

# Hospital Healthcare Europe 2021

Latest issue – Hospital Healthcare Europe 2021

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### HOPE

Healthcare in Europe: A review of healthcare data before COVID-19 26 November 2021

The figures in this analysis provide the most up-to-date comparative picture of the situation of healthcare and hospitals

HOPE Governors' responses 26 November 2021

HOPE Governors discuss their national COVID vaccination programmes and delivery, and the consequences of the pandemic on physical and mental healthcare provision to non-COVID patients



## **EMERGENCY CARE**

Higher in-hospital mortality risk with anticoagulant use at time of major trauma normalises over six months 4 November 2021

A study has found that while anticoagulant/antiplatelet use in older, major trauma patients increases their risk of in-hospital mortality, six months later, there was no adverse effect of these drugs on functional outcomes.

Three clinical symptoms in ED patients with atraumatic back pain associated with cauda equine compression 4 November 2021

Three key clinical findings have been found to be independently associated with an MRIconfirmed diagnosis of cauda equine compression.

Guideline-based acute paediatric asthma care infrequent in US emergency departments 4 November 2021

An analysis of over 7 million ED visits for acute asthma in children has revealed how only 34% of visits were guideline adherent although this increased to 42% in paediatric ED centres.

Higher qSOFA scores predictive of mortality among ED trauma patients 4 November 2021

Among trauma patients in the emergency department (ED), the quick sequential Organ Failure Assessment score (qSOFA) has shown good predictive value for mortality.

Positive CT-PA and haemoptysis associated with meeting 4-hour target in ED for PE patients 4 November 2021



Within an emergency department (ED), researchers identified that a positive computed tomography pulmonary angiography (CT-PA) and haemoptysis were the only factors associated with meeting the 4-hour target in an ED.

Significant increase in ED visits for bike-related injuries during the pandemic 4 November 2021

Researchers have identified ED visits for bike-related injuries increased during the pandemic although these were soft-tissue-related but no more serious than in previous years.

#### NICE updates guidance on the use of casirivimab and imdevimab in COVID-19 4 November 2021

The National Institute for Health and Care Excellence (NICE) has made revisions to its original COVID-19 rapid guideline: managing COVID-19 (NG191) that was originally produced in March 2021 to take account of emerging evidence on the effectiveness of different therapies and, in particular, patients who are hospitalised with the virus.

# Simulation-based training improves retention of paediatric resuscitation skills 4 November 2021

After initial paediatric resuscitation training, skills can decay as early as 4 months later. Inclusion of simulation-based training 4 months after the initial training appears to improve retention scores when re-assessed after 8 months.

#### <u>Unintentional opioid exposure in young children a common problem at EDs</u> 4 November 2021

The majority of children with unintended opioid exposure attending an emergency care department were discharged without incident and even those admitted had favourable outcomes.

### Sponsored: COVID-19 screening: Combining AI and rapid blood diagnostics during emergency care

4 November 2021

In emergency departments (EDs), rapid and accurate COVID-19 screening is critical for effective infection control and ensuring timely – and appropriate – delivery of care for



patients. With the pandemic relentlessly exerting an unprecedented burden on the healthcare system worldwide, this call for fast identification of COVID-19 at the point of care is more urgent than ever

## RADIOLOGY AND IMAGING

#### Sponsored: High-level disinfection of ultrasound probes 8 July 2021

A large population-level study has revealed an unacceptable risk of infection following endocavitary ultrasound procedures. Nanosonics is intent on ensuring that vulnerable patients are protected from the risk of cross-contamination

#### Combined PET/MRI scanning identifies features of sports-related brain injuries 8 July 2021

Autopsies of patients with traumatic brain injury have found increased levels of tau aggregation and neuroinflammation but combining PET/MRI scanning has enabled the visualisation of these changes among living patients with sports-related injuries.

#### International radiologist survey identifies need for AI training 8 July 2021

With little known about radiologists' views on the implementation of artificial intelligence (AI) and how this might impact on practice, an international survey sought answers on this important topic.

#### Manganese enhances MRI imaging of viable tissue after myocardial infarction 8 July 2021

After a myocardial infarction, assessing the extent of damage is essential but difficult. Now manganese-enhanced MRI offers an innovate approach to evaluate myocardial viability within one hour of an infarct.

#### <u>Real-time microscopic imaging allows for examination of flow characteristics during</u> <u>bioprinting</u> 8 July 2021



Bio ink flow dynamics can potentially damage cells during the process of bioprinting. Using a microscopy technique, researchers have directly observed ink flow to help identify conditions that could lead to cell damage.

Imaging modalities play a vital role in the assessment of patients with COVID-19 8 July 2021

From the start of the COVID-19 pandemic, imaging modalities have proved to be of enormous importance in the diagnosis and management of patients.

8 July 2021

CT pulmonary angiography (CTPA) is the preferred imaging modality to detect pulmonary embolism (PE) but whether D-dimer levels can guide selection for CTPA is uncertain.

Deep learning ultrasound algorithm predicted prognosis of COVID-19 as well as clinicians

8 July 2021

A deep learning algorithm for lung ultrasound with the ability to identify patients with COVID-19 at high risk of clinical worsening showed good agreement with the view of clinicians.

<u>Guideline summary: Vetting (triaging) and cancellation of inappropriate radiology</u> requests

8 July 2021

Radiologist review of imaging requests prevents unnecessary exposure to radiation, inappropriate and duplicate examinations and makes the overall delivery of services both safer and more efficient. Recent RCR guidance advises on setting up efficient processes for vetting and communication.

<u>Guideline summary: Integrating AI with the radiology reporting workflows</u> 8 July 2021



This guidance from the Royal College of Radiologists sets out the standards that a department should meet when integrating artificial intelligence into already established systems, producing a safe seamless system with the patients at the centre.

#### Meet the Expert: Paul Sidhu

8 July 2021

Paul Sidhu is Professor of Imaging Sciences at King's College London and consultant radiologist in the Department of Radiology at King's College Hospital. His research interests have focused on ultrasound and interventional radiology. Here he shares his thoughts with Hospital Healthcare Europe on ultrasound and how this technique has evolved and will continue to develop in the future.

#### <u>The world of medical ultrasound – A President's perspective</u> 8 July 2021

Pamela Parker is a consultant sonographer working within radiology of the Hull University Teaching Hospitals NHS Trust. Pamela has over 25 years' experience in the field of medical ultrasound and is President of the British Medical Ultrasound Society.

#### Meet the Expert: Neelam Dugar

#### 8 July 2021

After specialising in oncology imaging at Manchester, Neelam Dugar is now a consultant radiologist at Doncaster and Bassetlaw NHS Trust and also Chair of the Radiology Informatics Committee at the Royal College of Radiologists. Hospital Healthcare Europe had the pleasure of speaking with her about her career to date and to discuss recent documents produced by the College on the use of artificial intelligence in radiology and the development of a vetting procedure for inappropriate scan requests.

European Radiology Society best practice guidance for lung ultrasound in COVID-19 8 July 2021

Lung ultrasonography is portable and easy to use and has become the 'go to' imaging modality for lung and pleura and is recognised as being able to make a substantial contribution to the care of patients with COVID-19.