



# **2017/18 and 2018/19 National Tariff Payment System**

## **Annex F: Guidance on best practice tariffs**

**NHS England and NHS Improvement**

**December 2016**

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## 1. Introduction

1. The purpose of this guidance is to support implementation of the best practice tariffs (BPTs) in the 2017/19 National Tariff Payment System.
2. The other annexes are:

Annex	Description
A	The national prices and the national tariff workbook. This amalgamates a number of the separate annexes that were published in previous years.
B	The models used to set national prices
C	Technical guidance for mental health clusters
D	Currencies with national prices
E	Currencies with no national prices

**Table 1: Summary of best practice tariff changes**

BPT	Introduced	Additional policy changes since introduction	
Acute stroke	2010/11	2011/12 and 2012/13 2013/14	Increased price differential
		2016/17	Currency split to differentiate by patient complexity Updated criteria on brain imaging to be consistent with guidelines from the Royal College of Physicians
		2017 to 2019	Update criteria and clarify reporting requirements
Fragility hip fracture	2010/11	2011/12 2012/13	Increased price differential Further increase in price differential and expansion of best practice characteristics
		2017 to 2019	Three measures removed from the existing BPT and three new measures added
Day-case procedures	2010/11 (gall bladder removal only)	2011/12 2012/13	12 procedures added Two further procedures added and breast surgery procedures amended and revisions to same day-case rates
		2013/14	One further procedure added and hernia and breast surgery procedures amended
		2017 to 2019	19 more procedures included in the scope of the BPT and target rates increased for operations to manage female incontinence and tympanoplasty

BPT	Introduced	Additional policy changes since introduction	
Adult renal dialysis	2011/12 (vascular access for haemodialysis)	2012/13	Incentives for home therapies
Transient ischaemic attack	2011/12	2013/14	Magnetic resonance imaging payment removed in line with guidance on unbundling
Paediatric diabetes	2011/12 (activity-based structure – non-mandatory)	2012/13  2014/15	Year of outpatient care structure (mandatory) Updated to include inpatient care
Major trauma care	2012/13	2014/15	Best practice characteristics changed
Outpatient procedures	2012/13 (three procedures introduced)	2013/14  2016/17	Flexibility to encourage see-and-treat hysteroscopy Recalculated price for diagnostic hysteroscopy based on an increased transitional target towards the proportion thought to be achievable. Updated the calculation methodology not to apply an implicit efficiency assumption in our proposed prices
Same-day emergency care	2012/13 (12 clinical scenarios introduced)	2013/14  2017 to 2019	Seven new clinical scenarios introduced Seven new clinical scenarios introduced
Diabetic ketoacidosis and hypoglycaemia	2013/14		
Early inflammatory arthritis	2013/14		
Endoscopy procedures	2013/14	2016/17	Changed from a two-tier to a three-tier payment system so that only level 1 accredited units will receive the BPT.
Paediatric epilepsy	2013/14		
Parkinson's disease	2013/14		
Pleural effusions	2013/14		

BPT	Introduced	Additional policy changes since introduction	
Primary hip and knee replacement outcomes	2014/15	2016/17  2017 to 2019	National Joint Registry thresholds increased to 85%  Change to the rate below which providers will not be paid from the lower 99.8% significance to include the lower 95% significance for two consecutive years.
Heart failure	2016/17		Data submission to the national heart failure audit (NHFA) with a target rate of 70%.  Specialist input with a target rate of 60%.
Non-ST segment elevation myocardial infarction (NSTEMI)	2016/17 (non-mandatory)	2017 to 2019	Mandatory BPT and inclusion of patient transfers within the required timeframe
Chronic obstructive pulmonary disease (COPD)	2017 to 2019		
Straight-to-test for patients requiring lower gastrointestinal investigation	2017 to 2019 (non-mandatory)		
Cardiac rehabilitation for myocardial infarction (MI)	2017 to 2019 (non-mandatory)		

### *Pricing structure*

3. Some BPTs relate to specific healthcare resource groups (HRGs) while others are more detailed and relate to a subset of activity within an HRG (sub-HRG). The BPTs that are set at a more detailed level are identified by BPT 'flags' as listed in Annex A, and relate to a subset of activity covered by the high level HRG. This document should be read in conjunction with Annex A.
4. A summary of the terms used appears below:

Term used	Description
<b>Conventional price (tariff)</b>	The price that would apply if there was not a BPT or for activity covered by the HRG unrelated to the BPT (where set at sub-HRG level).
<b>BPT price (tariff)</b>	The price paid for activity where the requirement(s) of the BPT are achieved. This will normally be higher than the conventional price.
<b>Base price (tariff)</b>	The price paid for activity where the requirement(s) of the BPT are not achieved. This will normally be lower than the conventional price.
<b>Conditional top-up payment</b>	<p>This is the difference between the BPT price and base price.</p> <p>For BPTs where SUS+ automates the base price, this is the amount to be added as a local adjustment where the BPT requirement(s) are met.</p> <p>For BPTs where SUS+ automates the BPT price, this is the amount to recover as a local adjustment where the BPT requirement(s) are not met.</p>

## 2. Acute stroke care

### *Purpose*

- Patients presenting with symptoms of stroke need to be assessed rapidly and treated in an acute stroke unit by a multidisciplinary clinical team. The team will fully assess, manage and respond to complex care needs, including planning and delivering rehabilitation from the moment the patient enters hospital to maximise their potential for recovery. The acute stroke care BPT is designed to generate improvements in clinical quality in the acute part of the patient pathway. It does so by incentivising key components of clinical practice set out in the National Stroke Strategy,<sup>1</sup> NICE clinical guideline CG68 *Stroke and*

<sup>1</sup> [http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_081062](http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_081062)

*transient ischaemic attack in over 16s: diagnosis and initial management*<sup>2</sup> and the NICE quality standard for stroke QS2.<sup>3</sup>

### *Design and criteria of the BPT*

6. The Royal College of Physicians has published a national clinical guideline for stroke.<sup>4</sup> Recommendation 2.2.1b of its stroke guidance (fourth edition) states: “imaging of all patients in the next slot or within 1 hour if required to plan urgent treatment (eg thrombolysis), and always within 12 hours”. This has changed from previous guidance under which there was a one-hour target where urgent imaging is required, and 24 hours for all other patients.
7. In 2016/17 we amended criterion (b) below so that the payment is only made where initial brain imaging is within 12 hours of admission. Patients requiring urgent imaging should continue to receive imaging in the stated timescales, but due to the limited availability of data this will not form part of the BPT.
8. For 2017/19 we have amended criterion (a) to include a requirement for patients to be seen by a consultant with stroke specialist skills within 14 hours of admission and adjusted criterion (b) to clarify requirements around reporting.
9. This design provides additional funding per patient to meet the anticipated costs of delivering best practice, and creates an incentive for providers to deliver best practice care.
10. The BPT is made up of three individual conditional payment levels, where:
  - a) patients are admitted directly<sup>5</sup> to an acute stroke unit<sup>6</sup> either by the ambulance service, from A&E or via brain imaging; they must not be admitted directly to a medical assessment unit. Patients must be seen by a consultant with stroke specialist skills within 14 hours of admission, then spend most<sup>7</sup> of their stay in the acute stroke unit
  - b) initial brain imaging takes place within 12 hours of admission; for the purposes of the BPT, reporting times are not defined but access to skilled

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<sup>2</sup> <http://guidance.nice.org.uk/CG68/NICEGuidance/pdf/English>

<sup>3</sup> <http://www.nice.org.uk/guidance/QS2>

<sup>4</sup> <https://www.strokeaudit.org/Guideline/Historical-Guideline.aspx>

<sup>5</sup> Due to the variety of routes into the stroke unit, we define direct admission as being within four hours of arrival in hospital.

<sup>6</sup> Or similar facility where the patient can expect to receive the service described in quality marker 9 of the National Stroke Strategy.

<sup>7</sup> Defined as greater than or equal to 90% of the patient’s stay within the spell that groups to HRGs: AA35A; AA35B; AA35C; AA35D; AA35E; AA35F. For a definition on measuring the 90% stay, we recommend that used for the Sentinel Stroke National Audit Programme.

radiological and clinical interpretation must be available 24 hours a day, seven days a week to provide timely reporting of brain imaging

- c) patients are assessed for thrombolysis, receiving alteplase if clinically indicated in accordance with the NICE technology appraisal TA264 *Alteplase for treating acute ischaemic stroke*<sup>8</sup> guidance on this drug.<sup>9</sup>

### *Operational*

11. Due to the move to HRG4+, the BPT is no longer at sub-HRG level.
12. The base price is generated by the grouper and SUS+, where the spell meets these criteria:
  - a) patient aged 19 or over (on admission)
  - b) non-elective admissions
  - c) HRG from the list in Annex A.
13. Of the three best practice characteristics, SUS+ will only apply the additional payment for alteplase when OPCS-4 code X833 (fibrinolytic drugs) is coded to create an unbundled HRG XD07Z (fibrinolytic drugs band 1) from AA35A to AA35F. For the other two best practice characteristics, organisations will need to agree local reporting and payment processes. Providers who charge all three characteristics via a local dataset will need to provide assurance to commissioners they are not coding to OPCS-4 code X833 as well.
14. The Stroke Improvement National Audit Programme<sup>10</sup> (SINAP) has been superseded by the new stroke audit, the Sentinel Stroke National Audit Programme<sup>11</sup> (SSNAP), which is now the single source of stroke data nationally. SSNAP will be a useful source of information and support for organisations in establishing these processes. Contribution to national clinical audits should be considered a characteristic of best practice for providers of high quality stroke care, though this is not a criterion for the BPT.
15. Commissioners will be aware of different models for delivering high quality stroke care. While a few hyperacute units have been identified to admit all acute stroke patients, other units will provide high quality stroke care but not qualify for the element of the BPT relating to timely scanning (nor the additional payment for thrombolysis) because they admit patients who are further along the stroke

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<sup>8</sup> <https://www.nice.org.uk/guidance/ta264?unlid=2021569132016428837>

<sup>9</sup> The additional payment covers the cost of the drugs, the additional cost of nurse input and the cost of the follow-on brain scan.

<sup>10</sup> <http://www.rcplondon.ac.uk/projects/stroke-improvement-national-audit-programme-sinap>

<sup>11</sup> <https://www.strokeaudit.org/>

care pathway. However, all acute providers of stroke care should be able to meet the requirement of direct admission to a stroke unit and so qualify for the corresponding incentive payment.

16. One BPT criterion is that patients are admitted directly to an acute stroke unit either by the ambulance service, from A&E or via brain imaging. To qualify, acute stroke units must meet all the markers of a quality service set out in the National Stroke Strategy<sup>12</sup> quality marker 9, which are:
- a) all stroke patients have prompt access to an acute stroke unit and spend most of their time in hospital in a stroke unit with high-quality specialist care
  - b) hyperacute stroke services provide, as a minimum, 24-hour access to brain imaging, expert interpretation and the opinion of a consultant stroke specialist, and thrombolysis is given to those who can benefit
  - c) specialist neuro-intensivist care, including interventional neuroradiology or neurosurgery expertise, is rapidly available
  - d) specialist nursing is available for monitoring patients
  - e) appropriately qualified clinicians are available to address respiratory, swallowing, dietary and communication issues.

### 3. Adult renal dialysis

17. This BPT covers haemodialysis, home haemodialysis and dialysis away from base only. However, for completeness Table 2 shows all the currencies for adult renal dialysis. The BPT only applies to adult patients with chronic kidney disease<sup>13</sup> and not those with acute kidney injury.<sup>14</sup>

**Table 2: Adult renal dialysis currencies**

Dialysis modality and setting	Basis of payment
Haemodialysis	per session
Home haemodialysis	per week
Peritoneal dialysis and assisted automated peritoneal dialysis (aAPD)	per day
Dialysis away from base	per session

<sup>12</sup> [http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Healthcare/Longtermconditions/Vascular/Stroke/DH\\_099065](http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Healthcare/Longtermconditions/Vascular/Stroke/DH_099065)

<sup>13</sup> For payment purposes, organisations should distinguish between patients starting renal replacement therapy on chronic and acute dialysis on the basis of clinical judgement in the same way that they do for returns to the UK Renal Registry.

<sup>14</sup> Principally this is because acute renal failure is excluded from the scope of the National Renal Dataset for detailed data collection.

18. Contribution to national clinical audits should be considered a characteristic of good practice for providers of high quality renal dialysis care, though it is not a BPT criterion.

### 3.1. Haemodialysis

19. The aim of the BPT for haemodialysis is to encourage the adoption of clinical best practice for vascular access where there is clear clinical consensus, as described in these guidelines and standards:
  - a) Renal Association guidelines<sup>15</sup> (guidelines 1.1 and 1.2)
  - b) Vascular Society and Renal Association joint guidelines
  - c) National Service Framework (NSF) for renal services (standard 3).<sup>16</sup>
20. The ideal form of vascular access should be safe and efficient and provide effective therapy. A native arteriovenous fistula is widely regarded as the optimal form of vascular access for patients undergoing haemodialysis. The presence of a mature arteriovenous fistula at the time of first haemodialysis reduces patient stress and minimises the risk of morbidity associated with temporary vascular access placement as well as the risk of infection.
21. If an arteriovenous fistula cannot be fashioned, an acceptable alternative form of definitive access is an arteriovenous graft which involves an artery and vein being surgically joined together, using an artificial graft, usually polytetrafluoroethylene.
22. The advantages of a native arteriovenous fistula over other forms of access with infective and thrombotic complications are significant. In addition, dialysis via a fistula will also provide the option of higher blood flows during the procedure, resulting in more efficient dialysis.
23. The Renal Association guidance states an audit standard<sup>17</sup> of 85% of patients on haemodialysis receiving dialysis via a functioning arteriovenous fistula. In 2016/17 the BPT is based on providers achieving a rate of 80%, although providers should continue to work towards the 85% rate.
24. The BPT requires vascular access to be undertaken via a functioning arteriovenous fistula. Therefore, renal units will need to collaborate with surgical

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<sup>15</sup> <http://www.renal.org/guidelines/modules/vascular-access-for-haemodialysis#sthash.1BzXd9Zf.dpbs>

<sup>16</sup> Information about the NSF can be found at:

[http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/documents/digitalasset/dh\\_4102680.pdf](http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4102680.pdf)

<sup>17</sup> See <http://www.renal.org/guidelines/modules/vascular-access-for-haemodialysis#Summary1>

services to establish processes that facilitate timely referral for formation of vascular access.

### 3.2. Home haemodialysis

25. The aim of national prices for home haemodialysis is to provide a real choice of home haemodialysis for patients. The BPT price and structure offer incentives to both providers and commissioners to offer home haemodialysis to all patients who are suitable.
26. The BPT price for home haemodialysis will reflect a week of dialysis, irrespective of the number of dialysis sessions prescribed. Providers and commissioners should have sensible auditing arrangements to ensure that home haemodialysis is at least as effective as that provided in hospital.
27. It is expected that the BPT price will cover the direct costs of dialysis as well as the associated set-up, removal and utility costs incurred by the provider (eg preparation of patients' homes, equipment and training).

#### *Dialysis away from base (satellite dialysis)*

28. A review of funding for dialysis away from base found that there may be associated additional costs. However, because the reference costs include these additional costs, the BPT price should adequately fund, on average, providers dialysing a mix of regular and away-from-base patients. Nevertheless, in recognition of the importance to patients of being able to dialyse away from base, and given some providers will have a significantly disproportionate mix of patients, local payment arrangements may be agreed as follows:
  - a) All patients who require haemodialysis away from base may be paid the arteriovenous fistula or graft BPT price,<sup>18</sup> with the local arrangements then providing for any additional payments
  - b) Commissioners have the flexibility to pay above the national price to providers who face significantly high proportions of patients who require dialysis away from base. The appropriate additional level of reimbursement and the proportion of dialysis away from base are for local negotiation between commissioners and providers. As a guide, we would expect that a significant proportion of dialysis away from base is around 85% to 90% of a provider's total activity.

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<sup>18</sup> Applicable HRGs are LD05A, LD06A, LD07A and LD08A.

### Operational

29. The national prices in this document apply at HRG level. The HRGs and prices are set out in Annex A. Commissioners will pay based on the HRGs in the tariff information workbook and validate this via local data flows. Any activity submitted to SUS+ will derive LA08E and will generate a zero price.
30. The HRGs are generated by data items from the National Renal Dataset (NRD). Commissioners must include, as a minimum, the data items listed in Table 3 in information schedules of NHS contracts where these services are provided.

**Table 3: National Renal Dataset fields**

Area	Field
Renal care	[1] renal treatment modality, eg haemodialysis, peritoneal dialysis [6] renal treatment supervision code, eg home, hospital
Person observation	[75] blood test HBV surface antigen [77] blood test HCV antibody [79] blood test HIV Demographics [19] PCT organisation code <sup>19</sup>
Dialysis	[182] type of dialysis access, eg fistula [23] dialysis times per week
Organisations will also need to derive:	<ul style="list-style-type: none"><li>• a unique patient identifier</li><li>• patient age (in years derived from date of session – date of birth)</li></ul>

31. The reporting process for renal dialysis will differ from other services. The data items defined in the NRD are not contained in the Commissioning Data Set (CDS) and do not flow into SUS+. We therefore expect organisations to implement local reporting while we continue to work towards a national solution. The local payment grouper will support local processes in generating HRGs from the relevant data items extracted from local systems.
32. The HRGs in sub-chapter LD are core HRGs. For patients with chronic kidney disease attending solely for a dialysis session, there is no requirement to submit data on the admitted patient care or outpatient CDS because the activity data is recorded in the NRD and reported locally. Where providers do report dialysis activity within the CDS, an HRG – LA08E ‘Chronic kidney disease with length of

<sup>19</sup> CCG code will now be recorded in this field.

stay 1 day or less associated with renal dialysis' – will be generated, with a price set to zero.

33. Reporting and reimbursement for acute kidney injury will need to be agreed locally. Section 2.2 of Annex E details the currencies without national prices for haemodialysis for acute kidney injury that may be used for this purpose.
34. If a patient with acute kidney disease requires dialysis while in hospital during an unrelated spell, the dialysis price is payable in addition to the price for the core spell.
35. Due to the variation in funding and prescription practices across the country, the BPT price for renal dialysis is not for funding the following drugs:
  - a) erythropoiesis-stimulating agents: darbepoetin alfa, epoetin alfa, beta (including methoxy polyethylene glycol-epoetin beta), theta and zeta
  - b) drugs for mineral bone disorders: cinacalcet sevelamer lanthanum paracalcitol, sucroferric oxyhydroxide.
36. Organisations should continue with current funding arrangements for these drugs when used in renal dialysis or outpatient attendances in nephrology (TFC 361). For all other uses, the relevant BPT prices are to reimburse the associated costs of the drugs.
37. Patients with iron deficiency anaemia of chronic kidney disease will require iron supplementation. For patients on haemodialysis, the prices are for covering the costs of intravenous iron. For patients, either on peritoneal dialysis or otherwise, the costs will be reimbursed through the appropriate national price, either in outpatients or admitted patient care, depending on the type of drug and method of administration (slow infusion or intravenous).

#### **4. Chronic obstructive pulmonary disease (COPD)**

##### *Purpose*

38. COPD is a long-term respiratory condition characterised by airflow obstruction that is not fully reversible. People with COPD often have exacerbations, when there is rapid and sustained worsening of symptoms beyond their usual day-to-day variation.
39. For 2017/19 we have introduced a BPT to improve the proportion of patients who receive specialist review of their care within 24 hours of emergency admission for an exacerbation of COPD and who also receive a discharge bundle before leaving hospital.

40. Specialist input has been shown to improve outcomes as well as the adherence to evidence-based care processes in managing COPD exacerbations. However, only 57% of people admitted to secondary care receive specialist input in to their care within 24 hours of admission.
41. Patients who receive discharge bundles were more likely to receive better care than those who do not receive discharge bundles. However, only 68% of providers report using discharge bundles.

#### *Design and criteria*

42. For the relevant list of HRGs that fall in the scope of the BPT, as described in Annex A, there are two prices: a base price and a BPT price (based on a conditional top-up payment added to the base price). The base price is set at 90% of the BPT price.
43. To qualify for the BPT, 60% of patients must receive specialist input within 24 hours of admission **and** a discharge bundle before discharge.

#### *Operational*

44. The BPT is made up of two components: a base price and a BPT price (based on a conditional top-up payment added to the base price). The base price is payable to all activity irrespective of meeting best practice characteristics. The BPT price is payable only if all of the characteristics of best practice are achieved.
45. The BPT applies at the HRG level for all relevant non-elective admissions. The base price is generated by the grouper and SUS+, where the spell meets these criteria:
  - a) patient aged 19 or over (on admission)
  - b) non-elective admissions
  - c) HRG from the list in Annex A.
46. Where satisfied that providers have achieved the best practice criteria, commissioners should make manual adjustments to the base price by applying the conditional top-up payment.
47. Compliance with the BPT criteria will be measured by the National COPD Audit Programme's secondary care audit.<sup>20</sup> The national audit will produce at least a

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<sup>20</sup> <https://www.rcplondon.ac.uk/projects/national-copd-audit-programme-secondary-care-workstream>

quarterly report, showing the provider-level achievement against the BPT criteria, which will be available to both commissioners and providers.

48. For the purposes of measuring compliance with the BPT, the definition of 'specialist review' and 'discharge bundle' are the same as those used by the National COPD Audit Programme's secondary care audit:
- a) Respiratory team members, as agreed by the British Thoracic Society (BTS) membership, may be defined locally to include respiratory health professionals deemed competent at seeing and managing patients with acute exacerbation of COPD. These staff members might include respiratory consultant, respiratory trainee of ST3 or above, respiratory specialist nurse or physiotherapist, COPD nurse.
  - b) A discharge bundle is a group of evidence-based items that should be implemented/checked and verified on discharge from hospital. The discharge bundle should cover the following: understanding medication and inhaler use, self-management /emergency drug pack, smoking cessation, referral to pulmonary rehabilitation if appropriate and timely follow-up. Evidence of the discharge bundle may be found in the case record or the discharge summary.

## 5. Day-case procedures

49. For 2017/19 we have added 19 procedures and have increased the target rate for two day-case procedure BPTs.

### *Purpose*

50. A day-case procedure is defined as an admission where the patient is discharged before midnight. Performing procedures as a day case (where clinically appropriate) offers advantages to both the patient and provider. Many patients prefer to recuperate in their familiar home environment, while providers benefit from reduced pressure on admitted patient beds.
51. The day-case procedure BPT aims to increase the proportion of elective activity performed as a day case, where clinically appropriate.

### *Design and criteria of day-case BPT*

52. The BPT is made up of a pair of prices for each procedure: one applied to day-case admissions and one applied to ordinary elective admissions. By paying a relatively higher price for day-case admissions, the BPT creates an incentive for providers to manage patients on a day-case basis without costing commissioners any more money.

53. The British Association of Day Surgery (BADS) publishes a directory of procedures suitable for day-case admissions or short stays<sup>21</sup> along with rates that they believe are achievable in most cases. The procedures selected for BPTs come from the BADS directory.<sup>22</sup> They are high volume, and have day-case rates that vary significantly between providers and are nationally below the BADS rates.
54. In several cases, the day-case rate used to calculate the relative prices differs from those in the BADS directory because clinical feedback suggested the BADS rates may be too ambitious for some providers to achieve in one step.
55. For all the procedures covered by the BPT:
- Table 4 lists the clinical procedures in place in 2016/17
  - Table 5 lists the additional clinical procedures to be introduced in 2017-19
  - Table 6 lists the clinical procedures with increased target rates in 2017-19
  - Annex A details the prices, whether they apply at HRG or sub-HRG (with BPT flag) and the relevant OPCS codes.

**Table 4: Day-case BPT procedures (in place in 2016/17)**

Clinical area (procedure)	BADS rate (4th edition)	BPT calculation rate	Current rates (2011/12 HES)
<b>Breast surgery</b>			
Excision of breast			
Excision/biopsy of breast tissue including wire-guided	95%	75% (weighted average)	55%
Wide local excision	75%		
Simple mastectomy	30%	15%	5%
Sentinel lymph node biopsy	80%	80%	52%
Axillary clearance	80%	40%	11%
<b>Urology</b>			
Endoscopic resection of prostate (transurethral resection – TUR)	15%	N/A	3%
Resection of prostate by laser	75%	N/A	4%

<sup>21</sup> BADS publishes different target rates for short stays: stays of less than 23 hours and stays of less than 72 hours.

<sup>22</sup> Third edition with recent updates and additions based on the fourth edition.

Clinical area (procedure)	BADS rate (4th edition)	BPT calculation rate	Current rates (2011/12 HES)
<b>General surgery</b>			
Cholecystectomy	60%	60%	44%
Repair of range of hernia (umbilical, inguinal, recurrent inguinal and femoral)	90%	90%	69%
<b>Orthopaedic surgery</b>			
Arthroscopic subacromial decompression	80%	N/A	60%
Bunion operations with or without internal fixation and soft tissue correction	85%		62%
Dupuytren's fasciectomy	95%		83%
<b>Ear, nose and throat (ENT)</b>			
Tonsillectomy			
Children	70%	70%	40%
Adults	80%	80%	40%
Septoplasty <sup>23</sup>	80%	80%	54%

**Table 5: Additional clinical procedures to be introduced in 2017/19**

Clinical area (procedure)	BADS rate	Current observed rate	Proposed calculation rate
<b>Day surgical procedures</b>			
<b>Ear, nose and throat (ENT)</b>			
Polypectomy of internal nose	90%	55%	65%
<b>General surgery</b>			
Biopsy/sampling of cervical lymph nodes	80%	74%	80%
Excision biopsy of lymph node for diagnosis (cervical, inguinal, axillary)	80%	65%	80%

<sup>23</sup> Septoplasty previously had a BADS rate and calculation rate of 60%: this was incorrectly listed, but the methodology for calculating the prices was correct and has not changed.

Repair of other abdominal hernia	85%	68%	85%
<b>Gynaecology</b>			
Anterior or posterior colporrhaphy	40%	13%	25%
Laparoscopic oophorectomy and salpingectomy (including bilateral)	70%	17%	30%
<b>Head and neck</b>			
Excision of lesion of parathyroids	30%	11%	25%
<b>Ophthalmology</b>			
Dacryocysto-rhinostomy including insertion of tube	90%	70%	80%
<b>Orthopaedic surgery</b>			
Autograft anterior cruciate ligament reconstruction	40%	28%	40%
<b>Urology</b>			
Endoscopic insertion of prosthesis into ureter	90%	48%	60%
Endoscopic resection/destruction of lesion of bladder	50%	7%	25%
Optical urethrotomy	90%	42%	55%
Ureteroscopic extraction of calculus of ureter	50%	29%	40%
<b>Vascular surgery</b>			
Creation of arteriovenous fistula for dialysis	80%	63%	80%
Transluminal operations procedures on iliac and femoral artery	70%	50%	60%
<b>Medical procedures</b>			
Bone marrow biopsy	95%	68%	80%
Implantation of cardiac pacemaker	90%	59%	70%
Liver biopsy	90%	68%	80%
Renal biopsy	95%	67%	80%

Source: BADS directory fourth edition and HES 2013/14

**Table 6: Clinical procedures with increased target rates in 2017/19**

Clinical area	BADS rate	2014/15 transition rate	Current observed rate	Proposed calculation rate
Operations to manage female incontinence	60%	45%	45%	60%
Tympanoplasty	80%	50%	45%	65%

Source: BADS directory fourth edition and HES 2013/14

### *Operational*

56. Around half the total day-case BPTs apply at the HRG level, and for the remainder a flag is required to identify the relevant activity. In all cases SUS+ will automate payment of the appropriate price.
57. The BPT flags are generated by the grouper and SUS+, where the spell meets these criteria:
- patient classification is either 1 (for ordinary admissions) or 2 (for day-case admissions)
  - elective admission method (admission method is 11, 12 or 13)
  - relevant procedure codes from the list in Annex A (where at sub-HRG level)
  - HRG from the list in Annex A.
58. Annex A details the prices, whether they apply at HRG or sub-HRG (with BPT flag) and the relevant OPCS codes.<sup>24</sup>

## **6. Diabetic ketoacidosis and hypoglycaemia**

### *Purpose*

59. Diabetic ketoacidosis remains a common and life-threatening complication of Type 1 diabetes. Errors in its management are not uncommon and are associated with significant morbidity and mortality. Admitting, treating and discharging patients with diabetic ketoacidosis or hypoglycaemia without involving a diabetes specialist team could compromise safe patient care.

<sup>24</sup> OPCS codes for procedures for which the BPT applies at HRG level are detailed in the BADS Directory available to download in the definition document on the 'NHS Better Care, Better Value indicators' [website](#).

60. The aim of this BPT is to ensure the involvement of a diabetes specialist team and patient access to a structured education programme. The involvement of a diabetes specialist team shortens patient stay and improves safety; it should occur as soon as possible during the acute phase. The main benefit of a structured education programme is reduced admission rates.
61. Specialists must also be involved in assessing the precipitating cause of diabetic ketoacidosis or hypoglycaemia, managing the condition, discharge and follow-up. This includes assessing the patient's understanding of diabetes plus their attitudes and beliefs.

### *Design and criteria*

62. The BPT applies only to adults admitted as an emergency with diabetic ketoacidosis or hypoglycaemia. It is made up of two components: a base price and a BPT price (based on a conditional top-up payment added to the base price). The base price is payable for all activity irrespective of meeting best practice. The BPT price is payable if the patient:
- a) is referred to the diabetes specialist team (DST) on admission, and seen within 24 hours by a DST member
  - b) has an education review by a DST member before discharge<sup>25</sup>
  - c) is seen by a diabetologist or diabetic specialist nurse before discharge
  - d) is discharged with a written care plan (which allows the person with diabetes to be actively involved in deciding, agreeing and taking responsibility for how their diabetes is managed) that is copied to their GP
  - e) is offered access to structured education, with the first appointment scheduled to take place within three months of discharge.<sup>26</sup>
63. Access to structured education, and waiting lists for it, vary across the country. Structured education should be delivered in line with the Diabetes UK care recommendation 'Education of people with diabetes'.<sup>27</sup>

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<sup>25</sup> In some circumstances, not all elements of the review apply (eg injection issues that would be irrelevant to people who are not taking insulin (such as those taking oral medication) and ketone monitoring that is only required for individuals with Type 1 diabetes). **Review to include:** usual glycaemic control; injection technique/blood glucose; monitoring/equipment/sites; discussion of sick day rules; assessment of the need for home ketone testing (blood or urinary) with education to enable this; and contact telephone numbers for the DST including out of hours.

<sup>26</sup> It is accepted that in some circumstances structured education may not be appropriate for patients (for example, elderly people with dementia or living in care homes). Where this is the case then structured education can be excluded from the criteria.

64. The BPT excludes reimbursement for the structured education so arrangements for this will need to be agreed locally. There is a TFC for diabetic education services (TFC 920) against which organisations should record and cost activity.
65. The evidence base and characteristics of best practice have been informed by and are in line with:
- a) NICE *Diabetes in adults* quality standard (2011);<sup>28</sup> NICE clinical guideline CG15 *Diagnosis and management of type 1 diabetes in children, young people and adults*<sup>29</sup>
  - b) NHS Institute for Innovation and Improvement's Think Glucose Project; Diabetes UK and Joint British Diabetes Societies (JBDS) Inpatient Care Group guidance on *The management of diabetic ketoacidosis in adults*
  - c) Diabetes UK and JBDS Inpatient Care Group guidance on *The hospital management of hypoglycaemia in adults with diabetes mellitus*.

#### *Operational*

66. The BPT applies at the sub-HRG level ('flag BP52'), and SUS+ will apply the base price to spells with a BPT flag only (the conventional price will be otherwise applied). SUS+ will not apply the conditional top-up payment, and compliance with the characteristics of best practice will need to be monitored and validated through local data flows. Where satisfied that providers have achieved the best practice criteria, commissioners should make manual adjustments to the base price by applying the conditional top-up payment.
67. The BPT flag is generated by the grouper and SUS+, where the spell meets these criteria:
- a) patient aged 19 or over (on admission)
  - b) emergency admission method (codes 21 – 25, 2A, 2B, 2C, 2D [or 28 if the provider has not implemented CDS 6.2])
  - c) a diagnosis from the list in Annex A
  - d) one of the HRGs from the list in Annex A.

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<sup>27</sup> Information on diabetes education is available at <https://www.diabetes.org.uk/Guide-to-diabetes/Managing-your-diabetes/Education/>

<sup>28</sup> <http://guidance.nice.org.uk/QS6>

<sup>29</sup> <http://guidance.nice.org.uk/CG15/Guidance>

68. Where providers do not meet best practice, commissioner expenditure will reduce. We expect commissioners will engage with providers to improve services.
69. The base price is set at 85% of the conventional HRG price, with the conditional component equal to the remaining 15%.

## 7. Early inflammatory arthritis

### *Purpose*

70. The BPT's aim is to ensure timely diagnosis of patients with early inflammatory arthritis and, where appropriate, start of therapy. The BPT has been developed with the British Society for Rheumatology and Arthritis Research UK, and reflects NICE clinical guideline 79, *Rheumatoid arthritis in adults: management*.<sup>30</sup>

### *Design and criteria*

71. Three BPTs may apply when care meets the standards in Table 7. These BPTs apply to the first year of care only.

**Table 7: Early inflammatory arthritis BPTs**

BPT	Target patient group
Diagnosis and discharge BPT	<p>For patients with suspected early inflammatory arthritis who are:</p> <ul style="list-style-type: none"> <li>• seen within three weeks of referral</li> <li>• diagnosed as not having early inflammatory arthritis and discharged within six weeks of referral.<sup>31</sup></li> </ul> <p>The BPT includes the costs of plain radiology, ultrasounds, all blood tests and clinical consultations with doctors/nurses.</p>
Disease-modifying anti-rheumatic drugs (DMARD) therapy BPT	<p>For patients with suspected early inflammatory arthritis who:</p> <ul style="list-style-type: none"> <li>• are seen within three weeks of referral</li> <li>• start DMARD treatment within six weeks of referral.<sup>32</sup></li> </ul>

<sup>30</sup> <https://www.nice.org.uk/guidance/cg79>

<sup>31</sup> In exceptional circumstances where a patient is referred twice in-year, only the initial referral is eligible for the BPT. The second referral must be paid at the first and follow-up price for TFC 410. Patients with palindromic rheumatism are eligible for the BPT on second referral at the commissioner's discretion.

BPT	Target patient group
	<ul style="list-style-type: none"> <li>• receive regular follow-up<sup>33</sup> and monitoring over first year of treatment with evidence of appropriate titration of therapy.</li> </ul> <p>The BPT price includes the annual costs of all blood tests, non-biological prescriptions, clinical consultations with doctors/nurses, annual review.</p> <p>The price excludes physiotherapy, psychology, podiatry, occupational therapy, telephone emergency advice line, inpatient admissions, biologics and associated drug costs.</p>
Biological therapy BPT	<p>For patients with suspected early inflammatory arthritis who:</p> <ul style="list-style-type: none"> <li>• are seen within three weeks of referral</li> <li>• have DMARD treatment initiated within six weeks of referral</li> <li>• receive regular follow-up and monitoring over first year of treatment</li> <li>• meet NICE eligibility criteria for biological therapy and biologics are prescribed and initiated in year 1.</li> </ul> <p>The BPT price includes the annual costs of all blood tests, non-biologic prescriptions, clinical consultations with doctors/nurses, annual review.</p> <p>The price excludes physiotherapy, psychology, podiatry, occupational therapy, telephone emergency advice line, inpatient admissions, biologics, drug infusion and associated costs.</p>

72. For patients with inflammatory arthritis, it should almost always be possible to make the decision to start DMARD therapy within six weeks of GP referral where inflammatory synovitis is sustained at specialist review.

73. Current classification criteria for rheumatoid arthritis do not specify a minimum duration of disease, but do assign a single point (out of 10 possible) for duration of six weeks or more. The hypothetical case of a patient presenting to their GP on their first day of symptoms and being referred the same day would be quite

<sup>32</sup> In some circumstances patients are known to decline DMARD therapy. If the patient still receives the requisite regular follow-ups and monitoring, the BPT still applies.

<sup>33</sup> The requirement for follow-up will vary depending on the disease-specific activity measures. We anticipate there would usually be a minimum of four consultant-led follow-ups and an annual review as part of the pathway, in addition to further nurse-led reviews.

exceptional given the insidious onset of symptoms. Even in that situation, there would be six weeks of joint inflammation by the time DMARD initiation is suggested.

74. There are substantial proven benefits of DMARD initiation within 12 weeks of symptom onset. To enable this, GPs should continue to develop and follow local guidance for referral to ensure that patients with suspected early inflammatory arthritis are referred within a maximum of six weeks of symptom onset.
75. Given the potential of urgent, intensive DMARD treatment to transform outcomes for people with inflammatory arthritis by inducing remission and preventing disability, as well as reducing the need for subsequent biologic therapies, Arthritis Research UK and the British Society for Rheumatology support this suggested six-week timeframe for specialist review and initiation of DMARD therapy.
76. The National Audit Office report, *Services for people with rheumatoid arthritis*<sup>34</sup> noted: “The likelihood of people with rheumatoid arthritis being diagnosed and treated within the clinically recommended period of three months from the onset of symptoms has not improved in recent years”.

#### *Operational*

77. The BPT covers the first year of care only. Treatment for patients diagnosed more than 12 months ago will continue to be paid for through the rheumatology TFC 410. Each of the BPT prices is an annual payment. Patients are only eligible for one of the payments in-year, subject to meeting all criteria.
78. The BPT’s structure aims to remove any first and follow-up ratios in operation locally that may have prevented providers from receiving full payment for delivering a best practice service.
79. For the purposes of this BPT, diagnostic imaging costs are included in the price.
80. SUS+ will not apply any of the three BPTs and there is no discrete TFC for early inflammatory arthritis activity. Organisations will therefore need to identify activity and administer the BPTs locally.
81. Activity meeting the best practice characteristics will need to be excluded from the CDS to avoid double payment. Providers achieve this by including an equals sign (=) as the last significant character of the six-character CDS data item Commissioning Serial Number. The equals sign will exclude the episode and a conventional price will not be applied.

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<sup>34</sup> <http://www.nao.org.uk/report/services-for-people-with-rheumatoid-arthritis/>

82. If a provider is not meeting the best practice specification they will continue to be paid the outpatient first and follow-up attendance national prices for the rheumatology TFC 410.
83. The pricing approach is designed to adequately reimburse the costs of best practice. Before 2013/14, providers were paid on a first and follow-up attendance basis as part of a generic TFC for rheumatology, which did not in all circumstances adequately reflect the actual costs of a best practice service.
84. The pricing of the DMARD therapy BPT reflects the anticipated average number of follow-ups. We appreciate that there will be patients with more complex needs requiring additional follow-ups, but we would anticipate that the BPT price will adequately fund, on average, providers with a regular mix of patients.
85. The price of the TFC for rheumatology has not been affected by the BPT's introduction.

## **8. Endoscopy procedures**

### *Purpose*

86. The aim of this BPT is to provide a financial incentive to promote improved and consistent standards across endoscopy services.
87. Award of accreditation by the Joint Advisory Group on GI Endoscopy (JAG) provides assurance that an endoscopy service is delivering high quality, safe and effective care for patients as well as supporting the endoscopy workforce and providing a suitable training environment. Eligibility for accreditation requires satisfactory scores in the Global Rating Scale, and is awarded after submission of written evidence and a site visit by a professional team of peer assessors.

### *Design and criteria*

88. The BPT applies to adults only for elective endoscopic procedures in all NHS providers (including community organisations) and independent sector providers.
89. For the BPT, JAG provides three levels of site accreditation, shown in Table 8 below.

**Table 8: JAG accreditation levels**

Level	Description
Level 1	Units have met the necessary standard for full JAG accreditation, or are in a period of accreditation award deferral.
Level 2	Units have been assessed as not meeting all the JAG criteria. However, they have provided evidence to JAG of progress in addressing issues and will be reassessed within a specified timeframe.
Level 3	Units have been assessed as not meeting the minimum standard, or are not participating in the JAG accreditation scheme.

90. Only providers achieving level 1 accreditation will be reimbursed at the full BPT rate. Providers at level 2 will receive a price 2.5% below the BPT level and providers at level 3 will receive a price 5% below the BPT level.
91. The status of providers is defined by JAG, available on its website<sup>35</sup> and updated monthly.

*Operational*

92. SUS+ will automate payment of the endoscopy BPT by applying the full (level 1) BPT price to the HRG. Commissioners will need to reclaim any overpayments from providers not achieving level 1 of the accreditation scheme. Commissioners must ensure that they reflect any changes to providers' status in-year.
93. Information on the JAG website is at site level rather than organisation level. Where a provider has sites of mixed status, commissioners must apply the BPT at site level where they are able to do so, otherwise organisations will need to agree the appropriate reduction that reflects the service provision across the provider. If agreement cannot be reached then we suggest that payments are reduced in proportion to the number of sites not engaged.
94. Where providers do not attain level 1 accreditation, commissioner expenditure will reduce. We expect commissioners will engage with providers to improve services and adherence to JAG standards,

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<sup>35</sup> <http://www.thejag.org.uk/Commissioning/BestPracticeTariffStatus.aspx>

## 9. Fragility hip fracture

### *Purpose*

95. For patients with a fragility hip fracture, care needs to be quickly and carefully organised to prepare them for surgery. The most positive outcomes can be achieved by quickly stabilising patients and ensuring that expert clinical teams respond to their frail conditions and complex needs. Equally, the care that these patients receive following surgery is just as important, because it is in the initial days following surgery that the greatest gains can be made in patient outcomes.
96. The aim of the BPT is to promote hip fracture programmes that provide best practice in the care and secondary prevention of fragility hip fracture in line with the clinical guideline and quality standard from NICE (CG124 and QS16). For 2017/19 we have removed three measures relating to the joint admissions protocol, multidisciplinary teamworking and post-op abbreviated mental test and replaced them with three new measures, described below.

### *Design and criteria*

97. The BPT is made up of two components: a base price and a BPT price (based on a conditional top-up payment added to the base price). The base price is payable for all activity irrespective of whether the characteristics of best practice are met. The BPT price is payable only if all these characteristics are achieved:
  - a) time to surgery from arrival in an emergency department, or – if an admitted patient – time of diagnosis to the start of anaesthesia, is within 36 hours
  - b) assessed by a geriatrician<sup>36</sup> in the perioperative period (within 72 hours of admission)
  - c) fracture prevention assessments (falls and bone health)
  - d) an abbreviated mental test performed before surgery and the score recorded in National Hip Fracture Database (NHFD)<sup>37</sup>
  - e) a nutritional assessment during the admission (new)
  - f) a delirium assessment using the 4AT screening tool during the admission (new)

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<sup>36</sup> 'Geriatrician' is defined as consultant, non-consultant career grade (NCCG) or specialist trainee ST3+.

<sup>37</sup> It is expected that a reduced abbreviated mental test score of 7 or below would trigger a dementia risk assessment by dementia-trained staff, the outcome of which would inform appropriate discharge and follow-up arrangements.

- g) assessed by a physiotherapist the day of or day following surgery (new).
98. This design provides additional per patient funding to meet the anticipated costs of delivering best practice, and creates an incentive for providers to deliver best practice care.

*Operational*

99. The base price and the BPT price apply at the sub-HRG level ('flag BP01'). The BPT flag is generated by the grouper and SUS+, where the spell meets these criteria:
- a) patient aged 60 or older (on admission)
  - b) emergency, or transfer admission method (admission codes 21-25, 2A, 2B, 2C, 2D [or 28 if the provider has not implemented CDS 6.2] and 81)
  - c) a diagnosis and procedure code (in any position) from the list in Annex A
  - d) HRG from the list in Annex A.
100. SUS+ will apply the base price to spells with the BPT flag. Where satisfied that providers have achieved the best practice criteria, commissioners should make manual adjustments to the base price by applying the conditional top-up payment.
101. Commissioners determine compliance with best practice using reports compiled from data submitted by providers to the NHFD. The report is available quarterly in line with the SUS+ reporting timetable:<sup>38</sup> for example, the report for the April to June quarter will be available at the final reconciliation date. The additional best practice payment is therefore paid quarterly in arrears, with the base price paid as normal. Payment arrangements for NHFD records entered or completed outside the agreed timeframe must be negotiated locally.
102. Providers already have access to the NHFD through a lead clinician who is responsible for ensuring the quality and integrity of the data.
103. Commissioners may receive reports of NHFD data in one of two ways:

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<sup>38</sup> Before the final reconciliation point, providers will be given two weeks from the end of the quarter to input and edit any outstanding records. NHS Digital will then match the records to responsible commissioners, which will take a further two weeks. Once the commissioner data are uploaded, providers will be given another two weeks to correct any problems or omissions. The final data will therefore be available to commissioners six weeks after the end of the quarter.

- a. commissioners nominate a data representative with an NHS email account to register to access the NHFD website;<sup>39</sup> aggregated (anonymised) provider-level data will be provided in tabular, online reports
- b. NHS Digital, through its Data Services for Commissioners Regional Offices (DSCROs), will support the provision of data and analysis to underpin and provide evidence for best practice payments and validation with SUS+. The exact process should be negotiated locally.

104. NHFD is currently the only source of data relevant to the BPT criteria collected on a regular basis, with professional clinical oversight. Further information on best practice is available from the NHFD website including advice on:

- a. improving clinical care and secondary prevention
- b. service organisation
- c. how to make a case for the posts and resources necessary for the delivery of high quality, cost-effective care.

105. The pricing approach is designed to incentivise a change in practice and provide additional funding per patient to adequately fund the costs of best practice.

#### *Persistence with bone treatment after discharge*

106. Following feedback from the summer engagement document,<sup>40</sup> we have decided to defer the introduction of follow-up for persistence with bone treatment after discharge. We recommend that providers begin collecting this information, as we will be working towards introducing this in the future.

107. Many patients who have a hip fracture require some form of medication to reduce the risk of further fractures. Current practice should ensure that patients are assessed and treatment started or recommended in hospital, but it is well recognised that long-term compliance is poor and patients often do not take the tablets. Telephone follow-up is effective and significantly increases the rate of long-term compliance with treatment. It should be noted that the requirement depends on the follow-up taking place and not on patient compliance with medication. We suggest that telephone appointments take place 120 days from the date of discharge and that the data are recorded in the NHFD.

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<sup>39</sup> <http://www.nhfd.co.uk/>

<sup>40</sup> <https://improvement.nhs.uk/resources/national-tariff-policy-proposals-1718-and-1819/>

## 10. Heart failure

### *Purpose*

108. The aim of this BPT is to support best practice in the care of patients with heart failure as outlined in the NICE clinical guideline 108 *Chronic heart failure in adults: management*,<sup>41</sup> in clinical guideline 187 *Acute heart failure: diagnosis and management*<sup>42</sup> and the chronic heart failure quality standard (QS9).<sup>43</sup>

### *Design and criteria*

109. The payment of the BPT depends on providers meeting both these criteria:

- a) data submission to the National Heart Failure Audit (NHFA) with a target rate of 70%; this means that at least 70% of all eligible records need to be submitted to NHFA
- b) specialist input with a target rate of 60%; this means that at least 60% of all patients recorded in the heart failure audit have received specialist input as defined by NHFA.

110. The BPT price is higher than the standard HRG price to reflect higher costs that providers may incur in achieving best practice. Providers that do not meet both of the above criteria will receive a price 10% below the BPT level.

### *Specialist input to the management of heart failure*

111. Management of heart failure by heart failure and cardiology specialists results in better outcomes for patients. Not only is mortality reduced in hospital and in the month following discharge, but the quality of care received in hospital has marked patient benefit for some years following discharge, reducing subsequent admissions (NHFA 2013/14<sup>44</sup>). Specialist input is also associated with patients receiving other evidence-based care processes.

112. NHFA defines specialist input as a face-to-face review with a consultant cardiologist, or a consultant with a subspecialist interest in heart failure, or a specialist registrar or a heart failure nurse specialist. This is the definition on which success against the BPT will be judged alongside the data submission rate. For clarity, this should exclude non-specific categories (for example, 'Other' or 'Unknown'). Providers should be able to show they have sufficient skill

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<sup>41</sup> <https://www.nice.org.uk/guidance/cg108>

<sup>42</sup> <https://www.nice.org.uk/guidance/cg187>

<sup>43</sup> <https://www.nice.org.uk/guidance/qs9>

<sup>44</sup> <http://www.hqip.org.uk/resources/national-heart-failure-audit-report-2014/>

mix to provide specialist input for at least 60% of all non-elective heart failure admissions.

113. The threshold for specialist input has been set relatively low to enable providers to make progress in meeting best practice in the early years of full national implementation. We anticipate this rate will be revised upwards in the future, along with a review of the care processes incentivised in the BPT.

#### *Submission of data to NHFA*

114. The NHFA was established in 2007 to monitor the care and treatment of patients admitted to hospital in England and Wales with heart failure. It collects and reports data based on recommended clinical indicators and the outcomes of acute patients discharged from hospital with a primary diagnosis of heart failure. Further information can be found on the National Institute for Cardiovascular Outcomes Research (NICOR) website.<sup>45</sup>
115. Submitting data to NHFA will enable providers and commissioners to benchmark services, identify areas for improvement and monitor progress in improvements in the care of people with heart failure.

#### *Operational*

116. The BPT applies at the HRG level for all relevant non-elective admissions.
117. SUS+ will automate payment of the base price. Using a guide developed by NICOR,<sup>46</sup> providers will be required to submit a validation report to commissioners. Where satisfied that providers have achieved the best practice criteria, commissioners should manually adjust the base price by applying the conditional top-up payment. Success against the best practice criteria is measured at provider level.
118. Meeting best practice criteria, and payment of the BPT, should be based on the latest available data. We recommend that payment is made retrospectively.
119. Specialist input for the BPT is defined as a face-to-face review with a consultant cardiologist, or a consultant with a subspecialty interest in heart failure, or a specialist registrar or a heart failure nurse specialist. For clarity, this should exclude non-specific categories (for example, 'Other' or 'Unknown'). Providers should be able to present a list of members identified as heart failure specialists to commissioners if requested for payment purposes.

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<sup>45</sup> <http://www.ucl.ac.uk/nicor>

<sup>46</sup> This will be available at <https://www.ucl.ac.uk/nicor>.

120. Commissioners may wish to consider the skills and competencies required by healthcare professionals to provide the expected outcomes for people with heart failure. A further source of information is the Skills for Health website,<sup>47</sup> which includes several [competency tools](#)<sup>48</sup> on heart failure.
121. Commissioners may wish to review the NICE commissioning guide to support the commissioning of services for people with heart failure. In particular, the [NICE clinical guidelines on chronic heart failure](#)<sup>49</sup> and acute heart failure<sup>50</sup> outline the importance of the multidisciplinary team in the care of people with heart failure. The multidisciplinary team may be made up of several professionals who may work with the patient at any point in the care pathway. Commissioners may choose to work with providers to develop a multidisciplinary heart failure team if one is not already in place.
122. Commissioners and providers may wish to monitor whether reported improvements in the rate of specialist input correspond to improvements in other care processes measured by NHFA.
123. Commissioners and providers will need to work together to ensure the accuracy of data submitted to NHFA to ensure fair and accurate payments are made.

## 11. Major trauma

### *Purpose*

124. The aim of the BPT for major trauma is to encourage best practice treatment and management of trauma patients within a regional trauma network. The BPT is paid for activity at major trauma centres for the most seriously injured patients.

### *Design and criteria*

125. The BPT is made up of two levels of payment differentiated by the injury severity score (ISS) of the patient and conditional on achieving the criteria set out below.
126. A level 1 BPT is payable for all patients with an ISS of more than eight providing that:
- a) the patient is treated in a major trauma centre

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<sup>47</sup> <http://www.skillsforhealth.org.uk/>

<sup>48</sup> <https://tools.skillsforhealth.org.uk/>

<sup>49</sup> <http://www.nice.org.uk/Guidance/CG108>

<sup>50</sup> <https://www.nice.org.uk/guidance/indevelopment/gid-cgwave0608>

- b) Trauma Audit and Research Network (TARN) data are completed and submitted within 25 days of discharge
- c) a rehabilitation prescription is completed for each patient and recorded on TARN
- d) any coroners' cases are flagged within TARN as being subject to delay to allow later payment
- e) tranexamic acid is administered within three hours of injury for patients receiving blood products
- f) if the patient is transferred as a non-emergency they must be admitted to the major trauma centre within two calendar days of referral from a trauma unit (TU).<sup>51</sup>

127. A level 2 BPT is payable for all patients with an ISS of 16 or more providing level 1 criteria are met and that:

- a) if the patient is admitted directly to the major trauma centre or transferred as an emergency, they must be received by a trauma team led by a consultant in the major trauma centre; the consultant can be from any specialty, but must be present within five minutes
- b) if the patient is transferred as a non-emergency, they must be admitted to the major trauma centre within two calendar days of referral from the trauma unit<sup>52</sup>
- c) patients admitted directly to a major trauma centre with a head injury (AIS 1+) and a Glasgow Coma Scale (GCS) score of less than 13 (or intubated pre-hospital), and who do not require emergency surgery or interventional radiology within one hour of admission, receive a head CT scan within 60 minutes of arrival.

128. While not currently a condition of level 1 payments, patients with severe injuries being admitted directly to the major trauma centre or transferred as an emergency should be received by a consultant-led trauma team as soon as possible (ideally within 30 minutes).

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<sup>51</sup> If there is any dispute around the timing of referral and arrival at the major trauma centre, this will be subject to local resolution.

<sup>52</sup> If there is any dispute around the timing of referral and arrival at the major trauma centre, this will be subject to local resolution.

### *Operational*

129. The BPT is not conditional on the patient's HRG being in the VA chapter (multiple injuries), and applies to both adults and children. Any patients eligible for the major trauma BPT are excluded from the marginal rate emergency admissions rule.
130. A patient cannot attract additional payments for both level 1 and level 2. For example, a patient with an ISS score of 17 would attract a maximum additional payment of the level 2 score, not both level 1 and level 2.
131. The BPT will not be applied through SUS+, and organisations will need to use the TARN database to support manual payment adjustments.

## **12. Non-ST segment elevation myocardial infarction (NSTEMI)**

132. This BPT is designed to improve the time from admission to receiving coronary angiography for people with NSTEMI. The current achievement rate nationally for this is 55% for people with NSTEMI undergoing coronary angiography do so within 72 hours of admission.
133. The BPT's scope includes patients who are transferred between hospitals to receive care, ie where a patient is transferred from one hospital to another to undergo the procedure, and so the time will be calculated from the admission time to the first hospital.

### *Purpose*

134. Myocardial infarction (MI) is usually caused by a blockage of a coronary artery producing tissue death and consequently the typical features of a heart attack: severe chest pain, changes on the electrocardiogram and raised concentrations of proteins released from the dying heart tissue into the blood. There are two types of MIs:
- a) ST segment elevation myocardial infarction (STEMI), which is generally caused by complete and persisting blockage of the coronary artery
  - b) non-ST segment elevation myocardial infarction (NSTEMI), reflecting partial or intermittent blockage of the coronary artery.
135. According to NICE quality standards (Q68) timely angioplasty, followed by percutaneous coronary intervention (PCI) where required, is associated with improved outcomes. However, only 55% of people with NSTEMI undergoing coronary angiography do so within 72 hours of admission. The purpose of the NSTEMI BPT is to improve adherence to this quality standard.

### *Design and criteria*

136. Compliance with the BPT will be measured through the Myocardial Ischaemia National Audit Project (MINAP) database, which collects data on time from admission (arrival at hospital<sup>53</sup>) to coronary angioplasty for patients experiencing both NSTEMI and STEMI events.
137. Best practice will be considered achieved where 60% of NSTEMI patients receiving coronary angiography (with follow-on percutaneous coronary intervention [PCI] if indicated) within 72 hours of first admission to hospital. For patients who are transferred between hospitals to undergo the procedure, the time will be calculated from admission (arrival) to the first hospital (arrival at non-interventional hospital).

### *Operational*

138. The BPT applies at sub-HRG level (flag 'BP50') for all relevant non-elective admissions:
- a) emergency/transfer (21-25, 2A, 2B, 2C, 2D, 28, 81)
  - b) patient aged 19 or over (on admission).
139. The BPT is made up of two components: a base price and a BPT price (based on a conditional top-up payment added to the base price). The base price is payable for all activity irrespective of whether the characteristics of best practice are met. The BPT price is payable only if all of the characteristics are achieved. SUS+ will automate payment of the base price.
140. Using a guide developed by NICOR,<sup>54</sup> providers will be required to submit a validation report to commissioners. Where satisfied that providers have achieved the best practice criteria, commissioners should manually adjust the base price by applying the conditional top-up. Success against the best practice criteria is measured at provider level and for the provider that undertakes the procedure.
141. The BPT applies at a sub-HRG level to ICD10 code I214 'acute subendocardial myocardial infarction'. This is because the HRGs will cover a larger group of patients than the BPT intends. The HRGs the BPT may apply to are listed in Annex A.

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<sup>53</sup> The definitions for arrival time at hospital as used in the BPT and recorded by MINAP can be found at [www.ucl.ac.uk/nicor/audits/minap/datasets](http://www.ucl.ac.uk/nicor/audits/minap/datasets)

<sup>54</sup> This will be available at <https://www.ucl.ac.uk/nicor>.

142. Meeting best practice criteria, and payment of the BPT, should be based on the latest available data.

### 13. Outpatient procedures

#### *Purpose*

143. Performing procedures in an outpatient setting, where clinically appropriate, offers advantages to both the patient and the provider. Outpatient procedures provide the patient with a quicker recovery, as well as allowing them to recuperate at home. There are also wider benefits, importantly that patients can get back to work and daily life sooner. Providers benefit from reduced operating theatre and anaesthetic time.

144. The BPT covers three procedures:

- a) diagnostic cystoscopy
- b) diagnostic hysteroscopy
- c) hysteroscopic sterilisation.

145. For diagnostic cystoscopy and diagnostic hysteroscopy, the aim is to shift activity into the outpatient setting.

146. For hysteroscopic sterilisation the aim is to maintain the high outpatient rate and remove price as a barrier to greater use of hysteroscopic over laparoscopic sterilisation where clinically appropriate and chosen by patients. It is not clear why the reported costs do not accurately reflect the true cost of hysteroscopic sterilisation, but evidence suggests that the device-related costs may not be fully apportioned to the HRG.

#### *Design and criteria*

147. For the diagnostic procedures, the BPT is made up of a pair of prices for each procedure: one applied to outpatient settings, the other to ordinary and day-case elective admissions. By paying a higher price for procedures in the outpatient setting, the BPT creates a financial incentive for providers to treat patients there.

148. For hysteroscopic sterilisation, the BPT is a single price that applies to the outpatient setting. Reimbursement for any day case or ordinary elective admissions will be the conventional national price for MA10Z.

### *Operational*

149. The BPTs for all three outpatient procedures apply at the HRG level. SUS+ will automate payment by applying the relevant prices to the HRG. Annex A details the prices, relevant HRGs and the relevant OPCS codes.
150. To qualify for the outpatient BPT, the procedure must occur and be coded to an outpatient setting as defined by the NHS Data Dictionary. Organisations may find it helpful to note that clinically, for these particular outpatient procedures, we expect that any procedures recorded as a day case would be performed in a theatre-based setting with the administration of a general anaesthetic, and any procedures recorded as an outpatient would be performed in a non-theatre based setting with local or no anaesthetic.

## **14. Paediatric diabetes**

### *Purpose*

151. The aim of the paediatric diabetes BPT is to enable access to consistent, high quality management of diabetes. The BPT is an annual payment that covers outpatient care from the date of discharge from hospital after the initial diagnosis until the patient is transferred to adult services at the age of 19. Before implementing or paying the BPT, providers and commissioners will need to agree:
- data flows and supporting information to show that the best practice criteria have been achieved
  - processes for identifying activity already covered by the year-of-care tariff.

### *Design and criteria*

152. Since April 2014, the BPT has also included inpatient admissions for managing diabetes in these patients, so providers will no longer be reimbursed separately for these. They will continue to be reimbursed for admissions for these patients that are not related to diabetes.
153. The best practice service specification is:
- a) On diagnosis, a young person's diabetes is to be discussed with a senior member of the paediatric diabetes team within 24 hours of presentation. A senior member is defined as a doctor or paediatric specialist nurse with 'appropriate training' in paediatric diabetes. Information on what constitutes

'appropriately trained' is available from the [British Society for Paediatric Endocrinology and Diabetes](#)<sup>55</sup> or the [Royal College of Nursing](#).<sup>56</sup>

- b) All new patients must be seen by a member of the specialist paediatric diabetes team on the next working day.
- c) Each provider unit can provide evidence that each patient has received a structured education programme, tailored to their needs and their family's needs, both at initial diagnosis and at ongoing updates throughout their attendance at the paediatric diabetes clinic.
- d) Each patient is offered a minimum of four clinic appointments per year with a multidisciplinary team (MDT), defined as including a paediatric diabetes specialist nurse, dietitian and doctor. At every visit, the patient must be seen by the doctor, who must be a consultant or associate specialist/specialty doctor with training in paediatric diabetes or a specialist registrar training in paediatric diabetes, under the supervision of an appropriately trained consultant (see above). The dietitian must be a paediatric dietitian with training in diabetes or equivalent appropriate experience.
- e) Each patient is offered additional contact by the diabetes specialist team for check-ups, telephone contacts, school visits, troubleshooting, advice, support, etc. Eight contacts per year are recommended as a minimum.
- f) Each patient is offered at least one additional appointment per year with a paediatric dietitian with training in diabetes (or equivalent appropriate experience).
- g) Each patient is offered a minimum of four haemoglobin HbA1C measurements per year. All results must be available and recorded at each MDT clinic appointment.
- h) All eligible patients must be offered annual screening as recommended by [current NICE guidance](#).<sup>57</sup> Retinopathy screening must be performed by regional screening services in line with the national retinopathy screening programme, which is not covered by the paediatric diabetes BPT and is funded separately. Where retinopathy is identified, timely and appropriate, referral to ophthalmology must be provided by the regional screening programme.

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<sup>55</sup> <http://www.bsped.org.uk/about/index.aspx>

<sup>56</sup> <https://www.rcn.org.uk/library/subject-guides/children-and-young-people-childrens-endocrine>

<sup>57</sup> <https://www.nice.org.uk/guidance/conditions-and-diseases/diabetes-and-other-endocrinal--nutritional-and-metabolic-conditions/diabetes>

- i) Each patient must be annually assessed by their MDT for whether they need care from a clinical psychologist and access to psychological support, which the MDT itself should be able to provide.
- j) Each provider must participate in the annual National Paediatric Diabetes Audit.
- k) Each provider must actively participate in the local paediatric diabetes network. They must contribute to funding the network administrator, and show they attended at least 60% of regional network meetings. They should also participate in peer review.
- l) Each provider unit must give patients and their families 24-hour access to advice and support. This should also include 24-hour expert advice to fellow health professionals on the management of patients with diabetes admitted acutely, with a clear escalation policy on when further advice on managing diabetes emergencies should be sought. A provider of expert advice must be fully trained and experienced in managing paediatric diabetes emergencies.
- m) Each provider unit must have a clear policy for transition to adult services.
- n) Each unit will have an operational policy, which must include a structured 'high HbA1C' policy, a clearly defined 'did not attend/was not brought' policy, taking into account local safeguarding children board policies, and evidence of patient feedback on the service.

### *Operational*

154. Commissioners will monitor compliance with these criteria through terms in the negotiated contracts, which may include local records of clinic attendances, local education programmes, etc. We expect that patient and public involvement will be part of this feedback and monitoring process. We also expect that compliance with all criteria will need to be demonstrated for at least 90% of patients attending the clinic.
155. The BPT does not cover the cost of insulin pumps and associated consumables. However, it does include patient education about using insulin pumps, whether provided in outpatients or as a day case. The BPT also covers insulin and blood glucose testing strips prescribed as an emergency by the specialist team. Routine prescriptions for insulin, blood glucose testing and ketone monitoring are issued in primary care and so are not part of the BPT.
156. Where commissioners are satisfied that the standards have been achieved, the BPT must be paid for all patients attending the clinic.

157. If a provider admits a patient who is not registered with it, it must invoice the provider with which the patient is registered. If the patient is not registered with a provider, the admitting provider must invoice the relevant commissioner.
158. If a patient is referred elsewhere for a second opinion, shared care or full transfer of care, the referring and receiving centres will need to agree subsequent division of funding using a service level agreement. The precise division of funding will need to be negotiated locally.

## 15. Paediatric epilepsy

### *Purpose*

159. There are continuing concerns regarding quality of and variance in care for patients with epilepsy in the UK compared with the recommendations in NICE clinical guideline 137 *Epilepsies: diagnosis and management*.<sup>58</sup> This includes misdiagnosis, misclassification, unsuitable drug choices, under-referral of epilepsy surgery candidates, inadequate communication, inadequate comorbidity management and school support.
160. A major issue in the variation in practice is the lack of epilepsy specialist nurses (ESNs). Services should develop care pathways that include appropriate access to ESNs and also paediatricians with expertise in epilepsies. ESNs form a fundamental bridge between primary, secondary and tertiary care and ensure that epilepsy is managed in the community and school when needed rather than just in the hospital ward or clinic. The aim of the BPT is to enable access to consistent high quality management of children's epilepsy services.

### *Design and criteria*

161. The BPT is payable to providers of a service that meets these criteria:
- a. Paediatric consultants<sup>59</sup> with expertise in epilepsies lead the service, with ESNs performing an integral role.
  - b. Patients have a comprehensive care plan agreed between the patient, family and/or carers and both the paediatric consultant with expertise in epilepsies and the ESN. This must cover lifestyle issues as well as medical issues.

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<sup>58</sup> <http://guidance.nice.org.uk/CG137>

<sup>59</sup> Paediatric consultants (or associate specialists) with expertise in epilepsies are defined as having (a) job plans and appraisals that demonstrate appropriate training and ongoing education in paediatric epilepsies: for example, paediatric epilepsy training (PET2); (b) epilepsy as a significant part of their clinical workload (equivalent to at least one session a week); (c) undertake regular peer review of practice.

- c. The follow-up appointments provide sufficient time with both the paediatric consultant (or associate specialist) with expertise in epilepsies **and** the ESN to manage the patient against the agreed care plan. As a guide, it is expected that the patient spends at least 20 minutes with each professional (either at the same time or in successive slots). All children with epilepsy must be able to be reviewed when clinically required. Outpatient booking systems must be able to guarantee these follow-up appointments.
- d. The service has evidence of shared care and referral pathways to tertiary paediatric neurology services, transition and referral pathways to adult services, and continuing full participation in the Epilepsy 12 national audit.

162. The BPT is a payment for each attendance for follow-up appointments and covers outpatient care after first acute or outpatient assessment, for patients with a diagnosis of probable epilepsy until they transfer to adult services. Activity meeting the best practice criteria must be coded against the TFC 223 Paediatric Epilepsy.

#### *Operational*

163. Commissioners and providers must monitor compliance with the criteria locally to determine the relevant payment against the TFC 223. Where a provider codes to TFC 223 but is unable to demonstrate eligibility for the BPT, then the price for TFC 420 (Paediatrics) applies and a local adjustment will be required.

164. The BPT does not include costs related to:

- acute inpatient care
- new patient assessment
- epilepsy investigation and treatment costs (eg electroencephalography, magnetic resonance imaging, drugs, surgery, vagal nerve stimulation, ketogenic diet, etc) with the exception of the costs of blood tests
- the costs of the more complex epilepsy patients who, in line with NICE guidelines, have shared care with a paediatric neurologist and are coded to the paediatric neurology TFC; it is anticipated that about one third of epilepsy patients fall into this category
- costs of child and adolescent mental health services (CAMHS), other therapists, etc
- costs of assessment and treatment for other health problems.

165. SUS+ will automate payment by applying the BPT to activity coded to TFC 223 paediatric epilepsy. Activity must only be coded to this TFC if it meets the characteristics of best practice.
166. The pricing approach is designed to adequately reimburse the costs of best practice. The activity covered by the BPT is currently captured within the general paediatric TFC, which does not reflect the costs of best practice.

## 16. Parkinson's disease

### *Purpose*

167. Parkinson's therapy in secondary care settings ranges from basic (a care of elderly or neurology review) to comprehensive (multidisciplinary review with full access to therapy services).
168. The aim of this BPT is to enable access to consistent high quality management of Parkinson's disease, in line with NICE clinical guidelines, to reduce unscheduled care and length of stay in hospital.

### *Design and criteria*

169. The BPT applies to adults with a probable diagnosis of Parkinson's disease where care during the first year is delivered in line with the criteria below. This is an annual payment to reflect the costs from the initial referral date for the first year of care only. The BPT excludes the costs of admitted patient care and the cost of any items not covered by national prices.
170. The criteria for best practice are:
- a) Referrals from primary care with suspected Parkinson's disease must be seen by a movement disorder specialist (neurology/elderly care) within six weeks. These timescales apply to all patients for the purposes of the BPT, but the expectation is that new referrals in later stages of disease with more complex problems will continue to be seen within two weeks.
  - b) Each patient must receive regular follow-up and diagnostic review with a specialist nurse at least every six months with a process to identify the appropriate period of follow-up. Each patient must have a nominated person identified to continue with follow-up and diagnostic review.
  - c) All patients must be referred to a Parkinson's disease nurse specialist (PDNS) (local names may include neurology nurse specialist or movement disorder specialist) who will be responsible for co-ordinating care.

- d) Evidence to demonstrate that the provider is using recognised tools: for example, patient feedback, non-motor symptoms (NMS) screening tool and cognitive assessment tool.
- e) Patients must be offered therapy assessment within one year (including physiotherapist, speech and language therapist and occupational therapist). The BPT does not include the costs of the therapy assessment. However, payment depends on therapy assessment being offered (irrespective of whether the patient takes this up).<sup>60</sup>

171. Commissioners must monitor compliance with the criteria through evidence provided by providers, which may include local records of clinic attendances, local education programmes, etc. Where a provider does not meet all the criteria, activity should continue to be paid at locally agreed rates.

172. The criteria for the BPT are underpinned by:

- a) NICE clinical guideline 35, *Parkinson's disease in over 20s: diagnosis and management*, June 2006<sup>61</sup>
- b) National Service Framework for long-term conditions. Department of Health, 2005<sup>62</sup>
- c) recommendations 12 and 13 of *Local adult neurology services for the next decade – report of a working party*, Association of British Neurologists and the Royal College of Physicians, June 2011<sup>63</sup>
- d) *The European Parkinson's disease standards of care consensus statement*, European Parkinson's Disease Association, Volume I, 2011.<sup>64</sup>

### *Operational*

173. SUS+ will not apply the BPT and there is no discrete TFC for Parkinson's disease activity. Organisations will therefore need to identify activity and administer the BPTs locally. Therefore, activity meeting best practice will need to be excluded from the CDS to avoid double payment. Providers achieve this by including an equals sign (=) as the last significant character of the six-

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<sup>60</sup> In a few circumstances therapy assessment is not relevant and where providers are able to evidence this, the BPT still applies.

<sup>61</sup> <https://www.nice.org.uk/guidance/cg35>

<sup>62</sup> <https://www.gov.uk/government/publications/quality-standards-for-supporting-people-with-long-term-conditions>

<sup>63</sup> <http://shop.rcplondon.ac.uk/products/local-adult-neurology-services-for-the-next-decade?variant=6595193733>

<sup>64</sup> <http://www.epda.eu.com/en/#>

character CDS data item Commissioning Serial Number. The equals sign will exclude the episode and a conventional price will not be applied.

174. One way to identify the activity applicable for consideration against the BPT is to use the non-mandatory diagnosis codes in outpatients (G20X).
175. If a patient is referred elsewhere for a second opinion, shared care or full transfer of care, the referring and receiving centres will need to agree subsequent division of funding using a service level agreement. The precise division of funding will need to be negotiated locally.
176. The pricing approach is designed to adequately reimburse the costs of best practice. At present, the activity covered by the BPT is captured within a non-mandatory neurology TFC 400, which does not reflect the costs of best practice.

## 17. Pleural effusion

### *Purpose*

177. Historically, many patients presenting at A&E with a pleural effusion were admitted unnecessarily. They often receive imaging-related pleural management, introducing a delay in the patient's journey and potentially leading to an unnecessary increase in length of stay.
178. The aim of this BPT is to incentivise a shift in activity away from non-elective admissions to pleural effusions being performed on a planned elective basis under ultrasound control.

### *Design and criteria*

179. This is achieved by setting the price for elective admissions relatively higher than the non-elective price, therefore creating a financial incentive for the management of patients on a day-case basis. In setting the BPT, we have assumed that 50% of current admissions to DZ16N are suitable to manage on a day-case basis (either YD04Z or YD05Z). These figures are based on assessment using expert clinical opinion. The remaining admissions comprise those unsuitable either because of complications or comorbidities.
180. British Thoracic Society guidelines and the National Patient Safety Agency stipulate that pleural effusion should be performed using bedside ultrasound guidance when determining the best site for aspiration and or biopsy.
181. The BPT applies only to adults with undiagnosed unilateral pleural effusions.

### *Operational*

182. The price for emergency admissions and day cases applies at the HRG level. SUS+ will automate payment where the spell meets these criteria:

- a) patient aged 19 or older
- b) elective admission method (11, 12 or 13)
- c) HRG code from the list in Annex A.

183. We anticipate that some patients will need to be admitted immediately to an acute medical unit to relieve breathlessness before being discharged with a booked day-case appointment. This approach will ensure we do not disqualify providers from receiving the BPT where they deliver care in line with the best practice criteria.

184. As with other BPTs designed to incentivise a shift in activity between settings, this BPT is made up of a pair of prices that create a financial incentive, without costing commissioners more. This is achieved by:

- a) departing from the conventional pricing structure, with the price for the elective care setting higher than the non-elective price
- b) decreasing the absolute level of prices for both settings to reflect the lower cost of providing a greater proportion of care in the elective setting.

## **18. Primary hip and knee replacement outcomes**

### *Purpose*

185. In 2017/19 we will amend the outlier criteria requirement for the primary hip and knee replacement outcomes BPT.

186. The purpose of the BPT for primary hip and knee replacements is to link payment to the outcomes that are important to the patient. The aim is to reduce the unexplained variation between providers in the outcomes reported by patients.

### *The design and criteria*

187. The criteria for payment of the BPT are:

- a) the provider not having an average health gain significantly below the national average
- b) the provider adhering to these data submission standards:

- i. a minimum Patient Reported Outcome Measures (PROMs) participation rate of 50%
- ii. a minimum National Joint Registry (NJR) compliance rate of 85%
- iii. an NJR unknown consent rate below 15%.

188. Providers also will not receive the BPT if they are:

- a) below the lower 99.8% control limit based on the most recently published data
- b) below the lower 95% control limit based on the most recently published previous two years' data.

189. When the BPT was introduced in 2014/15, the minimum thresholds for data submissions were intentionally set lower than the ones providers should aspire to. This was intended to allow providers time to adopt mechanisms to improve submission rates. In response to this, in 2016/17 the thresholds for NJR compliance and consent were increased.

190. The data necessary to measure adherence to the payment criteria, along with further information relating to both collections, are available on these websites:

- a) PROMs <http://digital.nhs.uk/proms>
- b) NJR <http://www.njrcentre.org.uk/>.

### *Operational*

191. SUS+ will automate payment of the BPT price for all eligible activity.

192. Commissioners will need to monitor PROMs and NJR publications to determine whether providers are complying with the payment criteria. Where this is not the case, commissioners should manually recover to the base (non-best practice) price until an improvement is shown in the published data and the BPT requirements are met.

193. The aim of the BPT is to improve patient outcomes and it should not be seen as a way for commissioners to reduce funding. Therefore, before adjusting payment, it is expected commissioners will discuss the data with providers and support any action to improve outcomes.

194. To help understand the PROMs programme, such as how the data are presented or interpreted, NHS England has published a 'bite-size guide'.<sup>65</sup>

195. A national variation exists for this BPT by which commissioners must continue to pay the BPT price, even when providers are not meeting all the best practice payment criteria. Section 5 of the 2017/19 National Tariff Payment System gives details.

#### *Patient Reported Outcome Measures (PROMs)*

196. PROMs assess the quality of care delivered to NHS patients from the patient perspective. Information is collected about a patient's health status (or health-related quality of life) before surgery and again six months after the procedure, with any change in health state attributed to the intervention. For this BPT, changes in health state are assessed using the casemix-adjusted condition-specific Oxford Hip Score and Oxford Knee Score for primary joint replacements only.

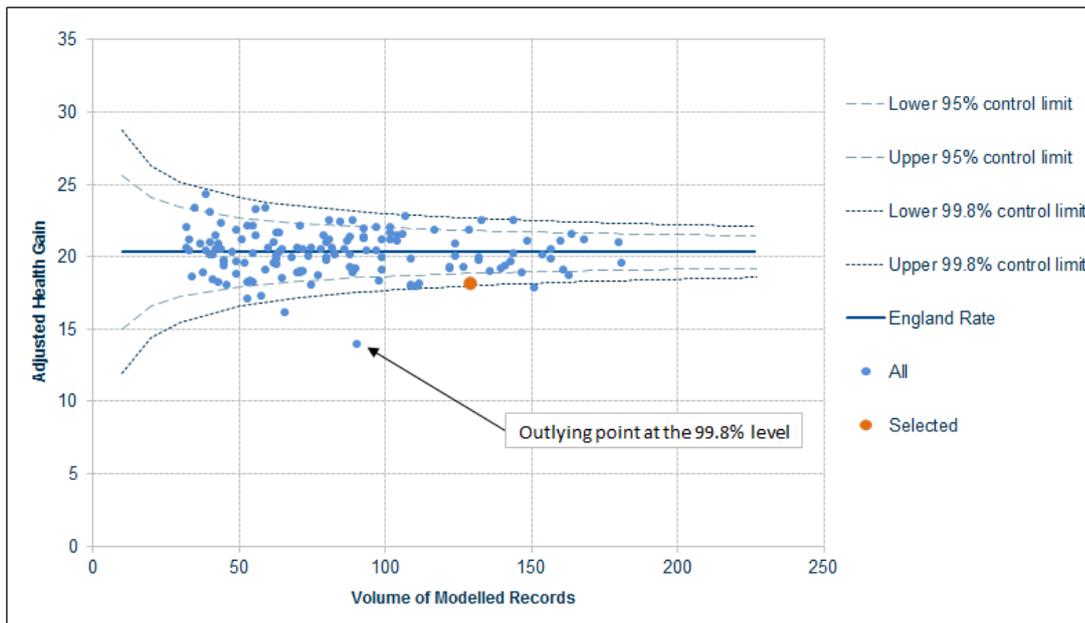
197. Providers' average health gain is presented, as in Figure 1, as a funnel plot and compared with the national average of all providers in England. The funnel plot indicates whether a provider's health gain is statistically significantly different to the national average. According to the PROMs publication, providers are outliers if they have:

- a) below the lower 95% significance level labelled 'alerts'
- b) below the 99.8% significance level labelled 'alarms'.

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<sup>65</sup> <https://www.england.nhs.uk/wp-content/uploads/2016/09/patient-reprtd-outcm-measure.pdf>

Figure 1: Example of PROMs provider score comparison<sup>66</sup>



198. Whether identified as an outlier or not, all providers should work to achieve the best possible outcomes as outliers are identified relative to the national average, which may change as the data are updated throughout the year.
199. To make the comparisons between providers' outcomes meaningful, a procedure-specific casemix adjustment is applied to the PROMs data before inclusion in the funnel plot. These specific adjustments are based on statistical models that predict expected outcomes based on patient characteristics and other factors beyond providers' control. This allows more accurate comparisons between the average outcomes achieved by different providers. It also means that providers cannot improve their relative position by selecting patients of a particular type as it is the difference between actual and expected health gain that matters, not simply the absolute health gain.
200. Further information on the casemix adjustment methodology is published by NHS England.<sup>67</sup>
201. The method of identifying outliers only works when providers have a minimum of 30 completed questionnaires. When this is not the case, payment of the BPT is based on providers meeting the data submission requirements of best practice.

<sup>66</sup> Chart adapted from NHS Digital's provider score comparison tool, available at <http://digital.nhs.uk/proms>

<sup>67</sup> <http://www.england.nhs.uk/statistics/statistical-work-areas/proms/>

202. The first of these requirements is that providers achieve a minimum PROMs participation rate. This rate is calculated as the number of preoperative PROMs questionnaires completed, relative to the number of eligible Hospital Episode Statistics (HES) spells.
203. The PROMs publication also reports other outcome and data submission statistics for primary hip and knee replacements.<sup>68</sup> While not a condition of this BPT, these may be considered as evidence of good practice.
204. PROMs data are updated on a cumulative basis, meaning the data become more complete over the year. Because the postoperative questionnaire is not sent out until six months after surgery, compliance to the BPT will need to be assessed against the latest available data at the time of payment. Organisation-level data are made available each quarter (typically in February, May, August and November). Data are provisional until a final annual publication is released each year, but for the BPT the provisional data shall be used.
205. In some instances the latest participation figures will relate to a different period than the outcome measure, as postoperative questionnaires are not sent out until six months after surgery and so subject to a greater delay.<sup>69</sup>

#### *National Joint Registry*

206. In addition to PROMs outcome and participation, payment of this BPT is conditional on data submitted to NJR.
207. NJR is part of the National Clinical Audits and Patient Outcomes Programme and aims to improve patient care by collecting information about joint replacement prostheses and surgical techniques to provide an early warning of issues related to patient safety. Providers are required to upload information to the registry after joint replacement, which NJR uses to support quality improvements and best practice through its monitoring and reporting of the outcomes achieved by different prostheses, surgeons and providers. NJR also supports choice and policy decisions through the data published in its annual report.
208. Payment of the BPT is conditional on providers meeting minimum thresholds regarding two aspects of the NJR data:
- a) compliance – measured as procedures uploaded relative to the number of eligible spells recorded in HES

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<sup>68</sup> These include EQ5D Index, EQ5D VAS and linkage, issue and response rates.

<sup>69</sup> Although questionnaires are sent out six months after surgery, published outcomes will be subject to a further lag while questionnaires are completed, returned and processed.

b) consent – measured as the proportion of uploaded procedures to which patient consent was not requested or is unknown.

209. As with the PROMs data, there is a short lag between procedure and these being made available through NJR publications. Therefore, commissioners should base compliance on the latest available data at the time of payment.

210. Although independent sector providers do submit data to NJR, it has no way of cross-checking compliance as it has no comparator for private (non-NHS) activity – unlike NHS providers, where NJR can check against HES. This is an area NJR is working on, but until there is a solution for the purposes of the BPT this criterion would not apply. However, you should continue to seek assurance from the provider that it is submitting relevant information to NJR.

### *Data quality*

211. Participation in the data collections is included to improve the data quality and the accuracy with which outcomes are reported. PROMs participation rates may be improved by distributing the preoperative questionnaires in a structured and organised way. Integrating the process into the general preoperative assessment routine is a good way to help ensure high coverage. Providers may also work with their individual supplier who delivers and collects the questionnaires to find a solution that meets their individual needs.

212. PROMs participation rates for a few providers may be greater than 100%. This occurs where the number of PROMs questionnaires returned exceeds the activity recorded in HES. This can occur for a number of reasons: for example, where a provider administers the PROMs questionnaire but the procedure is either carried out at another provider due to subcontracting arrangements, or the procedure is not carried out at all due to unforeseen circumstances. Where this causes issues with assessing adherence to the best practice characteristics, providers and commissioners should reach local agreement on whether thresholds are met.

213. While not a condition of this BPT, there are some things which providers can do to improve the accuracy of their reported rates:

- a) Some providers choose to administer the preoperative PROMs questionnaire at a pre-assessment clinic before admission. This means that questionnaires may be received for cancelled operations for which there is no episode in HES. Administering questionnaires closer to, or actually on the day of admission may reduce the chances of this happening.
- b) Clinical coding problems could mean that questionnaires cannot be linked to HES because of poor or incomplete clinical coding. Ensuring that all procedures are fully coded would help this.

214. NJR compliance rates reflect the extent to which eligible hip and knee joint replacement procedures recorded in HES correspond to a record in NJR. These compliance rates may be reported as greater than 100% when the number of records uploaded to the NJR exceeds a provider's activity recorded in HES. This may reflect inaccuracies in the coding of HES data, or may be where activity is subcontracted to another provider, so that HES reports activity at the primary provider but the corresponding NJR record is recorded against the subcontracted provider.
215. To improve NJR compliance, a provider must ensure that both NJR and HES data accurately reflect joint replacement activity undertaken within and on behalf of the organisation. Providers should work with their local NJR regional co-ordinator to address any issues in NJR compliance.

### *Improving outcomes*

216. Many factors affect patient outcomes, and the way in which improvements are achieved is for local determination. However, the following suggestions may be useful in supporting discussions between providers and commissioners when planning improvements.
217. The headline PROMs scores can be broken into individual domain scores, and providers can request access to individual patient scores through NHS Digital. Providers might look at which questions they perform badly on to identify why they have been identified as an outlier.
218. Individual patient outcomes may also be compared against patient records to check for complications in surgery or comorbidities that may not be accounted for in the casemix adjustment. It would also be sensible to check whether patients attended rehabilitation sessions once discharged from hospital.
219. Reviewing the surgical techniques and prosthesis used against clinical guidelines and NJR best practice recommendations is another way in which providers may attempt to address poor outcomes. As well as the surgical procedure itself, outcomes can be improved by scrutinising the whole of the care pathway to ensure no other area is affecting outcomes.
220. Providers may also choose to work collaboratively with those identified as having outcomes significantly above average to learn from service design at other organisations. Alternatively, providers could conduct a clinical audit, a quality improvement process that seeks to improve patient care and outcomes through a systemic review of care against expected criteria.

## 19. Same-day emergency care

221. For 2017/19 we introduce seven new clinical scenarios into the scope of the BPT:

- abnormal liver function
- acutely hot painful joint
- chronic indwelling catheter related problems
- gastroenteritis
- transient ischaemic attack
- upper gastro-intestinal haemorrhage
- urinary tract infections.

### *Purpose*

222. With effective ambulatory emergency care in place, only patients who actually require admission to an acute hospital bed will be admitted and the length of stay will be appropriate for their acute care needs.

223. As a first step towards realising the potential of ambulatory emergency care, the initial aim of the same-day emergency care BPT is to promote ambulatory care management of patients who are currently admitted and stay overnight. The expected outcome is therefore a shift in the proportion of admitted patients from stays of one or two nights to same-day discharges. In the future, once datasets in the non-admitted setting become rich enough to capture the activity of ambulatory emergency care, there is the potential for nationally mandated prices to be developed to encourage further shifts from the admitted setting.

### *Design and criteria*

224. The scenarios have been selected from the NHS Institute's *Directory of ambulatory emergency care for adults*.<sup>70</sup> This lists potential clinical scenarios that can be managed using ambulatory emergency care. It presents ranges of potential delivery of ambulatory care, expressed as percentages of current non-zero length of stay admissions for each condition. The directory highlights the top 25 conditions ranked by volume of admissions with a length of stay of at least one day adjusted against potential for ambulatory care.

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<sup>70</sup> <http://www.ambulatoryemergencycare.org.uk/BAAEC/BAAEC-Resources/AEC-Directory>

225. Tables 9 and 10 show the current same-day rate for each of the existing and new clinical scenarios, as well as the 75th percentile same-day rate used to calculate the BPT. We believe that these rates represent a sufficiently challenging, but achievable, rate for most providers. They also mean there is a margin within the BPT prices to accommodate local circumstances where providers have started to implement ambulatory emergency care (AEC) pathways in the non-admitted setting.

**Table 9: Same-day emergency care clinical scenarios (in place in 2016/17)**

Clinical scenario	75th percentile rate (used to calculate BPT prices) (HES 2010/11) <sup>71</sup>	Current national average rate (HES 2011/12)
Abdominal pain	40%	35%
Anaemia	16%	14%
Bladder outflow obstruction	30%	24%
Community-acquired pneumonia	24%	20%
Low-risk pubic rami	13%	10%
Minor head injury	64%	56%
Supraventricular tachycardias (SVT) including atrial fibrillation (AF)	34%	29%
Epileptic seizure	35%	28%
Acute headache	43%	35%
Pulmonary embolism	18%	14%
Asthma	30%	24%
Lower respiratory tract infections without chronic obstructive pulmonary disease	49%	43%
Chest pain	50%	46%
Falls including syncope and collapse	41%	36%
Appendicular fractures not requiring immediate fixation	39%	29%
Cellulitis	35%	26%
Renal/ureteric stones	45%	35%
Deep vein thrombosis	75%	53%
Self-harm	56%	47%

<sup>71</sup> The BPT has been calculated by applying the 2014/15 relativities (based on HES 2010/11) to updated APC prices.

**Table 10: Additional clinical scenarios to be introduced in 2017/19**

Proposed clinical scenario	75 <sup>th</sup> percentile (HES 2013/14)	Current national average rate (HES 2013/14)
Abnormal liver function	30%	22%
Acutely hot painful joint	65%	55%
Chronic indwelling catheter-related problems	65%	55%
Gastroenteritis	35%	26%
Transient ischaemic attack	40%	30%
Urinary tract infections	30%	21%
Upper gastro-intestinal haemorrhage	60%	50%

226. It is not expected that all patients will be suitable for management on a same-day basis, and therefore the rates shown are below 100%.

227. The BPT for each clinical scenario listed is made up of a pair of prices: one applied to emergency admissions with a zero day length of stay, the other to emergency admissions with a stay of one or more days. By paying a higher price for same-day cases, the BPT creates an incentive for providers to manage patients in this way.

228. We do not expect the rate of emergency admissions will increase as a result of introducing the BPT for the clinical scenarios. We expect the rate either to remain constant with the proportion of zero stays increasing, or to reduce as providers implement additional same-day emergency care pathways appropriate to a non-admitted setting.

229. Commissioners will want to monitor and reassure themselves that the emergency admission rates are not increasing and length of stay is reducing. To support this, we suggest that organisations undertake a baseline exercise, at a population level, that accounts for any established pathways that currently avoid admissions.

230. Some providers have already implemented best practice in ambulatory emergency care and are able to manage patients outside the traditional hospital bed base. The BPT is specifically designed for those providers that are not so well advanced. It will be important to make sure the BPT does not disadvantage those already delivering best practice. Therefore, organisations may agree local payment variations that either encourage development of pathways outside the

admitted setting or ensure adequate reimbursement for acute providers that have already established such care models.

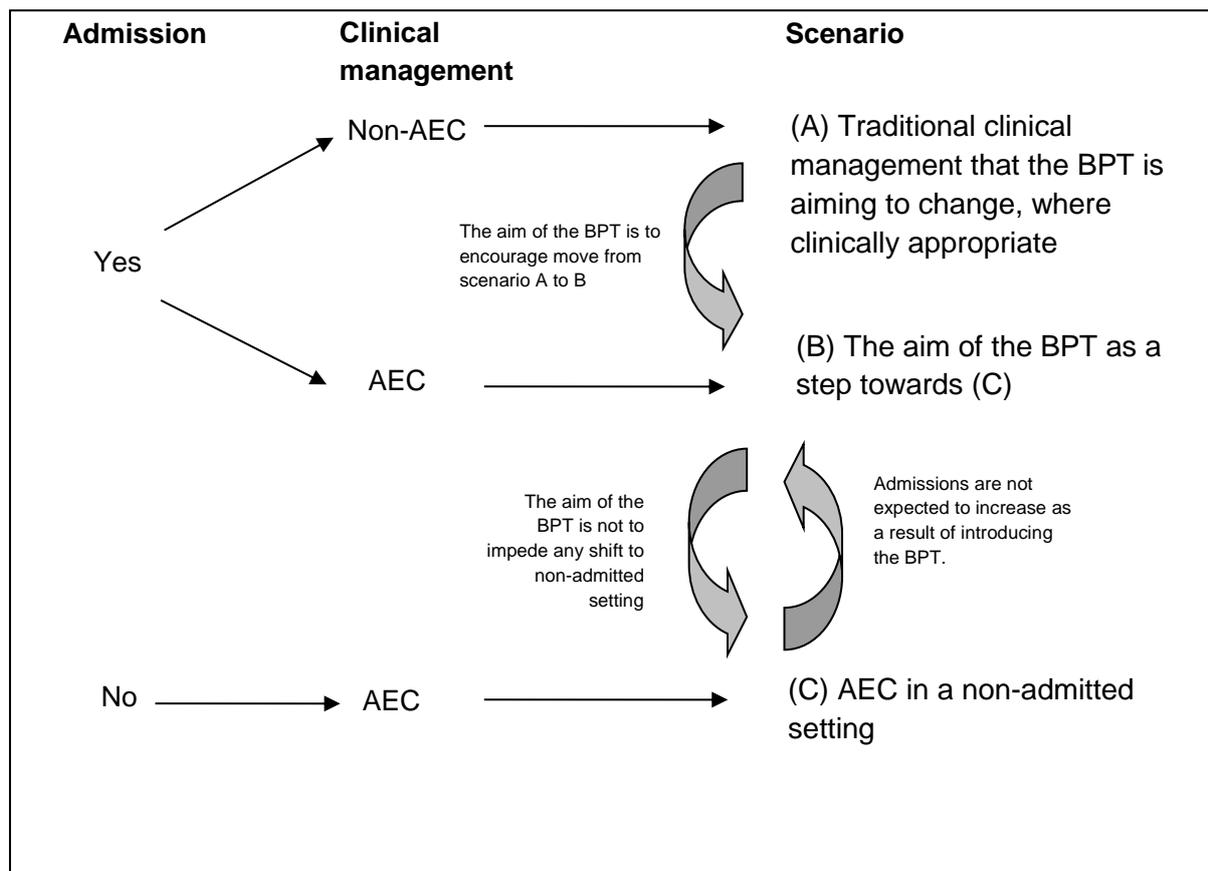
### *Operational*

231. For about half the scenarios, the BPT will apply to the HRG. For the remaining scenarios, the BPT will apply at the sub-HRG level. In both cases, the grouper and SUS+ will generate a BPT flag to automate payment.<sup>72</sup> The BPT flags are generated by the grouper and SUS+, where the spell meets these criteria:
- a) patient aged 19 or over
  - b) emergency admission method (admission method codes 21-25, 2A, 2B, 2C, 2D (or 28 if the provider has not implemented CDS 6.2)
  - c) a primary diagnosis from the list in Annex A (where at sub-HRG level)
  - d) an HRG from the list in Annex A.
232. Annex A of this document details the prices, whether they apply at HRG or sub-HRG level and the relevant ICD-10 codes.
233. Activity within the BPT's scope is included in the marginal rate emergency rule.
234. It has been brought to our attention that in a few cases SUS+ will automate payment of the BPT for a spell that is not a zero length of stay. This happens because SUS+ uses an adjusted length of stay. Any admission to critical care, rehabilitation bed nights and specialist palliative care is by definition not ambulatory emergency care, so local analyses should be used to identify these occurrences (identified by the presence of unbundled HRGs). We would expect providers and commissioners to work together to resolve any occurrences where the BPT is being incorrectly applied until this is amended in national systems.
235. Figure 2 illustrates the way in which the BPT needs to be flexible to recognise where good practice is already in place. It shows a stylised model of managing patients suitable for ambulatory emergency care.

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<sup>72</sup> This will only happen for same-day emergency care BPTs because SUS+ requires a flag to differentiate between currencies on the basis of zero day length of stay and greater than zero days length of stay.

**Figure 2: Model of managing patients suitable for ambulatory emergency care**



236. In relation to Scenario B, with the focus on the admitted setting, it is not that the BPT discourages the development of AEC pathways (move from Scenario B to Scenario C) – for example, where scheduled care in an urgent or routine outpatient setting is most appropriate. It is important that the national price does not constrain local innovation and service redesign.

237. In relation to Scenario C, if the acute provider avoids admitting patients suitable for AEC, it needs to receive adequate reimbursement for those patients who do not need to be admitted. We suggest that these patients attract reimbursement equivalent to the BPT's higher price (same-day admissions) rather than its lower price (overnight stays). Recognising that these are stylised scenarios and that reality is likely to be more complex, commissioners and providers will need to be reasonable in agreeing to what extent the flexibility is applied.

238. It is recognised that the time of attendance at hospital may in the first instance dictate whether an overnight stay is required. For simplicity, and to encourage the development of consistent responses to patient need regardless of time of day, we have set the threshold length of stay to be zero days and expect that,

as patients' time of access should be similar across providers, this should not disproportionately affect providers' income.

## 20. Transient ischaemic attack

### *Purpose*

239. The BPT is aligned with quality markers 5 and 6 of the National Stroke Strategy.

### *Design and criteria*

240. The BPT is made up of two components. Both components are conditional on meeting best practice characteristics, though they are payable separately.

Activity that does not meet best practice must not be reported against this TFC (TFC329). The components are:

- a) Component 1: payable to providers meeting minimum best practice criteria. Providers not meeting these criteria will be paid an alternative TFC (base) price (to be agreed locally). It is payable for all patients presenting at a specialist transient ischaemic attack (TIA) clinic (both high and lower risk, and regardless of final diagnosis). The criteria are:
  - i. all patients are assessed by a specialist stroke practitioner, who has training, skills and competence in diagnosing and managing TIA consistent with the UK Forum for Stroke Training<sup>73</sup>
  - ii. the non-admitted TIA service has both the facilities to diagnose and treat people with confirmed TIA, plus the facilities to identify and appropriately manage (which may include onward referral) people with conditions that could suggest TIA
  - iii. clinics are provided seven days a week, even if via a service level agreement with another provider
  - iv. all patients are diagnosed and treated within seven days of first presenting to any healthcare professional regardless of risk assessment
  - v. all patients diagnosed with TIA have the opportunity to receive a specialist TIA follow-up within one month of original diagnosis. Patients diagnosed as non-TIA are not subject to this criterion. The nature of the follow-up must be agreed locally and it is not expected that this will necessarily be delivered in the same setting as the initial diagnosis and treatment. Where multiple follow-ups are necessary, commissioners and providers agree the level of reimbursement locally.

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<sup>73</sup> <http://www.ukstrokeforum.org/>

b) Component 2: payable for investigation and treatment of high-risk patients<sup>74</sup> within 24 hours. The timeframe is aligned with the vital signs for TIAs and mini-stroke, and is defined as:

vi. the clock starts at the time of first relevant presentation<sup>75</sup> of the patient to any healthcare professional (eg a paramedic, GP, stroke physician, district nurse or A&E staff)

vii. the clock stops 24 hours after this initial contact, by which time all investigations<sup>76</sup> and treatments<sup>77</sup> should be completed.

241. The payment for investigation and treatment of high-risk patients within 24 hours is designed to incentivise providers to meet the ambition in QM5 of the Department of Health National Stroke Strategy, and has been set as a further 20% of the base price.

242. Activity occurring in TIA services meeting the minimum best practice criteria must be reported against TFC 329 – transient ischaemic attack – and applies in the non-admitted setting. Activity that does not meet best practice must not be reported against this TFC (TFC329).

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<sup>74</sup> Defined as ABCD2 score greater than or equal to 4. ABCD2 score is completed by the healthcare professional referring the patient. It is accepted that there are some additional factors that are not picked up by the ABCD2 score and it is legitimate that the assessing stroke consultant take account of these in using judgement to reclassify patients.

<sup>75</sup> Reclassification of patient risk does not alter clock start time.

<sup>76</sup> Blood tests and ECG (all patients); brain scan (if vascular territory or pathology uncertain; diffusion-weighted MRI is preferred, except where contra-indicated, when CT should be used); completion of carotid imaging (where indicated) and referral for timely carotid surgical intervention (where indicated).

<sup>77</sup> Aspirin, statin and control of blood pressure where needed or alternative if contra-indicated.

## *Operational*

243. SUS+ will:

- a) apply the price to activity coded under the appropriate TFC 329
- b) prevent generation of an outpatient procedure (eg where 24-hour electrocardiograms [ECGs] are performed) when reported against the TIA TFC.

244. SUS+ will not:

- a) record risk assessment of patients
- b) assess whether providers have met the 24-hour measure for high-risk patients; providers must supply risk assessment data and compliance to qualify for the additional payment
- c) apply pricing to follow-up attendances coded to TFC 329.

## **21. Short-stay emergency adjustments (SSEM) and BPTs**

245. The short-stay emergency adjustment (SSEM) is a mechanism for adjusting the national price that would otherwise be payable for short-stay emergency spells (less than two days) where a longer length of stay would generally be expected.

246. The adjusted price is based on rules concerning the average length of stay for the HRG: the higher the average length of stay, the lower the price. These adjustments are in Annex A.

247. For BPTs, the SSEM adjustment is not universally applicable because:

- a) SSEM only applies to diagnostic driven HRGs
- b) it does not apply, for example, when the BPT's purpose is to reduce length of stay.

248. Table 11 below is designed to help clarify when the SSEM applies and how the adjustment is to be applied in each case.

**Table 11: Application of SSEM**

Best practice tariff	SSEM applicable	SUS+ applied	Local adjustment required
COPD (new)	Yes	To base price	To conditional top-up
Non-ST segment elevation myocardial infarction	No – procedure driven	n/a	n/a
Acute stroke care	No – policy exempt	n/a	n/a
Diabetic ketoacidosis and hypoglycaemia	Yes	To base price	To conditional top-up
Fragility hip fracture	No – policy exempt	n/a	n/a
Heart failure	Yes	To base price	To conditional top-up
Same-day emergency care	No – policy exempt	n/a	n/a
Primary hip and knee replacement outcomes	No – procedure driven	n/a	n/a

249. Providers and commissioners should take this into account when agreeing local data flows and reconciliation processes. Where applicable any local adjustment should be made at the same rate as the core spell (as defined in Annex A).

## 22. Non-mandatory best practice tariffs

250. We publish non-mandated BPTs where we have clear evidence of the need to develop a best practice tariff but elements of it, such as the availability of national data, are not yet fully established. They are intended to be short-term measures to allow time to resolve any issues before mandating the BPT. They signal our future intent and allow providers time to start reviewing current working practices based on the evidence in the BPT. To implement a non-mandated BPT, the commissioner and provider have to agree the arrangements as a local variation.

### 22.1. Referral of appropriate post-myocardial infarction (STEMI) patients to cardiac rehabilitation

#### *Purpose*

251. Cardiac rehabilitation is a co-ordinated and structured programme designed to remove or reduce the underlying causes of cardiovascular disease. It provides the best possible physical, mental and social conditions so that people can, by their own efforts, continue to play a full part in their community. A healthier

lifestyle and slowed or reversed progression of cardiovascular disease can also be achieved (NICE guideline CG172).<sup>78</sup>

252. Myocardial infarction (MI) is usually caused by blockage of a coronary artery producing tissue death and consequently the typical features of a heart attack: severe chest pain, changes on the electrocardiogram and raised concentrations of proteins released from the dying heart tissue into the blood. There are two types of MIs:

- a) ST segment elevation myocardial infarction (STEMI), which is generally caused by complete and persisting blockage of the coronary artery
- b) non-ST segment elevation myocardial infarction (NSTEMI), reflecting partial or intermittent blockage of the coronary artery.

253. People who are referred to rehabilitation programmes early have better rates of uptake and adherence and hence improved clinical outcomes.

#### *Design and criteria*

254. The BPT is designed to incentivise referral to cardiac rehabilitation services of appropriate post-STEMI patients within three days of an initiating event<sup>79</sup> and before discharge. Nationally, an estimated 50% of people post-STEMI are referred within three days to cardiac rehabilitation. The target compliance rate is for 60%: ie 60% of patients need to be referred to cardiac rehabilitation services within three days of initiating event for the BPT payment to be made.

255. We recommend a 90% payment differential between the base and BPT price.

#### *Operational*

256. The HRGs in Table 12 below fall within the scope of this BPT.

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<sup>78</sup> <https://www.nice.org.uk/guidance/cg172/>

<sup>79</sup> This a data field in the National Audit of Cardiac Rehabilitation (NACR): 'the primary reason why the patient was referred to Cardiac Rehabilitation, this may be a diagnosis such as MI or treatment such as CABG'.

**Table 12: HRGs within the BPT's scope (where there is also a primary diagnosis included from Table 13)**

HRG code	HRG name
EB10A	Actual or Suspected Myocardial Infarction, with CC Score 13+
EB10B	Actual or Suspected Myocardial Infarction, with CC Score 10-12
EB10C	Actual or Suspected Myocardial Infarction, with CC Score 7-9
EB10D	Actual or Suspected Myocardial Infarction, with CC Score 4-6
EB10E	Actual or Suspected Myocardial Infarction, with CC Score 0-3
EY40A	Complex Percutaneous Transluminal Coronary Angioplasty with CC Score 12+
EY40B	Complex Percutaneous Transluminal Coronary Angioplasty with CC Score 8-11
EY40C	Complex Percutaneous Transluminal Coronary Angioplasty with CC Score 4-7
EY40D	Complex Percutaneous Transluminal Coronary Angioplasty with CC Score 0-3
EY41A	Standard Percutaneous Transluminal Coronary Angioplasty with CC Score 12+
EY41B	Standard Percutaneous Transluminal Coronary Angioplasty with CC Score 8-11
EY41C	Standard Percutaneous Transluminal Coronary Angioplasty with CC Score 4-7
EY41D	Standard Percutaneous Transluminal Coronary Angioplasty with CC Score 0-3
EY42A	Complex Cardiac Catheterisation with CC Score 7+
EY42B	Complex Cardiac Catheterisation with CC Score 4-6
EY42C	Complex Cardiac Catheterisation with CC Score 2-3
EY42D	Complex Cardiac Catheterisation with CC Score 0-1
EY43A	Standard Cardiac Catheterisation with CC Score 13+
EY43B	Standard Cardiac Catheterisation with CC Score 10-12
EY43C	Standard Cardiac Catheterisation with CC Score 7-9
EY43D	Standard Cardiac Catheterisation with CC Score 4-6
EY43E	Standard Cardiac Catheterisation with CC Score 2-3
EY43F	Standard Cardiac Catheterisation with CC Score 0-1

**Table 13: Target population ICD10 codes (primary diagnosis)**

ICD10 code	Description
I210	Acute transmural myocardial infarction of anterior wall
I211	Acute transmural myocardial infarction of inferior wall
I212	Acute transmural myocardial infarction of other sites
I213	Acute transmural myocardial infarction of unspecified site
I219	Acute myocardial infarction, unspecified
I220	Subsequent myocardial infarction of anterior wall
I221	Subsequent myocardial infarction of inferior wall
I228	Subsequent myocardial infarction of other sites
I229	Subsequent myocardial infarction of unspecified site

257. The number of patients referred to cardiac rehabilitation would be calculated through the National Audit of Cardiac Rehabilitation (NACR).<sup>80</sup> Providers will be expected to supply to the commissioner, on a quarterly or more frequent basis, the number of patients referred for cardiac rehabilitation as a proportion of all relevant activity.

258. We have developed a specification to calculate the relevant activity for assessing compliance with the BPT criteria (using BPT flag 'BP02'):

- a) emergency/transfer (21-25, 2A, 2B, 2C, 2D, 28, 81)
- b) ICD10 Codes (as in Table 13)
- c) HRGs (as in Table 12)
- d) discharge destination: usual place of residence (19).

259. In calculating the target population, only patients discharged home should be included, to ensure that patients transferred between hospitals are not included more than once across providers.

## **22.2. Rapid colorectal diagnostic pathway**

### *Purpose*

260. Straight-to-test (STT) pathways can improve access to testing, enabling earlier diagnosis and treatment, and improve patient outcomes. They involve clinical assessment and triage over the phone, prior to further investigation, rather than

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<sup>80</sup> [www.cardiacrehabilitation.org.uk](http://www.cardiacrehabilitation.org.uk)

patients having to attend an outpatient appointment before their investigation is booked.

261. There is evidence that STT pathways can reduce diagnostic<sup>81</sup> and treatment<sup>82</sup> waiting times for patients with colorectal cancer. Specifically, Homerton University Hospitals NHS Foundation Trust reduced its waiting time to treatment by six days, and the Whittington Hospital NHS Trust reduced its time by 10 days. Barts Health NHS Trust reduced its mean time to diagnosis for patients on 18-week wait pathways to five days, a time saving of 96.5%.

262. There is evidence from Guy's and St Thomas' NHS Foundation Trust,<sup>83</sup> Barts Health NHS Trust<sup>84</sup> and Dorset County Hospital<sup>85</sup> that STT pathways result in high patient and GP satisfaction. Specifically, at Barts Health NHS Trust:

- 94% of patients thought the triage service was very convenient
- 79% preferred telephone triage to outpatient clinic
- 76% thought it was a very responsive service
- 89% were very satisfied overall.

These findings are based on 57% of users over the period.

263. Finally, there is potential for significant cost savings from STT. An economic analysis from the Western Infirmary and Gartnavel General Hospital and the University of Glasgow concluded that STT pathways for patients with lower GI

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<sup>81</sup> Mukherjee S, Fountain G, Stalker M, Williams J, Porrett TR, Lunniss PJ. The 'straight to test' initiative reduces both diagnostic and treatment waiting times for colorectal cancer: outcomes after 2 years. *Colorectal Disease*. 2010 Oct 1; 12 (10 online): e250-4.

<sup>81</sup> Thapar A, Rodney S, Haboubi D, Oshowo A, Bhan C, Wilson J, Walshe M, Haddow J, Mukhtar H. Straight to test lower GI endoscopy: the Whittington Experience. Whittington Hospital NHS Trust.

<sup>81</sup> Watson H. A colorectal telephone assessment/straight to test pathway (CTAP) for the initial assessment of colorectal referrals. Guy's and St Thomas' NHS Foundation Trust, November 2014.

<sup>81</sup> Andrews P, Steward L, Mistry M, Wong A, Machesney M. Straight to test for colorectal symptoms: a viable means of shortening time to a definitive diagnosis. Barts Health NHS Trust and London Cancer.

<sup>82</sup> Mukherjee S, Fountain G, Stalker M, Williams J, Porrett TR, Lunniss PJ. The 'straight to test' initiative reduces both diagnostic and treatment waiting times for colorectal cancer: outcomes after 2 years. *Colorectal Disease*. 2010 Oct 1; 12 (10 online): e250-4.

<sup>82</sup> Thapar A, Rodney S, Haboubi D, Oshowo A, Bhan C, Wilson J, Walshe M, Haddow J, Mukhtar H. Straight to test lower GI endoscopy: the Whittington Experience. Whittington Hospital NHS Trust.

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<sup>85</sup> Watson H. A colorectal telephone assessment/straight to test pathway (CTAP) for the initial assessment of colorectal referrals. Guy's and St Thomas' NHS Foundation Trust, November 2014.

symptoms save an average of £105 per patient.<sup>86</sup> A similar economic evaluation from Barts Health NHS Trust reported potential savings of nearly £80,000 a year due to reduced numbers of outpatient appointments.<sup>87</sup> In addition, removing the initial outpatient appointment from the pathway will free clinicians to undertake other work and therefore make efficient use of their time.

### *Design and criteria*

264. The BPT payment will be conditional on delivering the rapid colorectal diagnostic pathway and based on an annual provider-level self-assessment. The self-assessment should be based on achieving all these characteristics:

- i. STT-dedicated nurse in post – nursing team, minimum two at band 7 who meet recommended competencies (they do not need to be two whole-time equivalents and should be combined with other appropriate roles)
- ii. evidence-based (where possible) investigation algorithm<sup>88</sup> in place, agreed by the consultant team
- iii. evidence of primary care and patient group liaison with pathway development
- iv. strong clinical leadership – the STT service needs to be led by a consultant (colorectal surgeon/gastroenterologist/consultant nurse)
- v. pathway supported by systems allowing active tracking of referrals and collection of outcome data
- vi. two-week wait and 18-week wait timeliness compliance
- vii. able to demonstrate a reduction in outpatient clinic requirements for patients on pathway
- viii. endoscopic, radiological and histology results conveyed to GP and patient in a timely manner and in an appropriate patient-centred fashion
- ix. outcome data from the pathway to be available to commissioners

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<sup>86</sup> MacKenzie S, Norrie J, Vella M, Drummond I, Walker A, Molloy R, Galloway DJ, O'Dwyer PJ. Randomized clinical trial comparing consultant-led or open access investigation for large bowel symptoms. *British Journal of Surgery*. 2003 Aug 1; 90(8): 941-7.

<sup>87</sup> Andrews P, Steward L, Mistry M, Wong A, Machesney M. Straight to test for colorectal symptoms: a viable means of shortening time to a definitive diagnosis. Barts Health NHS Trust and London Cancer.

<sup>88</sup> [www.londoncancer.org/media/89221/stt-at-guys-and-st-thomas-dec-14.pdf](http://www.londoncancer.org/media/89221/stt-at-guys-and-st-thomas-dec-14.pdf)

- x. plans in place to ensure sufficient endoscopy capacity to deliver pathway
- xi. development of an STT standard operating procedure.

265. For trusts to deliver an STT pathway, we recommend that providers and commissioners agree a local pricing structure, reflecting the benefits of the pathway while taking into account any savings from a reduction in the delivery of outpatients.

266. The STT pathway offering diagnostic tests to patients without an initial outpatient appointment should follow this guidance:

- a. The GP refers the patient onto the two-week referral pathway or six-week diagnostic pathway.
- b. The provider contacts the patient via a triage hub, aided by an algorithm, to decide the most appropriate test.
- c. If the approach is not suitable for the patient they would be referred for an appointment as normal.
- d. Following the test, the diagnostic service is responsible for deciding the most appropriate clinical steps.

267. In addition to the self-assessment, commissioners may request evidence to prove that providers have met the criteria.

268. If the criteria have been met, providers would receive the agreed local price for applicable activity.

269. If a provider can prove that they have put procedures in place and have met the criteria part way through the year, they could be reassessed and the agreed local price paid from that point onwards.



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

NHS Improvement Publication code: P 04/16

NHS England Publications Gateway Reference: 06227

NHS England Document Classification: Official