NHS England Innovation and Technology Payment 2018 to 2019 Technical Notes

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Contact Details for further information	Sharon Priestnall Innovation & Research Unit 4N04, Quarry House Leeds LS2 7UE 0113825110

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NHS England Innovation and Technology Payment 2018 to 2019 Technical Notes

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Equality and Health Inequalities Statement

Promoting equality and addressing health inequalities are at the heart of NHS England's values. Throughout the development of the policies and processes cited in this document, we have:

· Given due regard to the need to eliminate discrimination, harassment and victimisation, to advance equality of opportunity, and to foster good relations between people who share a relevant protected characteristic (as cited under the Equality Act 2010) and those who do not share it; and

· Given regard to the need to reduce inequalities between patients in access to, and outcomes from healthcare services and to ensure services are provided in an integrated way where this might reduce health inequalities.

Contents

1. Purpose

Section 3.4 of the 2017/18 and 2018/19 National Tariff Payment System technical notes sets out the innovation themes, specifications, reimbursement and reporting requirements for the Innovation and Technology Tariff.

This guidance should be seen as a supporting document to section 3.4 of the technical notes. It contains the innovations, specifications, reimbursement and reporting requirements for the Innovation and Technology Payment for 2018/19.

2. Background

In April 2017, NHS England launched the Innovation and Technology Tariff (ITT), an initiative designed to reduce the financial and procurement barriers experienced by commissioners and providers wanting to adopt innovative technologies in the NHS.

NHS England identified six themes where innovative technologies could make a difference in the two years from 2017-19. To find out more about the ITT, its interface with the National Tariff and how to obtain the innovations please read the national guidance here https://www.england.nhs.uk/wp-content/uploads/2017/05/innovation-tech-tariff-technical-notes.pdf

A full list of both the ITT and ITP innovations can be found in Appendix B.

The ITT has been well received by industry and the NHS with over 100 sites implementing the ITT innovations. NHS England committed to build on this approach with the introduction of the Innovation and Technology Payment (ITP). For 2018 /19 the ITP is testing four innovative products and technologies at national scale under a pilot approach[1].

3. The Innovation and Technology Payment (ITP)

The ITP was launched as an open competition in June 2017. Its focus was to attract entries for proven, cost effective, market ready innovations demonstrating potential to deliver significant patient outcomes and savings to the NHS. The competition culminated in a shortlist of innovations which were considered by a panel including clinicians, commissioners, providers, representatives of NICE and AHSNs and patients. Further due diligence and commercial discussions further refined this shortlist, to identify the innovations with the most realisable benefit to the NHS.

[1] The ITP uses a Direct Award under Public Contract Regulations 2015 regulation 14. The ITP is limited to 12 months in order to build evidence of benefits. If the benefits are realized then NHS England may choose to undertake full market procurement.

The innovations selected for the 2018/19 ITP have been through a rigorous process to check they meet the clinical and service standards required to deliver high quality clinical care. NHS England may choose to test the market for other products in the future, assuming that the positive outcomes anticipated from the 2018/19 ITP are realised.

These notes set out how commissioners and providers can access the products available via the ITT and ITP.

4. Innovation and Technology Payment innovations

This section sets out the innovations which are funded through the ITP for the 2018/19 financial year.

NHS England is supporting three innovations to spread at pace across the healthcare system. These are:

1. HeartFlow - Rapid diagnosis of patients with suspected Coronary Heart Disease (CAD) using advance image analysis.
2. SecurAcath - Improved stability and reduced infection risk for patients with a peripherally inserted central catheter
3. Endocuff Vision® - Improved colorectal examination for patients undergoing bowel colonoscopy

A fourth innovation is being funded for sites which currently have a Surgical Site Infection rate above 4 per cent, as per the product specification.

4. Plus Sutures - Reduction of Surgical Site Infection (SSI) through the use of antimicrobial suture packs

A fifth digital innovation called DrDoctor is being trialled to understand the potential benefit for the healthcare system. A detailed description of this innovation will not be included in this document as, agreement with site(s) will be reached locally. For more information about this innovation please visit the NHS England website.

Feedback from NHS commissioners and providers was positive about the zero cost model used for the ITT therefore NHS England is continuing this approach for Endocuff Vision, SecurAcath and HeartFlow. For these innovations, providers order the innovations directly from the supplier at no cost and NHS England reimburses the supplier directly. Further detail can be found in the innovation specifications in section 8 along with details on the reimbursement model for Plus Sutures.

5. Nationally agreed pricing for ITP innovations

NHS England will cover the costs of the innovations funded under the ITP as outlined in each specification. Additional costs associated with implementation are not covered by NHS England and should form the basis of local discussions.

This document identifies national prices agreed between NHS England and the manufacturers/suppliers providing the ITP innovations. It is likely that local commissioners and providers will choose to use these on the basis that they consider them to be the best available price. However they are not precluded from engaging in additional negotiations, and commissioners and providers must still comply with the local pricing rules set out in the National Tariff.

6. Support and advice

The 15 Academic Health Science Networks (AHSNs) have been closely involved in developing the ITP and supporting the roll out of the ITT. Each AHSN can offer a range of support to help commissioners and providers to implement the ITP and ITT innovations in local geographies. See http://www.ahsnnetwork.com for more information on AHSNs and Appendix A for a list of AHSN contacts.

For more enquiries regarding NHS England funded programmes that support innovation please contact the Innovation and Research Unit at england.innovation@nhs.net

7. Data collection

To inform future work in promoting innovation, it is essential that NHS England can assess both the impact of the ITT and ITP in facilitating access to innovations and the impact of the innovations themselves (i.e. the extent to which the anticipated outcomes set out in the innovation specification are met through use of the innovations). For this purpose, providers are required to provide data on uptake and use. Details of the data reporting requirements are set out in each innovation specification.

8. ITP innovation specifications

The following section provides more information on each of the ITP innovations. It sets out the specification met by the innovations and explains the pricing and payment mechanisms applicable to each innovation.

9. Innovation specification: HeartFlow FFRCT - Rapid diagnosis of patients presenting with new onset chest pain which is suspected to be Coronary Artery Disease (CAD) using advanced image analysis software

9.1. Purpose

The purpose of this specification is to give providers and commissioners of NHS services specific details as to the basis on which this product is included in the Innovation and Technology Payment (ITP) with respect to FFRCT to estimate fractional flow reserve from coronary CT angiography.

9.2. Expected outcome

HeartFlow FFRCT Analysis is a novel software technology which estimates fractional flow reserve (FFR) in coronary arteries, using CT coronary angiography (CCTA). FFR measured from invasive angiography has been used widely in clinical practice for many years and helps determine whether a person's coronary disease warrants revascularisation. Examples of revascularisation include the insertion of stents or surgical bypass grafting. The HeartFlow Analysis helps clinicians determine whether such an intervention is likely to improve a patient's longer term outcomes or not. Improved resolution and gating of CT coronary angiography has allowed the extent and anatomical severity of coronary lesions to be assessed non-invasively, and 'HeartFlow Analysis' is the first technology to allow an assessment of FFR to be made during the same investigation.

The expected outcomes from this innovation are:

- Improved diagnosis of coronary artery disease (CAD)
- Better treatment decisions for patients who have suspected CAD

9.3. Payment / price detail

The ITP agreed price for this innovation is £700 per unit, excluding VAT. This is available to providers under the zero cost model. From the 1st April, the HeartFlow Analysis can be ordered directly from HeartFlow Inc. (https://www.heartflow.com/) under the zero cost model. Participating sites must meet the criteria set out in section 9.7. More information may be requested at info@heartflow.com.

9.4. Population Needs

National context and evidence base

CT coronary angiography is now recommended as the first diagnostic test in around 40,000 people presenting with new onset chest pain suggestive of stable angina

(2017).[2] 'HeartFlow Analysis' technology is approved by NICE for the functional assessment of coronary lesions found on CT. This combined CT assessment of coronary anatomy, and the functional significance of selected coronary lesions by FFRCT, provides valuable diagnostic and therapeutic information and may reduce the need for more invasive investigations. Based on NICE's Medical Technology Guidance (2017) there is an estimated potential net saving of £214 per patient for HeartFlow FFRCT compared with the current treatment pathway.[3]

9.5. Scope

Aims and objectives of product

This innovation must aim to improve the diagnosis of coronary artery disease and improve the patient experience by avoiding the need for invasive coronary angiography and revascularisation.

Innovation description

This innovation must:

- Be a coronary physiology simulation software package and service used for the qualitative and quantitative analysis of previously acquired computerised tomography DICOM data.
- Improve patient care by avoiding the need for invasive coronary angiography and revascularisation

Population covered

This innovation must be appropriate for use in:

- Adult patients with stable, recent onset chest pain who are offered a coronary CT angiography (CCTA) as a part of the NICE pathway on chest pain

9.6. Clinical Standards

This innovation must:

- Be a CE marked as a Class IIa software solution
- Be supported by an appropriate clinical evidence-base and be compliant with NICE guidance set out in MTG32,[4]
- Be governed by criteria similar to the Institute of Medicine's six dimensions of healthcare quality.[5] This means that products or services are:

[2] https://www.nice.org.uk/guidance/mtg32
[3] https://www.nice.org.uk/guidance/mtg32
[4] https://www.nice.org.uk/guidance/mtg32

- Safe – avoiding harm to patients wherever possible
- Effective – providing support based on clear benefit to patients
- Efficient – avoiding waste
- Person centred – accepting patient's needs and preferences
- Timely – reduces waits and harmful delays
- Equitable – care does not vary in quality due to patient characteristics

9.7. NHS site criteria

NHS sites implementing the Heartflow must meet the following criteria. Criteria include CT Data Format and Quality Requirements, Site-specific Criteria and commitments NHS sites need to make.

CT Data Format and Quality Requirements

Requirements for HeartFlow are consistent with Society of Coronary Computed Tomography (SCCT) Performance of Cardiac CT Guidance Document

- 64 or greater slice CT scanner with cardiac gating capability
- Dual syringe injector for 2 phase injection
- Access to scheduled time on the scanner for CCTA
- Experience, willingness, and staffing to use Glyceryl Trinitrate (GTN) and beta blockers (BB) (oral or IV) for proper vessel visualisation and heart rate control, respectively
- Accredited CCTA reader (or equivalent experience of >150 cardiac CTs) - may be SCCT Level 1+ or accredited through other organisations/fellowship
- At least 1 Radiographer trained in CCTA and experienced with cardiac reconstructions
- Ability to meet minimum quality requirements for HeartFlow process (minimum 8/10 consecutive cases pass initial quality acceptance)
- HeartFlow on-site review of the institution's CCTA programme, training for imagers on HeartFlow requirements, review of CCTA best practices, and SCCT guidelines for performance of CCTA

[5] Institute of Medicine: Crossing the quality chasm: a new health system for the 21st century. Washington DC: National Academy Press, 1990, p244.

Site-specific Criteria

Additional site-specific criteria to ensure broad evaluation of HeartFlow in England

- Imaging team with CCTA expertise meeting recommendations set by Royal College of Radiology and Society of Coronary Computed Tomography as well as a demonstrated ability to meet minimum CT quality requirements

- Annual CCTA volume of > 700 scans or prior experience with HeartFlow

NHS sites are required to:

- Collaborate with HeartFlow, including IT review and implementation within 30 days of meeting with HeartFlow IT director.
- Have broad support across radiology, cardiology, and site administration with ability and commitment to enable and educate physicians to follow a CT±FFRCT pathway
- Provide health economic data to NHS England/HeartFlow

Applicable Service Standards

HeartFlow FFRCT for estimating fractional flow reserve from coronary CT angiography: Medical technologies guidance [MTG32] see https://www.nice.org.uk/guidance/mtg32

Applicable standards set out in Guidance and/or issued by a competent body

- Consistent with standards set by Royal College of Radiology and Society of Coronary Computed Tomography (SCCT). [6]

9.8. Reporting

At the end of each quarter, providers must report back on the following minimal data set:

Report for previous financial year:

- Number of patients scanned with a 64-slide (or above) coronary CT angiography during the previous financial year.
- A list of the different pathways the site has used for patients presenting with new onset chest pain suggestive of stable angina.

[6] https://www.rcr.ac.uk/publication/standards-practice-computed-tomography-coronary-angiography-ctca-adult-patients

Report for each quarter of the current financial year:

- The number of patients scanned with a 64-slice (or above) coronary CT angiography.
- The number of patients receiving a HeartFlow Analysis.
- The number of patients receiving an invasive angiography after a HeartFlow Analysis.

Reports should be returned to Arden GEM CSU using the following email address FinanceQueries@ardengemcsu.nhs.uk. CCGs and Providers can also obtain a copy of the reporting template from Arden GEM using the same email address.

10. Innovation specification: SecurAcath - Improved stability/securement and reduced infection risk for patients with a peripherally inserted central catheter

10.1. Purpose

The purpose of this specification is to give providers and commissioners of NHS services specific details as to the type of securement device for peripherally inserted central catheters purchased centrally by NHS England.

10.2. Expected outcome

The expected outcomes from using SecurAcath are a reduction in the number of securement device replacements required and the number of catheter replacement procedures required. This is associated with a lower incidence of catheter-associated complications, such as migration, dislodgement, occlusion, thrombosis and infection. SecurAcath is designed to remain in place as long as the catheter is in place.

10.3. Payment / price detail

The ITP agreed price for SecurAcath is £20 per device. SecurAcath is available under the zero cost model. NHS Trusts can order SecurAcath directly from the supplier at zero cost, Forward enquiries to E-contactus@aquilantservices.com or call 01256365490.

10.4. Population Needs

National/local context and evidence base

NICE states that SecurAcath is more effective than adhesive securement devices when a PICC is anticipated to stay in place for 15 days or more.[7] Its analysis suggests that the annual savings from 100 per cent adoption of SecurAcath in these PICC lines is a minimum of £4.2 million a year.[8]

Where a PICC line will remain in place for 25 days or 120 days respectively, the cost savings per patient are estimated to range from £9 to £95.[9]

[7] https://www.nice.org.uk/guidance/mtg34/chapter/6-Conclusions
[8] https://www.nice.org.uk/guidance/mtg34/chapter/5-Cost-considerations
[9] https://www.nice.org.uk/guidance/mtg34/chapter/5-Cost-considerations

10.5. Scope

Aims and objectives of the innovation

This innovation must aim to:

- Reduce the number of securement device replacements required and lower the number of catheter-associated complications.
- Reduce the number of catheter replacement procedures required due to migration or dislodgement.

Innovation description

This innovation must:

- Be a device to allow subcutaneous attachment of peripherally inserted central catheters (PICC) lines leading to improved stability and reduced infection risk for patients with a peripherally inserted central catheter;
- Be supported by an appropriate clinical evidence-base and be compliant with NICE guidance set out in MTG34[10] See https://www.nice.org.uk/guidance/mtg34/chapter/1-Recommendations

Population covered

This innovation must be appropriate for use in:

- Patients who have an anticipated medium-to long-term dwell time of 15 days or more with a peripherally inserted central catheter, in line with NICE guidance.[11] Through the scope of the ITP, SecurAcath is only funded for PICC lines, not central venous catheter lines.

10.6. Clinical Standards

This innovation must:

- Be governed by criteria similar to the Institute of Medicine's six dimensions of healthcare quality.[12] This means that products or services are:
    - Safe – avoiding harm to patients wherever possible

[10] https://www.nice.org.uk/guidance/mtg34
[11] https://www.nice.org.uk/guidance/mtg34
[12] Institute of Medicine: Crossing the quality chasm: a new health system for the 21st century. Washington DC: National Academy Press, 1990, p244.

- Effective – providing support based on clear benefit to patients
- Efficient – avoiding waste
- Person centred – accepting patient's needs and preferences
- Timely – reduces waits and harmful delays
- Equitable – care does not vary in quality due to patient characteristics

Acceptance and exclusion criteria and thresholds and site specific criteria:

- It should not be used for anyone with a clinically documented nickel allergy;
- Pain may be experienced on removal of the device and local anaesthetic may be needed, particularly until staff are fully familiar with the technique;
- Infection rates may be increased if the device and catheter are not maintained and dressed according to protocol;
- If a surgical 'nick' in the skin is used to aid catheter insertion, the risk of bleeding post-insertion related to this 'nick' can be managed with pressure until haemostasis is achieved or a haemostatic patch and dressing;
- Initial adverse events may occur, such as skin indentation and anchor migration, until staff becomes familiar with the correct insertion and care techniques.
- Follow the supplier's recommended training plan and available online resources so that all frontline staff are properly trained to be able to correctly insert, maintain and remove SecurAcath, as recommended by NICE.

Training by the supplier

Aquilant provides a range of free of charge training platforms, and participation is highly recommended. The training platforms include guidance on correct insertion, care and maintenance and removal of the SecurAcath stabilisation device.

To access these training programs please contact your local Territory Manager or email tenders@aquilantservices.com or T 01256365490

10.7. Applicable Service Standards

Applicable national standards

- SecurAcath for securing percutaneous catheters: Medical technologies guidance, see https://www.nice.org.uk/guidance/mtg34

Applicable standards set out in Guidance and/or issued by a competent body

None

10.8. Reporting

At the end of each quarter, providers must report back on the following minimal data set:

Report for previous financial year:

- Number of patients who have PICC lines for more than fifteen days for the previous financial year. This is only required for the first report.
- Number of complications resulting from catheter dislodgements from the previous financial year for patients who had PICC lines for more than fifteen days. This is only required for the first report.

Report for each quarter of the current financial year:

- Number of patients who have used SecurAcath during this period of reporting.
- Number of complications resulting from catheter dislodgements for patients who have PICC lines for more than fifteen days from this period of reporting.

Reports should be returned to Arden GEM CSU using the following email address FinanceQueries@ardengemcsu.nhs.uk. CCGs and Providers can also obtain a copy of the reporting template from Arden GEM using the same email address.

11. Innovation specification: Endocuff Vision ® to improve visualisation of the bowel during colonoscopy by increasing the total surface area of the visual field

11.0. Purpose

The purpose of this specification is to give providers and commissioners of NHS services specific details as to the basis on which this product is included in the Innovation and Technology Payment (ITP) with respect to improved colorectal examination for patients.

11.1. Expected outcome

The expected outcome is an increase in the adenoma detection rate (ADR) of a relative increase in ADR rate of up to 21% based on the findings from the ADENOMA study.[2] Improved visualisation will enhance the identification of colonic polyps, specifically adenomas and adenocarcinomas, and increase the likelihood of complete excision as well as aiding post-excision scar examination. This will be achieved through improved stability and visualisation provided by Endocuff Vision® during colonoscopy.

11.2. Payment / price detail

From April Endocuff Vision can be ordered from Norgine Pharmaceuticals Ltd under the zero cost model. Providers can email DHLUKNorgine@dhl.com to order this product and there is a minimum order of three boxes of Endocuff Vision. More information about Endocuff Vision is available from: http://endocuff.com/products/endocuff-vision

11.3. Population Needs

National/local context and evidence base

Earlier cancer detection is a priority for the NHS in England. Bowel cancer is the fourth most common cancer in the UK, after breast, prostate and lung cancers. Over 41,000 people are diagnosed with bowel cancer each year. The prognosis for people is better if diagnosed early. Approximately 16,000 people die as a result of bowel cancer in the UK each year, meaning it is the second highest cause of deaths from cancer.[13]

[13] https://www.bowelcanceruk.org.uk/about-bowel-cancer/bowel-cancer/

2 Ngu WS, Bevan R, Tsiamoulos ZP, et al. Improved adenoma detection with Endocuff Vision: the ADENOMA randomised controlled trial. Gut Published Online First: 23 January 2018. doi: 10.1136/gutjnl-2017-314889

11.4. Scope

Aims and objectives of the innovation

This innovation must aim to:

- Improve patient care by improving visualisation to enhance the identification of colonic polyps, specifically adenomas and adenocarcinomas, and increase the likelihood of complete excision as well as aiding post-excision scar examination. Earlier diagnosis of bowel cancer leads to better patient outcomes and potentially less intensive or invasive management.

Innovation description

This innovation must:

- Be a distal device that fits onto the end of a colonoscope, providing improved visualisation and stability during colonoscopy to improve ADR.
- Have a class II CE Mark
- Be governed by criteria similar to the Institute of Medicine's six dimensions of healthcare quality[14]. This means that products or services are:
    - Safe – avoiding harm to patients wherever possible
    - Effective – providing support based on clear benefit to patients
    - Efficient – avoiding waste
    - Person centred – accepting patient's needs and preferences
    - Timely – reduces waits and harmful delays
    - Equitable – care does not vary in quality due to patient characteristics

Population covered

This innovation must be appropriate for use in:

- Patients undergoing colonoscopies who meet the acceptance and exclusion criteria outlined below. It is expected that decisions on use with individual patients are based on the healthcare quality criteria outlined in 11.4.

[14] Institute of Medicine: Crossing the quality chasm: a new health system for the 21st century. Washington DC: National Academy Press, 1990, p244.

11.5. Clinical standards /acceptance and exclusion criteria and thresholds

Acceptance Criteria:

NHS sites adopting this technology must:-

- Only use Endocuff Vision® attachments with compatible colonoscopes;
- Ensure staff are trained in the correct use of Endocuff Vision®
- Follow instructions for use and use correct Endocuff Vision® size in accordance with the scope being used;
- Should not be used for complex sub-mucosal dissection where a separate distal attachment is required.

Exclusion Criteria:

Sites should be aware that:

- The Endocuff Vision® is not intended for deep ileal intubation;
- Should not be used in cases with acute, severe colitis or where there is known colonic stricture.

Applicable Service Standards

- Must be consistent with standards set by the Royal College of Physicians Joint Advisory Group on GI Endoscopy
- Be supported by an appropriate clinical evidence-base and be compliant with NICE guidance set out in MT509 (under development)

11.6. Reporting

- NHS England is working with Norgine to develop a device registry. Please contact the NHS England Innovation and Research Unit for more information england.innovation@nhs.net

12. Innovation specification - Plus Sutures - Reduction of Surgical Site Infection (SSI) through the use of antimicrobial sutures

12.0. Purpose

The purpose of this specification is to give providers and commissioners of NHS services specific details as to the basis on which this product is covered under the Innovation and Technology Payment (ITP) with respect to Triclosan-coated absorbable sutures which are designed to the reduce incidence of surgical site infection.

12.1. Expected outcome

Complications arising from Surgical Site Infections cost the NHS £700m a year, with a longer expected length of stay putting additional burden on NHS Trusts.[15]

It is anticipated that there will be considerable cost savings as a result of the anticipated reduction in SSIs by up to 30 per cent through using the Plus Sutures. In part this will be realised through a reduction in length of stay by using the sutures. The reported average savings from using antimicrobial sutures is £91.25 per procedure across all wound types.[16]

NHS England has identified Plus Sutures as Triclosan-coated absorbable sutures which currently meets the specification set out in this document. Plus Sutures are an effective way of cutting the incidence of SSIs.

Plus Sutures alone may well be expected to reduce infection rates, but they may be even more effective when introduced into a specific bundle of measures designed to prevent SSI occurrence.

12.2. Payment / price detail

A contract has been agreed between Johnson and Johnson Medical Ltd and NHS England. This contract sets out that NHS England will reimburse designated NHS Trusts that transition from standard to Plus Sutures in designated specialties for the 30% premium cost of Plus Sutures, compared to the standard Ethicon sutures currently in use. This central reimbursement will be paid on the increased adoption from the initial baseline level at the start of the period. Reimbursement will be made

[15] https://www.nice.org.uk/guidance/qs49/resources/support-for-commissioning-for-surgical-site-infection-253715293

[16] Wang Z, Jiang C, Cao Y and Ding Y (2012) Systematic review and meta-analysis of triclosan-coated sutures for the prevention of surgical-site infection. British Journal of Surgery 100: 465-473.

eligible to NHS Trusts which have a baseline SSI rate of 4 per cent or higher, further detail around the baseline criteria is included below.

If the NHS Trusts that adopt Plus Sutures under this ITP programme collectively do not realise a significant reduction in their SSI rate that offsets the additional costs associated with the product then Johnson and Johnson Medical Ltd will reimburse NHS England the difference between the SSI saving achieved and the premium up to a maximum of the total premium incurred by NHS England.

This ensures that an NHS Trust which has a baseline SSI rate of 4 per cent and above should not have to pay any more for sutures in the specialities set about below than their current Ethicon baseline price or the equivalent baseline price if they are using alternative suture supplier.

Availability: Only sites which meet the 'Site specification' outlined below will be eligible to have this premium cost covered. Forward enquires to Chloë Symes, UK & IRE Platform Manager for Wound Closure, phone 07768852382 or email csymes1@its.jnj.com

12.3. Population Needs

National/local context and evidence base

Surgical site infections cost the NHS £700m a year. SSIs lead to an increased length of stay for patients in hospital. NICE have estimated that the average cost of treating one SSI is £4,300 this is made up of drugs, dressings, interventions and professional time.17. NICE estimate that the cost of surgical site infection ranges from £2,100 to £10,500 per infection.[18] Experts have estimated that the cost for complex surgery could be as high as £20,000 per SSI and up to £14,000 for general surgery[19].

12.4. Site specification

The following criteria must be met for NHS hospital sites to be funded to purchase Plus Sutures through the ITP:

- NHS Trusts must have a baseline Surgical Site Infection rate of 4 per cent or above. This is based on data from Hospital Episode Statistics for 2016/2017 for the following specialties: Bariatrics, Breast augmentation, Breast reconstruction, CABG, Caesarean Section, Cardiac, Colorectal, General Surgery, Gynaecology (not including Hysterectomy), Head and Neck, Hernia,

[17] https://publications.parliament.uk/pa/cm200809/cmselect/cmpubacc/812/812.pdf

[18] https://www.nice.org.uk/guidance/qs49/resources/support-for-commissioning-for-surgical-site-infection-253715293

[19] https://www.nice.org.uk/guidance/qs49/resources/support-for-commissioning-for-surgical-site-infection-253715293

HPB, Hysterectomy, Neuro, Oncological ablations, Thoracic, UGI, Urology and Vascular.

These criteria have been set, as by targeting NHS Trusts with higher than expected SSIs, the ITP will make the biggest meaningful impact on overall SSI rates which will enable better patient outcomes and cost savings to be realised in the Trusts.

12.5. Scope

Aims and objectives of the innovation

This innovation must aim to:

- Reduce the incidence of Surgical Site Infections using Triclosan-coated absorbable sutures

Innovation description

This innovation must:

- Be Triclosan-coated absorbable sutures which are designed to reduce incidence of surgical site infection;
- Improve patient care by reducing the incidence of Surgical Site Infections (SSIs);

Population covered

This innovation must be appropriate for use in:

- Patients undergoing the surgical procedures set out in the 'Clinical Standards' section of this guidance document below.

12.6. Clinical Standards

This innovation must:

- Be governed by criteria similar to the Institute of Medicine's six dimensions of healthcare quality[20]. This means that products or services are:
    - Safe – avoiding harm to patients wherever possible
    - Effective – providing support based on clear benefit to patients

[20] Institute of Medicine. Crossing the quality chasm: a new health system for the 21st century. Washington DC: National Academy Press, 1990, p244.

- Efficient – avoiding waste
- Person centred – accepting patient's needs and preferences
- Timely – reduces waits and harmful delays
- Equitable – care does not vary in quality due to patient characteristics

Any acceptance and exclusion criteria and thresholds

NHS England will only reimburse trusts the premium cost of plus sutures when used in the following areas of surgery:

- Bariatrics, Breast augmentation, Breast reconstruction, CABG, Caesarean Section, Cardiac, Colorectal, General Surgery, Gynaecology (not including Hysterectomy), Head and Neck, Hernia, HPB, Hysterectomy, Neuro, Oncological ablations, Thoracic, UGI, Urology and Vascular.

12.7. Reporting

- A baseline SSI rate for participating Trusts (those with a 4 per cent SSI rate or above) will be produced, based on the procedure and diagnosis codes and specialities set out above for the 2017/2018 financial year.
- NHS England will track the progress of SSI rates based on the procedure and diagnosis codes and specialities set out above on a quarterly basis to track the expected outcomes listed.

Reports should be returned to Arden GEM CSU using the following email address FinanceQueries@ardengemcsu.nhs.uk. CCGs and Providers can also obtain a copy of the reporting template from Arden GEM using the same email address.

13. Appendix A: - The Academic Health Science Networks (AHSNs) contacts

Location	Contact Name	Email/Telephone
Eastern	Stacie Coburn Principal Advisor	E: Stacie.coburn@eahsn.org T: 07411917300
East Midlands	Tim Robinson, Commercial Director	E: tim.robinson@nottingham.ac.uk T: 0115 7484244
Health Innovation Network	Anna King Commercial Director	E: anna.king1@nhs.net T: 0207 188 9805
Health Innovation Manchester	Arjun Sikand Commercial Director	E: Arjun.Sikand@healthinnovationmanchester.com T: 0161 206 7978
Imperial College Health Partners	Shirlene Oh Director of Commerce, Innovation and Capability Building	E: Shirlene.oh@imperialcollegehealthpartners.com T: 0333 077 1707
Innovation Agency	Lorna Green Chief Operating Officer	E: Lorna.Green@innovationagencynwc.nhs.uk T: 0177 252 0259
Kent, Surrey and Sussex	Robert Berry Head of Innovation	E: robert.berry@nhs.net T: 0300 303 8660
North East and North Cumbria	Nicola Wesley Director of Innovation	E: Nicola.Wesley@ahsn-nenc.org.uk T: 0191 208 1326
Oxford	Nick Scott-Ram Director of Commercial Development	E: Nick.scott-ram@oxfordahsn.org T: 0186 578 4994
South West	Stuart Monk Director of Delivery	E: Stuart.Monk@swahsn.com T: 0139 224 7903
UCLPartners	Holly McLaren Commercial Director	E: holly.mclaren@uclpartners.com T: 0207 679 6633
Wessex	Frank Ratcliff Senior Programme Manager	E: frank.ratcliff@wessexahsn.net T: 0238 202 0840
West Midlands	Tony Davis Commercial Director	E: tony.davis@wmahsn.org T: 0121 371 8061

West of England	Elizabeth Dymond Deputy Director of Enterprise	E: Elizabeth.Dymond@weahsn.net T: 0117 900 2604
Yorkshire and Humber	Neville Young Head of Commercial Development	E: neville.young@yhahsn.com T: 0192 466 4506

14. Appendix B: - Innovations funded under the ITP and ITT

The following table sets out the innovations which are being supported through the ITP and ITT.

Funding mechanism	Description	Benefit	Example Product	Nature of funding
ITP	Rapid diagnosis of patients with suspected Coronary Heart Disease (CAD) using advance image analysis	Fractional flow reserve from coronary CT angiography	Heartflow	Being funded for national spread
ITP	Improved stability and reduced infection risk for patients with a peripherally inserted central catheter	Device to allow subcutaneous attachment of PICC lines	SecurAcath	Being funded for national spread
ITP	Improved colorectal examination for patients	A distal device that fits onto the end of a colonoscope,	Endocuff Vision	Being funded for national

	undergoing bowel cancer screening	during a colonoscopy procedure it provides increased flexibility and stability.		spread
ITP	Reduction of Surgical Site Infection (SSI) through the use of antimicrobial suture packs	Triclosan-coated absorbable sutures to reduce incidence of surgical site infection (SSI)	Plus Sutures	Premium cost being funded for sites which have a baseline Surgical Site Infection rate of 4 per cent and above.
ITP	A digital outpatients' platform allowing patients to view, change and schedule outpatient appointments themselves either online, on smartphone or by conversational SMS.	Communications platform to enable smarter booking of appointments	DrDoctor	Being funded as a demonstrator
ITT	Guided episiotomy scissors designed to achieve a mediolateral cut at 60 degrees to the	Episiotomies successfully cut at the intended 60 degrees minimising the risk of obstetric anal sphincter	Episcissors60	Being funded for national spread

	perineal midline.	injuries		
ITT	Needle free arterial connecting system with one way valve	Designed to reduce bacterial contamination and the accidental administration of medication, additionally making blood sampling simple for staff and improving arterial line safety	Non-injectable arterial connector (NIC)	Being funded for national spread
ITT	Pneumonia prevention system for intubated patients, a cuffed ventilation tube and electronic cuff pressure monitor	Designed to stop leakage of pathogenic oral secretions and stomach contents into the lung, preventing ventilator-associated pneumonia (VAP) a leading cause of infective hospital-acquired mortality	PneuX	Being funded for national spread
ITT	A web based application for the self-management of chronic obstructive pulmonary disease (COPD)	Aimed at empowering patients to manage their COPD through education, self-management plans and enhanced patient–clinician	myCOPD	Being funded for national spread

		communication		
ITT	Frozen Faecal Microbiota transplantation for patients with recurrent Clostridium difficile infection (CDI)	FMT donor samples aim to reduce the risk of repeated CDI relapse, by rebalancing the patient's bowel flora. Donor samples will reduce morbidity and mortality, reduce the risk of avoidable harm and provide an enhanced quality of life for patients.	Frozen Faecal Microbiota Transplantation	Currently on hold pending new supplier following a change in MHRA regulation.
ITT	Prostatic urethral lift system to treat lower urinary tract symptoms of benign prostatic hyperplasia as a day case	Designed as an alternative to current surgical procedures the Urolift uses adjustable permanent implants to move excessive prostatic tissue away from the urethra, improving symptom control for patients with BPH	Urolift	Funded under a new OPCS code in the National Tariff for national spread.