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RCP regional poster competition 2021 digest introduction

In 2021 the RCP Regional team were delighted to announce a programme of 14 virtual poster competitions for trainees across England, Wales and Northern Ireland. Aware that face-to-face meetings would be restricted in 2021, the Regional team wanted to provide a forum for trainees to share their projects and work online.

The competition was open to trainees at all levels, including medical students, foundation year, IMT, CMT, ACCS-AM or ST3-7 (or equivalent) and MTI doctors. Physician associates and physician associate students were also invited to participate.

Posters could be based on the following topics:

- research and education
- examples of good practice, service improvement and innovation
- audit / quality improvement project
- innovation in medical education / training
- a case study involving a series of patients.

Over 500 applications were received. A regional panel of judges shortlisted a total of 195 entrants across the 14 competitions to present their virtual poster. A total of 42 judges participated in both shortlisting the abstracts and live judging of the virtual posters.

‘We were overwhelmed with the response from trainees from across the whole of England, Wales and Northern Ireland and the standard of submissions was extremely high. This competition created a platform for trainees to profile the outstanding projects and initiatives they have been developing while also working at the forefront of the pandemic response. We are grateful to all who submitted an abstract and congratulations to the winners and highly commended detailed in this digest. We’d also like to thank all the judges across our RCP community who gave up their time to shortlist and judge the various regional competitions.’ – Caroline Burton, RCP head of UK regions.

‘Fantastic selection of posters, with work completed during a challenging time! RCP provided an excellent opportunity for trainees to share their work and experience presenting.’ – Dr Carolyn Mackinlay, RCP regional adviser for the Severn region

One winner and one/two highly commended trainees were announced in each region/nation and these are included in this ‘RCP regional poster competitions 2021’ digest. The winners and highly commended have also been offered a free virtual place at Medicine 2022.

Congratulations to the winners and the highly commended award winners, but also to those shortlisted within their region/nations.

Please enjoy this digest of the 2021 competition.

RCP Regional team
Background
Epidemiology and aetiology of infective endocarditis (IE) has scope to change greatly, largely driven by the change in NICE guidance for pre-procedural prophylactic treatment of patients at risk of IE in 2008, coupled with increasing rates of valve replacement and ICD insertion, meaning ongoing research is paramount.

Aim
The aims were to review the epidemiology and aetiology in IE patients and to assess if the Modified Dukes criteria remains useful in predicting likelihood of IE.

Methods
All patients who had a transoesophageal echocardiogram for the investigation of IE in a tertiary teaching hospital between 2015–2020 were analysed. A total of 218 patients were included in the study and demographics, pathogen, Modified Dukes score and diagnosis were collected from discharge summaries.

Results
In total, 36.3% had echocardiographic evidence of IE, with a further 19.3% treated due to high clinical suspicion, with aortic valves being the most affected and mortality of 30.26% at 1 year. Of IE patients, 89.8% had a positive blood culture, 43.2% isolating strep pathogens. Extracardiac source of infection was found in 36.6%, with main sources split between skin, spinal and intra-abdominal. Of those with ‘Definite’ Dukes criteria, 92.1% had echocardiographic evidence of IE and 21.1% mortality.

Conclusion
This study showed evidence of evolving aetiology of IE, compared with previous studies suggesting *S aureus* and dental as most common pathogen and extracardiac source. Modified Dukes criteria remains effective in predicting IE and this study suggests it could be used to predict mortality.
East Midlands – highly commended

Mouth care matters: improving mouth care on the stroke ward at Royal Derby Hospital

Lead author: Leanne Lacey – junior clinical fellow
Co-authors: Charlotte Hubert and Caroline Hartley
University Hospitals of Derby and Burton NHS Foundation Trust / Royal Derby Hospital

Introduction
Dysphagia is common after stroke and significantly increases the risk of aspiration pneumonia. Studies have shown good mouth care reduces this risk. Our project aimed to study and improve the standard of mouth care on the stroke ward at Royal Derby Hospital, by assessing compliance with the oral assessment tool (OAT) and exploring patient and healthcare professional experiences of mouth care and barriers to its delivery.

Methods
Proformas and questionnaires were designed to explore current practice, and patient and staff perceptions of mouth care. Three PDSA cycles were completed. Interventions included teaching huddles, individualised mouth care plan posters, patient and staff educational posters and improving provision of equipment.

Results
Across the cycles, completion of OAT within 24 hours improved (86% to 100%). Mouth care posters were consistently correctly displayed above beds and 86% of surveyed staff found these useful. Mouth care huddles improved confidence (87%) and 82% found the educational posters useful. Provision of mouth care products improved from 14% to 33%. There was no overall improvement in patient perceptions of mouth care.

Discussion
Barriers to mouth care delivery are multi-factorial, requiring a multidisciplinary team (MDT) approach to deliver sustained improvements. Although we have achieved some progress there remains a need for significant improvements to meet the required standards. Interventions were well received, increasing awareness and confidence. Further work needs to focus on documentation of mouth care, availability of equipment, and ongoing education and collaboration of the MDT.
East Midlands – highly commended

Creation and implementation of a deteriorating patient pro-forma at Nottingham University Hospitals NHS Trust

Lead author: Charlotte Parr – ST6
Co-authors: Hannah Tobiss, Sally Wood, Daniel Takahashi, Lauren Clark and Jack Cunningham
Nottingham University Hospitals NHS Trust / Queen’s Medical Centre

Prompted by the proposed Deteriorating Patient CQUIN (CCG9 2020/21) designed to support improvements in reliable recording of deterioration episodes, we created a Deteriorating Patient Proforma (DPP) for use at Nottingham University Hospitals (NUH) to improve the consistency of our approach to, documentation and management of deteriorating patients. An in-depth audit in January 2020 of clinical response to high NEWS2 triggers at NUH highlighted inconsistencies in the response and documentation relating to the deteriorating patient. Key CQUIN indicators include time of escalation and clinical response. These are historically poorly recorded, impairing the ability to benchmark compliance with NEWS2. The DPP was designed with multi-professional and multi-specialty engagement and revised according to real-time feedback.

A structured proforma ensures all necessary data (from RCP and learning from incidents) are captured while addressing human factors – we use the SBAR format and provide prompts throughout, facilitating consistent, comprehensive documentation in high-stress situations. The DPP has resulted in improvement in both the graded quality of documentation (National Confidential Enquiry into Patient Outcome and Death (NCEPOD) approach) and SJCR-rated quality of care for a deterioration episode. User feedback highlighted the DPP as a useful tool, covering all areas for documentation, as well as prompting aspects often forgotten. Furthermore, there was a positive impact in clarity of escalation and resuscitation status, and inter-professional communication. The DPP is easily recognisable in medical records, alerting other healthcare professionals to a deterioration episode. The NUH DPP has been shared on the National Deterioration Forum and highlighted by the national deterioration lead for NHS England as an exemplar piece of work.
East Midlands judges

Dr Lee Walker – RCP regional adviser, East Midlands South
Dr Ajay Verma – chair, RCP new consultant committee
Dr Kailash Krishnan – RCP new consultant committee representative, East Midlands

Names of lead authors shortlisted to present in the East Midlands region virtual poster competition

Ankita Singh
Anupama Vijay
Asif Muhammad
Beth Brailsford
Daniel Smith
Fazeel Shahid

Hayley Cheung
Jennifer Walker
Lucy Brooks
Olakunle Akanji
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Eastern – overall winner

Could the use of an age-adjusted D-dimer reduce the number of unnecessary radiological interventions carried out within the trust?

Lead author: Elizabeth Hickman – physician associate student
North West Anglia NHS Foundation Trust / Hinchingbrooke Hospital

Background
In March 2020, NICE guidance 158 recommended the use of an age-adjusted D-dimer threshold, as part of the diagnostic strategy for people aged over 50 presenting with possible venous thromboembolism (VTE).

Methods
We conducted a retrospective review of 170 patients presenting with possible VTE. Our local D-dimer threshold was set at 250 ug/l. The age-adjusted threshold for our assay in people aged over 50, is calculated as their age multiplied by 5.

Results
During our project, 146 patients presented as possible PE, and 24 as possible DVT. For the PE cohort, the specificity of the new threshold increased from 23% (95% CI 16% to 32%) to 39% (95% CI 30% to 48%). It remained unchanged at 67% for DVT. Sensitivity remained at 100% for all patients.

If we had implemented the age-adjusted D-dimer for these patients, we could have reduced the number of CTPAs from 95 to 77 (19 less scans). The number of Doppler scans would have been unaffected and we would not have missed any VTE diagnoses. Less patients would have been exposed to radiation and the trust would have saved valuable resources.

Conclusion
As a result of this project, the trust has now agreed to implement the age-adjusted D-dimer.
Eastern – highly commended

A study of stakeholder views on ethical issues relating to asymptomatic COVID-19 testing in a higher education institution

Lead author: Caitriona Cox – internal medicine trainee
Cambridge University Hospitals NHS Foundation Trust / Addenbrooke’s Hospital

Background
Asymptomatic COVID-19 testing programmes are being introduced in higher education institutions, but little is known about stakeholder views regarding associated ethical issues.

Methods
We conducted a mixed-method study (semi-structured interviews and a survey including open/closed questions) with stakeholders at a university with a student testing programme. Survey data were analysed descriptively; analysis for interviews was based on the Framework method.

Results
A total of 239 people participated in the study: 213 in the survey (189 students, 24 staff), and 26 in interviews (19 students, 7 staff). 99% supported the testing programme, with stakeholders identifying a range of goals (including reducing virus transmission, data collection for research and providing psychological reassurance). 76% felt the university had some responsibility to run a testing programme. 62% supported voluntary participation, with tentative support for incentivisation and opposition to penalties for non-participation. Multiple challenges were identified with isolation (notably psychological impact), which were seen as disproportionately burdensome for some groups. There was clear identification of university responsibilities to support isolating students. 61% were worried about false negatives, vs 40% worried about false positives. Concerns surrounding privacy/confidentiality were expressed by some, but there was general acceptance of the need for limiting sharing of positive test results to run the testing programme effectively.

Conclusion
We gathered empirical data on stakeholder views relating to a wide range of ethical issues. These data can be used as part of an empirical ethics approach to answer normative questions regarding mass asymptomatic COVID-19 testing programmes, informing decision making about their introduction, design and delivery.
Eastern judges

Dr Deepak Jain – RCP regional adviser, Eastern
Dr Khin Swe Myint – RCP regional adviser, Eastern
Dr Khalifa Boukadida – RCP SAS deputy lead

Names of lead authors shortlisted to present in the Eastern region virtual poster competition

Abu Taher
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Clare Freer
Daniel Ng
Dylan Angel
Fathima Thaahira Mohideen
George Choa
Georgia Galloway

Joanne Kiang
Madeline Charles-Rudwick
Oluwagbemiga Idowu
Rowan Gossedge
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RCP regional office

Eastern

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Kent, Surrey, Sussex (KSS) – overall winner

Do we need national head and neck cancer referral guidelines? A 6-year retrospective analysis
Lead author: Zohaib Siddiqui, ST1
Co-author: Nadine Caton
Maidstone and Tunbridge Wells NHS Trust

Introduction
Within the UK, no national referral guidelines exist for suspected head and neck cancer (HNC). HNC is the 8th commonest cancer and numbers are increasing. We analysed the HNC referral-pathway within our trust, comparing it with NICE, Pan-London referral pathways and the symptom based risk calculator for head and neck cancer referrals (HaNC-RC.V2).

Method
A 6-year retrospective analysis (2015–2020) of HNC referrals. We identified proven cancer patients and compared our referral pathway with NICE, Pan-London and HaNC-RC.V2 to assess which holds the strongest cancer detection rates. We also included an equal number of disproved HNC patients to obtain the negative predictive value (NPV) of each pathway.

Results
A total of 8,607 patients were referred to 2ww-HNC-clinic between 2015 and 2020. 210 patients were diagnosed with HNC (72F, 138M). HNC detection increased from 1.9% in 2015 to 2.4% in 2019 and 3.3% in 2020. There was a 32% increase in referrals over 4 years. The average time to diagnosis (TTD) was 56 days. PPV: Pan-London 94.7%, NICE 91%, HaNC-RC.V2 82.9%. NPV: Pan-London 18.6%, NICE 52.7%, HaNC-RC.V2 72.3%. Overall mortality 26%. 2-year survival 88%.

Conclusion
The sheer volume of suspected HNC referrals highlights the need for a robust referral pathway to reduce unnecessary referrals and TTD for proven HNC patients. This requires a pathway with a high PPV and high NPV to prevent non-HNC referrals. Pan-London had the highest PPV and with modification became more effective, but a low NPV. HaNC-RC.V2 had the highest NPV and with modification to females with neck lumps, the PPV increased to 93.3%. To reduce non-HNC referrals, we recommend a specialist nurse to triage using a modified HaNC-RC.V2 and refer directly for ultrasound.
Kent, Surrey, Sussex (KSS) – highly commended

**The virtual escape room: a new near-peer approach to supporting FY1s transition to FY2**

Lead author: Georgina Yan – foundation year  
Co-authors: Bethany Whittle, Roshnee Patel and Charles Markham  
University Hospitals Sussex NHS Foundation Trust

**Introduction**

Escape rooms can be a high-impact medical education tool due to the opportunity to challenge multiple skills simultaneously in a controlled environment. We designed a virtual escape room to support foundation year 1 (FY1) doctors with the transition to foundation year 2 (FY2). Our aim was to improve their confidence in the management of acutely unwell patients and build on non-technical skills including prioritisation and communication, while creating a resource that could be utilised for future near-peer teaching.

**Methods**

The scenario was designed via Google Forms incorporating clinical learning needs the FY1s had pre-identified, such as the management of upper gastrointestinal bleeding and tachyarrhythmias. The session was delivered to 36 FY1s across two hospitals of whom, half attended in person and half attended via Microsoft Teams.

**Results**

A total of 83% of FY1s rated the session ‘excellent’ (5/5 on likert-type scale). The FY1s found the format engaging and confidence building for FY2. The FY2 facilitators shared personal reflective experiences to reinforce key principles regarding prioritisation and initial management of unwell patients. Overall, the FY1s valued the opportunity to discuss their thought processes and work together to solve problems in a safe environment.

**Conclusion**

Virtual escape rooms are straightforward to design and deliver. This approach empowers learners to discuss their reasoning behind clinical decisions and consider different viewpoints. Facilitation by near-peer tutors promotes reflective practice, which is essential for junior doctors learning to manage uncertainty in clinical medicine. We will further develop the virtual escape room approach for the upcoming trust FY1 induction.
KSS judges

Dr Deborah Bosman – RCP regional adviser, KSS
Dr Jeremy Tibble – RCP regional adviser, KSS
Dr Umesh Dashora – RCP regional adviser, KSS

Names of lead authors shortlisted to present in the KSS region virtual poster competition

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Ala Haqiqi
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Shilen Shanghavi
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London – overall winner

A year-long trust-wide audit of electronic treatment escalation plans introduced during the COVID-19 pandemic

Lead author: Elizabeth Brown – junior clinical fellow
Co-author: Isabella Watts
Imperial College Healthcare NHS Foundation Trust

Audit standards
1. All adult inpatients should have an eTEP.
2. All eTEPs that limit treatment should be discussed with the patient or next of Kin (NoK).

Methods
In response to the COVID-19 pandemic in March 2020, paper treatment escalation plans (TEPs) were replaced with electronic treatment escalation plans (eTEPs). We performed monthly point-prevalence audits using CERNER electronic records from April 2020 to April 2021. Education initiatives were undertaken throughout the year as part of an ongoing quality improvement project. Data on location and timing of TEP completion; treatments limited; discussions with patient and NoK and frailty scores were collected.

Results
A total of 9,895 patients and 3,762 eTEPs were included. When paper TEPs were audited in 2018, 10% of patients had a TEP and all TEPs limited treatment. In the year following eTEP introduction, monthly completion varied from 28%–57%. Of these eTEPs, only 58% limited treatment, and 42% stated ‘for full escalation’. The monthly proportion of patients with an eTEP correlated with the proportion of COVID-19 inpatients – with higher rates seen during the spring and winter peaks. 87% of eTEPs that stated ‘not for full escalation’ had a documented discussion with the patient/NoK.

Discussion
The implementation of eTEPs has improved overall TEP completion and helped to incorporate these discussions into standard practice. The COVID-19 pandemic has put new focus on documenting escalation plans, and eTEP completion rates were highest in April 2020 and January 2021 when clinical services were under intense pressure. This suggests wider use is feasible if a culture is created where these decisions and discussions are prioritised.
London – highly commended

Tackling the NHS culture shock for international doctors

Lead author: Pushpo Hossain – clinical fellow
Co-authors: J Kotecha, K Fardeen and J Husselbee
Epsom and St Helier University Hospital NHS Trust

Introduction
International medical graduates (IMGs) constitute around 40% of the NHS medical workforce. Cultural differences mean IMG doctors face significant challenges upon entering the workforce, including communication difficulties, teamworking skills and accessing training programmes. We developed a teaching programme to address challenges faced by IMG doctors integrating into our NHS trust.

Method
Existing IMG doctors in the trust – with more than 1 year’s experience – were surveyed to understand the challenges they faced. A programme of nine weekly virtual teaching sessions for new IMG doctors was developed using the survey results. Topics included difficult conversations with patients, referring to other specialties and portfolio building. Sessions were designed and delivered primarily by existing IMG doctors. Feedback was collected after each session to ensure learning objectives were met.

Results
Of 30 existing IMG doctors surveyed, 85% felt a teaching programme to help integration into the NHS was necessary. Over the 9 weeks, 23 new IMGs attended, with more than than 90% reporting the sessions to be useful. All attendees reported improved confidence in communication skills (vs 30% feeling confident pre-programme) and knowledge of training pathways (vs 4% pre-programme).

Conclusion
IMG doctors face multiple cultural challenges upon joining the NHS workforce. We developed a teaching programme specifically tailored to the needs of IMG doctors within our trust. We hope to integrate this programme into existing trust induction programmes to help future IMG doctors. Additionally, we feel it is a model other trusts could use to benefit their IMG doctors.
London judges

Dr Jacob de Wolff – RCP regional adviser, North West London
Dr Elaine Hui – RCP regional adviser, North West London
Dr Tumena Corrah – immediate past New Consultants Committee representative

Names of lead authors shortlisted to present in the London region virtual poster competition

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Mersey – overall winner

Enhancing research capacity: the impact of NWCORR, an innovative trainee research collaborative

Lead author: Victoria Randles – StR
Co-authors: Patrick Bradley, Laurence Pearmain, Arshiya Mastan and Freddy Frost
Liverpool University Hospitals NHS Foundation Trust

Launched in February 2020, the North West Collaborative Organisation for Respiratory Research (NWCORR) has facilitated collaboration between respiratory trainees from the Mersey and North West Deaneries to create high quality, multicentre research aligned with the RCP ‘Research for All’ strategy.

Our network, one of only three regional respiratory trainee collaboratives, now provides trainees with a new pathway to gain valuable experience of research design and delivery through mentorship and networking, with support from the Greater Manchester NIHR CRN.

With 42 active members, NWCORR has successfully completed three research projects including over 1,300 patients from across 13 hospitals. Thirty-nine trainees have participated, each gaining valuable research experience alongside clinical training without having to undertake an ‘out of programme’ research post. Trainees, with support from consultant mentors, have led all aspects of research design and delivery through to presentation at national conferences and publication in peer-reviewed journals. The data from our first projects have contributed meaningfully to the care of COVID-19 patients, and several projects in other areas are planned.

The success of NWCORR demonstrates the value of trainee research collaboratives and we believe our model can serve as an exemplar. We will present the development of NWCORR since its inception, outline the structure of the group, its research projects, key outputs, challenges faced and future directions. We believe networks like ours can, and should, play a pivotal role in embedding a research culture into everyday practice, improving patient care while fostering the researchers of the future within the NHS.
Mersey – highly commended

Preparation for the foundation programme: is there a guide for this?
Lead author: Wendy Tan – foundation year
Co-author: Akash Doshi
Warrington and Halton Teaching Hospitals NHS Foundation Trust

Transitioning from being a medical student to a doctor can be a daunting process. Although student assistantships and the shadowing period can give a good insight into the day-to-day job of a foundation doctor, there are often many questions left unanswered, especially regarding the practicalities of being a doctor.

There are many courses available on assessing and diagnosing acutely unwell patients but there are very few resources on the employment process. There is currently no guidance or reading material published that foundation doctors can refer to if they have any specific queries. Therefore, the aim of this project is to create a booklet that medical students and IMGs (international medical graduates) can refer to when starting their foundation programme.

Based on a questionnaire sent to over 1,000+ medical students and IMGs preparing for FY1, a list of topics was generated. This includes information on the general day-to-day job, communication skills, ARCP as well as pre-work preparation such as medical indemnity, essential equipment, rota allowances, pay and tax. Important tips and general examples are also included to give a better idea on what to expect. The booklet is disseminated upon completion of a survey.

We will obtain further feedback regarding the booklet to tailor it accordingly, and plan to create a yearly teaching course with it. The objective of this is to increase confidence among the incoming foundation doctors and better prepare them for the employment process.
Mersey – highly commended

Building QI capacity for rheumatology: from the bottom up

Lead author: Rosalind Benson – StR
Co-authors: Charlotte Sharp and Hannah Baird
Warrington and Halton Teaching Hospitals NHS Foundation Trust

Background
Specialty trainee representatives conceived the bi-annual rheumatology Northwest trainee leadership and management series, having identified a need for leadership and management training. During their 3-year tenure they recognised a need to build capacity in quality improvement (QI) methodology for trainees and consultants.

Methods
In May 2019, a QI workshop brought 35 trainees and consultants together, using established materials. Following delivery of a session which received excellent feedback, the British Society for Rheumatology (BSR) invited the trainees to convene a day-long QI workshop. Delegates were invited to rate their confidence in using a number of QI tools, and in participating in or leading QI, before and after the course.

Results
The first BSR national practical QI methodology workshop was convened online in March 2021. Specialty trainees designed the course and resources, delivering the content (‘teaching up’), alongside six faculty members from the MDT. A total of 30 delegates with varying experience (consultants, trainees, pharmacists, nurses and physiotherapists) attended a combination of plenary and breakout sessions. All 22 survey respondents stated that the course would change their practice and that they would recommend it to colleagues. The most marked improvement was reported in delegates’ confidence in leading QI. All now felt confident in using the QI tools taught and >50% felt happy to teach others.

Conclusion
Scaling up a programme of work which began as a regional meeting and has progressed to a national course as part of the BSR ‘core education’ offering, we are contributing to embedding a sustainable culture of QI within rheumatology.
Mersey judges

Dr Laura Watkins – new consultant committee representative, Mersey
Dr John Anderton – head of school of medicine, HEENW
Dr Ash Bassi – RCP regional adviser, Mersey

Names of lead authors shortlisted to present in the Mersey region virtual poster competition

Amit Banerjee
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Emily Pye
Emily Woolley
Jennifer Bellamy
Mark Ambrose
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Northern – overall winner

Cholecystectomy following ERCP for common bile duct stones (CBDS); are we getting it right?

Lead author: Chia C Yau – StR
North Tees and Hartlepool NHS Foundation Trust

Introduction
Patients with CBDS undergoing ERCP and duct clearance should have early cholecystectomy (CCY) to minimise the risk of recurrent biliary complications and acute pancreatitis. The British Society of Gastroenterology (BSG) recommends CCY as a definitive management for patients with concomitant gallbladder (GB) and CBDS. For patients with mild acute gallstone pancreatitis, CCY should be performed within 2 weeks of presentation. Recently the European Society of Gastrointestinal Endoscopy (ESGE) recommended CCY within 2 weeks following ERCP in CBDS patients to minimise the risk of recurrent biliary events.

Aim and objectives
To determine the time frame between ERCP and CCY in non-pancreatitis group, to determine the time frame between ERCP and CCY in pancreatitis group and to determine the readmission rate with biliary events while awaiting CCY.

Method
All patients who underwent ERCP for CBDS in our centre between 1 July 2018 and 31 July 2019 were included. Patients with prior CCY were excluded. All patients were followed up for at least 6 months following their ERCP.

Results
A total of 216 patients underwent ERCP for CBDS. 47 patients with prior CCY were excluded. 45.6% (77/169) of patients with gallbladder in situ underwent CCY. The median time between ERCP and CCY was 105 days (range 0–379 days). In the CCY group, 10 patients had mild pancreatitis – the median time between ERCP and CCY was 54.7 days (range 1–169 days). 30% (3/10) of the patients with mild pancreatitis and 10.4% (8/77) of patients overall underwent CCY within 2 weeks of duct clearance. In the non-CCY group, 52% were deemed unfit for surgery, 15% declined surgery, 13% await appointment for surgery, 15% await surgical outpatient appointment and 5% were not referred for surgery. In the non-CCY group, nine patients had mild gallstone pancreatitis – three were deemed unfit for CCY, three await surgical outpatient appointment, one awaits appointment for CCY, one declined CCY and one patient was not referred for CCY.

Conclusion
The median time between ERCP and CCY was high in our organisation. Only a small proportion of patients in the mild pancreatitis and non-pancreatitis groups underwent CCY within 2 weeks of duct clearance. Local pathways including early referral, prompt surgical assessment of patients deemed fit for surgery and access to regular hot CCY lists should be established to streamline the management of these patients and ensure adherence to the guidelines.
Decision making translates the question of ‘what is going on?’ into ‘what course of action is best?’. When what course of action is best seems obvious, decision making may not even be experienced as making a decision. However, at other times it is unclear and contentious as to what the best course of action is and reaching a consensus on the matter may not be feasible.

The difficulty of decision making can be heightened in an acute medical unit (AMU), where wide-ranging decisions are made under time pressure. Surprisingly, the process of decision making in an AMU is relatively unexplored. There is an abundance of prescriptive literature (how decisions should be made), but a poverty of descriptive literature (how decisions in fact are being made.)

In this qualitative research, I present a new framework of how decisions are made in an AMU. These findings are derived from a thematic analysis of a 16-month ethnography of an AMU in the north of England, supplemented by 27 semi-structured interviews with staff, patients and relatives. I identify three values by which people judge what course of action is best: welfare, choice and effectiveness.

My presentation of this ‘three-dimensional’ approach addresses the following objectives:
1 Expose the reductionism of current prescriptive models
2 Expand two key terms in clinical decision making: ‘futility’ and ‘holism’
3 Explain the psychological gear change between easy and difficult decisions.

In this way, my presentation would benefit physicians in terms of clinical practice, medical ethics and medical training.
Northern – highly commended

The impact of COVID-19 pandemic on upper GI and hepatopancreatobiliary cancers: beyond delayed diagnosis

Lead author: Palaniappan Jeyam Suresh – internal medicine trainee
Co-author: Ee Xuan Ngeyu
County Durham and Darlington NHS Foundation Trust

Objective
The BSG Endoscopic Section predict an increased GI cancer related mortality arising from reduced endoscopic activity and delays to cancer diagnosis during the COVID-19 pandemic. Initial modelling reports suggest up to a 58% reduction in weekly GI cancer detection during the first wave. A real world analysis of the adverse impact of COVID-19 on Upper GI and hepatopancreatobiliary (HPB) cancers within County Durham is closely examined.

Methods
Patients with a new diagnosis of upper GI or HPB cancer at County Durham over two 5-month periods June–October 2019 (pre-COVID) and 2020 (peri-COVID) were selected for this analysis. Data were collected from electronic patient notes and the Somerset Cancer MDT electronic database on patient details, pathway parameters and tumour parameters.

Results
A total of 163 patients were included – 82 patients in pre-COVID (2019) and 81 in peri-COVID (2020) cohorts. An absolute increase of 17.5% was seen in emergency presentation of UGI cancers to A&E in 2020 (35.8% v 18.3%). In the peri-COVID group, 87.1% of patients had advanced oesophageal and gastric cancer, 7.1% more than in the pre-COVID group. A similar increase of 6.4% was identified in metastatic pancreatic cancers (58.8% in 2020 v 52.4% in 2019).

Conclusion
The impact of COVID-19 on endoscopy activity resulted in a 17.5% increase in emergency presentation of UGI and HPB cancers, a nearly 10% increase in advanced cancer diagnosis and a 42% reduction in endoscopy activity in County Durham. We believe a similar phenomenon has occurred across the NHS and reinstates the collateral costs of a pandemic.
Northern judges

Professor Matthew Phillips – RCP regional adviser, Northern
Dr Sath Nag – RCP regional adviser, Northern
Dr Louise Southern – RCP new consultants committee representative, Northern

Names of lead authors shortlisted to present in the Northern region virtual poster competition

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Kristen Davies
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Northern

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Northern Ireland – overall winner

Improving discussions and documentation of treatment escalation and resuscitation decisions in acute medical admissions to a care of the elderly ward in a district general hospital: a quality improvement project

Lead author: Gary Roulston – internal medicine trainee
Co-authors: Dean Carolan, Michael Dolaghan and Michael Alcorn
The Ulster Hospital

Introduction
Establishing treatment escalation and limitation plans [TELP] for medical admissions is essential, particularly in patients with advancing frailty. Appropriate use of the Rockwood Clinical Frailty Scale [CFS] assists identification of patients unlikely to benefit from escalation to critical care and supports individualised discussions regarding goals of care. Once decisions are made, clear documentation prevents delivery of inappropriate interventions and facilitates effective communication.

Aims
To maximise the proportion of acute admissions to a care of the elderly [COE] ward with documented consideration of TELP, CFS and resuscitation status by time of first consultant geriatrician review.

Methods
Baseline data was retrospectively collected on 28 patients admitted to a COE ward in a district general hospital. An intervention consisting of a modified ‘take sheet’ containing prompts to consider CFS, TELP and resuscitation status was introduced and supported by a postgraduate teaching session. Two PDSA cycles were conducted between October 2020 and March 2021.

Results
At baseline (n=28), 93% of patients had documented CFS. In PDSA Cycle 1 (n=18), CFS was documented in 100%, and 100% in PDSA cycle 2 (n=18). Pre-intervention, 46% of patients had resuscitation status and 32% had TELP documented. In PDSA cycle 1, this improved to 72% of patients with resuscitation status and 61% with TELP documented. In PDSA cycle 2, 67% and 44% had resuscitation status and TELP documented respectively.

Conclusion
Results indicated an early improvement in documentation of CFS, resuscitation status and TELP. Incorporation of the intervention into medical induction with appropriate training may ensure sustained engagement.
Northern Ireland – highly commended

Hot-Mic: ‘Learning outside a comfort zone’ – a positive legacy of adaptations to COVID-19

Lead author: Chad Matthew Eastwood – StR
Co-author: Andrew Spence
Dairy Hill Hospital

Background
The COVID-19 pandemic posed unique challenges in delivering effective education on clinical placements. Mindful of the potential for remote working and self-isolation of staff and students alike, we developed Zoom ‘Hot-Mic’ sessions to facilitate remote teaching and broad coverage of the curriculum with an approach designed to develop skills that could accelerate learning and promote retention. Prior to each session students received 4–5 topics for 2-minute presentations – with only one selected, and in-session, it mandated preparation of all. One educator facilitated the session with a 5-minute debrief and feedback per topic to consolidate learning. Sessions were generalist (broad mix) and specialist (focused) in content.

Methods
Feedback was collated from 22 of 29 students (8 third year, 21 final year) comprising free text and Likert scale assessments: 1 (not useful) to 5 (very useful).

Results
In total, 86% of third years and 88% of final years ranked the sessions ≥4/5 (4.6/5 and 4.1/5 respectively). Free text responses indicated the design met our objectives – ‘Hot mics was useful as it forced focused revision into the given topics in order to meet time given. I felt it was a great way to learn’, ‘An interesting concept. Initially I was rather doubtful of how useful they would be, but I was surprised how much I actually retained.’

Conclusion
Hot-Mic augmented learning in a supportive yet pressurised environment. The design is simple, proofed against COVID-19 restrictions and was easily transferred (successfully) to other centres. When specialty focused it requires minimal preparation by educators, aside from content selection, so should encourage involvement despite heavy clinical workloads.
RCP regional poster competition digest 2021

Northern Ireland judges:

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Dr Stella Hughes – RCP regional adviser, Northern Ireland

RCP office

Northern Ireland

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North Western – overall winner

Can the use of the serum anti-PLA2R antibody negate the need for a renal biopsy in primary membranous nephropathy?

Lead author: Omar Ragy – SpR
Co-author: Vilma Rauteema
Manchester Royal Infirmary

Background
Since the emergence of the anti PLA2R ab test nephrology practice has not changed dramatically, and most nephrologists are still relying on performing a kidney biopsy in diagnosing membranous nephropathy. In this study, we sought to examine how specific the anti PLA2R ab test is using ELISA in diagnosis.

Methods
We have conducted a retrospective analysis for 187 patients between 2003 and 2020 correlating their renal biopsy findings with their anti PLA2R ab test when performed. Using a statistical analysis model, we have analysed the positive and negative predictive value of the anti PLA2R ab test carried out during that period. Also, we have recorded all patient’s demography, urine protein creatinine ratios, serum albumin, and treatment commenced whether using RAS blockade or immunosuppression treatment.

Results
The mean levels of anti PLA2R ab titer in primary membranous nephropathy were 217, whereas the mean level was only three for both secondary membranous nephropathy and other diagnoses. The majority of our cohort who had a positive anti PLA2R ab test had a confirmed renal biopsy diagnosis of primary membranous nephropathy with a PPV of 97.3%. Also, we found that the test sensitivity was 75.5%. In contrast, we found that the NPV was 79.8% and the specificity was 97.8% at a level of >20 IU/ml.

Conclusion
Anti PLA2R ab test is a highly specific test for diagnosing membranous nephropathy. Experience from our centre, supported by some evidence from the literature, suggests that we can rely solely on a positive test without the need to perform a renal biopsy. More trials are required to further support that notion.
Introduction
Despite patients with cystic fibrosis (CF) having a high risk of developing premalignant colorectal polyps and early colorectal cancer (CRC), there are currently no national recommendations for CRC screening in CF in the United Kingdom. We evaluated the incidence of premalignant polyps and CRC at a tertiary CF unit.

Methods
Data were collected from all patients with CF attending the Manchester Adult Cystic Fibrosis Centre (MACFC) between 2010 and 2020. Electronic records were reviewed for cases of CRC, and endoscopy reporting software was interrogated to identify those ≥30 years of age who underwent a colonoscopy.

Results
In total, 361/709 (51%) patients with CF at MACFC were aged ≥30 years, and n=135 (19%) were ≥40 years old. 33/361 (9%) of patients with CF ≥30 years of age (mean age 44.8 ± 11.0 years) underwent 39 colonoscopies between 2010 and 2020. At colonoscopy, in 11/33 (33%) of CF patients aged ≥30 years, 20 polyps were detected and removed, of which 93.8% were premalignant and 87.5% were proven adenomas. Patients ≥40 years of age accounted for the majority who were found to have polyps (8/11, 72.7%). Over a 10-year follow up, no patients in this study developed post-colonoscopy CRC. However, of the CF patients ≥40 years of age that did not have a colonoscopy (111/135, 82.2%), four subsequently developed CRC, three of whom died from complications of their cancer.

Conclusion
As the life expectancy of those with CF continues to rise, these data strongly support the development of CRC screening programmes to prevent CRC in those ≥40 years of age.
North Western judges:

Dr Sandy Thomson, RCP regional adviser, North Western
Dr Ray Keelan, RCP regional adviser for North Western
Dr Mumtaz Patel, RCP regional adviser for North Western

Names of lead authors shortlisted to present in the North Western region virtual poster competition

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Sophie Green  Fatima Riaz
Joanna Nathan  Muhammad Haris
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North Western

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Oxford and Thames Valley – overall winner

Improving the efficiency and effectiveness of acting on a critically abnormal blood result to reduce the number of serious incidents in the deteriorating patient

Lead author: Kate Brackenborough – ST5
Co-authors: Aya Abbas and Lauren Watts
Frimley Health NHS Foundation Trust

Introduction
Serious incidents involving the suboptimal care of the deteriorating patient across Frimley Health NHS Foundation Trust have increased over the past few years. A deeper dive highlighted that 44% of these were due to delayed awareness, recognition and treatment of critically abnormal blood results (CABR).

Method
The process of acting on a CABR was audited via observation and retrospective review over a week at the two acute hospitals within the trust, Frimley Park Hospital (FPH) and Wexham Park Hospital (WPH). The process involved multidisciplinary teams, information technology systems and the movement of a sample through the hospitals.

Results
Multiple areas of waste, delay and concern were highlighted, from origin of result within pathology to the action aimed to resolve the abnormality. Qualitative and quantitative analysis involving PDSA cycles and prototyping a CABR sticker has demonstrated improvement in the process. At WPH a third of CABRs were not communicated between pathology and the team clinically responsible for the patient. Four main medical wards were highlighted as having IT discrepancies, these were resolved. A 24/7 monitored nurse in charge (NIC) baton mobile was implemented on each ward, resulting in 100% of CABRs from pathology being communicated to the correct ward.

Conclusion
At FPH, 18% of critically abnormal blood results phoned through by pathology were not acknowledged due to failings in the documentation of results. The action taken for CABRs was not documented 45% of the time; a prototyped CABR sticker aiding documentation and acting as an ‘aide mémoire’ has significantly improved this process.
Oxford and Thames Valley – highly commended

The low incidence of aneurysmal subarachnoid haemorrhage following negative CT head at a tertiary NHS trust: exploring the evolving role for acute medicine

Lead author: Logan Mills – internal medicine trainee
Co-author: Aneliya Kuzeva
John Radcliffe Hospital

Background
As CT sensitivity for subarachnoid blood has improved there is now a growing body of evidence that patients presenting with sudden onset headaches need not always proceed to lumbar puncture (LP) following a CT that is negative for subarachnoid haemorrhage (SAH).

Aims
To retrospectively quantify the incidence of CT negative SAH in a tertiary UK hospital trust and to assess the morbidity of LP.

Methods
Patients with xanthochromia results between 2013 and 2020 in an NHS trust with two A&Es were identified. Patients were excluded if a) CT was positive for SAH b) no CT was performed prior to LP c) CT was on a scanner older than 3rd generation 64-slice. Patients were grouped as simple presentations or complex (GCS<15, traumatic, loss of consciousness, focal neurology, history of SAH or aneurysm).

Results
1,208 patients were identified with xanthochromia results meeting the above criteria; 1,087 patients had simple presentations and 121 complex. Of simple presentations, 54 had non-negative xanthochromia of which 11 were felt to be SAH with only one being aneurysmal (0.09%). Of complex presentations, 8% (10/121) were SAH, with 4% (5/121) aneurysmal. Only three SAH were identified by LP where the CT was performed <6h from onset; two of these were complex and one did not have CSF bilirubin present. In terms of morbidity, 5.4% of patients required fluoroscopic LP after multiple failed attempts, 2% of patients represented to A&E with headache or back pain and 19% of patients undergoing further imaging after LP had an incidental aneurysm identified.
Oxford and Thames Valley judges

Dr Claire Pulford – RCP regional adviser, Oxford and Thames Valley
Dr Asif Humayun – RCP regional adviser, Oxford and Thames Valley
Dr Lindsey Tilling – new consultant lead for Oxford and Thames Valley

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South West – overall winner

Late presenters to HIV clinic at North Bristol NHS Trust

Lead authors: Isabelle Guest and Isobel Hope – clinical fellows
Co-author: Jemimah Beardwood
North Bristol NHS Trust

Aim and methods
To retrospectively analyse the demographics of late presenters with HIV and identify missed opportunities for diagnosis. Review of patients referred between January 2018 and December 2020 to HIV clinic with a CD4 count of less than 350. Resources used included the HIV database, connecting care, EDMS hospital notes and ICE.

Results
• Data from 48 patients were analysed. 40 were male and 46% were below the age of 40. Eight patients were born in a place of high prevalence.
• 28 patients were White British, nine were Black and British African and six European. The cohort was comparable to the whole HIV cohort at NBT in 2018.
• 50% of male patients were MSM. Seven had a HIV positive partner. Five patients had documented high-risk sexual activity, three patients injected drugs and one had needle stick exposure.
• Eight patients appeared to have been seroconverting and were not included in analysis of missed opportunities for earlier diagnosis.

Analysis
Younger patients were more likely to be diagnosed at sexual health clinics. Nine patients were diagnosed as inpatients: three had *Pneumocystis jirovecii* and two had severe pneumonia.

A missed opportunity was defined as a delay of at least 3 months from presentation with a clinical indicator condition. 11 patients were identified with a mean delay of 55 months. 16 clinical indicator conditions and 6 AIDS-defining illnesses were identified in the group. In the year prior to diagnosis, four patients had been admitted to hospital and three had been reviewed by one or more specialties in outpatient clinics.

Conclusion
Specialties that were notified of patients who had presented to their departments included gastroenterology, ENT, maxillofacial surgery and ophthalmology. These cases were presented for discussion around changing current practice.

Limitations
Sexual health and GP consultations were often inaccessible. We were unable to establish if patients had previously declined HIV testing due to lack of documentation or whether more patients had presented earlier with clinical indicator conditions.
South West – highly commended

‘Surprise’ ward-based simulations: a means to increase fidelity and interprofessional engagement?

Lead author: Beth Norman – physician associate
Co-author: Leigh Beard
Yeovil District Hospital NHS Foundation Trust

Introduction
The acute medicine team at Yeovil District Hospital NHS Foundation Trust collaboratively developed and implemented a curriculum of interprofessional, high-fidelity, ward-based simulation, tailored to the educational needs of all the staff members working across acute medicine. Sessions took the form of impromptu 15-minute simulations on the wards. Key features of this teaching programme included the ‘surprise’ element of the session, as well as involvement of all members of the multidisciplinary team (MDT), including doctors, nurses, physician associates, nursing associates and healthcare assistants. Sessions would begin with either a shout for help or the sound of an emergency call bell. Arriving staff members would then be expected to manage the situation as appropriate.

Method
Evaluation surveys consisting of a mixture of Likert scales and free-text answers were conducted pre- and post-simulation curriculum. Results suggested that confidence in managing medical emergencies and the use of the A–E approach increased across all members of the MDT. Staff stated that the benefits of interprofessional learning were deep and wide-ranging, particularly in raising awareness of the human factors associated with medical emergencies.

Conclusion
Limitations of this project include practicalities such as lack of bed spaces or side rooms on the ward for sessions. Although the ‘surprise’ nature of the sessions gave an added level of authenticity to scenarios, this meant that not all members of the MDT were aware the session was taking place. In the future, we shall aim to continue this programme regularly in acute medicine and will aim to expand into other specialties.
South West judges

Dr Carolyn Mackinlay – RCP regional adviser, Severn
Professor Nick Maskell – RCP regional adviser, Severn
Dr Antonia Brooke – RCP regional adviser, Peninsula

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Laura Kyle    Kate Millington
Francis Screech  Shivani Gor
Subi S Raju  Anavami Sadiq
Aimee Leadbetter  Sophie Holloran
Jebby Kuriakose  Felicity Poulton
Matthew Steward  Josh Rollett

RCP regional office

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RCP Cymru Wales – overall winner

Development and implementation of a bleep simulation programme to improve medical student access to medical education during the pandemic

Lead author: Emily Appadurai – Foundation year
Co-author: Camile Jenkins
Prince Charles Hospital

Background
Final-year medical students missed substantial clinical exposure and teaching due to COVID-19, perpetuating their expected anxiety towards commencing foundation training. In response, a bleep simulation programme was developed to increase engagement with medical education while creating a safer learning environment.

Methods
Junior doctors designed over 30 consultant-reviewed scenarios to emulate common clinical situations. A medical student resource pack was produced to facilitate real-time prescription and data interpretation during the simulation. Students were bleeped throughout the day with different scenarios. When patient review was required, assessment and management were conducted over the phone, supplemented by the resource pack to mitigate viral transmission. A socially distanced post-simulation debrief provided opportunity for feedback, additional teaching and clinical skills.

Results
On programme completion, all students (n=24) felt more confident in approaching and managing varied clinical scenarios. There was a significant improvement in practising independently and preparedness to carry a bleep (p<0.005). Cohort prescribing confidence doubled following programme participation (p=0.003) and 75% felt more comfortable escalating care for deteriorating patients.

Qualitative feedback indicated that students felt better equipped for foundation training and sought additional simulation days for further skill set enhancement. Overall, the programme increased preparedness to begin foundation training, despite pandemic-imposed restrictions on medical education.

Conclusion
This bleep simulation programme is a sustainable and effective pedagogy to utilise in medical school curricula to withstand service interruption without compromising education. The model could be replicated across other hospitals to augment student knowledge and skills, and ultimately improve patient safety.
The burden of nosocomial COVID-19 in Wales: results from a multi-centre retrospective observational study of 2,508 hospitalised adults

Lead Author: Mark J Ponsford – StR
Cardiff University

Objective
To define the burden of nosocomial (hospital-acquired) novel pandemic coronavirus (COVID-19) infection among adults hospitalised across Wales.

Design
Retrospective observational study of adult patients with polymerase chain reaction (PCR)-confirmed SARS-CoV-2 infection between 1 March and 1 July 2020 with a recorded hospital admission within the subsequent 31 days. Outcomes were collected up to 20 November 2020 using a standardised online data collection tool.

Setting
Service evaluation performed across 18 secondary or tertiary care hospitals.

Participants
4,112 admissions with a positive SARS-CoV-2 PCR result between 1 March and 1 July 2020 were screened. Anonymised data from 2,508 participants were returned, representing over 60% of adults hospitalised across Wales. The prevalence and outcomes (death/discharge) for nosocomial COVID-19 were assessed across a range of possible case definitions.

Results
Inpatient mortality for nosocomial COVID-19 ranged from 38% to 42% and remained consistently higher than for participants with community-acquired infection (31–35%) across a range of case definitions. Participants with nosocomial infection were an older, frailer and more multimorbid population than those with community-acquired infection. Based on the Public Health Wales case definition, 50% of participants had been admitted for 30 days prior to diagnostic testing.

Conclusions
This represents the largest assessment of clinical outcomes for patients with nosocomial COVID-19 in the UK to date. These findings suggest that inpatient mortality from nosocomial infection is likely higher than previously reported, emphasising the importance of infection control. The findings also support prioritisation of vaccination for COVID-19-negative patients admitted and trials of post-exposure prophylaxis among inpatients.
RCP regional poster competition digest 2021

RCP Cymru Wales judges

Dr Olwen Williams – RCP vice president for Wales
Dr Hilary Williams – RCP regional adviser, Wales
Dr Shaun Smale – head of school, Health Education and Improvement Wales (HEIW)
Dr Jonathan Goodfellow – chair, Society of Physicians in Wales

Names of lead authors shortlisted to present in the RCP Cymru Wales virtual poster competition

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Ben Pyrke            Jared Charlton-Webb
Cat Bralesford       Joy Creaser-Thomas
Charlie Finlow       Rachel Bradley
Chunhei (David) Li   Rebecca Vincent
Claire McGregor      Rona Fishburn
Eleanor Wong         Ryan Federani
Emma Parkes          Sarmad Tayyab
Eugene Er            Susan Tucker

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Wessex – overall winner

Improving the management of anaemia in solid tumour patients receiving chemotherapy at a tertiary oncology centre

Lead author: Sina Yadholli – internal medicine trainee
Co-authors: Kim Teasdale, Shenthuiluyan Theivendrampillai and Jack Broadfoot
University Hospital Southampton NHS Foundation Trust

Introduction
Anaemia affects up to two-thirds of cancer patients during chemotherapy. It is associated with fatigue, reduced quality of life and worse overall survival, but is significantly under-treated. National guidelines recommend baseline haematinics and consideration of iron therapy and erythropoiesis-stimulating agents (ESAs) to improve early recognition and reduce blood transfusions. Our aim was to assess and optimise anaemia management and transfusion safety in patients with cancer at University Hospital Southampton.

Methods
A pre-intervention audit was performed of all solid tumour patients who started chemotherapy from September–October 2019, against National Institute for Health and Care Excellence (NICE) guidelines. Patient records were interrogated to identify whether haematinics were checked before chemotherapy and which treatments were given for anaemia. This was followed by a series of educational sessions and changes to departmental protocols. During the period March–April 2021, a post-intervention audit was performed.

Results
108 patients were included. The pre-intervention audit showed that departmental practice did not meet national standards. 52% of patients were anaemic. 1.8% of patients had haematinics checked before chemotherapy. Blood transfusions were given to 27% of anaemic patients, 1.8% received intravenous iron therapy and 4% received ESAs. Despite 76% of patients having at least one transfusion-associated circulatory overload risk factor, none had a documented risk assessment. Following the interventions described, standards of care and safety improved significantly.

Conclusion
Our practice was not aligned with current guidelines, with insufficient haematinic monitoring, limited use of transfusion-sparing treatments and lack of pre-transfusion risk assessments. Multidisciplinary staff education and changes to standard operating procedures improved compliance with the standard and patient care.
Management of COVID-19 in older people

Lead author: Phoebe Paley – Foundation year
Co-authors: Sofia Miah, Thomas Reid, Sophie Edmonds, James Richards
Dorset County Hospital NHS Foundation Trust

Studies have highlighted the atypical presentations of COVID-19 in older patients and the increased morbidity and mortality. Nearly one-third of the local population is over the age of 65, meaning that at our district general hospital there was an increased proportion of inpatients with COVID-19 with increased risks.

We surveyed doctors directly involved with caring for patients with COVID-19 to assess confidence in recognising and managing COVID-19 in older patients. It highlighted the benefits that a set of guidelines incorporating multiple aspects of their admission would bring. It highlighted a need for support in recognising the variable presentations of older patients, the consideration of escalation plans and advice for communicating with patients’ loved ones. It was also raised that there should be consideration of long COVID, particularly given the complexities of discharging older patients.

Using these highlighted points, we created a set of guidelines for older patients with COVID-19 with practical points in assessment, key investigations and what they may reveal, as well as management options and longer-term considerations. We also covered sensitive topics including resuscitation status and palliative care. The development of our guideline from the quality improvement project will allow doctors to have more confidence in managing the varied aspects of COVID-19 in older patients and it also provides practical support, with resources and contacts within the hospital. Alongside the guideline itself, we have created posters to be presented on the wards to help highlight the guideline and provide a snapshot of the most important aspects.
Wessex judges

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**West Midlands – overall winner**

**Improving medical handover in adult medicine**

**Lead author:** Fatimah Nasrullah – IMT  
**Co-authors:** Jamie Smyth, Maxwell Thoburn and William Bermingham  
**University Hospitals Birmingham NHS Foundation Trust / Birmingham Heartlands Hospital**

Robust handover processes are at the heart of safe and effective delivery of patient care. The Royal College of Physicians states that ‘Failure of handover is a major preventable cause of patient harm and is principally due to the human factors of poor communication and systematic error’. Here, we present data from an adult medical handover quality improvement initiative at a large NHS foundation trust through the challenging and fluid working environment of wave 1 of the SARS-CoV-2 pandemic.

Using pre-pandemic data as a baseline, recurrent plan–do–study–act (PDSA) cycles were undertaken through March–July 2020 with an aim of improving the handover process. Junior doctor feedback was sought via repeated, standardised electronic surveys.

Targeted interventions were employed over two cycles according to the needs identified. Survey data revealed key areas for improvement in basic introductions, highlighting of the most unwell patients and cardiac arrest team role allocations. A formal structure for handover was reintroduced following fundamental changes to services caused by the pandemic. Key stakeholders, including junior doctors, senior clinical staff and the site team, were engaged and formal communication channels were used to keep them updated.

Substantial improvements were made in the quality of handover, including in identification of the most unwell patients, role allocation for cardiac arrest teams and continuity of care. However, the continuous changes to care pathways required to adapt to the pandemic present a constant challenge to handover processes. This necessitates ongoing, reactive quality improvement to maintain standards of patient care.
West Midlands – highly commended

Efficacy of age-adjusted D-dimer in excluding pulmonary embolism in patients with cancer

Lead author: Raisa Khan – IMT
Co-author: Ahsan Zahid
University Hospital North Midlands / Royal Stoke University Hospital

Background
Cancer is a strong provoking factor for pulmonary embolism (PE). It is well recognised that D-dimer levels are frequently elevated in cancer patients and its specificity decreases with age, hence resulting in frequent unwarranted CT pulmonary angiogram (CTPA). There is growing evidence on the utility of age-adjusted D-dimer (AADD) in patients >50 years of age.

Aim and objectives
To study the efficacy of AADD in ruling out PE in patients with cancer compared with conventional D-dimer cut-off.

Methods
Retrospective analysis of consecutive patients undergoing CTPA within 48 hours of admission at our institution from 1 April 2018 to 30 September 2018. Patients <50 years of age and non-cancer patients were excluded.

Results
807 CTPAs were performed over the 6-month period. 247 patients with cancer were included in further analysis, of whom 69 (29.7%) had PE. 60/178 patients (33%) with negative CTPAs had D-dimer levels lower than AADD. Thus 60 patients could have avoided an unnecessary CTPA by applying the AADD in place of conventional D-dimer, at the expense of missing three PEs (all were subsegmental PE).

Conclusion
AADD has comparable performance to D-dimer in patients with cancer and improves the specificity while retaining the sensitivity of D-dimer. It can prevent a significant number of inappropriate CTPAs, but can also potentially miss a small number of PEs. Further studies are needed to validate its utility before its universal application.
West Midlands judges

Dr Jattinder Khaira – RCP regional adviser, West Midlands
Dr Sarah Bowater – RCP regional adviser, West Midlands
Dr Priyanka Chandratre – new consultant lead, West Midlands

Names of lead authors shortlisted to present in the West Midlands region virtual poster competition

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Olivia Payton
Thomas Greenwood
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Yorkshire – overall winner

Hypochloraemia following admission to hospital with heart failure is common and associated with an increased risk of readmission or death: a report from OPERA-HF

Lead author: Joe Cuthbert
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Background
Hypochloraemia may be common in patients hospitalised with heart failure (HF). We assessed the clinical significance of changes to serum chloride levels during admission in a cohort of consecutive patients admitted with HF and enrolled into an observational study based at a single tertiary centre in Hull, UK (OPERA-HF).

Methods
Hypochloraemia was defined as chloride levels <96 mmol/L. Outcomes assessed were all-cause mortality, all-cause mortality or all-cause hospitalisation, and all-cause mortality or HF hospitalisation. Cox regression and Kaplan–Meier curves were used to investigate associations between clinical variables and outcome.

Results
1,002 patients were included in the analysis. The prevalence of hypochloraemia was 15% on admission and 36% on discharge. During a median follow-up of 856 days (interquartile range 272–1,416 days), hypochloraemia on discharge was associated with an increased risk of all-cause mortality (hazard ratio (HR) = 1.44 (95% confidence interval = 1.15–1.79); P=0.001), all-cause mortality or all-cause hospitalisation (HR = 1.26 (1.04–1.53); P=0.02) and all-cause mortality or HF hospitalisation (HR = 1.41 (1.14–1.74); P=0.002) after multivariable adjustment. Patients with hypochloraemia that recovered by the time of discharge were not at increased risk of adverse outcome, although the number of such patients was small.

Conclusion
Hypochloraemia affects over a third of patients discharged from hospital with HF and is associated with increased risk of morbidity and mortality of any cause. Treatments aimed at prevention and, possibly, correction of hypochloraemia may have prognostic benefit.
Increasing breast oncology clinic capacity by reducing clinic frequency for patients who have received >6 months of palbociclib. Data from a single UK cancer centre

Background
Endocrine therapy plus CDK4/6 inhibitors is standard of care in ER-positive/HER2-negative metastatic breast cancer. Although its summary of product characteristics (SmPC) recommends 3-monthly follow-up in low grade 1–2 toxicity, real-world data are needed. The aim was to determine whether 3-monthly follow-up after month 6 was safe in early low-grade toxicity and to identify predictive factors of late (month 7 onwards) high-grade 3–4 toxicity.

Methods
A real-world retrospective study of patients treated with palbociclib plus letrozole between December 2017 and September 2020 at Weston Park Cancer Centre, Sheffield. Patients in all age groups treated for ≥6 months were eligible. Data included baseline characteristics, comorbidities, metastatic sites, toxicity grade/type. Predictive factors of toxicity were used to develop a potential scoring tool.

Results
Data analysis included 57 patients, median age 62.5 (range = 31–87) and median number of cycles 16 (range = 6–37). High-grade toxicity included neutropenia (94%), thrombocytopenia, anaemia and fatigue (2% each). No episodes of febrile neutropenia were identified. 66% of patients developed early high-grade toxicity (90% required dose reductions/delays), 12% developed late high-grade toxicity and 21% never experienced early/late high-grade toxicity. Age ≤70 years, ≥3 episodes of early high-grade toxicity, and presence of bone metastases were predictive factors for the development of late high-grade toxicity. Our scoring tool had a positive predictive value of 72% in this population.

Conclusions
Carefully selected patients with early low-grade toxicity can be safely de-escalated to 3-monthly clinics after month 6. Predictive factors in our scoring tool may help clinicians to identify patients who need monthly clinic assessments, but further validation is warranted.
Yorkshire judges

Dr Jack Kastelic – RCP regional adviser, Yorkshire
Dr Rehan Azim Qureshi – RCP regional specialty adviser, Yorkshire
Dr Madeleine Vernon – RCP college tutor, Yorkshire

Names of lead authors shortlisted to present in the Yorkshire region virtual poster competition

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