds. For example, activity CMA302 Community care can be identified by the 'Service or team type referred to' field in Feed 3c: NAPC feed – as code 12 District nursing.
- 55. As a superior method, community care activities can use the field 'Community care activity type code' to further detail the activity/activities in the patient event.

56. For NAPC patient events, use the prescribed activities in Table CM3.3 (see Spreadsheet CP3.2 for detailed descriptions).

Table CM3.3 Prescribed activities for NAPC

Sector	Prescribed	activity
All sectors	SLA135	Outpatient care
	SLA136	Outpatient procedure
	SLA151	Pre-operative assessment
	SLA149	Telemedicine contact
	SLA102	Other non face-to-face contact
	MHA262	Day care
	SLA157	Ward attender care.
Mental health	MHA293	CMHT care
only	SLA101	MH Outreach visit
	MHA261	CPA meeting
	MHA291	Home based MH care/crisis intervention
Mix – acute/ community	CMA302	Community care – for general contacts, eg district nursing
care contacts	CMA300	Health visiting contact
	CMA301	School nursing contact
	CMA309	Other rehabilitation care
	CMA310	Stroke rehabilitation care
	CMA311	Musculoskeletal care
	CMA313	Pregnancy advisory/family planning care
	CMA314	Rapid response assessment/care
	CMA315	Long-term conditions care
	CMA316	Rheumatology care
	CMA300	Health visiting contact

	CMA301	School nursing contact
	CMA317	Respiratory care
	CMA318	Intravenous therapy care
	CMA319	Children's community care
	CMA320	Tuberculosis care
	CMA321	Cancer-related care
	CMA322	Cardiac care
	CMA323	Continence advisory care
	CMA324	Diabetic care
	CMA325	Enteral feeding care
	CMA326	Haemophilia care
	CMA328	Palliative/respite care
	CMA329	Neurological care
	CMA330	Stoma care
	CMA331	Tissue viability care
	CMA332	Transplantation patients care
Acute only	SLA147	Home births
	SLA158	Community maternity care

Outpatient care - patient to clinician 'consultations'

- 57. Activity ID: SLA135: Outpatient care represents a discussion with a care professional – usually in a clinical setting. The term 'outpatient' is usually used for 'clinics' in a specialist, hospital-based service. There would not be material costs of consumables in these patient events.
- 58. Mental health interventions may include a wide range of talking therapies, patient education and management of medicines/substances, enabling the patient to manage or improve their condition. Costing such complex nonadmitted mental health services needs a good understanding of the staff

- working in these services, and how the information recorded about them may be used to 'count' activity and allocate cost.
- 59. Community clinics in a health centre or other community setting, where one care professional is visited sequentially by different patients, would not normally be called 'outpatient care'. These would be community care contacts, that are in a clinical setting.

Outpatient procedures

- 60. These are interventions performed in an NAPC setting by specialist care professionals. For example, pain management consultants give pain-relief injections, podiatrists perform surgical procedures on feet, and electroconvulsive therapy (ECT) may be administered in the mental health sector. These procedures should be identified from their clinical coding or other sources of information and will have an HRG currency. Use activity SLA136 Outpatient procedure.
- 61. Outpatient procedures or interventions may occur in the consultation room (clinic) or a specialist treatment room. You need to ensure the correct department costs and clinical non-pay items are allocated to the procedure (see Standard CM21: Clinical non-pay items for more information).
- 62. Outpatient procedures would not normally be performed in the patient's home. Where a community care contact includes a procedure, this will have a 'care activity code' on the patient's record, and this will show in the CSDS. You should use the relevant community care activity for the procedure.

Ward attenders

- 63. These are patients attending a ward for an NAPC contact with a nurse, therapist, or medical staff. The contacts are often follow-up care, or for long term conditions that have an 'open access' to the ward: but the patient is not admitted to a hospital bed. You should use Activity ID: SLA157: Ward attender care.
- 64. The ward attendance should be included on Feed 3a: NAPC feed, or Feed 3c: NAPC community feed. Feed 4: Ward stay, may contain some of the information used for costing these attendances, as bed spaces may be allocated to these patients (even though they are not admitted).

- 65. Some costs will come from the ward cost centre, as the staff from the ward will give most of the care. An outpatient department should not be included in the cost, even though the patient event is classified as NAPC.
- 66. You will also need to identify any additional care professionals (rather than the ward staff) involved in the ward attendance. For example, specialist nurses may see their patients on a ward in this model. As a superior costing method (SCM33), they should be recorded on Feed 7: Supporting contacts, and costed using the relevant Activity ID. See Table CM3.4 Activities for supporting contacts.

Table CM3.4 Activities for supporting contacts

Activity ID	Activity name
MHA258	Supporting contact 1:1 - inpatient unit
MHA259	Supporting contact multidisciplinary - inpatient unit
SLA099	Technical and professional supporting contact (non therapy)
SLA154	Palliative care support contact
SPA162	Infection control support contact
THA001	Therapies supporting contact
THA005	Psychotherapy support contact

Day care

- 67. Day care is where a group of non-admitted patients benefit from care services in a group setting – usually over a few hours. A range of care professionals may provide care over the period of attendance. The activity may be recorded in the patient administration system (PAS) and reported as part of the CDS, or it may be on a standalone local system.
- 68. The staff involved are most likely to be nurses, therapists and other care workers, but in some areas, there can be medical input. The model of care may be termed 'social' or 'medical' depending on its clinical content. There are

separate cost centres in the cost ledger should you need to keep the two types of model separate.⁴⁶ You should use Activity ID: MHA262: Day care.

Non face-to-face (telemedicine) consultations

- 69. For costing, telemedicine and other non face-to-face contacts should be treated in the same way as face-to-face contacts.
- 70. Non face-to-face contacts are a vital part of clinical care for many patients. Most of these contacts will be by telephone but video calling is increasingly used: these are both defined as 'telemedicine'. Use Activity ID: SLA149: Telemedicine consultation (telephone and video consultation).
- 71. Other non face-to-face contacts include text conversations, email, patient-online schemes and patient letter review.⁴⁷ These need to be separated from telemedicine, as the duration of 'patient contact' will be the time taken to review and respond to the patient rather than the duration of the patient contact (there is no actual patient contact). Use Activity ID: SLA102: Other non face-to-face contact.
- 72. Clinical telemedicine can be identified in the NAPC dataset using the 'consultation medium used' field. See Table CM3.5 showing the NHS Data Dictionary codes for this field.

Table CM3.5: NHS Data Dictionary codes for consultation media

Code	Method of communication
01	Face-to-face communication
02	Telephone
03	Telemedicine web camera
04	Talk type for a person unable to speak
05	Email
06	Short message service (SMS) – text messaging

⁴⁶ Note: Day care – even surgical or medical day care – is different from 'day hospital', which is an admitted patient care (APC) unit.

⁴⁷ Note: As there are only names for these communication methods in the NHS Data Dictionary, we apply the same guidelines as for telephone contacts. If you include these in your PLICS, we recommend you include your local policy on what constitutes the currency in ICAL worksheet 3: Local activity definitions.

- 73. These contacts should be counted and costed as they often replace the need for face-to-face contact and prevent escalation of conditions, making an effective contribution to agreed pathways. Non face-to-face contacts simply to make bookings or pass on results without advice and guidance are not countable.
- 74. If services record their non face-to-face calls on a separate database to the patient administration system (PAS), you should obtain a patient-level feed from this alternative source that includes all important identifiable information.⁴⁸
- 75. Telemedicine and other non face-to-face contacts are often 'hidden activity' (see Standard IR1: Collecting information for costing). Therefore, you may need to identify where there are gaps in your NAPC data.
- 76. You need to determine if the time recorded for a non face-to-face consultation is the actual call duration or if it includes preparation and write-up time. Only the duration of the phone call should be used, for consistency with the costing of other NAPC contacts, 49. Preparation and write up time are treated as administration time, not contact time.
- 77. Most telemedicine and other non face-to-face contacts are likely to involve only one staff member, but multi-professional contact is possible. The appropriate resources should be attached to the activity accordingly.

Mental health outreach care

78. These are contacts outside the standard clinical setting that have required significant additional time 'searching' for the patient. This activity occurs in the mental health sector, often where the patient has not attended appointments to continue their treatment plans. The MH professional searches for the patient and holds the contact wherever possible – this will not necessarily be in a

⁴⁸ If this data is not submitted to the national dataset, you will need to note this on your activity reconciliation.

⁴⁹ The NHS Data Dictionary definition also excludes the time spent on preparation for the contact and follow up time.

- clinical setting. Without these contacts, patients may not take medication or follow self-care plans.
- 79. Use Activity ID: SLA101: MH outreach visit. Allocate this activity using the total duration of contact in accordance with the 'clinical contact duration of care contact' field, plus local information at the patient level for the searching time.

Home visits (including 'domiciliary visits')

- 80. Acute and mental health visits by specialist medical staff and other care professionals to the patient's home or current place of residence should use Activity ID: SLA135: Outpatient care, even if the location is not a traditional home setting. These can include contacts at hostels or shelters, temporary residence at a friend's/family's home and where a homeless person lives on the street. Consultant visits to the patient's home are rare, and are sometimes known as 'domiciliary visits' due to the payments made for these to the individual in the past. In costing terms, these are still 'outpatient care' if the care professional is a consultant or another specialist care professional.
- 81. The location is identified by the 'activity location type code' field, so there is no need for a different activity ID code.
- 82. Community-specific staff visiting the patient's residence should use the activity relevant to the care given – for example, Activity ID: CMA301: Community care, or the detailed community team areas of care given using activity ID prefixed with 'CMA'. These community teams can be general – such as district nurses that provide a range of services and knowledge, or more specific – such as a community diabetes service.
- 83. If there is not a clear division between a specialist service and a community service, you should agree with (1) the service, and (2) your PLICS steering group which type of service is provided. This decision will take into account:
 - understanding the data recorded (ie consider which national dataset their patient events are reported to)
 - the service or team's understanding of whether they are a specialist service, or a community service

• if the service is commissioned as a specialist service or a community service. Traditionally, community services have been under block contract arrangements. (See your contracting team for more details).

Group sessions

- 84. These occur when several patients have contact with a single or multiple care professionals simultaneously.
- 85. Group sessions are identified by the 'group therapy indicator' field in the NAPC feeds (see Spreadsheet IR1.2).
- 86. The costing method for these is detailed in Standard CM14: Group sessions.

Mental health care programme approach (CPA) meetings

- 87. Care programme approach (CPA) meetings review a patient's mental health care plan. They must be held annually but can be more frequent; and can take place in either a non-admitted setting or while the patient is an inpatient. You should ensure the costs of these meetings are allocated to Activity ID: MHA261: CPA meeting.
- 88. CPA meetings will be recorded for the MHSDS and should be brought into Feed 3b: NAPC – mental health feed, if they are held in the outpatient setting. Use the field 'care programme approach review date' to identify these reviews separately from other NAPC contacts.
- 89. Please note: CPA meetings while the patient is admitted will also be identified using this field. Activity ID: MHA261: CPA meeting should also be used for CPA meetings during admissions, showing as a component cost of the care, but still remaining identifiable.

Mental health liaison service

- 90. Patients reporting mental health illness in an acute care setting may require assessment and/or treatment for their mental health condition as well as their physical condition. Mental health liaison teams work in acute providers; usually in emergency departments, but they can work in other areas such as outpatient clinics, emergency wards or elderly care wards supporting patients with dementia.
- 91. The cost of these services will be recorded in:

- the mental health organisation's ledger or the acute provider's ledger.
- 92. Some organisations will have patient-level data for these contacts, some will have aggregate data without patient records, and some will have no patient event information at all⁵⁰.
- 93. Where there is patient-level event information, and the cost of the resources is in your organisation it should be costed at patient level. However, it is known that not all trusts have patient-level information for MH liaison services, so:
 - if only aggregate level activity is available, you may cost this at average cost per unit in your costing system
 - if no activity information is available in your organisation, you should identify any cost in your organisation and record it as 'other activities' so it is not allocated to patients that did not receive the service
 - where there is cost in your organisation but no activity, you should identify the cost as MH Liaison services in the 'other activities' cost group. This cost should not be allocated to patients that did not receive the service.
- 94. You should use Activity ID: SLA153: A&E mental health liaison care to identify this service.

Other NAPC activities

95. Other activities may include, but are not limited to, the list in Table CM3.6.

Table CM3.6: Other NAPC activities

Activity ID	Activity
MDA062	Audiology assessments
SLA129	External beam radiotherapy delivery
SLA142	Chemotherapy delivery ⁵¹
SLA132	Endoscopy

⁵⁰ A flow chart showing the costing and collection process for MH Liaison Services to acute or community providers can be found on the <u>OLP</u>.:

⁵¹ These activities are used for both NAPC and APC patient events. There is no expectation that costing practitioners should reclassify the point of delivery from the one shown in the PAS.

SLA143	Pain management care			
CLA047	Sleep studies ³⁵			
CMA303	Issuing of equipment			

96. Prisons or other judicial settings: use the activity ID relating to the care given, not the location where it took place. The location is identified by the 'activity location type code' field, not by the activity code. For example, endoscopy can be admitted patient care or non-admitted patient care – the activity is location unspecific.

Resource activity combinations

Table CM3.7 is an excerpt⁵² from Spreadsheet CP3.3 showing some of the 97. resource and activity links to use for an NAPC attendance.

Table CM3.7: Excerpt from Spreadsheet CP3.3 showing some possible resource and activity links for NAPC costs

	Activity		
Resource	Telemedicine	Outpatient care	Outpatient procedure
Advanced nurse practitioner	£X	£X	£X
Midwife	£X		
Psychologist	£X		
Speech and language therapist	£X		
Dietitian	£X	£X	
Healthcare assistant		£X	£X
Medical and surgical consumables		£X	£X
Consultant	£X	£X	£X

⁵² Please note all excerpts in this standard are for illustrative purposes only. Use Spreadsheet CP3.3 to ensure correct resource and activity links.

Matching

- Use the prescribed matching rules in Spreadsheet CP4.1 to ensure the auxiliary patient-level information feeds match to the correct NAPC contact. Examples include:
 - medicines dispensed (feed 10)
 - pathology (feed 8)
 - diagnostic imaging (feed 12a).
- 99. As a superior method (SCM33), where a clinician has contact with a patient during a patient event from a different department, this can be recorded on Feed 7: Supporting contacts, and matched to the NAPC patient event. For example, where a specialist palliative care nurse attends an outpatient oncology clinic to see specific patients only.
- 100. See Table CM3.4 Activities for supporting contacts.

Other considerations

NAPC events while the patient is admitted

- 101. If a patient is seen by a team, not in the ward and where the costs are not within the ward care activity, they can be recorded as a superior method (SCM33) on Feed 7: Supporting contacts feed, and matched to the patient episode. The cost of this care is part of the patient episode.
- 102. The only exception to this is if a NAPC patient event was pre-booked with a different service and the appointment takes place while the patient is admitted. This can be recorded separately as an NAPC event. For example, a substance use service visiting a patient admitted to a secure unit, when they have not been admitted for substance use.

NAPC 'did not attends' – for guidance only

103. We do not prescribe how to cost 'did not attends' (DNAs) but if required for local purposes, our recommended approach is available to download from the Open Learning Platform (OLP).

CM4: Emergency department attendances (including ED, minor injury units and walk-in centres)

Purpose: To ensure emergency department (ED) attendances are costed consistently

Objective

To ensure all ED attendances are costed according to the investigations and the treatment/procedures the patient receives.

Scope

- 2. This standard applies to ED attendances reported under treatment function code (TFC) 180⁵³ as defined in the NHS Data Dictionary and other treatment function codes where there is a record of the patient event in the Emergency Care Data Set (ECDS).54
- ED attendances may be at adult, paediatric and mixed ED55 units, single 3. specialty emergency units, urgent treatment centres, minor injury units (MIU) and walk-in centres (WIC).
- All ED attendances within the costing period, including all patients discharged in the costing period and patients still in the unit at midnight on the last day of the costing period.

⁵³https://www.datadictionary.nhs.uk/data_dictionary/attributes/t/tran/treatment_function_code_de.asp? shownav=1?query=%22treatment+function+code%22&rank=100&shownav=1

⁵⁴ The ECDS is the national dataset for urgent and emergency care. It has replaced the Accident & Emergency Commissioning Data Set (CDS type 010).

⁵⁵ We have used the term ED to describe all the emergency units, and 'ED' to identify a 24 hour service area.

5. EDs may carry out several types of activity that are all reported under TFC 180, including follow up appointments such as fracture clinics and admissions to clinical decision units. Any outpatient attendances or inpatient episodes reported under TFC 180 should be costed using integrated standards CM3: Non-admitted patient care and CM13: Admitted patient care. These are not ED attendances so are out of scope of this standard.

Overview

- 6. Patients attend or are brought to emergency units for life-threatening emergencies, less severe injuries and the fast or severe onset of clinical conditions. Some are 24-hour units, and some have fixed opening times. Some have a full range of clinical services, some are clinical specialty specific (such as ophthalmology) and some see and treat the less severe cases.
- 7. We recognise that the time a patient spends in a 24-hour ED from arrival to departure is not an appropriate relative weight value (RWV) for allocating their costs, as someone with a relatively minor injury is likely to spend a disproportionate time in the department waiting to be seen.
- 8. However, it is also known that establishing a full set of weightings by treatment is a significant piece of work. Therefore, we have moved the weighting of treatments to a superior method SCM58 ED Weighted treatments, whilst this area can be reviewed. (See Spreadsheet CP3.5 Superior and alternatives)
- 9. The transition path shows that it remains our intention to prescribe weightings by treatment in the future⁵⁶.
- 10. You should cost 24-hour ED attendances by allocating costs weighted by the treatment/procedures the patient receives. As a superior method, you can also weight the attendances by the investigations performed (See Spreadsheet CP3.5: Superior and alternatives).⁵⁷
- 11. For the non-24-hour units covered by this standard, and for the single-specialty units, duration of attendance can be used by specific agreement with the service team. For example where gynaecology-specific units all have the basic investigation/treatment, time may be agreed as a valid allocation method.

⁵⁶ The 2022 transition path is available on the Approved Costing Guidance website as part of the prescribed tools.

⁵⁷ The 2022 Costing Assessment Tool (CAT) gives higher scores for superior methods, to reflect the additional quality of costing.

You should record these agreements in the ICAL worksheet 14: Local cost allocation methods.

Approach

Information requirements

- 12. Obtain Feed 2: Urgent care (ED/MIU/WIC) feed, for all emergency units including mono-speciality units, urgent treatment centres, MIU and walk in centre attendances as described in Standard IR1: Collecting information for costing and Spreadsheet IR1.2.
- 13. The feed contains data items from both CDS (the original CTP feed) and ECDS: the latter have been added to show the planned move to ECDS for all services. This change has not been completed as yet, because HRGs cannot be calculated from the ECDS data (SNOMED-CT) and are still required for national reporting. You may update the data items in line with your local reporting needs. The new data items will have the same impact on the National Cost Collection as the old data items.
- 14. Note: Clinical decision unit (admitted patient care) patient events will be recorded on Feed 1a: APC, and outpatient appointments will be recorded on Feed 3a: NAPC, and should not be included in Feed 2: Urgent care (ED/MIU/WIC).
- 15. The superior method SCM58 ED Weighted treatments costing process requires treatment/procedure codes. Either CDS or SNOMED-CT codes can be used in Feed 2: Urgent care (ED/MIU/WIC)⁵⁸ in column D in Spreadsheet IR1.2⁵⁹ for the costing process - but please note the HRG is a mandatory requirement. If the SNOMED-CT codes are used, these will need to be mapped to the HRG codes using the SUS mapping⁶⁰.
- 16. Where there are no treatment/procedure codes in the data to be used for costing, review the data quality with the service team. If no treatment/procedure is confirmed, use the duration of the attendance as the cost driver with minimal nursing staff and administration time agreed locally.

⁵⁸ In future years, the costing process will require the SNOMED-CT codes as used in the ECDS. ⁵⁹ The ECDS is the mandated dataset to be used for emergency care, replacing the data collection that included fields for Investigation and Treatment.

⁶⁰ https://digital.nhs.uk/services/secondary-uses-service-sus/secondary-uses-service-sus-what-snew#april-2020

Specialist cost centres and expense codes

17. In the standardised cost ledger, you should use cost centres

XXX070: Accident and Emergency⁶¹

XXX098: GP streaming to A and E department

• XXX608: Minor Injury Unit

XXX645: Walk in centre.

- 18. Where staff cover different parts of the emergency department, you should customise the cost ledger using local digits to replace the XXX, to disaggregate the cost of staff to the relevant patient area: for example, main ED unit, clinical decision unit, outpatient attendances, eye casualty, dental emergency department, minor injuries etc.
- 19. You need to identify the proportion of time spent by staff in the different parts of the ED. Obtain this understanding through discussion with service managers and clinical leads covering the different activities. For example, consultant A works:
 - 50% of their time in ED, so 50% of their costs should be allocated to a disaggregated cost centre and attached to Feed 2: Urgent care (ED/MIU/WIC)
 - 50% of their time on the clinical decision unit (admitted patients), so 50% of their costs should be allocated to a different disaggregated cost centre so the costing process can use Feed 1a: admitted patient care (APC).

Resources

- 20. Identify the staff in the ED attendance from the actual or planned staffing levels and allocate to the resources for the service provided.
- 21. Please note general practitioners should be separately identified from 2022, using the resource code ID: SGR077 General Practitioner secondary care, to separately identify the cost of GP within and prior to the ED attendance. Use costing resource SGR077 General Practitioner secondary care to identify these staff. This activity maps to new collection resource CPF010 General Practitioners.

⁶¹ This can include mono-specialty ED units.

⁶² Please see collection guidance volume 3 for further information about the separate identification of general practitioner streaming services.

Activities

- 22. You need to identify the ED activities your organisation delivers from the prescribed activity list in Spreadsheet CP3.2.
- 23. Use the following prescribed activity for the ED attendances and GP streaming service:
 - SLA119 ED advanced nursing practitioner (ANP) care
 - SLA120 ED department care
 - SLA121 ED medical care
 - SLA124 Minor injuries unit / Walk in centre care
 - SLA153 ED MH liaison care
 - SGA091 GP and primary care service
 - SLA159 Streaming before emergency department attendance
- 24. Please note, SLA159 Streaming before emergency department attendance maps to a new collection activity EMC002 Streaming before emergency care dept.

Costing using treatment/procedures information

- 25. As a superior costing method SCM58, costs for each patient event should be weighted by the treatment/procedure they receive. See Spreadsheet CP3.5 Superior and alternatives.
- 26. Set up relative weight values (RWVs) for each treatment/procedure type to use in the costing process. You need to develop these in conjunction with the ED clinical and service leads. Table CM4.2 shows how the statistic allocation table could look.

Table CM4.2: Example of a statistic allocation table per treatment/procedure⁶³

Treatment/procedure code (SNOMED-CT)	Procedure	Nurse (min)	HCA (min)	Consultant (min)	Non- consultant medical staff (min)	Patient- specific consumables (£)
SCTID: 10849003 Removal of foreign body (procedure)	Removal of foreign body	60	30	10	20	10

⁶³ All values are for illustrative purposes only. Your data feed may include SNOMED treatment/procedure codes, not those shown in Table CM4.2.

Treatment/procedure code (SNOMED-CT)	Procedure	Nurse (min)	HCA (min)	Consultant (min)	Non- consultant medical staff (min)	Patient- specific consumables (£)
SCTID: 15631002	Application of dressing (minor procedure)	60	30	5	10	20
SCTID: 439569004	Resuscitation (procedure)	120	30	60	60	75
SCTID: 284182000	Gluing of wound	60	30	5	10	10

- 27. Where there is more than one treatment/procedure code, use the first code⁶⁴ as the basis for the allocation of cost. As a superior method SCM47 ED using more than one treatment to weight the cost, you can use a weighting based on a combination of codes (see Spreadsheet CP3.5: Superior and alternatives for further detail).
- 28. Clinical investigations such as scans and pathology tests should be matched to the patient event from the auxiliary feeds, however, where these investigations are not recorded on a prescribed feed, as a superior method SCM45 ED clinical investigation weightings you can apply additional acuity weightings to the cost allocation based on the investigations shown in the ED CDS or the Emergency Care Clinical Investigation (SNOMED CT) field (see Spreadsheet CP3.5: Superior and alternatives for further detail).

Resource activity combinations

29. Table CM4.1 is an excerpt⁶⁵ from Spreadsheet CP3.3 showing the resource and activity links to use for ED attendances.

⁶⁴ The first code may not necessarily be the most significant. We are looking at options within the new SNOMED-CT coding to identify the most important code, and how this might be identified for costing. 65 Please note all excerpts in this standard are for illustrative purposes only. Use Spreadsheet CP3.3 to ensure you are using all the correct resource and activity links.

Table CM4.1: Excerpt from Spreadsheet CP3.3 showing some of the resource and activity links for ED attendance costs

Resource	ED – advanced nurse practitioner (ANP) care	ED – department care	ED – medical care	ED – MH liaison care	Streaming before emergency department attendance
Advanced nurse practitioner	£X			£X	
Healthcare assistant		£X			
Medical and surgical consumables	£X	£X	£X	£X	
Medical and surgical equipment and maintenance		£X	£X	£X	
Nurse		£X			
Patient-specific consumables	£X	£X			
Consultant			£X	£X	
Non-consultant medical staff			£X	£X	
General practitioner – secondary care			£X		£X

Matching

30. Use the prescribed matching rules in Spreadsheet CP4.1 to ensure the auxiliary patient-level feeds, such as diagnostics, match to the correct ED attendance, APC or NAPC patient event.

Other considerations

Major trauma patients

31. Treat major trauma patients in the same way as above; they should be allocated their own costs depending on the treatment/procedures they receive.

- 32. The cost of the major trauma team should be allocated across all patient events for flagged major trauma patients,
- 33. Use the major trauma flag in Feed 2: Urgent care (ED/MIU/WIC), in Spreadsheet IR1.2 to identify these patients.
- 34. Most major trauma patients will have an ED attendance recorded upon arrival, but some patients will be admitted without an ED attendance - eg those transferred straight to theatre. The cost of the major trauma team should be allocated across all patient events for flagged major trauma patients, including any admissions without an ED attendance.
- 35. You should discuss with your major trauma team the care they give once the patient has been moved from ED into an admission and build this information into the allocations to the patient for the major trauma team cost.
- 36. Be aware that major trauma patients will have separate data recorded and a separate funding source, so their identification will need to come from the alternative data source, and be flagged in Feed 2: Urgent care (ED/MIU/WIC), to allow you to correctly allocate the costs of the major trauma team.
- 37. Major trauma patients may have critical care input while in ED. Standard CM6: Critical Care provides guidance on how to identify these costs. The costs of the critical care input should be included in the costs of the ED attendance. If the patient is later transferred to critical care, they will also have separate patient event(s) for critical care.

CM5: Theatres and special procedure suites

Purpose: To ensure all theatre and special procedure suite (SPS) activity is costed consistently

Objective

- To cost theatre and SPS sessions based on the staff in attendance at those 1. sessions.
- 2. To allocate the cost of the theatre/SPS session to the patients who had surgery during the session, based on their time in the unit.
- 3. To describe superior methods which may increase the accuracy of your theatre costing:
 - i) allocating costs based on the complexity of the procedures performed in theatre/SPS, including the costs of additional medical staff from different specialties
 - ii) allocating the actual pay costs of the staff in attendance at those sessions rather than using an average.

Scope

- 4. This standard applies to all surgical operating theatre and SPS activity.
- 5. For this standard, the term 'theatre' includes main surgical operating theatres and special procedure suites such as cardiac catheter laboratories, endoscopy, renal dialysis suites and electroconvulsive therapy suites. Other procedure suites can be included as a superior method, eg podiatry and outpatient procedure suites.
- 6. High cost equipment such as robotics are included in this standard.

7. High-cost clinical implants and devices are used in theatres. These are covered in Standard CM21: Clinical non-pay items, and are out of scope of this standard.

Overview

- 8. Theatre services are at the centre of the hospital system and cover a wide range of activities, whether scheduled or unscheduled, complex, or more routine day surgery and procedures. Such services are delivered by skilled clinicians using high value clinical infrastructure in sterile environments to provide the highest possible standard of patient care.
- 9. Theatre costs include the cost of the patient arrival in the suite, anaesthesia, the surgery/intervention, recovery, and time waiting to return to the ward or be discharged. Theatre costs must include all appropriate out-of-hours and waiting list costs.
- 10. Only allocate costs to patients who have attended the theatre /SPS unit for surgery/procedures during the session⁶⁶.
- 11. There should be no separate cost event for planned or unplanned downtime; the time lost for downtime should be removed from the calculations for the costing process. As a superior methods SCM21 Theatre set up and clean down time and SCM23 Unused time in theatre, costs can be treated as a separate activity and allocated across all patients in the specific theatre suite used.

Approach

Information requirements

- 12. Obtain Feed 13: Theatres, as prescribed in Standard IR1: Collecting information for costing and Spreadsheet IR1.267. This includes the required session and procedure information.
- 13. The theatre management will capture information on the planned mix of staff working in individual theatre sessions. As a superior method SCM75 Theatres/SPS – actual staff by session, you can allocate specific staff costs to the patients using the theatre sessions, although doing so should be carefully

⁶⁶ If the patient attended the unit but did not have the procedure, the theatre record will show the stage the patient reached before the procedure was cancelled. Costs should still be allocated for the relevant stages.

⁶⁷ We appreciate there might not be as much information for SPS in the feed as for theatres.

- considered where the lead surgeon has no control over the staff rostered for that session.
- 14. Feed 13: Theatres information will show the primary surgeon and anaesthetist for the operation. It may also identify second and subsequent surgeons, anaesthetists, and other medical staff for the operation.
- 15. Some complex operations may require two or more surgeons and several anaesthetists, and last many hours, making them high-cost activities. All these staff are unlikely to be recorded on the standard electronic theatres data. As a superior method SCM75 Theatres/SPS – actual staff by session, where the expected cost of these additional staff is material, review this issue with the clinical/service leads to see if alternative information can be obtained, and if it can, bring this information into the costed patient record.
- 16. Work with clinicians to understand how the data shows the different timestamps in column D in Spreadsheet IR1.2 to ensure that costs are allocated using the correct durations. Surgeons will usually be present for the time period known as 'knife to skin'. Consultant anaesthetists will be responsible for the patient for longer, from anaesthetic start time until they are out of recovery.
- 17. There may be instances where two theatres share an anaesthetist at the same time. You should consider this in your allocations.
- 18. Map your staff to the appropriate resource. Using Feed 13: Theatres, and additional information from management, allocate the cost to the relevant theatre/SPS. Use the actual staffing mix of grades, although a permissible alternative is the planned staffing mix, where this data is more reliable.

Specialist cost centres and expense codes

- 19. In the standardised cost ledger, you should use cost centre XXX051: Theatres / SPS. This can be customised using local digits to replace the XXX if you need to disaggregate costs for main theatres and specialist procedure suites of different types.
- 20. Many high-cost implants will be in the general ledger linked to theatres. You should ensure these are identified and allocated in accordance with Standard CM21: Clinical Non-pay items.

Resources

- The resources for theatres are shown in Spreadsheets CP2.1 and CP3.1. Use the following key resources for theatres and SPS.
 - SGR062 Consultant
 - SGR063 Non consultant medical staff
 - SGR064 Consultant anaesthetist/intensivist
 - SGR065 Non consultant medical staff anaesthetist
 - SGR066 Operating department practitioner
 - SGR068 Perfusionist
 - SLR081 Nurse
 - MDR046 Medical and surgical consumables
 - MDR047 Medical and surgical equipment and maintenance
- 22. Note: Theatres can include both nurses and separately trained operating department practitioners.
- 23. As a superior method SCM75, where the individual staff are recorded at patient-level in the theatre/SPS information, their actual costs, which may be identified from a general ledger or payroll data source, can calculated at an individual level in the costing system and allocated to specific activities and on to specific patients.68

Table CM5.2: Excerpt from Spreadsheet IR1.2 showing some of the fields in which to record the different staff in theatres⁶⁹

Feed name	Field name	Field description
Theatres	Surgeon 1	Name or identifier
Theatres	Anaesthetist 1	Name or identifier
Theatres	Non-consultant medical staff – anaesthetist	Name or identifier

⁶⁸ Using the electronic staff record to allocate appropriate pay costs has been adopted as a superior method for other service areas. However, this method should be considered carefully where the pay cost of individual staff is not controlled by the service, eg where the surgeon has no control over of rota staffing.

⁶⁹ The full list has been reviewed and in Spreadsheet IR1.2 some staff groups have been moved to 'optional' at the agreement of the Costing Expert Working Group.

Theatres	Operating department practitioner	Name or identifier
Theatres	Nurse	Name or identifier
Theatres	Perfusionist	Name or identifier
Theatres	Midwife	Name or identifier

24. You need to consider the cost of capital charges, lease, and repair costs for high-cost equipment – eg robotics – and ensure these costs are only allocated to patients who were treated using them.

Activities

- 25. You need to identify the theatre activities 70 your organisation delivers from the prescribed activity list in Spreadsheet CP3.2:
 - SGA079 Theatre anaesthetic care
 - SGA080 Theatre recovery care
 - SGA081 Theatre surgical care
 - SGA082 Theatre care general.
- 26. If your organisation has SPS, you should use the following SPS activities:
 - MHA279 Electro-convulsive therapy
 - SLA132 Endoscopy
 - SLA134 Cardiac catheterisation laboratory
 - SLA136 Outpatient procedure
 - SLA137 Other specialist procedure suites care
 - SLA138 Renal dialysis.
- 27. Special procedure suites may use the same data recording and planning process as the theatres, or a completely separate one. You should identify the information and include it in Feed 13: Theatres, to provide consistent information. We recognise that different service areas may have different information systems, so you should assess the materiality of work to bring the patient-level data into Feed 13: Theatres, and judge the prioritisation accordingly.

⁷⁰ For SPS activities, please see section in this standard on special procedure suites.

Resource activity combinations

- Table CM5.1 is an excerpt⁷¹ from Spreadsheet CP3.3 showing some of the 28. resource and activity combinations you should use for theatres.
- 29. For each resource and activity combination, a two-step prescribed allocation method is given in Spreadsheet CP3.3. This is based on the time a staff group spends in theatre, eg the duration of the procedure (operation 'cutting time') in minutes for consultant surgeons.
- 30. Recovery costs should be allocated based on the patient's time, in minutes, between entering and leaving recovery.
- 31. Where a provider has theatres on separate sites, collect the theatre costs by site, and apportion to the theatre minutes used, by site, for that costing period.

Matching

32. Use the prescribed matching rules in columns in Spreadsheet CP4.1 to ensure the costed theatre/SPS activity is matched to the correct patient episode.

Other considerations

Sterilisation costs

- 33. Sterilisation services can be within the trust or contracted in. The costs should be allocated to the department(s) that use the service.
- 34. You should use resource ID: T1S131 Sterile services
- 35. As a superior method SCM76 Sterile services at patient level, you can allocate the cost to patients for specific items where information on the sterilisation service provided is available at patient level.
- 36. As a superior method SCM32 Sterile services trays by procedure, you can allocate costs using the procedure codes from the theatre record. This is not as effective method of allocation as SCM76, but may provide improved information over the prescribed allocation method shown in Spreadsheet CP2.2 Overhead allocations. Both these superior methods will require work with the sterile services team to establish the costing methodology.

⁷¹ Please note, all excerpts and examples in this standard are for illustration only. Use Spreadsheet CP3.3 to ensure you are using all the correct resource and activity links.

Costing emergency and out-of-hours theatre sessions

- 37. Theatre staff are often scheduled to work outside a nine-to-five working day. However, sessions outside their normal working hours may incur costs that are materially higher than in-hours work due to the enhanced salaries payments⁷².
- 38. Theatre timetables will include planned sessions and also sessions held for emergency patient needs, such as 'expected' non-elective maternity theatre sessions and flexibility for trauma or other emergency surgery. Emergency theatre activity costs can be materially higher per patient due to the lower use of emergency theatre sessions. Work with the theatre leads to decide if a further weighting is appropriate for this work.
- 39. Theatres will also have sessions that require additional staffing above the planned level, for clinical need and to support capacity requirements or to adjust for theatres taken out of use unexpectedly. These sessions may require additional staff payments over the cost of standard working rates.
- 40. Discuss with the theatre leads whether this is a material issue, the information is available to you, and where the inclusion of higher cost for emergency/out-of-hours work by additional weighting is a desirable allocation. Then discuss and agree with your costing steering group whether you should allocate the additional costs by weighting the patients who were in these theatre sessions. This issue should be discussed because the staff responsible for the operations often have no control over whether a theatre session is a normal one or unplanned.⁷³
- 41. Do not assume all emergency and out of hours costs relate to non-elective patients, as patients admitted electively may need to return to theatre out of hours or may be on waiting list initiatives. Wherever possible, use episode identifiers to allocate these additional costs.
- 42. Where agreed, the acceptable alternative method is for these costs to be allocated to all patients who have used the theatre during the costing period, weighted by actual theatre minutes.

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⁷² Overnight, weekends, bank holidays and within other non-working days may incur additional payments,

⁷³ We will discuss this issue further with the Costing Expert Working Group for Theatres in 2021, to provide further guidance and/or a national prescribed approach.

Table CM5.1: Excerpt from Spreadsheet CP3.3 showing some of the resource and activity combinations for theatre costs

				Activity			
Resource	Theatre – anaesthetic care	Theatre – recovery care	Theatre – surgical care	Theatre care – general	Insertion or fitting of a prosthesis, implant or device	Perfusion	
Consultant – anaesthetist	£X	£X					
Nurse	£X	£X					
Consultant			£X				
Non-consultant medical staff			£X				
Operating department practitioner				£X			
Cardiac devices					£X		
Perfusionist						£X	

CM6: Critical care

Purpose: To ensure all adult, paediatric and neonatal critical care activity is costed consistently

Objective

1. To cost all critical care activity using the prescribed method.

Scope

- 2. This standard applies to adult, paediatric and neonatal critical care and high dependency unit activity provided by the organisation. This includes but is not limited to:
 - intensive care units (ICU)/intensive therapy units (ITU)
 - specialist care units (SCU)
 - high dependency units (HDU)
 - high dependency beds and critical care beds on a general ward with a critical care minimum dataset record
 - critical care 'outreach'⁷⁴ teams working on non-critical care units
 - critical care transport and the critical care transport network.

Overview

3. Critical care units⁷⁵ - sometimes called intensive care units (ICU) or intensive therapy units (ITU) – are specialist hospital wards that provide treatment and monitoring for seriously ill patients. They are staffed by specially trained healthcare professionals and contain sophisticated equipment for monitoring and treatment. They are a core part of acute admitted patient care and for costing are treated separately from the general ward stay.

⁷⁴ Critical Care Outreach is a clinical/service management term. For costing, please note the specific differences between critical care outreach and mental health outreach, as they have different costing allocation methods.

⁷⁵ See https://www.nhs.uk/conditions/intensive-care/

- 4. All critical care patients have a critical care minimum dataset (CCMDS) record. In this standard, for brevity we refer to the CCMDS as covering all ages.
 - a. babies under 1 month⁷⁶ are recorded using the Neonatal Minimum Dataset (NCCMDS)⁷⁷
 - b. children are recorded using the paediatric Critical Care Minimum dataset (PCCMDS), and
 - c. Adult critical care patients will be recorded using the Critical Care Minimum Data Set (CCMDS)..
- 5. Patients with a CCMDS record may be in designated critical care units and HDUs, or on other wards.⁷⁸
- 6. System names and terminology: The data items as submitted to the CCMDS for each age group should be used for costing reconciliation. The following audit and system-based terminology should be understood so that you can have clear conversations with service and informatics colleagues.
 - Adult: the CCMDS is the data recorded for patients in an adult ward and is part of a wider research and audit dataset called ICNARC (Intensive care national audit and research centre).
 - Paediatric: the data that is sent to the PCCMDS is part of a wider research and audit dataset PICANet (Paediatric Intensive Care Audit Network).
 - Neonatal: Some trusts record neonatal data on the BadgerNet system, which is used by the trust as the source data for the nationally mandated NCCMDS submission. This data is also sent to a national research database BadgerNet.

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⁷⁶ This timeframe varies in some organisations, depending on the care needs of the baby, especially where the baby is born significantly before the expected delivery date.

⁷⁷ Some trusts record paediatric and neonatal data on PicaNet or Badgernet systems and submit to their national dataset (non-mandated datasets). This data must also be submitted to NHS Digital for the mandated PCCMDS and the NCCMDS.

⁷⁸ See also section on patients in non-critical care wards in this standard. Different commissioning rules may govern the treatment of critical care patients on other wards. The standards require patients recorded on the CCMDS to be included as critical care patients for costing. Please note, paediatric and neonatal critical care patients are treated on general wards far less frequently than adults.

- 7. Each bed day of a critical care or high dependency ward stay should be costed as a separate patient event. This is to show the high level of cost variability in these services by day.
- 8. The patient's inpatient care will be recorded in the main PAS as an 'episode⁷⁹' that forms part of the commissioning data set. The HRG grouper will use ICD10 and OPCS data within the CDS data to provide a core HRG for the episode; and uses the Unit Function code to identify the patient critical care days within the episode.
- 9. The critical care data items for the CCMDS are also recorded in provider information systems. The grouper mainly uses the CCMDS data items to create the relevant unbundled HRG(s), not the ICD10 or OPCS codes within the core HRG⁸⁰.
- 10. The critical care HRG are known as 'unbundled HRGs'.
- 11. All patients will have an underlying episode and 'core' HRG.
 - Some trusts create a separate, standalone episode for the time spent in critical care showing the 'transfer of care' to an intensive care consultant.
 - Others do not have a separate episode but identify the critical care period from the CCMDS data items.
- 12. You should find out whether critical care is shown as a discrete episode or as part of a core episode used by your trust, so a critical care patient event by day can be shown in the costing system and costed separately from the core episode.
- 13. You should work with your service/clinical leads to understand the costs. Costs to consider for critical care include:
 - nursing
 - consultants and non-consultant medical staff
 - allied health professional staff (physiotherapists, pharmacists, dieticians, speech and language therapists, occupational therapists, psychologists)

⁷⁹

https://datadictionary.nhs.uk/nhs_business_definitions/consultant_episode__hospital_provider_.html? hl=episode

⁸⁰ There are some ICD codes that are used along with PCCMDS to determine if an 'isolation' uplift can be applied (moves up one HRG category)

- other staff (healthcare assistants, cleaners, admin staff)
- clinical support services (eg pathology, radiology)
- extracorporeal membrane oxygenation (ECMO) and extracorporeal life support (ECLS)
- enhanced recovery teams (preoperative critical care input) and perioperative and critical care teams (PACE)
- critical care outreach teams.
- medical and surgical consumables and equipment
- medicines dispensed
- critical care transport.
- 14. You also need to consider the data for, and cost of, the following types of patients, which will not be recorded on the CCMDS (see later sections in this standard):
 - non-critical patients in a critical care bed
 - critical care staff attending major trauma patients in ED or other areas
 - patients involved in research studies
 - critical care 'outreach' teams
 - patients in a temporary critical care bed in a general ward, recovery, or other unit.⁸¹
- 15. Additional factors you need to consider when reviewing your costed critical care are:
 - There should be no cost to the core episode when the patient is within the critical care unit.
 - The first day of the period in critical care may incur more costs. You should include this factor in relative weight values, as well as matching any additional services to the specific bed day when they occurred
 - Lengthy stays in critical care may incur additional costs, as long periods of critical care may impact the patient's condition. You should include critical care ward support in allocations of therapies and professional/technical services as agreed with those services; but as a superior method SCM33 Supporting contacts allocated at patient level, you can obtain supporting

⁸¹ These episodes would only be classed as critical care for this standard if recorded in the CCMDS data.

- contacts feed⁸² (feed 7) to show the cost of patient-level contacts for each patient, by day.
- Consultants from the core episode may visit the patient whilst in critical care. This may be part of their ward round information (superior method SCM71 Ward rounds at patient level) or identified as additional visits (SCM33 Supporting contacts allocated at patient level). If material, these superior methods enable you to include this additional cost of patient care in an advanced manner.
- Discuss cost and data factors with the critical care team so that you understand the issues and set costing rules accordingly. Document these rules in integrated costing assurance log (ICAL) worksheet 14: Local costing methods.
- 17. In addition to the service leads, a useful point of contact is the local representative of the Operational Delivery Network (ODN) for each critical care area.

Approach

Information requirements

- 18. Obtain the appropriate patient-level critical care feed (feeds 6a neonatal, 6b paediatric and 6c adult) as prescribed in Standard IR1: Collecting information for costing and in Spreadsheet IR1.2. Some trusts may need to use Feed 4: Ward stay, to identify the ward days within their APC data, and ensure they are not duplicating days within the underlying episode.
- 19. All critical care data should be available in the costing system as a bed day record. There is no difference between age group or national dataset.
- 20. Once the data has been gathered from the relevant data source, all age groups are costed in the same way cost is attached to each bed day.
- 21. Consult your software supplier to understand which method your system uses to create the costed critical care bed day record. This will also depend on how your organisation records critical care):
 - as a discrete episode with transfer of care to a consultant intensivist (anaesthetist) or

⁸² This feed is a superior costing method.

- the patient episode continues under the surgical or medical consultant, and Feed 4: Ward stay, or Feeds 6a, 6b and 6c: Critical care, will show the relevant critical care unit.
- 22. All trusts submit data to the national Critical Care Minimum datasets held by NHS Digital (eg adult CCMDS, PCCMDS and NCCMDS). You should reconcile the activity submitted to this dataset⁸³ and not to the ICNARC, PICANet or BadgerNet datasets. These datasets are owned by separate organisations⁸⁴ and they cleanse the data, and apply HRG codes using the NHS Digital payment grouper, so the HRG may be different to that in the CCMDS and the costing system.
- 23. The national critical care datasets undergo data cleansing, and the data may be sent back to the provider with the expectation that the data cleansing is repeated in the local system. You should find out whether the data cleansing advised by these datasets has been used to update the local data before resubmission to NHS Digital. This allows the closest possible reconciliation of costed data to the national dataset.
- 24. Other data differences between the costing system and the national dataset may include:
 - Timing of data extracts: has data been updated in your local systems since the data was sent to the national CCMDS?
 - The costing grouper adds a day for part days in the length of stay calculation, where national datasets do not.
 - All patients should have a PAS episode, which should be costed if the
 patient does not have a critical care record. This applies even if they are
 on a critical care unit. For example, a well-baby may be cared for on the
 neonatal unit because the mother is unwell. The baby may not have a
 critical care record but should have their main episode costed with the
 costs of a neonatal unit patient. These patients may not be in the national
 dataset.

⁸³ Where your organisation does not submit to the national dataset you should reconcile to the local system data and record this method in the ICAL.

⁸⁴ For example, PICANet is part of the national audit programme managed by Healthcare Quality Improvement Partnership (HQIP).

- 25. Data transfers for costing between critical care, main PAS episodes and the costing system should be carefully reconciled as it is reported that this process can easily miss patients.
- 26. You should ensure the Unit Function Code for your critical care patients is correct. **All** critical care unit function codes are used for costing and reporting. You should not manually group unit function codes based on previous years of costing guidance.

Critical care patients on a general ward85

- 27. Where there are critical care (ICU or HDU) beds on a general ward, these patients should have a critical care record in the CCMDS, and these patients should be included on the acute hospital critical care feeds (feeds 6a, 6b and 6c). This identifies them as a critical care patient⁸⁶. They should also be flagged in Feed 4: Ward stay, using the 'critical care bed on a general ward' field in column D of Spreadsheet IR1.2.
- 28. The CCMDS allows these patients⁸⁷ 'to be recorded in any location where critical care is provided'. This may differ from your local commissioning arrangements.
- 29. You will need to work with the ward manager to identify how or if the nursing ratio differs for these patients. If relevant, you will need to set up relative weight values to ensure the critical care patients receive a higher proportion of the general ward's nursing than those in the other beds.
- 30. These patients will not normally receive care from the 'critical care outreach team' as if they have a CCMDS record, they are critical care patients and will be supported by the main critical care unit(s). You should also discuss the support these patients receive from critical care staff and allocate their costs accordingly. Critical care outreach services are described later in this standard.

Non-critical patients in a critical care bed

31. In exceptional circumstances, patients who do not require critical care may be placed in a critical care bed (non-critical care patients). Some critical care unit

⁸⁵ This section may also apply to critical care beds in a recovery unit, to increase critical care capacity.

⁸⁶ Note: these are not outreach patients as they do have a CCMDS record.

^{87&}lt;a href="https://www.datadictionary.nhs.uk/data_dictionary/messages/supporting_data_sets/data_sets/critical_care_minimum_data_set_fr.asp?shownav=1">https://www.datadictionary.nhs.uk/data_dictionary/messages/supporting_data_sets/data_sets/critical_care_minimum_data_set_fr.asp?shownav=1

- or HDU beds may be flexed to accommodate step-down patients waiting for a bed in another organisation. Their care needs are not as high as those for a critical care patient.
- 32. If material in number or cost, the allocation of cost should be discussed and agreed with the critical care team.
- 33. These patients should have a note on their critical care record (CCMDS)⁸⁸. Flag these patients in Feeds 6a, 6b and 6c: Critical care, using the 'non-intensive care unit patient flag' field in column D in Spreadsheet IR1.2.

Specific cost centres and expense codes

- 34. Critical care cost centres in Spreadsheet CP2.1 are:
 - XXX067 Critical care Adult
 - XXX068 Critical care Neonatal
 - XXX069 Critical care Paediatrics
 - XXX083 High dependency unit
 - XXX080 Critical Care Transport Service Network
 - XXX081 Critical Care Outreach
 - XXX089 Critical Care Transport Service
- 35. These can be customised in your local cost ledger if you have different discrete costs centres for each of the different unit function codes. There are separate cost centres for the critical care transport service and network so these can be allocated using different methodology to the other units.
- 36. Use expense codes appropriate for the staff type and band. You may need to disaggregate the costs of staff covering more than one unit or service area, to ensure the correct resource is applied.
- 37. Where critical care and high dependency unit costs for multiple wards are within one cost centre, you should disaggregate the cost at the general ledger to cost ledger mapping stage. An example weighting is shown in Table CM6.1. You should agree the weighting with the service lead.

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⁸⁸ We have noted that that the end date may not be consistently recorded on the local dataset to reflect this change in care level on the unit. Please note the materiality of this work.

Table CM6.1: Example of relative weight values for nursing where cost of all critical care units is contained within one cost centre

Acuity/care level (locally determined)	Nurse
HDU 1	0.5
HDU 2	0.5
ICU 1	1.0
ICU 2 (specialist unit, eg liver)	1.5

Resources

Medical and other clinical staff

- 43. The resources for critical care are shown in Spreadsheets CP2.1 and CP3.1. Use the following key resources for the critical care units.
 - SGR062 Consultant (paediatric and neonatal)
 - SGR063 Non consultant medical staff
 - SGR064 Consultant anaesthetist/intensivist (adult unit only)
 - SGR065 Non consultant medical staff anaesthetist (adult unit only)
 - SLR081 Nurse
 - SLR082 Specialist Nurse
 - MDR046 Medical and surgical consumables
 - MDR047 Medical and surgical equipment and maintenance
- 38. Adult critical care units are led by anaesthetist consultants called 'intensivists', as opposed to theatre-based anaesthetists. Paediatric and Neonatal intensive care units are led by consultants that are not normally anaesthetists. You should use the appropriate expense code for medical staff in each unit.
- 39. Junior medical staff will cover both critical care and theatre-based services. but you should note that when on the rota in critical care, they should map to the resource of the medical staff role they are performing (for example, nonconsultant medical staff - anaesthetists.
- 40. Critical care medical and nursing staffing should be allocated across all patients in the critical care unit they work in, based on critical care stay duration in hours and minutes.

- 41. Fields that may offer data on unit or patient acuity include:
 - nursing acuity care level (CCMDS)
 - unit function code (CCMDS)
 - acuity score (all ages local source)
 - HRG (paediatric and neonatal).⁸⁹
- 42. As a superior method SCM2: Acuity, Specialing and Observations in Spreadsheet CP3.5, medical staff and nursing costs can be weighted for patient acuity. 90
- 43. Patients in critical care may also be visited by their named consultant from another specialty, eg their named cardiac consultant. These visits to critical care by non-intensivist consultants, other grade medical staff, and specialist nurses are matched from the ward round or supporting contacts information.

Medical and surgical consumables and equipment

- 44. Use the process described in Standard CM21: Clinical non-pay items to cost medical and surgical equipment.
- 45. For consumables, high-cost patient-specific items should be allocated to the patients that used them.
- 46. Superior costing method SCM24 Use Inventory Management System to allocate equipment / consumables / implants to patient level, enables you to use a patient-level feed for all consumables.

Activities

- 47. You need to identify what critical care activity your organisation delivers and map this to the prescribed activity list in Spreadsheet CP3.2.
- 48. Use the prescribed activities for staff for all critical care units (there are no separate categories for age groups, as that can be determined from the unit function code):
 - SLA159 Critical Care ward care
 - SLA160 High Dependency Unit

⁸⁹ In these datasets, the HRG is applied per day so acuity by day can be identified. The HRG cannot be used in this way for adults as it is the highest level of care in the critical care period.

⁹⁰ This will be based on local acuity information. It is a superior method as we appreciate this information is not be available in all organisations.

SLA105 Critical care – ECMO/ECLS

- 49. These activities represent the ward care of the unit for that day's care. There is no separation between different staff types. Patients with a CCMDS record should not use the activity ID SLA156 as this relates to non-critical care wards only.
- 50. Within one critical care unit, there may be different levels of care provided. Superior method SCM77 Critical care acuity within one critical care unit you can work with the clinical team to apply weightings to beds or specific patients (see Table CM6.2).

Table CM6.2: Example of relative weight values for patient or bed-level acuity information within one critical care unit

Acuity/care level (locally determined)	Nurse	Medical staff
Patient A/Bed A	1.0	1
Patient B/Bed B	0.5	0.5
Patient C/Bed C	1.5	1

51. As the cost is calculated for each day, you should also consider the treatment of step-down bed moves within one critical care unit. For example, if a patient is of higher acuity on days 1-4 but on day 5 has improved and requires less intervention for the rest of their stay. The adult critical care HRGs do not show this variation, and the patient will still have the same HRG for all days of their critical care period within one unit.

Resource activity combinations

- 52. Table CM6.3 is an excerpt⁹¹ from Spreadsheet CP3.3 showing example resource and activity combinations to use for critical care.
- 53. As the critical care record costs on a 'by day' basis, patients not yet discharged or moved from critical care to a general ward area are always costed in conjunction with incomplete patient events (see Standard CM2:

⁹¹ Please note all excerpts in this standard are for illustrative purposes only. Use Spreadsheet CP3.3 to ensure you are using all the correct resource and activity links.

Incomplete patient events). The CCMDS data will identify when the critical care period ends for the patient.

Table CM6.3: Excerpt from Spreadsheet CP3.3 showing the resource and activity links for a critical care stay (including ECMO costs)

	Activity					
Resource	Critical care - journey	Critical care	Ward round	Dispense non patient- identifiable medicines	Critical care – ECMO/ ECLS	Perfusion
Medical and surgical consumables	£X	£X				£X
Medical and surgical equipment and maintenance	£X	£X				£X
Consultant	£X		£X			
Non-consultant medical staff	£X					
Nurse	£X	£X				
Medicines				£X		
Pharmacy technician				£X		
Perfusionist						£X
Critical care transport	£X					
ECMO / ECLS equipment					£X	

Matching

- 54. Costs such as pathology, therapies, diagnostic imaging, and other clinical support services will also be incurred in critical care. Examples include Feed 8: Pathology, and Feed 12a: Diagnostic imaging (CRIS).
- 55. The cost of these activities will include the relevant resources according to the staff group, as in Spreadsheet CP3.1 and CP3.3
- 56. Use the prescribed matching rules in columns K to N in Spreadsheet CP4.1 to ensure the activity and costs on auxiliary feeds are matched to the correct

- critical care patient bed day, not to the APC episode. For example, pathology tests should be matched to the critical care record of that day.
- 57. You should not match the costs from auxiliary feeds to the core episode if the patient is in critical care. The exception to this is theatres, as surgery is deemed to be part of the core episode, not the critical care episode.
- 58. The only time theatres can be matched to the critical care episode is where the patient spends no time on a ward other than critical care; therefore, the critical care period is the core episode. For this reason, critical care is lower in the matching rules for Feed 13: Theatres, in Spreadsheet CP4.1. You should review any patients who match to critical care, to ensure they had no time spent on a general ward.

Other considerations

ECMO/ECLS

- 59. ECMO and ECLS use an artificial lung (membrane) located outside the body (extracorporeal) to infuse blood with oxygen (oxygenation) and continuously pump this blood into and around the body.
- 60. ECMO is used mainly to support a failing respiratory system, whereas ECLS is used mainly to support a failing heart.
- 61. All ages of patient in the relevant specialist units can receive ECMO/ECLS. The cost of these techniques is significant so they should be costed at patient level. These patients are likely to report higher costs against their critical care activities than critical care patients with a lower acuity.
- 62. You should use resource ID: SLR087; ECMO/ECLS equipment and the activity SLA105 Critical Care ECMO/ECLS to identify patients who have received ECMO/ECLS during their critical care stay. The activity SLA105 represents the whole of the ward care given for that day, so when the patient no longer receives ECMO/ECLS care, they will move to the activity SLA159 Critical care ward care.
- 63. You will need to access local data on which patients use ECMO/ECLS in your critical care units. The CCMDS has a 'critical care activity' for ECMO, but does not distinguish ECLS separately, so local information will be required.

- 64. You can add the information to create the ECMO/ECLS flag in each of the critical care feeds (feeds 6a, 6b and 6c) as described in column D in Spreadsheet IR1.2 to identify which day ECMO or ECLS has been delivered, and ensure those patients receive the appropriate nursing acuity costs and medical and surgical equipment and consumable costs.
 - Clinical perfusion scientists or 'perfusionists' may also be involved in delivering ECMO/ECLS. They are a separate type of care professional from medical staff or nurses. As a supporting method SCM52 Perfusionist team, you should identify their costs separately and match their costs to the patients they work with using Feed 7: Supporting contacts.
 - Some information on ECMO/ECLS equipment, consumables and staffing may come from databases separate from the main critical care record. You should identify material costs and allocate them using information from the critical care department or the relevant specialist team.

Critical care transport

- 65. You should identify the cost of critical care transport separately from critical care. This is because critical care transport patients do not always have critical care episodes in the same hospital, so the cost should be identifiable in the costing system.
- 66. Costed critical care journey activities for patients conveyed to other providers, or between two different areas with a full critical care team, should be reported under 'other activities' cost group.
- 67. Use resource ID: SLR086; Critical care - transport fleet for the cost of the vehicles, maintenance and running costs. For staff, use the relevant resource or overhead code.
- 68. Use the prescribed cost allocation rules in Spreadsheet CP3.3 for all age groups using the activity SLA106; Critical care - journey. Paediatric and neonatal patients should have patient-level information available as there are separate HRGs for this service. For adults, the cost should be allocated based on service manager/clinical lead information according to patient acuity and/or duration of the journey made.
- 69. As a superior method (SCM66), if your organisation provides critical care transport, you can obtain patient-level Feed 6d: critical care transport, for this

as prescribed in Standard IR1: Collecting information for costing and Spreadsheet 1.2. Patients that do not have a CCMDS record within your organisation should be reported as unmatched separately from the cost of the care. For example: trust A provides a critical care transport service for the region, and a patient is conveyed from trust B to trust C. This patient would not have a relevant critical care record in trust A, so should be reported separately.

70. If your organisation provides the hub for critical care transport, you are likely to hold the network and central administration costs for running this service. Identify these costs in the cost ledger using the resource ID: SLA086; Critical care – transport network, and activity ID: SLA162 Critical care transport network which flows to collection activity SEN001 Services excluded from the National Cost Collection (via the reconciliation). This will show the costs separately.⁹²

Critical care outreach teams

- 71. Critical care outreach teams support clinical staff in managing acutely ill patients by providing closer observation of 'at risk' patients on non-critical care wards. These patients will not be recorded on the CCMDS.⁹³
- 72. For care provided by nurses on critical care outreach teams use the resource ID: SLR082; Specialist nurse and activity ID: SLA163 Critical care outreach on general ward.
- 73. Agree a local allocation method with the critical care outreach lead.
- 74. As a superior method SCM33 supporting contacts allocated at patient level, the critical care outreach team activity can be recorded on Feed 7: Supporting contacts, and matched to the patient event.

Major trauma patients and other emergency department (ED) support⁹⁴

75. Some patients in the ED may require critical care medical and nursing input.

This will include major trauma patients that are identifiable as a specific category of patients recorded separately from other ED data. (Major trauma

⁹² These costs are now excluded from the cost of critical care in the National Cost Collection. See NCC guidance volume 3 for further information on critical care transport network.

⁹³ For patients in general wards recorded on the CCMDS, see the section 'Critical care patients on a general ward'.

⁹⁴ See Acute standard CM4: Emergency department attendances (including ED, minor injury units and walk-in centres).

- consultant on-call or critical care staff may also support other patients in the ED.) You should understand whether ED patients have received critical care support in your costing process for critical care staff and allocate the cost. This ensures the cost does not show as relating to the cost of critical care.
- 76. This can be allocated using local allocation methods, but as a superior method SCM33 Supporting contacts allocated at patient level, these patients can be entered onto Feed 7: Supporting contacts, matching to Feed 2: Urgent care (ED/MIU/WIC). You will need to discuss and agree with the critical care team:
 - how information is collected for major trauma patients (and other ED patients) who receive input from the critical care team
 - how this input is measured that is, who in the team provides the input
 - a scale to weight the input that is, how long a member of the critical care team stays with the patient. This could be a sliding scale based on patient need.

Perioperative/pre-rehabilitation and postoperative teams

- 77. Critical care staff in 'enhanced recovery' or 'post-acute care enablement (PACE)' teams may support patients across non-critical care wards/specialties. These will:
 - pre-screen patients for treatments
 - prepare them for surgery
 - improve the effectiveness of their rehabilitation
 - facilitate effective discharge by co-ordinating care across specialties, disciplines, and organisations.
- 78. Where these services are in place the critical care staff costs should be disaggregated between pre-rehabilitation/postoperative work and work on the critical care unit. Costs should be allocated to the patients who have received the different types of care.
- 79. As a superior method SCM33 Supporting contacts allocated at patient level, you can allocate the relevant staff costs using patient-level activity on Feed 7: Supporting contacts, matched to specific patient outpatient appointments or APC episodes. Only patients who have received care from the relevant team should be allocated their costs.

Follow up contacts for critical care staff

- 80. In many units, medical and nursing staff will have follow-up contacts with the patient after they have left the critical care unit to support the ongoing effect of critical care. These will be recorded as clinical activity to ensure the electronic patient record is complete and should be costed according to the resources used.
- 81. Where these are outpatient or home visits, they should be included in Feed 3a: NAPC, and costed as a separate patient event using the data item in Spreadsheet IR1.2 'Activity Location Type' to identify where the patient event took place.
- 82. For contacts whilst the patient is on a non-critical care ward, the event can be recorded in the supporting contacts feed, and the cost attached to the core HRG, rather than to the critical care event. This is a superior method.

Part day costs and transfers

- 83. Part-day costs should be applied to the critical care record as the costs are incurred. When the patient leaves critical care or dies while in critical care, the minutes of the day will form a part-day cost. This should be identified with a part cost flag so that this cost is not compared to full day costs.
- 84. For patients discharged from the critical care bed to a non-critical care ward. The costs relating to the non-critical care ward should be bundled into the cost of the final critical care bed day.

CM7: Private patients and non-English NHS-funded patients

Purpose: To ensure private patients and other non-English NHS-funded patients are costed in a consistent way

Objectives

- To ensure the activities relating to private patients, 95 overseas visitors, patients funded by the Ministry of Defence, and other patients funded from outside English NHS commissioning, are costed in line with the Approved Costing Guidance.
- 2. To ensure the associated income for these patients is correctly identified and matched to the correct episode, attendance or contact on the basis that all patients for whom the English NHS provides care should be costed in the same way, irrespective of the way their care is funded.

Scope

- 3. This standard applies to activities relating to all patients funded from outside English NHS commissioning (CM7 Patients).
- 4. This standard also applies to patients funded by English NHS commissioning of an NHS provider, but managed and paid for via a third party, eg capacity purchased from a local private hospital.

⁹⁵ For our definition of private patient care, see the *Costing glossary*.

Overview

- 5. CM7 patients should be costed regardless of whether they are on NHS wards or private/designated wards.96
- 6. The relevant episodes, attendances and contacts must be flagged in the costing system.
- 7. Costed activity for these patients should be reported as 'own-patient care', along with the corresponding income for local reporting and business intelligence purposes.
- 8. We recognise that there may be issues with recording these patients. For example, private patient records may be held on a separate patient administration system (PAS). This should be brought into the PLICS where possible, to ensure consistency of costing across NHS providers.

Approach

- 9. CM7 patients should be costed in the same way as patients funded by the English NHS, using the resources, activities, and prescribed cost allocation methods in Spreadsheets CP3.1, CP3.2 and CP3.3
- 10. They should also be included in the allocation of support costs
- 11. You can identify who funds each patient episode, attendance or contact for these patients from their 'organisation identifier (code of commissioner)' and their 'administrative category code' in column D in Spreadsheet IR1.2.
- 12. Cost centres for CM7 patients are included in Spreadsheet CP2.1 the cost ledger and can be customised to show other types of CM7 patients in your local cost ledger. The cost centres are:
 - XXX090 Ward D – Private patient ward
 - XXX252 Overseas visitor management
 - XXX239 Private patients admin

⁹⁶ Conversely, NHS patients on private patient wards should be costed using the costs of the ward they were on.

- 13. Private patients' administration and overseas visitor managers' costs have been classified as an overhead cost in the standards. These costs should be allocated directly to these patients as prescribed in Spreadsheet CP2.2.
- 14. The patient's 'administration category code' may change during an APC episode. For example, the patient may opt to change from NHS to private healthcare. In this case, the start and end dates for each new administration category code should be recorded in Feed 1a: APC,97 so all activity for CM7 patients can be correctly identified and costed accurately.
- 15. Non-admitted patients cannot change status during one attendance or contact.
- 16. Table CM7.1 shows the resource and activity combinations for private patient administrators and overseas visitor management teams.

Table CM7.1: Excerpt from Spreadsheet CP3.4 showing some of the resource and activity links for private patient administration and overseas visitor management team costs

	Activity			
Resource	Overseas visitor management	Private patient administration		
Overseas visitor management team	£X			
Private patient administrator		£X		

- 17. Do not include any costs in the costing process for CM7 patients where the costs incurred do not sit in the organisation's accounts. For example, where a consultant saw a patient using NHS facilities and staff but separately invoices the patient/healthcare company for their time, you should allocate the facilities and other staff cost to that patient but not the consultant time. 98
- 18. Where this results in the patient event only having part of the cost, you should flag this as a 'part cost'99 event for reporting purposes.

⁹⁷ This is to be confirmed with NHS Digital for the Mental Health Services Data Set (MHSDS).

⁹⁸ This example presumes the patient contact was recorded on an NHS data system.

⁹⁹ See Standard CM8: Clinical and commercial services for more detail.

- 19. Therapy, medicines, diagnostic tests, critical care costs, social care and other costs should be included in the costing process for CM7 patients unless they do not sit in the organisation's accounts.
- 20. If the patient receives a service that is additional to those received by an English NHS-funded patient, these costs should be identified and allocated to that specific patient – for example:
 - private room costs
 - additional catering costs
 - additional clinical or holistic treatments, tests, and screening not normally available on the English NHS patient pathway
 - privately or charitably-funded specialist limbs/equipment, including those provided to veterans and children.
- 21. Private patient wards may include NHS beds where the provider's NHS wards are facing capacity challenges. The cost of the private patient ward should be allocated to the patients occupying the beds, irrespective of how they were funded.
- 22. The income received for caring for private patients and other non-English, NHS-funded patients must be allocated to the correct episode, attendance, or contact. This will ensure any profit is shown against the private or other non-English, NHS-funded patient, and not netted off from the English, NHS-funded patient care costs.

CM8: Clinical and commercial services 100

Purpose: To ensure all other activities provided to or by another organisation are costed in a consistent way

Objective

- 1. To ensure activities delivered by your organisation on another organisation's behalf are costed in a consistent way, including clinical services supplied to NHS and non-NHS organisations.
- 2. To ensure activities delivered on your organisation's behalf by another organisation are costed in a consistent way.
- 3. To ensure patient events which have only had part of the cost of the care provided shown in the costed patient record, are flagged for clear identification using the 'part cost flag'.

Scope

- 4. This standard applies to all activities a provider performs that do not relate to the care of its own patients (services supplied).
- 5. This standard also applies to care provided to one organisation's patients by another organisation (services received).
- 6. This standard applies to where a costed patient event only shows part of the cost of care that the patient received.
- 7. The services can be clinical or non-clinical.

¹⁰⁰ This standard was formerly called 'Other services'.

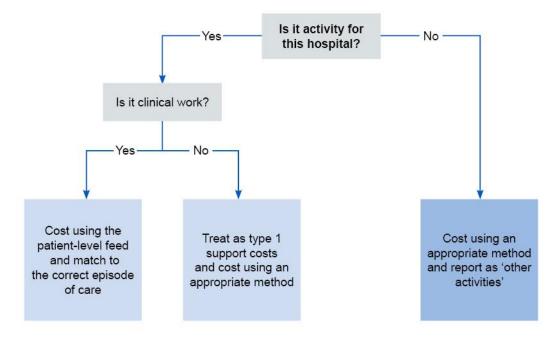
8. The services will include care provided by NHS organisations (sometimes termed 'provider to provider') and commercial activities that are outside standard NHS contracts (both for NHS and non-NHS organisations).

Overview

- 9. Services provided by one organisation to another should have a contract in place to confirm the specification of the service provided. This document should give useful information for the costing process: it should state the remuneration agreement and also include requirements for information about the service provided to be received by the receiving organisation. You should work with your contracts team to understand the services provided, and where the cost/income sits within the general ledger.
- 10. The detail of electronic data flows to the receiving organisation should be established in the contract.
 - a. Where the service is for patient care activity, a patient-level clinically coded record should be received. This will be entered into PAS and flow into the costing system with the other patient events.
 - b. Where the service is for clinical supporting items, such as medicines or diagnostic tests, the data should be received with patient identifiers for clinical safety. You can use this information to match the cost to the patient event.
 - c. Where the service is for non-clinical services, the contract should include sufficient information to identify the service area or corporate area benefiting. For example, where maintenance is outsourced, the cleaning information should be available by ward/site/service unit etc.
 - 11. If the data received by your organisation is not sufficient to provide electronic patient information, you should work with the contracts team to ensure future contracts do include this information electronically. Whilst waiting for these contract changes to take place, you may use relative weight values to allocate the costs of these services, in conjunction with the service manager responsible for managing the contract fulfilment. We do not expect costing practitioners to have to input manual patient-level information into electronic format, from invoices or other contract documents.

- 12. Patient care that is classified as 'clinical services supplied or received' needs to be flagged in the relevant information feeds using the clinical services supplied and clinical services received indicators in column D in Spreadsheet IR1.2¹⁰¹
- 13. All activities delivered by your organisation on another organisation's behalf should be costed in the same way as your organisation's own-patient activity but reported separately so that it and any related patient activity is not included in your organisation's own patient care costs.
- 14. Work with contract managers and other finance colleagues to understand the service-level agreements for services supplied and received, as this helps you identify the nature of these activities.
- 15. Where activity undertaken for other organisations is in your activity feeds, you need to understand the different service users of the departments delivering this activity (see Figure CM8.1).
- 16. The patient-level activity feeds you obtain from the relevant departments need to contain their entire activity, not just their activity for your organisation's own patients.

Figure CM8.1: Services with different service users



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¹⁰¹ This currently applies to acute activity only. We are looking at how other activities can be identified in the mental health and community care activity datasets.

Approach

Services supplied

- 17. Where activity supplied to another organisation is within your patient administration system (PAS), 102 it needs to be flagged in the information feeds using the clinical services supplied indicator in column D in Spreadsheet IR1.2.103
- 18. All activity, including that supplied to another organisation, should be costed using the resources, activities and cost allocation methods described in Spreadsheets CP3.1 to CP3.3 and reported under the 'other activities' cost group.
- 19. If it is unclear whether an activity is own-patient care or activity supplied to another organisation, discuss it with the service manager to agree an appropriate apportionment and document this in integrated costing assurance log (ICAL) worksheet 13: % allocation bases.
- 20. For non-clinical services supplied to another organisation, use the proportion of costs that should be attributed to the services it supports if the department has a system for recording this information. If it does not, develop a relative weight value with the department and financial management team to use in the costing process.

Services received

- 21. Services received may be:
 - the whole spell, eg where provided by a private or voluntary provider or a different NHS provider
 - part of the patient event, such as pathology, pharmacy, or diagnostic imaging
 - overheads such as payroll or shared services.
- 22. All services received should be flagged in the costing system using the field 'contracted-in indicator' within the feeds shown in Spreadsheet IR1.2. This field

¹⁰² We recognise that most organisations will not have this activity within their PAS.

¹⁰³ This is for the acute sector only. We are looking at how other activities can be identified in the mental health and community care activity datasets.

- will enable the costing system to identify the correct cost for the service received at patient level.
- 23. The costs relating to this activity are in the form of invoices charged to the general ledger. You need to identify these costs in the PLICS and ensure they are applied to the correct patients.
- 24. Where the contract relates to patient-facing activity, the patient record for that provided service needs to be entered in the relevant feed and flagged in the information feeds using the clinical services received indicator in column D in Spreadsheet IR1.2,¹⁰⁴ and reported under the 'own patient care' cost group.
- 25. Where you cannot obtain a breakdown of the resources, use the resource IDs:
 - CLR016 Services received - clinical non patient level
 - CLR026 Services received - pathology testing non patient specific
 - CLR027 Services received - pharmacy services
 - CLR028 Services received - radiology scans
 - CLR030 Services received - clinical patient level
 - CLR031 Services received - pathology testing patient specific.
- 26. The activity codes you use should relate to the care given. Use the list in Spreadsheet CP3.2. If you do not have detail of the activities, for transparency you should use:
 - SPA175 Services received – no activity detail available
- 27. If the activities provided on your organisation's behalf by another organisation are recharged at a fixed value per patient or per treatment, use this as a relative weight value in the costing process.
- 28. The fixed value will contain an element of overheads.
- 29. Where the services received activity relates to support services, costs should be allocated in the same way as for an in-house service.
- 30. For example, a contract for facilities (maintenance and cleaning) with NHS Property Services would be disaggregated to show cost allocation of:

¹⁰⁴ We understand that some providers have difficulty receiving this information, but as it is essential for safety and communication in the complete patient record we continue to require it in PLICS.

- maintenance use the same allocation method as T1S030 Estates. buildings and plant, facilities maintenance costs (pay and non-pay costs) - floor area (m²)
- cleaning use the same allocation method as T1S013 Cleaning and other hotel services (pay and non-pay costs) – floor area (m²) occupied by an area weighted by the number of times cleaning is carried out.
- 31. Activities provided by your organisation on another organisation's behalf may need to receive an element of your organisation's own overheads for administering the contract. You need to identify which overheads to apply and in what proportion.

Commercial activities

- 32. Some NHS organisations have developed commercial services which generate additional income to reinvest in patient care. These may be clinical or nonclinical services and will not be within the provider-to-provider operating partnership agreements described above. They may include but are not limited to:
 - commercial research and trials
 - international healthcare management and consultancy
 - pathology, pharmaceutical production, toxicology
 - occupational health
 - retail space and site rental
 - facilitating market entry for new services to the NHS.
- 33. Where material and possible, this activity should be costed in the same way as for other activity, so you need to identify the costs and activity relating to it.
- 34. All commercial activity should be flagged in the costing system by adding a commercial activity flag in your costing model where appropriate.
- 35. Commercial activity should be costed using the resources, activities and cost allocation methods as described in Spreadsheets CP3.1, CP3.2 and CP3.3.
- 36. Costed commercial activities should be identifiable as separate from the provider's own activity and reported under the 'other activities cost group' for local reporting.

37. Income for these activities should be identifiable in PLICS as relating to this service, and not netted off within the expense code, in accordance with how income is treated throughout the standards. These activities should be reported internally with their associated income for business intelligence purposes.

Part costs (mandation year 2022/23)

- 38. Some patient care costed records will not show the full cost of the care the patient received. To identify these records during reporting, these events should have a part cost flag applied.
- 39. For example: Trust A provides the ward care and Trust B provides medical staff care and specialist nursing, under an integrated care system arrangement. There is no recharge between the two trusts for the care provided. Trust A records the patient event.
 - a. Trust A would add a part cost flag to the patients in their wards under this arrangement, treating the patient events as 'own patient care'.
 - b. Trust B would identify the cost of the medical staff and specialist nursing care, and mark this as 'other activities' in the costing system. 105

Asset disposal

40. Where assets are sold there is likely to be a profit or loss on asset disposal shown in the GL. This value should be mapped to expense code 7142 (Profit) / Loss On Asset Disposals in the cost ledger.

¹⁰⁵ Trust B should refer to the National Cost Collection volume 3 section on the data extract specification for part costs, and volume 2 reconciliation section on provider to provider adjustments.

CM9: Cancer MDT meetings

Purpose: To ensure cancer multidisciplinary team (MDT) meetings are costed consistently.

Objective

To cost all cancer MDT meetings hosted by the organisation that are not recorded elsewhere, eg in Feed 3a: non-admitted patient care (NAPC).

Scope

- This standard applies to all patient-specific cancer MDT meetings hosted by 2. your organisation, whether held locally or nationally, at which the treatment of patients is reviewed¹⁰⁶.
- 3. This standard also applies where your organisation does not host the MDT, but your staff spend material amounts of time attending them.
- Please note this standard only includes cancer-specific MDT meetings as defined in the National Cost Collection guidance, volume 3 section 5.2.

Overview

- 5. Cancer MDT meetings are reviews by staff of available treatment options and individual responses from the patient. Patients do not attend these meetings.
- 6. You need to know the types of cancer MDT meetings hosted by your organisation, in particular understanding which type of cancer they relate to, 107 eg breast, colorectal and specialist upper gastrointestinal. You will need to

 $^{^{\}rm 106}$ MDT meetings that are not patient-specific are not to be costed separately.

¹⁰⁷ Please refer to the National Cost Collection guidance volume 3 for more information on cancer MDTs in the National Cost Collection.

- identify the frequency of these meetings and who from your organisation attends.
- 7. Cancer MDT meeting costs are not allocated to individual patients but are reported at specialty level. They are kept separately from other costs as they are a significant cost and involve patients from different organisations being discussed by clinical experts.
- The costing requirement is for an average cost per patient. As a superior method, SCM30 Cancer MDT meetings at patient level you can cost with more detail, including the cost of diagnostic tests if they have been ordered from the meeting.
- 9. Cancer MDT meetings should be reported under the 'own patient care' cost group.¹⁰⁸ Your trust may also supply clinical experts to cancer MDT meetings hosted by another trust. These should be reported under the 'other activities' cost group¹⁰⁹.

Approach

Information requirements

- 10. Obtain Feed 14: Cancer MDT meetings, from your organisation's MDT meeting information database as prescribed by Standard IR1: Collecting information for costing and Spreadsheet IR1.2.
- 11. The feed contains the number of times each MDT meeting is held during the calendar month or year. This feed is classified as a standalone feed so prescribed matching rules are not provided in columns H to O in Spreadsheet CP4.1
- 12. These meetings would be costed as patient events. They are not required to be matched to a non-admitted patient care (NAPC) or admitted patient care (APC) feeds.
- 13. Understand and gather this information and use a local feed to enter the data into the costing system.

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¹⁰⁸ See Standard CP5: Reconciliation for more information on cost groups.

¹⁰⁹ The trust supplying clinical experts for cancer MDT but who does not host the meetings should refer to the National Cost Collection volume 2 reconciliation section on provider to provider adjustments.

- 14. The meeting duration should be recorded for each staff member present and used to allocate cost to the patient using the activity for cancer multidisciplinary meetings.
- 15. Patient-level information about MDT meetings may be available. Using superior costing method SCM30 you can cost the individual patient discussions and match diagnostics ordered to the specific patient event. See Spreadsheet CP3.5 Superior and alternatives for further information. This information, including patient identifier and staff present, may be collected in a separate MDT database, or developed from the clinical datasets.

Specialist cost centres and expense codes

- 16. Cancer MDT will be run by a specific administrator or may have one administrator for each cancer type.
- 17. You should use cost centre XXX095 Cancer Multidisciplinary Team Meetings (CMDT) and expense code 5471 Multidisciplinary meeting co-ordinator for the administration costs.
- 18. The clinical costs of cancer MDT will come from a range of staffing codes in the general ledger. You will need to disaggregate these costs to show the correct staff involved in the meetings. See column A in ICAL worksheet 27: Cancer MDT meetings for an example of the potential attendees at a cancer MDT meeting whose input may need to be costed.
- 19. Spreadsheet CP2.1 cost centre XXX095 Cancer Multidisciplinary Team Meetings (CMDT) can be customised to include the relevant staff groups involved in the meetings.

Resources

20. For the administration, you should use the resource ID: SLR091; Cancer MDT meeting co-ordinators. For the other staff types, use the appropriate resource for their clinical work.

Activities

21. Use activity ID: SLA127; Cancer multidisciplinary meeting.

22. This is the cost of your own staff attending CMDT meetings. It does not matter where this meeting was held, or who hosted it. This prevents the cost being included in a costed patient event.

Resource activity combinations

23. Table CM9.1 is an excerpt¹¹⁰ from Spreadsheet CP3.3 showing the resource and activity links to use for MDT meetings.

Table CM9.1: Excerpt from Spreadsheet CP3.3 showing some of the resource and activity links for MDT meeting costs

Resource	Activity Cancer multidisciplinary meeting
Advanced nurse practitioner	£X
Consultant	£X
Dietitian	£X
Non-consultant medical staff	£X
Occupational therapist	£X
Physiotherapist	£X
Psychologist	£X
Cancer multidisciplinary meeting co-ordinator	£X

- 24. Set up relative weight values (RWV) to calculate an average cost for the MDT meeting to be used in the costing process.
- 25. Use the costing template in integrated costing assurance log (ICAL) worksheet 27: Cancer MDT meetings to identify the information you need to set up the RWV, including:
 - meeting members, including whether they are internal or external¹¹¹ staff and the department they belong to
 - length of the meeting

¹¹⁰ Please note all excerpts in this standard are for illustrative purposes only. Use Spreadsheet CP3.3 to ensure you are using all the correct resource and activity links.

¹¹¹ You should not include external staff numbers within the calculation of average cost per unit for cancer MDT meetings, unless you have a recharge from their own organisation.

- number of meetings attended by each member over the last year to calculate the average number of each type of meeting each member attends
- preparation and follow-on time for an MDT meeting, particularly the time staff spend reviewing diagnostic test results.
- 26. Cancer MDT meetings should include overheads for reporting purposes.

CM10: Pharmacy and medicines

Purpose: To ensure costs of pharmacy services and medicines are consistently allocated

Objective

- To ensure pharmacy services costs are allocated in the correct proportion to the activities they deliver.
- 2. To ensure medicine costs are allocated to the correct patient event.

Scope¹¹²

3. This standard applies to all pharmacy and all medicine costs.

Overview

- 4. The cost of medicines is separate from the cost of pharmacy services.
- 5. Medicines are a material cost, second only to staffing for the NHS. For most providers, they are a significant cost. Therefore, these items should be costed appropriately, then matched to the correct patient event (prescribed areas) or allocated across patients according to allocation rules, to ensure the overall accuracy of the final patient cost.
- 6. This standard also provides guidance on how to identify the activities that pharmacy staff undertake in your organisation and how to apportion their costs to the activities they undertake.
- 7. If your pharmacy services are provided by an external party, your access to cost and medicine issue data may be limited, but information at patient level

¹¹² Blood and blood products are out of scope of this standard (This service is now in CM28: Blood Services)

used to support patient care and for clinical safety should be available. See CM8: Clinical and commercial services for more information.

Approach - Medicines

Information requirements

- 8. The range of medicines provided by organisation will vary according to the services provided. You should work with your pharmacy lead and pharmacy informatics team to develop an understanding of how the different medicine types support care, and how the costing terms for medicines should be applied.
- 9. Medicines information will be provided by your organisation's pharmacy system, an outsourced partner (where the service is not delivered in-house) or via FP10HP prescriptions on ePACT2.¹¹³

Medicines identifiable at patient level

- 10. Guidance on Feed 10: Medicines dispensed, is provided in Standard IR1: Collecting information for costing, and Spreadsheet IR1.2.
- 11. Acute: a mandated monthly dataset collects data on 'high-cost drugs' for NHS England and NHS Improvement's national tariff payment system; this list covers about 70% of the highest cost medicines. These medicines are the minimum required in Feed 10: Medicines dispensed, and should be matched to the patient event where they were prescribed; showing as a component cost at patient level.
- 12. Other drugs of significant cost and chemotherapy medicines may be identified using the 'high-cost drug (OPCS)' and 'chemotherapy drug flag' fields in Feed 10: Medicines dispensed. This should include drugs commissioned by the NHS England and NHS Improvement specialised commissioning department, which are not on the national tariff payment system list. These should also be matched to the patient event and show as a component cost at patient level.
- 13. Mental health: medicines such as the antipsychotics clozapine, paliperidone, risperidone, aripiprazole and zuclopenthixol decanoate; and methadone and melatonin are a significant cost in an individual's care. Information on these medicines and other controlled medicines are likely to be available at patient

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¹¹³ This is the system used to record the FP10s. It is understood that not all organisations have this information available for costing.

level and so these drugs are the minimum required in Feed 10: Medicines dispensed, for mental health services¹¹⁴.

Negative costs in the medicines dispensed feed

- 14. Feed 10: Medicines dispensed, will contain values for the medicines. This information is used to provide proportional calculations for the costing allocation process.
- 15. This feed may contain negative values due to products being returned to the pharmacy department – for example, it may contain the dispensing, supply and returns for a patient's medicine within the same – or different - periods.
- 16. These issues and returns are not always netted off within the department's pharmacy stock management system against the same patient. If this is the case, you need to review the medicines feed and net off the quantities and costs to ensure only what is used is costed.
- 17. All negative costs need to be removed, as the costing calculations cannot be based on a negative value. The values of the returns are not a reconciliation item.
- 18. Use of Electronic Prescribing and Medicines Administration (EPMA)¹¹⁵ systems in costing medicines not normally dispensed at patient level, is a superior method SCM78 Inclusion of all medicines in costing at patient level, using EPMA system¹¹⁶. See Spreadsheet CP3.5 Superior and alternatives for more detail.
- 19. For reporting purposes, ensure that Feed 10: Medicines dispensed feed, includes the generic name of the medicine, not the brand name. This is for ease of reporting and discussion with users of PLICS information¹¹⁷.
- 20. As part of the 'Global Standard 1' (GS1) project for the NHS, the expectation is that NHS organisations will have the GS1 identifier (barcode) on all drugs from February 2019. This will provide more consistent information on the type and

¹¹⁴ See section on 'Medicines provided by other organisations' below.

¹¹⁵ These systems are sometimes called 'e-Prescribing systems'.

¹¹⁶ This superior method would not include the drugs on the High Cost Drugs list, as they are already prescribed to be allocated at patient level.

¹¹⁷ You should work with the pharmacy information system team to understand the different field names and bring the medicine name into the costing system.

cost of items, which may improve the ability to link key items at patient level and using consistent terminology.

Specialist cost centres and expense codes

- 21. Use cost centre XXX038 Pharmacy to identify the pharmacy costs in the cost ledger. You can customise the cost ledger by repeating this cost centre to separate different costs that need disaggregating to different sections of the pharmacy service.
- 22. Where medicines are delivered to patient's home, use cost centre XXX041 Home delivery of medicines. This will include contracted services.
- 23. For chemotherapy home delivery, see Standard CM25; Chemotherapy which includes cost centre XXX042 Home Delivery of Chemotherapy Medicines.
- 24. The expense codes for staffing show 'Pharmacy' bands of 1-9, bank, agency, and:
 - 5299 Chief pharmacist
 - 7021 Contract: pharmacy services (not including medicines)
 - 7002 Contract: pharmacy services (including medicines)
- 25. The expense codes specific to medicines are:
 - 7026 Medicines
 - 7083 High cost drugs
 - FP10 medicines 7089
 - 7091 Vaccines
 - 7092 Contract: Medicines bought in with aseptic unit preparation

Resources

- You should map medicines to the resources in Table CM10.1. There are three different medicine types for costing purposes:
 - i. Medicines which are deemed locally to be of significant cost or need identifying at patient level for commissioning (such as high-cost drugs, chemotherapy and medicines supplied to the home) or safety reasons (such as controlled drugs).
 - Those medicines not normally recorded at patient level in pharmacy systems, eg ward stock.

- iii. Medicines provided to patients using the FP10 prescription service.
- 27. Medicines type (i) above should be costed at patient level using the Resource ID: MDR044 Medicines. 118
- Medicines type (ii) also use the Resource ID: MDR044 Medicines, but do not 28. have to be matched at patient level, and can be allocated to patients using the allocation methods shown in Spreadsheet CP3.3.
- 29. Where the organisation has an EPMA a greater level of detailed patient level information will be available. As a superior method, part or all of medicines in type (ii) can be costed at patient level using EPMA system information and matched to the patient using the matching rules in Spreadsheet CP4.1.
- 30. You may create additional local costing resource codes to identify significant cost medicines to be costed at patient level (type ii or iii) within your costing system, ensuring they flow to the correct collection resource shown in Spreadsheet CP2.1.
- 31. Medicine type (iii) should use the Resource ID: MDR063 FP10 Medicines and be allocated to patients using the allocation methods in Spreadsheet CP3.3. See the section on treatment of FP10 costs below.
- 32. Where high cost drug and other medicines information is already separate in the general ledger, you should work with your finance colleagues to understand how the ledger structure, and therefore the financial value shown, corresponds with the costing categories. This discussion may also help identify some of the medicines for which information is available at patient level.
- 33. Feed 10: Medicines dispensed, contains the actual cost of the medicine. These costs are used as relative weight values to allocate the costs as proportions in the cost ledger. This is so that if the total cost to the pharmacy department is £1,000 but only £900 is in the cost ledger, a negative cost is not incurred by allocating more cost using Feed 10: Medicines dispensed, than is on the cost ledger code.

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¹¹⁸ Formerly, medicines resources were separated into medicines and high cost drugs. This separation has been removed from 2021.

Activities

- The activities for medicines describe the technical task of issuing and checking the items. Use the following activity IDs for medicines dispensed at patient level:
 - MDA063 Dispensing high cost drugs
 - MDA067 Dispensing chemotherapy medicine scripts
 - MDA068 Dispensing patient level medicine scripts
 - SLA126 Delivery of homecare medicines.
- 35. Where medicines are not dispensed from the pharmacy at patient level for example, 'ward medicines' or 'stock' items¹¹⁹ – use activity ID: MDA065; Dispense non patient-identifiable medicines.
- 36. To use the non patient-identifiable field in the source data to identify their costs, use the 'requesting location code' to allocate them to the ward, department, or service. Then allocate the cost to the patient events in those areas based on duration of the patient event in minutes.
- 37. Pharmacy input varies as the patient moves between wards or is discharged to primary care, and not necessarily because their acuity changes. Pay particular attention to ensuring medicines are identified for each transfer of care – such as admission, transfer between wards and discharge - and are then matched to the correct patient event.

Resource activity combinations

Table CM10.2 is an excerpt¹²⁰ from Spreadsheet CP3.3 showing the resource 38. and activity links to use for medicines.

Table CM10.2 is an excerpt from Spreadsheet CP3.3 showing the resource and activity links to use for medicines.

		Activity					
Resource	Dispense all other	Dispense chemotherapy	Dispense non patient	Homecare medicines	Dispensing high cost drugs		

¹¹⁹ Many organisations use the term 'stock items'. We use the term 'non patient-identifiable medicines'.

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¹²⁰ Please note all excerpts in this standard are for illustrative purposes only. Use Spreadsheet CP3.3 to ensure you are using all the correct resource and activity links.

	medicine scripts	medicine scripts	identifiable medicines		
Medicines	£X	£X	£X	£X	£X

Matching

39. Use the prescribed matching rules in columns K to N in Spreadsheet CP4.1 to match costed medicines to the correct patient event.

Homecare medicines

- 40. Homecare medicines issued by the trust pharmacy dept will have a patient identifiable record for medicines issued directly to patients in their own homes for safety and commissioning purposes. The patient will use the medicines over an agreed period of time that does not relate specifically to one patient event.
- 41. These medicines will be identified first in the matching process, before the other matching rules for Feed 10: Medicines dispensed, using the 'homecare flag' so they do not remain unmatched and are not incorrectly matched to patient events.
- 42. As a superior method SCM54 Homecare medicines or equipment (see Spreadsheet CM3.5: Superior and alternatives) trusts can create a proxy record for homecare patients and the medicines match the medicines to that proxy record. This will allow identification of the cost within our current structure.

Other considerations

Treatment of FP10 costs

- 43. 'FP10' is the form used to reclaim the cost of medicines prescribed in hospital and dispensed on behalf of the NHS by community pharmacies. This prescription cost information is a useful part of the patient pathway as it shows how the medication regimen continues outside the clinical setting.
- 44. Where community pharmacies or the NHS Business Services Authority NHS Prescription Services¹²¹ charge your provider for these medicines, you will have the costs for them in the general ledger.

¹²¹ Formerly the Prescription Pricing Authority. https://www.nhsbsa.nhs.uk/nhs-prescription-services

- 45. Use resource ID: MDR063 FP10 Medicines and activity ID: MDA066 Dispensing non patient identifiable medicines.
- 46. FP10 costs are not linked to your organisation's pharmacy department, therefore they should be kept separate from other medicine costs. You should identify them as part of the 'other activities' cost group. The value should be included in the unmatched reconciliation, not matched to patients, to ensure the cost is not spread over patients who did not receive these medicines.
- 47. As a superior method SCM79 FP10 costs at patient level, you can obtain a dataset122 to understand which patient prescription each cost relates to, so it can be matched to the relevant patient contact.
- The information can then be added to Feed 10: Medicines dispensed, as shown 48. in Spreadsheet IR1.2 and matched to the patient event recorded in the feed, as described in Standard CP4: Matching costed activities to patients. Any unmatched activity should be reported in the reconciliation and not allocated across other patients.
- 49. For the superior method, use resource ID: MDR063; FP10 Medicines and activity ID: MDA068; Dispensing patient level medicine scripts.
- 50. Note: If your organisation is in an area where community or private pharmacies that dispense medicines charge the clinical commissioning group (CCG) directly for FP10s, the cost will not be in your organisation's accounts and there is no requirement to gather information on it.

Medicines provided by other organisations

- 51. Where your organisation purchases its medicines including homecare medicines - and/or pharmacy services from a different NHS provider or other external party, your organisation should receive information for patient safety and invoice validation.
- 52. You should request sufficient electronic information to support Feed 10: Medicines dispensed, so the costs can be allocated to the patient event in the same way as an internal pharmacy service. This will include:
 - patient-level information on medicine cost, and

¹²² The NHS Prescription Services section of the National Health Service Business Services Authority is trialling a reporting model that will allows inclusion of patient-level information.

- information on non patient-identifiable medicines which have been delivered to a trackable location from where they are issued to the required units.
- 53. You may need to work with your provider-to-provider contracts team to obtain sufficient and appropriate electronic information ¹²³. However, if this information is not available electronically at patient level, you should allocate the costs as a non-patient identifiable medicines to the relevant service area. We do not require manual entry of data from invoices into spreadsheets for a patient level medicines feed.

Clinical trials - medicines

- 54. Where the medicines are part of a clinical trial, the cost may not be in the trust accounts. Where the NHS provider is supplying the staffing and facilities, the patient event should still be costed, even though there is no value available to show as a component cost of the medicines.
- 55. Clinical trial patients should be identified within the trust clinical information systems. For reporting purposes, this identification is helpful for users to explain the lack of medicine costs.

Technology changes in medicines

- 56. Some medicine costs may be significant but not yet identified at patient level in Feed 10: Medicines dispensed. Costs for such drugs may skew the cost of some patient groups. This may include:
 - newly released medicines
 - medicines in clinical trials within the trust general ledger.
- 57. Work with the pharmacy service team to understand such known medicine costs and identify where they sit in the general ledger. If necessary, move material values to an appropriate place to ensure the cost sits in the correct resource and can be identified with the correct patient or clinical service.

¹²³ See Standard CM8 Clinical and commercial services for more information.

Approach – Pharmacy Services

Information requirements

- 58. Pharmacy staff carry out significantly more activities than dispensing medicines. Pharmacy pay costs will therefore be associated with a range of services which should be understood for the most effective costed patient activity.
- 59. Pharmacy services have a national 'infrastructure, governance and clinical model'. The elements are:
 - patient-facing clinical services: includes prescribing, supporting patient selfcare and medicine reviews
 - infrastructure: includes managing supply of medicines, outsourced pharmacy service contracts, formulary development and medicines information
 - governance: includes policies and procedures development, safe management of medicines, audit of clinical practice and recording information.
- 60. The infrastructure and governance elements (including providing the legal presence to permit medicine supply to patients, provider-wide strategy, governance, and education services) should be costed separately from the clinical element of the service provided. This is to provide meaningful local information for clinical service review.
- 61. The cost centre will be the same as for medicines above, including XXX038 Pharmacy, and the expense codes will cover the relevant pay and non-pay items.

Resources

- 62. The staffing and non-pay will use the resources shown in Spreadsheet CP2.1 on the Pharmacy cost centre.
- 63. You will need to identify which staff grades perform different tasks to identify the percentage of pharmacy staff time spent in each area. You will need to disaggregate the Pharmacy cost centre to separate dispensing costs from the infrastructure and governance costs.

Activities

Clinical services

- 64. Clinical services include dispensing medicines, aseptic suite, and direct patient support in clinical units. These services should be allocated to patients that received the service.
- 65. Wards or services receiving a specific pharmacy service, with input determined by specialty, clinical need and patient turnover should have the staff/non-pay resource allocated to the appropriate ward or service area. Use activity ID: MDA066; Pharmacy work.
- 66. You should speak to your chief pharmacist to identify how many and which band of pharmacy staff work with dedicated services, and then set up relative weight values to ensure their costs are allocated only to patients using those services/wards.
- 67. Services that typically receive dedicated pharmacy services include: 124
 - critical care
 - renal dialysis
 - respiratory
 - aseptic
 - cancer/haematology
 - chemotherapy
 - medical admissions
 - parenteral nutrition
 - · high secure units
 - crisis units
 - forensic units
 - learning disability services
 - eating disorders services
 - drug and alcohol services.

¹²⁴ This is our list of likely services. Please let us know of any others that receive specialist pharmacy support.

- 68. Further things to consider when developing relative weight values for allocating clinical service pharmacy staffing costs are:
 - Should there be a relative weight value division of inpatients to outpatients/community services?
 - Do intensive care units require a higher percentage of pharmacy staffing costs, or is the support at a higher banding?

Aseptic unit

- 69. An aseptic unit is a clinical production unit for the aseptic preparation of injectables, such as chemotherapy, biological preparations/formulations, and total parental nutrition (TPN).
- 70. The aseptic unit is staffed mainly by specially trained pharmacy technicians. There will also be significant costs for non-pay items, cleaning, and equipment costs.
- 71. This is a separate pharmacy activity and should be costed separately, so the cost is allocated to the patients that use aseptic prepared items. Use activity ID: MDA074; Aseptic unit work.
- 72. Costs in an aseptic unit typically include:
 - staffing (pharmacist, pharmacy technicians and assistants)
 - hire/depreciation/maintenance costs of the unit
 - registration and inspection to ensure the unit is fit for purpose
 - quality assurance
 - consumables and cleaning of the unit.

Infrastructure and governance

73. Work on infrastructure and governance should be identified and allocated to all patient events as the work is not specific to types of patient. Use the activity ID: MDA066; Pharmacy work.

Resource activity combinations

74. Table CM10.3 is an excerpt¹²⁵ from Spreadsheet CP3.3 showing the resource and activity links to use for pharmacy services.

Table CM10.3: Excerpt from Spreadsheet CP3.3 showing examples of the resource and activity links for pharmacy services costs

	Activity			
Resource	Dispensing high cost drugs (patient-identifiable)	Dispense non patient-identifiable medicines	Pharmacy work	Aseptic unit work
Pharmacist	£X	£X	£X	
Pharmacy assistant	£X	£X	£X	
Pharmacy technician			£X	£X
Medical & surgical equipment				£X

¹²⁵ Please note all excerpts in this standard are for illustrative purposes only. Use Spreadsheet CP3.3 to ensure you are using all the correct resource and activity links.

CM13: Admitted patient Care Updated for community services 2022

Purpose: To ensure admitted patient care (APC) is costed consistently

Objective

To correctly allocate costs to episodes¹²⁶ of APC.

Scope

- 2. This standard applies to patients receiving care in a hospital bed and individuals/patients in a hospice, long stay or care home provided by the NHS, and in virtual wards staffed by the NHS provider in the patient's home.
- This standard excludes patients in a critical care unit: defined as a patient with a record on the relevant age-related critical care minimum data set. For critical care units, refer to Standard CM6: Critical Care.

Overview

- Inpatient departments provide a clinical setting for patients who need to be in a 4. hospital bed as their condition requires it. Care homes 127 provide accommodation and personal care for individuals to meet their ongoing care needs.
- 5. Costs are incurred each day the patient is on the ward. The costing process should apply costs to the patient record showing the date(s) the costs were incurred, so a timeline of costs can be viewed.

¹²⁶ Traditionally, some services did not use the term 'episode' or 'spell' for inpatient stays. These terms are now used in the clinical data sets. Therefore, they are used throughout the Approved Costing Guidance (standards).

¹²⁷ https://datadictionary.nhs.uk/nhs_business_definitions/care_home.html

- 6. The costed patient event is the episode for all care sectors, whether short term, long term or residential. One care professional will be clinically named responsible for the 'episode', even if they work as part of a team.
- 7. Most episodes will be completed during the costing period but some will be unfinished patient events. These should still be costed see Standard CM2: Incomplete patient events.
- 8. All mental health and learning disability admissions should be costed at patient level in the costing system, irrespective of whether they are collected at patient level in the NCC.
- 9. For costing, acute and community episodes will be classified with an 'Episode grouping' code. These are costing-specific currency types that group admissions. Mental health/learning disability episodes do not require an episode grouping.
- 10. Episode groupings¹²⁸ have been developed with community providers¹²⁹ to show the nature of the care without reliance on clinical coding. See Table CM13.1 Episode groupings codes and descriptions. Trusts should map their APC patient events to these codes.
- 11. The requirement for episode grouping for all acute episodes as well as community episodes, ensures that the NCC does not need a separate, additional feed for community inpatients, as requested by costing practitioners.

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¹²⁸ Further information about the episode groupings is available on the online learning platform at: link ¹²⁹ The episode groupings were developed with the Community PLICS Early Implementer group over three years of the pilot PLICS project. Many community care providers do not have access to sufficient or even any clinical coder time for their admissions, and longer stay patients may not be clinically coded until discharge/death: this may be outside the costing period so not coded within the costing period.

Table CM13.1 Episode groupings codes¹³⁰ and descriptions – applies to all acute and community admitted patient care

Episode Grouping Code	Episode grouping title	Sector type
01	Episode with costing grouper HRG (all but undefined groups)	All acute care Community hospitals – procedure-driven care and care with clinical coding.
02	Community medical episode	Community care without clinical coding, including medical admissions unit. May include step-up care to prevent acute admission – for example a urinary tract infection.
03	Community surgical episode	Community care without clinical coding – surgical unit for example with comorbid patient admitted for procedure usually done in outpatients or the community.
04	Community intermediate care episode	Community care, without clinical coding. Step down care as part of a pathway.
05	Community neuro rehabilitation (long stay unit) episode	Providers of neuro rehabilitation in non-acute inpatient units and neuro long stay units.
06	Other community rehabilitation episode	Other community bed days for rehabilitation, without clinical coding.
07	Community palliative care episode	Community bed days without clinical coding – for example hospice care.
08	Other community episode	Other community care without clinical coding.

¹³⁰ Please note: episode grouping codes are not required by the NAPC in community.

Other episode with undefined group HRG	All – see collection guidance for information about UZ HRG codes.
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- 12. Episode groupings should be based on local information, such as ward code, or using information agreed with the clinical teams.
- 13. Where care is currently submitted to the National Cost Collection using HRG codes, this should continue. For these patient events, providers will apply either episode grouping 01 Episode with costing grouper HRG (all but undefined groups) or Episode Grouping 09 Other episode with undefined group HRG and continue to use HRG (in the finished consultant episode HRG field) for detailed currency analysis. See the National Cost Collection guidance volume 3 for more detail¹³¹.
- 14. The currency used to group types of care depends on the care given:
 - For acute services and community hospitals performing acutetype services or procedure based (such as endoscopy), the currency is HRG code. Admissions to community hospitals for procedure-based care will also have a costed patient event with an HRG: for example, endoscopy.
 - For mental health, the currency is the cluster code.
 - For designated community admissions, HRG UZ01Z¹³² is acceptable. These episodes will be identified by the episode groupings as shown in table CM13.1 and are costing-specific currencies developed with community providers¹³³ to show the nature of the care without reliance on clinical coding.
 - Learning disability services, and other AC episodes not in scope of PLICS for the NCC do not require an episode grouping code.

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¹³¹ https://www.england.nhs.uk/publication/approved-costing-guidance-2021-integrated-prescribed-guidance-and-tools/

¹³² Community providers report that there is insufficient clinical coding availability to generate HRGs appropriately. Also, HRGs were mainly established to represent acute care.

¹³³ The episode groupings were developed with the Community PLICS Early Implementer group over three years of the pilot PLICS project. Many community care providers do not have access to sufficient or any clinical coder time for their admissions, and longer stay patients may not be clinically coded until discharge/death: this may be outside the costing period so not coded.

- 15. Integrated trusts may have more than one type of costed patient event for APC.
- 16. Wards will have a range of clinical differences, depending on the level of care given. For example:
 - Surgical wards will provide pre-operation and post-operation care.
 - Mental health wards will provide a safe and therapeutic environment for patients with a range of conditions.
 - Rehabilitation is promoted from admission on all wards, and some wards will be entirely dedicated to it
 - Community wards will usually have patients requiring less intensity of care than acute wards, so staffing ratios and resources will be lower.
 - Virtual ward is a way of recording the data for patients who are treated as APC in their homes, with clinical staff input. Usually, these ward stays are step-down care from a hospital ward.
- 17. Some wards will be secured¹³⁴ to ensure the safety of the individual and others - for example, for patients with dementia, or forensic wards in mental health.
- 18. Wards will operate in different ways according to the needs of the patients.
 - a. Acute hospital wards will have many clinical interventions during the patient's episode, including pre- and postoperative care, diagnostics, and treatments.
 - b. Mental health and community/long stay wards have programmes of activities – including one-to-one medical consultation, and single or group therapies such as art, cookery, exercise classes or physiotherapy and talking therapies.
 - c. Longer-term mental health patients and individuals with learning disabilities may contribute to the 'work' of the ward

¹³⁴ The term 'secured' in this context describes the limitation of patient, staff and visitor ingress and exit.

or their place of residence, by serving meals, doing laundry, or other such activities.

- 19. In some cases, the activities will be provided by staff from another organisation; for example, a specialist practitioner from another organisation, physical health professionals on a mental health ward, or GPs who provide community ward medical cover. Where this care is recharged to the organisation, this cost should be mapped to the patients who received the care (see Standard CM8: Clinical and commercial services supplied or received.)
- 20. The costing system should include core HRGs for all admitted patients even when they are admitted for services that generate unbundled HRGs as all or part of their care. This will include core HRGs for chemotherapy (see Standard CM25 Chemotherapy services), radiotherapy (especially brachytherapy/interstitial and other types of radiotherapy – see Standard CM26 Radiotherapy), renal care, specialist and non-specialist palliative care, and rehabilitation¹³⁵ services:
 - The acute CDS episode data will unbundle to HRGs according to their area of care. Providers should ensure their clinical coding is sufficient to enable the appropriate HRGs to be unbundled and should ensure the cost is applied to the correct HRG. Where the whole episode of care is within the unbundled care area, all the cost should be in the unbundled HRG, leaving a core HRG with a zero cost.
 - Community provider episodes in palliative care and rehabilitation wards should be costed under the episode groupings listed in Table CM13.1.

Approach

Information requirements

21. The data for APC activity will come from the relevant data set as described in Standard IR1: Collecting information for costing, and Spreadsheet IR1.2.

¹³⁵ Please note: the unbundled HRGs for these services will continue to be submitted in the NCC workbook. Standards for these areas are being written, for consultation and publication within 2022.

- Providers of acute hospital services admitted patient care are required to use Feed 1a: APC feed, including healthcare resource groups (HRGs).
- Providers of mental health services admitted patient care are required to use Feed 1b: MH APC, including clusters.
- Providers of community hospital admitted patient care are required to use Feed 1a: APC data, and either:
 - (1) group each patient episode to HRGs where clinical coding is required to report clinical procedures (for example – endoscopy and other special procedure suites) in feed 1a (acute APC) or
 - (2) identify community admissions with the appropriate episode groupings (see Table CM13.1). These do not require HRGs: the mapping to these groupings should be locally defined. A record of the mappings should be referenced in the integrated costing assurance log (ICAL).
- 22. Where there is no national dataset for example, in residential care run by the NHS, the data should still be available from local systems. This should be brought into the costing system using feed 1a and used for the costing process.
- 23. The 'accommodation' and necessary care costs are allocated to the ward care activity, driven by the length of stay in minutes, so the costing system needs information on the date and time on each ward as required fields.
- 24. For acute and community services, Feed 4: Ward stay will give additional information on the time spent on a ward. This feed is required, as the commissioning data set (the base data for Feed 1a: APC) does not show the date and time on each ward.
- 25. For mental health services, Feed 1b: APC, is based on the mental health services data set (MHSDS), which includes ward stays, so this information can be obtained from the APC feed, and Feed 4: Ward stay, may not be required.
- 26. Use the fields in Table CM13.2 as the cost driver.

Table CM13.2 Excerpt from Spreadsheet IR1.2 showing the patientlevel field requirements for calculating the length of stay by ward

Field name	Field description
Start date (ward stay)	The start date of a ward stay
Start time (ward stay)	The start time of a ward stay
End date (ward stay)	The end date of a ward stay
End time (ward stay)	The end time of a ward stay
Ward code	A unique identification of a ward in a healthcare provider to which the patient was admitted

- 27. The data field 'ward code' will supply information to the costing system for linking cost to the data of patients on a ward. Wards may differ in their costs, so to appropriately cost an individual patient's 'journey', you need to know which ward(s) the patient was on. Ward code will also identify patients treated in a virtual ward – in their own home.
- 28. Costing practitioners should understand the hierarchy of data items in the CDS and the costing system shown in Table CM13.3 so the cost can be applied to the correct patient event as it occurs – by date and time.

29. These data items are:

- a spell¹³⁶ (admission to discharge) (this has one or more episodes)
- at least one episode¹³⁷ (an episode is a period of time during a spell under a single healthcare professional or team; it may have one or more wards)
- at least one ward: the longer the spell, the more likely there will be multiple wards recorded.

¹³⁶ NHS Data Dictionary definition of spell

¹³⁷ NHS Data Dictionary definition of episode

Table CM13.3: Examples of how patients are shown in the admitted care dataset hierarchy

Pati ent A		
Spel I	Episode 1	Ward A
		Ward B
	Episode 2	Ward C

Patient A was admitted to ward A, moved to ward B, then transferred to a second care provider and moved to ward C, from where they were discharged.

Pati ent B		
Spel	Episode 1	Ward B
ı		Ward C

Patient B was admitted to ward B and moved to ward C from where they were discharged.

- 30. You should be aware that taking dates and times from different datasets may show different durations, or the dates and times may not match. In this case, review the accuracy of the data and use the ward information from the source with the best data quality.
- 31. For example, use the start date (ward stay) and start time (ward stay) as the indicator that the patient was on that ward, rather than trying to match the end date and time of one ward with the start date and time of the next ward.

Ward care 'acuity'

32. 'Acuity', as defined in for costing, describes the level of resource a patient uses due to their condition; including physical and mental health, behavioural and forensic issues. 138

¹³⁸ Forensic mental healthcare is the interface between the patient's mental healthcare and the criminal justice system. Certain parts of the mental health service specialise in this.

- 33. The standard level of acuity is understood from the type of ward for example, those with a higher staffing ratio will accommodate patients with higher acuity.
- 34. Unless otherwise informed, you can expect all patients on the same ward to use resources at a similar rate.
- 35. For mental health, information on the level of resource expected for patients on a whole ward may be understood for costing purposes from the MHSDS fields, as shown in Table CM13.4. This recognises the additional levels of acuity that can be expected from different types of ward – although you should discuss this premise with the service team.

Table CM13.4: Ward care-level designation (mental health)¹³⁹

Feed name	Field name	Field description
Admitted patient care	Ward code	A unique identification of a ward in a healthcare provider.
Admitted patient care	Ward setting type (MH only)	The type of ward setting for a mental health service's patientduring a hospital provider spell
Admitted patient care	Ward security level (MH only)	The level of security for a ward.

- 36. You can use a superior costing method to allocate the costs of additional care provided to different patients on a ward, by using nursing acuity or ratios (SCM8 Inpatient nursing acuity), specialing/observations (SCM2 Specialing and observations) and by identifying mental health escorted home leave (SCM6 escorted home leave). This information should relate to specific patients and can come from clinical notes or other reliable sources.
- 37. The CDS and MHSDS do not contain acuity information. To apply these superior cost methods for acuity, you will need to obtain this information from a local information source and input it into the 'acuity level' field in Feed 1a and 1b: APC, as shown in Spreadsheet IR1.2.

¹³⁹ These fields are in the MHSDS, but your organisation may not record in this field.

Supporting contacts

- 38. As a superior method, the costing process can also show the additional resources used by different patients by recording supporting contacts. For example, a physiotherapy professional from a different cost centre visiting a patient on the ward, can be included on Feed 7: Supporting contacts, to reflect the time and grade of staff providing the contact.
- 39. The cost is likely to be part of another service area's expenditure, eg the 'therapy' budget. The cost should be matched to the patient(s) who benefited from the activity, rather than patients in another service area (or organisation). The cost will become a component cost of the admitted patient care episode.
- 40. Please note: if the attendance was a pre-booked NAPC appointments, seen on a ward, this will be an NAPC patient event, not a component of the APC.

Specialist cost centres and expense codes

- 41. Many types of staff can work on a ward, and they will show in the ward cost centres in your general ledger.
- 42. Table CM13.5 is an extract of the standardised cost centre codes for wards as shown in Spreadsheet CP2.1: The standardised cost ledger.
- 43. The cost centres will need to be customised for each ward using the XXX to indicate your local ward identifier. Set up the allocation of ward costs to reflect the care given, so it can be mapped to the correct patients. You may group similar wards together.

Table CM13.5: Extract from spreadsheet CP2.1 the standardised cost ledger, showing ward cost centres

Cost centre (CC)	CC description
XXX064	Ward A - Acute, elderly and general
XXX065	Ward B - Paediatrics
XXX066	Ward C - Maternity
XXX090	Ward D - Private patient ward

XXX604	Ward - Community
^^^04	Ward - Community
XXX538	LD Adult High Secure Ward/residential- Learning Disability
XXX500	MH Inpatient Adult - other
XXX501	MH Inpatient High Secure Unit - non-forensic
XXX502	MH Inpatient High Secure Unit - other specialised services
XXX503	MH Inpatient Medium Secure Unit - non forensic
XXX504	MH Inpatient Low Secure Unit - non forensic
XXX505	MH Inpatient Psychiatric ICU
XXX506	Perinatal Mother and baby inpatient unit
XXX507	Perinatal mental health services (non inpatient)
XXX513	Adult Eating Disorders (non-inpatient)
XXX527	CAMHS Inpatient – Other
XXX537	MH Inpatient High Secure Women's Services
$\Lambda\Lambda\Lambda JJI$	Will impatient riight Secure Women's Services
XXX537 XXX539	MH Inpatient High Secure Deaf Services
XXX539	MH Inpatient High Secure Deaf Services LD Adult Medium Secure Ward/residential-
XXX539 XXX541	MH Inpatient High Secure Deaf Services LD Adult Medium Secure Ward/residential- Learning Disability LD Adult Low Secure Ward/residential-
XXX539 XXX541 XXX556	MH Inpatient High Secure Deaf Services LD Adult Medium Secure Ward/residential- Learning Disability LD Adult Low Secure Ward/residential- Learning Disability LD Adult other Ward/residential-Learning
XXX539 XXX541 XXX556 XXX557	MH Inpatient High Secure Deaf Services LD Adult Medium Secure Ward/residential- Learning Disability LD Adult Low Secure Ward/residential- Learning Disability LD Adult other Ward/residential-Learning Disability
XXX539 XXX541 XXX556 XXX557 XXX558	MH Inpatient High Secure Deaf Services LD Adult Medium Secure Ward/residential- Learning Disability LD Adult Low Secure Ward/residential- Learning Disability LD Adult other Ward/residential-Learning Disability MH Older Adult Inpatient secure MH Inpatient Personality Disorder - Medium
XXX539 XXX541 XXX556 XXX557 XXX558 XXX559	MH Inpatient High Secure Deaf Services LD Adult Medium Secure Ward/residential- Learning Disability LD Adult Low Secure Ward/residential- Learning Disability LD Adult other Ward/residential-Learning Disability MH Older Adult Inpatient secure MH Inpatient Personality Disorder - Medium Secure

XXX564	MH Inpatient Low Secure Unit - Forensic
XXX570	CAMHS Eating Disorder non inpatient
XXX571	CAMHS Inpatient - Eating Disorder
XXX573	CAMHS LD High Secure Ward/residential- Learning Disability
XXX574	CAMHS LD Medium Secure Ward/residential- Learning Disability
XXX575	CAMHS LD Low Secure Ward/residential Learning Disability
XXX576	CAMHS LD other Ward/residential Learning Disability
XXX577	Drug and Alcohol inpatient ward/unit
XXX578	MH Adult Eating Disorder inpatient unit – ward care

- 44. Ward stay data will include patients on virtual ward: the patient is in their home and attended by clinical staff. The ward code should be used to identify these patients and match them with the cost of providing this care in the same way as for other wards. However, the care may be provided by a third party, so the cost may be in the form of invoices.
- 45. A range of staff may work on wards, including nurses and specialist nurses, non-consultant medical staff, psychiatrists, psychologists, therapists, pharmacists, support workers and activity co-ordinators. The expense codes used should reflect the staff group and non-pay items used.
- 46. Where staff costs are not on the ward cost centre, you should ensure their costs are identified and allocated to the area of the patients they care for. This can be done by disaggregating the cost centre where their costs are held. For example, non-consultant medical staff in a community hospital might work across three wards, so their costs should be allocated across those wards. See Standard CM1: Medical staff for more detail.

- 47. Specific expense codes for ward expenditure include:
 - Ward clerk • 5467
 - 5854 Ward manager
 - 7107 Patient specific consumables – ward

Resources

- 48. The patient will incur costs from the care given by a range of staff, the use of consumables (including medicines), and ward overheads (previously known as Type 1 Support Costs), such as ward clerk costs.
- 49. Use the resources for staff type and non-pay as shown in Spreadsheet CP2.1: The standardised cost ledger.

Activities

Ward care

- 50. Admitted patients incur costs just by being on a ward. Therefore, all APC patient events should show the Activity ID: Ward care, among the list of activities the patient benefits from.
- 51. The 'accommodation' and necessary care costs are allocated to the ward care activity, using the length of stay in minutes. The datasets supplying the costing system with information include date and time as required fields.
- 52. Use Activity ID: SLA097: Ward care for all wards, unless you require greater detail for your costing system to link to the costs, for additional levels of local reporting, or if you are using a superior allocation method.
- 53. For mental health units: Table CM13.6 is an excerpt from Spreadsheet CP3.2, showing the superior method of ward care activities for mental health inpatient units.¹⁴⁰ The activities are separately identified by the level of care, security, and service, to facilitate meaningful local reporting.
- 54. Spreadsheet CP3.3 shows the resource links to ward-related activities.

¹⁴⁰ Ward care for mental health has been broken down into appropriate activities using feedback from mental health providers.

Table CM13.6: Excerpt from Spreadsheet CP3.2 listing the ward care activities for mental health inpatient units

Activity ID	Activity
MHA270	CAMHS inpatient – eating disorder – ward care
MHA272	CAMHS inpatient – other – ward care
MHA294	MH adult ward care – low secure
MHA295	MH adult ward care – medium secure
MHA296	MH adult ward care – high secure
MHA297	MH adult ward care – other

Ward rounds

55. Formal ward rounds are visits to the admitted patient by a senior healthcare professional and other team members to review and coordinate the care. They are an important part of the decision-making process for acute and community admitted patients and are generally led by a medical staff member. See Standard CM1 Medical staffing for more information on costing ward rounds.

Mental health care programme approach (CPA) meetings

- Care programme approach (CPA) meetings are held annually, usually with the patient present, to agree a plan for their care.
- 57. The mental health patient may attend CPA meeting(s) during admission. These meetings are recorded in the MHSDS whether they take place in an APC or NAPC patient event.
- 58. Where a CPA meeting is recorded as part of an APC event it should show as a component of the APC patient event but with Activity ID MHA261: CPA meeting, so it is identifiable separately from the rest of the ward care. Therefore, if the CPA took place on a ward, you should identify which resources attended this meeting and allocate this to the APC patient event. For further guidance on CPA meetings, see Standard CM3: Non-admitted patient care.

Group sessions

- 59. Long term and mental health admitted patients may have access to group sessions such as therapy, supervised sport, cookery, condition management, or employment preparation. Patients accessing these activities use more resources than those on the same ward who do not.
- 60. Where these sessions include all patients on the ward and are run by the staff from the ward budget (which is already allocated equally across all patients on the ward), there is no requirement to separate the cost and show it as a group session on the ward.
- 61. Where the costs of running the sessions are not in the ward budget for example, a physiotherapist attends the ward once a day to hold a mobility group or where only some of the ward patients attend the group, you can use Feed 7: Supporting contacts, to allocate cost to patients attending group sessions. This is a superior method.
- 62. You should follow the materiality principle (see the Costing principles) when prioritising work on group sessions. For further information on group sessions, see Standard CM14: Group activities.

Resource activity combinations

63. See Spreadsheet CP3.3 for possible combinations of resources and activities in wards.

Matching

Non-pay items

- 64. For the treatment of costs for other ward consumable items and equipment, refer to Standard CM21: Clinical non-pay items.
- 65. Medicines will be issued to most patients on a ward. Medicine costs should not be included in Activity ID: SLA097: Ward care, or the superior method ward care activities for MH.
 - Patient-identifiable medicines dispensed during an admission should be matched to the APC episode using the prescribed matching rules in Spreadsheet CP4.1, and Feed 10: Medicine dispensed. These will either use Activity ID: MDA063:

Dispensing high cost drugs or Activity ID: MDA068 Dispensing patient level medicine scripts.

- Non-patient identifiable medicines also called 'ward stock' should be allocated across all the patients on the ward, using Activity ID: MDA065: Dispensing non patient identifiable medicines.
- 66. For more detail, refer to Standard CM10: Pharmacy and medicines.

Other considerations

Ward attenders

- 67. Ward attenders are patients who visit the ward for healthcare but are not admitted to a hospital bed. They are recorded in the acute and community commissioning datasets as non-admitted patients, so should be included and costed and reported as NAPC patients.
- 68. You should identify the resources used by these patients within the ward cost centre(s) and use Activity ID: SLA157: Ward attenders to show this component cost in the NAPC patient event. See Standard CM3: Non-admitted patient care for more detail.

Home leave

- 69. 'Home leave' is when a patient who is admitted onto a ward, leaves for an authorised or authorised period at home, and the hospital bed remains empty for their possible return.
- 70. MH patients may be escorted or unescorted during home leave; acute and community patients may also have home leave, but this will mostly be unescorted.
- 71. MH home leave is recorded in the MHSDS data set using the fields shown in Table CM13.7 and is authorised for an agreed number of days. 141 Home leave is not a discharge. The duration of the admission should not include the bed

¹⁴¹ The MHSDS definition for a planned MH leave of absence is up to 6 days. However, organisations can have a local policy for number of days at the discretion of the responsible care professional: for example up to 28 days.

- days on home leave. The patient episode continues, keeping a bed for their use.142
- 72. Acute and community providers should use their PAS data to identify the unescorted home leave period and exclude it from the length of stay used for calculations of cost.

Table CM13.7: Excerpt from Spreadsheet IR1.2 showing the patientlevel field requirements for costing home leave

Field name	Field description
Start date (home leave)	The start date for a period of home leave for patients not liable for detention under the Mental Health Act 1983.
Start time (home leave)	The start time for a period of home leave for patients not liable for detention under the Mental Health Act 1983.
End date (home leave)	The end date for a period of home leave for patients not liable for detention under the Mental Health Act 1983.
End time (home leave)	The end time for a period of home leave for patients not liable for detention under the Mental Health Act 1983.
Escorted home leave	Additional field, showing whether the patient had staff accompaniment during the home leave.

73. Occasionally, a patient has escorted leave, where they are under a staff member's supervision 24/7, to ensure they do not put either their own safety or that of others, at risk, and to assess them further before discharge. The number of healthcare professionals who attend the patient on escorted leave depends on the patient's needs. As a superior costing method, you can obtain information on the resources used during escorted leave and bring them into the costing process in Feed 7: Supporting contacts. When costing escorted home leave, use Activity ID: MHA288: Escort during home leave.

¹⁴² If the patient does not return after six days, the patient spell will be closed with a discharge. If this happens after the end of a costing period, refer to Standard CM2: Incomplete patient events.

- 74. Unescorted home leave does not incur cost for food, fresh linen, on-ward staffing input, ward rounds or ward work with healthcare professionals. It, therefore, does not require additional information or consideration of acuity.
- 75. There may be some costs for the facilities kept available on the ward for the patient on home leave which is not used by other patients. For example: heating their bedroom.
 - In this version of the standards, we are not prescribing allocating costs to the patient for ward care, ward rounds and ward work during home leave, as doing so is beyond the level of costing required. The net length of stay on the ward is the primary cost driver for ward care and ward work after the home leave period has been subtracted.
 - The exception to this is where there is a full roster of staff on the ward, AND agency staff have been booked to cover the escorted home leave.

Perinatal mental health services

- 76. Some women need to be admitted to a MH unit during pregnancy or following the birth of their child. This may be to a specific mother and baby unit, the discrete costs for which should be attributable to the correct cohort of patients.
- 77. Where there is no specific unit and women are admitted to other wards, ensure that the appropriate relative weight values for duration and number of observations are used. This care will need to be discussed with the service as there is no mandated field in the MHSDS for it.
- 78. The costed activity is for the mental health healthcare provided to the mother only, although there may be additional nursery costs on discrete units. Ensure the nursery costs are allocated across the patients (mothers) using the unit in the period unless patient-level information is available.

CM14: Group sessions

Purpose: To ensure group activities are costed consistently

Objective

1. To ensure costs are correctly allocated to patient episodes/contacts where there are multiple patients with one or more professionals.

Scope

- 2. This standard applies to all group sessions with two or more patients attending.
- 3. Group sessions can take place during a non-admitted patient care (NAPC) contact or during an admitted patient care (APC) episode.

Overview

- 4. Group sessions are often delivered in a group-specific location, eg physiotherapy in a gymnasium.
- 5. A group session involves multiple patients and one or more staff members. A group contact is the activity unit recorded for a single patient within a group session.

Approach

6. Group sessions take place in all sectors. The nature of having a group discussion can be the objective – as with group therapy or social enrichment sessions, and for other services, groups are a cost-effective way of providing care - as with education sessions and self-care guidance for a physical health condition.

Information requirements

- 7. Standard IR1: Collecting information for costing and Spreadsheet IR1.2 specify the minimum information required to cost group contacts; that is, a patient event as part of a group session.
- 8. Each patient contact in Feed 3b: NAPC – mental health, and Feed 3c: NAPC – community, relating to a group session should have a unique identifier in the field 'group session identifier' as this information comes from the Mental Health Services Data Set (MHSDS) and Community Services Data Set (CSDS) respectively. Where this field is not null, it is a group session. The 'number of group session participants' is available as a field to enable cost to be divided between them.
- 9. Feed 3b: NAPC - mental health, and Feed 3c: NAPC - community, should include a record of the duration of the group session against each participant, in the field 'clinical contact duration of group session'.
- 10. The acute patient Commissioning Data Set (CDS) does not have a field identifying a group contact, so the 'group session identifier' field and the 'number of group session participants' field in the PLICS Feed 3a: NAPC, will need to be populated from local information. Local information will be needed for groups held during an APC episode (if material).
- 11. For acute groups, you should use Feed 3a: NAPC field 'appointment duration'. Assume all patients spend the same amount of time in the group session (although this can vary). The recorded duration will be for the whole contact, so it should be used to allocate the cost of providing the session against all the participants.
- 12. To identify the service/team providing the group, you will need local information:
 - for some services this may be a clinic code
 - another indicator may be specialty or treatment function code
 - for community services, the service/team providing the group may be identified from the field 'service or team type referred to (community care)'.143

¹⁴³ See the Community Services Data Set (CSDS) specification for the list of codes (https://digital.nhs.uk/data-and-information/data-collections-and-data-sets/data-sets/communityservices-data-set/community-services-data-set-technical-output-specification), under 'technical

- 13. If the group session fields are not routinely completed, work with your informatics department to ensure these are recorded. Without this information, the contact will be costed as though it were a single professional appointment (receiving a higher weighting of resource than was used by the patient).
- 14. The costing process can then link the staff cost to the resource for that staff group, and onwards to the activity for the types of group sessions.
- 15. There is no national dataset to record groups for admitted patients, so you will need a local data source. As a superior costing method SCM33 Supporting contacts allocated at patient level, this information should be entered onto Feed 7: Supporting contacts¹⁴⁴, in accordance with Standard IR1: Collecting information for costing and Spreadsheet IR1.2, to ensure a record of the cost of the group contact is included as part of the episode cost for patients benefitting from the service see Standard CP2: Clearly identifying costs.

Specialist cost centres and expense codes

- 16. There is no specific cost centre in the standardised cost ledger (Spreadsheet CP2.1) for group sessions. Use the cost centres for NAPC or APC where group sessions take place, or for the team that run the session.
- 17. For group sessions where activity data is not available at all, use cost centre 'XXX584: Group Session without PAS contact' to map your group session costs to. This would apply where clinical professionals run group sessions with no record of the individuals attending such as school nurses running a health session in a school assembly.

Resources

Staff numbers running group sessions

18. The sources of the NAPC information feeds (CSDS, MHSDS and CDS) record only one care professional for the group, using the fields 'care professional local identifier' (CSDS and MHSDS) and 'healthcare professional code' (CDS). You should ensure the cost of the identified care professional is included in the group cost. This person is the named contact for the group session to discuss

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output specification'. Further information on the CSDS can be found at: https://digital.nhs.uk/data-and-information/data-collections-and-data-sets/data-sets/community-services-data-set

This feed is a superior costing method.

- the costing process with. They will know whether additional information is required and available about the service team make-up.
- 19. If no further information is available or the cost of additional staff is not material. for costing purposes you can assume the group is staffed by this one care professional only.
- 20. Group sessions with multiple care professionals will have a different cost per patient from group sessions with a single care professional. Depending on the number and type of staff involved, the cost could be higher or lower. You need to identify the appropriate resources for each patient contact, to ensure costs are not attributed to the wrong patient event (or spread across other events).
- 21. Where the cost of additional staff within the group is material, the activity feed can include additional staff from a local source. The field to use is 'second care professional local identifier'. This information will then inform relative weight values to identify the resources involved.
- 22. You may add further fields for subsequent care professionals if needed, in conjunction with your costing software provider.
- 23. Work with the relevant team/service/department and your informatics department to find a suitable method of recording each staff member's involvement in the group activities.

Allocating non-pay costs to group sessions

- Many group sessions will not involve equipment, medicines or patient consumables, or their item use will be negligible. However, for some activities such as specialist sporting sessions (including trips out), identifying the costs in a more detailed manner may be beneficial, including travel and other non-pay costs, should be allocated to those patients who benefited from the group.
- 25. The materiality principle should be used when developing detailed models for attributing this cost. Use the methods prescribed for consumable items in Standard CM21: Clinical non-pay items.

Activities

26. For group sessions similar in length/nature of an outpatient appointment or community care contact, where the patients are known and have a patient

- administration system (PAS) record for the group use Activity ID: CMA308; Group contact recorded at patient level.
- 27. Where there is no patient recorded use Activity ID: CMA344 Group contact without a patient level record

Day care

- 28. Day care is where a group of non-admitted patients benefit from care services in a group setting – usually over a few hours. Use Activity ID: MHA262 Day Care as this will allow better reporting of the service that runs for a longer period of time. A range of care professionals may provide care over the period of attendance.
- 29. The activity may be recorded as NAPC or it may be on a standalone local system.
- 30. The staff involved are most likely to be nurses/therapists but in some areas, there could be medical input. The model of care may be termed 'social' or 'medical' depending on its clinical content. You should include all relevant staff costs for the session.
- 31. Day care should be costed as for other group sessions, using the duration of the session divided by the number of patients present.

Groups run during admitted patient care

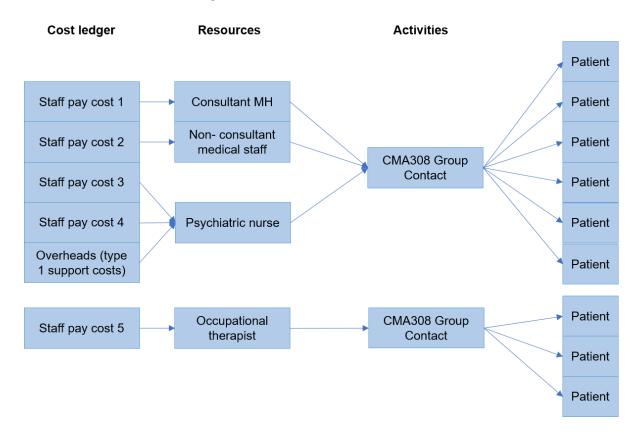
- 32. Many patients receive group therapy during admissions, eg physiotherapists running a group on a ward to maintain patient mobility.
- 33. Where the cost of running the group is within a service area's budget (eg the cost of the physiotherapist is on the ward budget) and all patients on that ward have the opportunity to participate in the group, there is no requirement to separately cost a group contact. The cost will be included in the activity ID: SLA097; Ward care.
- 34. Where the cost is not in the service area, you should include it in the costing of the area that runs the group, using the activity ID: CMA308 group contact recorded at patient level. This will be shown as a component of the admission cost.

35. Where not all patients on the ward receive the group service, you should apply the cost to the patients who do attend the group. You should consider the materiality of this cost differential and prioritise it accordingly.

Resource activity combinations

36. Group contacts should include the cost of the resources to provide the group, spread across the number of patients in the group as shown in Figure CM14.1.

Figure CM14.1: How multiple or single staff members are attributed to resources, activities, and patients



- 37. This method relies on several assumptions:
 - each staff member spends the same amount of time with each patient
 - patients do not leave the session early
 - staff members do not leave the session early.
- 38. We acknowledge that these assumptions do not always hold true, and the method will therefore not provide a completely accurate representation of how care is delivered. As the ability to collect information improves, future versions of the standards will specify more accurate methods based on, for example, patient acuity or measuring actual time spent with specific patients.

39. If you already apply additional relative weight values to specific patients or adjust for staff presence in the relative weight values, continue to do so as this provides better information for costing. Please let us know by contacting costing@england.nhs.uk

Matching

40. Where group session is recorded at patient level, the information feeds inform the allocation is usually the master feeds, eg APC and NAPC feeds. Therefore, there is no need for matching.

CM16: Sexual health services

Purpose: To ensure sexual health services are costed consistently

Objective

To ensure costs for providing sexual health services in an admitted patient care (APC) or a non-admitted patient care (NAPC) setting are allocated appropriately.

Scope

2. This standard applies to all activity provided by sexual health services.

Overview

- 3. Sexual health services offer a range of services to those who have, may have or are at risk of sexually transmitted infections, including:
 - diagnosis and treatment
 - education
 - family planning services
 - support for sexual assault victims
 - provision of surgical and medical terminations of pregnancy
 - psychosexual medicine.
- 4. Patients can be treated in both APC and NAPC settings.
- 5. Some elements of this care will be under the formal medical specialty of genitourinary medicine (GUM).
- 6. Due to information governance constraints on sensitive and legally restricted data, patient information for some sexual health services will be anonymised.

Therefore, we are aiming to cost **a** patient, not **the** patient, accessing sexual health services. This should not mean there is no record of the patient's care – such a record is important for patient safety. But it may not be available for costing in the same way as for other NHS patients.

Approach

Information requirements

- 7. You need to follow the same Information requirements process for the admitted patient care (APC) and non-admitted patient care (NAPC) contacts whether you are using patient-identifiable information or anonymised/proxy records.
- 8. Sexual health services may record formal medical NAPC contacts (GUM) in the outpatient commissioning data set (CDS) or hold records locally in a separate data system. APC care will be in the CDS. Sexual health is not in scope of the community services data set (CSDS).
- 9. You will need to speak to your informatics team to determine the source of the information for Feed 17: Sexual Health, if this information is not available within Feed 3a: NAPC. See Standard IR1: Collecting information for costing and Spreadsheet IR1.2.
- 10. If no patient-level activity is available and your costing system needs to work with a patient-level structure, you can create proxy, pseudonymised or anonymised records.
 - Pseudonymised records are where the real patient record has had patient identifiable information removed but keeping a key to track back to the actual patient.
 - Anonymised records are where the real patient record has the patient data removed, but without a key.
 - Proxy records are where no patient record is available, but for costing purposes a 'record' is created to attach the cost of care to.

Admitted patient care

11. Patients admitted overnight or as day cases primarily for sexual health will usually be recorded under Specialty 360: Genitourinary medicine (GUM) on Feed 1a: APC. The type of procedures performed will be clinically coded and should be costed in the same way as for other admitted patients.

- 12. Where an admitted patient receives a sexual health test, this can be included on Feed 8: Pathology. It will be identified as a separate activity but still be an identifiable part of the total cost of the admitted episode, whichever specialty the patient is admitted under.
- 13. If a patient admitted under a specialty other than GUM receives a bedside consultation with a sexual health professional, as a superior method SCM33 Supporting contacts allocated at patient level, the contact can be recorded on Feed 7: Supporting contacts, and be separately identifiable as part of the patient episode.
- Sexual health or GUM services may use theatres. See Standard CM5:
 Theatres and special procedure suites and Standard CM21: Clinical non-pay items.

Specialist cost centres and expense codes

- 15. The cost of sexual health services should be shown in cost centre XXX613; Sexual health/GUM care. If multiple services are within the sexual health costs in your general ledger, you may customise the XXX in your cost ledger to ensure the cost flows to the appropriate resource for allocation.¹⁴⁵
- 16. There are no specific expense codes for this service. However, if the sexual health testing is purchased from another organisation, you should use expense code 7020 Contract: pathology testing non patient specific data.¹⁴⁶

Resources

- 17. You should map to resources as shown in Spreadsheet CP2.1. for the cost centre above.
- 18. To note: for contracted out services you will map to
 - CLR026 Services received pathology testing non patient specific
 - CLR031: Services received pathology testing patient specific

¹⁴⁵ See also Standard CP2: Clearly identifying costs.

¹⁴⁶ If you receive this information at patient level, please use 7261 Laboratory External Tests

Activities

- Where the patient receives a consultation in non-consultant led services or clinics sexual health only, use the activity ID: CMA312; Sexual health/GUM care.
- 20. Where the patient(s) receive integrated sexual health and family planning, use the activity ID: CMA334; Integrated sexual health and family planning care.
- 21. Medical staff resources for standard GUM consultations should be mapped to the activity 'Outpatient care'.
- 22. The cost drivers for allocating these activities are duration of appointment and the care professional(s) in attendance.
- 23. These activities will include the cost of taking bloods or swabs for testing and sending them to the laboratory, but not the cost of the test processing in the laboratory. This is costed to a separate activity ID from the consultation, and then matched to the patient contact in accordance with Standard CP4: Matching costed activities to patients, so the overall cost of the patient visit to the sexual health service includes all identifiable costs.

Sexual health tests

- 24. A sexual health test is the pathological test or group of tests to determine type of condition or cause. This is the activity of receiving the blood test or swab sample at the relevant laboratory and processing it, and the cost of consumables, staff/machine processing time and the test. In this way, local laboratory costs can be identified separately from those of contacts and may be compared to those of an outsourced laboratory.¹⁴⁷
- 25. Not all patients will undergo a test during their contact. Therefore, the cost of the test should show up as a separate activity from staff time with the patient doing the swab or taking the blood. You should include sexual health tests in Feed 8: Pathology, and match it to the contact record for the patient, to ensure the cost is attributed to the correct patient event. Use the activity ID: CMA306; Sexual health testing, for the cost of the test.
- 26. The cost of taking the blood/swab sample is usually associated with the consultation with the sexual health professional, and therefore should be

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¹⁴⁷ Please note, the cost of outsourced tests will include consumable and other variable costs as well as support costs.

- included as part of that contact. Only include the associated contact costs for taking the sample if the test is carried out separately from the sexual health consultation for example, in a separate laboratory clinic room by a non-sexual health professional such as a phlebotomist.
- 27. If your sexual health test information comes from a pathology service dataset (including outsourced) other than the main pathology lab, add its data to the feed 8: pathology.
- 28. Sexual health tests may be performed by a different provider from the one where the contact took place. The information should be available to your organisation at patient level, in accordance with Standard CM8: Clinical and commercial services supplied or received.
- 29. You should use Activity ID: CMA306; Sexual health testing for outsourced laboratory tests.

Resource activity combinations

30. Table CM16.1 is an excerpt¹⁴⁸ from Spreadsheet CP3.3 showing the resource and activity links to use for NAPC sexual health and family planning services.

Table CM16.1: Excerpt from Spreadsheet CP3.3 showing some of the resource and activity links for sexual health service costs

		Activity		
Resource	Sexual health testing	Sexual health/ GUM care	Integrated sexual health/ family planning care	Outpatient care
Technician	£X			
Services received – pathology testing – patient level	£X			
Clinical scientist	£X			
Medical and surgical consumables	£X			
Specialist nurse		£X	£X	
Consultant				£X

Please note all excerpts in this standard are for illustrative purposes only. Use Spreadsheet CP3.3 to ensure you are using all the correct resource and activity links.

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Matching

- Use the prescribed matching rules in columns K to N in Spreadsheet CP4.1 to ensure the costed prosthesis, implant or device is matched to the correct patient event, as in Standard CP4: Matching costed activities to patients.
- 32. The test should be matched to the contact when it was taken 149, in accordance with Standard CP4: Matching costed activities to patients. You should follow the matching rules for pathology in Spreadsheet CP4.1.

¹⁴⁹ And not to a contact where results are given.

CM17: Dental services

Purpose: To ensure costs for dental services are allocated consistently

Objective

1. To ensure costs for providing dental services are allocated appropriately, including community services and dental hospitals.

Scope

- This standard applies to all activities provided by NHS dental services, including community and hospital dentistry, emergency and planned dental care, orthodontics and where oral surgery and maxillofacial services include dental practitioners.
- This standard does not apply to dental emergencies treated in 24 hour emergency departments. These are included in Standard CM4: Emergency department attendances.

Overview

- 4. Dental services are provided across various settings including:
 - planned outpatient clinics in a hospital, health centre or prison
 - NAPC in a domiciliary setting
 - community NAPC appointments in a high street setting
 - emergency dental departments: excluding dental emergencies treated in type 1 ED departments¹⁵⁰
 - patients admitted to a ward under dentistry or another specialty for dental care.

¹⁵⁰ Dental emergencies treated in level 1 ED departments will be recorded on the emergency care data set as part of ED services.

Approach

Information requirements¹⁵¹

- 5. Activity for dental patients will be recorded in provider systems in various ways:
 - in the main patient administration system (PAS) as admission episodes (included in the admitted patient care (APC) feed)
 - in the main PAS as outpatient attendances (included in the non-admitted patient care (NAPC) feeds (feed 3a or 3c))
 - in a separate local system for community dental activity.
- 6. The data required for Feed 18: Dentistry feed, as shown in Spreadsheet IR1.2, is the community dental activity. It should only include dental activity not covered by the APC or NAPC feeds.
- 7. Where the patient has been admitted, the patient event for costing is the episode.
- 8. For non-admitted patients seen in hospital outpatient clinics, the patient event for costing is the outpatient attendance. 152
- 9. The unit of dental activity (UDA) is a unique data item for community dentistry. It is included in Feed 18: Dentistry, so that organisations can produce cost reports for UDA as needed for service management and commissioning. 153
- 10. Where community dental contacts are not recorded in the main PAS but as UDAs in a separate clinical information system, that local data should be used to supply Feed 18: Dentistry feed. The patient contacts can then be costed under the costing process standards.
- 11. In some pathways, multiple patient contacts will relate to the same UDA. For example, the diagnostic contact will be followed by a treatment contact under the same UDA. These contacts are separate, often to enable the patient's underlying health to improve before treatment¹⁵⁴, or to obtain custom prosthesis

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¹⁵¹ For more detail on the Information requirements for APC and NAPC dental activity, see the Standard IR1 and Spreadsheet IR1.2

¹⁵² If dental services are provided in the patient's residence and recorded on the Community Services Data Set (CSDS), these should be entered into Feed 3c: NAPC – community

^{153 &}quot;UDAs are a measure of the amount of work done during dental treatment. More complex dental treatments count for more UDAs than simpler ones." NHS England (2018) https://www.england.nhs.uk/statistics/2018/05/03/dc0136785_mar18/

¹⁵⁴ Such as abscesses relating to the dental complaint, or wider health issues.

to be prepared. Each patient event should still be included in the costing system.

Specialist cost centres and expense codes

- 12. Map the general ledger to the cost ledger in accordance with the costing process standards, which will ensure the resources for dentistry are identifiable. The dental – specific cost centres in the cost ledger are XXX033 Dental services and XXX039 Dental laboratory. These can be customised in your local cost ledger where there are specific different dental services both inside and outside the hospital setting.
- 13. Other cost centres that may contribute to dental care will include theatres, day surgery units, outpatient departments, and community health centres.
- 14. Specific expense codes will include 5294: Dentist and dental nurse bands 1-9.
- 15. Bespoke prosthesis purchased from external dental laboratories should be recorded under 7046: Other prosthesis

Resources

16. Use the resources linked to these cost centres. The most important ones for dental services are listed in Table CM17.1.

Table CM17.1: Excerpt from Spreadsheet CP3.1 showing resources for dental services

Resource ID	Resource	
MDR051	Other Prostheses, implants, and devices	Intraocular lens, spinal wires and screws, hips and knees and dental implants. Excludes cardiac devices, hearing devices and heart valves
MDR053	Dental laboratory technician	Technicians who use moulds taken during an outpatient attendance to manufacture dental appliances such as braces and mouth guards. These are fitted in subsequent appointments.
MDR057	Dentist	Medical staff professionally qualified as a dentist.
MDR058	Dental nurse	Specialist nurse in dentistry – all bands.

17. Where dentistry services use medical and surgical consumables – including bespoke dental and orthodontic devices – in assessing and treating patients, allocate the cost to the patient according to Standard CM21: Clinical non-pay items.

Activities

18. Review the prescribed list of activities in Spreadsheet CP3.2 and by working with the service team identify those your dental staff deliver. Table CM17.2 lists the activities to use for community dental services. Other dental services should use the relevant HRG for APC or NAPC dental care in the hospital setting.

Table CM17.2: Excerpt from Spreadsheet CP3.2 showing activities for community dental services

Activity ID	Activity	
MDA076	Dental care	Dental care for routine dental services
MDA077	Specialised dental care	Specialised dental care should include orthodontic and other specialist activities.
MDA078	Emergency dental care	Emergency dental care for out-of-hours services, emergency surgery and other unplanned services (excluding type 1 (ED) emergency dental treatments).

- 19. With your service team, you should agree how the patient activities are identified from the data in Feed 18: Dentistry.
- 20. Oral health promotion takes place in many dental contacts, but where the patient has a contact for oral health promotion with no other investigations or treatments, this should be recorded as activity ID: MDA076; Dental care.

Internal dental laboratories

- Dental laboratories within your organisation should use the relevant resource for the type of pay/non-pay items. Where they provide a service to your organisation's own patients, use activity ID: MDA075; Dental laboratory work, to allocate the cost to the patients.
- 22. Where this activity does not relate to your own patients, but to those of other providers, again use activity ID: MDA075; Dental laboratory work but treat this

as commercial activity by applying the costing processes in Standard CM8: Clinical and commercial services supplied or received.

Resource activity combinations

23. Table CM17.3 is an excerpt from Spreadsheet CP3.3 showing the resource and activity links to use for dental service contacts.

Table CM17.3: Excerpt from Spreadsheet CP3.3 showing some of the resource and activity combinations for dental service contacts with patients

Activity				
Resource	Dental care	Specialised dental care	Emergency dental care	Dental laboratory work
Other Prostheses, implants, and devices		£X	£X	£X
Medical and surgical consumables	£X	£X	£X	£X
Dentist	£X	£X	£X	£X
Dental nurse	£X	£X	£X	
Dental laboratory technician				£X

Matching

Use the prescribed matching rules in Spreadsheet CP4.1 to ensure the costed dental service activity is matched to the correct patient episode.

CM19: Wheelchair services

Purpose: To ensure costs for wheelchair services are allocated consistently

Objective

1. To ensure costs for providing wheelchair services are allocated appropriately, including purchase of equipment, patient contacts for assessment, fitting, handover and review, and maintenance/repair.

Scope

- 2. This standard applies to all activities provided by wheelchair services.
- 3. All wheelchairs, accessories and equipment associated with the wheelchair provided and/or maintained/repaired by the service. 155

Overview

- 4. NHS England states: "Wheelchairs provide a significant gateway to independence, wellbeing and quality of life for thousands of adults and children. They play a substantial role in facilitating social inclusion and improving life chances through work, education and activities that many people who do not need wheelchairs take for granted. 156
- 5. Wheelchairs and accessories are therefore a key part of analysis of patient pathways, and across sectors of healthcare. Costed information at patient level can help to show the impact of this service.
- 6. The wheelchair service issues a wide range of equipment and support to patients with a wide variety of conditions and requirements. The cost per patient will vary accordingly.

¹⁵⁵ Some wheelchairs and accessories/equipment are supplied by charities or other third parties. Only the cost incurred by the provider should be included in the costing information.

¹⁵⁶ NHS England Improving wheelchair services https://www.england.nhs.uk/wheelchair-services/

- 7. Most wheelchair services are provided during NAPC clinics in a hospital, health centre or at home. Some assessments and issues of wheelchair equipment may occur while the patient is an inpatient, eg following amputation surgery.
- 8. This standard will support NHS England in its development of currencies and tariffs for wheelchairs.

Approach

Information requirements

- 9. There is no national clinical patient-level dataset submission for wheelchair services. Therefore, the costing system should include an information feed based on the local data submitted to NHS Digital's aggregate quarterly collection - the National Wheelchair Data Collection. 157
- 10. Many wheelchair services are commissioned directly at patient level using the national currencies which rely on patient level information, so this information should be accessible for costing.
- 11. Two information feeds are used for feed 19a wheelchair contacts and feed 19b wheelchair equipment see Standard IR1: Collecting information for costing and Spreadsheet IR1.2. These enable the costing system to maintain separate the costs of wheelchair contacts from the equipment, repair and maintenance. The feeds include the information required for wheelchair currencies.
- Your organisation will record wheelchair service contacts either (or both) of the following:
 - in the main PAS as outpatient attendances
 - in a separate local system for wheelchair service activity.
- 13. Wheelchair contacts feed 19a includes similar information to other NAPC feeds. for patient identifiable detail and detail about the contact. Feed 19a also includes the additional data items held in wheelchair data systems not used elsewhere in feed 3a, that support the wheelchair currency factors:
 - a. Level of patient need Low, medium, high, specialised;

¹⁵⁷ This dataset is submitted at aggregate level. Collection guidance can be found at: https://www.england.nhs.uk/publication/wheelchair-services-national-wheelchair-data-collectionguidance/

- Type of attendance assessment, fitting & handover, substantial review, review (non-face to face), repair and maintenance, or skills support
- c. Powered or manual equipment.
- 14. Where the data is held in the PAS outpatient attendances, the patient events can be brought into PLICS in Feed 3a: non-admitted patient care (NAPC)¹⁵⁸, but this will require amendment for the wheelchair currency factors.
- 15. Wheelchair equipment should be brought into the costing system in Feed 19b: Wheelchair equipment, as described in Spreadsheet IR1.2. This will include the following data factors:
 - a. Wheelchair or accessory
 - b. Level of wheelchair package: low, medium, high, specialised
 - c. Manual / powered
 - d. Specialist seating
 - e. Repair and maintenance costs.
- 16. Costs of the wheelchair equipment issued at patient level required for feed 19b will be recorded in a local system or spreadsheet. This information will also identify if the equipment was issued from new, issued following repairs/maintenance, or issued following refurbishment.

Specialist CC and EC

- 17. In the standardised cost ledger, you should use cost centre XXX606: Wheelchair services. This can be customised using local digits to replace the XXX if you need to disaggregate costs to separate standard/specialist-complex services, or adult/child services.
- 18. Expense codes specific to the staffing costs of the service will include
 - wheelchair / rehabilitation therapists band 6-9,
 - Ancillary band 1-4 for the wheelchair and rehab assistants

¹⁵⁸ Wheelchair contacts are not included in the current Community Services Data Set (CSDS) version v1.0 6.

- professions allied to medicine (PAM) expense codes bands 1-8d. These codes should be used for the wheelchair / rehabilitation engineers/technicians.
- 19. Staffing can also include nurses, medical staff, and specially trained administration staff. They should be identified by band in the same way as other administration staff and their costs allocated to the patients who use the service. In this way, the cost will reflect the additional skills used.
- 20. Wheelchair equipment should include chairs, cushions, and support equipment. Use the following cost ledger expense codes:

- 7004 Powered wheelchairs	- 7054	Powered wheelchairs
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- 7053 Special seating and accessories
- **-** 7052 Wheelchairs (non-powered)
- 7057 Appliances and implants, special cushions.
- 21. Wheelchair repairs and maintenance have a separate cost from the purchase of new wheelchair equipment, and may either:
 - be performed within the organisation by designated staff use the expense codes of those staff, and the components should show on cost ledger expense code: 7066 Medical and surgical equipment maintenance/repairs and components
 - For items sent away to specialist companies use the expense code: 7067 Medical and surgical equipment maintenance contracts.

Resources

22. Table CM19.1 lists the key resources to use for wheelchair service contacts.

Table CM19.1: Excerpt from Spreadsheet CP3.1 showing some service-specific resources for wheelchair staffing

Resource ID	Resource	Resource description
CMR302	Wheelchair: rehab engineer	Staff member trained in technical/clinical assessment, formulating wheelchairs to bespoke specification, including setting up high performance wheelchairs, special controls and programming of powered wheelchairs and the supporting work with the wheelchair user. Starting at band 5, with registered/qualified staff at band 6+
CMR311	Wheelchair: rehab assistant	Staff member trained in clinical/technical assessment or maintenance and repair of wheelchairs; and the supporting work with the wheelchair user. Band 1-5. Includes field service engineer.
CMR314	Wheelchair: rehab therapist	Salary of staff trained in clinical/postural assessment, identification of suitable wheelchairs, postural management and pressure relieving products, and fitting of patients referred for wheelchair services, including care pathway planning and follow up. Starting at band 5 with registered/qualified staff at band 6+

- 23. Wheelchair equipment, excluding repairs and maintenance expense items, will map within the cost ledger to the resource ID: CMR303: Wheelchairs.
- 24. Repairs and maintenance expense codes map to resource ID: CMR338: Wheelchair repair / maintenance outsourced, and in-house components.
- 25. The allocation method for the wheelchair equipment, repairs and maintenance is actual cost, based on the information supplied to the costing system from Feed 19b: wheelchair equipment. Where equipment has been returned, this may create negative values in the cost column. You should check the values in this feed for negative values and remove them. Cost cannot be allocated based on a negative value.

Activities

26. Review the prescribed list of activities in Spreadsheet CP3.2 and by working with the service team identify those your wheelchair and support staff deliver.

- 27. With your service team you should agree how the patient activities are identified from the data in Feed 19a: Wheelchair contacts.
 - CMA304 Wheelchair first assessment contact
 - CMA335 Wheelchair handover and clinical fitting contact
 - CMA336 Wheelchair repairs/maintenance contact
 - CMA305 Wheelchair review following assessment/fitting contact
 - CMA341 Wheelchair skills practice and other contacts
 - CMA342 Wheelchair substantial review
- 28. Activity IDs CMA305 and CMA342 should be attached to patient contacts, based on a calculation: CMA305 should have a clinical duration of up to 60 minutes and CMA342 should have a clinical duration of over 60 minutes.

Resource activity combinations

29. Table CM19.2 is an excerpt 159 from Spreadsheet CP3.3 showing some of the resource and activity links to use for wheelchair service contacts.

Other considerations

- Specialist wheelchair services do not require additional rules for costing, even though this area is not covered by the mandated national wheelchair commissioning currencies. You should cost the contact and equipment using the prescribed methods, codes and feeds for all wheelchair services.
- 31. Some patients receive wheelchairs, equipment or accessories via the wheelchair services, that are not funded by NHS commissioning. The patient, charities, or others will pay the trust for the equipment. The cost and income will be in the general ledger, and the purchase should included in the costing system.
- 32. For reconciliation, the income should be in the 'other operating income' group. You can then show this income aligned with the patient equipment issued for reporting purposes, reflecting that the income contributes to a lower net cost to the trust.

¹⁵⁹ Please note all excerpts in this standard are for illustrative purposes only. Use Spreadsheet CP3.3 to ensure you are using all the correct resource and activity links.

Table CM19.2: Excerpt from Spreadsheet CP3.3 showing the some of the resource and activity links for wheelchair service staffing costs, equipment, and repairs

				Activity			
Resource	Wheelchair first assessment contact	Wheelchair repairs/ maintenance contact	Wheelchair handover and clinical fitting contact	Wheelchair review following assessment/ fitting contact	Wheelchair skills practice and other contacts	Issue of wheelchair equipment/ components/ accessories	Wheelchair repair/ maintenance , including outsourced cost
Nurse	£X						
Wheelchair: rehab assistant		£X			£X		
Wheelchair: rehab engineer		£X	£X	£X			
Wheelchair/ rehabilitation therapists	£X		£X				
Wheelchairs						£X	£X
Wheelchair repair / maintenance outsourced, and in-house components							£X

CM21: Clinical non-pay items

Purpose: To ensure clinical non-pay items are costed consistently

Objective

- 1. To allocate patient-specific clinical non-pay items to the patients who use them.
- 2. To cost and allocate non-patient identifiable clinical non-pay items in a consistent manner.

Scope

- 3. This standard applies to:
 - all clinical non-pay items used in all patient care settings, including but not limited to - wards, outpatient locations, community contacts, theatres, and special procedure suites¹⁶⁰
 - those items identified as high cost devices in the national tariff list, and MedTech innovation products
 - clinical equipment that is not a capital purchase, including leased items and payments for loan equipment.
- 4. This standard does not apply to non-clinical use items, such as linen, uniforms, administrative items and basic food. It also does not cover medicines or blood and blood products, which are included in Standard CM10: Pharmacy, medicines and blood services; or wheelchairs and accessories, which are included in Standard CM19: Wheelchair services.

¹⁶⁰ This standard should be used in conjunction with the standard for the relevant area, eg Standard CM3: Non-admitted patient care and Standard CM5: Theatres and special procedure suites.

¹⁶¹ Specialist dietetic items for patient use may be included as clinical non-pay items.

5. The term clinical non-pay items for this standard includes prostheses, implants, devices, appliances, specialist dietetic foods, equipment, and other clinical items.¹⁶²

Overview

- 6. Clinical non-pay items are an essential part of patient care and material items should be matched to the patient. The cost per item varies immensely, and therefore you should balance the materiality of the items against the amount of work required in identifying them to the patient.
- 7. Items on the high cost devices list for national payment purposes, should be allocated at patient level. These can be found as part of the documentation for the national payment system in tab 14a of the national tariff workbook.
- 8. If an item is not material at a unit level, you should also consider whether the volume of this item is so significant that recording and costing the item would improve the quality of the information to your trust.
- 9. Where the clinical items are not material to the cost of care, the items should be allocated across the patients in the service area that used them.
- 10. Clinical non-pay items are identifiable as expense codes in your general ledger to comply with the financial accounting requirements¹⁶³: and should be mapped clearly from the appropriate expense codes (see Standard CP2: Clearly identifying costs) to resources, showing whether they are patient identifiable or non-patient identifiable.
- 11. For costing purposes, the following explanations help to understand the different terminology, and different types of items to expect in your organisation (see also the Costing glossary). Please note, the definitions may overlap depending on circumstance, and may differ from those used in your general ledger.
 - An 'implant' (noun) is something intentionally left in the patient after surgery.
 Implant is also a verb to describe the insertion of an item. Some implants will later be removed, and some will be permanent.

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Other terminology may include 'medical and surgical' consumables and equipment, but clinical non-pay items also include items used for mental health support, education and health promotion.
 DHSC Group Accounting Manual 2019-20,

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/798830/dhsc-group-accounting-manual-2019-to-2020.pdf

- A 'device' is an item 'intended for a medical purpose, as assigned by the manufacturer' (NHS National Innovation Centre 2019).¹⁶⁴ They are usually a mechanical or electrical invention or contrivance, and can be implanted in the body or used outside the body. For example, a pacemaker is implanted into the body; a circular external fixator frame is applied externally but goes into the body; and continuous positive airway pressure (CPAP) machines are applied externally.
- A 'consumable' is an item used once for a patient. These may also be called disposable or single use items.
- 'Prosthetic and orthotic limbs/appliances' are a personal item 'worn' by the
 patient to replace or to support a function of their body, eg a prosthetic
 leg, or a hearing aid. Appliance can also refer to an item of equipment used
 by a single patient, eg a walking frame.
- The term 'prosthetic' can also refer to an artificial body part implanted into the patient – such as a breast prosthesis.
- 'Medical and surgical equipment' includes non-capitalised items to be used by more than one patient in a clinical setting.
- 12. All implants and devices in the national tariff high-cost devices list and listed procedures tab in Annex A: National Tariff Workbook¹⁶⁵ should be included in the patient-level Feed 15: Prostheses and other high-cost items, to be costed at patient level.
- 13. Your organisation will have cost, activity, and patient information available for these items, as this information is used to generate pass-through payment from commissioners.
- 14. As a superior method SCM24 Use inventory management system to allocate equipment/consumables/implants at patient level, you may add other high cost devices and items to the patient-level feed. We do not specify what constitutes 'high cost' for items not in the national tariff list. That is left for local policy.
- 15. Data sources for this information will vary by trust. For example:

Definition from the NHS National Innovation Centre: http://knowledge.nic.nhs.uk/documentDetails.aspx?docId=15

¹⁶⁵ https://improvement.nhs.uk/resources/national-tariff/

- a. implants within the Scan 4 Safety¹⁶⁶ theatres protocol or other local tracking system. Your organisation should have activity and patient information available, as this is used for patient safety
- b. electronic inventory management systems (IMS) that record the clinical non-pay items used at patient level, with the cost.

Approach

Information requirements

- 16. As described in Standard IR1: Collecting information for costing, the prosthesis and other high cost items (feed 15) contains items of clinical non-pay that will be costed at patient level. See also Spreadsheet IR1.2.
- 17. Feed 15 allocates the cost for the item to the patient, irrespective of the location or setting of the issue. For example, a heart valve may be implanted in theatre and a prosthetic limb may be issued to the patient in an outpatient attendance.
- 18. The patient-level feed will show the actual cost of the item. This will be used as a proportional weighting in the allocation patient identifiable items in the costing account code. This allows for discounts and residual balances of cost on general ledger codes.
- 19. Some patients will receive custom-made prosthetic limbs and appliances purchased from a laboratory or other manufacturer contracted to supply the service. You should obtain this information from the appropriate source and add it to Feed 15: Prostheses and other high-cost items.
- 20. Note: Items identified on a 'sale or return' or 'consignment stock' basis will only be in the general ledger at the point they are purchased, so no adjustment to the costing system is necessary. The patient level feed will only apply this cost to the patient when the item is issued. If the item is returned to the manufacturer the cost will be removed from the GL.

Specialist cost centres and expense codes

21. Most organisations will have clinical non-pay items in the budget of the service that uses it. These are consumables used in specific theatres, wards, or service

¹⁶⁶ https://www.scan4safety.nhs.uk/

- areas. You should work with the service and finance colleagues to allocate the cost over the patients that used the service.
- 22. The linking of costs in your general ledger to the expense codes shown in Table CM21.1 should be identifiable. These are the expense codes that we recommend you consider as part of your materiality/priority planning exercise. They should have patient-level information available for safety and clinical tracking reasons.¹⁶⁷

Table CM21.1: List of expense codes where use of a patient-level feed is advisable

Expense code	Expense code name
7032	Pacemakers
7035	Maxillofacial implants
7036	Hearing, tinnitus and balance aid accessories (including batteries)
7037	Hearing and balance aid repairs – repairs
7038	Digital hearing aids – purchase
7039	Non-digital hearing aids and assistive listening devices – purchase
7040	Cochlear implant, auditory brainstem and middle ear implants + processor – purchase*
7041	Ophthalmic Implants
7042	Vascular implants
7043	Orthopaedic implants – hips
7044	Orthopaedic implants – knees
7045	Orthopaedic implants – other
7046	Other prosthesis
7047	Breast care prosthesis
7048	Voice prosthesis
7049	Upper limbs
7050	Disabled living aids – including balance and other audiology aids

¹⁶⁷ Please note, wheelchairs and wheelchair equipment are covered in Community standard CM19: Wheelchair services.

Expense code	Expense code name
7076	Heart valves
7077	Spinal cord stimulators
7078	Stents
7084	Bone conduction implant and processor system (including BAHA/sound and bone bridge) – purchase*
7085	Spinal implants
7086	Endoscopy high cost items
7087	High-cost consumables for specialist equipment
7088	Lower limbs
7102	Umbilical cords
7103	Bone marrow
7104	Stem cells
7802	gammaCore
7803	HeartFlow
7804	Placental Growth Factor (PLGF)-based Testing
7801	Subcutaneous engineered stabilisation device

- 23. The expense codes have been set up so you can clearly identify the high cost devices and consumables separately from those that are of significant cost but are not in the national tariff high-cost devices list. The information will then flow through your PLICS and be identifiable in output reports. All items that are considered of significant cost should be costed at patient level, including where the high cost item is a consumable item associated with specialist equipment such as perfusion or robotics.
- 24. You may need to disaggregate the costs in the GL to separate the clinical nonpay items into the two sections – those for which you will apply a patient-level feed to match the cost directly to the patient, and those for which you will allocate the cost over all patients in that service area.
- 25. The MedTech innovation devices should be identifiable in your general ledger. Use the cost ledger subjective codes starting 78** in the list above.

- 26. You should identify the patient-level items first, and the remainder will fall into the second group.
- 27. For clinical non-pay items that cannot be attributed directly to the patient, you should use the following categories of items and cost accordingly:
 - consumables used in specific theatres, wards or service areas should be allocated to the patients in those areas based on duration of the operation in minutes
 - consumables used in all theatres, wards, or service areas, or where the cost is held centrally, should be allocated across all areas where the items are used to all patients.

Resources

28. In Spreadsheet CP2.1, these expense codes will map to the resources shown in Table CM21.2 by using the relevant costing account codes leading to these resources.

Table CM21.2: Excerpt from Spreadsheet CP3.1: Resources – showing resources using a patient-level feed

Resource ID	Resource
MDR041	Hearing and other audiology devices
MDR050	Cardiac devices
MDR051	Other prostheses, implants and devices
SGR072	Heart valves
SGR074	Bone marrow, stem cells and umbilical cords
SLR106	MedTech authorised devices

- 29. The items in this list are for items usually issued in theatres or special procedure suites. The resource ID: MDR052; Patient-specific consumables will include theatres and other service areas, eg wards and outpatient clinics.
- 30. Use the resources shown in Table CM21.3 if you are not using a patient-level feed.

Table CM21.3: Excerpt from Spreadsheet CP3.1: Resources showing the resources not using a patient-level feed

Resource ID	Resource	Resource description
MDR046	Medical and surgical consumables	Including medical gases and dressings
MDR047	Medical and surgical equipment and maintenance	Including hire

Activities

- Most high-cost items issued to the patient should use the activity SGA089: Insertion of a prosthesis implant or device.
- 32. Other methods of issue are possible. These activities are shown in table CM21.4 below.

Resource activity combinations

33. Table CM21.4 is an excerpt¹⁶⁸ from Spreadsheet CP3.3 showing the resource and activity links to use for Feed 15: Prostheses and other high-cost items.

Table CM21.4: Excerpt from Spreadsheet CP3.3 showing some resource and activity links for the items on Feed 15: Prostheses and other high-cost items

	Activity				
Resource	Critical care – ward care	Outpatient procedure	Specialised dental care	Insertion of a prosthesis, implant or device	
Patient-specific consumables	£X	£X			
Patient appliances		£X	£X		
Bone marrow				£X	
Cardiac devices				£X	
Hearing devices				£X	

¹⁶⁸ Please note all excerpts in this standard are for illustrative purposes only. Use Spreadsheet CP3.3 to ensure you are using all the correct resource and activity links.

Heart valves		£X
Other prostheses, implants and devices	£X	£X
MedTech authorised devices		£X

34. Table CM21.5 shows an excerpt from the resource and activity combinations for clinical consumables and equipment not identifiable at patient level. You should use the allocation method in Spreadsheet CP3.3.

Table CM21.5: Excerpt from Spreadsheet CP3.3: Resources and activity combinations for some clinical non-pay items not at patient level

			Activity		
Resource	ED – department care	Adult critical care – ward care	Drug and alcohol inpatient unit – ward care	Clinical decisions unit (CDU) – ward care	Magnetic resonance imaging (MRI)
Medical and surgical consumables	£X	£X	£X		
Medical and surgical equipment and maintenance	£X			£X	£X

Matching

Use the prescribed matching rules in columns K to N in Spreadsheet CP4.1 to 35. ensure the costed prosthesis, implant or device is matched to the correct patient event, as in Standard CP4: Matching costed activities to patients.

Expected costs

36. For many procedures – particularly those done in theatres and special procedure suites – the procedure would be expected to contain the cost of

- prostheses, devices, and implants. Prostheses, implants and devices are often expensive, so investing time to ensure your costing system can identify where they have been used and to assign a cost to them will improve the accuracy of the final patient costs.
- 37. A list of the OPCS procedure codes that are expected to contain prosthesis, devices, and implants has been prepared as a guide to identifying where significant clinical non-pay items have been used. This spreadsheet is on the open learning platform¹⁶⁹. Use the procedure (OPCS) field in Feed 1a: APC in column D in Spreadsheet IR1.2 to compare the costed patient event for these procedures with the actual clinical non-pay item allocated. Where there is no item matched to the patient, this costed record may need a data quality review.
- 38. Review these with clinicians and service managers to ensure you are identifying and correctly allocating the appropriate costs to procedures for clinical non-pay items used. Be aware that there may be timing or clinical coding issues with either the costed record or the PAS record.
- 39. The expected cost spreadsheet does not make any clinical statement about whether these items should have been used in this procedure. The list of prostheses, devices, and implants in the expected costs spreadsheet is there to help identify missing costs in the costing outputs.

Inventory management systems

40. As part of the 'Global Standard 1' (GS1) project for the NHS, the expectation is that all NHS organisations will have the GS1 identifier (barcode) on all drugs (from February 2019) and medical devices (from May 2020). This will provide more consistent information on the type and cost of items, which may improve the ability to link key items to patient level.

MedTech innovation products

- 41. The trusts that use these innovation products¹⁷⁰ will have a clear funding stream from NHS England or NHS X, and should have identifiable costs in the general ledger.
- The costing treatment is as follows:

¹⁶⁹ www.openlearning.com/nhs/courses/costing-improvement/cm21 clinical non pay items/?cl=1

¹⁷⁰ A list of the trusts that used these products from April 2021-February 2022 is available on the OLP at: https://www.openlearning.com/nhs/courses/costingimprovement/medical_technology_innovation_products/?cl=1

- a. Use new specific expense codes in the cost ledger (if cost ledger is used)
- b. Use the costing resources of SLR106 MedTech authorised devices in the costing system (if costing resources are used)
- c. Use the collection resource of CPF033 MedTech authorised innovation devices in the National Cost Collection
- d. Use costing activities
 - i. SLA160 Use of a MedTech innovation device, or
 - ii. SLA161 use of a PLGF Placental Growth Factor test MedTech innovation (if costing activities are used)
- e. Use collection activities
 - i. DEV001 Use of High cost and MedTech Devices
 - ii. PAT008 Use of PLGF Placental Growth Factor Test -MedTech Innovation.
- 43. Report the cost of the devices in the Supplementary Information (SI) feed, using the patient level extract matching identifier (PLEMI) to identify the patient event where the device was used for the patient's benefit. The PLGF tests do not need to be reported in the SI feed, as they are reported as a component cost using activity SLA161.

CM22: Audiology services

Purpose: To ensure costs for audiology services are allocated consistently.

Objective

1. To ensure costs for providing audiology services are allocated consistently, including purchase of equipment and patient contacts for assessment, fitting, review, maintenance, and repair.

Scope

- 2. This standard applies to all activities provided by audiology services, across all sectors.
- 3. All patient hearing and balance aids, accessories and equipment provided by the audiology service, and the maintenance/repair of items for patients accessing the audiology service.
- Newborn hearing screening services.

Overview

- 5. Audiology services assess the hearing, tinnitus, and balance function of referred patients, and support the associated disorders/diagnoses, with various methods of rehabilitation.
- 6. Commissioning services for people with hearing loss: A framework for clinical commissioning groups¹⁷¹ defines the demographics, requirements and audiological pathways available to primary care; and how to support the commissioning of audiological services supporting acute pathways, including ear nose and throat (ENT) and complex hearing aid referrals.
- 7. "Hearing is central to our health and well-being. Approximately one in six people experience hearing loss, which is a major cause of poor development of

¹⁷¹ https://www.england.nhs.uk/publication/commissioning-hearing-loss-framework/

language and communication skills and also impacts on employment, mental health, independence, and quality of life. It is responsible for an enormous personal, social and economic impact throughout life." ¹⁷² Hearing loss affects people who are born deaf and people who experience it later in life.

- 8. The services may be direct access from GPs, ongoing and long-term support, or part of a broader pathway. Understanding which part of the service the cost relates to is critical to the accurate allocation of patient-level costs. The 'Direct Access Audiology' (DAA) service "covers all patients referred to a direct access audiology service that is a service not led by a medical or surgical consultant regardless of where that service is provided".¹⁷³
- 9. For costing purposes, the audiology services are broken down into the following areas:
 - Direct access audiology (also called community audiology): Services for people with hearing loss who are referred directly from primary care and included within the data that feeds the DAA dataset. They may be identified by the non consultant-led treatment function code (TFC) 840 Audiology. The service may include complex referrals such as patients with multi-complex needs, eg learning disabilities and dementia.
 - ENT and other specialty support: Staff working in the audiology service
 provide clinical support to other specialties, including but not exclusively –
 Otology ENT services, which diagnose and treat diseases and disorders of
 the ear. Such audiology support may take place in outpatient clinics or in
 theatres during surgical implant procedure; or the patient may attend the
 audiology department for specialist hearing/balance tests, but these activities
 are still part of the consultant-led service.
 - Audiological medicine: The audiology service will support this consultantled specialty for balance and associated medical conditions. The TFC for this service is 310 Audiological medicine. The consultant-led appointments will be included in the main patient administration system (PAS) and commissioning dataset. This service is only provided in a small number of trusts.
- In the first two areas listed above, audiology acts as a clinical support function for data recording and for costing purposes – no separate audiology

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¹⁷² https://www.england.nhs.uk/wp-content/uploads/2016/07/HLCF.pdf

¹⁷³ https://digital.nhs.uk/data-and-information/data-collections-and-data-sets/data-collections/adwt-direct-access-audiology

- appointments should be reported for commissioning, and the specialty or TFC will reflect the consultant-led service. The location of the audiology contact with the patient does not define how it should be recorded in the activity data.
- 11. Appointments for clinical support within ENT, audiological medicine (and other specialties where relevant) may be identified by clinic codes within the PAS or via the audiology system;¹⁷⁴ which may also hold other useful information about the contact.
- 12. Newborn hearing screening may be part of the audiology service or separate. You should identify how your trust structures newborn screening and ensure costs are categorised to the correct service.

Approach

Information requirements

- 13. Audiology services are largely provided by NAPC activity, so the data can be brought into PLICS via Feed 3a: non-admitted patient care (NAPC).
 - Support of ENT and other specialties within their clinics will be available as
 part of the electronic patient record there may be no separate contact from
 the consultant-led consultation. (The cost of the audiology service will be a
 part of the consultant-led appointment.)
 - The DAA contacts will be available either in the main PAS or in a standalone system. (The audiology cost will be the main cost of this activity.)
 - Where the patient attends the audiology department as a separate contact to the (ENT) specialty clinic, this will be an appointment under the specialty, but the cost of the audiology will be the main cost.
- 14. Where TFC 840 is not used in your local organisation data, it should be added to the load for the PLICS activity Feed 3a: NAPC. As a minimum, this TFC will identify the DAA activity but you should check whether this TFC is used in PAS for all audiology services and use the appropriate TFC for costing as shown in table CM22.1.

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¹⁷⁴ An example system of standalone data is 'Auditbase'.

Table CM22.1: Excerpt from NHS Data Dictionary list of treatment function codes, showing principal areas for audiology services¹⁷⁵

TFC code	TFC name	TFC description
840	Audiology	Physiological measurement diagnosis of hearing disorders and the rehabilitation of patient with hearing loss
310	Audiological medicine	The medical specialty concerned with the investigation, diagnosis and management of patients with disorders of balance, hearing, tinnitus and auditory communication. Excludes audiology and hearing tests (listed under medical specialties)
120	ENT	Ear, nose and throat (listed under surgical specialties)
254	Paediatric audiological medicine	The medical specialty concerned with the investigation, diagnosis and management of patients with disorders of balance, hearing, tinnitus and auditory communication. Excludes audiology and hearing tests (listed under children's specialist services)

- 15. You should set up a local TFC for newborn screening, to identify it separately from the other parts of audiology.
- 16. Which patient events are in which TFC depends on the care professional who has clinical responsibility for the patient in that appointment:
 - Where an audiologist provides a DAA appointment (or ongoing audiology service where the patient has been discharged from a primary care pathway but continues with the hearing loss/balance support element of their care), the audiologist has clinical responsibility – this is a 'non consultant-led' activity: use TFC 840.¹⁷⁶
 - Where an audiologist works directly in an ENT clinic that provides consultant-led activity for TFC 120 ENT, the activity will remain as TFC 120, to show the responsibility for the patient in that appointment lies with the

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¹⁷⁵ https://www.datadictionary.nhs.uk/web_site_content/supporting_information/main_specialty_and_tr_eatment_function_codes_table.asp?shownav=1?query=%22treatment+function%22&rank=100&shownav=1

¹⁷⁶ This TFC will enable you to identify the DAA within Feed 3a: NAPC, and allocate the content to the correct costing activities.

- consultant. This appointment will usually be part of a wider ENT pathway, not for hearing loss alone.
- Where an audiologist works in an audiological medicine clinic that provides consultant-led activity for TFC 310 Audiological medicine (or the paediatric equivalent TFC254 Paediatric audiological medicine), the activity will remain as 310/254, to show the responsibility for the patient in that appointment lies with the consultant. This work will usually be part of a wider pathway, not for hearing loss alone.
- Where an audiologist or other specially trained staff member performs newborn hearing assessments, the clinical responsibility will be agreed locally.
- 17. Audiology procedures within outpatient clinics require OPCS clinical coding to generate the outpatient procedures for reporting at HRG level for example: hearing assessment can be identified with the code U243: Hearing assessment. This coding may be included in the record for ENT outpatients or other treatment functions to indicate audiology input.
- 18. Where clinical coding is not applied to the patient record¹⁷⁷ but the patient receives an outpatient procedure in an outpatient clinic, you should agree a mapping table with the clinical coders locally and apply these to the relevant patient events.
- 19. For direct access/community audiology, you should apply the community codes used in the National Cost Collection on the AUD tab, starting AS. These audiology contacts are not expected to have OPCS codes or HRG codes attached.
- 20. The expected list of currency codes are shown in table CM22.2. Direct Access audiology have a service code of AUD in this table to identify them separately from the 840 hospital audiology service code with HRGs.

Table CM22.2 Audiology currencies

Service code	Currency code	Currency name
AUD	AS01	Fitting of Hearing Aid, Adult
AUD	AS02	Fitting of Hearing Aid, Child

¹⁷⁷ There is no mandation of clinical coding for outpatients agreed by NHS Digital Clinical Classifications Service.

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AUD	AS03	Fitting of Hearing Aid, Child, Specialist Audiology Services
AUD	AS04	Fitting of Hearing Aid or Device for Tinnitus
AUD	AS05	Hearing Aid, Adult, Any Qualified Provider Contract
AUD	AS06	Hearing Aid, Adult, Other Contract
AUD	AS07	Hearing Aid, Child
AUD	AS08	Follow-up, Adult, Face toFace
AUD	AS09	Follow-up, Child, Face to Face
AUD	AS10	Follow-up, Non Face to Face
AUD	AS11	Aftercare
AUD	AS12	Maintenance and Programming, Bone Anchored Hearing Aid
AUD	AS13	Maintenance and Programming, Cochlear Implant
AUD	AS14	Rehabilitative Audiology Service, One to One
AUD	AS15	Rehabilitative Audiology Service, Group
AUD	ASNNS	Newborn Hearing Screening Programme Attendance
840	CA37A	Audiometry or Hearing Assessment, 19 years and over
840	CA37B	Audiometry or Hearing Assessment, between 5 and 18 years
840	CA37C	Audiometry or Hearing Assessment, 4 years and under
840	CA38A	Evoked Potential Recording, 19 years and over
840	CA39Z	Evoked Potential Recording, 18 years and under
840	CA40Z	Fixture for Bone Anchored Hearing Aids
840	CA43Z	Balance Assessment

- 21. Most audiology services are provided during NAPC clinics in a hospital or health centre, but if an audiologist or other staff member attends an admitted patient or their contribution to the appointment is not reflected in the TFC, as a superior method SCM33 Supporting contacts allocated at patient level it should be recorded on Feed 7: Supporting contacts, to show the audiology component of the episode.
- 22. Some high cost procedures for example bone anchored hearing aids and cochlear implants - involve audiologists attending theatre sessions. You should

identify sources of local information to ensure the cost of these staff is allocated to the relevant patients.

Specialist cost centres and expense codes

- 23. In the standardised cost ledger, you should use the following cost centres as appropriate:
 - XXX037 Audiology
 - XXX040 New-born hearing screening diagnostics.
- 24. In the costing standards, new-born hearing screening diagnostics has been kept separate, although in your general ledger the services may be separate, combined within one cost centre or even be provided by a different organisation.
- 25. Medical staff are not connected to the audiology cost centres, but if relevant, the cost ledger should have a separate cost centre to show doctors specifically in audiological medicine, eg cost centre code XXX049 Medical staffing – by specialty can be customised using the same rows and renamed (for example) X21049 Medical staffing – audiology.
- 26. Where staff on the audiology (or new-born hearing screening diagnostics) cost centre provide services for both DAA and other specialties, their costs should be disaggregated to ensure the correct resource activity combination can be achieved. This ensures the cost of the activity shown as DAA is not overstated and that cost for the other services is not understated.
- 27. Disaggregation may also be required for where staff provide a commercial service, services for another trust, or under 'Any Qualified Provider' contracts, which may need separate local monitoring.
- 28. Costs of the audiology equipment provided will be recorded in the local system or spreadsheet and should give the cost of the items issued per patient.
- 29. Where material, 178 this information should flow to Feed 15: Prostheses and other high-cost items, to be matched to the patient appointment in accordance with Standard CP4: Matching costed activities to patients. See Standard CM21: Clinical non pay items for more information.

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¹⁷⁸ We are not specifying what is material but allowing trusts to agree locally whether this is a priority

Resources

- Professional audiologists and associated staff are specifically trained to provide 30. the hearing, tinnitus, and balance assessments, fitting and review of aids, rehabilitation with/without hearing aid provision, and all ongoing long-term care.
- 31. Allocate audiologists and assistant technical officers pay costs using the resource IDs: MDR039; Audiologist and MDR040; Assistant technical officer (audiology)
- 32. Allocate audiology clinical non-pay costs such as hearing aids and implants using the resource ID: MDR041; Hearing and other audiology devices.
- 33. The external part of the hearing aid may be applied in audiology; however, part of the cochlear implant or bone anchored hearing aid may be implanted in a theatre or a special procedure suite. You should identify where the high cost implants sit in the GL and ensure these costs flow to the patient event where the device was implanted, in accordance with Standard CM21 Clinical non-pay items.

Activities

- 34. You should identify which activities your audiologists and support staff deliver and map these to the prescribed activity list in Spreadsheet CP3.2.
- 35. The activities will be costed using the 'clinical contact duration of care contact' field in Feed 3a: NAPC, in accordance with Standard CP2: Clearly identifying costs and Standard CP3: Allocating costs to activities.
- 36. With your service team, agree how the patient activities are identified from the data in Feed 3a: NAPC.
- To ensure your local reporting shows the impact of audiology on the cost, use 37. the activity ID: MDA062; Audiology assessment for all contacts where no equipment is issued.

Resource activity combinations

Table CM22.3 is an excerpt¹⁷⁹ from Spreadsheet CP3.3 showing the resource 38. and activity links to use for audiology.

¹⁷⁹ Please note all excerpts in this standard are for illustrative purposes only. Use Spreadsheet CP3.3 to ensure you are using all the correct resource and activity links.

Table CM22.3: Excerpt from Spreadsheet CP3.3 showing the resource and activity links for audiology service costs

	Activity				
Resource	Audiology assessments	Newborn hearing diagnostics	Supporting contact	Theatre care – general	Insertion or fitting of a prosthesis, implant or device
Audiologist	£X	£X	£X		
Assistant technical officer (audiology)	£X	£X	£X	£X	
Hearing and other audiology devices					£X

Matching

- 39. The costs for clinical non pay items should be matched to the patient for the episode or attendance where it was implanted/issued.
- 40. The materiality of the cost of devices should be considered locally. If a patientlevel feed is not considered necessary, the cost of the devices should be allocated across all the patients who received them.

CM23: Direct access

Purpose: To ensure costs for direct access and hosted programmes are allocated consistently.

Objective

- 1. To ensure those services that are not the primary function of the organisation are costed consistently.
- 2. To ensure that the costs relating to those services are allocated to the appropriate area of the cost ledger.

Scope

- This standard applies to all activity relating to direct access: this service receives direct referrals from primary and community care and provides diagnostic assessment and/or treatment.
- 4. This standard does not include direct access audiology, which is covered in Standard CM22 Audiology.

Overview

- A direct access service is defined as one carried out independently from an admission or attendance: for example, when a patient is referred by their GP
- 6. Direct access is part of a clinical diagnostic service. The clinical responsibility for reviewing results and ongoing care of the patient remains with the GP who requested the test(s). GPs can directly access a range of diagnostic services for their patients, including pathology, phlebotomy, imaging, physiological and clinical tests.
- 7. In some regions, commissioners have agreed the provision of a wider range of clinical testing as direct access, including respiratory physiology (lung function testing), cardiac physiology and audiology¹⁸⁰.

¹⁸⁰ Audiology is covered in Standard CM22 Audiology.

8. The cost of diagnostic or pathology services provided during admitted patient care, critical care, outpatients, or ED are included in the composite cost of those hospital patient events. They are not part of the direct access service because the clinical responsibility for reviewing results and ongoing care is with the care professional who requested the test and the provider, not the patient's GP.

Approach

Information requirements

- 9. Direct access activity for imaging is identifiable in Commissioning Data Set (CDS) 6.2 through the direct access referral indicator field, and providers should report it using the relevant healthcare resource groups (HRGs). Therefore, these scans can be costed at patient level.
- 10. For more information on pathology tests, refer to the National Laboratory Medicine Catalogue, which is designed to support consistent, standardised reporting and is available from the Technology Reference Data Update Distribution Service (TRUD).
- Direct access should be reported under the 'other activities' cost group.

Specialist CC and EC

- 12. The most frequently used cost centres are:
 - XXXX017 Pathology - by lab
 - XXX016 Diagnostic imaging/Radiography - by modality

Resources

- Direct access pathology costs should include the entire cost: staffing, consumable and machinery running costs and transportation of samples where appropriate.
- The pathology service may contract some tests to external laboratories. You should identify where the cost for this is in the ledger and ensure that it is allocated to the correct type of test (or group of tests).
- 15. The most material resources associated with direct access for pathology and phlebotomy and diagnostic imaging are:

- SGR062 Consultant
- MDR042 Medical and surgical consumables
- CLR017 Clinical scientists
- CLR015 Technician
- MDR047 Medical and surgical equipment and maintenance

Activities

- 16. Use activity ID: SLA118 Direct access services.
- 17. Direct access testing will also use clinical equipment. The running costs of this equipment should be allocated across all the different uses, including hospital patient events and direct access.

Resource activity combinations

18. Table CM23.1 is an excerpt¹⁸¹ from Spreadsheet CP3.3 showing example resource and activity combinations to use for direct access.

Table CM23.1 Resource activity combinations – Direct Access

	Activity
Resource	Direct Access
Consultant	£X
Clinical scientists	£X
Technician	£X
Medical and surgical consumables	£X

Matching

19. You are not required to match direct access activity to master feeds in PLICS.

¹⁸¹ Please note all excerpts in this standard are for illustrative purposes only. Use Spreadsheet CP3.3 to ensure you are using all the correct resource and activity links.

Other considerations

- 20. You do not need to calculate direct access activity at individual patient level. From a system perspective, multiple calculations do not need to be run if the correct costs and activities are used. 182
- 21. Direct access includes plain film X-rays and other imaging scans. You should be aware that the more expensive tests such as MRI and CT scans are lower volume. You should work with the diagnostic imaging team to understand and cost the activity to the appropriate tests.
- 22. Direct access pathology and phlebotomy is usually based on blood testing. The phlebotomy cost may sit in the hospital where the laboratory is based or in the community (eg where blood is taken in a GP surgery or community hospital). Therefore, for direct access the cost of phlebotomy should be separate from that for the test, to ensure the cost of the test is comparable.

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¹⁸² You should continue to calculate direct access at patient level if you already do so.

CM24: Maternity

Please note, the mandation year will be 2022/23 (collected in 2023). See the acute transition path for further detail.¹⁸³

Purpose: To ensure maternity activity is costed consistently

Objective

 To ensure all costs incurred in delivering maternity services are identified and allocated to the correct patient event.

Scope

- 2. This standard should be applied to all maternity services provided by your organisation, irrespective of sector. The term 'community care' for maternity relates in this standard to care given by any provider outside a hospital setting¹⁸⁴.
- 3. Maternity activity includes care of the mother during the antenatal phase, the delivery event, and the post-natal phase.
- 4. This standard also covers the care of the baby/babies prior to discharge from the maternity services, where they are not within a neonatal critical care episode or part of a paediatric care pathway.
- 5. This standard excludes fetal medicine and parentcraft classes. 185
- 6. This standard excludes maternity services provided by GP primary care surgeries, including GPs and practice nurses.

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¹⁸³ www.england.nhs.uk/approved-costing-guidance-2022

¹⁸⁴ Including midwife-led care in GP surgeries & home births.

¹⁸⁵ It is the intention to bring foetal/fetal medicine and parentcraft into this standard in future years. We use the spelling of 'fetal' medicine in this standard.

Overview

- 7. The maternity service specialises in the treatment and care of women and baby/babies during a Maternity Episode¹⁸⁶, including pregnancy (antenatal), delivery, and post-partum (mother)¹⁸⁷/ post-natal ¹⁸⁸ care (baby).
- 8. The care delivered through the maternity episode will start at the 'booking' appointment' where the pregnancy is recorded on the maternity data system. The care given will depend on the individual woman's needs.
- 9. The care may be within a clinical setting or the patient's home/other community location.
- 10. You should cost each patient event separately, using the
 - Mother: Feed 3a Non-admitted patient care (NAPC) for hospital care
 - Mother: Feed 3d NAPC community midwifery
 - Mother: Feed 1a Admitted patient care (APC) feed for hospital admissions including delivery
 - Mother: Feed 3e NAPC home births.
 - Baby: Feed 1a APC feed for birth during a hospital delivery and an admission following a home birth.
 - Baby: Feed 3a NAPC feed for hospital care where the baby is reviewed under neonatology¹⁸⁹, but the mother does not require review.
- 11. Information from the auxiliary feeds should be matched to the patient events. This includes an auxiliary feed for the maternity-specific information (feed 27) that is sent to the Maternity Services Data Set (MSDS), which will link patient events for costing and reporting, including:
 - mother to baby/babies
 - patient events to the pregnancy

https://www.datadictionary.nhs.uk/data dictionary/nhs business definitions/m/maternity episode de. asp?shownav=1

¹⁸⁷ https://datadictionary.nhs.uk/nhs_business_definitions/postpartum.html?hl=postpartum

¹⁸⁸ https://datadictionary.nhs.uk/nhs_business_definitions/postnatal.html

¹⁸⁹ Neonatal outpatients is not strictly maternity, but is included in this standard for clarity

- And to match information not recorded in other feeds, such as ultrasound scans and screening not recorded in other auxiliary feeds¹⁹⁰.
- 12. Maternity care should be provided in line with the National Institute for Health and Care Excellence (NICE)¹⁹¹ guidelines. In general, women with complex health conditions before or during pregnancy will have more contacts with the maternity service, and/or will have more complex care.

Antenatal care

- 13. Standard maternity care is usually midwifery-led. Non-admitted patient care activity is delivered both in hospital (feed 3a) and in a range of non-acute settings (such as at general practice surgeries, health centres or in the patient's own home) (feed 3d).
- 14. Consultant-led care (obstetrics) is provided for women of higher-risk and complexity, in a hospital setting.
- 15. Mothers may be admitted for antenatal care, especially for the higher risk patients, and conditions such as ectopic pregnancies and hyperemesis gravidarum (excessive nausea and sickness). Patients may also be admitted for termination, or attend the ED or maternity unit for miscarriages. Both will end the maternity pathway. These events should be costed in the same way as other APC events. High risk mothers may have additional NAPC events, including additional scans and blood tests.

Antenatal screening

- 16. Screening currently comprises the combined test at 11 to 14 weeks for Down's, Edwards' and Patau syndromes using maternal hormone levels and nuchal fold size, and assessment for structural abnormalities such as an encephaly/neural tube defects (eg spina bifida) and for completion of the abdominal cavity.
- 17. The screening continues with the 18-20 week anomaly scan to assess the fetus' structural normality and determine if there are any indications for referral for a fetal medicine specialist's opinion.

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¹⁹⁰ For example: some scans are done in treatment rooms by maternity medical or midwifery staff without a Clinical Radiology Information System record, but that these scans will be recorded on the Maternity Services Data Set (MSDS).

^{191 &}lt;a href="https://pathways.nice.org.uk/">https://pathways.nice.org.uk/ You should select 'topics' then 'service delivery, organisation and staffing' then 'Maternity Services' for more information on NICE guidance.

18. These screening tests should be costed and matched to the patient event when they occurred in accordance with Standard CP4: Matching costed activities to patients. Screening attendances will mostly be NAPC events but may be a hospital NAPC contact (feed 3a) or a NAPC community contact (feed 3d).

Delivery phase

- 19. Delivery events can vary considerably depending on the type of delivery, eg caesarean section (either elective or emergency), forceps, normal or multiple births. The delivery event should be costed according to the care the patient receives, including theatre time, ward care, delivery suite time, and where the cost of clinical non-pay items is material.
- 20. Delivery events can take place in different types of unit, including:
 - Hospital delivery suites
 - Hospital obstetric theatres
 - Midwife-led birthing centres
 - Home
 - A small number of very complex deliveries may take place in main theatres – including those for mothers with intensive needs and complex co-morbidities.
 - Other
- 21. The recording of home births is mandatory and must be submitted to the Maternity Services Data Set (MSDS) alongside the hospital births. Home births are not a mandatory submission in the CDS/SUS data.
- 22. The costing system must include the HRG for all births, so the costing grouper will need to apply the HRG to all delivery events. This will show the hospital deliveries in feed 1a APC¹⁹² and the home births in feed 3e NAPC Home Births. There should not be a duplication of the same data item in both feeds.
- 23. The delivery event may start as a home birth and later transfer to a hospital unit. The home birth will be recorded as a distinct patient event in feed 3e home births, and a spell will only be started when the patient is admitted to hospital care in feed 1a APC.

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 $^{^{192}}$ If there are data quality issues with this process, you should discuss the plan for improvement with Informatics and Maternity service colleagues.

24. The hospital spell only starts on admission to hospital and may contain one or more episodes, depending on whether the care transfers to another care professional – or from midwife led care to obstetrics – during the admission. Figure CM24.1 illustrates the most probable scenarios, showing which treatment function code is used.

Figure CM24.1 Illustration of 3 patient events for delivery starting as home birth where the mother subsequently transfers to hospital. Each example would have a single pregnancy identifier but will have 2 or more data items. The home birth will be in feed 3d, and then the admitted episode(s) will be in feed 1a.

Location	TFC	Event
Home	Midwife	home
потпе	led care	birth
Hospital	Midwife	episode
Hospital	led care	1

Location	TFC	Event	
Homo	Midwife	home	
Home	led care	birth	
Hacnital	Obstetrics	episode	
Hospital	obstetrics	1	

Location	TFC	Event	
Homo	Midwife	home	
Home	led care	birth	
Hacnital	Midwife	episode	ll
Hospital	led care	1	spel
Hospital	Obstetrics episode 2		1

- 25. Costs should be applied to each separate event, showing the resources used at each stage. For example, theatre costs should only be matched to the hospital part of the care.
- 26. The mother delivering at home or in a birthing centre, whether an obstetric or midwifery unit, may have different care, for example, water birth, sensory stimuli, and complementary therapies. Where material, the cost of the care items should be matched to the patient using feed 15 Prosthetic and high-cost items.
- 27. Delivery events that result in a still birth should be costed in the same way as other delivery events. This outcome would close the maternity pathway so there would be no post-natal care, but there may still be post-partum care for the mother. If psychological support is provided, this should be costed as part of the patient delivery event where it is given or recorded as a separate patient event for NAPC care.
- 28. Where the mother receives material additional care or education on feeding or care of the baby during the delivery event, this should be shown as part of the mother's event, rather than as part of the baby's event.

Post-partum/postnatal phase

- 29. Post-partum care begins once a woman is discharged from a maternity unit or birthing centre and will include post-natal care of the baby. Most post-natal care is provided in NAPC settings and may be provided in the woman's home.
- 30. Use the discharge date of the delivery event to identify when the post-natal contacts begin. If there is a home birth and not a hospital birth, use the date of home birth to start the post-natal phase.
- 31. Post-partum/post-natal maternity care in the MSDS will generally cease to be part of the maternity service at ten days after the delivery event has completed. Longer periods of care may occur. Different datasets and clinical practice may cover different lengths of time post-delivery.

Care of the baby

- 32. When a baby is delivered, the baby will be recorded on PAS with their own separate clinical record, and an NHS number generated within six weeks.
- 33. For completeness, all babies delivered under the trust's care should be included in the costing system so that the baby's record can have cost attached to it when (if) the baby receives material care that can be quantified.
- 34. Treatment function codes (TFCs):
 - If the baby has a neonatal level of care classification of one or above, they will be TFC 422 neonatology, and usually move to one of the neonatal areas.
 - If the mother is discharged but the baby remains in hospital, they will be
 TFC 422 neonatology (and will move to a neonatal ward).
 - While the mother is admitted (and well), and if the baby is considered within normal parameters of health, the baby will have the treatment function code (TFC) 424 Well Baby¹⁹³. A 'well-baby' has a neonatal level of care classification of zero which is defined as 'normal care', and the main care is given by the mother with medical and nursing advice if needed¹⁹⁴.

¹⁹³

https://www.datadictionary.nhs.uk/data_dictionary/nhs_business_definitions/w/well_baby_de.asp?shownav=1

¹⁹⁴ A briefing paper on Well Babies will be available to costing practitioners soon.

- If the mother is significantly unwell, but the baby is well, the baby will remain under 424 well-babies. The baby may remain on the maternity unit under the care by the maternity team, or may move to a neonatal unit.
- 35. The care of a well-baby will as a minimum include:
 - A first review in the national screening programme of new-born and infant physical examination (NIPE)¹⁹⁵.
 - They may also be reviewed by a paediatrician.
 - Initial and further midwife reviews and
 - Vitamin K injections before discharge.
- 36. As a superior method SCM80 Well babies costed in detail, you can allocate these costs to the baby's episode.
- 37. It is known that the baby's TFC is not always robustly applied, and as TFC 424 well-babies are not included in the national cost collection (NCC) there is a risk that significant costs are not identified to the correct baby. You should therefore cost all babies under TFC 424 locally to identify any with significant cost. This enables local review of the baby's episode, to ensure that the treatment function code (and any clinical coding) is appropriate.
- 38. The babies receiving additional care should have these costs allocated to their record, and should be recorded as TFC 422 neonatology, irrespective of the ward they are in. The care that would trigger this costing treatment is:
 - Where the baby is receiving regular review from a neonatology doctor, eg on ward rounds.
 - babies who receive additional care or procedures (eg IV antibiotics or phototherapy).
 - babies who significant levels of monitoring (eg observations for risk of sepsis, meconium aspiration, hypoglycaemia).
 - Where a baby has a record on the critical care neonatal minimum data set with a neonatal level of care of 1 or above. The baby will have significant additional needs and reviews, and the critical care record and the core episode will both be costed. See Standard CM6: Critical Care and Feed 6a: Acute Hospital Critical care - neonatal.

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¹⁹⁵ https://www.gov.uk/guidance/newborn-and-infant-physical-examination-screening-programme-overview

- 39. The baby's event may be recorded at birth or transfer to TFC 422 neonatology during the episode, to reflect the clinical responsibility for the additional care. Babies under TFC 422 neonatology may remain on a hospital ward with the mother, or in the neonatal unit.
- 40. There should be no costs for the mother against the baby's event.
- 41. The NCC guidance assumes there is no material use of resources anticipated for the care of a TFC 424 well-baby. Local costs of the mother and baby delivery event should be added together. 196
- 42. Please note: in terminology 'well-babies' is a data term. They are not necessarily 'well' or 'unwell' based on the treatment function code alone. The baby may be within a range of normal conditions for new-borns but still require additional support. The accepted terminology of these babies should be agreed locally and used sensitively.

Approach

Information requirements

- 43. You should obtain the patient-level feeds necessary to cover all maternity services feeds 1a, 3a, 3d, 3e, 12b & 27, as shown in Standard IR1: Collecting information for costing and Spreadsheet IR1.2. Table CM24.1 shows these feeds with names and descriptions
- 44. Feeds 3d, 3e, 12b and 27 will use data reported in the Maternity Services Dataset (MSDS).
- 45. Feeds 1a and 3a will use data reported in the acute Commissioning Dataset (CDS).
- 46. Feed 27 Maternity gives the mother and baby information to match to feed 1a and 3a, so that those patient events can show in reporting, by using the pregnancy identifier, which is already in feeds 3d, 3e and 12b. This allows a connection of mother and baby, and also different patient events in the pathway. This will also be used for separating the ante natal and post-natal NAPC contacts

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¹⁹⁶ Please note: for collection purposes you should refer to the National Cost Collection guidance on how to show mother and 'well-baby' in the delivery event.

Table CM24.1: List of feeds necessary for costing the whole maternity pathway

Feed number	Feed name	Feed description	Source data	Purpose in maternity context
1a	Admitted patient care (APC)	Episodes for all acute services	CDS	Any maternity admissions including delivery (excludes home births
3a	Hospital Non- admitted patient care (NAPC)	Acute outpatient contacts in hospital and other clinical settings	CDS	Maternity outpatient contacts with all care professionals (excludes pure diagnostic appts)
3d	NAPC community midwifery	Community contacts with patient – ante natal and post-natal.	MSDS	Home visits and GP surgery appointments not recorded on hospital PAS
3e	NAPC Home Births	Delivery events started and completed in patients home, whether birth takes place there or not.	MSDS (should not be on CDS)	Home births are a separate patient event to a delivery in hospital and clear information is needed for accurate pathway review
12b	Diagnostic Imaging – maternity ultrasound	Scans not recorded on main diagnostic imaging system	MSDS	These are usually performed during outpatients by the relevant maternity care professional (including specialist and midwife sonographers) rather than the diagnostic imaging dept

	I	I	I	I
27	Maternity services	Pregnancy identifier and maternity	MSDS	This allows the costing system to link the patient
	30111003	j		•
		pathway discharge		events to a pregnancy,
		date		connecting mother and
				baby, and identifies when
				that pathway has closed.

Ward attenders

- 47. Ward attenders see a clinician in the ward location without the need for a hospital bed admission. They are treated as 'outpatients' for costing and commissioning purposes and are identified within the information feeds (feeds 3a, 3b, 3c, & 3d) using field 'activity type location code' of E02 Ward (nursing and other non-medical professionals).
- 48. Some ward attendances will go over midnight (for example, in EPU, but this could happen throughout a pregnancy), so the costing system should use the start¹⁹⁷ of the attendance for the costed record (and for the National Cost Collection, NCC), to ensure the costed record is identified with other NAPC records in the same month.

Community midwifery

- 49. This is an area known to be limited in electronic data. The service should be recorded and submitted to the MSDS for clinical and safety reasons, so we recommend you work with the service and informatics team to develop consistent and robust patient level information in this area. We recognise that costing is a secondary information use but can be used as an additional reason to establish these information recording protocols locally.
- 50. We understand that some trusts have been able to extend the use of their electronic neonatal systems, to the whole maternity pathway, allowing real-time recording of all events wherever they occur: in the hospital, the community, or at home. This includes both high risk (consultant-led) and low risk (midwife-led) pregnancy pathways. This means that mothers-to-be in some trusts have access to their electronic record via applications on their smart phones or

¹⁹⁷ This date must be in the same month as the other submission data for the collection

- tablet, and because of this, these trusts are using such applications for their community midwifery contacts. In these instances, 'applications that cover all the maternity contacts' 198, can provide additional data, however, it would still be the maternity services data set (MSDS) data items that are needed.
- 51. All trusts should have a digital midwife. These roles will be a key contact for understanding the maternity service data including community midwifery and any data quality issues.
 - 52. Where Community Midwifery PLICS data cannot identify the post-natal start locally, for example, where the mother delivers in another trust, local technical reporting rules to be installed to identify deliveries outside of the organisation. For example, if there is a baby record created linked to the mother with a date of birth within 9 months of a midwifery or obstetrics appointment.
 - 53. Cross border births are to be reviewed via matching with the MSDS after the first collection via NHS Digital (ie not during this collection year). A field for Estimated Date of Delivery (EDD) has been added to feed 27 to improve the matching of cross border births.

Specialist cost centres and expense codes

- 54. Spreadsheet CP2.1 shows the following cost centres for maternity services
 - XXX066 Ward C Maternity¹⁹⁹
 - XXX076 Midwifery Outpatients (and customise XXX075 Outpatients clinics - by speciality/service for obstetrics outpatients)
 - XXX603 Community Midwifery
- 55. For obstetrics medical staff, you can customise your cost ledger for cost centre XXX049 Medical Staffing by Specialty
- 56. If you require a delivery suite cost centre, you can customise your cost ledger for cost centre XXX051 Theatre / SPS.
- 57. Use the expense codes for the appropriate staff type and band. The following expense codes can be used for maternity specific staff
 - 5393 Qualified Midwife
 - 5437 Agency nursing Midwifery

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¹⁹⁸ For example, the use of BadgerNet Maternity Notes software

¹⁹⁹ There are cost centres in the Cost Ledger (CL) for outpatient and community midwives, but these can be customised for team working if required.

- 5440 **Student Midwives**
- Nursery Nurse • 5443

Resources

58. Healthcare staff for maternity pathways can include the resources shown in table CM24.2. You should ensure the mother only receives cost from the staff involved in her care.

Table 24.2 List of resources for maternity by care type of mother

Staff group	Standard care / low-risk	Complex care / high risk
Midwives	SLR085; Midwife	SLR085; Midwife
Maternity support workers	SLR084; Healthcare assistant	SLR084; Healthcare assistant
Specialist midwives - antenatal/newborn screening and breastfeeding	SLR082; Specialist nurse	SLR082; Specialist nurse
Sonographer within maternity dept	CLR022; Sonographer	CLR022; Sonographer
Anaesthesia team	SGR065; Non- consultant medical staff – anaesthetist: or consultant grade.	SGR065; Non-consultant medical staff – anaesthetist: or consultant grade.
Obstetrician		SGR062; Consultant
Cardiologist		SGR062; Consultant
Psychologist		SLR090; Psychologist
Dietitian		MDR033; Dietitian.

- 59. In some trusts, medical staff duties are split between obstetrics and gynaecology²⁰⁰, and this may need disaggregation to ensure appropriate cost allocation.
- 60. Staff may be present for different lengths of time in home birth events. This should be considered when allocating cost to resources.

Medical and surgical consumables

- 61. You should pay particular attention to the medical and surgical consumables and equipment used during maternity procedures.
- 62. The unit cost of the consumables used in many maternity contacts may be negligible. But if you find these costs are material, per patient or in total, please refer to Standard CM21: Clinical non-pay items.
- 63. Medical and surgical equipment such as delivery boxes used in home births should be costed and allocated to the patient that uses them in accordance with Standard CM21: Clinical non-pay items.

Activities

64. The main activities for the mother are shown in table CM24.1. All admission events should be costed in the same way. See Standard CM13: Admitted Patient Care.

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²⁰⁰ Where a consultant works solely in either specialty, this will not be of issue.

Table CM24.1: List of example activities for the mother in a maternity service.

Phase of care	Activity ID	Activity Description	Use for:
Antenatal	SLA135	Outpatient care	Hospital clinic attendances
	SLA158	Community maternity care	Midwifery in community clinic settings or the patient's home
	CLA022	Obstetrics Ultrasound	Scans matched from feed 12 diagnostic imaging or feed 27 maternity services
Delivery (and other admissions)	SLA097	Ward care	Time on maternity wards
	SLA146	Birthing suite care	Usually midwife-led deliveries
	SGA082	Theatre care - general	Surgical or high risk deliveries, usually in specific obstetric theatres
	SLA147	Home birth	Delivery at home
Post-natal	SLA135	Outpatient care	Hospital clinic attendances
	SLA158	Community maternity care	Midwifery in community clinic settings or the patient's home

Matching

Mothers and babies may receive care that is recorded on auxiliary patient-level 65. feeds, including medicines, theatres, and diagnostic imaging. These component

- activities should be matched to the patient event in accordance with Standard CP4: Matching and using the matching rules in Spreadsheet CP4.1.
- 66. Where physiotherapy is part of the ward care budget, it should be costed as part of the ward care. However, if it is on a separate GL cost centre, as a superior method SCM33 Supporting contacts at patient level, you can include these activities in Feed 7 Supporting contacts and match them to the patient event.
- 67. Midwives and medical staff frequently perform ultrasound scans in antenatal outpatient attendances, without requiring a sonographer. These scans should be identified from feed 12b diagnostic imaging maternity, and where material, the cost of equipment should be matched to the mothers who had the scans. Scans can also be recorded on Feed 12a diagnostic imaging where they take place in the main diagnostic imaging department.
- 68. You should ensure that scans are not duplicated in both feed 12a and 12b. The pregnancy identifier is available in feed 12b so it is preferable that any scans relating to a maternity pathway are included in feed 12b, or there will be missing elements from the maternity pathway reporting.

Resource activity combinations

69. Table CM24.2 is an excerpt²⁰¹ from Spreadsheet CP3.3 showing example resource and activity combinations to use for maternity events.

Table CM24.2: Excerpt from Spreadsheet CP3.3 showing some examples of resource and activity combinations for maternity events

	Activity (mother)				
Resource	Birthing suite care	Obstetrics ultrasound	Home birth	Outpatient care	Ward care
CNST payment					£X
Consultant				£X	
Non-consultant medical staff	£X				£X

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²⁰¹ Please note all excerpts in this standard are for illustrative purposes only. Use Spreadsheet CP3.3 to ensure you are using all the correct resource and activity links.

	Activity (mother)				
Resource	Birthing suite care	Obstetrics ultrasound	Home birth	Outpatient care	Ward care
Medical and surgical equipment and maintenance	£X	£X			£X
Delivery box	£X		£X		
Medical and surgical consumables	£X		£X		£X
Midwife	£X		£X	£X	£X
Specialist nurse	£X				£X
Advanced nurse practitioner	£X				
Sonographer		£X			

70. Additional midwife care supporting an 'unwell' baby remaining on the maternity unit should be identified from local information and allocated to the baby's episode. The baby may also receive medicines, diagnostic imaging and pathology investigations matched from the auxiliary feeds.

The Clinical Negligence Scheme for Trusts (CNST)

- 71. The premium payment²⁰² for the Clinical Negligence Scheme for Trusts (CNST) is calculated by NHS Resolution and is a considerable cost for maternity care.
- 72. Maternity services form the largest part of the premium around 40% for most trusts. This is because of the impact that maternity delivery can have on the long-term needs of the baby.
- 73. The premium will be notified to your trust in a 'contributions letter', with a supporting schedule, showing the value for your trust, and the proportion relating specifically to maternity.

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²⁰² The scheme is an insurance to cover the cost of clinical negligence claims. The payment shown in the general ledger is the premium for that 'insurance policy'.

- 74. Follow the cost allocation method for allocating the whole CNST payment in Spreadsheet CP3.3, using Resource ID SPR105: CNST payment.
- 75. Allocate the maternity portion to live births delivery events only.²⁰³
- 76. Live births are identified from the secondary diagnosis code (ICD10) Z37* on the patient record. Please note: it is the mother's delivery event that has the CNST matched against it, not the record for the new baby.
- 77. CNST should also be allocated to home births, using feed NAPC 3e to identify these patient events.
- 78. CNST maternity premium cost should not be allocated to admissions that are not a delivery event, outpatient attendances or community midwifery contacts.
- 79. As a superior method SCM37 CNST in maternity to use advanced weightings, you can agree to a local complexity weighting for this allocation with the local clinical team, for example, additional weightings for multiple births or where the mother has complex co-morbidities. See Spreadsheet CP3.5: Superior and alternatives.

Other considerations

Early Pregnancy Unit (EPU)²⁰⁴

- 80. An Early Pregnancy Unit (EPU) is a specialist unit that provides care for women with problems and concerns in early pregnancy. The care often centres around the provision of an ultrasound scan to confirm the location and viability of a pregnancy.
- 81. The EPU forms part of maternity services, irrespective of when the patient is booked, and which TFC the care is recorded under.
- 82. The unit can also provide treatment for women diagnosed with complications such as a miscarriage or ectopic pregnancy.
- 83. Some patients will attend a designated EPU in the early stages of pregnancy before a pregnancy is confirmed,²⁰⁵ as an admission, a ward attender, or an

https://www.datadictionary.nhs.uk/data_dictionary/nhs_business_definitions/e/early_pregnancy_unit_de.asp?shownav=1?query=%22early+pregnancy+unit%22&rank=100&shownav=1

²⁰³ More information on CNST is available from https://resolution.nhs.uk/resources/clinical-negligence-scheme-for-trusts-cnst-rules/. A costing briefing paper will be available here
204 Also known as EPAU – Early Pregnancy Assessment Unit

- outpatient attendance. Others will attend after the pregnancy booking event, however there is potential this may occur prior to the booking date.
- 84. The service is usually specialist nurse, midwife, or general practitioner-led care. The TFC of this service may vary, so identification of these patient events needs to be agreed locally, for example, by ward code.
- 85. Some staff will work in both the EPU and the wider maternity service. You should discuss the allocation of staff time to resources with the clinical team, to ensure the correct proportion goes to patient events in the EPU and the maternity service.

Fetal medicine

- 86. Fetal medicine services are not yet required to be costed at patient level, although this service will be included in the future. You should cost the patient events in line with the requirements of the National Cost Collection guidance.
- 87. Fetal medicine is the speciality that encompasses extra care required for babies in the womb, such as for smaller babies or babies with complications and co-morbidities²⁰⁶. All maternity services provide some fetal medicine care, but some services provide more specialised care for mothers and babies with particularly complex or highly specialised needs.
- 88. The treatment function code of 505 Fetal medicine²⁰⁷ will be applied where a specialist fetal medicine consultant is responsible for the care.
- 89. Some staff will work in both fetal medicine and the wider maternity service. You should discuss the allocation of staff time to resources with the clinical team, to ensure the correct proportion goes to each service type.

Parentcraft

90. Parentcraft class group contacts are not yet costed at patient level, although this service will be included in the future. You should cost the patient events in line with the requirements of the National Cost Collection guidance.

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For more information please refer to the NHS service specification for Fetal medicine:
 https://www.england.nhs.uk/wp-content/uploads/2013/06/e12-fetal-medi.pdf
 See also NHS Data Dictionary for TFC 505

 $[\]frac{\text{https://www.datadictionary.nhs.uk/web_site_content/supporting_information/main_specialty_and_treat_ment_function_codes_table.asp?shownav=1?query=%22treatment+function%22&rank=100&shownav=1}{v=1}$

91. Some staff will work in both parentcraft and the wider maternity service. You should discuss the allocation of staff time to resources with the clinical team, to ensure the correct proportion goes to each service type.

Safeguarding

92. As a superior costing method SCM81 Safeguarding - maternity and paediatric services, where your safeguarding team can provide information on the proportion of time spent with maternity services, this can be used to allocate that proportion directly to maternity, rather than allocating the costs across all patients equally as per Spreadsheet CP2.2.

Transitional Care

- 93. Transitional care means 'in between care' and is for babies who need a little more nursing care and monitoring than the routine care that all babies receive on the maternity ward. It is offered to babies who require extra care or observations after birth and supports babies to stay with their mother rather than going to the Special Care Baby Unit (SCBU).
- 94. A baby may be admitted to Transitional Care after spending some time on the neonatal unit, or may be admitted with the mother from the delivery suite. There are several reasons why a baby may be admitted to the Transitional Care Unit for example:
 - Babies that may need help to keep warm or with feeding
 - Babies that may need photo-therapy (light treatment) for jaundice
 - Babies that may need treatment with antibiotics
 - Babies whose mother was known to have Group B streptococcus bacteria (GBS) in pregnancy
 - Babies born over 24 hours after the waters were broken (prolonged rupture of membranes/'PROM')
 - Babies born between 35 37 weeks who do not require admission to the Special Care Unit
 - Small babies suspected of having inter uterine growth restriction 'IUGR'
 - Babies of diabetic mothers
 - Babies who were distressed at birth
- 95. Each baby will be assessed by the neonatal team for admission to the Transitional Care pathway.

- 96. Transitional Care facilities can form part of postnatal wards as well as specific Transitional Care Units.
- 97. To identify babies in Transitional Care, the activity may show on a specific Transitional Care Unit ward, not a neonatal unit, but would normally sit under TFC 422 neonatology.

CM28: Blood services

Purpose: To ensure costs of blood services are consistently allocated

Objective

1. To ensure blood services costs are allocated at patient level (for prescribed areas) or in the correct proportion to the activities they deliver.

Scope

- 2. This standard applies to blood, blood products and blood services.
- 3. This standard also applies to blood-based immunotherapy, including CAR-T cell therapy.

Overview

- 4. Blood services are a significant cost in some patient pathways. The emergency department (including major trauma) and theatres may use significant volumes of blood, and blood products are used to support patients with blood disorders such as haemophilia.
- 5. The standard classifies blood services items separately as blood, blood factor products and immunotherapy blood products.
- 6. All blood units and blood products should be tracked to the patient for clinical safety, however in some areas such as ED units blood may be issued for general use. For example, 'O-negative' blood is used in emergency circumstances when the patient's blood type is not known.
- 7. This standard provides guidance on how to identify the activities that blood services staff undertake in your organisation and how to apportion their costs to the activities they undertake.

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Approach

Information requirements

- 8. Blood and blood products will be provided to your organisation by NHS Blood and Transplant. Once within the trust, the items require appropriate storage and issue to service teams, along with other regulatory duties. The service will manage the information about the issue to departments and onwards to individual patients, and they will also have information on wastage and expired items.
- You should work with your informatics team, and blood services manager to access sufficient blood and blood product tracking information for Feed 9: Blood and blood services. See Standard IR1: Collecting information for costing, and Spreadsheet IR1.2.
- 10. Where blood is provided for general use and there is no patient identifier provided, you will need information on the use and cost of this blood to set up a RWV allocating across all patients in this service.
- 11. If specialist blood items or immunotherapy services are provided by an external party, your access to cost and medicine issue data may come from a different source, but information at patient level used to support patient care and for clinical safety should still be available.

Specialist cost centres and expense codes

- 12. Use cost centre ID XXX053 Blood Service & Blood Products. You may customise this cost centre to show different parts of the service if needed.
- 13. The blood service is usually managed in conjunction with the pathology department, therefore, the staff will include clinical scientists, medical laboratory scientific officer (MLSO) and scientific professional and technical staff at all bands.
- 14. Blood service specific expense codes are:
 - 7093 Blood
 - 7095 Factor Products
 - 7113 High cost blood products

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- 7024 Contracts: clinical – patient specific (for bought in specialist blood and immunotherapy products)
- **-** 7805 CAR-T Cell therapy
- 15. Blood costs will be in the general ledger using prices from NHS Blood and transplant. You should understand how the costs relate to the patient level feed values by working with the blood services leaders.

Resources

- 16. You should map blood service specific non-pay items to the following resource IDs:
 - SGR070 Blood
 - SGR071 Factor products
 - SGR079 High cost blood products
 - CLR030 Services received clinical patient level (for bought in specialist blood and immunotherapy products)
 - SLR105 Car-T Cell Therapy
- 17. For blood issued to departments such as ED where the patient is not identified, the cost can be allocated across all patients in the relevant department(s)
- 18. For the infrastructure and governance work allocate to all patient events.
- The costs on Feed 9 Blood and blood services, are used as relative weight values to allocate the costs in the cost ledger, in the same way as for medicines. Negative costs should be treated in the same way as negative costs for medicines and not used as part of the allocation calculation process.
- 20. The cost of the blood management team should be allocated proportionally between the patients receiving the blood and blood products, and the infrastructure and governance of the blood service. You should work with the blood services manager to agree appropriate relative weight values.

Activities

- For the allocation of cost for blood, injection of clotting factors and other blood products and blood services using patient information use the following activity ID:
 - Activity ID: SGA086; Blood Transfusion and injection of blood products

- Activity ID: SGA087; Factor replacement therapy; which also includes injection of clotting factor medicines and other blood products
- Activity ID: SLA131; Car-T Cell Therapy delivery

Resource activity combinations

22. Table CM28.1 is an excerpt²⁰⁸ from Spreadsheet CP3.3 showing the resource and activity links to use for blood services.

Table CM28.1: Excerpt from Spreadsheet CP3.3 showing the resource and activity links for blood services costs

	Activit	у	
Resource	Blood transfusion and injection of blood products	Factor replacement therapy	Car-T Cell Therapy Delivery
Blood	£X		
High cost blood products	£X		
Factor products		£X	
Medical and surgical consumables	£X	£X	
Car-T Cell Therapy			£X

Matching

- 23. Immunotherapy for cancer is a rapidly emerging area of blood-based treatments. The most advanced of the therapies is CAR-T chimeric antigen receptor T-cell which involves reprogramming a patient's immune system to target their cancer. It is specifically developed for each patient, used only for certain cancers and is available in a limited number of NHS organisations.²⁰⁹
- 24. Contacts with the patient for immunotherapy should be recorded and costed as NAPC or APC patient events as relevant: where the patient's blood is taken, and after the laboratory has 'trained' the blood to fight the cancer cells, the CAR-T blood is given back to the patient.

²⁰⁸ Please note all excerpts in this standard are for illustrative purposes only. Use Spreadsheet CP3.3 to ensure you are using all the correct resource and activity links.

²⁰⁹ https://www.england.nhs.uk/cancer/cdf/car-t-therapy/

- 25. Where the patient's blood is sent to an external laboratory, use expense code 7024 Contracts: clinical patient specific and Resource ID: CLR030 Services received clinical patient level, and match this cost to the patient event where the blood is first infused back into the patient.²¹⁰
- 26. For the preparation of the patient's blood in the trust laboratory, use the prescribed resources for the appropriate staff and non-pay. As the treatment is inherently associated with the patient, patient level information will be available, although the detail of preparation time and consumables may vary.
- 27. Use activity ID; SLA131: CAR-T therapy delivery for the preparation costs of the CAR-T blood and match this activity to the patient event at which the therapy is given using the rules in spreadsheet CP4.1.

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²¹⁰ We are looking to review this process with the trusts using this specialised therapy.

CM30: Education and training

Purpose: To enable a consistent approach to netting off education and training (E&T) income from both aggregated²¹¹ and PLICS costs during the transition phase of the National Cost Collection.²¹²

Objective

- 1. NHS England and NHS Improvement, working in partnership with Health Education England (HEE) and the Department of Health and Social Care (DHSC), is **not** collecting education and training (E&T) costs in 2022. However, as providers need to understand the costs of E&T, we are developing E&T costing standards for use in a future pilot collection.
- 2. This guidance specifies the transitional method to be used in 2022 for netting off E&T income from patient care costs for the National Cost Collection as the costs of E&T are not currently part of any mandated collection. This method supports the transition from the national reference costs to the PLICS collection.

Scope

3. This guidance applies to the acute, community and mental health sectors.

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²¹¹ The term 'Aggregated costs' is used to describe the costs out of scope for a PLICS collection in the current year, that are submitted in workbook format as part of the National Cost Collection (NCC).
212 See The National Cost Collection guidance 2021, https://www.england.nhs.uk/approved-costing-guidance/

4. All integrated providers should net off E&T income from expenditure for their submissions of both PLICS elements and aggregated costs as part of the mandated National Cost Collection.

Overview

- 5. This guidance describes a six-step method to allocate and net off E&T income at cost centre/expense code level, for the four categories of E&T income:
 - tariff postgraduate medical
 - tariff undergraduate medical
 - tariff non-medical
 - non-national tariff.
- 6. Refer to the *Healthcare education and training tariff guidance*²¹³ for details of the first three national tariff income categories *and* for a list of non-national tariff training programmes. Funding for these programmes is based on local agreements. Their associated activity is described in the learning and development agreements (LDAs) issued by Health Education England.
- 7. In the 'Reconciliation' in the National Cost Collection, income for all categories should be included in line 2: Other Operating Income.²¹⁴
- 8. You do not need to calculate 2021/22 E&T costs to be able to apply this transitional method. When the guidance states you should use E&T costs as a weighting, use your most recently submitted cost data adjusted for changes in subsequent years.²¹⁵
- 9. When allocating E&T income to the service area that supports the students, the cost for the number of students and trainees on courses in 2021/22 should be adjusted for significant changes to the previous year. For example, if the number of students and trainees falls between 2020/21 and 2021/22, adjust your E&T costs down by the same proportion.

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www.gov.uk/government/publications/healthcare-education-and-training-tariff-2017-to-2018

²¹⁴ See *The National Cost Collection guidance 2021*, https://www.england.nhs.uk/approved-costing-guidance/

²¹⁵ For E&T costing roadmap partners that participated in the pilot E&T cost collection in 2018, this is 2017/18 E&T cost data. For all other providers, this is 2016/17 E&T cost data.

- 10. E&T costs should be adjusted where more accurate internal information has been obtained, or a more accurate costing exercise has been done since the 2020/21 National Cost Collection.
- 11. You will need to develop local relative weight values for areas of E&T income that were not covered in 2020/21 - for example, if your organisation received funding to deliver a new training programme (specialty) in 2021/22.

Approach

- 12. The six-step approach to allocate and net off E&T income at cost centre/expense code level, for the four income categories listed above, is described below, and summarised in Figure CM35.1.
- 13. E&T income is netted off at cost centre/expense code level because E&T costs are not incurred treating patients, although both patient-facing and E&T activities share the same resources. Therefore, E&T income should not be allocated and netted off at either healthcare resource group or patient level. Netting off needs to happen before the costing process calculations begin – that is, at the general ledger stage. This puts the correct cost quantum in the right place before the costing process starts.
- 14. The costing standards recommend that E&T income is transparent in your cost ledger so the impact of this income on the cost of patient care can be viewed locally

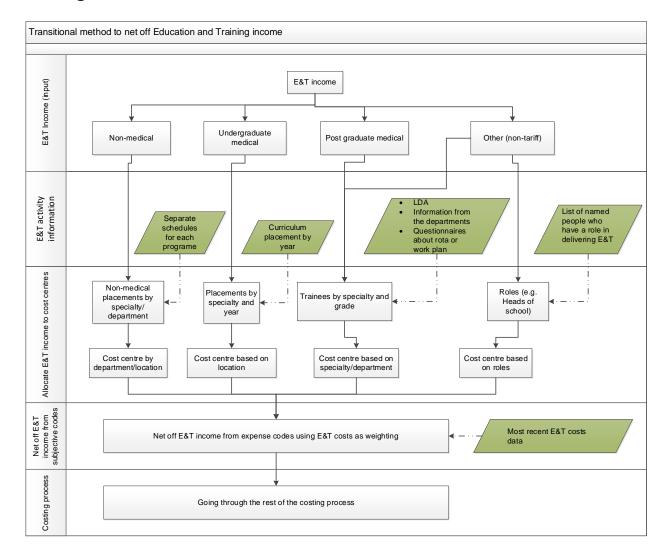


Figure CM35.1: Transitional method to net off E&T income

The four areas of E&T income are netted off, following steps 1 to 4 in any order, and then the remaining cost is processed as specified in Standards CP1 to CP5.

Step 1: Allocate and net off non-medical income

16. You need to obtain the following information:

1. Activity and cost information:

- separate schedules for each programme²¹⁶
- E&T cost information at cost centre/expense code level

²¹⁶ This information is available from the LDA or directly from the relevant departments of your organisation.

2. Income information:

- E&T income for non-medical students or trainees by schedule for each programme.

17. To allocate and net off the income you need to:

- allocate E&T income for tariff category: non-medical to courses (departments), location or clinical pathway based on the programme schedules
- allocate the E&T income to cost centres by course or location
- allocate the income by cost centre to expense codes weighted by E&T costs
- net off the income from the cost centre/expense codes.

Step 2: Allocate and net off undergraduate medical income

18. You need to obtain the following information:

Activity and cost information:

- length of undergraduate medical student placement in weeks²¹⁷ by curriculum placement year and specialty²¹⁸
- placement location²¹⁹
- E&T cost information at cost centre/expense code level

Income information:

- E&T income for undergraduate medical students.
- 19. To allocate and net off the income you need to:
 - allocate E&T income by tariff category: undergraduate medical to specialties (departments) by length of placement in weeks
 - allocate the income to cost centres based on specialty or placement location
 - allocate the income by cost centre to expense codes weighted by E&T costs

²¹⁷ This information is available from the LDA or directly from the relevant departments of your organisation.

²¹⁸ This information is available from medical schools.

²¹⁹ This information is available from the LDA or directly from the relevant departments of your organisation.

net off the income from the cost centre/expense codes.

Step 3: Allocate and net off postgraduate medical income

20. You need to obtain the following information:

Activity and cost information:

- number of funded whole time equivalents (WTE)²²⁰ for postgraduate medical trainees by:
 - 1. course (department)
 - 2. grade²²¹
- E&T cost information at cost centre/expense code level
- deanery post schedules
- finance schedules

Income information:

- postgraduate medical E&T tariff income
- tariff basic salary contribution for postgraduate medical trainees

21. To allocate and net off the income:

For the group 1 income group you need to:

- allocate E&T income for postgraduate medical trainees to courses (departments) weighted by the number of WTE for postgraduate medical trainees
- allocate the income to cost centres by course
- allocate the income by cost centre to expense codes weighted by E&T costs
- net off the income from the cost centre/expense codes
- allocate basic salary contribution income by trainee grade to courses (departments) weighted by the number of funded WTEs

For the group 2 income group you need to:

- allocate the income to cost centres by course
- net off the income from the expense codes for postgraduate medical trainees' salaries.

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²²⁰ This information is available from the LDA via your local Health Education England (HEE) team.

Postgraduate medical trainees can move grade within a financial year (usually to the next grade in August). Your local HEE team will have adjusted for this in its calculation of contribution to basic salaries. This information is available from your local HEE team.

Step 4: Allocate and net off non-tariff income

22. You need to obtain the following information:

Activity and cost information:

- separate schedules for each programme²²²
- list of named people and their specific E&T roles
- E&T cost information at cost centre/expense code level

Income information: non-tariff E&T income for undergraduate medical programmes, postgraduate medical programmes, non-medical programmes, and other regional programmes.

- 23. To allocate and net off the income you need to:
 - allocate non-tariff E&T income to roles (eg heads of school) based on the schedules for each programme
 - allocate non-tariff non-medical, postgraduate and undergraduate medical income by following the approaches specified in steps 1, 2 and 3 respectively
 - allocate E&T income for each role to cost centres and net off from the expense codes for the salaries.

Step 5: Allocate E&T specific support costs

- 24. After netting off the E&T income, some type 1 support costs that relate to E&T may still sit in your ledger – for example, library costs. If these support costs are shared between E&T and non-E&T services:
 - use local judgement to categorise these support cost centres as E&T or non-E&T based on materiality – that is, if the costs in a cost centre are materially E&T support costs, categorise the cost centre as an E&T-specific support cost centre²²³
 - for those costs that are not dominantly for E&T or non-E&T services, use locally developed relative weight values to apportion them to:
 - E&T-specific support costs

²²² This information is available from the LDA or other local funding agreements for E&T programmes.

²²³ See The costing principles: materiality, https://www.england.nhs.uk/approved-costing-guidance/

- non-E&T support costs.²²⁴
- 25. Use locally developed relative weight values to apportion the E&T-specific support costs (either as an E&T-specific support cost centre or as an E&T-specific expense line) to:
 - tariff-funded postgraduate medical E&T programmes
 - tariff-funded undergraduate medical E&T programmes
 - tariff-funded non-medical E&T programmes
 - non-national tariff programmes.
- 26. Follow the allocation methods specified in Spreadsheet CP2.2 to allocate the E&T-specific support costs to relevant patient-facing and type 2 support cost centres.

Step 6: Netted off costs go through the costing process

- 27. Check the output from the five steps above that is, all four categories of E&T income netted off at cost centre/expense code level and adjust the output to ensure that this process does not generate negative balances at the resource level (see Spreadsheet CP3.1 for prescribed resources).
- 28. Put the checked output through the costing process prescribed by the healthcare costing standards for England and National Cost Collection guidance 2022.²²⁵

²²⁴

See Standard CP2: Clearly identifiable costs and Spreadsheet CP2.2 for allocation of non-E&T type 1 support costs,

²²⁵ https://www.england.nhs.uk/approved-costing-guidance/

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

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