TEL NEWS

Welcome to TEL News

We are working with Calderdale College as part of our digital literacy work to identify the specific digital skills that local employers are looking for. See page 2 for the full story.

TEL News is your monthly update keeping you up to speed with all that is Technology Enhanced Learning (TEL) in healthcare. TEL News includes information from Health Education England's (HEE) TEL Programme team, the e-Learning for Healthcare Programme, e-Learning and simulation Leads across the local offices and other updates we think you will find useful. We're keen to spread the news about TEL so would be grateful if you would share it throughout your own networks. If a colleague would like adding to the distribution list please ask them to email tel@hee.nhs.uk providing their contact details.

TEL Programme update

Team update

From next month HEE will welcome Charlotte Teager back from maternity leave. Charlotte will join the team as TEL Programme Manager, supporting Neil Ralph on the various projects that are part of the TEL Programme.

Digital literacy project update

The Technology Enhanced Learning programme continues to support the Building a Digital Ready Workforce programme with our work on improving the digital capabilities of the health and care workforce.

After a year of consultation, workshops, focus groups and other stakeholder engagement activities our digital capabilities framework has been completed. Such is the nature of the digital landscape that this framework needs to be a dynamic, iterative piece of work but this first version is available on our website. The framework consists of four levels under the six domains with capability statements in each level. Intended for use by all, the capabilities are intended to help anyone in the workforce identify existing capabilities and to suggest new ones for further development. To make the framework more accessible we are developing a user-friendly self-assessment tool.

The "wall of employer partners" at Calderdale College

We've been working with Calderdale College, a further education college, who are undertaking a curricula review to ensure their students develop the skills, attitudes and behaviours that employers want and need. With a range of health and care qualifications they are working with us on identifying the specific digital skills that local employers are looking for.

Our dentistry project is testing a learning delivery methodology via a cohort of dental digital champions who are going to be trained, specifically for this project on cyber and other security, to disseminate learning and champion digital at local practice level.

Working with Global Filtered we are developing a self-assessment interface that, using artificial intelligence/machine learning, helps people identify their learning needs against our digital capabilities framework and delivers personalised learning resources to them.

There's a huge amount going on in the digital literacy space and if you are engaged in local projects or would like to talk to us about ways in which you might use the digital capabilities framework please email tel@hee.nhs.uk.

Simulation work continues to move at pace

The first of the Task and Finish Groups that are supporting the Simulation-Based Education (SBE) Strategy was held on earlier this month. This group is about delivering the outputs necessary to ensure a cohesive approach to Faculty Development. The other group meetings are arranged up to the beginning of March 2018.

We are extremely grateful to all of the members of the Simulation Reference Group (SRG) for giving up their valuable time in support of these groups. Over the coming 12 months, we aim to deliver and embed the outputs associated with the five headings of the guiding principles:
1. Governance
2. Strategic Approach
3. Quality Assurance
4. Quality Outcomes
5. Faculty Development.

We are also delighted that some dental colleagues and Allied Health Professionals have joined these groups and very much look forward to working with them.

During January and early February we were able to finish two more simulation films, which will be added to the suite of films we're producing. It's wonderful to see how much terrific work is going on in simulation - with dedicated teams of people really pushing boundaries.

VR being used in ICU

We were particularly humbled by our experiences in filming at The Horizon Centre in Torbay, courtesy of Nick Peres, who leads on learning and emerging technologies. Nick kindly managed to arrange access for us to film a patient in the hospital's Intensive Care Unit (ICU), who with Nick's help (along with Bob Stone, from Birmingham University), has been able to experience cycling along a familiar coastal route, through using a virtual reality (VR) bicycle. As a result of this innovative intervention the patient has also experienced a great improvement in both physical and mental wellbeing.

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In addition, we were also able to capture on film some conversations with the scenario author of the peri-natal simulated patient scenario at Maudsley Simulation Centre, along with consultant psychiatrist and clinical lead for HEE's mental health programme, Rebecca Burgess-Dawson. This film will really help support HEE in demonstrating the impact and effectiveness of simulation in healthcare.

We would like to thank both centres for their co-operation and very much look forward to being able to share the films on release of the outline strategy, which is scheduled for completion at the end of May 2018.

The set for the patient scenario session

Learning Solution and Taxonomies projects

Progress is continuing to be made on both the Learning Solution and Taxonomies projects. A further update will be provided in the March 2018 issue of TEL News.

For more information about these pieces of work visit www.hee.nhs.uk/tel.

TEL Horizon Scanning Project

The TEL team is continuing to scan for new and emerging technologies that may have value in healthcare education. As part of this, we encourage debate and discussion with colleagues both within and external to HEE; this helps inform how we prepare for those technologies that show most promise.

Below is a table summarising themes generated from our horizon scanning activity over the last year.

Technology	Emerging use cases include…
Artificial Intelligence/Machine learning/Deep learning	Tutorbots, AI-generated eLearning courses
Big data - learner analytics	Coupled with AI, learner analytics are being used to help reduce undergraduate attrition
Affective computing	Tailoring online learning experiences based on a learners' emotional state
Adaptive learning	Adapting learner experiences online based on their prior knowledge and experience, has been used in training surgeons in military medicine
Immersive environments including VR, augmented reality (AR), mixed reality (MR) and holograms	Application varies from teaching junior doctors how to use catheters in interventional cardiology, developing clinician's empathy and compassion

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	toward patients to broadcasting live operations to students around the world
3D printing	Printing anatomical models for training
Internet of Things (IoT) including sensors, wearables, facial recognition	Use of google glass to deliver remote surgical education

The following custom hype cycle for these technologies in education (derived from Gartner research) shows us when these technologies are likely to reach mainstream adoption.
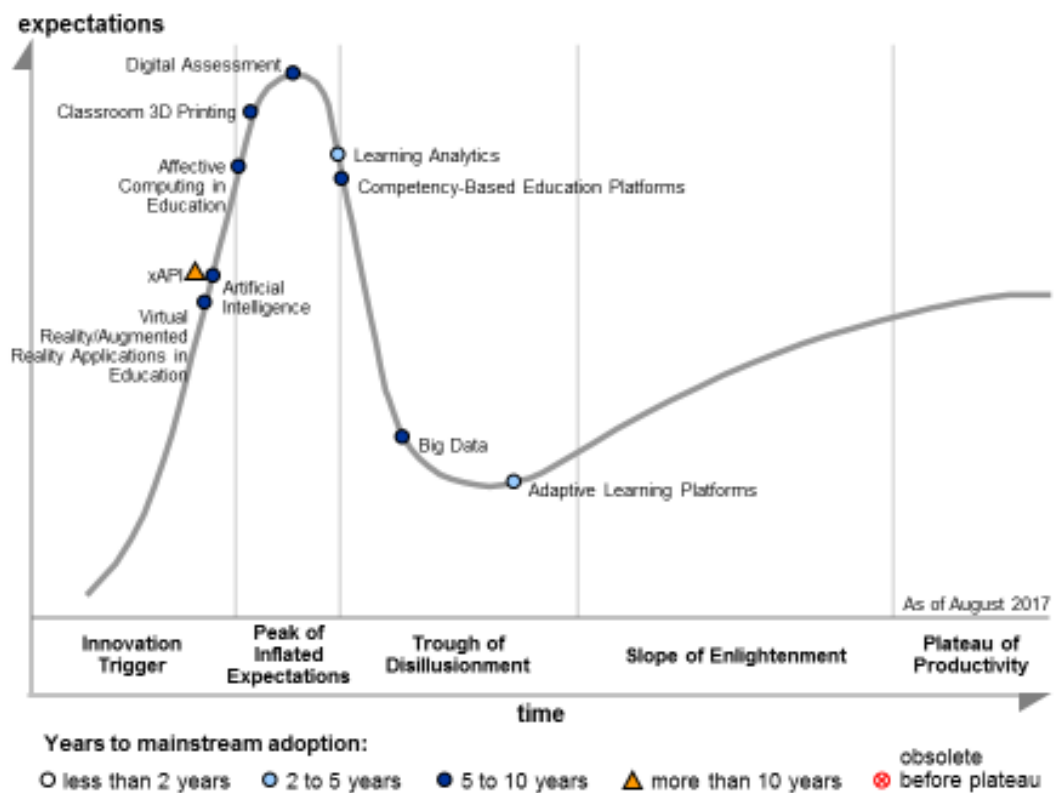
Our horizon scanning activity has generated new areas of interest to the TEL Programme; informing investment decisions and research over the coming year. These include discovery work into the use of xAPI for the e-Learning for Healthcare Hub, exploring the use of artificial intelligence for digital competency assessment and establishing a VR lab to test the utility of different devices and software for healthcare education and to grow a 'VR in Healthcare' community to spread learning.

If you want to be part of the conversation about new and emerging technologies, please email tel@hee.nhs.uk. We meet four times a year – our next few meetings will be online – no contribution is too great or too small!

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The Topol Review: Preparing the healthcare workforce to deliver the digital future

The game changing pace of development in relevant technologies such as genomics, machine learning and artificial intelligence, digitalisation and data analytics, bionanotechnology and robotics means they will form a key part of the future NHS.

To enable NHS staff to make the most of these opportunities to improve services and help ensure a sustainable NHS, the Secretary of State for Health and Social Care has commissioned a major independent review, led by Dr Eric Topol and facilitated by HEE.

The review will provide independent advice to the Secretary of State for Health and Social Care on:

- o how technological and other developments (including in genomics, pharmaceutical advances, artificial intelligence, digital and robotics) are likely to change the roles and functions of clinical staff in all professions over the next two decades to ensure safer, more productive, more effective and more personal care for patients;

- o what the implications of these changes are for the skills required by the professionals filling these roles, identifying professions or sub-specialisms where these may be particularly significant;

- o the consequences for the selection, education, training, development and life-long learning of current and future clinical staff.

The review will provide interim conclusions to the Secretary of State for Health and Social Care by June 2018 and a final report by the end of 2018.

e-LfH update
The HEE e-LfH team is constantly updating existing and launching new
e-learning sessions. For the schedule of when new sessions will be launched please click on this link:
www.e-lfh.org.uk/planned-programmes.

Breastmilk Provision for Preterm and Sick Neonates e-learning programme launched

We have worked in partnership with the Thames Valley and Wessex Neonatal Operational Delivery Network, Portsmouth Hospitals NHS Trust, University Southampton Hospitals, Oxford University Hospitals and HEE e-Learning for Healthcare (e-LfH) to develop a learning resource to improve education and training of all relevant staff in the support of breast milk provision for preterm and sick infants.

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The e-learning programme will also enable healthcare professionals to improve breastmilk provision rates at discharge from neonatal units.

The content is suitable for all professionals who work to support to improving breastmilk provision including:

- Nurses and healthcare assistants
- Midwives and maternity healthcare support workers
- Medical trainees
- All medical staff

This resource can be used as a preparatory learning experience and can also be used for performance support by healthcare professionals. The content is split into four main sections:

1. After delivery – what the healthcare professional should know and help the mother to understand before she starts expressing breastmilk
2. Starting to express – how to support a mother practically and emotionally as she begins to express
3. Increasing milk supply – how to support mothers to maintain and increase their breastmilk supply
4. Resources – access to a set of useful job aids and reference tools.

The e-learning programme is available to access for free via the e-LfH Hub and the Electronic Staff Record.

For more information about the e-learning programme and details on how to access the programme visit: https://www.e-lfh.org.uk/programmes/breastmilk-provision-for-preterm-and-sick-neonates/

Breastmilk Provision for Preterm and Sick Neonates

An e-learning resource to help improve breastmilk provision rates at discharge from neonatal units

Foundation e-learning project: Professional Capability: 3 Behaves in accordance with ethical and legal requirements

Foundation specific e-learning - developed by The Academy of Medical Royal Colleges in partnership with HEE e-LfH to develop a Foundation Programme specific e-learning programme which is approved by UKFPO.

The Mental Health Act protects the rights of vulnerable adults and children; a group of the e-learning sessions outline the responsibilities of the people who care for them.

The e-learning programme explores how the General Medical Council (GMC) supports career development, looking at the topics of registration, the Foundation Programme and career development.

There are sessions which focus on the safeguarding of adults and children in primary and secondary care.

The importance of protecting data is also explored in sessions about information security and the Data Protection Act.

Sessions include:
Confidentiality and Privacy
Mental Health Act, Mental Capacity, Mental Capacity Assessment
Capacity and Difficult Consent
Use of Restraint
HIV Testing
DVLA
How to avoid the GMC Disciplinary Committee
Infection Control: Diarrhoea in an Inpatient
Completion of the Medical Certificate of Cause of Death Part 3
Safeguarding Vulnerable Adults
GMC Registration and Post Graduate Observation
Safeguarding Adults: Level 2
Safeguarding Children: Level 1 Safeguarding for All Staff Working in a Healthcare Setting
Safeguarding Children: Level 2 Part A - Recognition
Safeguarding Children: Level 2 Part B - Response in Secondary Care
Safeguarding Children: Level 2 Part C - Record in Secondary Care
Safeguarding Children: Level 2 Part B - Response in Primary Care
Safeguarding Children: Level 2 Part C - Record in Primary Care
Information Security
An Introduction to the Data Protection Act.

If you need to complete parts of the curriculum on your e-portfolio which you do not cover in day-to-day practice, try some of the free e-learning mapped directly to the Foundation Professional Capabilities (Training Outcomes) in the 2016 Foundation Curriculum.

Sign in to the e-learning with the login supplied by e-LfH at the beginning of your foundation training: https://www.e-lfh.org.uk/programmes/foundation-programme/.

New sessions added to surgical trainees' e-learning programme

The HEE e-LfH team has worked with the Royal College of Surgeons to develop and update eSurgery, a free e-learning resource supporting trainees in their early years of surgical training.

This resource provides a broad theoretical knowledge common to all surgical specialties and help trainees develop the basic knowledge and skills required of a surgeon.

eSurgery offers interactive e-learning sessions structured in modules that map to the Intercollegiate Surgical Curriculum Programme (ISCP).

The modules cover:
- Basic science knowledge relevant to surgical practice
- Common surgical conditions **– this module has recently been updated with 22 new sessions**
- Basic surgical skills
- Peri-operative care of the surgical patient
- Assessment and management of patients with trauma **– this module has recently been updated with 13 new sessions**
- Organ and tissue transplantation.

The eSurgery programme will be available via the Electronic Staff Record (ESR) in March 2018.

For more information about eSurgery and how to access the programme please visit: https://www.e-lfh.org.uk/programmes/surgery/.

Removal of redundant workforce development programmes

Please be aware that the following programmes will be removed from the e-Learning for Healthcare (e-LfH) Hub on 31 March 2018:
- Fire Safety
- Health and Safety
- Infection Control
- Manual Handling.

These programmes have been replaced by updated courses held within the new Statutory and Mandatory programme available here. The courses have been re-developed in a new format allowing for improved viewing using a mobile phone, tablet as well as laptop or desktop devices. The new programme can be enrolled on by individual users via the 'My Account', 'Enrolment' area once logged in.

Please be aware that any learning activity that you have undertaken on the e-LfH Hub will be retained and you can access this information via the 'My Activity', 'Reports' section of the e-LfH Hub. However, if you require a certificate, please access and download before 31 March 2018.

If you have any questions or queries relating to the removal of these programmes, please contact the support desk via this link.

Changes to the NHS CHC programme

Please note that access to the NHS Continuing Healthcare (CHC) programme will become available on the e-LfH Hub to local authority and some third sector staff from 1 April 2018. Colleagues with the following email addresses will be able to register for the programme on the e-LfH Hub:

- .gov.uk
- @nass.uk.net
- @neural.org.uk

- @mssociety.org.uk
- @ageuk.org.uk
- @alzheimers.org.uk

- @nhsconfed.org
- @parkinsons.org.uk
- @sheffieldmind.co.uk
- @spinal.co.uk
- @sueryder.org
- @mndassociation.org

@beaconchc.co.uk
@careengland.org.uk
@mariecurie.org.uk
@mencap.org.uk
@mind.org.uk

The NHS Continuing Healthcare Portal will be removed on 31 March 2018 and you will need to register on the e-LfH Hub to access this programme.

If you already hold an account on the e-LfH Hub individual users can enrol on this programme, via the 'My Account', 'Enrolment' area once logged in.

If you have any questions or queries relating to this programme, please contact the support desk via this link.

New content to support nasogastric tube placement guidance

The Image interpretation programme has developed two new sessions on nasogastric (NG) tube placement in response to patient safety publications.

The first session covers the main principles of correctly identifying the NG tube position on a chest radiograph. It also includes how to tell if the NG tube should be advanced and the safety issues surrounding this. The second highlights the clinical governance and safety issues involved with assessing radiographs for the correct NG tube placement. Systems to promote safe practice are also outlined.

33_01 - Image Interpretation - Nasogastric Tube Placement: Using Chest Radiographs to Identify Nasogastric Tube Placement http://portal.e-lfh.org.uk/Component/Details/482786

33_02 - Image Interpretation - Nasogastric Tube Placement: Safe Practice and Clinical Governance https://portal.e-lfh.org.uk/Component/Details/482790

The sessions were written by Natasha Hayes, a Radiographer at Homerton University Hospital NHS Foundation Trust. The module editor was Dr Nick Woznitza, Consultant Radiographer at Homerton and Clinical Academic at Canterbury Christ Church University, Kent.

Dr Nick Woznitza said: *"Accurate interpretation of chest radiographs for nasogastric placements is an essential role in maintaining patient safety. These sessions provide the core knowledge required in an accessible format."*

Video and illustrations used in the sessions were developed by the NHS Improvement National Patient Safety Team.

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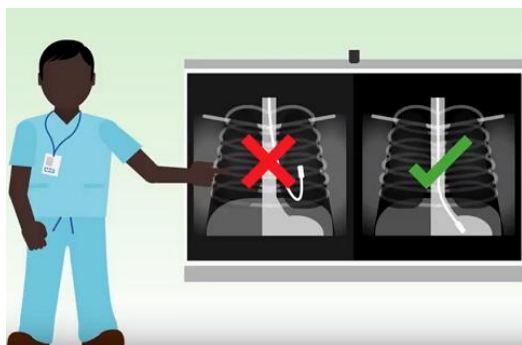
Please note these e-learning sessions do not provide competency-based training but offer a knowledge base for radiographers and other healthcare staff to accurately interpret chest radiographs for the position of an NG tube.

For more information please contact dorothy.keane@e-lfh.org.uk

Illustration courtesy of NHS Improvement National Patient Safety Team

Doctors in training induction package

We are developing a standardised national online induction package for Doctors in training. The target audience for this resource is Foundation doctors, but it will be available for all doctors in training as part of their induction.

The Doctors in Training Induction e-learning programme is not intended to replace statutory and mandatory training. Doctors in training will still need to complete statutory and mandatory training as required by their role.

Dr Clare Van Hamel has been appointed as the clinical lead for this piece of work. The programme team is working with a range of subject matter experts to develop three patient centred scenarios, which will cover the following clinical topics: Blood Transfusion, Consent, Death Certification, Mental Capacity Act, Record Keeping, Risk Management, Safe Prescribing and VTE Thromboprophylaxis. The scenarios will be based within primary, secondary and community care settings.

Work is underway to define the learning outcomes and agree content for the three scenarios.

The new induction e-learning programme will be available from June 2018, via the e-Learning for Healthcare Hub, the Electronic Staff Record (ESR) and local Learning Management Systems via AICC links.

For more information please email tel@hee.nhs.uk.

For more information about anything you have read in this update please email tel@hee.nhs.uk.

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