



NHS Innovation and Technology Tariff

The commitment to create a new Innovation and Technology Tariff was announced by NHS England Chief Executive Simon Stevens in June 2016.

Following clinical review, the first six innovations have been selected as part of the new tariff, which aims to benefit women giving birth, patients with chronic lung problems, men having urological surgery, and acutely ill inpatients. NHS England is also, in parallel, backing new mobile technology solutions for diagnosing heart problems, specifically atrial fibrillation.

The Innovation and Technology tariff will help cut the hassle experienced by clinicians and innovators in getting uptake and spread across the NHS. It will remove the need for multiple local price negotiations, and instead guarantee automatic reimbursement when an approved innovation is used, while at the same time allowing NHS England to negotiate national 'bulk buy' price discounts on behalf of hospitals and patients.

"The NHS has a proud track record of world firsts in medical innovation but getting wide uptake has often been far too slow. Our new payment system brings clarity on fast track funding to get ground-breaking new treatments and technologies to NHS patients. Many of them not only improve care but will save the NHS money too."

NHS England Chief Executive Simon Stevens

The innovation categories that will join the national payment scheme are:

- Guided mediolateral episiotomy scissors to minimise the risk of obstetric injury
- Arterial connecting systems to reduce bacterial contamination and the accidental administration of medication
- Pneumonia prevention systems which are designed to stop ventilator-associated pneumonia
- Web based applications for the self-management of chronic obstructive pulmonary disease
- Frozen microbiota transplantation for recurrent Clostridium difficile infection rates
- Prostatic urethral lift systems to treat lower urinary tract symptoms of benign prostatic hyperplasia as a day case
- Separately from the tariff, NHS England is centrally funding the purchase of mobile ECG technology, which will be managed through the AHSN Network.



Further details, with examples, of the innovation categories are:

Guided mediolateral episiotomy scissors to minimise the risk of obstetric injury



Approximately 15% of births in England require the woman to have an episiotomy. Of these, around 25% of women experience a complication called Obstetric Anal Sphincter Injury, which causes anal incontinence and which may require reconstructive surgery. Using acute 60 degree angle episiotomy scissors during childbirth reduces the risk of this life changing complication. Preventing these injuries dramatically increases the quality of lives of new mothers who have undergone this procedure and halving litigation costs alone could save the NHS in the region £23.5 million.

Episcissors-60 are an example of a product that may help solve this problem

More information about this innovation, and an Implementation Toolkit for the Epi-scissors-60 can be downloaded from the Wessex AHSN website at:

<http://wessexahsn.org.uk/projects/146/guided-mediolateral-episiotomy-scissors-to-minimise-the-risk-of-obstetric-injury>

Arterial connecting systems to reduce bacterial contamination and the accidental administration of medication



Although rare, accidental injection of intravenous medication into an arterial line can lead to catastrophic injuries which sometimes require major amputations. Innovations that ensure this does not happen will increase patient safety in NHS hospitals. One such innovation is the Non-Injectable Connector (NIC).

The Non-Injectable Connector (NIC), developed in Kings Lynn Hospital, helps avoid complications associated with arterial lines by preventing bacterial contamination, blood spillage and accidental administration of medication into the artery.

Arterial lines are used in the ICU to accurately measure blood pressure on a second by second basis. However, these lines are associated with complications highlighted by the National Patient Safety Agency (NPSA) Rapid Response Alert (2008): bacterial contamination, blood spillage and, due to confusion with venous lines, accidental administration of medication into the artery instead of the vein.

The Non-Injectable Connector (NIC) makes arterial lines and blood sampling techniques safer. Its origins lie in a local 'fix': a consultant at The Queen Elizabeth Hospital in King's Lynn started wrapping tape around the arterial sampling port to reduce the risk of the junior doctors accidentally giving medication into this line.

The NIC has gone on to win the National Patient Safety Awards.

More information about this innovation, and an Implementation Toolkit for the NIC can be downloaded from the Wessex AHSN website at:

<http://wessexahsn.org.uk/projects/147/arterial-connecting-systems-to-reduce-bacterial-contamination-and-the-accidental-administration-of-medication>



Pneumonia prevention systems which are designed to stop ventilator-associated pneumonia



100,000 patients are admitted for ventilation in the UK critical care units each year and 10-20% will go on to develop ventilated associated pneumonia (VAP). Between 3,000 and 6,000 people die from this type of pneumonia every year and prevention would save many lives. Treating VAP costs the NHS between £10,000 – £20,000 per patient and conservative estimates for prevention are savings to the NHS of over £100 million.

The PneuX system from Venner Medical is one example of the technology available.

More information about this innovation, and an Implementation Toolkit for the PneuX system can be downloaded from the Wessex AHSN website at:

<http://wessexahsn.org.uk/projects/148/pneumonia-prevention-systems-which-are-designed-to-stop-ventilator-associated-pneumonia>

Web based applications for the self-management of chronic obstructive pulmonary disease



Digital applications for the self-management of COPD can improve the quality of life for patients living with COPD. They give patients the ability to manage their condition by more effective use of their inhalers, support self care and complement face to face pulmonary rehabilitation programmes.

MyCOPD, by MyMHealth is an example of this technology.

More information about this innovation, and an Implementation Toolkit for the MyCOPD app can be downloaded from the Wessex AHSN website at:

<http://wessexahsn.org.uk/projects/149/web-based-applications-for-the-self-management-of-chronic-obstructive-pulmonary-disease>

Frozen microbiota transplantation for recurrent Clostridium difficile infection rates



Faecal microbiota transplantation is a treatment for clostridium difficile infection. It is an effective alternative to antibiotic treatment for CDI at a comparable cost. High cure rates (90%) and reduced use of antibiotics equal a win-win for patients and the NHS.

More information about this innovation can be downloaded from the Wessex AHSN website at:

<http://wessexahsn.org.uk/projects/150/frozen-microbiota-transplantation-for-recurrent-clostridium-difficile-infection-rates>



Prostatic urethral lift systems to treat lower urinary tract symptoms of benign prostatic hyperplasia as a day case



Prostatic urethral lift systems are an alternative surgical procedure for Benign prostatic hyperplasia (BPH), a common and chronic condition where the enlarged prostate can make it difficult for a man to pass urine, leading to urinary tract infections, urinary retention, and in some cases renal failure. This is an alternative to existing surgical treatments – TURP (transurethral resection of the prostate) or laser. These existing treatments involve cutting away or removing existing tissue, require an average hospital stay of 3 days and often catheterisation for many days post-surgery.

This procedure uses adjustable, permanent implants to pull excess prostatic tissue away so that it does not narrow or block the urethra. Following the procedure, patients return home after a few hours, typically without catheter, and follow-up is normally by telephone. Patients have significantly fewer side effects (notably 0% risk of permanent sexual dysfunction) and post-operative complications, such as infection and bleeding, compared with existing alternatives. The procedure is increasingly carried out under a local anaesthetic.

Urolift is an example of this type of system.

More information about this innovation can be downloaded from the Wessex AHSN website at:

<http://wessexahsn.org.uk/projects/151/prostatic-urethral-lift-systems-to-treat-lower-urinary-tract-symptoms-of-benign-prostatic-hyperplasia-as-a-day-case>

Mobile ECG Technology



Strokes are a major cause of death and disability in the UK. Up to a third of strokes are caused by blood clots that form as a result of heart arrhythmia, particularly Atrial Fibrillation (AF). These AF-related strokes also tend to be more serious, and have greater impact on patients' lives than non-AF strokes. In patients with known AF and additional risk factors, tried and tested anticoagulants are used to significantly reduce the risk of a stroke occurring.

The diagnosis of AF is therefore a key step to preventing strokes.

AF can be symptomatic, or asymptomatic, and can be persistent or paroxysmal (comes and goes). Mobile ECG technology can be used for fast screening in clinics, or loaned to patients. It has the capacity to improve diagnosis and therefore prevent strokes.

Wessex AHSN will be supporting the distribution of AliveCor's Kardia device across Wessex.

More information about this innovation, and an Implementation Toolkit for the AliveCor Kardia device can be downloaded from the Wessex AHSN website at:

<http://wessexahsn.org.uk/projects/155/mobile-ecg-devices>

