







# **National Foundation Doctors Presentation** Day



# Abstract Book

# Friday 19 January 2024

The Bristol Hotel, Prince St, Bristol BS1 4QF

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We are very grateful for the continued support from the following organisations, who have kindly given up their time to support the event.



























Royal College of General Practitioners





Alison Hodge, NHS Education for Scotland Ashley Byford, NHS England (enhance programme)

Caran Chamberlain, British Medical Association

Christine Rea, NHS Education for Scotland Emily Nicholas, General Medical Council

Georgia Croft, NHS Wales

Helen Johnson, NHS England (enhance programme) Jessica Lockhart, Northern Ireland Medical & Dental Training Agency Joanna Stephen, NHS Education for Scotland John Okocha, NHS England (enhance programme) Kate Pilgrim, General Medical Council

Kathryn Bryans, Northern Ireland Medical & Dental Training Agency Laura Brian, NHS Wales Marisa Mason, National Confidential Enquiry into Patient Outcome and Death Molly Dineen, Royal College of General Practitioners Phil Greenwood, Institute of Medical Ethics

Sarah McKillop, The MDU - Professional medical indemnity Tim Combley, British Medical Association

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## Introduction

Welcome to the National Foundation Doctors Presentation Day 2024. This event is proudly hosted by the UK Foundation Programme Office (UKFPO).

We are thrilled to offer this opportunity for current foundation doctors to present their work at a national meeting and look forward to seeing and hearing about their contributions to medicine and to the NHS.

#### Format

Foundation Doctors from across the UK were invited to submit abstracts relating to Sustainability, Education, Ethics, Research/Original Work, Clinical Case Reports, or Quality Improvement work undertaken during their Foundation Programme training. A total of 396 abstracts were submitted.

Successful applicants were then invited to present on the day, with the top 17 being selected for oral presentations in the main programme. Oral presentations were 10 minutes each in total, with 8 minutes to present and 2 minutes for questions.

143 further abstracts were selected for poster presentations. Poster presentations were carried out in a "mini-oral" format. The audience was a smaller group made up primarily of the other presenters in the poster group and the presentations lasting 3 minutes each -2 minutes to talk through the key messages of their poster and 1 minute for questions.

Poster presentation groups ran concurrently with the main programme.

#### Prizes

Each poster group and the oral presentations were judged by a panel. One oral presentation and one poster from each poster group was selected for a prize. The oral presentations and each poster group were marked by panels of judges against a set of criteria including choice of subject; presentation and visual aid; depth of knowledge, evidence or research, literature review; and conclusions.

#### About National Foundation Doctors Presentation Day

For over ten years, the National Foundation Doctors Presentation Day has highlighted and celebrated the achievements of Foundation Doctors.

Like a conference in format, the event also provides opportunities for organisations such as the GMC, NICE, NCEPOD and more to engage with this dynamic and enthusiastic cohort of doctors at the start of their career.

Fascinating speakers have volunteered to give the keynote talk, covering all sorts of topics – expeditions to Everest, delivering a baby gorilla by caesarean, sleep! And this year, we were delighted to be welcoming Dr Craig Holdstock BMBS BSc (Hons) PGCE FRCA as our keynote speaker. Craig talked to us about the amazing work he and a network of volunteers across the UK undertake as part of complex cave rescue teams.

The primary focus, however, is on F1 and F2 doctors delivering oral and poster presentations, showcasing their work in Sustainability, Case Reports, Education, Research, and Quality Improvement with their peers and senior foundation faculty, and inspiring us all.



## **Speakers**



doctor at AFC Bournemouth.

#### **Dr Clare van Hamel**

Dr Clare van Hamel is the Severn Foundation School Director and a Consultant Anaesthetist. Clare conceived the National Foundation Doctors Presentation Day in 2011 and delivered the day with her hard-working Severn FS team until 2023. The UKFPO have now taken on the responsibility for the delivery of the event which has become one of the most enjoyable days in her calendar.





#### Dr Craig Holdstock BMBS BSc (Hons) PGCE FRCA

Dr Mike Masding, MA (Ed) FRCP

Dr Mike Masding is Co-chair of the UK Foundation Programme Office and the Lead Foundation School Director in England and. He has previously been Head of Wessex Foundation School, and Foundation Programme Training Director and Director of Medical Education at the trust where he does his clinical work. The subject of his MA(Ed) dissertation at the University of Winchester in 2010 was Workplace supervision of Foundation doctors. He also continues his clinical work as a Consultant Physician & Diabetologist on the south coast, and in what's left of the week spends time with his family, cycles as much as possible and continues to be senior crowd

Dr Craig Holdstock is a Consultant Cardiothoracic Anaesthetist and Intensivist working at University Hospitals Plymouth NHS Trust. Craig undertakes anaesthesia for adult cardiac surgery including coronary artery bypass, valvular and major aortic surgery. He also undertakes anaesthesia for adult thoracic surgery including minimally invasive thoracic surgery and robotic surgery. Craig has an additional specialist interest in hyperbaric medicine and is the anaesthetic lead for DDRC Healthcare.

Craig is the Medical Officer for Devon Cave Rescue Organisation. This is a team of volunteers who provide specialist rescue in caves and disused mines. He is on the national call-out for cave and cave diving rescue. He is an experienced caver with a variety of experience in both caves and mines including expeditionary caving abroad. He is a cave diver with the Cave Diving Group utilising both open-circuit and closed-circuit equipment.

## **Speakers**





Dr Tony Choules, BM, BSc, MRCP(UK), FRCPCH, DipMedEd

Dr Tony Choules was Foundation School Director and Associate Dean in the West Midlands for many years and is now an advisor to the UKFPO on education and training matters.

As former chair of the Academy of Medical Royal Colleges (AoMRC) Foundation Programme Committee, he led development of the latest iteration of the UK Foundation Programme curriculum, seeking views and best practice across all four nations of the UK. Since obtaining GMC approval he has subsequently led on the implementation of the 2021 curriculum.

He was one of the two foundation school director (FSD) advisors on the HEE Foundation Programme Review and worked to develop resources to facilitate induction and support of foundation doctors, including processes to deliver equity of support and training.

#### Dr Doanna Daoud, MBBS

Dr. Doanna Daoud, a Canadian UKFPO fellow at Durham hospital and graduate of the University of Khartoum, is dedicated to making a meaningful impact in healthcare. Drawing from her tech background, she values diversity and inclusion, advocating for these values as both a POC and IMG. As a healthcare professional, she aims to actively promote inclusivity and has devoted her fellow project to creating "Beyond the Blind Spot: Unravelling Unconscious Bias," a workshop designed to inspire and challenge fellow doctors. Doanna's overarching goal is to serve as a catalyst for positive change throughout her fellowship and beyond.





#### Dr Aysha Nijamudeen MBChB (Hons) BDS BSc (Hons) MFDS

Dr Aysha Nijamudeen is an academic F2 doctor and UKFPO fellow working in Manchester. Prior to medicine, she qualified as a dentist and worked in Oral and Maxillofacial Surgery for several years; having been through a different training programme has given her an interesting perspective on how to improve the foundation training experience for doctors. She has enjoyed working with the UKFPO and various stakeholder teams so far, and giving foundation doctors a voice at this level.

Her main goal this year is to reduce inequalities in

attainment of core/specialty training posts and post-graduate examinations by improving access to training and portfolio activities on rotas; she's passionate about improving training and morale in the profession overall and hopefully this work can be integrated into the curriculum. Outside of work, she is an avid cook and baker, and has recently become an amateur patissiere! To balance the pastries, she also takes part in water sports and hiking.



# Faculty

We would like to warmly thank our faculty who have kindly given up their time to support the event:

Shortlisting and judging	Faculty support
Abigail Moore, British Medical Association	Alison Hodge, Scotland
Alexander Gatt, Malta	Amelia Isaac, UKFPO
Alice Carter, London	Anna Parsons, Wessex
Angela Cottrell, Peninsula	Anthony Crolla, Midlands
Aysha Nijamudeen, UKFPO	Charlotte Porter, KSS
Charlie Mackaness, Trent	James Clark, UKFPO
Christine Rea, Scotland	Joanna Stephen, Scotland
Christopher Fowell, East of England	Julian Shepherd, North West of England
Christopher Knight, South West	Karen Moore, Northern Ireland
Clare van Hamel, Severn	Kata Várnai, UKFPO
Doanna Daoud	Kiran Kaur Padham, UKFPO
Eduardo Villatoro, Trent	Maisie Shrubsall, UKFPO
Elaine Colaco, UKFPO	Melissa Dixon, North West of England
Fiona Cameron, Scotland	Natalie Band, Peninsula
Francesca Crawley, East of England	Rani Achhireddy, Severn
Helen Barker, East Anglia	Sophia Berridge, UKFPO
Jane Jacobi, NICE	Suzanne Maddock, Peninsula
John Tabone, Malta	Tamika John, UKFPO
Julian Chilvers, West Midlands Central	
Jon Scott, Northern	
Karl Davis, Wales	
Lorraine Corfield, Institute of Medical Ethics	
Lorraine Parks, Northern Ireland	
Lynn Wilson, Northern Ireland	
Manjula Pammi, Trent	
Marisa Mason, NCEPOD	
Mike Masding, UKFPO	
Paul Baker, North West of England	
Rachel Parry, LNR	
Rachel Todd, South West	
Ray Raychaudhuri	
Ritwik Banerjee, EBH	
Sara Evans, South West	
Sohail Nassir, West Midlands	
Stephen Taylor, Wessex	
Susan Redward, GMC	
Tom Southorn, Trent	
Tom Yapp, Wales	
Tony Choules, UKFPO	
Ursula Gialanze-reitano, Malta	
Xavin Taylor, RCGP	

# Timetable

## UK Foundation Programme

#### Friday 19 January 2024, The Bristol Hotel, Prince St, Bristol BS1 4QF

Time	Activity	Room
08:30-09:00	Registration, collection of name stickers, refreshments (Conference centre foyer) FDs to mount posters (see rooms list)	Conference centre foyer
09:00-09:10	Welcome and Housekeeping Dr Clare van Hamel, Severn Foundation School Director	Ballroom 2
09:10-09:20	Introduction Dr Mike Masding, Co-Chair of UKFPO	Ballroom 2
	Set 1: Oral Presentations x 5 (10 minutes each)	Ballroom 2
	CR01: Case Report Poster Group 1 (11 posters, 3 mins each)	Frank Barnwell Room
	CR02: Case Report Poster Group 2 (11 posters, 3 mins each)	George White Room
09:20-10:20	RO01: Research/Original Work Group 1 (10 posters, 3 mins each)	William West Room
	RO02: Research/Original Work Group 2 (9 posters, 3 mins each)	Francis Greenway Room
	ED01: Education Poster Group 1 (12 posters, 3 mins each)	Elizabeth Blackwell Room
	ED02: Education Poster Group 2 (12 posters, 3 mins each)	Thomas Lawrence Room
10:20-10:35	Refreshments (Trade stands and poster viewings)	Conference centre foyer
	Set 2: Oral Presentations x 5 (10 minutes each)	Ballroom 2
10:35-11:35	QS01: QI / Sustainability Poster Group 1 (12 posters, 3 mins each)	Frank Barnwell Room
10:35-11:35	QS02: QI / Sustainability Poster Group 2 (11 posters, 3 mins each)	George White Room
	QS03: QI / Sustainability Poster Group 3 (10 posters, 3 mins each)	William West Room
11:35-11:50	Changeover / comfort break / trade stands and poster viewings	Conference centre
	QS04: QI / Sustainability Poster Group 4 (10 posters, 3 mins each)	Francis Greenway Room
11:50-12:50	QS05: QI / Sustainability Poster Group 5 (10 posters, 3 mins each)	Elizabeth Blackwell Room
	QS06: QI / Sustainability Poster Group 6 (11 posters, 3 mins each)	Frank Barnwell Room
	QS07: QI / Sustainability Poster Group 7 (11 posters, 3 mins each)	George White Room
12:50-13:50	Lunch (Trade stands and poster viewings)	Conference centre foyer
13:50-14:50	Set 3: Oral Presentations x 4 (10 minutes each)	Ballroom 2
	ET01: Ethics Poster Group (3 presentations, 3 mins each)	George White Room
14:50-15:05	Refreshments (Trade stands and poster viewings)	Conference centre foyer
15:05-15:45	Set 4: Oral Presentations x 3 (10 minutes each)	Ballroom 2
15:45-16:10	<b>UKFPO Fellows</b> Dr Aysha Nijamudeen Dr Doanna Daoud	Ballroom 2
16:10-16:40	Keynote speech Dr Craig Holdstock, BMBS BSc PGCE FRCA Consultant Cardiothoracic Anaesthetist - University Hospitals Plymouth NHS Trust	Ballroom 2
16:40-17:00	Oral & Poster Presentations Prize Giving Dr Mike Masding, Co-Chair of UKFPO Dr Clare van Hamel, Severn Foundation School Director Dr Tony Choules, Operational Advisor to the UKFPO	Ballroom 2



# 2024 winners

Many congratulations to our 2024 poster presentation winners listed below.

Poster presentation Group	Poster Presentation Presenters	Poster Presentation Title
CR01: Case Report Poster Group 1	Presenter: <b>Prerana Bhandari</b> FS: Kent, Surrey & Sussex (KSS) Foundation School	CR102: Hepatoxicity Secondary to Diet Pill Use – A Case Report
Poster Group 2	Presenter: <b>William Fostier</b> FS: Northern Foundation School	CR205: Eruptive seborrheic keratosis and constitutional mismatch repair deficiency: Insights into the sign of Leser-Trélat.
Research/original work Group 1	Presenter: Lydia Shackshaft FS: Severn Foundation School	RO110: Designing a Virtual Reality Café to Treat Eating Disorders: a Thematic Analysis of Stakeholder Viewpoints
RO02: Research/original work Group 2	Presenter: <b>Arun Thirunavukarasu</b> FS: Oxford Foundation School	RO212: A validated web-application (GFDC) for automatic classification of glaucomatous visual field defects using Hodapp-Parrish-Anderson criteria
Poster Group 1	Presenter: <b>Jamal Ross</b> FS: Kent, Surrey & Sussex (KSS) Foundation School	ED107: Early Predictors of rapid surgical skill acquisition.
ED02: Education Poster Group 2	Presenter: <b>Samuel Leach</b> FS: Severn Foundation School	ED205: Severn Foundation Cases - A regional online teaching series to complement local trust teaching for foundation doctors in the United Kingdom
sustainability Poster	Presenter: <b>Alex Parker</b> FS: Leicester, Northamptonshire & Rutland (LNR) Foundation School	QS109: Keep Calm and Hold Sedation: An audit at Leicester Royal Infirmary Intensive Care Unit
QS02: QI / sustainability Poster Group 2	Presenter: <b>Dominic Atraszkiewicz</b> FS: Essex, Bedfordshire & Hertfordshire (EBH) Foundation School	QS303: Emergency Drug Wastage in Operating Theatres: A Quality Improvement Project
QS03: QI / sustainability Postor	Presenter: <b>Robert Beckett</b> FS: West Midlands North Foundation School	QS201: Using Salamol cannister weight to estimate remaining salbutamol doses and improve patient confidence in knowing when their Salamol inhaler is empty.
	Presenter: <b>Christopher Eaves</b> FS: North West of England Foundation School	QS405: Quality improvement in gauging and subsequently improving doctors' knowledge regarding ligatures and the safe and proper actions to take in such an event.
	Presenter: <b>Eva Larkai</b> FS: Severn Foundation School	QS509: Cervical Screening Amongst Healthcare Professionals at University Hospitals Bristol and Weston (UHBW): How Can We Improve Accessibility and Uptake?
	Presenter: <b>Scott Mcildowie</b> FS: Scotland Foundation School	QS607: Reducing Unnecessary Blood Test Requests in Medical Inpatients: A Quality Improvement Project
QS07: QI /	Presenter: <b>Louise Raper</b> FS: Leicester, Northamptonshire & Rutland (LNR) Foundation School	QS607: Improving the quality of ENT discharge letters for total and para- thyroidectomies through implementation of a discharge template.
	Presenter: <b>Caitlin Jones-Fullerton</b> FS: Wales Foundation School	ET102: Treating COVID-19: Clinical Trials and the Ethical Dilemma of Pregnancy



## 2024 winners

Many congratulations to our 2024 oral presentation winners listed below.

Oral presentation winner	Oral Presentation Presenters / Authors	Oral Presentation Title
Winner	Presenter: Andrew Walker FS: Northern Ireland Foundation School	OP009: Restart the 'DAMN' Drugs! – A Quality Improvement Project on Post-Acute Kidney Injury Medication Management
Runner up	Presenter: <b>Grace Filbrandt</b> FS: North West of England Foundation School	OP014: Reducing cost and plastic waste in Estradiol prescribing.
(no prize) Special mention 1:	Presenter: <b>Tom Twentyman</b> FS: Northern Foundation School	OP010: Primum Non Nocere: Exposing Medical staff to the Coroner's Court
(no prize) Special mention 2:	Presenter: <b>Conor Gillespie</b> FS: East Anglia Foundation School	OP012: C-R-Pointless? Results of a 4- cycle QUIP to rationalise post-op CRP in Trauma and Orthopaedic surgery











## National Foundation Doctors Presentation Day

# **UK** Foundation Programme

# 2024 Abstracts



Oral group - 1



# INSINC Insight – Breathing Equality and Diversity into the Heart of Cardiothoracic Surgery

Authors

K. Kirkley; G. Layton; F. Bhatti; K. Booth

Severn Foundation School

#### Background

Diverse workforces provide better care, however widening participation (WP) students are less likely to apply to, or obtain places in, Medicine; 2% of successful applicants are from the lowest socioeconomic groups, reflected subsequently in the graduating doctor cohort [1]. Cardiothoracic Surgery is behind most specialties for diversity; as such, the 'INSINC Insight' Scheme aims to increase engagement of WP students with Cardiothoracics, through placements and online lectures. This study reports the lecture series' results alone.

#### **Methods**

Students, aged 14-20, were invited to six cardiothoracic-themed, 'case-based discussion' style lectures, covering anatomy, intervention, the multidisciplinary team and reflective practice. Pre and post intervention questionnaires provided quantitative results.

#### Results

482 students participated: 42% from WP backgrounds; 77% female, 20% male, 1% non-binary and 80% from ethnic minority groups. Greatest perceived barriers by students were accessing work experience (77%); financial limitations (45%) and application support (41%). Post intervention, 73% more students felt confident, 87% felt engaged and 90% found the sessions helpful.

#### **Key Messages**

Online lectures can successfully engage large, diverse, student numbers, costing little for organisers and attendees, whilst avoiding the resources required for work experience, or financial implications disproportionately affecting WP students. Further research should focus on understanding the attrition from medical school into specialty training

#### References

1. 1.Brown G, Garlick P. Changing geographies of access to medical education in London. Health & Place. 2007 Jun;13(2):520–31.

Oral group - 1



# Effect of Liraglutide in managing high output stoma following small bowel resection

#### Authors

Seong Hui Moon, Amtul Noor

Wessex Foundation School

#### Background

High output stoma (HOS), defined as stoma output exceeding 1.5 litres, is a challenging complication in short bowel syndrome patients, often unresponsive to standard management(1). This may result from impaired hormonal balance following extensive enteral resection, leading to the absence of key hormones, particularly GLP. Liraglutide, a glucagon-like peptide 1 receptor agonist, is a potential treatment by mitigating gastric hypersecretion and slowing gastric emptying(2).

#### **Case Presentation**

A 46-year-old male, diagnosed with Crohn's disease underwent small bowel resection due to an idiopathic bowel perforation. Following ileostomy formation, he experienced uncontrolled HOS, necessitating readmission. Standard treatments failed to yield improvement, and surgical intervention was precluded due to a concurrent infection.

#### Outcome

Over five weeks, he received subcutaneous Liraglutide, beginning at 0.6mg daily for two weeks, incrementally increasing to 1.8mg daily. Liraglutide resulted in a substantial reduction in ileostomy output from an average of 2320±982ml to 1072±484ml. Total fluid input decreased from 1813±573ml to 1024±790ml, and the true balance improved from a discrepancy of -1720ml to -1157ml. Additionally, the patient's BMI increased from 16.5kg/m2 to 19.3kg/m2.

#### Follow Up Discussion

Liraglutide effectively reduced HOS and improved fluid balance, making it a viable last-resort option for patients unresponsive to conventional treatments and ineligible for surgery.

#### References

1. Nightingale JMD. How to manage a high-output stoma. Frontline Gastroenterology. 2021 Mar 22;13(2):flgastro-2018-101108.

2. Hvistendahl M, Brandt CF, Tribler S, Naimi RM, Hartmann B, Holst JJ, et al. Effect of Liraglutide Treatment on Jejunostomy Output in Patients With Short Bowel



Syndrome. Journal of Parenteral and Enteral Nutrition. 2016 Oct 3;014860711667226.

Oral group - 1



Improving the level of preparedness of foundation doctors when transitioning between rotations/specialities through a foundation doctor handbook.

Authors

Megan Driver and Naomi Blower

Wales Foundation School

#### Background

A high level of preparedness among foundation doctors when rotating between specialities is pivotal to maintaining high quality patient care despite the frequent changovers (1,2,3,4). However, we have observed that foundation doctor responsibilities vary substantially between posts and there is often no clinical induction (5). By producing a mobile-friendly handover resource, this study aims to improve F1 preparedness when rotating (6,7,8).

#### **Methods**

- Parameters that contribute to preparedness were analysed via an online survey.

-Information on each of the F1 rotations within the Hospital was gathered from the current F1 cohort.

-This was collated and shared as an online handbook.

-Participants were then resurveyed to assess the impact this had had.

#### Results

- There were higher levels of perceived preparedness in F1s rotating to new specialities when they had access to an induction resource.

-Pre-intervention 11.1% of participants knew where to go on their first day compared to 100% post-intervention.

Prior to intervention 27.8% of participants rated their preparedness between 6-10, afterwards this increased to 100%.

#### **Key Messages**

–Increased preparedness amongst foundation trainees should help to mitigate the effect of ever-changing teams on the standard of patient care.

-An online clinical induction resource is an accessible way to share information between trainees to improve rotation.

References

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1. Jen MH, Bottle A, Majeed A, Bell D, Aylin P. Early in-hospital mortality following trainee doctors' first day at work. PLoS ONE. 2009;4(9). doi:10.1371/journal.pone.0007103

2. Blencowe NS, Van Hamel C, Bethune R, Aspinall R. 'from scared to prepared': Targeted structured induction training during the transition from Medical School to Foundation doctor. Perspectives on Medical Education. 2015;4(2):90–2. doi:10.1007/s40037-015-0168-x

3. Haller G, Myles P S, Taffé P, Perneger T V, Wu C L. Rate of undesirable events at beginning of academic year: retrospective cohort study BMJ 2009; 339 :b3974 doi:10.1136/bmj.b3974

4. [Internet]. [cited 2023 Jun 21]. Available from: https://www.gmc-uk.org/-/media/documents/Shape\_of\_training\_FINAL\_Report.pdf\_53977887.pdf

5. Hayes L. Improving junior doctor handover between Jobs. BMJ Quality Improvement Reports. 2014;3(1). doi:10.1136/bmjquality.u201125.w713

6. Fraser L. Why you should use your foundation year 1 to create a safe handover document. BMJ. 2013; doi:10.1136/bmj.f5112

7. Chamberlain F, Davis L, Kentley J, Yates R, Sivapathsuntharam D. Developing the junior doctor handover database: Improving patient safety and fluidity of staff transition. Future Hospital Journal. 2016;3(Suppl 2). doi:10.7861/futurehosp.3-2-s8

8. Thomas N, McGrann E, Zammit L, Eaton P, White W, Lingam C, et al. Junior doctor-designed induction booklet to improve future junior doctor experience in a new post. Future Healthcare Journal. 2019;6(Suppl 2):17–17. doi:10.7861/futurehealth.6-2-s17

Oral group - 1



## Crisis in the Crisis And Home Treatment Team? A Two-Cycle Audit into Staff Training and Appraisal in the CRHT at Penn Hospital, Wolverhampton.

#### **Authors**

Bilal Khan, Callum Singh Grewal, Simal Asher, Eesaa Longden

West Midlands North Foundation School

#### Background

The Crisis and Home Treatment Teams (CRHT) consist of medical practitioners and mental health nurses, regulated by the Royal College of Psychiatrists (RCP). A twocycle audit into staff training and appraisal of the CRHT at Penn Hospital was undertaken to ensure their alignment with the standards outlined by the RCP. Failure to meet these standards would significantly threaten patient safety and may breach the law.

#### **Methods**

Feedback was collected via Google Forms, with binary questions derived from Type 1 Standards of the Home Treatment Accreditation Scheme1, which require 100% satisfaction to ensure safe care, including delivering support during crises and significantly poor mental health.

#### Results

14 out of 19 mental health nurses completed the survey (response rate = 73.7%). 92.9% were not annually assessed for medication delivery and administration. 64.3% were untrained in effective communication for patients with special needs (e.g. learning disabilities). 38.4% felt unprepared in basic counselling skills, with 18.2% not having appropriate training for crisis response.

#### **Key Messages**

This study underscores the importance of ongoing adherence to training in mental healthcare, without which patient care is at severe risk. Following the re-audit, the team achieved 100% compliance with these standards, emphasising the commitment to delivering safe and respectful mental health

#### References

1. Royal College of Psychiatrists. QNCRHTT standards [Internet]. 2022 [cited 2023 Feb 29]. Available from: https://www.rcpsych.ac.uk/improving-care/ccqi/quality-networks-accreditation/qncrhtt/htas-standards

Oral group - 1



### An Unresolving Case of Fever and Dyspnoea

#### Authors

Dr Yuxiao Alice Wang (FY2)

London Foundation School

#### Background

Organising pneumonia (OP) is a type of interstitial lung disease caused by a nonspecific inflammatory process in the lungs. It can be classified into cryptogenic, where no clear cause can be found; or secondary, which is associated with autoimmune disease or radiation exposure. Oral corticosteroids produce excellent outcomes, often initiated following failed empiric antibiotic therapy.

#### **Case Presentation**

A fifty-year-old female with a background of breast cancer treated with mastectomy and radiotherapy in the preceding year presented with a ten-day history of productive cough, recurrent fevers and worsening dyspnoea. CT on admission revealed bilateral multifocal consolidation with ground-glass opacities.

#### Outcome

Antibiotic therapy for a community-acquired/atypical pneumonia failed to produce clinical or biochemical improvements. The patient later revealed that she had recently received anti-TNF $\alpha$  for rheumatoid arthritis abroad. High-dose oral prednisolone was commenced, producing an excellent response, confirming the clinical suspicion of secondary organising pneumonia due to a combination of previous chest irradiation and immunosuppression.

#### Follow Up Discussion

Consider organising pneumonia as a differential for patients with pneumonia that is poorly responsive to antibiotics. Tailoring specific questions to your patient when taking a thorough history can be key to delineating the underlying diagnosis. Early involvement of different specialities aids with prompt diagnosis and management, optimising patient outcomes.

#### References

- Cordier J. Organising Pneumonia. Thorax 2000;55:318-328.

- Dhamija E, et al. Cryptogenic organising pneumonia. Reference article, Radiopaedia.org (Accessed on 13 Oct 2023) https://doi.org/10.53347/rID-7109.

- Baha A, et al. Cryptogenic and Secondary Organizing Pneumonia: Clinical Presentation, Radiological and Laboratory Findings, Treatment, and Prognosis in 56



Cases. Turk Thorac J. 2018 Sep 13;19(4):201-208. doi: 10.5152/TurkThoracJ.2018.18008.

Oral group - 2



### **BEWARE - Skin Cancer disguised as chronic paronychia**

#### Authors

Kenal Patel, Sharmila Jivan

Yorkshire & Humber Foundation School

#### Background

Acute paronychia (nailfold infection) is amongst the most common hand infections. Conversely, chronic paronychia, a prolonged erythematous nailfold swelling caused by infectious aetiology or chronic irritation, is much less common. We present a case of squamous cell carcinoma (SCC) which presented as chronic paronychia.

#### **Case Presentation**

A 40-year-old fit and well male patient presented with a 2-month history of an 8mm x 6mm hard tender erythematous lump on his right ring finger ulnar proximal nailfold. It grew suddenly after skin/nail biting and became intermittently inflamed and tender but remained the same size over 2 months. Initially diagnosed as possible paronychia, he underwent biopsies. Specimens were sent for microbiology and histology. Microbiology grew an oral commensal, actinomyces neuii which can, on rare occasions, cause solid lumps. Histology reported a well differentiated SCC.

#### Outcome

Following skin cancer MDT recommendations, he underwent amputation of his finger. Subsequent histology confirmed a completely excised well differentiated SCC.

#### Follow Up Discussion

If a specimen was not sent for histology, we may have delayed cancer treatment by treating this patient for actinomyces, based on microbiology alone. Having a high index of suspicion and sending tissue for both microbiology and histology is very important when history and examination reveal unusual

#### References

-

Oral group - 2



## A quality improvement project to reduce the number of unnecessary fluorescein angiography investigations in Broomfield Hospital

#### **Authors**

Dr Patrick Hughes, Dr Haowen Kwan, Dr Mussa Butt, Mr Malhar Soni

Essex, Bedfordshire & Hertfordshire (EBH) Foundation School

#### Background

Fundus fluorescein angiography (FFA) has been widely used to assess retinal vasculature. However, it has many complications ranging from nausea to anaphylaxis (1). For many conditions, including diabetic retinopathy, it has been replaced by optical coherence tomography which is non-invasive and more sensitive (2). This project aims to review the indications for FFA and reduce the number of unnecessary requests.

#### **Methods**

Data was collected from all FFAs performed in Broomfield Hospital from August to December 2022. After the results were reviewed, teaching sessions were held for the ophthalmology department and the protocol for FFA request was amended to require consultant approval.

The second cycle then collected data from May to September 2023 to review if there were any changes after these implementations.

#### Results

41 FFAs were performed during the first cycle with diabetic retinopathy being the most common indication (49%). 24 were requested by trainees. 12 patients subsequently required treatment. There was a significant delay with 17 patients waiting over a month. In the second cycle, only 1 FFA was performed.

#### **Key Messages**

Nearly half of the FFAs performed at Broomfield Hospital were not required. Education and protocol changes led to a significant reduction in the number of FFAs requested.

#### References

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Oral group - 2



### Remote near-peer regional surgical teaching programme is an effective method to improve Foundation Year doctors' education

Authors

Omar H Ali, Ali Abbas, Teri Toi, Mina Youssef

East Anglia Foundation School

#### Background

There is general dissatisfaction amongst Foundation Year (FY) doctors on surgical rotations attributed to lack of teaching and expectation to cross cover specialities with very limited experience. We aimed to evaluate the effectiveness of a near-peer regional surgical teaching programme delivered remotely to address the aforementioned.

#### Methods

We designed and delivered an 11-week surgical teaching programme from August to October 2023. Topics encompassed five surgical specialities that FY doctors commonly rotate through. Content was tailored to the level expected of FY doctors, and taught by either core trainees or junior registrars. Sessions were interactive, pitched as structured open forum, incorporated Q&A, and delivered entirely online. A five-point Likert scale was used to evaluate pre- and post-session FY doctors' confidence level.

#### Results

On average, 74% of those who registered for teaching sessions were in attendance, and a median of 31 FY doctors from multiple Trusts attended each session. Overall, there was a statistically significant increase in their confidence level: pre-session mean 3.2 ( $\pm$ 1.3) and post-session mean 4.3 ( $\pm$  0.7) (p < 0.001, paired t-test).

#### **Key Messages**

Near-peer teaching delivered remotely is an effective, low-cost method to provide accessible teaching, improve confidence levels, and meet educational needs. Careful organisation is essential for consistent

References

n/a

Oral group - 2



### Restart the 'DAMN' Drugs! – A Quality Improvement Project on Post-Acute Kidney Injury Medication Management

#### Authors

Andrew Walker (1), Aleena Joy (2), Michael Corr (3)

1.) Foundation Year 2 Doctor, Ulster Hospital Dundonald, Northern Ireland (awalker32@qub.ac.uk)

2.) Foundation Year 2 Doctor, Craigavon Area Hospital, Northern Ireland (ajoy02@qub.ac.uk)

3.) Irish Clini

Northern Ireland Foundation School

#### Background

Upon detection of AKI, 'nephrotoxic' medications, including the 'DAMN' drugs, (diuretics, ACEi, metformin and NSAIDS) are held. However, following recovery, medications are often inappropriately restarted at lower doses without plan for uptitration or not restarted despite overall renal/cardio-protective effects, putting patients at increased risk of cardiovascular morbidity/progressive CKD. Our aim was to improve post-AKI medication management and increase patient awareness of 'sick day rules'.

#### Methods

Three metrics were audited for inpatient cases of AKI at the Mater Hospital – (1) Diagnosis documentation, (2) Medication reintroduction, (3) Issuing 'sick day rule' advice. Four Plan-Do-Study-Act cycles were implemented. Interventions included education events, posters and patient education leaflets.

#### Results

Documentation of AKI improved from 60% to 70%. Appropriate reintroduction of medications improved (32% to 77%). If medications were restarted at an altered dose, a plan for titration increased from 44% to 100%. 20% (from 0%) of patients received advice about AKI prevention.

#### **Key Messages**

There are increasing numbers of disease-modifying medications that exacerbate AKI. Appropriately stopping, but also restarting, these medications is crucial. Empowering patients to temporarily stop these medications themselves on sick days can prevent AKI. We plan to collaborate with General Practice/pharmacists to shape further implementations to improve continuity of post-AKI care.

References

N/A



Oral group - 2



# Primum Non Nocere: Exposing Medical staff to the Coroner's Court

#### Authors

T Twentyman1, A Walters2, J Ryan3, D Macafee4, J Heath5, AJ Turley6

1FY-1, 2Medical Examiner, 3DME, 4Past DME, 5Senior Coroner, 6Foundation Tutor

Northern Foundation School

#### Background

Medical staff may be called to give evidence at coronial inquests, but most have no prior exposure to this process. Many feel vulnerable to litigation and view inquisitorial processes as aiming to apportion blame rather than learning from events.

#### **Methods**

AW, a medical examiner and coroner's court support service volunteer, proposed a pilot for medical staff to undertake supervised visits to N. Yorkshire coroner's court inquests. This aimed to provide medical staff with guided exposure to the coroner's court to educate and alleviate witness anxiety around court attendance. Feedback from the pilot was collated from its initiation in 2021 until July 2023. The sample size (n=33) was limited due to national Covid-19 lockdown restrictions.

#### Results

Attendee feedback was overwhelmingly positive. Supervised visits enabled a greater understanding of the coroner's role, highlighted inquests as a fact-finding missions rather than trials and increased the attendees' confidence should they have to appear as future witnesses. All respondents were grateful for the opportunity and commended it for wider uptake. The main criticism was that were only limited opportunities to attend.

#### **Key Messages**

Supervised coroner's court visits are practical, achievable, and invaluable to learning. Such guided exposure should be considered an important postgraduate medical training opportunity for Foundation Doctors.

References

Nil

Oral group - 3



### Potential and Ethical Pitfalls of AI integration in Dermatology

#### **Authors**

Zachary Chan, Faishal Dubash

Scotland Foundation School

#### Background

The integration of artificial intelligence (AI) in the field of dermatology promises revolutionary transformations to the medical domain. While some of the existing research performed has highlighted the capabilities of AI in diagnosing lesions comparable to those of a dermatologist, it brings about its own ethical challenges that affect both the clinician and the patient. This article aims to explore the ethical issues and prospects surrounding AI implementation in dermatology by drawing insights from the current literature.

#### **Methods**

A qualitative analysis was conducted on articles focusing on AI usage in medical care, with a specific emphasis on dermatolog

#### Results

The analysis unveils four main ethical issues: selective bias and unequal treatment based on skin tone differences, intrusion of privacy brought about by the contribution of images on an open-access database, the potential erosion of patient autonomy in AI decision-making, the risk of unwarranted harm to patients because of unnecessary biopsies to potential misalignment of treatment priorities between AI systems and patients.

#### **Key Messages**

Introduction of a transparent, explainable AI model would alleviate concerns regarding patient autonomy. Simultaneously, the establishment of a global openaccess database will serve to mitigate selective bias. Furthermore, additional research comparing algorithms would be useful in establishing a standardized validation tool.

References

Nil

Oral group - 3



### C-R-Pointless? Results of a 4-cycle QUIP to rationalise post-op CRP in Trauma and Orthopaedic surgery

#### Authors

Conor Gillespie, George Matheron, Ravi Shenoy

East Anglia Foundation School

#### Background

Laboratory tests cost the NHS £2.5bn every year. Optimising post-operative CRP requests could save costs, and reduce biochemistry lab workload.

#### Methods

Prospective Quality improvement project (4 cycles) at a single DGH trauma and orthopaedic department (April 23-July 23). Number of post-operative CRP requests and management impact were identified. Cost of each test (£1.79) was used to calculate potential and actual savings. Interventions: Cycle 2: Inform FY/SHOs of policy; Cycle 3: Visual aids in office and orthogeriatric team involvement; Cycle 4: Elective care bundle.

#### Results

Four cycles were completed. 524 patients were included (117 cycle 1, 145 cycle 2, 134 cycle 3, 128 cycle 4). Mean age was 69 (SD 17) with a median hospital stay of 5 days. Day 1 CRP requests decreased by 80% throughout each cycle (97.2% -> 33.4% -> 25.0% -> 18.0%). Total post-op CRP requests declined by 85% (580 -> 360 -> 250 -> 110). Mean CRP requests per patient decreased (5.9 -> 4.8 -> 2.2 -> 0.9). CRP changed clinical management in <1.2% of patients in each cycle. In total, the QUIP saved the department £1764.80 quarterly, and £7058.40 every year.

#### **Key Messages**

Simple interventions can reduce expenditure without affecting clinical outcomes, and save costs.

#### References

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foundationprogramme.nhs.uk

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Oral group - 3



### Reducing cost and plastic waste in Estradiol prescribing.

#### Authors

Dr Grace Filbrandt, Dr Mayurika Sinha

North West of England Foundation School

#### Background

Atrophic vaginitis is estimated to affect more than half of postmenopausal women1. The vaginal mucosa becomes more fragile, and changes in pH and vaginal flora can increase vaginal and urinary tract infections2.

The recommended treatment is topical oestrogen3. ELHT formulary historically recommended Vagifem. The aim was to explore if Vagirux, a more cost-effective and environmentally friendly alternative, would be acceptable for patients.

#### **Methods**

This multi-methods project had two phases, an audit of prescribing practice and telephone interviews to explore patient experience of Vagirux as a replacement for Vagifem.

#### Results

The audit identified that 3111 Vagifem tablets were dispensed 01/04/21 - 31/03/22 costing £2,173.60, with 3,120 plastic applicators. The alternative Vagirux costs £1,474.20 and uses 130 plastic applicators. A direct comparison gives a saving of £700 and a reduction of 2990 applicators.

Telephone interviews with 41 women explored ease of use; 12 declined to answer and 8 had not used the product. Of those who answered, 81% rated it easy, 14% average and 5% difficult.

#### Key Messages

1. Vagirux is a cost effective and more environmentally friendly alternative to Vagifem.

2. 81% of patients rated Vagirux easy to use.

3. Changing to Vagirux supports the NHS Long-term plan to reduce single-use plastic waste.

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Oral group - 3



# On-call Simulation: A low-cost, high impact undergraduate teaching approach

#### Authors

Clodagh Beattie, Maria Miles, Sam Chumbley, Rachel Scott

Severn Foundation School

#### Background

Newly graduated doctors commonly report feeling underprepared to work on-call shifts.(1) On-call simulation teaching has been reported to improve undergraduates' confidence for out-of-hours work, however existing studies have small sample sizes.(2-4) Our study aims to evaluate the effect of large-scale on-call simulation programme on students' preparedness for practice, and to assess its cost-effectiveness.

#### **Methods**

Sessions were delivered to final-year medical students as part of the 'Bleep101' teaching programme, where students manage bleeps to various medical scenarios. We assessed student preparedness for on-call shifts using post-session feedback forms with Likert scales (1-10 preparedness rating). A cost-report was undertaken using Levin's costing framework.(5)

#### Results

220 students from 7 UK hospitals participated in the study over a 5-year period. The programme resulted in an increase in overall preparedness to complete a ward cover shift (pre 4/10, post 7/10, p<0.01). 99% of students agreed that their medical school would benefit from on-call simulation. The cost-report demonstrated that the programme would cost institutions £0.30 per student per year.

#### **Key Messages**

On-call simulation is an effective intervention to help students' transition to working as a doctor and can be delivered on a large scale, at low cost. Further work should consider integration of on-call simulation to the national undergraduate curriculum.

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Oral group - 4



# Opioids Back In The Bottle - A QI Project to improve analgesia prescribing on medical wards

#### Authors

Li Ying Tay, Foundation Doctor, University Hospital Ayr

Joellene Mitchell, Anaesthesia and Acute Pain Consultant, University Hospital Ayr

Scotland Foundation School

#### Background

Opioids harbour risks of side effects, addiction and dependence. In 2018, opioids were directly involved in 90% of all drug related deaths in Ayrshire & Arran. Non-opioids are effective analgesia yet are not routinely used. This QI Project aims for 80% of all pain prescriptions on medical wards in University Hospital Ayr (UHA) to have regular non-opioids (Paracetamol/NSAIDs) prescribed as first line analgesia, in line with the World Health Organisation (WHO) pain ladder.

#### Methods

Barriers to prescribing non-opioids were identified via process mapping. Three Plan-Do-Study-Act(PDSA) cycles were conducted with weekly data collection spanning 10 weeks between March-May 2023. Inclusion criteria were medical patients with acute pain. Palliative, complex, and chronic pain patients were excluded. We obtained data from the HEPMA database and examined whether regular non-opioids were prescribed before opioids.

#### Results

At baseline, 69% of prescriptions aligned with WHO guidelines. PDSA cycle 1 (education sessions) did not yield improvements. PDSA cycle 2 (education posters) reached out to more prescribers and raised data to 77%. PDSA cycle 3 (data trend sharing) closed the communication loop and provided inherent motivation to sustain change.

#### **Key Messages**

- 1. Familiarity bias creates inertia to change.
- 2. Change takes time.
- 3. Sustaining change requires collaborative effort.

References

N/A

Oral group - 4



## Quantitative Analysis of Challenges Encountered by UK Widening Participation Medical Students in Comparison with their Non-Widening Participation Peers

#### Authors

Ravulapalli KC, Arroyave Caicedo NM, Zahra D, Mirza M

#### Northern Foundation School

#### Background

Few studies have captured the experiences of widening participation (WP) medical students, and none have compared their experiences to their non-WP peers. This study aims to identify which challenges WP students are more likely to face.

#### **Methods**

A 22 item questionnaire was distributed to medical students across all U.K. medical schools. Students were asked yes or no questions on whether they faced challenges in finances, socialising, physical and mental health, academic attainment and COVID19 related teaching changes.

#### Results

176 medical students from all year groups across the U.K. responded, with 97 students from a WP background. WP students were significantly more likely to have their personal background impacting their mental health (OR = 2.65, WP = 0.002), more than twice as likely to feel that their job impacted their studies (OR = 2.53, P = <0.05), more likely to feel limited by their financial situation (OR = 2.29, P = <0.05) and to receive support from student finance (OR = 2.08, P<0.05).

#### **Key Messages**

WP students were more likely to face challenges in mental health and finances in medical school compared to their peers. These findings, further informed by qualitative insights can aid in advancing equity in medical training.

#### References

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Oral group - 4



### Conflicting Presentations in Psychiatry: Major suicide attempt in the absence of a major depressive episode

#### Authors

Dr Danielle Pollitt-Walmsley

Yorkshire & Humber Foundation School

#### Background

Most frequently, suicide attempts occur in patients with a known psychiatric condition, commonly major depressive disorder, or psychosis. It is important, however, for clinicians to recognise patients may present following a suicide attempt in the absence of a chronic or acute psychiatric disorder1.

#### **Case Presentation**

A 70-year-old female (LH) presented following a pre-meditated major suicide attempt, without fulfilling the criteria for an acute or chronic psychiatric condition. No clear triggers for the attempt were identified. Mental state examinations described LH as 'superficially bright' and 'struggling to express herself'. LH was evasive when answering questions, open to suggestions, and potentially demonstrating signs of dissimulation. She described perceived financial concerns, personality traits of meticulous planning and social isolation which may have contributed to triggering the attempt

#### Outcome

Following treatment of her physical injuries, LH will be discharged to the community with support of the home treatment team. Psychotherapy and family therapy will be considered.

#### Follow Up Discussion

1. Patients may attempt suicide without having a historic or acute mental health condition.

2. It is important to be aware of patients dissimulating and ask open questions to avoid influencing patients' responses.

3. Social isolation may be an indication to explore affective disorders and suicide risk in older people.

#### References

1. Brådvik L. Suicide Risk and Mental Disorders. Int J Environ Res Public Health. 2018. 15(9):2028. doi: 10.3390/ijerph15092028.



Education poster group - 1

# Multidisciplinary 'on-call' simulations to improve communication, prioritisation and interprofessional understanding: a quality improvement project

#### **Authors**

Authors: Dominic Fritche1, Adam Watson1, Eva Mullarkey1, Julia Morris1

Acknowledgements: Judith Cave1, Sophie Pilkington1

1 University Hospital Southampton NHS Foundation Trust, Southampton, UK

Wessex Foundation School

#### Background

Medical1 and nursing2 students consistently perceive themselves as unready for the transition to independent clinical practice. Informal student feedback highlighted shared gaps in experience as potential contributing factors, including interprofessional communication, task prioritisation and using bleeps. Previous research demonstrates simulation can develop these non-technical skills.3

#### Methods

We introduced a unique multi-disciplinary 'on-call' simulation for medical and nursing students at Southampton General Hospital. In this, simulated patient notes, featuring outstanding clinical tasks, are distributed across wards. Nursing students identify tasks and communicate these via bleeps to medical students, who prioritise and 'manage' these patients. 'Seniors' are available via bleep to enable bidirectional bleep practice. Students then engage in a structured reflective session. Medical student feedback is gathered via pre- and post-questionnaire; nursing student feedback via informal discussion.

#### Results

17 medical students have participated in this ongoing simulation training. Medical students report increased confidence post-simulation (Table 1), describing the experience as useful (100%), realistic (91%) and stressful (55%). 91% of medical students would recommend the session. Seven nursing students have participated thus far, consistently reporting the most useful aspect is simulated patient escalation.

#### **Key Messages**

The multidisciplinary 'on-call' simulation improves medical and nursing student confidence within interprofessional bleep and telephone communication.

#### References



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NB: image/graph of results is in the poster but unable to upload to this google form. Many thanks



Education poster group - 1

# Investigating barriers to surgical careers and addressing the growing need for diverse role models in surgery through a mentoring event

#### Authors

Sabba A. Hussain1,2, Mona Jaffar-Karballai2, Rebecca Beni2, Anna Bridgens1 and Yael Gelfer1,2

1 Trauma and Orthopaedics Department, St George's University Hospitals NHS Foundation Trust, London, UK

2 St George's University of London, London, UK

London Foundation School

#### Background

Attrition of females during surgical training remains a significant problem. This project aimed to assess barriers to surgical careers and provide diverse role models to support uptake.

#### Methods

A first-of-its-kind local mentoring event was held including surgeons from diverse backgrounds. Surveys were disseminated before ("pre-event"), immediately after ("post-event"), and five-months later ("follow-up"), to assess impact. Surveys involved open-ended and Likert-scale questions ('10=very-much';'0=not-at-all') assessing opinions. Descriptive statistics and thematic qualitative analysis were undertaken.

#### Results

Female students across all year-groups completed pre-event (n=25), post-event (n=25), and follow-up (n=11) surveys. More students considered surgical careers following the event (score  $\geq$ 7/10: pre-event 76%; post-event 92%; follow-up 91%). The most common uncertainties and worries reduced after the event (work-life balance (pre-event 48%; post-event 24%); parenthood (32%;24%)). Remaining concerns included training pathway (32%;36%) and competitiveness (20%;36%), with 18% citing sexual harassment as a deterrent at follow-up. 84% scored  $\geq$ 8/10 stating the event strengthened their decision to become surgeons. The format was well received (60% scoring 10/10) and met all expectations, and 96% signed for additional mentoring.

#### **Key Messages**



The value of mentoring through a single evening and early

support in decision making is beneficial to career progression for aspiring surgeons. Continuous support through further evenings is encouraged.

References

N/a



Education poster group - 1

# Assessing the impact of junior doctor led induction workshops for incoming Foundation Year 1 doctors

#### **Authors**

Maariya Malik, Tanuja Thavarajah, Laith Alexander, Amelia Hughes, Leila Frodsham

London Foundation School

#### Background

Preparedness surveys often show medical graduates to be lacking in skills of handover, clinical reasoning, ward familiarity, and knowledge of their ePortfolio requirements (1,2).

#### Methods

To address these deficits, we scheduled junior doctor led workshops into the Foundation Year 1 induction programme. Sessions focussed on the structure of different shifts, simulation in prioritising tasks, effective handover, and the ePortfolio. Attendees completed pre- and post- session questionnaires to quantitatively and qualitatively assess the impact of the workshops.

#### Results

Of a total of 61 attendees, 70% found the workshops to be "very helpful", and 26% to be "quite helpful". 46 felt extremely/quite prepared with what to expect on the various shifts, compared with 0 prior to the session, along with a 73% increase in confidence with portfolio expectations. Qualitative feedback included "was very anxious but now feel confident", "great practical tips", and "portfolio information was particularly useful".

#### **Key Messages**

In conclusion, 96% of attendees found our intervention of junior doctor led induction sessions to be beneficial. Three quarters felt more confident with key skills, including clinical reasoning, prioritisation and handing over, with enhanced understanding of Portfolio requirements. Consequently, this will reduce stress and anxiety in F1s and improve patient safety, whilst ensuring continuous professional development.

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foundation training programme. BMC Med Educ [Internet]. 2020;20(1):106. Available from: http://dx.doi.org/10.1186/s12909-020-01999-5



**Education poster group - 1** 

### The Surgical FY1 Experience

#### Authors

Jaina Patel, Lily Scourfield, Hannah Abbasi

London Foundation School

#### Background

All foundation doctors have one surgical placement during their 2 year training programme, this project aimed to provide a platform for doctors to share their views on their experiences.

#### **Methods**

Twenty three Foundation Year 1 doctors in a London teaching hospital completed an anonymous survey on their experiences of working in Surgery.

The 20 point questionnaire included a range of topics such as teaching opportunities and personal well-being.

#### **Results**

During their 4 month placement, only 4.4% of doctors reported to have not finished late or missed their breaks, whilst 100% had missed teaching sessions due to workload.

Strikingly, 22% of doctors felt that their surgical placement rarely offered learning opportunities, not including the 26% who felt that it was a service provision only role. During their surgical rotation, 86% of doctors had become upset due to an interaction with another member of the healthcare team. Worryingly, over 45% of doctors would not feel comfortable escalating a bad experience to their senior.

#### **Key Messages**

The falling rate of job retention in the NHS is no secret and the relationship between job satisfaction and retention is clear. This survey has highlighted key issues within the field of surgery which require intervention.

References

N/A



Education poster group - 1

### **PSA Teaching for IMGs**

Authors

Dr Jamolbi Rahmatova

Trent Foundation School

#### Background

Prescribing Safety Assessment (PSA) is known to be an important exam to be taken in final year of

medical school or 1st year of Foundation training in the UK. Although the exam can be difficult for UK graduates, it is proven to be even more challenging for International Medical Graduates (IMGs), so many of them end up needing to re-sit the PSA. This prompted me to provide a 3-day PSA teaching course for those preparing for their second attempt in my deanery.

#### Methods

An online PSA teaching course was held over 3 days. Each session was around 1.5 hours long and recordings were saved for FY1s that had work commitments. Feedback was collected before and after the course from those that attended on the day and those that watched the recordings later.

#### Results

- Majority (>80%) of IMGs felt more confident and prepared to re-sit the PSA after the teaching course.

- All IMGs found each session helpful.

- Majority (90%) of IMGs passed their second attempt.

#### **Key Messages**

- Majority of IMGs had no PSA teaching prior to their 1st attempt.

- All IMGs found the teaching useful and though it would be helpful to have PSA teaching for all IMG FY1s.

References

N/A



Education poster group - 1

# Importance of clinical skills and practical sessions during the Preparation for Professional Practice Week

#### Authors

Dr Ashita Leena Ramtohul, Dr Aditi Sakthivel, Dr Rajas Barve, Dr Janavi Shah

Essex, Bedfordshire & Hertfordshire (EBH) Foundation School

#### Background

Becoming a newly qualified doctor is undoubtedly a daunting experience. Prior to undertaking this role, embedded within the foundation programme is a mandatory Preparation for Professional Practice (PfPP) week (EoE, 2023). This week emphasises on shadowing current foundation doctors and learning IT systems with minimal clinical skills sessions to supplement these. Consequently, foundation doctors can feel unprepared and under-confident, thus affecting patient care and safety (Croker et al., 2013). Our aim is to improve foundation doctors' confidence in essential clinical skills and scenarios.

#### Methods

Within the first month of foundation training we organised three sessions: 1 practical skills and 2 'on-call' simulations for medicine and surgery respectively. Each session focused on common skills or clinical scenarios that they may encounter.

#### Results

In comparison to eleven other sessions during PfPP week, the doctors found these three sessions collectively to be the second most useful. On average 87.5% found all three sessions 'very useful', the remainder finding these 'useful'. The surgical on-call session was most useful with 97% finding it 'very useful' and 88% found the other two sessions 'very useful'. Feedback highlighted the relevance of these sessions to the role and improved doctors' confidence.

#### **Key Messages**

Our study highlights the importance of clinical and practical

#### References

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Education poster group - 1

### Early Predictors of rapid surgical skill acquisition.

#### Authors

#### Jamal Ross

Kent, Surrey & Sussex (KSS) Foundation School

#### Background

Surgical skill acquisition is a complex process that requires significant time, effort and informed repetition. Learning a new skill can be regarded as an extension of neuroplasticity - the ability of the brain to form and re-organize synaptic connections, in response to learning or experience. Identifying early predictors of rapid skill acquisition (RSA) can help optimise surgical training programs and improve patient outcomes. However, few studies have investigated this area in the context of surgical training.

#### **Methods**

We conducted a prospective study with a cohort of third year medical students at Brighton Medical school. The majority of participants had very limited surgical exposure, if any at all. Participants were assessed using a series of novel tasks and standardised fine-motor skill tests to generate performance metrics. We collected data on demographic characteristics, prior surgical experience, cognitive ability, and personality traits. We then used regression analysis to identify predictors of rapid surgical skill acquisition.

#### **Results**

The preliminary results have shown that our novel kinaesthetic test SURKIT was a strong predictor of identifying RSA participants. RSA participants were more easily identified through precision -based assessments than assessments based on accuracy.

#### **Key Messages**

The scientific roots of skill acquisition theory are explored in several branches of psychology. Skill

#### References

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Education poster group - 1

# Foundation to Future: Uncovering the Trends Behind Competition Ratios for Post-Foundation Training

#### Authors

Dr Jamie William Scriven

Wales Foundation School

#### Background

Competition ratios (CR) indicate the most and least subscribed specialties for annual training programmes. When viewed in isolation, their trends are overlooked. With the percentage of Foundation Doctors entering specialty training immediately post-F2 reaching a low of 24.88% in 2022(1), we aim to identify trends and shifts in specialty recruitment.

#### Methods

We extracted data of round one CT/ST1 programmes from Health Education England, from 2013-2023(2). This information was analysed using Microsoft Excel. Data was reviewed in graphical and tabular formats.

#### Results

Whilst the total number of posts slowly increased over the 10-year period from 6916 to 9194, applications rose exponentially by 51.6% from 2019-2023. Individual applicants fell from 2013-2017, but data is not available from 2018. Cardiothoracic surgery (CR 8.42-27.09), neurosurgery (CR 6.54-12.75) and ophthalmology (CR 3.24-9.91) saw the greatest rise from 2019-2023. Smallest increases were GP (CR 1.34-2.67), paediatrics (CR 1.18-2.4) and core/internal medical training (CR 1.43-2.64).

#### **Key Messages**

-2019 onwards has seen an exponential rise in applications to specialty programmes in England.

-Surgical specialties with historical oversubscription are becoming more competitive.

-The rapid increase in applications may indicate trainees' willingness to consider more than one career pathway.

-Whilst competition ratios fluctuate annually, this trend does signify a worrying barrier to specialty training.

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#NFDPD



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Education poster group - 1

# Out-of-Hours Working: A Lecture Series to Improve Confidence of F1 Doctors at Torbay Hospital

#### Authors

Dr R Watts (1), Dr G Roberts (1), Dr E Hale (1), Prof. N Cooper (2)

- (1) Torbay and South Devon Foundation Trust
- (2) Peninsula Foundation School

Peninsula Foundation School

#### Background

F1s are expected to work independently out-of-hours (OOH), often with minimal formal training.(1,2) Non-technical skills and OOH confidence are integral to maintaining patient safety.(3)

#### **Methods**

A 3-part series on OOH working was delivered to F1s at Torbay Hospital as part of their weekly teaching programme. The main outcome was increased confidence OOH, with secondary outcomes being perceived ability to hand-over patients, prioritise, manage medical/surgical patients, and escalate unwell patients appropriately. F1s were surveyed throughout the series, asking them to rate their ability at a task between 1-10. A cut-off for acceptably good perceived ability/confidence was taken to be 7/10.

#### Results

23 F1s attended some part of the lecture series:  $\geq$ 3 attended one lecture,  $\geq$ 9 attended two,  $\geq$ 6 attended all three. Confidence working OOH increased from 35% (8/23) to 100% (18/18) (p<0.05). Perceived ability to handover, escalate unwell patients, and manage both surgical and medical patients OOH improved with the series (p<0.05). Perceived ability at job prioritisation improved, though this did not reach statistical significance.

#### **Key Messages**

Confidence at working OOH is low in new F1s. This lecture series improved confidence and perceived ability to do important tasks to maintain patient safety OOH. Further work is needed to assess its impact on F1 behaviour

#### References

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Education poster group - 1

# A Quality Improvement Project (QIP) to improve how the Newborn and Infant Physical Examination (NIPE) is taught to medical students

#### Authors

Charlotte Wilson and Shana Pampapathi

**Trent Foundation School** 

#### Background

Performing NIPEs are an integral part of the role of a paediatric foundation doctor, yet there is limited focus on this area during medical school, impacting the confidence of foundation doctors. This project was designed to formulate a junior led teaching session aimed at medical students to be embedded into the University of Nottingham (UoN) curriculum, to improve students' knowledge and confidence surrounding NIPEs.

#### **Methods**

Five small group teaching sessions were delivered between November 2022 and June 2023 to 55 medical students (UoN). 'Peyton's 4-step teaching approach' was used to explain how to perform the examination, followed by an opportunity to practise the skills obtained over the two hour session. The students' confidence and knowledge was assessed with a pre and post session questionnaire, which was subsequently analysed.

#### Results

The average percentage of questions answered correctly improved from 42% pre session to 88% post session. The majority of students shifted from feeling 'not confident at all' to 'very confident' following teaching.

#### **Key Messages**

The project was successful in improving comprehension and capability amongst students, whilst giving junior doctors a way to enhance their portfolio by facilitating teaching sessions. Feedback obtained from students and an observing clinical educator was reflected upon to improve the sessions.

#### References

NA



Education poster group - 1

# Educational Experiences in Oral & Maxillofacial Surgery: A Qualitative Study

Authors

Sally Al-Ali

North West of England Foundation School

#### Background

Recruitment and retention of trainees is a continual challenge. For surgical training in particular, applications have declined across the board. In recent years, despite an increase in the number of trainees undertaking a second degree, numbers of filled training and consultant posts in Oral and Maxillofacial Surgery are in decline. This qualitative study aimed to assess how the educational experience of those in training within this field impacted their motivation and career choices.

#### Methods

Data was collected through semi-structured interviews using the critical incident technique, with 6 professionals with a minimum of 12 months experience in Oral and Maxillofacial Surgery in the UK, ranging from SHO to consultant. Interview transcripts were analysed using a general inductive approach to establish common themes.

#### Results

Operative exposure and individualised one-to-one training opportunities with trainee autonomy and control, good role modelling and feeling valued as a team member in an environment of emotional safety were commonly reported by interviewees as key factors influencing their perceptions of their educational experiences.

#### **Key Messages**

The critical incident technique is a useful tool to highlight areas within the educational system which promote learning and motivate trainees. This is useful to establish a focus for the development of post-graduate surgical training and

#### References

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Education poster group - 1



### GCHATGPT & MSRA – The AI is Invited to Interview

Authors

Dr George Woods

Wales Foundation School

#### Background

ChatGPT3.5 is a language-based AI that passed the USMLE and Situational Judgement Test (SJT) (1,2). However, its performance in the Multi-Speciality Recruitment Assessment (MSRA), an exam used by various specialities to filter application for training posts, hasn't been assessed. The examination consists of SJT questions aimed at FY2 doctors and Clinical Problem-Solving questions (CPS) (3).

#### **Methods**

The 2023 MSRA mock examination paper was inputted into ChatGPT3.5 (4). A new chat was created for each question along with the brief. Answers were recorded and analysed against the mark scheme.

#### Results

ChatGPT scored 68.3% in the Professional Dilemmas (PD) section, achieving 76.3% in the ranking style questions and 67.7% in the multiple-choice questions. Only 1 PD question was entirely correct. The AI fared slightly better in the CPS section, with a 75% average. PD and CPS combined, ChatGPT scored 69.1%.

#### **Key Messages**

Although an isolated MSRA score is difficult to interpret due to score normalisation, ChatGPT's result is likely competitive. Some specialities rank applicant's by MSRA alone to distribute offers. Therefore, it's plausible ChatGPT could secure a training post ahead of other applicants, especially in locations and specialities that struggle with recruitment (5). More research is necessary to better understand the capabilities and applications of ChatGPT.

#### References

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Education poster group - 2

# Paediatric Safeguarding Simulation: Can simulation prepare junior doctors for challenging and complex communication?

#### Authors

Dr Imogen Bishop, Dr Isabella Girling

North West of England Foundation School

#### Background

Child protection is a critical responsibility of doctors (GMC, 2013). However, current paediatric safeguarding education for doctors is inadequate. The following project aims to improve the confidence and knowledge of junior doctors in managing paediatric safeguarding concerns by using simulation as a tool to provide this.

#### Methods

Four simulation scenarios were designed relating to the four main types of child abuse. Each scenario was based on real life scenarios and aimed to reflect the complexities of safeguarding children to challenge junior doctors. Various members of the paediatric multidisciplinary team were recruited to deliver the sessions. Overall, 76 foundation doctors participated.

#### Results

All participants felt their confidence in managing paediatric safeguarding scenarios improved; with 43.5% of participants feeling very confident and 46.7% feeling somewhat confident. This has demonstrated that simulation is a useful tool for improving confidence in managing paediatric safeguarding scenarios.

#### **Key Messages**

As one of the participants commented; "Paediatric safeguarding is a very difficult topic which is often taught poorly at medical school. By using simulated scenarios, it helped contextualise learning points about how to respond to each difficult scenario". The project demonstrates that simulation is a useful teaching tool leading to significant improvement in the confidence of junior doctors when managing paediatric

#### References

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Education poster group - 2

# Should the Emergency Department be a foundation doctor's first rotation; a reflection on the experience of two new FY1 doctors

Authors

Alice Churchill, Adam Aslam-Baskeyfield

Peninsula Foundation School

#### Background

The first Foundation Year One (FY1) rotation for medical graduates is daunting creating significant life changes and new responsibilities. The Emergency Department (ED) is a busy environment which can be challenging and stressful. This year North Devon District Hospital (NDDH) recruited its first FY1s in the ED. This project discusses the benefits and limitations of starting FY1 in ED, whilst additionally considering the rotation's suitability for future applicants.

#### **Methods**

Reflective discussions between FY1s and senior colleagues were carried out. Key topics included the benefits and limitations of a foundation job in ED and whether it was an appropriate rotation for FY1s. Aspects of the rotation that could be improved to increase suitability for new doctors were also discussed.

#### Results

Strengths and limitations were identified. The main benefits include gaining confidence and competence in assessing acutely unwell patients and initiating appropriate management. Limitations included the fast-paced nature of ED which may put pressure on FY1s, especially when senior support is frequently limited during busy times.

#### **Key Messages**

ED is a good first rotation for new FY1s which facilitates the development of skills essential for doctors. There are, however, ways in which the rotation could be modified to make it more suitable.

References

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Education poster group - 2

### FY1 in ICU - The good, the bad, the ugly

Authors

Anastasia Fabian-Hunt

Sasha Carter (co-author)

Peninsula Foundation School

#### Background

Intensive care is an environment where patients are diagnostically challenging, require multiorgan support and multidisciplinary input. The variety of medicine on ICU is unlike other departments. Crash calls, airway management & A-E assessments are daily occurrences compared to dreaded on-call shifts as an FY1. Working in intensive care is difficult but immensely rewarding. Discussions, teaching and development of procedural & communication skills are obtained with the support & comfort of being under a consultant-led unit.

#### **Methods**

Reflection of personal experience and interviews with senior doctors regarding opinions on the benefits of a rotation in intensive care during foundation training were used to develop an FY1 job plan.

#### Results

Knowledge regarding ventilation, airway management and being comfortable with critically unwell patients are key advantages compared to other FY1 rotations. Anaesthetic procedures and ultrasound are frequently taught during ICU placements, something which is uncommon on other rotations. Limitations included little paediatric exposure & abundance of other trainees.

#### **Key Messages**

Working in critical care has major advantages and should be encouraged. Many graduates feel out of their depth when assessing and managing acutely unwell patients and an ICU rotation can help provide the confidence and skills to further clinical practice (1).

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BMC



Education poster group - 2

# Improving e-Portfolio engagement for Foundation Year 1 trainees: Insights from a Tailored Teaching Session

#### Authors

Dr Annapurna Jagadish, Dr Abijan Pakiyaraja

West Midlands North Foundation School

#### Background

Maintaining professional portfolios as foundation doctors, namely e-Portfolios, are a mandatory requirement for progression and annual appraisal (ARCP). They aid in demonstrating General Medical Council (GMC) competencies and facilitating self-reflection, supported by feedback from senior clinicians. Inadequate introduction and guidance regarding navigating e-Portfolios has been shown to hinder engagement and effective use (1).

#### **Methods**

Recently qualified Foundation Year 1 (FY1) doctors designed a teaching session, aligned with official UKFPO guidance, to assist new FY1 trainees in effectively navigating e-Portfolios. The session was delivered in-person during a core teaching day organised by University Hospitals North Midlands (UHNM) trust. Pre- and post-session surveys were used to assess the session's relevance and overall effectiveness.

#### Results

Prior to the session, only 11% claimed to have a strong grasp of e-Portfolios. FY1s hoped to learn about Supervised Learning Events (SLEs) sign-offs and practical tips for meeting ARCP requirements. Post-session feedback (n=22) indicated that 100% found the session "Extremely Relevant" or "Relevant" and all respondents found it "Extremely Useful" or "Useful." Overall, 100% considered the session "Extremely Effective".

#### **Key Messages**

Integrating tailored guidance on e-Portfolio navigation into core teaching for new FY1 trainees can enhance engagement and alleviate concerns related to ARCP requirements.

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Education poster group - 2

# Severn Foundation Cases - A regional online teaching series to complement local trust teaching for foundation doctors in the United Kingdom

#### **Authors**

Boris C. Wagner\*, Samuel Leach\*, Eppie Taylor-Adams, Georgina Lewis, Oscar Maltby, Isabella Sawyer, Jonathan Smith, Sara Evans and Clare Van Hamel

\*Joint first-authorship

Severn Foundation School

#### Background

An online teaching series was designed and delivered regionally to complement local teaching for foundation doctors in the Severn and Peninsula Foundation Schools.

#### Methods

A series of six online teaching sessions were delivered via MedAll. Feedback was collected pre- and post-event. The results were analysed using Microsoft Excel. Statistical significance was set at p<0.05.

#### Results

Total number of attendees was 188. Median number of attendees was 26 per session (range 22 to 49). The majority of attendees were at F1/F2 level. Trainees attended from nine different trusts across both Severn and Peninsula Foundation Schools. Trainee confidence in taught topics increased significantly from a mean of 3/5 to 4/5 post-event (p<0.0001). The vast majority of attendees (99%) agreed that the teaching was relevant to their stage of training and 96% agreed with the statement that teaching complements local trust teaching. Teaching was rated a mean of 4.5/5 for 'engaging'. 97% of attendees agreed that online teaching helped them reach required hours for ARCP and 100% reported being interested in attending future teaching sessions.

#### **Key Messages**

Deanery-wide online teaching is well received by trainees and presents an effective way of complementing local teaching to increase confidence in managing core scenarios.

#### References

N/A



Education poster group - 2

# Don't Let Your Pay Slip Away - The Importance of Payslip Education for Foundation Doctors

#### Authors

Lee, Caitlin; Mohammad, Omar; Ganesananthan, Sharma

London Foundation School

#### Background

Remuneration for junior doctors has changed dramatically over recent years, resulting in confusion for both doctors and payroll. As such, payslip errors are common, compounding an increasing dissatisfaction with pay amongst junior doctors. We therefore aim to quantify Foundation Doctors' confidence in the components of the payslip, and assess the impact of a novel educational guide on this.

#### **Methods**

Foundation Doctors across three sites were surveyed regarding their understanding of the payslip. A descriptive statistical approach was used to analyse the data. A guide was created using official GOVUK, NHS and BMA resources, and a follow-up survey sent to determine how this impacted confidence. All analysis was conducted using Python.

#### Results

80% of the 15 Foundation Doctors surveyed lacked confidence to identify payslip errors and were not confident that the correct amount was deducted from their payslip. 86.7% strongly disagreed that they knew what their enhancements should be. 86.7% strongly agreed that a written guide would be useful to improve their confidence regarding the payslip.

#### **Key Messages**

Foundation doctors lack confidence in understanding their payslips and would overwhelmingly find a written guide useful. This emphasises the necessity of payslip education. Further data will be collected to evaluate the impact of our validated guide.

#### References

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Education poster group - 2

# PassMed, fail FY1? Are online resources and question banks detrimental to the confidence of new doctors?

#### Authors

Eesaa Longden

Mariam Dean

North West of England Foundation School

#### Background

First-year post-medical school trainees are completing their initial rotations in the NHS. This study compares how effective they found different resources during medical school in preparing them for not only their final examinations, but also their NHS roles in an era of record-high staffing shortages and doctor burnout.

#### Methods

A questionnaire was distributed to foundation doctors and some post-finals students via Google Forms. Binary questions probed the usefulness of resources in exam preparation and job readiness, with free-text boxes for responders to offer further insight.

#### Results

The questionnaire was sent to 50 individuals. 32 of 34 responders (94.1%) stated that one of their top 3 most effective resources for finals was an online question bank. However, merely 40% of doctors included them as similarly helpful in preparing for FY1. Similar downward trends are seen in other resources deemed useful for finals, such as medical education websites and mock OSCEs.

Conversely, only 14.7% of responders felt that doctor-led teaching sessions were effective for finals, yet almost two-thirds of doctors (63.3%) found these sessions very useful in preparing them for the FY1 job.

#### **Key Messages**

A notable disparity exists between resources valued during medical school and those favoured in practice. Findings suggest a desire among trainees

References

nil



Education poster group - 2

# The Academic Medicine Initiative: Gauging Medical Student Interest in Clinical Academic Training

**Authors** 

Gillian Manchip

Ghazn Khan

Zeryab Meyer

North West of England Foundation School

#### Background

Action is required to increase knowledge equity and access to the The Integrated Clinical Academic Training (ICAT) pathway and promote interest in clinical acadaemia (1).

#### **Methods**

We delivered three 1-hour lectures at a medical school in the North West of England (two in-person, one online) aimed at increasing knowledge of the ICAT pathway. All students from Years 1-4 were invited to attend. Surveys were conducted following each lecture.

#### Results

Overall, 18 responses were obtained. 16.7% were in Years 1, 3 and 4, with 50% in Year 2. 50% of respondents stated having 'Very Poor' or 'Poor' knowledge of the ICAT pathway prior to the talk. Following the talk, 83% stated 'Good' or 'Very Good' knowledge of the ICAT pathway. A majority stated having 'Very Low' to 'Moderate' interest in pursuing Research, Education or Leadership activities prior to the talk (72%, 61% and 83% respectively). Following the talk, the majority stated 'High' or 'Very High' interest in pursuing Research, Education or Leadership activities (78%, 72% and 56% respectively). A majority stated having 'Very Low' to 'Moderate' interest in pursuing the Specialised Foundation Programme (SFP) prior to the talk (78%). Following the talk, the majority stated having 'High' or 'Very High' interest in pursuing the talk, the majority stated having 'High' or 'Very High' interest in pursuing the talk, the majority stated having 'High' or 'Very High' interest in pursuing the talk, the majority stated having 'High' or 'Very High' interest in pursuing the talk, the majority stated having 'High' or 'Very High' interest in pursuing the talk, the majority stated having 'High' or 'Very High' interest in pursuing the talk, the majority stated having 'High' or 'Very High' interest in pursuing the talk, the majority stated having 'High' or 'Very High' interest in pursuing the talk, the majority stated having 'High' or 'Very High' interest in pursuing

#### **Key Messages**

#### References

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Education poster group - 2

# The Prescribing Safety Assessment: A National Near-Peer Teaching Series

#### Authors

Holly Mould and Ashka Moothoosamy (First co-authors)

Alexandra Carrie, Sophie Maccoy, Katherine Wright

North West of England Foundation School

#### Background

The Prescribing Safety Assessment (PSA) is a UK-based exam for medical graduates to demonstrate prescribing competence. Foundation Year 1 (FY1) doctors must pass the PSA to progress to Foundation Year 2(1). Given the importance of this examination, a near-peer structured PSA teaching series was created, delivered, and evaluated.

#### Methods

FY1 doctors delivered 5 sessions themed around sections of the PSA with mock examinations and explanations. Attendees rated their improvement in understanding using Likert scales. A free-text response explored differences between these sessions and medical school teaching.

#### Results

Sessions had an average of 262 attendees, with 99% being final year medical students. Attendees had a self-assessed mean increase in understanding of over 35% for all sections of the PSA, including 87% for exam timing, and 68% for exam format. Thematic analysis of qualitative responses demonstrated that a many attendees had not received PSA teaching from their medical schools. Attendees preferred the mock examination structure, PSA-specific teaching, and near-peer aspect of the teaching.

#### **Key Messages**

The PSA teaching series increased attendee understanding of all elements of the PSA. With many attendees not receiving PSA teaching at medical school, this series offers easily accessible high-quality examination-focussed teaching delivered by experienced near peers.

#### References

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Education poster group - 2

# Implementation of ultrasound guided peripheral intravenous cannulation training for foundation doctors

#### Authors

Presenting author - Mia Pham (Foundation year 1 doctor)

Co author (s) - Robert Aldous

St Georges University Hospitals Foundation Trust, London

London Foundation School

#### Background

Peripheral venous cannulation (PVC) is a skill which foundation doctors are tasked with daily. Despite this, it has high failure rates with nearly 26% of patients requiring multiple insertion attempts (1). Ultrasound-guided PVC has been shown to greatly increase likelihood of success, which could reduce senior reliance (2). We aim to assess foundation doctors' experience of ultrasound-based PVC teaching and evaluate whether it would be a valuable addition to the foundation curriculum.

#### Methods

We surveyed 46 foundation doctors to evaluate their perceptions on using ultrasound for PVC. Twenty-five foundation year one doctors took part in USS-PVC teaching. We assessed pre and post course confidence using cross-sectional questionnaires.

#### Results

Out of the foundation doctors surveyed, 61.7% had never used USS guided PVC before. Foundation doctors' confidence when performing PVC both on difficult-to-access patients and USS guided increased significantly (p = 0.002), with 100% of participants stating the session was useful.

#### **Key Messages**

As point of care ultrasound becomes more readily available, ultrasound guided PVC should be considered for inclusion in the foundation programme curriculum. Success may be limited by availability of ultrasound machines, and limited knowledge on suitable patients (3). We hope to extend this further to include medical students and foundation year 2 doctors.

#### References

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peripheral intravenous cannulation training program for emergency clinicians: An Australian perspective. Australasian Emergency Care. 2020, 23(3), pp. 151-156

Education poster group - 2



# Running a successful online teaching series: the near peer experience

Authors

Dr Oscar Oglina

Dr Nicholas Rees

Dr Ffion Byrne

Severn Foundation School

#### Background

Expedited by the pandemic, online teaching- both by institutions as part of a blended learning strategy and unaffiliated organisations- has surged in popularity. However, there is significant variation in styles of online medical education platforms and many deliver overly complex revision sessions requiring a large time commitment to attend. To address this issue, we created a novel, online finals-orientated teaching series called Combat Finals.

#### Methods

We pioneered a virtual series of standalone, concise sessions, standardised against the MLA curriculum and NICE guidelines. The most recent of these sessions were each attended by over 250 people with international representation. These sessions were punctuated with interactive question polls and a monitored chat function throughout. Utilising social media, we produced daily revision content for our thousands of followers. Recognising the importance of a collaborative ethos, we established an international network of ambassadors who can create content to enhance their professional development.

#### Results

We received feedback from 1330 attendees across all sessions delivered. Attendees reported an average improvement in their baseline knowledge of 51% and 36% across our lecture and single-best-answer series, respectively. 100% and 99.4% of attendees would recommend our lecture and single-best-answer series to friends, respectively.

#### **Key Messages**

There is significant variation in styles of online

#### References

N/A

ET101



Ethics poster group - 1

# Developing a Resource to Improve Transitional Care from Paediatric to Adult Services

Authors

A. Corbett

North West of England Foundation School

#### Background

An effective transition process between paediatric and adult services is critical to ensure the uninterrupted provision of effective healthcare. It helps bridge the gap between age-specific healthcare systems and maintains continuity in a patient's treatment and support. The Care Act stipulates that if a child is likely to require support once they reach the age of 18, there is an obligation to conduct a relevant assessment. Placing young individuals at the centre of a carefully coordinated, and well-supported transition empowers them, and when relevant, their caregivers, to maintain connections with healthcare teams responsible for their well-being. As a result, young people are more inclined to adhere to their treatment plans and enhance their ability to self-manage their health conditions.

#### Methods

A questionnaire will collect qualitative data from paediatric service users, and adults who have recently moved to adult services, to identify their experiences, concerns and expectations about transitioning between services.

#### Results

Core themes identified will be used to create a patient focussed proforma that will be used in consultations with young people approaching the transition to adult services.

#### **Key Messages**

Developing an effective tool to identify young people's concerns around transitioning to adult services will improve outcomes by allowing clinicians to address challenges earlier.

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ET102 Ethics poster group - 1



# Treating COVID-19: Clinical Trials and the Ethical Dilemma of Pregnancy

Authors

Dr Caitlin Jones-Fullerton

Wales Foundation School

#### Background

COVID-19 is no longer considered a global health emergency(1), but the virus has not gone away, and cases, hospitalisations and deaths do continue(2,3). Vaccines and treatments have offered a significant reduction in risk of serious illness and death from COVID-19, particularly in high-risk groups(1,3). Pregnant women are one such group at higher risk, particularly unvaccinated women and women at high risk due to other factors(4,5). However, clinical trials commonly exclude pregnant women on ethical grounds. Without a safety profile or evidence base for many potential COVID-19 treatments in pregnancy, clinicians have limited options and difficult decisions when deciding how to manage COVID-19 in pregnant women.

#### Methods

A review of the study protocols for the eight UK-based platform trials for COVID-19 treatments(6).

#### Results

Just two out of more than fifteen treatments across six trials did not exclude pregnant women(7–16).

#### **Key Messages**

This poster explores some of the complex ethical issues around clinical trials in pregnancy and discusses how further work is needed to develop a better evidence base for COVID-19 treatment to protect pregnant women and their unborn babies.

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QI & Sustainability poster group - 1

# Glucocorticoids on the respiratory ward: a quality improvement project to improve capillary blood glucose monitoring

#### Authors

Mu'Azzamah Ahmad, Mark Jacunski, Melanie Cross

Scotland Foundation School

#### Background

Steroids are frequently used on the respiratory ward to manage conditions such as Covid-19 and COPD.

Joint British Diabetes Society guidelines recommend monitoring capillary blood glucose (CBG) in patients on steroids due to the risk of hyperglycaemia. As few patients were undergoing regular monitoring, we sought to increase glucose monitoring to 75% of patients on high-dose steroids.

#### **Methods**

We collected data twice-weekly between December 2022-April 2023.

Patients on >20mg prednisolone (100mg hydrocortisone, 3mg dexamethasone) were identified. Those without diabetes and established normal CBG were omitted. Interventions included: (1) posters at CBG machines, (2) patient-facing posters with nursing safety-brief announcements, (3) empowerment at safety-briefs to stop CBG monitoring when levels were consistently <12mM as per national guidelines. Data was analysed using run-chart methodology.

#### Results

218 observations were made with 147 unique patients. The baseline period showed a median of 27.6% of patients monitored. Cycle 2 showed a positive shift with a median of 75% of patients monitored. Cycle 3 resulted in near baseline levels. Patients with known diabetes mellitus were monitored more reliably. There were 9 signals, which is within the expected range.

#### **Key Messages**

CBG monitoring can introduce high workload. Subsequent initiatives could include education, integration into

#### References

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QI & Sustainability poster group - 1

# A Quality Improvement Project on Formal Teaching of E-Discharge Completion among Junior Doctors

Authors

A.D. Balan, C.L. Cho, G. Antunes

Northern Foundation School

#### Background

Ensuring high-quality discharge summaries is vital for seamless secondary to primary care communication, yet formal training is lacking, leading to poor standards, errors, and risks for patients. The focus is on evaluating junior doctors' training on completing discharge summaries.

#### **Methods**

An online survey conducted among junior doctors at a tertiary hospital collected data over a month. This aimed to gauge their exposure to formal teaching, awareness of national guidelines, and the challenges faced in completing discharge summaries.

#### Results

Out of 50 responses, 84% were foundation trainees and the rest were core trainees. Only 24% had received formal training, while 12% were aware of national guidance. The most challenging aspects included follow-up actions to GPs and managing medication lists. Respondents struggled due to insufficient training for e-discharge completion and incomplete clinical documentation.

#### **Key Messages**

Training sessions aligned with the national guidelines and tailored practical exercises were conducted during generic skills for foundation year 1 (FY1) doctors showed enhanced confidence in discharge summaries, from 7.6 to 9.2 on average. Feedback from 24 participants unanimously advocated for mandatory training for FY1 doctors, emphasizing its earlier inclusion during foundation induction. In conclusion, education is vital for junior doctors to ensure better e-discharge quality and patient care transition.

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QI & Sustainability poster group - 1

# A Quality Improvement Project on Inpatient Transthoracic Echocardiogram Rejected and Appropriateness of Requests

Authors

A. Balan, C.L. Cho, J. Thambyrajah

Northern Foundation School

#### Background

Transthoracic echocardiograms are common diagnostic tools for assessing cardiac structure and function. Appropriate utilisation is crucial, considering limited resources and high demand. This project aimed to evaluate and enhance the quality use of echocardiograms, following hospital guidelines.

#### **Methods**

Using the PDSA cycle, we collected and analysed data on inpatient transthoracic echocardiogram requests for one month in a tertiary hospital. A new interface for request submission, incorporating specific indications and local guidelines, was designed and tested.

#### Results

Pre-intervention, 12.44% of requests were rejected, mainly due to the absence of BNP results and incomplete Duke's criteria. Post-intervention, the rejection rate decreased to 8.42%, which now is accounted mainly incomplete Duke's criteria and recent echoes. The appropriateness of authorised requests improved to 91.92% from 87.82%, with most remaining errors related to Duke's criteria.

#### **Key Messages**

The results demonstrated a successful reduction in rejection rates and improvement in appropriateness post-intervention with changes in the request interface, including specific indications and local guidelines. Further efforts to educate medical staff on appropriate request criteria are essential for sustained improvement.

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QI & Sustainability poster group - 1

# Improving the Confidence of Junior Doctors in Holding Do Not Attempt Resuscitate(DNAR)/ Treatment Escalation Plan(TEP) Discussions.

Authors Ee Lin Wong Eri Aung Sven Kerneis Kent, Surrey & Sussex (KSS) Foundation School Background

The CQC carried out a focused inspection at Queen Elizabeth Hospital in 2020 regarding TEP forms and the ways they were completed and recorded, identifying inconsistencies in the way they were completed. In particular, records detailing what was discussed with the family and the patient were not always documented.

Improving the way TEP decisions are discussed and documented, would improve the experience and confidence of junior doctors holding these discussions, and patients, whose time in hospital is distressing enough without having to have rushed conversations regarding TEP.

#### **Methods**

We introduced a poster consisting of core elements as a guidance on ways to discuss DNAR/TEP with patients. The core element consisted of SCOPE, namely Situation, Conditions, Options, Patients, Establishing Plan to guide doctors on discussions regarding DNAR/TEP.

#### **Results**

After introducing the poster, we noticed overall increase in compliance towards the core element when discussing DNAR/ TEP with patients. The guidance we have created increased the confidence level of doctors when holding TEP related conversations with patients.

#### **Key Messages**

This project has engaged doctors to be more compliant towards the core element, hence being more confident in discussing TEP with patients, leading to patients feeling more empowered with knowledge about DNAR and TEP discussions.

#### References

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QI & Sustainability poster group - 1

# 'Door-to-needle time' in neutropenic sepsis: A re-audit at Homerton Healthcare NHS Foundation Trust

#### Authors

Laura Fitzgerald (1), Elizabeth George (2), Katherine Ryan (2), Claire Charley (2), Sarah Slater (2)

London Foundation School

#### Background

Neutropenic sepsis (NS) carries an inpatient mortality rate of 10% (1). Failure to administer antibiotics within the 'golden hour' after presentation increases mortality ten-fold (2). We determined 'door-to-needle time' for antibiotic administration in suspected NS presentations in Homerton Healthcare Emergency Department (ED).

#### Methods

Trust guidelines state that 'unwell' or febrile patients presenting within 60 days of systemic anti-cancer therapy should be treated as suspected NS, receiving antibiotics within one hour. We identified presentations fulfilling the 'suspected NS' criteria from 1st July to 31st December 2022 by reviewing ED lists daily. We gathered data from electronic patient records.

#### Results

20 patients attended with suspected NS. 13 patients (65%) presented with fever. Within one hour of arrival, 13 (65%) patients had antibiotics prescribed and four (20%) patients had antibiotics administered. There were no deaths from NS.

#### **Key Messages**

Adherence to the 'golden hour' standard has declined from 55% in 2019 to 20% in 2022. One possible cause is increased ED waiting times, which could be addressed by prioritising suspected NS patients identified during triage. Delays could also be reduced by introducing a NS Patient Group Direction, enabling triage nurses to prescribe and administer antibiotics, as proven effective in other hospitals (3,4).

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QI & Sustainability poster group - 1

# Improving the Coronary Angiography service for Acute Coronary Syndrome (ACS) patients at a busy South London District General Hospital.

**Authors** 

1) Dr John Gillespie, F1

- 2) Dr A Gulati, Consultant Cardiologist
- 3) Dr A Pavlidis, Consultant Cardiologist

London Foundation School

#### Background

Best practice guidelines state that patients presenting with an NSTEMI or Unstable Angina (UA) should be offered inpatient angiography +/- PCI (if indicated) within 3 days of admission. Early intervention is shown to have significantly superior health outcomes2. Interventional angiography service runs three days a week at Queen Elizabeth Hospital (Mondays, Wednesdays, and Fridays). The interventional service is delivered by the consultant of the week or a separate interventional cardiologist.

#### **Methods**

Retrospective audit of all Acute Coronary Syndrome admissions for June, July and August 2023 using the electronic health database and a cath lab productivity analysis.

#### **Results**

The average wait from admission to angiogram for the 3 months period was 6.14 days vs the NICE target of 3 days. Patients admitted on a weekend waited on average 2 days longer than those admitted on a weekday.

The percentage of patients who met the NICE target over this 3-month period was 29.31%.

Cath lab productivity is 7.24 units per day when delivered by a dedicated interventionalist vs 3.5 units when the consultant of the week also had to cover the cath lab service. N=52

#### **Key Messages**

Significant cost saving potential and improved patient outcome if a dedicated consultant is employed to run the intervention list 3 days

#### References



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QI & Sustainability poster group - 1

# Attitudes towards and uptake of covid-19 booster on an acute inpatient psychiatric ward.

**Authors** 

Rebecca Johnson

**Thomas Cheliotis-James** 

London Foundation School

#### Background

Patients with serious mental illness have twice the mortality rate of the general population, this is multifactorial including increased rates of obesity, diabetes, cardiovascular disease and socio-economic factors (1,2). NHS England therefore defines this population as high risk for covid-19, and recommends they receive an autumn booster (3). All patients on an acute inpatient psychiatric ward were offered boosters. For this QIP we aimed to increase the uptake of boosters.

#### Methods

If patients declined boosters we offered them a government information leaflet (intervention 1). If still declining we conducted a semi-structured interview, exploring their understanding of and reasons for declining the booster (intervention 2).

#### Results

Eight patients accepted the booster without interventions. Eleven patients declined the booster, nine of whom undertook both interventions. Two patients subsequently accepted the booster. Themes that emerged for declining the booster included: contracting covid-19 despite vaccination, lack of understanding of boosters, and perceived lack of benefit.

#### **Key Messages**

Easy to access education into the purpose and need of booster vaccines, herd immunity and vaccinations reduction in symptoms/ hospitalisation may improve vaccine uptake in this population. Given the lack of engagement with health services for this population (2), offering vaccines in accessible environments may also increase uptake.

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QI & Sustainability poster group - 1

## **Collateral History Proforma QIP**

#### Authors

Dr Rashaan Jackson-Wade, Dr Stefani Kikina and Dr Jegard

Essex, Bedfordshire & Hertfordshire (EBH) Foundation School

#### Background

The national audit of Dementia (NAD) 4 demonstrated that dementia, frailty, and delirium are becoming increasingly prevalent amongst older inpatients. Consequently, many older inpatients are too confused to obtain history from, meaning that a collateral history is an invaluable resource. However, there are no national guidelines for collateral history (CoHx) taking.

#### Methods

We created a scoring system alongside a proforma for taking a CoHx. We then assessed CoHx scores pre- and post-intervention and compared scores of those with the proforma to those without.

#### Results

Average CoHx score with the proforma was 19/21 vs 6.5/21 without. There was a global improvement in scores in those using the proforma, particularly regarding continence (67% vs 28%), activities of daily living (61% vs 28%) and mobility (56% vs 36%). Additionally, a greater percentage of domains were covered in those using the proforma (90% vs 28%).

#### **Key Messages**

Our results demonstrated a qualitative improvement of CoHx with the proforma across all domains and provided structural support to taking them. Yet, there is still room for improvement across all domains.

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QI & Sustainability poster group - 1

# Keep Calm and Hold Sedation: An audit at Leicester Royal Infirmary Intensive Care Unit

#### **Authors**

Dr Alex Parker, Dr Simran Khanna, Dr Mavis Cheng and Dr Martin Smith.

Leicester, Northamptonshire & Rutland (LNR) Foundation School

#### Background

Sedatives for critically ill patients are commonplace in the Intensive Care Unit (ICU). The appropriate use of sedation has many benefits including reducing agitation and discomfort1,2. Continuous sedation infusions can lead to an increased mortality3. The Faculty for Intensive Care recommends daily sedation holds4. University Hospitals of Leicester (UHL) have a guideline for completing sedation holds and when to avoid them.

#### **Methods**

Data was collected by reviewing bedside nursing charts of 68 eligible patients in the Leicester Royal Infirmary ICU. Anonymised data was collected on whether a sedation hold had taken place that day, and the quality of the documentation.

#### Results

Only 36.8% of the sample had a sedation hold. The majority of the documentation was graded as 'Very Poor' with only 2 entries deemed 'Acceptable'. Of those that did not have a sedation hold, most were more deeply sedated than necessary.

#### **Key Messages**

There is room for improvement in performing and documenting sedation holds at UHL. Teaching sessions for staff are being delivered to improve results. A new sedation hold sticker has been introduced to simplify the process and posters have been produced and put in the unit. Another audit cycle will be completed in future to ensure improvement.

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QI & Sustainability poster group - 1

# Improving Documentation and Follow-up for Thoracic Surgery Patients

Authors

Charlotte Smith, Vipin Zamvar

Scotland Foundation School

#### Background

Thoracic surgery is a tertiary specialty to which junior medical staff often have minimal exposure (1). As a result, junior medical staff may lack confidence in coordinating care specific to thoracic surgery patients. This project aimed to implement structured ward round and discharge letter templates to improve patient care (2).

#### **Methods**

Junior medical staff working in a tertiary cardiothoracic surgery unit completed anonymous surveys to assess levels of confidence in co-ordinating care for thoracic surgery patients. Structured templates for ward rounds and discharge documentation were then formulated with input from senior surgical staff. After a trial period, further data were collected to assess the efficacy of the intervention.

#### Results

Survey found that 88.9% of junior medical staff felt that thoracic ward round structure could be improved. Respondents reported low levels of confidence in arranging follow-up for thoracic patients. Following intervention, respondents reported improved clarity around decision-making and patient plans. Mean likert scoring of confidence improved, and respondents reported perceived benefit to patient care.

#### **Key Messages**

- Thoracic surgery is a niche, tertiary specialty which may be unfamiliar for rotating junior medical staff.

- Structured templates for ward rounds and discharge letters ensure consistent care for thoracic surgery patients, and clarity around patient plans

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QI & Sustainability poster group - 1

# R-E-S-P-E-C-T: A closed-loop audit increasing the quality of ReSPECT documentation in a tertiary surgical centre in the United Kingdom

#### Authors

Boris Wagner, Molly Flint, Benjamin Jenkins, Alexandra McNish, Timothy Rutland and Stijn van Laarhoven

All authors are affiliated with: Department of Surgery, University Hospitals Bristol and Weston NHS Foundation Trust, Bristol, United Kingdom

Severn Foundation School

#### Background

Recommended Summary Plans for Emergency Care and Treatment (ReSPECT) should be considered for all acute hospital admissions (1). This quality improvement project aims to evaluate the use of ReSPECT forms in acute general surgical admissions and improve compliance with the ReSPECT process.

#### Methods

Data was collected in the form of random spot-checks, quantitatively and qualitatively evaluating the completion of ReSPECT forms for all patients admitted via the general surgical 'take' at Bristol Royal Infirmary. The first intervention was the addition of ReSPECT forms to the surgical admissions proforma. Second-cycle intervention involved education of clinical teams in the form of a novel poster and teaching session highlighting the importance of ReSPECT form completion.

#### **Results**

The initial completion rate of accurate ReSPECT forms was 8%, with 30% countersigned by the responsible consultant. Re-audit following the first intervention showed ReSPECT form completion rate of 27%, with 50% of forms counter-signed by a consultant

#### **Key Messages**

The addition of ReSPECT forms to the surgical admission proformas is a simple and effective way of increasing compliance. Overall quality of ReSPECT documentation improved with our interventions, however, there remains scope for further improvement and ongoing education of clinical teams is paramount to improving compliance with the ReSPECT process long-term.

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QI & Sustainability poster group - 1

# Introducing a structured daily multidisciplinary board round to safely enhance vascular surgical ward patient flow: a quality improvement project

#### Authors

Yawen Xiang, Christopher C Potter

London Foundation School

#### Background

Elderly surgical patients frequently experience delays in discharge due to delayed therapy referrals and complex discharge needs. In this project, we aimed to examine the effectiveness of introducing a structured daily multidisciplinary (MDT) board round at safely enhancing surgical ward patient flow and MDT communication on a vascular ward in a tertiary centre.

#### Methods

We introduced a daily 15-minute MDT board round to discuss care plans aimed at safe and early discharges and highlight relevant patients for early rehabilitation or discharge assessment. We collected information on patient demographics, surgical procedures, and length of stay (LOS) before and after the intervention. We monitored MDT attendance and distributed surveys on MDT teamwork.

#### Results

After one month of intervention, compared with baseline, the average LOS decreased from 10.7 to 9.6 days. Post-op LOS reduced from 7.3 to 6.1 days. The MDT board round was well attended. 21 out of 25 staff members agreed that the board round improved MDT communication and 19 out of 25 believed that it led to improved patient care.

#### **Key Messages**

The introduction of MDT board round at our vascular surgery ward has enhanced patient flow. It also provided a platform for effective MDT communication.

References

NA



QI & Sustainability poster group - 2

# Using Salamol cannister weight to estimate remaining salbutamol doses and improve patient confidence in knowing when their Salamol inhaler is empty.

#### **Authors**

Dr Robert Beckett, Dr Annapurna Jagadish, Prof Will Carroll, Dr Francis Gilchrist

West Midlands North Foundation School

#### Background

Pressurised metered-dose inhalers (pMDIs) containing salbutamol are a critical medicine for airway disease and Salamol is the most widely prescribed version in the UK. Salamol does not contain an integrated dose counter, so patients struggle to identify when it is empty. They may continue to use a pMDI that contains no active medicine, presenting a patient safety risk.

#### **Methods**

We weighed the cannisters of Salamol pMDIs (n=14) at stepwise dose intervals using digital scales to create a model. We applied this model in a quality improvement project in the paediatric respiratory clinic. We assessed families' access to digital scales and their confidence in using this model at home.

#### **Results**

We found a strong linear relationship between the weight of a Salamol cannister and the number of remaining salbutamol doses (y = 0.0311x + 9.548;  $R^2 = 0.9954$ ; p<0.001). Survey results (n=50) indicate that 66% of families have access to their own digital scales and 96% would be confident in using our weighing method at home.

#### **Key Messages**

A Salamol cannister weight of less than 10 grams suggests it is close to empty and should be replaced. Patients and families are amenable to using this model to better understand when their Salamol pMDI is empty.

References

Nil.



QI & Sustainability poster group - 2

## **CoolSticks: A Sustainable Alternative to Aerosols**

#### Authors

Bennett, H. Langberg, A. Good, L. Rutter, L. Shah, A. Miles, E.

Severn Foundation School

#### Background

Ethyl chloride (EC) spray is used within North Bristol Trust's maternity unit to test neuraxial blocks. These unrecyclable cans have a significant financial burden and potential environmental impact in both their disposal and contents (1,2). We proposed that finding a re-usable alternative would reduce their use, producing both cost and environmental savings and contributing to NHS net zero aims.

#### Methods

We investigated the use of CoolSticks (3) as a reusable alternative. These stainlesssteel devices are kept refrigerated and are adequate for assessing neuraxial anaesthesia (4). A pilot was undertaken, user acceptability data was gathered, and results presented locally. Units of EC purchased were monitored throughout. We plan to implement another cycle of CoolStick promotion, and monitor the effect on EC usage.

#### Results

100% of surveyed Anaesthetists felt that CoolSticks were comparable to EC for block assessment. In the year preceding the pilot, 296 units of EC were purchased. Data collection for the current cycle is ongoing.

#### **Key Messages**

We believe CoolSticks provide a reliable and sustainable alternative to EC. After demonstrating impact locally, we aim to roll this out further afield - significantly reducing cost to both the planet and the NHS.

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QI & Sustainability poster group - 2

# An Audit of Elective, Open Hernia Repair Services in Croydon University Hospital

#### Authors

Rory Durham, Masha Zdravkovic, Michael Adebayo, Athanasius Ishak, Nikolaos-Andreas Anatasopoulos, Paul Dent

London Foundation School

#### Background

Approximately 400 elective, open groin and umbilical hernia repairs are performed at Croydon University Hospital annually. We identified three areas for audit – use of prophylactic antibiotics, preoperative group and screen (G+S), and delayed discharges.

#### Methods

For the first cycle, we retrospectively analysed electronic patient data from elective, open groin and umbilical hernia repair from July 2022 to February 2023. We assessed practice against local, national and international guidance.

#### Results

251 patients were included. 113 (45.0%) received prophylactic antibiotics, with zero surgical site infections reported. 229 (91.2%) of patients had preoperative G+S. Mean blood loss was 6.82mL (0-50mL) with no transfusions required. 43 (17.1%) of discharges were delayed by at least a day, with urinary retention the most common reason (39.5%).

Results were presented at a Trust R&D day and to surgical, microbiological and transfusion teams. We implemented specific changes as follows: 1) Update of Trust antibiotic prophylaxis guidance. 2) Prevention of unnecessary preoperative G+S, expected to save £8,000 / annum. 3) Intervention with a bladder management algorithm to reduce delays. The analysis of the 2nd cycle of data collection is to be completed by December 2023.

#### **Key Messages**

Our findings are likely to significantly improve service efficiency and generalise to other elective operations.

References

n/a



QI & Sustainability poster group - 2

Project Complete CARE (Completion of Chasing Awaiting Results & Events): Improving the quality of post-discharge care of paediatric patients in a district general hospital: A quality improvement project

Authors

Dhanushan Gnanendran

Thamir Alshamari

Yorkshire & Humber Foundation School

#### Background

Prompt review of results is essential for maintaining patient safety [1]. Clinically stable patients are often discharged before receipt of pending results. Guidance dictates outstanding job proforma completion with timely chasing. Regrettably, timely follow-ups are often missed, risking near misses. We aim to increase the percentage of timely chased results post-discharge from a baseline of 0% to 100% by October 2024.

#### **Methods**

Retrospective audit of 88 discharges over April 2023 was done. Percentages of inpatient pathologies acknowledged at discharge, percentage of completed proformas and subsequent time required for chasing were measured. A questionnaire was given to doctors to assess their current awareness and scope suggestions. Results were presented at the local clinical governance meeting.

#### **Results**

First PDSA cycle introduced an outstanding job book, a restructured outstanding job proforma, and educating departmental staff. The project achieved an 84% proforma completion, up from 56% in April. Timely follow-ups increased by 64%, reducing average follow-up time from 36 days to 3.6 days within two weeks. Pathology acknowledgement improved from 66% to 95%.

#### **Key Messages**

Overall improvement 2 weeks into the revised post-discharge protocols was seen.

Email/poster reminders and a follow-up staff survey are underway in upcoming cycles, and weekly audits are planned to guide ongoing PDSA development.

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QI & Sustainability poster group - 2

# Quality Improvement in Intravenous Ferric Carboxymaltose Consenting in Ambulatory Care

#### **Authors**

James Hayley, Eleanor Chandler, Peter Przylecki-Bruce

London Foundation School

#### Background

Intravenous ferric carboxymaltose, or 'iron infusion' (IVI), is a treatment for irondeficiency anaemia that is commonly administered in ambulatory care. A rare adverse effect of IVI is extravasation, which can cause permanent cutaneous haemosiderin staining1. This can have severe cosmetic and psychological ramifications, and thus represents a potential source of patient harm and hospital litigation. Proper consenting for this risk is paramount, but frequently omitted. We sought to improve the quality of IVI consenting and documentation at the ambulatory care department of a London teaching hospital.

#### Methods

All ambulatory care referrals from 01/07/2021 to 30/06/2022 mentioning pre-selected keywords were reviewed for consent documentation. A formal consenting process with a patient information leaflet (adapted from Surrey and Sussex NHS Healthcare Trust) was then introduced and communicated to clinical staff. The audit cycle was repeated for referrals from 26/03/2023 to 22/05/2023.

#### Results

Pre-intervention, 78 patient encounters involved IVI. 17.9% included documentation relating to IVI consent (n=14), with only 1 specific mention of extravasation risk (1.3%). Post-intervention, there were 17 IVI encounters. 41.1% included documentation of IVI consent (n=7), and 23.5% included mention of extravasation (n=4).

#### **Key Messages**

Implementing formal consenting processes improves the quality and documentation rate of consent discussions for iron infusion in ambulatory care.

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QI & Sustainability poster group - 2

# 3-month Prospective Audit of Extended VTE Prophylaxis Following Major Abdominal Cancer Surgery

#### **Authors**

Kieren Higginson, Alanah Kapur, Sourab Ramkumar, Thomas Mroczek

North West of England Foundation School

#### Background

Extended VTE prophylaxis following major abdomino-pelvic cancer surgery is important to help prevent post-operative VTE events. The aim of this audit was to determine compliance with VTE prophylaxis guidelines and identify methods to improve clinical practice to ensure consistency and accuracy in prescribing for post-operative colorectal and HPB patients

#### Methods

A prospective audit of patients who underwent elective or emergency colorectal and HPB cancer surgery at Royal Blackburn Hospital between 1st June 2023 and 31st August 2023 was undertaken to assess compliance with NICE VTE guidelines within the department.

#### Results

A total of 90 patients underwent elective surgery and 8 had emergency surgery. 9.2% of patients were incorrectly not given extended VTE prophylaxis following discharge. The majority of discharge paperwork for these patients were completed by foundation doctors. A survey showed only 65% of surgical junior doctors were aware of current extended VTE prophylaxis guidelines by the end of their 4-month surgical rotation.

#### **Key Messages**

A multi-disciplinary approach involving health education for rotational doctors and allied health professionals is important to help mitigate potential preventable postoperative complications such as VTE in patients undergoing major colorectal and HPB cancer surgery. There is a plan to re-audit following implementation of six multidisciplinary interventions.

References

n/a



QI & Sustainability poster group - 2

## Audit to assess appropriate prescription of SGLT-2 inhibitors

Authors

Ahmad Hnieno

Mithun Kumaran

London Foundation School

#### Background

In light of new NICE guidelines published in January 2023 on the contraindications and adverse effects of SGLT2 inhibitors we set out to audit current use of SGLT2 inhibitors to assess when they were prescribed and held/discontinued on admission of medical patients to Ealing Hospital.

#### **Methods**

Over a two week period we collated data on patients with type 2 diabetes mellitus admitted to Ealing Hospital and assessed whether they were already on SGLT2 inhibitors. If patients were not on SGLT2 inhibitors we assessed whether they were indicated based on NICE criteria.

#### Results

There were 88 patients assessed over the two-week period. Six were already on SGLT2 inhibitors. 21 patients had an indication for SGLT2 inhibitor but only six of these patients left hospital with an appropriate prescription of SGLT2 inhibitors. 50% of these six were already on SGLT2 inhibitors, meaning that only three patients were newly prescribed SGLT-2 inhibitors.

#### **Key Messages**

Our findings suggest lack of appropriate review of type 2 diabetes mellitus in patients admitted acutely to Ealing Hospital. Appropriate prescription of SGLT2 inhibitors can reduce the need for insulin injections which are more invasive, with their own side-effect profile including a higher risk of inducing hypoglycaemia.

References

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QI & Sustainability poster group - 2

# Chest drain nursing care: a quality improvement project to improve patient safety

Authors

Dr Saranya Rajendran, Dr Eihab Bedawi (Consultant)

Yorkshire & Humber Foundation School

#### Background

Systematic chest drain observations support early identification of developing complications. Variable compliance was noted on ward rounds. This project aimed to evaluate and improve the standard of chest drain care. Objectives included identifying factors contributing to challenges in chest drain monitoring, diagnosing learning needs, and developing appropriate training materials.

#### Methods

Data was collected through retrospective review of case notes and paper drain charts between August 2022 and May 2023. A spot questionnaire was developed for nurses working in respiratory wards.

#### Results

80% of case notes identifying a chest drain included a procedure report. 28% had no drain charts filed and 22% used varying charts. 76% of completed charts had observations documented as recommended by the British Thoracic Society (1). Questionnaires were anonymously completed by 20 nurses. 40% felt confident managing chest drains, 45% found filling drain charts challenging and 100% felt they would benefit from additional training/guidelines.

#### **Key Messages**

Several areas requiring improvement in chest drain care were noted. Electronic recording could mitigate issues relating to paper charts and this is being addressed as a result of these data. A pilot standard operating procedure has been rolled out to respiratory wards and a nursing care education package has been designed and implemented.

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QI & Sustainability poster group - 2

# Working towards a Net Zero NHS : Evaluation of the Out-Patient Parenteral Antimicrobial Therapy (OPAT) service across the triple bottom line

#### **Authors**

J Mazurek1\*, J Cunningham2, R Johnson2, S Munro3, C Mendes4, A Okubuike4, N Parker5, U Onyendoro5, J Nops5, F Creese5, B Rogers5, C Thomas5

1Foundation Year 2 Doctor, Hampshire Hospitals Foundation Trust (HHFT)

2Clinical Lead for OPAT plus /Infection C

Wessex Foundation School

#### Background

The NHS has recently adopted a multiyear plan to become the world's first 'carbon emission net zero' health system. OPAT service is designed with sustainability principles at heart. Patient-centeredness decreased risk of healthcare related infection and a more cost-effective utilisation of resources and reduction in the length of hospital stay. The aim of this review is to compare the Hampshire Hospitals Foundation Trust OPAT service to standard inpatient care using the triple bottom line theory- by simultaneously considering their environmental, financial, and social impacts.

#### **Methods**

Retrospective anonymised patient data across all 'OPAT plus' care pathways, including elastomeric pump use, district nurse- and self-administration of intravenous drugs alongside daily outpatient visit, and IV-Oral Antibiotic Switch Therapy (IVOST) were analysed. Carbon emissions are calculated using the bottom-up and top-down approaches. Environmental data calculations do not account for waste produced and its disposal method. Financial data was based on HHFT expenditure. All patient and staff information was collected via anonymous surveys.

#### **Results**

Average projected emission savings of 14,383 kg CO2 per year would be achieved with OPAT operating at current capacity. An estimated 980 inpatient bed days are saved every year from OPAT operation. Annual estimated monetary savings from running an OPAT service at HHFT

#### **Key Messages**

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QI & Sustainability poster group - 2

# Initial Management of Puerperal Maternal Readmission For Retained Products of Conception at Royal United Hospital, Bath

Authors

Shittu, K. Shorten, C. Eisa, D. Hogg, J.

Severn Foundation School

#### Background

Puerperal maternal readmission contributes to maternal morbidity. Readmission disrupts maternal physical and psychological health, with additional financial implications on the NHS (1). A leading cause of maternal readmission is retained products of conception (RPOC), which complicates ~2.5% of vaginal deliveries (2, 3).

#### Methods

This work reviews the initial management of puerperal maternal readmission for RPOC at Royal United Hospital (RUH), employing retrospective data collection from patient records between July 2022-June 2023 (N=19).

#### Results

During the studied period, the incidence of admission for RPOC was 0.45% (all delivery types) (3) with a modal length of stay of 2 days. The Ockenden report 2022 (4) states that patients should receive consultant review once admitted. Our study found 17% of patients did not receive documented senior review. Furthermore, antibiotic use varied, with 17% of the cohort receiving no antibiotics, whilst 28% and 55% received intravenous and oral treatments, respectively. Additionally, only 1 patient had appropriate VTE prophylaxis prescribed, conflicting RCOG recommendations (5).

#### **Key Messages**

Our findings stress areas of improvement in the management of maternal readmission for RPOC in the puerperium. In light of MBRRACE report finding VTE as the leading direct cause of maternal death (6), our study places particular importance on improving VTE prophylaxis prescription.

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QI & Sustainability poster group - 2

# The development of a new stroke unit website: Improving access to information about acute strokes and inpatient care in Croydon University Hospital, a South London DGH

#### Authors

Dr Aditi Sinha, Dr Melissa Lisac, Dr Enas Lawrence, Dr Joanne Bramble

London Foundation School

#### Background

Stroke survivors and their relatives report a need for further information provision during the early post-stroke period (1,2). The stroke rehabilitation ward at CUH has its own website. Last updated in 2020, it was noted details were out-of-date and there was limited information on the MDT. Furthermore, the user readability and usefulness of the webpage was unknown. This suggested a need to review the website as a resource for patients and relatives.

#### Methods

Participants were asked to score the resource on usefulness, reliability, ease to read and for free-text comments. The resource was redesigned to include MDT role descriptions, and to address survey feedback.

#### Results

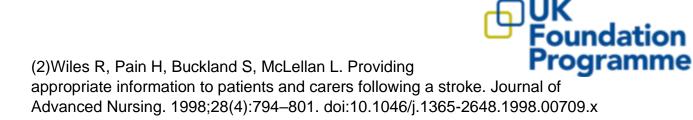
17 responded to the pre-intervention survey. The webpage scored an average of 7/10 for usefulness, 7.7/10 for ease to read and 5.9/10 for readability. 23.5% thought the website was up-to-date, 11.8% were unable to say. 18 responded to the post-intervention survey, in which the webpage scored an average of 9.3/10 for usefulness, 9.4/10 for ease to read and 9.5/10 for readability. 94.4% thought the new webpage was up-to-date, and 5.6% were unable to say.

#### **Key Messages**

There was an improvement across all parameters assessed. Ensuring ward information is up-to-date, and providing education resulted in an increase in usefulness.

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QI & Sustainability poster group - 3

# Managing Pain in General Practice Today: An Analysis of Tramadol Prescribing Data

**Authors** 

Dr Inbar Aberman, Dr Jonathan Burrows

Wales Foundation School

#### Background

Managing pain in General Practice can be difficult at the best of times and in an era of increasing weight times, demand for appointments, widespread social and economical issues, this can prove even more challenging. Tramadol is an opiate-based pain medication proven to work best in brief courses for short term pain (particularly for cancer) - but if used longer term, it is prone to be ineffective and increases side effect risk. As per AWTTC[1], we should endeavour to encourage appropriate use and review of tramadol in primary care to avoid dependence, misuse, diversion and adverse reactions.

#### Methods

We analysed the collective data of tramadol prescriptions in a single GP centre to assess how tramadol is being prescribed and how this compares to the AWTTC recommendations.

#### Results

We have identified that 1/5 have addiction history, 3/4 prescription indications are uncoded, 1/2 are on the maximum dose, 15% are prescribed multiple opiates concurrently, 30% have had a prescription for 3+ years and 18% for 10+ years. 2/3 may be eligible for a reduction.

#### **Key Messages**

We should prescribe tramadol mindfully for our patients, consider reduction/ alternatives where possible, and ultimately utilise a multifactorial approach when treating pain patients.

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QI & Sustainability poster group - 3

# Seamless Transition, Safer Care: Improving Junior Doctor Transition onto Stroke Ward via implementation of an Induction Handbook

Authors

- 1. Raghav Vinay Aggarwal (1st Author)
- 2. Geethu Mary
- 3. Junayna Khan

West Midlands Central Foundation School

#### Background

The simultaneous transition of doctors onto new roles in early August each year ('changeover day') has been shown to lead to a temporary decrease in patient safety. A 2009 retrospective study by Imperial College London found a 6% higher early death rate for patients admitted on the first Wednesday in August (Jen et al., 2009). To address this concern, our project aimed to enhance the induction process by implementing a 'Stroke Induction Handbook' onto an acute stroke ward.

#### **Methods**

A pre-intervention survey was sent to stroke FY1 doctors to understand preparedness for stroke medicine. This included likert-scale questionnaires to measure: week one confidence, efficiency in completing ward jobs, and preparedness for managing acutely unwell stroke patients. Post-intervention surveys measured the impact of the handbook on these domains.

#### Results

During cycle 1, the pre- and post-intervention surveys received a 100% response rate. An >80% improvement was recorded across all three domains (confidence, efficiency, managing unwell patients) after implementation of the handbook. Across all cycles, 100% of doctors felt an induction handbook helps transition into stroke medicine.

#### **Key Messages**

The AoMRC advocates for 'High Quality Clinical Induction at All Units'. This project provides evidence that implementation of a department-specific induction handbook has the potential

References



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QI & Sustainability poster group - 3

# Emergency Drug Wastage in Operating Theatres: A Quality Improvement Project

#### Authors

Dominic Atraszkiewicz, Thomas Tresidder, Niven Akotia

Essex, Bedfordshire & Hertfordshire (EBH) Foundation School

#### Background

Sustainability and financial efficiency are key challenges for a 21st century National Health Service. This Quality Improvement Project (QIP) aimed to reduce both emergency drug wastage and financial expenditure within an anaesthetic department by implementing pre-filled alternatives.

#### **Methods**

Online surveys were sent to registrar and consultant anaesthetists at Broomfield Hospital between February and May 2023. In-person questionnaires assessed realtime drug wastage in anaesthetic rooms between March to April 2023. Twelve months of emergency drug Pharmacy orders were also analysed.

#### Results

The online survey had a 73% response rate and showed that 62.5% of trays contained drawn-up preparations. These often contained Ephedrine, Atropine, and Propofol, and less frequently, Glycopyrronium and Suxamethonium. Questionnaires meanwhile showed 100% of Atropine and Suxamethonium ampoules were wasted. Similarly, 50%, 85.7%, and 38.9% of Glycopyrronium, Propofol, and Ephedrine were wasted respectively. Pre-filled preparations have been ordered bringing an estimated annual saving of at least £38,016. For drugs without pre-filled alternatives available, a change in practice to keep drugs in vials on emergency trays has been encouraged.

#### **Key Messages**

Benefits of pre-filled syringes are: i. Reduced environmental pollution, ii. Significant financial savings, and iii. Readier available preparations for clinical emergencies.

References

n/a



QI & Sustainability poster group - 3

# Exploring factors that influence hospital stay after DKA resolution - results from DEKODE length of stay study

#### Authors

Ankita Gupta, Benedict Brazier, Lakshmi Rengarajan, Punith Kempegowda, Parth Narendran, DEKODE Working Group

West Midlands Central Foundation School

#### Background

DKA is one of the leading causes of morbidity and mortality in people with diabetes and its high burden on healthcare system. Studies have shown mismatch between DKA resolution and length of stay following hospitalisation. (1) This study explores factors that influence hospital stay during DKA.

#### Methods

This study utilised data from 3 hospitals within University Hospitals Birmingham Trust from January 2021 till June 2023. Data on date and time of admission and discharge, DKA diagnosis and resolution, medically suitable for discharge, diabetes doctor review, and diabetes specialist nurse review were collected. Reasons for discharge delays were documented. Results were presented as medians or proportions.

#### Results

527 DKA episodes were included. The median time until patients became medically suitable for discharge post DKA resolution was 2.5 (1.5-6.0) days. Once medically fit, patients were discharged within 8.7 (3.2-10.1) hours. The main reasons patients stayed in hospital were due to discharge letters and medications (32.2%), occupational and physical therapy (16.9%) and transport (11.6%). No reasons for discharge delay could be found in 44% episodes.

#### **Key Messages**

By identifying factors that cause discharge delays during DKA, we can facilitate safer, quicker discharges, improving both the patient experience and reducing the burden on healthcare services.

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QI & Sustainability poster group - 3

# An audit of the initial management of neutropenic sepsis: ED outcomes at an acute DGH

Authors

Dr Leah Heredia, Dr Gabrielle Marshall

West Midlands South Foundation School

#### Background

Neutropenic sepsis (NS) is a life-threatening emergency with mortality rates ranging from 2-21%<sup>1</sup>. It is one of the most common complications of cytotoxic chemotherapy with rising national incidence<sup>2</sup>. As patients can rapidly deteriorate, appropriate initial management of NS is an area of clinical importance evidenced to directly affect recovery prognosis<sup>3</sup>.

#### Methods

This is a modified re-audit following guidance from the Royal College of Radiologists and NICE<sup>14</sup>. We evaluate the following primary outcomes at Hereford County Hospital (HCH)'s Emergency Department (ED):

Initial blood cultures, FBC, U&Es, CRP, lactate (target 100%)

Documentation of initial observations (target 100%)

1 hour 'door-to-needle' time with empiric antibiotics (target 95%)

Review by a senior clinician within 24 hours (target 100%)

Retrospective data was collected from Symphony, Maxims, EPMA, and paper notes on all 51 patients coded as suspected/diagnosed NS between 01/01/2022 and 31/12/2022. 38 patients were included in analysis.

#### Results

Primary outcomes:

58% of patients had full initial bloodwork

100% of patients had complete initial observations

31% of patients met the 1 hour 'door-to-needle' target (presentation to administration)

100% of patients met the 24 hour senior review target

Secondary outcomes:

26% of patients met the NICE diagnostic criteria

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0% of patients were risk-assessed



100% of patients' antibiotics were actioned appropriately where applicable

#### **Key Messages**

Accurate and safe recognition of low-risk patients could help

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QI & Sustainability poster group - 3

# Improving The Quality Of Handovers At A Tertiary Centre Hyperacute Stroke Unit

Authors

Monika Johal

London Foundation School

#### Background

At a tertiary centre hyperacute stroke unit it was noted, other than verbally, there were no established practices to ensure effective handover of scans, blood tests and other investigations to team members. This led to discharge delays and the potential for near-misses. A standardised jobs list can help minimise these risks.

#### **Methods**

A pre-intervention survey sent to team members, n=20, assessed safety of current handover practices. This focused on handover of investigations, scans and blood tests to be requested and reviewed. An intervention in the form of a standardised jobs list (with tick boxes for blood tests and imaging) was rolled out over a month. A post-intervention survey re-assessed safety of current handover practices.

#### Results

Handover of scans improved by 55% post intervention in the 'very safe' category. Requesting and checking of bloods over the weekend was deemed as 'very unsafe' by 42% of participants pre-intervention and 0% post. Across all 7 survey questions, pre-intervention handovers were mostly 'fairly unsafe/very unsafe' whilst post intervention most were 'fairly safe/very safe'. Suggested improvements, for example, a tick-box for discharge medications are currently being assessed in another cycle.

#### **Key Messages**

Simple interventions have the potential to produce impactful changes on patient safety in busy tertiary centres.

References

n/a



QI & Sustainability poster group - 3

# Quality Improvement Project to Develop a Guideline for the Use of Immunoglobulins in Sepsis and Infection in ICU

Authors

Maia Osborne-Grinter, Thomas O'Connor, Matthew Gibbins

Severn Foundation School

#### Background

Sepsis is a leading cause of death in ICU patients and a major cause of ICU admission[1]. Intravenous immunoglobulin (IVIg) may be indicated in the treatment of sepsis, however, IVIg is costly and the evidence for its use remains controversial[2]. The aim of this quality improvement project was to standardise the use of IVIg in ICU.

#### Methods

This quality improvement project used Plan-Do-Study-Act (PDSA) methodology. A multi-disciplinary team (MDT) was created to identify ways to improve compliance with national guidelines for the use of IVIg in the ICU. Current policies and guidelines related to the use of IVIg in ICU patients were reviewed and a guideline was developed with MDT input

#### Results

Prior to the intervention, there was a lack of clarity regarding the indications, dosing, and regimens for the use of immunoglobulin in ICU. A review of NHS England commissioning criteria and GSTT guidelines resulted in 8 infectious indications. Following 4 PDSA cycles, the guideline was successfully implemented.

#### **Key Messages**

The development of a guideline is an effective way to standardise the use of IV immunoglobulins in ICU. A further audit assessing current compliance with the guidelines and best prescribing practices is required.

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QI & Sustainability poster group - 3

## Nicotine Replacement Therapy (NRT): Not Reaching Targets

#### Authors

Dr Catherine Palfreeman-Watt, Dr Phoebe Ratcliffe

West Midlands Central Foundation School

#### Background

Tobacco use is the leading cause of premature, preventable mortality worldwide (1,2). Hospital admissions provide an important opportunity to promote smoking cessation (3). NICE guidance states that all people who smoke admitted into secondary care should be offered stop-smoking support, including prescription of nicotine replacement therapy (NRT), within 24 hours of admission (4). This ongoing quality improvement project aims to assess and increase NRT prescription rates within 24 hours for smokers admitted to Sandwell and West Birmingham NHS Trust.

#### **Methods**

Data were collected across 3 dates between 12/09/23-05/10/23 for patients admitted in the acute medical and surgical units and respiratory wards. Digital records were scrutinised for documentation of smoking status and prescription of NRT. Data were analysed using Microsoft Excel.

#### Results

344 patients were included in data analysis. Smoking status was documented for 95% of patients, with 72 current smokers identified. Of these, daily cigarette consumption was documented in 64% of cases. NRT was prescribed for only 20.8% of smokers, and only 5 smokers (6.9%) received prescription within 24 hours.

#### **Key Messages**

NRT prescription rates are not meeting NICE standards and valuable health promotion opportunities are being missed. An intervention to increase prescription rates is in design; following its implementation, data will be

#### References

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QI & Sustainability poster group - 3

## Evaluating CT Imaging pathways for Anticoagulated Patients with Head Injuries in the Emergency Department: An audit

**Authors** 

**Dilan Parmar** 

Northern Foundation School

#### Background

Local standards established pre-COVID aimed for all anticoagulated patients presenting with isolated, low-impact mechanism head injuries to be identified, discussed with senior doctors, and have CT head imaging requested at triage. The aim of this audit was to assess local performance and implement recommendations to improve patient flow.

#### Methods

Retrospective data was collected for all CT head scans ordered in the emergency department for patients on anticoagulation presenting with head injuries in January 2023. This audit also collected time-related data for each patient including time of arrival, time of review, time CT scans were requested, performed and reported and time of departure. Following data collection, a local flowchart was disseminated to triage staff and clinical leads provided education about the pathway. An audit of performance was repeated for September 2023

#### Results

The percentage of anticoagulated patient presenting with head injury that had CT head scans booked at triage was 29% in January 2023. After education and flowchart distribution, this figure increased to 50% in September 2023. The average time from arrival to CT scan request, performed, report and departure all decreased respectively.

#### **Key Messages**

By identifying eligible patients at triage, imaging is performed earlier resulting in earlier recognition of pathology and improved patient flow.

References



QI & Sustainability poster group - 3

## MIND THE BUMP - A multi-site initiative promoting allyship for pregnant colleagues in orthopaedic theatres

#### Authors

Brown R, Rogers M, Jenkins L, Marino S, Dunkerley S, Gibby M, Graham S, Hristova K, Pentlow A, Vipulendran K, Pearce K, Shmuel E, Pavlova K, Cyclewala S, Roope J, McNish A, Lyons M, Ryan E, English C, Rushton F, Thomas O, Bolchover L.

Severn Foundation School

#### Background

Awareness of considerations to keep pregnant colleagues safe in orthopaedic theatres is crucial for equity and diversity. National guidance exists for radiation, cement exposure, gas induction, scrub, and managing symptoms. Lack of knowledge of guidance can cause anxiety for pregnant staff and friction between colleagues. This multi-centre initiative assessed and improved awareness of pregnancy considerations amongst theatre staff, promoting allyship and a supportive environment.

#### Methods

A questionnaire assessing knowledge of published guidance on pregnancy considerations was completed by theatre staff at eight trusts. Educational posters were displayed in theatres and changing areas. The questionnaire was then repeated.

#### Results

290 pre-poster (49.1%:50.2%:0.7% Male:Female:Non-Binary) and 220 post-poster (37.8%:62.2%:0.0% M:F:NB) questionnaires were completed. Pre-poster, the average percentage of correct questionnaire answers was 22.4%, with a significant 47.3% increase post-poster to 69.8% (95%CI 43.8%-50.8%, p=0.0000). Knowledge increased across all topics (radiation 9.0% to 61.4%, scrub 17.2% to 74.5%, cement 30.3% to 72.3%, gas induction 10.7% to 57.7% and symptom management 45.2% to 82.7%).

#### **Key Messages**

This study revealed a concerningly low baseline knowledge of important pregnancy considerations amongst theatre staff. A simple poster campaign transformed awareness across multiple trusts in all staff groups and could easily be embedded nationwide to promote allyship and support for our pregnant colleagues.

#### References







QI & Sustainability poster group - 4

## Inpatient Falls Assessments: Digital Solutions?

#### Authors

Elizabeth Vacher, Caroline Hedley, Olivia Russell

London Foundation School

#### Background

Inpatient falls in NHS hospitals are the most frequently reported safety incident(1). Falls carry risk of physical injury and fractures, as well as psychological impacts, including loss of confidence

#### **Methods**

Our aim was to improve the assessment and documentation of falls by junior doctors within Homerton University Hospital by education methods and the creation of a falls electronic proforma (e-proforma) for junior doctors to use. We collected baseline data of one month of falls documentation were analysed from September 2022 to see what aspects junior doctors covered in their fall assessments. Data was subsequently collected from falls assessments in February 2023, one month after a teaching session and introduction of a electronic proforma to junior doctors, to assess for any improvements in the documentation and assessment of falls.

#### Results

We found that documentation of some metrics, such as vital signs, had improved somewhat. However, we found limited utilisation of the e-proforma and thought further signposting might be required.

#### **Key Messages**

Creating a long-term strategy for rotating doctors to access e-proformas could help to ensure sustained improvements in falls assessments. Digital solutions can only enhance patient care if we take the necessary steps to identify and limit barriers to access.

#### References

1. Oliver D, Healey F, Haines TP. Preventing falls and fall-related injuries in hospitals. Clin Geriatr Med. 2010 Nov;26(4):645-92. doi: 10.1016/j.cger.2010.06.005. PMID: 20934615.



QI & Sustainability poster group - 4

# Implementation of the New ENT SHO Handbook and Emergency Clinic Referral Guide; a Quality Improvement Project

#### Authors

Aydin Caglayan, Aditya Mavinkurve, Elena Boscanici, Audrey Najuko, David Pennell

Kent, Surrey & Sussex (KSS) Foundation School

#### Background

Ear, Nose and Throat (ENT) surgery is a unique specialty that Foundation Doctors can rotate onto during training. ENT is recognised to be poorly taught at an undergraduate and postgraduate level. Consequently, Foundation Doctors rotating onto ENT often find it challenging to manage patients whilst on-call and covering emergency clinics.

#### Methods

Cross-sectional data was obtained using a survey methodology from two cohorts of newly rotating ENT Foundation Doctors. A new departmental ENT SHO Handbook and Emergency Clinic Referral Guide was created to support Foundation Doctors in managing the diverse set of patients encountered. Pre-intervention and postintervention questionnaires were completed.

#### Results

Overall, the new handbook was noted to facilitate improvements in Foundation Doctors' ENT knowledge and the ability to manage common ENT conditions. Notably, the new Emergency Clinic Referral Guide boosted trainee confidence in triaging calls during the on-call shift and aided decision-making for booking patients appropriate follow-up appointments.

#### **Key Messages**

The transition into a new rotation can be difficult. This process can often lead to Foundation Doctors feeling a lack of confidence and demotivated. We identify that the new departmental ENT SHO Handbook and Emergency Clinic Referral Guide was able to enhance overall trainee confidence and triaging ability during on-calls.

References

N/A



QI & Sustainability poster group - 4

# Increasing the use of exception reporting among junior doctors

Authors

Dr Alice Capper, Dr Isobel Dawbarn

Peninsula Foundation School

#### Background

The 2016 Junior Doctor Contract saw the introduction of exception reporting (ER) to "ensure compensation for all work performed and uphold agreed educational opportunities". [1] Despite the clear benefits, uptake of ER is generally poor throughout the country. [2-4] Reasons cited locally include lack of knowledge, lack of IT access, uncertainty about what to exception report, senior pushback, and time reporting takes.

#### Methods

- Initial survey of doctors' knowledge
- Review of ER data from April-June 2022
- Poster displayed in all doctors' offices and communal spaces
- Subsequent survey after posters on display for 3 months
- Review of ER data from April-June 2023

Surveys distributed via email list and hospital WhatsApp group

#### Results

Significant increase in ERs submitted & improvement in doctors' knowledge and awareness. 82 submitted in April-June 2022 vs 202 in 2023.

53% more likely to ER now that the information was readily available.

20% reported they submitted more ERs since the posters were displayed.

#### **Key Messages**

- Simple intervention which has produced significant positive results
- Positive culture and staff awareness increases ER
- Key tool for targeting staffing interventions
- Easily replicable project

#### References



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QI & Sustainability poster group - 4

# Quality improvement in gauging and subsequently improving doctors' knowledge regarding ligatures and the safe and proper actions to take in such an event.

Authors

Dr. Christopher Eaves

North West of England Foundation School

#### Background

Rudimentary discussion has shown a lack of knowledge and/or confidence in this topic, simple teaching could improve this and thus patient care. Ligature related deaths on a ward should be a never event, showing the importance of this project.

#### **Methods**

A sample size of 41 doctors was used to gauge confidence/knowledge, via a questionnaire. Following this a teaching session was implemented to see if confidence/knowledge was improved. The same questionnaire was then redistributed to gauge improvement.

#### **Results**

Initially only 12% of doctors identified the crash trolley as the correct location of ligature cutters. >88% of doctors were unaware of the location of emergency equipment in a ligature scenario. >50% of doctors noted no confidence in using ligature cutters. Following a teaching session knowledge and confidence was increased. >70% of responders were now aware of the location of suitable ligature cutters and 50% of responders now rated themselves confident in managing a ligature scenario, including aftercare.

#### **Key Messages**

The data shows that simple teaching increases the confidence and/or knowledge in the management of ligature related incidents. This data could be implemented in a wider training programme for medical staff, ensuring a workforce competent in managing ligature incidents, thus improving patient outcomes.

#### References

Nil in abstract.



QI & Sustainability poster group - 4

## Safely Prescribing Fluoroquinolone Antibiotics

Authors

Dr Emily Hare

Dr Caitlin Mcnee Smith

Peninsula Foundation School

#### Background

MHRA guidance advises that prescribers be cautious with the administration of fluoroquinolone antibiotics due to their severe and long-lasting side effects (1). This includes appropriately safety-netting and consenting patients. We conducted a quality improvement project, at University Hospital Plymouth (UHP), aiming to increase rates of consenting patients.

#### Methods

An initial survey was sent to prescribers (n=162) asking them to self-report how often they consented patients. Our intervention was two-fold. A link to the MHRA patient leaflet was added to the electronic prescribing platform for all antibiotics in the class. A program of education was also conducted through posters and teaching, to alert prescribers to the risks associated with the antibiotics and need to consent patients. The effect was measured by analysing all discharge letters with levofloxacin as a TTO from the month before the intervention and the month after. A follow up survey was also sent out.

#### Results

15% of prescribers self-reported consistently consenting patients; this figure rose to 25% after the intervention. Quantitative analysis showed worse figures of documented consent; 3% of discharge letters (n=72) documented consent prior to the intervention, rising to 15% (n=35) afterwards.

#### **Key Messages**

Prescribers need education about the risks associated with fluoroquinolones and the need to consent patients.

#### References

1. Medicines and Healthcare Products Regulatory Agency (MHRA). Drug Safety Update. Volume 17: Issue 1: August 2023. [Internet]. 2023 [Cited: 13th October 2023]. Available from:

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QI & Sustainability poster group - 4

### Investigation of Young Stroke: A Quality Improvement Project

#### Authors

Davina Jugnarain, Matthew Birss, Nicholas Winterkorn

London Foundation School

#### Background

Ischaemic strokes in patients aged under 55 (young stroke) are uncommon and necessitate exploration of underlying factors to prevent recurrent events (1). Our quality improvement project focused on improving the completeness and appropriateness of investigations requested for young stroke patients at North Middlesex University Hospital.

#### Methods

In collaboration with biomedical scientists, stroke medicine and neurology consultants, a cost-effective investigations bundle for young stroke was developed. A preliminary audit was conducted between February and March 2023. The bundle was implemented in July, and a follow-up audit occurred between August and September 2023. Data was analysed using an independent t-test, and feedback from requesting doctors was qualitatively analysed.

#### Results

The initial audit identified six young stroke patients, with only 48.8% of recommended investigations requested. Inappropriate tests requested included costly thrombophilia screening. The reaudit included three patients, and completeness improved by 15.6% (p = 0.513), with one instance of bundle utilisation. Feedback enabled efficient, cost-effective, and consistent work-up.

#### **Key Messages**

Young stroke work-up should include tests for infectious, endocrine, and hypercoagulable causes. Implementation of a young stroke bundle at our institution demonstrated a non-significant initial improvement in completeness, with the expectation of further enhancement as bundle utilisation becomes more widespread.

#### References

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QI & Sustainability poster group - 4

# Audit of the timing of laparoscopic cholecystectomy for gallstone pancreatitis at a DGH

Authors

Sebastian Powell, Paul Froggatt

Wessex Foundation School

#### Background

AUGIS2016 guidelines state that patients with mild gallstone pancreatitis should undergo a cholecystectomy within the same admission or if discharged within two weeks of presentation. This reduces readmission and leads to shorter hospital stays (1). In 2020, compliance at Poole hospital was 57%. This audit aimed to identity current compliance and opportunities for improvement.

#### **Methods**

Retrospective study of patients admitted at Poole hospital from 01/12/2022 to 31/05/2023. The findings were presented and discussed at a staff meeting. Re-audit will be completed in January 2024.

#### Results

29 patients with gallstone pancreatitis were admitted. 22 fit for surgery, 2 patients passed away and 5 were unfit for surgery. 9 had cholecystectomy within 2 weeks giving a guideline compliance of 41%. 3 patients who did not have a cholecystectomy within 2 weeks were readmitted with pancreatitis. Median hospital stay overall was 3 days and the median wait for cholecystectomy was 5.5 days. The main barrier to compliance identified was a lack of regular theatre slots for cholecystectomy leading to regular cancellation on CEPOD.

#### **Key Messages**

Compliance with AUGIS guidelines has fallen since 2020. For meaningful improvement, service configuration is needed with dedicated theatre slots, this should be considered for the planned Poole and Bournemouth hospital merger.

#### References

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QI & Sustainability poster group - 4

# Physical health monitoring of adults on ADHD medications in the community.

Authors

Dr. Sneha Anil Punchayil

Northern Foundation School

#### Background

The increasing number of adult ADHD diagnoses in the UK is treated with stimulants, which may elevate heart rate and blood pressure due to sympathomimetic effects, increasing cardiovascular risk, alongside common side-effects like weight loss and decreased appetite. NICE recommends monitoring weight, heart rate, and blood pressure biannually.

#### **Methods**

A retrospective study of 30 ADHD patients attending a Hartlepool psychiatric clinic from February to August 2023 extracted data from healthcare records, specifically focusing on weight, heart rate, blood pressure, and appointment intervals, which was analysed with Excel.

#### Results

Results showed that 47% adhered to NICE guidelines, with 33% having heart rate, 32% blood pressure, and 36% weight monitored biannually. Importantly, 19% missed appointments, causing monitoring delays.

**Recommendations:** 

Dedicated Clinic: Establish a specialised adult ADHD patient monitoring clinic with increased staff involvement.

Document DNAs: Ensure staff document missed appointments in health records.

Comprehensive Monitoring: Make it mandatory to monitor heart rate, blood pressure, and weight for patients at each appointment.

#### **Key Messages**

Adult ADHD diagnoses are rising in the UK, often treated with potentially risky medications.

NICE advises biannual monitoring, but above project reveals non-adherence and missed appointments.

Recommendations include a dedicated clinic, documenting missed appointments, and comprehensive monitoring for safety.

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QI & Sustainability poster group - 4

## Diabetic burn management and routine blood glucose testing in the emergency department: a Quality Improvement Study

Authors

Pavandeep Kaur Virdee

West Midlands Central Foundation School

#### Background

Diabetics represent a significant proportion of patients in burn centres and are more likely to develop burns complications including infection [1]. This QIP aimed to ensure all patients presenting with a burn in the Emergency Department (ED) receive routine blood glucose testing and to improve diabetic burns management.

#### **Methods**

Two cycles were completed over 12 months. Burns patients at Sandwell General Hospital ED were identified. Initial data was collected on BM testing, diabetes diagnosis and burn management. Following MDT staff education and implementation of a 'burns management flowchart', data was re-collected.

#### Results

Following interventions, all burns patients received blood glucose testing in ED and diabetes was newly diagnosed in two cases. Poor glycaemic control in 72% of diabetic burns patients resulted in either acute or community management. Burn infection rates remained significantly higher in diabetics, but the proportion of infected burn cases discussed with a specialist burns unit increased, in addition to a reduced re-presentation rate, which may suggest improved management of burns infection.

#### **Key Messages**

Routine blood glucose testing of burns patients in ED may allow prompt recognition of undiagnosed or uncontrolled diabetes. This can ensure proper management of blood glucose levels, which in turn, may improve burn healing and management.

#### References

Maghsoudi H, Aghamohammadzadeh N, Khalili N. Burns in diabetic patients. Int J Diabetes Dev Ctries. 2008 Jan;28(1):19-25. doi: 10.4103/0973-3930.41982. PMID: 19902035; PMCID: PMC2772003.



QI & Sustainability poster group - 5

# Development of a web-based smoking cessation tool to facilitate accurate nicotine replacement therapy (NRT) prescription and onward referral to community stop smoking services.

#### Authors

Max Lipscomb, Matt Laughton, Joshua Datta, Aimée Somes, Esther Akpan and Amelia Clive.

Severn Foundation School

#### Background

The NHS long-term plan commits to offering all inpatient smokers access to tobacco treatment services (1). Previous trust audit demonstrated low rates of nicotine replacement therapy (NRT) and follow-up with community stop smoking services (CSSS). Poor recall of NRT guidelines and referral criteria for local CSSS were identified as barriers.

#### Methods

We developed a web-based, interactive smoking cessation tool which supports clinicians to prescribe the most appropriate dual NRT and guides them to the correct CSSS referral website based on a patient's postcode.

We promoted the tool using educational posters and teaching sessions across specialties.

Impact was measured through questionnaires assessing clinician confidence, reauditing NRT prescription rates and evaluating CSSS referral numbers.

#### Results

Following our interventions, we audited 121 patient notes across 4 departments. Smoking status was documented in 75%. NRT prescription rates increased from 25% in the 2021 BTS audit to 48% in 2023, surpassing the 2021 national average of 32.5%. CSSS referral data showed a 44% increase.

#### **Key Messages**

Our tool led to meaningful increases in prescription rates, CSSS referrals and prescriber confidence. It has shown technology can simplify and expedite decision making, improving clinical practice and we aim to integrate it into clinical systems nationally to maximise

References



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QI & Sustainability poster group - 5

# Intravenous to Oral Paracetamol - A Sustainability Quality Improvement Project

Authors

J.Goves, S. Reap, H. Willecombe, V. Chang, A. Dasari

North West of England Foundation School

#### Background

Paracetamol is an essential analgesic in the Emergency Department (ED). Evidence suggests oral paracetamol is as effective as intravenous (IV)1-5. IV paracetamol is more expensive and has a greater environmental impact due to increased clinical waste. This abstract outlines an in-progress sustainability quality improvement project encouraging ED staff to prescribe and administer paracetamol orally where clinically possible to reduce cost and clinical waste.

#### Methods

Dispensed quantities and costs were requested from the Royal Blackburn Hospital pharmacy and will be requested again after implementation to assess impact. Waste per dose was calculated using empty bottles, giving sets, flushes and packaging alongside the empty packaging of 32 tablet boxes. Educational materials are to be implemented within the ED to change prescribing and administration practices.

#### Results

Between 14/10/21 and 14/10/22, 10,744 doses of IV paracetamol were dispensed at a cost of  $\pounds$ 5479 and 1,755kg clinical waste ( $\pounds$ 0.50 and 163g/1g dose). 11,400 doses of oral paracetamol were dispensed at a cost of  $\pounds$ 168.72 and 8.55kg household waste ( $\pounds$ 0.015 and 0.75g/1g dose).

#### **Key Messages**

Evidence of equal efficacy between preparations presents an opportunity to reduce the environmental impact and costs associated with paracetamol prescribing in the ED.

#### References

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oral, and rectal paracetamol in equivalent doses. Cureus. 2023 Jul 14; doi:10.7759/cureus.41876



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QI & Sustainability poster group - 5

## "No Weight, Please Wait" – Improving perioperative management of anticoagulation in post-amputation patients

#### Authors

Dr Sisyena Anusha Gunaravi (FY2, Princess of Wales Hospital),

Mr Bappy Basak (CT2, Morriston Hospital),

Dr Par Jamfa (FY1, Morriston Hospital),

Miss Amy Stimpson (Consultant Vascular Surgeon, Morriston Hospital)

Wales Foundation School

#### Background

Patients lose significant weight after limb amputations (1). Medications with weightbased dosing, e.g. anticoagulants (2), should be reviewed. Inappropriately high doses can lead to complications e.g. bleeding, renal impairment. This audit aims to identify and improve current practice.

#### **Methods**

This is an ongoing prospective observational study of post-amputation patients in a regional vascular unit for South and West Wales. Data was collected via questionnaires which used patient notes and drug charts to assess if patients were weighed, on any weight-based medications, medication reviews happened, any ensuing complications and confounding comorbidities. Following a pre-intervention cycle (June-August 2023), weighing scales were introduced to emergency theatres and awareness raised via posters and multidisciplinary team education. A post-intervention cycle (September-October 2023) assessed for change. Ongoing measures include increasing access to weighing machines.

#### **Results**

100% of our patients (n=20) were not weighed postoperatively. All were on weightbased medications, i.e. anticoagulants, paracetamol and antibiotics, which were not reduced. 31.6% had postoperative bleeding. Post-intervention data showed improvement, with 41.2% weighed postoperatively, 23.5% having medications reduced and no bleeding. Another cycle will follow.

#### **Key Messages**

An accurate post-amputation weight improves patient outcomes, i.e. medication safety and fewer complications. Next steps include encouraging sustainability, evaluating other medication effects, and other areas of care

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QI & Sustainability poster group - 5

# Expediting Inpatient Management: Completing Urgent Jobs After Board-round

#### Authors

Dr James Harkness, Dr Sai Duraisingham, Dr Charles Daniels

London Foundation School

#### Background

This QIP explored whether junior doctors' time could be used more efficiently on a Medicine for Older People ward in a North-west London DGH to expedite inpatient investigations and facilitate earlier discharges. It tested the impact of conducting certain tasks earlier in the day during a pre-allocated time after morning board-round. Arranging scans, taking blood tests and writing TTAs were identified as potential jobs to do during this "Post Board-round Urgent Job Time".

#### **Methods**

This was compared to standard practice whereby those jobs were completed after a standard ward-round. We measured times of discharges and the proportion of results available to be acted upon before 5pm.

#### Results

Using the "Post Board-round Urgent Job Time" meant scans were seven times more likely to be done on the same day and patients were discharged on average 2 hours earlier, with no evening discharges. There was no advantage in taking blood tests during this time over the routine phlebotomy service. Further QIP opportunities were identified including the need to reduce blood test result delays and improve MDT communication around discharges.

#### **Key Messages**

We have shown a consistent "Post Board-round Urgent Job Time" expedites inpatient investigations via earlier completion of scans and facilitates discharges earlier in the day.

#### References



QI & Sustainability poster group - 5

# Use of Oakland Criteria for Discharge After PR Bleeding in General Surgery

Authors

Dr Kwaku Poku and Mr Fady Youssef

Trent Foundation School

#### Background

Lower gastrointestinal bleeding accounts for a significant number of emergency surgical referrals. This is supported by a study by Oakland 2019 reporting increases in bleeding-related mortality from 3.4% to 18%. Consequently, it is a clinical priority to differentiate between patients who can be safely discharged and those requiring urgent investigation or intervention following per rectum bleeding. The 'Oakland Criteria' was developed as a tool to aid this process.

#### **Methods**

A retrospective cohort study of sixty patients presenting with rectal bleeding to the emergency surgical department at Nottingham University Hospital Trust (NUH) was conducted. Data including the cause of admission, duration of hospital stay, appropriate discharge guided by Oakland criteria and rate of rebleeding was analysed over a five-month period.

#### Results

The study identified that the Oakland criteria was used to aid safe discharge from hospitals in just 10% of cases. In the cohort 16.67% of patients represented with per rectum bleeding. Finally, a third of patients were discharged using the criteria represented with rectal bleeding.

#### **Key Messages**

As a result of this study, the surgical team at NUH plans to educate staff on the use of the Oakland criteria and complete a second cycle of this quality improvement project from December 2023.

#### References

1. Oakland K, Chadwick G, East JE, Guy R, Humphries A, Jairath V, et al. Diagnosis and management of acute lower gastrointestinal bleeding: Guidelines from the British Society of Gastroenterology. Gut. 2019;68(5):776–89. doi:10.1136/gutjnl-2018-317807



QI & Sustainability poster group - 5

## Statin and Anti-platelets in Peripheral Vascular Disease

#### Authors

Muhammad Shariq Rahemtoola, Taher Faydi, Ahmed Elmetwally

North West of England Foundation School

#### Background

To determine whether patients with peripheral artery disease who had a bypass which included; claudication, rest pain and tissue loss; have been prescribed antiplatelet and statins as per the NICE and ESC guidleines

#### **Methods**

Retrospective Data collection

Data was collected using ICE and clinical portal for patients admitted from March 2019 until May 2020 for revascularization procedure

Total of 130 patients included in the study

Descriptive Analysis (frequency) was used for analyzing the data

#### Results

1 out of 130 patients were not on any anti-platelet therapy

99% of patients were on DAPT or SAPT respectively

28 out of 130 patients were not on a statin therapy and 2 did not tolerate it

77% of patients were on a lipid modifying therapy

#### **Key Messages**

99% of patients were appropriately on an anti-platelet therapy

Only 77% of patients were on a statin therapy

#### References

European Society of Cardiology (ESC) guidelines on treatment of Peripheral Artery Disease

NICE Guideline - Peripheral arterial disease: diagnosis and management



QI & Sustainability poster group - 5

# Cervical Screening Amongst Healthcare Professionals at University Hospitals Bristol and Weston (UHBW): How Can We Improve Accessibility and Uptake?

**Authors** 

Dr Isabelle Wood and Dr Eva Larkai

Severn Foundation School

#### Background

Cervical screening: a vital health need in the government's vison for women's health strategy. Yet, we are failing our national uptake target of 80% with England's 2020-2021 uptake, 69.9% (1,2). After struggling to attend screening around work as junior doctors, the project was initiated to help identify and address barriers colleagues experience when accessing screening.

#### **Methods**

We conducted a survey of Colleagues at UHBW. 56 participants responded. 50 were eligible for screening and were analysed; informing a proposal to the trust.

#### Results

Only 4% of respondents did not want to attend screening yet an overwhelming 44% were not up to date, higher than recent national figures.

66% found it difficult to book/attend due to work specifically: the most common barrier identified by respondents.

Only 36% said they felt confident approaching work for time off for screening yet 86% would attend in work hours if permissible, alleviating difficulties finding appointments around shifts.

#### **Key Messages**

Our results highlighted a significant uptake and accessibility challenge for colleagues. Therefore, we initiated a trust wide cervical screening campaign and are now running a bi-annual onsite staff cervical screening clinic in 2024 to alleviate difficulties booking/attending appointments off-site and will get user feedback post roll out.

#### References

1) Our Vision for the Women's Health Strategy for England [Internet]. https://www.gov.uk/government/publications/. Department of Health and Social Care; 2021 Dec. Available from: https://www.gov.uk/government/publications/our-vision-



for-the-womens-health-strategy-for-england/our-vision-for-thewomens-health-strategy-for-england

2) Cervical Screening Programme, England - 2021-2022 [Internet]. NHS choices. NHS; 2022 [cited 2023Mar15]. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/cervical-screening-annual/england-2021-2022



QI & Sustainability poster group - 5

### Ruling out fractures using the Ottawa Knee rule

Authors

Thomas Harris

Northern Foundation School

#### Background

The aim of this audit was to assess the percentage of knee x-ray requests which fulfilled the Ottawa knee rule. The results were analysed to help identify the number of unnecessary (and potentially harmful) knee x-rays that were being done. An educational resource was produced to help improve the proportion of x-ray requests meeting the Ottawa knee rule.

#### **Methods**

100 consecutive knee x-ray requests were analysed retrospectively. Following this, an educational poster was distributed across South Tees Hospital NHS Foundation Trust. A further 100 knee x-ray requests were then analysed to see whether any improvements had been made.

#### Results

The first audit cycle showed that only 59% of x-ray requests fulfilled the Ottawa knee rules. The second cycle showed this number increase to 70%.

One limitation of this audit is not knowing how long term the posters effects will be.

Furthermore, the poster did not result in 100% effectiveness. This suggests further intervention and auditing is required.

#### **Key Messages**

The results indicate that simple educational resources such as posters can be useful at improving compliance with fracture screening tools and reduce the number of unnecessary x-rays. Effective medical education doesn't need to be complex or even require to be a formal teaching session.

#### References

National Institute for Health and Care Excellence (NICE) guideline Fractures (noncomplex): assessment and management [NICE, 2016]. Excluding fracture (Ottawa knee rule). Available from: https://cks.nice.org.uk/topics/knee-painassessment/diagnosis/excluding-fracture-ottawa-knee-rule/



QI & Sustainability poster group - 5

## Gentamicin labels: Improving the timing of gentamicin levels and reducing delay in dose administrations

#### Authors

Muhammad Zakwan Zakariya, Esperanza Palenzuela, Rebekah Sutherland, Khalida Ann Lockman

NHS Lothian, Scotland

Scotland Foundation School

#### Background

Despite readily accessible guidelines, gentamicin use continues to be associated with errors, with recent Datix reports recording incidents, e.g., incorrectly prescribed frequencies and delayed doses.

Consequently, an audit was undertaken to evaluate current gentamicin practice within AMU at RIE to unearth areas for improvement.

#### Methods

The baseline audit studied 31 patients prescribed gentamicin in AMU within a threeweek period, examining these parameters: dose, dosing interval, time of level sampling, and dose administration times. After identifying issues with delayed levels and subsequent dose administrations, we introduced the use of patient gentamicin labels in hopes of increasing staff awareness, thereby promoting timely level sampling and doses. The aforementioned parameters were then re-audited for a further three weeks.

#### Results

Initially, only 74% patients had levels taken within the recommended window and received their second gentamicin doses at the right interval. The re-audit observed a slight improvement following our intervention, with 78% patients whose levels were taken on time, and 75% patients receiving timely subsequent doses. Noteworthily, the majority of those who had delayed second doses, both pre- and post-intervention, received their first doses in A&E.

#### **Key Messages**

In addition to improving awareness, further interventions should target on improving the handover of time-critical medicines between A&E and AMU.

#### References

1. Semple Y, Bennie M, Sneddon J, Cockburn A, Seaton RA, Thomson AH. Development and evaluation of a national gentamicin and vancomycin quality



improvement programme. Journal of Antimicrobial Chemotherapy. 2020 Apr 11;75(7):1998–2003.

2. Gentamicin (NHS GG&C) [Internet]. Scottish Antimicrobial Prescribing Group. [cited 2023 Apr 14]. Available from: https://www.sapg.scot/guidance-qitools/antimicrobial-specific-guidance/gentamicin-nhs-ggc/



QI & Sustainability poster group - 5

### **Comparing Endotracheal Cuff Pressures**

#### Authors

Layla Zeitouni, Jordan Lau, Jillian Scott, Jake Liu, Dima Nassif, Mohamad Homsi Jebrini, Rami Rifai

Scotland Foundation School

#### Background

The recommended pressure of endotracheal tubes is 20-30cm H2O. The gold standard is establishing pressure with a manometer but due to cost, anaesthetists often have to rely on subjective measures.

Cuff underinflation increases risk of inadequate ventilation, aspiration and unplanned extubation. Cuff overinflation can lead to mild complications (sore throat, hoarse voice) to severe (tracheal stenosis, post intubation stridor) (1). Pressures over 50cm H2O can lead to tracheal ischaemia. Overinflation is a risk factor for post-intubation rupture (2). Sulovari et al describe a case of endotracheal cuff overinflation resulting in a hypoxic cardiac arrest (3).

#### Methods

NHS Greater Glasgow and Clyde's introduction of intersurgical tubes sparked concerns over the accuracy of cuff pressures which prompted our QI. We collected data where anaesthetics measured the cuff pressure using a manometer to objectively see whether the cuffs were unintentionally overinflated. The data was collected over a month with a total of 104 patients.

#### Results

From our data, only 38% of patients sat within the Good Category, 12% were underinflated, and 51% of the population are over-inflated, with 23% being within the Danger Zone.

#### **Key Messages**

We recommend objective measures of cuff pressures such as manometers to be available in every theatre.

#### References

(1) Tennyson, J. et al. (2016) Endotracheal tube cuff pressures in patients intubated prior to Helicopter EMS Transport, The western journal of emergency medicine. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5102598/ (Accessed: 29 October 2023).

(2) Miñambres, E. (no date) Tracheal rupture after endotracheal intubation: a literature systematic review, Academic.oup.com. Available at:

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https://academic.oup.com/ejcts/article/35/6/1056/474300?login=false (Accessed: 29 October 2023).

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QI & Sustainability poster group - 6

## Surveillance following infrainguinal bypass grafts at South Mersey Arterial Centre

Authors

Matt Copp, Shady Zaki, Mr Ramasubramanyan Chandrasekar

North West of England Foundation School

#### Background

Infrainguinal Bypasses (IBs) are performed to treat Critical Limb Threatening Ischaemia (CLTI). These grafts can develop asymptomatic stenosis, potentially leading to graft occlusion. South Mersey Arterial (SMArt) Centre has a surveillance programme to detect and treat graft stenosis.

#### Methods

The aim of this audit was to review outcomes of the IB surveillance programme in the SMArt centre. Current practice at SMArt aims for surveillance by Duplex Ultrasound Scan (DUS) to occur around six weeks, three months, six months, nine months, and twelve months following IB.

The National Vascular Registry was accessed to identify patients who had IB for CLTI between 1st January 2021 and 31st December 2021. Hospital computer systems were accessed, and data analysis was performed.

#### Results

Fifty-one grafts underwent surveillance. IBs had 2.8 (SD=1.62) DUS within fifteen months. Sixteen grafts stenosed, occurring 188.6 days (SD=78.13) following surgery. Eleven underwent angioplasty, occurring 23 days (IQR=27) later. Four underwent jump bypass procedures and one had no intervention. Two stenosed grafts later occluded. Delayed stenosis identification due to missed surveillance did not increase the risk of graft occlusion.

#### **Key Messages**

Routine graft surveillance is vital to timely detection of stenoses which, if untreated, could threaten graft patency.

References

Nil



QI & Sustainability poster group - 6

# Closed loop audit of arthroplasty operation notes at Woodend General Hospital: Improved compliance with BOA guidance through electronic adaptable templates

#### Authors

Thanapon Ekkunagul, David Skipsey, Matthew Page, Gareth Medlock

Scotland Foundation School

#### Background

Operation notes are often indefensible medicolegally due to insufficient detail (1). This closed-loop audit aims to address this issue through improving our elective total hip arthroplasty (THA) and total knee arthroplasty (TKA) operation note compliance with the 2019 British Orthopaedic Association (BOA) best practice guidance for THA and TKA surgical documentation.

#### Methods

Retrospective reviews of elective THA and TKA operation notes from October to November 2019 were performed to assess baseline compliance with all facets of the 24 documentation standards in the respective BOA guidance. Electronic adaptable operation note templates were developed according to the standards and implemented for routine use. Compliance was reassessed through retrospective reviews of operation notes from October to November 2022.

#### **Results**

Post-intervention, mean operation note compliance with BOA guidance facets increased from 67% to 76% for THA, and 55% to 77% for TKA. 33% of THA and 74% of TKA operation notes utilised the electronic templates, with higher mean guidance compliance observed than non-template notes (88.0% vs 69.5% and 83.6% vs 57.9% respectively).

#### **Key Messages**

Electronic adaptable operation note templates improved overall arthroplasty documentation compliance with best practice guidance. However, template uptake and guidance component documentation rates varied, and surgeons need to be aware of potential limitations with templates.

#### References

1. Lefter LP, Walker SR, Dewhurst F, Turner RWL. AN AUDIT OF OPERATIVE NOTES: FACTS AND WAYS TO IMPROVE. ANZ J Surg. 2008 Sep;78(9):800–2.



QI & Sustainability poster group - 6

# Intravenous maintenance fluid prescribing in nil-by-mouth patients in General Surgery: A closed-loop audit

Authors

Dr Roseanne Ismail

Northern Foundation School

#### Background

Inappropriate intravenous fluid prescribing in peri-operative nil-by-mouth patients increases the risk of electrolyte, metabolic imbalances and starvation ketosis.(1) NICE guidelines offer recommendations for intravenous maintenance fluid prescribing in nil by mouth' patients.(2)

#### Methods

We retrospectively audited our practice over two randomized 14-day periods pre and post-intervention to check compliance with guidelines. Inclusion criteria included non-diabetic patients, no pre-existing electrolyte imbalances and nil-by-mouth for ≥24hrs. Interventions: We delivered teaching sessions to FY1/2 on General surgery highlighting NICE guidelines on correct IV fluids prescribing. Posters summarizing this were displayed around the surgical wards.

#### Results

Cycle 1 showed significant lack in the prescribing of potassium and glucose in our department.

#### Cycle 2:

82% of patients met their daily water requirements, while 94% and 96% met their sodium and chloride requirements, respectively. This translates to 40%, 10% and 11% increase in adherence to recommended water, sodium and chloride intake, respectively.

Although a small percentage of patients met their glucose (24%) and potassium (16%) requirements, the department witnessed a 55% and 54% increase in prescribing of glucose-containing and supplemental potassium-containing bags, respectively.

#### **Key Messages**

We identified an area of miseducation in our department and created a positive impact in the correct prescribing of maintenance fluids in nil-by-mouth patients.

#### References

(1) https://www.ncbi.nlm.nih.gov/books/NBK532305/

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(2) NICE - Algorithms for IV fluid therapy in adults https://www.nice.org.uk/guidance/cg174/resources/intravenous-fluid-therapy-inadults-in-hospital-algorithm-poster-set-191627821

Oxford Medical Education - How to prescribe IV fluids https://oxfordmedicaleducation.com/prescribing/ivfluids/#:~:text=The%20traditional%20regime%20%3D%20%E2%80%9C1%20salty,p otassium%20chloride%20(over%208%20hours)

Oxford Medical Education - Prescribing fluids https://oxfordmedicaleducation.com/prescribing/iv-fluids-types/

https://www.northdevonhealth.nhs.uk/wp-content/uploads/2019/08/Individualised-adult-IV-fluid-prescribing-guidelines.pdf



QI & Sustainability poster group - 6

# Clinical audit of VTE Assessment and Re-assessment in General Surgery

#### Authors

Mr Sachin Patel, Dr Preethi Jacob, Dr Aisel Abbasova, Miss Reem Moussa, Mr Ugochukwu Ihedioha

Leicester, Northamptonshire & Rutland (LNR) Foundation School

#### Background

Venous thromboembolism (VTE) is a frequent disease affecting more than 1 in 12 individuals during their lifetime. VTE is associated with long-term complications such as recurrence, post-thrombotic and post-pulmonary embolism syndrome.

Aim: To identify compliance to mandatory VTE assessment on admission for General surgery (GS) patients.

#### Methods

Reviewed VTE assessment charts for patients under GS from 21/8 to 25/08 for 24hrs (N=40 patients included in audit). This was done to identify if an assessment was completed within 14 hours of admission and reassessment after 24 hours.

#### Results

Admission Assessment Results

- N=24/40 did not have a tick in either 'no contraindication' or 'contraindication' boxes
- N=11/24 did not have any tick in 'risk factors' or bleeding risk' boxes
- N=20/40 had no documentation of date, time, name or signature

24hr Later Assessment Results

- N=6/40 patient had re-assessment
- 100% of patients who had reassessment had either 'continue' or 'change' ticked

#### **Key Messages**

Despite VTE prophylaxis being administered for patients, documentation of risk factors and contraindications for VTE prophylaxis administration were poor.

Worst performing areas were VTE re-assessment 24hrs after admission and indicating if there is 'no contraindication' or 'contraindication' to VTE-prophylaxis on admission.

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#NFDPD

Will require re-audit in future to check compliance to VTE assessment.



References

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QI & Sustainability poster group - 6

## A full cycle audit to assess the compliance with postoperative extended pharmacological VTE prophylaxis for major abdominal surgery in South Tees Trust

Authors

TSE HIENG KONG

YU LING TAN

Northern Foundation School

#### Background

NICE guideline 1.14.4 states that pharmacological thromboprophylaxis should extend to 28 days for patients who underwent major abdominal surgery.1 This audit aims to analyse the compliance with extended pharmacological thromboprophylaxis for colorectal surgery patients.

#### **Methods**

Data were collected retrospectively from the e-discharge system to verify the number of patients receiving extended pharmacological thromboprophylaxis on discharge. We included cancer and non-cancer abdominal surgery from August to November 2022 for the 1st cycle (n= 104) and March 2023 for the 2nd cycle (n=24).

#### Results

The compliance rate was 77% for the 1st cycle. 80 patients were prescribed 28 days of Tinzaparin upon discharge, 3 were prescribed a shorter course, and 21 did not receive any pharmacological thromboprophylaxis. For the 2nd cycle, there was a significant improvement with 100% of patients given 28 days of tinzaparin post operatively. The increase in compliance was due to the distribution of educational posters, departmental teaching, and remind doctors the types of surgery requiring extended pharmacological thromboprophylaxis.

#### **Key Messages**

Thromboprophylaxis compliance is essential for patient outcomes and reduce VTE incidence. Education for the surgical team has proved to be beneficial in improving compliance. We aim to continue educating doctors about the importance of extended VTE prophylaxis to ensure ongoing compliance.

#### References

1. NICE guidelines (NG 89): Venous thromboembolism in over 16s: reducing the risk of hospital-acquired deep vein thrombosis or pulmonary embolism. Available from:



https://www.nice.org.uk/guidance/ng89/chapter/Recommendations#interventions-for-people-having-abdominal-thoracic-or-head-and-neck-surgery



QI & Sustainability poster group - 6

## Outpatient follow up following elective operation

#### Authors

Dr Zhen Xin Wong, under supervision of Mr Nisheeth Kansal

Northern Foundation School

#### Background

In April 2022, NHS England has published guidance on recovering electives services to tackle COVID 19 backlog of care which main aim is to eliminate waits of over 12 months by March 2025. (1)This can be achieved by making outpatient care more personalized in which 'patient initiated follow up' following elective operation is encouraged with aim to achieve 25% reduction in routine review. (1)

Cycle 1 has collected outpatient follow up percentage following elective operation in 2022 and whether reasons are documented. Result is discussed in surgical safecare meeting to raise awareness regrading 'patient initiated follow up' to reduce routine follow up.

#### Methods

Data from January to August 2023 collected through documentation in operation notes and clinic letters whether patient is followed up and any documented reason for this.

#### Results

There is a significant decrease in outpatient follow up and minor decrease of nondocumented reason for follow up. The next step would be to establish structured system of patient initiated follow up and set no routine follow up as the default system.

#### **Key Messages**

Safecare meeting and teaching has reduced the unnecessary routine follow up and encourage surgeon to document clear indication for follow up. This can maximise clinic usage.

#### References

1. NHS England. [Internet]. Elective recovery planning. April 2022. [Cited 2023 October 16] Available from: https://www.england.nhs.uk/publication/planning-guidance-elective-recovery-planning-supporting-guidance/



QI & Sustainability poster group - 6

## Reducing Unnecessary Blood Test Requests in Medical Inpatients: A Quality Improvement Project

#### Authors

Dr Scott McIldowie, Dr Sidhant Seth, Dr Hasnain Jafferbhoy, Dr Heather Holmes and Prof Morwenna Wood

Scotland Foundation School

#### Background

This QI project aims to improve requesting of routine blood tests in medical inpatients based upon the UK RCPath's guidelines on minimum retesting intervals [1].

#### Methods

For Cycle 1, we collected data on a random sample of 95 blood tests (including U&Es, LFTs, FBC, CRP and Coagulation Screen) requested across four medical wards at Victoria Hospital Kirkcaldy. This was compared to RCPath guidelines [1] to evaluate if a particular blood test was indicated or not. An educational poster summarising the minimum re-testing guideline was designed and provided to medical doctors. For Cycle 2, we compared blood test requests before and after circulation of the poster, focussing on LFTs. Pre- and post-intervention performance was compared using a Chi-squared test.

#### Results

At baseline, 89% (85/95) of blood tests were indicated, and performance was worst for LFTs (44% indicated; 4/9). Before circulation of the poster, only 38% (51/134) of LFTs were indicated, rising to 58% (50/87) in the week after circulation. This was a statistically significant difference (p = 0.005; Chi squared test).

#### **Key Messages**

Non-indicated blood tests have implications for costs, resource management and has potential harms to patients [2].

Educational interventions are one possible method of reducing non-indicated blood tests [3].

References

 Lang T, Croal B. National minimum retesting intervals in pathology. G147. Version
The Royal College of Pathologists. 2021. Available from: https://www.rcpath.org/uploads/assets/253e8950- 3721-4aa2-

8ddd4bd94f73040e/g147\_national-minimum\_retesting\_intervals\_in\_pathology.pdf



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Subramanian J, et al. Reducing the number of unnecessary routine laboratory tests through education of internal medicine residents. Postgrad Med J. 2018; 94(1118): 716-719. doi: 10.1136/postgradmedj-2018-135784

3. Silverstein WK, Weinerman AS, Born K, Dumba C, Moriates CP. Reducing routine inpatient blood testing. BMJ. 2022; 379: e070698. doi:10.1136/bmj-2022-070698



QI & Sustainability poster group - 6

### Improving oxygen prescription on surgical wards

Authors

Dr Christopher O'Sullivan

**Dr Louise Restrick** 

Mr Ezzat Chohda

London Foundation School

#### Background

Often, surgical patients do not have their oxygen prescription or target saturations completed - despite receiving once-daily consultant/reg review. It is vital this is completed, in case a patient deteriorates and requires oxygen therapy to maintain their personal oxygen saturations. Two patients with type 2 respiratory failure were given inappropriate oxygen therapy, due to their oxygen prescription not being completed.

#### **Methods**

I researched oxygen prescription on the surgical ward – analysing bedside charts and noting if they had oxygen prescribed and target saturations noted. My first intervention was discussing my concerns at surgical handovers, with my senior colleagues and junior doctors. I then liaised with our IT department, integrating an online prompt to prescribe oxygen when entering ward round notes. Finally, I ensured this prompt became a mandatory field.

#### Results

Oxygen prescription rates were initially 22.2% - this rose to 44.4% on first intervention. It then rose to 50% with an online prompt, and then to 61% with the mandatory prompt.

#### **Key Messages**

As VTE prescription is a mandatory field on many hospital IT systems, we should make oxygen prescription a mandatory field to ensure safe oxygen prescription occurs. The intervention made a significant difference - it can therefore be implemented to other

#### References

1.O'Driscoll BR, Howard LS, Earis J, Mak V. British Thoracic Society Guideline for oxygen use in adults in healthcare and emergency settings. BMJ Open Respiratory Research [Internet]. 2017 May;4(1). Available from: https://bmjopenrespres.bmj.com/content/4/1/e000170



QI & Sustainability poster group - 6

### **Closed Loop Audit on VTE Prophylaxis**

Authors

Charles Robb

Anthony Thompson

Northern Foundation School

#### Background

Thrombosis UK states that every 37 seconds someone in the western world dies from a venous thromboembolism. At least two thirds of cases of hospital-associated thrombosis are preventable through VTE risk assessment and the administration of timely, appropriate thromboprophylaxis, however currently VTE is one of the most common forms of hospital mortality.

#### Methods

We performed a closed loop audit on the use of thromboprophylaxis in our hospital, assessing if a VTE risk assessment was completed on admission, administered within 14 hours of admission, whether it was prescribed appropriately based on weight and renal function, and to check if reassessment took place as per NICE guideline NG 89.

We initially reviewed 50 medical and 50 surgical patients, then provided departmental teaching and distributed posters, before re-auditing to assess the response one year later.

#### Results

On re-auditing, we saw the average time between admission and receiving VTE prophylaxis, drop from 21 hours to 15, as well as the percentage re-assessed within 24hrs increase by up to 54%.

#### **Key Messages**

VTE prophylaxis is a vital for hospital patients, and through this audit we have seen that through basic interventions, we can see a significant improvement in compliance with NICE guidelines, and therefore improve patient outcomes.

#### References

Thrombosis UK. Thrombosis Statistics [Internet]. 2023 [cited 2023 Oct 27]. Available from: https://thrombosisuk.org/thrombosis-statistics.php

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QI & Sustainability poster group - 6

# Operative documentation in Royal Aberdeen Children's Hospital

Authors

Dr Miriam Westwood & Dr Abigail Wright with contribution from Dr Matthew Davies and Dr Emily Ross

Scotland Foundation School

#### Background

Within paediatric surgery we noticed discrepancies between post-operative documentation provided by different specialities with many not meeting standards set out by Royal College Surgeons. We set out to formally assess this and then work to implement change to improve both the quality of individual notes and create an equitable standard across specialities.

#### **Methods**

We completed two cycles - the first to establish a baseline and the second to assess efficacy of our interventions. For each operative note we marked green/amber/red against each standard and to extrapolate conclusions we analysed by criterion, speciality and urgency (emergency/elective). We also created an overall percentage compliance per speciality to prioritise interventions.

#### Results

Cycle 1 data showed a range of 42-96% compliance with notable inter-specialty difference. We analysed potential precipitating/perpetuating factors then delivered our findings and recommendations at departmental QI meetings as well as creating and displaying informational posters in theatre areas. With cycle 2, the compliance range was 80-100%.

#### **Key Messages**

This documentation is the only written outcome of surgeries undertaken and ensuring 'accurate, comprehensive, legible and contemporaneous records' is key for optimising patient safe and centred care. The repeat cycle showed quantitative evidence of improvement and it is vital this is sustained going forward.

#### References

1. Sitecore\ddean@rcseng.ac.uk RC of S of E. Good surgical practice [Internet]. Royal College of Surgeons of England; 2014 [cited 2023 Oct 29]. Available from: https://www.rcseng.ac.uk/standards-and-research/gsp/



QI & Sustainability poster group - 7

## Empowering Allied Health Professionals in Antimicrobial Stewardship: A 3-cycle Quality Improvement Project

**Authors** 

Catherine Dominic, Steven Gopaul

East Anglia Foundation School

#### Background

Empowering healthcare professionals in inpatient settings to take charge of antimicrobial stewardship by increasing engagement may be effective.

#### **Methods**

Data was collected across 3 cycles from prescribing reports and patient notes. The first intervention was utilisation of stickers with the IV-oral checklist and awareness of these and second was use of poster sheets encouraging involvement and prompts for staff to use in handovers.

#### **Results**

In the first cycle, 21 patients on the ward received antibiotics. Of these prescriptions only 60% had a stop date and only 12% had an indication. The IV-oral switch was considered at the 48 hour timepoint in 46% of cases, but did not happen at this point 100% of the time. Following implementation of the intervention, the data so far (16 days into cycle 2) suggests an improvement in adherence to evaluation of the checklist at the 48 hour timepoint with an increase to 55% of patients who were considered for an oral switch at 24 hours. Full data analysis will be available at the time of the presentation if this is to be selected.

#### **Key Messages**

Empowering allied health professionals to partake in antimicrobial stewardship through simple guided novel interventions may assist in improving adherence to AMS policy.

References

Nil



QI & Sustainability poster group - 7

## Fragility Fracture Risk in Stroke Patients: a Quality Improvement Project

#### Authors

Oriane Grant, Lucy Sykes

Wessex Foundation School

#### Background

Fragility fractures cost the NHS around £4.4 billion per annum and result in high morbidity and mortality rates for patients [1]. Strokes largely affect an elderly population and falls are the most common complication post-stroke [2,3].

Our objective: to assess and improve identification of fracture risk and prescription of appropriate bone protection in a population of stroke patients.

#### Methods

Clinical notes of 90 patients were retrospectively reviewed to establish baseline bone protection prescribing practice. A FRAX and QFracture score were also estimated for each patient.

#### Results

No patients were started on bone protection during their admission and only one had a vitamin D level checked. One patient was re-admitted after discharge with a wrist fracture. 78% of patients qualified for bone protection treatment based on QFracture and 60% for further investigation based on FRAX.

#### **Key Messages**

There is currently no consideration of bone health in this population, despite most patients being at high risk of fragility fracture.

Next steps: We have designed an investigation table and implemented it in the ward round proforma to encourage physicians to calculate a QFracture for each patient. We have also delivered a teaching session at the local MDT. The population is now being re-audited, results expected by January.

#### References

1. NHS RightCare scenario: the variation between sub-optimal and optimal pathways. National Osteoporosis Society (2017) https://www.england.phs.uk/rightcare/wp-content/uploads/sites/40/2017/02/rightcare/wp

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2. Yousufuddin M, Young N. Aging and ischemic stroke. Aging May 1;11(9):2542-2544 (2019)

3. Davenport R, Dennis M, Wellwood I, Warlow C. Complications after acute stroke Stroke March;27(3): 415-420 (1996)



QI & Sustainability poster group - 7

## Audit of pain control in surgical inpatients

Authors

Grzegorz Jodlowski

**Trent Foundation School** 

#### Background

Pain is a significant feature in surgical patients and is complicated by multiple underlying mechanisms and co-morbidities. Optimal pain control is an important feature of care as prolonged pain can impair quality of life, reduce mobility, healing, delay hospital discharge and cause detrimental pathophysiological changes. The aim of audit is to assess the quality of pain control including side effects of analgesics in surgical inpatients at Lincoln County Hospital NHS Trust.

#### Methods

Prospective review of patients and their clinical records was undertaken in 50 surgical inpatients and repeated in 54 patients following a departmental educational presentation. Outcomes were measured against the WHO analgesic ladder and NICE 147 guideline.

#### **Results**

Pain was managed adequately in 30% patients in the first cycle and in 46% the second cycle. Prescribing habits were inadequate in 30% of patient's vs 16% of patients in the first cycle. Prophylactic laxatives were prescribed in a 100% of eligible patients in the second cycle, and anti-emetics were offered to 92% in first cohort vs 82% in the second. Overall it can be seen that changeover of staff affects the prescribing habits which should be unique for all surgical inpatients.

#### **Key Messages**

Pain management of surgical patients has improved following a departmental

References

WHO ladder,

**NICE 147** 



QI & Sustainability poster group - 7

# Prompt switching of IV antimicrobial treatment to oral medication

#### Authors

Dr Yuti Khare, Dr Graciela Sluga

Kent, Surrey & Sussex (KSS) Foundation School

#### Background

In recent decades, antibiotic misuse, and a decline in production of new agents has resulted in a global healthcare crisis. Appropriate and prompt switching from IV to oral antibiotics is imperative for reducing antimicrobial resistance, facilitating timely discharge, and ensuring medication efficacy. This audit was mapped to the national CQUIN criteria [1] to evaluate if the target of 40% or less was achieved, identifying key factors and barriers to switching.

#### **Methods**

A sample of 50 patients were retrieved from Sunrise EPMA over 3 months at Maidstone Hospital. Medical documentation, blood results and NEWS scorings were evaluated to ascertain if targets were achieved. Additionally, patient wards, consultant-in-charge, antibiotic used, and duration was noted to inform future action.

#### Results

Preliminary results show that targets are narrowly met, with clinicians preferring to keep IV treatment and only consider switching when planning discharge. Barriers identified include patients who are nil-by-mouth, who have aspiration pneumonia and upper gastrointestinal cancers. Once all results are collated, a qualitative summary of the barriers to switching will be produced informing the creation of a digital aid to assist clinicians in deciding when to switch.

#### **Key Messages**

Findings from this local audit could influence practice across the deanery and encourage local evaluation of practice.

#### References

1. Health and Social Care, CQUIN. Commissioning for Quality and Innovation (CQUIN) scheme for 2023/24 2023. Available from: https://www.gov.uk/government/publications/antimicrobial-intravenous-to-oral-switch-criteria-for-early-switch



QI & Sustainability poster group - 7

## An audit of sedation and general anaesthetic services for paediatric imaging in the East of England

Authors

Dr Helen LIN JIA QI, Dr Arun Saraswatula

London Foundation School

#### Background

To obtain useful imaging, paediatric patients need to lie still during scans. For children that have difficulties keeping still using non-pharmacological measures, national guidelines recommend chloral hydrate or midazolam sedation, and if required, escalation to general anaesthesia (GA)(1). We aim to audit sedation and GA services for paediatric imaging in East of England units and present preliminary findings here.

#### **Methods**

Paediatric leads in the region were invited to respond to an online questionnaire on local sedation and GA services.

#### Results

13 of 16 units responded to the questionnaire. 11 units (84.6%) provided chloral hydrate sedation, and 4 offered a second sedative agent. Units utilising only chloral hydrate could benefit from a second sedative agent to reduce referrals to a local or regional anaesthetic list. 11 units (84.6%) provided GA, with 5 offering partial services (elective or urgent scans only). Reasons for the limited services included difficulties staffing anaesthetic lists for imaging children and acquiring MRI-compatible anaesthetic equipment. These units could also benefit from increased sedative options.

#### **Key Messages**

Gaps were identified in the availability of sedation and GA, resulting in increased pressures on GA lists in tertiary centres. Regional guidelines on using sedative agents other than chloral hydrate are being introduced next.

#### References

1. National Institute for Health and Care Excellence. Sedation in under 19s: using sedation for diagnostic and therapeutic procedures [Internet]. 2010. Available from: https://www.nice.org.uk/guidance/cg112/chapter/Recommendations



QI & Sustainability poster group - 7

### An Amylase A Day

Authors

Dr Dillon O'Flynn

Northern Ireland Foundation School

#### Background

Amylase is a frequently used test in ED. It can help formulate a differential diagnosis and focus the treatment plan. A single amylase test costs £11.28. The aim is to assess the number of indicated tests performed in Daisy Hill Hospital ED.

#### **Methods**

Patients admitted under the medical team were selected at random between 23/2/23 - 8/3/23. Using NIECR system, it was checked who had amylase tested. Admission notes were reviewed to ascertain if amylase was indicated at time of presentation. Intervention included education of ED staff and posters in clinical areas. Data collection in the second cycle, a month later, was gathered using the same process.

#### **Results**

40 patient records were reviewed during the first cycle. 26(65%) patients had an amylase test on admission of which 4(15%) were indicated. During the second cycle, 40 patient records were reviewed. 9(22%) patients were tested, of which 6(66%) were indicated.

#### **Key Messages**

This audit showed a 43% decrease of amylase testing in ED. During the first cycle,  $\pounds$ 246.50 was spent on non-indicated amylase tests compared to  $\pounds$ 33.84 during the second cycle. With drawing staff's attention to the overuse of amylase testing, there was a drastic decrease in non-indicated amylase testing, saving over  $\pounds$ 200 for the trust.

#### References

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https://www.nice.org.uk/guidance/ng104/chapter/recommendations



QI & Sustainability poster group - 7

## The power of visual information: Posters in Anaesthetic Rooms to Improve Perioperative Antibiotic Compliance

Authors

Reeja Premjee

London Foundation School

#### Background

Prophylactic antibiotics should be administered within 30 minutes of knife-to-skin for patients undergoing Trauma & Orthopaedic surgery as per the Trust's local guidelines. This is important for reducing surgical site infections. This project aims to achieve >90% joint-specific prophylactic antibiotic compliance.

#### Methods

Baseline data was collected over a 1-month period to assess compliance. All eligible patients were identified on Pathpoint E-trauma under 'Procedures' and 'Post-operative review'. For each patient, the following details were obtained from Operative notes on Cerner: Age; Weight; Operation date; Operation type; Knife-to-skin time. Using 'Drug Admin Summary', the type, dose and timing of antibiotics for each case was obtained.

#### Results

Overall 78.2% of cases were not compliant with the Trust's local guidance for prophylactic antibiotics. The main faults were administration outside of the 30 minute window of knife-to-skin and incorrect type and dose of antibiotics. To improve this, simple posters illustrating the guidelines were placed in the anaesthetic rooms of operating theatres. After 2 weeks data was re-collected using the same method. Of the pre-antibiotics prescribed 48.6% achieved compliance vs 27.8% previously. Of the post-operative antibiotics 69% achieved compliance vs 50% previously.

#### **Key Messages**

Although there is room for improvement, posters are a simple yet effective means to

References

None



QI & Sustainability poster group - 7

## Improving the quality of ENT discharge letters for total and para-thyroidectomies through implementation of a discharge template.

Authors

Louise Raper

Leicester, Northamptonshire & Rutland (LNR) Foundation School

#### Background

Writing discharge letters is a key role for foundation doctors; but how do we make sure that quality letters for patients and their general practitioners are produced in an accurate and timely manner? Comparing discharge letters for total and parathyroidectomies against the British Association of Endocrine and Thyroid Surgeons (BAETS) (1) pre and post implementation of a discharge letter template, has allowed for just this.

#### **Methods**

Retrospective data from ENT discharge letters was collected over a one month period and assessed against the following six-point criteria.

- 1. Reason for admission
- 2. Procedure
- 3. Medications for discharge
- 4. Analgesia advise
- 5. Appropriate follow-up
- 6. Safety netting

This was then re-audited after the implementation of a template.

#### Results

Of the discharge letters written in audit cycle 1, only 13 % of them met all the sixpoint criteria. Post template this rose to 100 %, an increase of 669 %.

#### **Key Messages**

Implementation of a quality assessed discharge template for patients who have had total and or para-thyroidectomies has improved the quality of the letters by 669 %. Not only does this benefit the patients and their GPs by provided high quality information but is time efficient for medical staff.

References



(1) . Nepal, Patel et al. The American Association of Endocrine Surgeons Guidelines for the Definitive Surgical Management of Thyroid Disease in Adults. Wolters Klunew Health, Inc. 2020



QI & Sustainability poster group - 7

## Quality Improvement project- Improving inpatient falls assessment in Geriatric wards in Milton Keynes university hospital

#### Authors

May Pyone Khine, Piriyandan Santhiravarman, Jun Hoe Wong, Than Mya

**Oxford Foundation School** 

#### Background

There is an increasing number of falls during admission and failure to complete a thorough assessment leads to life-threatening injuries, such as intracranial haemorrhage, cervical and NOF fractures. This has negative consequences causing lengthened hospital stays, medicolegal complaints and reduced quality of life.

#### **Methods**

Paper records of admissions were used to select patients aged 65 and over being admitted during August and September 2023 on a geriatric ward in MKUH. Radar system is used to identify the falls incident during that period and electronic medical notes were reviewed to determine the quality of post fall assessment.

#### Results

Total 18 patients had a fall in geriatric ward in MKUH between August to September 2023. 67% of patients underwent medical review within first 12 hours of a fall, 39% had Musculoskeletal and neurological examination documented before being moved, 25% had Neurological observations done and documented when appropriate, 22% had anticoagulation medications reviewed and documented.

#### **Key Messages**

This project demonstrated the need to improve documentation and assessment of patients who have had a fall. Recommendations for next cycle are as follow: produce a proforma to achieve a consistency in correct documentation, bigger sample size and junior doctor education.

#### References

National Institute for Clinical Excellence. Head Injury: triage, assessment, investigation and early management of head injury in infants, children and adults. London: National Institute for Clinical Excellence, 2003. Google Scholar

National Audit of Inpatient Falls 2020

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QI & Sustainability poster group - 7

# Improving delirium assessment in geriatric healthcare. A Quality Improvement Project.

#### Authors

C Taylor, N Mohamadzade, H Wayne, L Makie, O Mitchell, C Bateman-Champain, J Hetherington, F Belarbi, G Singh, J Gandhi, A Ganggandeep

London Foundation School

#### Background

Delirium is a common condition among elderly patients with significant effects on both morbidity and mortality(1). The present quality improvement study aimed to assess the efficacy of delirium assessments in an acute senior health department in a London Hospital and to implement multidisciplinary team (MDT) based interventions to further practice.

#### Methods

An observational audit was conducted between 01/07/2023 and 31/07/2023. Data was collected regarding the number of patients who were assessed and managed as per NICE 2023 delirium guidelines CG103(2). Following the initial audit, educational MDT based interventions were introduced and the audit was re-conducted between 01/09/23 and 30/09/23. The results were then compared to the previous cycle.

#### Results

Initial findings revealed suboptimal compliance with NICE guidelines. Following intervention, a significant improvement was seen, most notably within the percentage of patients receiving a comprehensive delirium assessment and investigation into the cause of their acute delirium.

#### **Key Messages**

This study outlines the importance of ensuring adequate identification and management of the delirious patient and introduces a framework for improving current practice in acute senior health departments. Future cycles should explore how to ensure sustainable improvement and the impact of this on patient outcomes.

#### References

1. Inouye SK. Delirium in older persons. New England journal of medicine. 2006;354(11):1157-65.

2. NICE. Delirium: prevention, diagnosis and management in hospital and long-term care. Clinical guideline [CG103] NICE; 2010 [updated 18/01/2023].

RO101



Research & original work poster group - 1

## "Sweats" may not be indicative of haematological cancers: an analysis of 2-week-wait referrals to haemato-oncology at St Bartholomew's Hospital, London

#### **Authors**

Carola Maria Bigogno, John Riches, Rifca Le Dieu

London Foundation School

#### Background

Haematological cancers, such as leukaemia, myeloma, Hodgkin's and non-Hodgkin's lymphomas, account for over 40,000 new diagnoses every year (1,2). Key reasons for 2-week-wait referrals include subjective measures like sweats (3).

#### Methods

Patients referred to 2-week-wait haematology clinics at St Bartholomew's Hospital with "sweats" between May and December 2018 were identified (n=51) and divided into three groups – A, sweats only (n=14); B, sweats plus other B symptoms (n=22); and C, sweats plus adenopathy and/or lymphocytosis (n=15), and reported a low prevalence of "drenching night sweats" (A=35.7%, B=63.6%, C=53.3%).

#### Results

Most patients were examined (A=92.9%, B=90.9%, C=100%) and had follow-up blood tests (A=92.9%, B=95.5%, C=100%) or imaging (A=57.1%, B=90.9%, C=66.7%), and we explored the results of these in each group. Nobody received a diagnosis of malignancy in group A (0%) versus two patients in group B (9.1%) and two in group C (13.3%). Interestingly, most patients were discharged or diagnosed with viral illness, tuberculosis, human immunodeficiency virus (HIV), rheumatological diseases or anaemia.

#### **Key Messages**

In conclusion, "sweats" is a poorly defined term that does not indicate haematological malignancy. A clearer definition would be beneficial, and further studies should be conducted to explore the association of "sweats" and other signs and symptoms with haematological

#### References

(1) Haematological Cancer. Manchester Cancer Research Centre. [online] Accessed 20/10/2023. https://www.mcrc.manchester.ac.uk/research/diseasesites/haematological-

cancer/#:~:text=Haematological%20cancers%20are%20those%20that,the%20type% 20of%20cell%20affected.

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(3) Haematology 2WW. GP Gateway. 17 March 2023 [online] Accessed 20/10/2023 https://www.coventryrugbygpgateway.nhs.uk/pages/haematology/

**RO103** 



Research & original work poster group - 1

# ISS Bone Health and Recovery- An 18-month Preliminary Perspective

#### Authors

Fernandez P.12, Gordienko K.3, Locrelle H.1, Linossier M.1, Lau P.4, Rittweger J.4, Vassilieva G.3, Vico L.1

1 INSERM, U1059 – SAINBIOSE, Laboratory of Osteoarticular Tissue Biology, University of Lyon, France

2 Nottingham City Hospital, Nottingham, Unit

**Trent Foundation School** 

#### Background

Prolonged exposure to microgravity is known to elevate the rate of bone resorption in astronauts.1,2 Despite exercise countermeasures onboard the ISS, the effect on bone remains a challenge for both present and future long-duration spaceflight.

#### **Methods**

Twelve veteran Russian male cosmonauts (47.58 years  $\pm$  6.5 SD) were recruited for this prospective study. Volumetric BMD (vBMD) and microarchitectural parameters were measured at the non-dominant distal radius and tibia using HRpQCT imaging (Xtreme CT, SCANCO Medical).

Pre-flight measurements: (1 or 2 months pre-flight, or at both time points) for a baseline reference and followed up for 1.5 years after landing.

Post-flight measurements upon return(R): 1-day (R+1); 14-days (R+14), 3-months (R+90); 6-months (R+180); 12-months (R+360); and 18-months (R+540).

#### Results

Preliminary results demonstrated decreased cortical vBMD from baseline values in both the distal radius and tibia upon return, with more pronounced differences in the tibia (Fig. 1). Additionally, values remained below pre-flight levels 18-months later (Fig. 1). Cortical porosity followed a similar trend with elevated levels upon return and no recovery to pre-flight values (Fig. 2).

#### **Key Messages**

These preliminary results are consistent with a one-year longitudinal follow-up1,2 and further highlight that a return to baseline levels is currently not observed even after 18-months.

#### References



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2.Gabel L, Liphardt AM, Hulme PA, Heer M, Zwart SR, Sibonga JD, et al. Incomplete recovery of bone strength and trabecular microarchitecture at the distal tibia 1 year after return from long duration spaceflight. Sci Rep. 2022 Jun 30;12(1):9446.



Research & original work poster group - 1

#### Suicide Prevention on the Railways- Literature review

#### Authors

Tsz Tsun Ignatius Ip

Essex, Bedfordshire & Hertfordshire (EBH) Foundation School

#### Background

Suicide is one of the leading causes of death across all ages. Railway suicide is a relatively rare method of suicide with a high fatality rate, although the number of cases is comparatively limited when set side by side to other methods, it is still the leading cause of death on railways. Railway suicide is not only traumatic to the individual's relatives, it has also been shown to be a huge socio-economic burden to the society.

#### **Methods**

Literature review of 35 articles which reviewed the efficacy and feasibility of the selected preventative strategies, including platform screen doors, installation of blue lights, effects of media report, and monitoring and detection system.

#### Results

Platform screen doors have been the most effective. Blue light installation is a cheap and innovative measure, however exact efficacy is still yet to be determined. Both monitoring and media involvement are important to prevent railway suicide and should be considered to be a major future intervention.

#### **Key Messages**

Although most of the mentioned strategies have been shown to be effective, it is worth noting that the suicide rate remains high across the globe, hence more studies should consider deriving a global suicide prevention strategy.

#### References

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Research & original work poster group - 1

# A systematic review of circulating predictive and prognostic biomarkers to aid the personalised use of radiotherapy in the radical treatment of patients with oesophageal cancer.

#### **Authors**

Dylan P. McClurg1, Chandan Sanghera1, Somnath Mukherjee2, Rebecca C. Fitzgerald3 & Christopher M. Jones1,3

1 Addenbrooke's Hospital, Cambridge University Hospitals NHS Foundation Trust, Cambridge, UK

2 Churchill Hospital, Oxford University Hospitals NHS

East Anglia Foundation School

#### Background

Circulating biomarkers predictive of treatment response or prognostic of overall outcome could enable the personalised and adaptive use of radiotherapy (RT) in patients with oesophageal adenocarcinoma (OAC) and squamous cell carcinoma (OSCC).

#### **Methods**

A systematic review was performed following the Preferred Reporting Items for Systematic Reviews guidance. Medline, EMBASE, PubMed, Cochrane Library, CINAHL, Web of Science, and Scopus databases were searched between January 2005-February 2023 for studies relating to circulating biomarkers evaluated in the context of neoadjuvant or definitive RT for OAC and OSCC. Study quality was assessed using predefined criteria.

#### Results

A total of 57 studies were included that reported 61 biomarkers. The majority (43/57,75.4%) of studies were of Asian origin and retrospective (40/57, 70.2%), with most (52/57, 91.2%) biomarkers reported in OSCC. There was marked heterogeneity amongst study populations, treatments, biomarker assay methodology, biomarker positivity cut-offs, and statistical analyses. Nevertheless, there is consistent evidence for the potential value of circulating tumour DNA, tumour cell count, CYFRA21.1, and the serum concentration of several miRNAs.

#### **Key Messages**

There are a small number of circulating biomarkers with potential predictive and prognostic value in OSCC and, to a lesser extent, OAC. Well-designed studies are required to confirm whether these can be used to stratify RT

References

n/a





Research & original work poster group - 1

# Exploring patterns in topical treatment use for children with eczema

#### Authors

Katherine E. Memory

Stephanie J. MacNeill

Matthew J. Ridd

Severn Foundation School

#### Background

Eczema is a chronic inflammatory skin condition affecting ~20% of children (1). Topical therapies (emollients and topical corticosteroids (TCS)) prevent and treat flares (2, 3). However, use is poorly reported (4). Here we described topical treatment use in a trial comparing the effectiveness of four emollient types.

#### Methods

550 children with eczema were allocated to lotion, cream, gel or ointment, to apply 'twice daily and when required' for 16 weeks. Parents reported weekly on use of emollients and TCS. Descriptive analyses were undertaken.

#### Results

450 participants included. 47.3% female, median age 4 (IQR: 2-8) years. Questionnaire completion at weeks 1, 8, and 16 were and 84.7% (381/450), 64.9% (292/450), and 58.9% (265/450) for emollient use, and 94.2% (424/450), 86.4% (389/450) and 80.4% (362/450) for TCS use. Of these participants, use of only allocated emollient was reported by 53.0% (202/381), 57.9% (169/292), and 56.2% (149/265) at weeks 1, 8, and 16, respectively. Each week, ~25% of participants reported only using emollient types which they were not allocated to.

#### **Key Messages**

Completion of questions was better for TCS than emollient use, but decreased for both with time. Most participants used their allocated emollient. It is challenging to capture and report topical treatment use.

#### References

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2. National Institute for Health and Care Excellence (NICE). Eczema - Emollients 2023. Available from: https://cks.nice.org.uk/topics/eczema-atopic/prescribing-information/emollients/.

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4. van Zuuren EJ, Fedorowicz Z, Christensen R, Lavrijsen APM, Arents BWM. Emollients and moisturisers for eczema. Cochrane Database of Systematic Reviews. 2017(2).



Research & original work poster group - 1

## Depth of anaesthesia as a determinant of patient comfort and satisfaction with colonoscopy

#### Authors

Philip Paris, Tolu Osinuga, Peter Cassar, Gregory Selbie, David Cassar, John Schembri

Malta Foundation School

#### Background

There is wide global variation in the type of anaesthesia used in endoscopy 1. Pain experienced can influence willingness to undergo the procedure in the future, and whilst deep sedation can be assumed to be superior, other factors can influence pain perception and satisfaction 2.

#### Methods

We carried out a prospective cross-sectional study with the aim of identifying what factors influence patient colonoscopy experience. In our centre colonoscopy is performed using either deep or conscious sedation. Both groups were administered pre- and post- endoscopy questionnaires measuring anxiety and pain levels.

#### Results

A total of 99 patients were recruited (n=38 conscious, n=61 deep). 56.6% were male and average age was 56.8 years. Expected pain correlated better than preprocedural anxiety levels to actual pain experienced (p=0.03 vs p=0.40). Propofol use led to better patient comfort (1.5 vs 3.3 /10; p<0.01) but did not translate into higher satisfaction (9.2 vs 9.3 /10; p=0.49) or willingness to repeat the procedure (p=0.91). 4 patients in the deep sedation group experienced respiratory compromise.

#### **Key Messages**

Whilst deep sedation was more comfortable for patients, it also carried a higher risk of anaesthesia related complications. Other factors apart from comfort seem to determine overall satisfaction and willingness to repeat the procedure.

#### References

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Research & original work poster group - 1

# Rectus sheath catheters may not provide effective analgesia after paediatric laparotomy.

#### Authors

E.Potter1,2, H.Gill1, C. Wilson1

1. Bristol Royal Hospital for Children, University Hospitals Bristol and Weston, UK

2. Department of Physiology, Pharmacology and Neuroscience, University of Bristol, UK

Severn Foundation School

#### Background

Rectus sheath catheters (RSCs) may be used for post-operative analgesia in midline laparotomy (1). Despite their increasing popularity in adults, evidence for paediatric RSC use is scarce (2). We introduced RSCs for paediatric laparotomy in 2020; local anaesthetic infusion-rate was subsequently increased in April 2022. We aimed to assess whether RSCs provide 'effective' analgesia following this protocol change.

#### Methods

Data was collected prospectively (May 2022 - July 2023). Analgesic efficacy was determined on retrospective review. 'Ineffective' analgesia was defined by any of: i) rest pain score  $\Box$ 7, ii) total opioid consumption >2.0mg/kg, or iii) opioid background infusion added.

#### Results

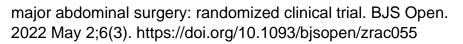
20 children had RSCs inserted. One patient was excluded due to equipment failure. RSCs were deemed 'effective' in 14/19 (73.7%). Median (IQR) total opioid consumption was 1.08 (0.96) mg/kg. Two patients (10.5%) had background infusions added.

#### **Key Messages**

Following the dose increase, fewer RSC patients (10.5% vs 32%, (2)) required an additional background infusion, suggesting our protocol change was beneficial. However, given RSCs were 'ineffective' for 26.3%, their clinical efficacy remains undetermined. Our systematic literature search identified no clinical trials evaluating RSCs in paediatric laparotomy. Therefore, similar to the CAMELOT trial in adults (3), we aim to design a pragmatic randomised-controlled trial for paediatric patients.

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Research & original work poster group - 1

## Designing a Virtual Reality Café to Treat Eating Disorders: a Thematic Analysis of Stakeholder Viewpoints

#### **Authors**

Lydia Shackshaft, Laura Chapman, Annabelle Hook, Lucy Biddle, Lucy Yardley, Tamsin Ford, Angela Attwood, Ian Penton-Voak, Mel Slater, Emily Rothwell, Stella Reeves, Alys Mathers, James Downs, Gillian Combe, Sam Clark-Stone, Trinisha Govender, Helen Bould

Severn Foundation School

#### Background

Eating disorders (ED) have significant physical and psychosocial impacts, and some of the highest mortality rates of any psychiatric illness. Development of novel treatments is a priority: recovery amongst adolescents following family-based therapy is <50%(1), and many relapse following treatment. Virtual reality (VR) is an innovative tool within mental health treatment and has potential therapeutic benefits for EDs. Previous qualitative work demonstrated enthusiasm of people with lived experience (PWLE) of EDs and clinicians for a VR café scenario as an intervention(2). This study aims to explore the opinions of key stakeholders to help inform the development of a VR graded-exposure café scenario as a potential treatment for EDs.

#### **Methods**

We conducted focus groups and interviews with PWLE (14-25 years), parents/carers, and clinicians. We will use thematic analysis to identify themes within stakeholder viewpoints.

#### Results

Preliminary results from the thematic analysis will be presented. Participants discussed their perspectives on a VR café as a potential treatment, the café environment design, and challenges to practice within it.

#### **Key Messages**

Findings will be discussed in the context of implications for developing novel VR interventions for people with EDs. This recognises the importance of a person-based approach to intervention development(3), incorporating user perspectives to optimise efficacy and acceptability.

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Research & original work poster group - 1

## 'Auspicious liaisons' - Evaluating the impact of a liaison geriatrician initiative on older adults psychiatric wards

#### Authors

P. Swann, D. Zahedi, H. Wong, A. Tolley, T. Paschalis, V. Kirthisingha, E. Ruiz-Mendoza, J. Rubinsztein

London Foundation School

#### Background

There is an unmet need for providing physical healthcare to older adults who are psychiatric inpatients, despite high levels of comorbidity and mortality. Although liaison services in acute hospitals are now the norm, the reverse is not usually available for patients in mental health trusts. Following the introduction of support from geriatricians to older people's mental health inpatient wards, we wanted to see if this intervention was effective and acceptable.

#### **Methods**

We performed a retrospective cohort evaluation on the impact of a liaison geriatrician, using routinely collected data, and assessed acceptability among medical staff by semi-structured interview.

#### Intervention:

Our service introduced regular sessions from consultant community geriatricians across older adults psychiatric wards including a mixture of video conference and face to face input.

#### Results

There was no significant decrease in emergency transfers but there was a significant reduction in length of stay with the introduction of a liaison geriatrician. There was a significant increase in geriatrician consultations and a decrease in specialty consultations to other specialists, however, there was no change in discharge prescriptions or destination. Geriatricians gave confidence to psychiatrists of all grades to treat physical health care issues, particularly chronic issues.

#### **Key Messages**

A liaison geriatrician service leads to a reduction in length

#### References

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Research & original work poster group - 2

# Designing a core outcome set for studies of Intrahepatic Cholestasis of Pregnancy

#### Authors

Capatina Nadejda (1,2), Williamson Catherine (1,3), Hague William (4) and Ovadia Caroline (1)

1 -Department of Women and Children's Health, King's College London, London, UK

2 -Ipswich Hospital, East Suffolk and North Essex NHS Foundation Trust, Ipswich,

East Anglia Foundation School

#### Background

Intrahepatic cholestasis of pregnancy (ICP) is the most common liver-specific pregnancy condition, yet our understanding of its impact is not well known. Previous meta-analyses have been limited in their scope based upon inconsistent source data outcome reporting. To improve the power of future ICP studies, standardised outcomes, the "Core Outcome Set" (COS), should be selected and defined, including those most important to patients, clinicians, and researchers.

#### Methods

Stage 1 involved identification of previously reported maternal and perinatal outcomes from systematic reviews of ICP, clinical trials, review publications and patient resources. Stage 2 involved three consecutive online e-Delphi surveys. Stage 3 involved a consensus meeting to agree on a COS for ICP.

#### Results

From 54 manuscripts, we identified 97 ICP outcomes. The most commonly reported outcome was Gestational Age at Delivery (reported in 85% of documents), followed by Apgar score (83%), Birthweight (74%), and Meconium-staining of the amniotic fluid (69%). Of note, maternal biochemical markers were reported in only 30% of the studies, and pruritus episodes/severity was reported in only 11% of the studies. Results from stages 2 and 3 will be analysed soon.

#### **Key Messages**

Our COS aims to standardise the framework for reporting outcomes in ICP, and thus improve the care pregnant women

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(4) Ethical clearance for this COS study was granted by King's College London with Minimal Risk Registration (MRA-23/24-39574).



Research & original work poster group - 2

# Identifying delays within the bladder cancer pathway for GP two week wait (2ww) haematuria referrals at the Royal Liverpool Hospital (RLH)

**Authors** 

Orla Hilton

North West of England Foundation School

#### Background

Roughly 28 new diagnoses of bladder cancer are diagnosed in the UK daily (1). NHS waiting times are at a record high (2) and delays in bladder cancer diagnosis and treatment are associated with increased mortality (3,4). We sought to understand where delays occur within the 2ww pathway, to improve our urology service compliance with faster diagnostic standard targets.

#### Methods

Data on 53 parameters were collected for n=174 patients (median age 66; 41% females) who received a flexible cystoscopy between January to March 2022, referred via the 2ww pathway for haematuria. Time in days was calculated between each stage of the cancer management process.

#### Results

There was a statistically significant difference in time between GP referral and first appointment for the macroscopic vs microscopic referrals (mean (s.d.) days 7.0 (4.7) vs 18.6 (40.0), p=0.0067). Only 45% of macroscopic referral patients (n=11) received treatment within 62 days compared to 75% of microscopic patients (n=4). Most procedures were TURBTs (n=10).

#### **Key Messages**

There is large variability in the bladder cancer pathway at RLH, with macroscopic referral patients on average waiting longer for treatment. Shorter waiting times are associated with faster treatment and improved patient experience. More research is required into why these delays are occurring.

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Research & original work poster group - 2

# Adapting to compromised routines: capturing parental perspectives on physical activity and health for children and adolescents with type 1 diabetes in the UK during COVID-19 lockdown. A qualitative study.

#### Authors

Rachel Stocker, Alisha Gupta, Guy S Taylor, James A Shaw, Daniel J West

Northern Foundation School

#### Background

Exploring how lockdown impacted physical activity levels and wellbeing of children with type 1 diabetes from a parental perspective, as there is no existing data on this.

#### **Methods**

This study is part of a larger, parallel mixed-methods design study, which incorporated a cross-sectional survey and semi-structured one-to-one interviews. Interviewees were recruited from the survey, which was distributed to parents of children/adolescents with T1D in the UK.

The interviews consisted of exploring diabetes management, mental and physical wellbeing, changes in PA levels, and sleep quality before/during lockdown and the effects of lockdown on the individual and their family. The interviews were transcribed and the data was thematically analysed.

#### Results

14 interviews were conducted with the parents. Thematic analysis generated a central theme of routine disruption, with four further themes on diabetes management routines, harnessing the opportunities of lockdown, weighing up risk, and variable impact on wellbeing.

#### **Key Messages**

Maintaining or increasing PA during COVID-19 lockdown was associated with better diabetes management, sleep, and wellbeing for children/adolescents with T1D, despite significant disruption to established routines.

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Research & original work poster group - 2

# Investigating the Roles of Macrophages in Inducing Calcinosis in Patients with Systemic Sclerosis using a Novel Coculture Model

#### Authors

Kaifeng Liang, Sandra Lopez Garces, Tamara Searle, Henry Lopez, George Martin, Teresa Collins, Jennifer Cross, Christopher Denton, David Abraham, Richard Stratton

London Foundation School

#### Background

Calcinosis is a severe and disabling manifestation in patients with systemic sclerosis (SSc) linked to ischaemia and local trauma. Previous studies have implicated Activin-A signalling and CD206 expression by macrophages in extraskeletal bone formation.

We investigated the pathogenesis of calcinosis through macrophages, using a novel tissue culture model created by stimulation of adipose derived mesenchymal stem cells (ASCs) with macrophages from SSc patients.

#### Methods

Plasma level of acitinv-A were measured in SSc and healthy controls (n= 72 and 42, respectively). ASCs were cultured in osteogenic media, with or without SSc patients' monocyte-derived macrophages, with or without inhibitors, CD206-inhibitor or neutralising activin-A antibody (Act A-Ab). Cultures were stained with Alizarin red for osteogenesis on day 21.

#### Results

Activin-A was increased in dcSSc patients' plasma when compared to HC, most notably in anti-centromere antibody (ACA) subgroup (plasma activin-A  $521\pm199pg/ml vs 255 \pm 170pg/ml [p=0.000065]$ ).

SSc patients' macrophages stimulated calcinosis in the coculture model, where addition of SSc macrophages (M) to the ASC cultures induced Alizarin red positive osteogenic foci at 21 days. Calcinosis was blocked by anti-CD206 and Act A-Ab (ASC: 0.5; ASC+M: 13.0 [p=0.002]; ASC+M+anti-CD206: 11.5; ASC+M+Act A-Ab 11.5 [p=0.015]; Alizarin stain 0-100%, median).

#### **Key Messages**

Activated macrophages from SSc patients are a potential source of Activin-A

References

None





Research & original work poster group - 2

## A novel framework for equity-focused evidence-synthesis: "EQUALS M+" to enable effective evaluation

**Authors** 

Lucy McCann, Lucy Johnson, John Ford

London Foundation School

#### Background

Equity-focused analysis is central to understanding how interventions affect disadvantaged groups and prevent widening inequalities via intervention-generated inequalities[1]. We reviewed the use of PROGRESS-Plus, a commonly used framework in equity-focused reviews, and proposed a novel framework[2].

#### **Methods**

We examined primary care studies which focused on health inequity and mapped the health inequity dimensions included to PROGRESS-Plus. We analysed the data to identify similarities and differences between published literature and PROGRESS-Plus. We proposed a novel framework which addresses the limitations identified.

#### Results

From the 325 studies included, the PROGRESS-Plus dimensions most assessed were sex(52%), ethnicity/race(49%), and age(44%). We identified several gaps between PROGRESS-Plus and published literature. In PROGRESS-Plus, there was no mention of inclusion health groups, no consideration of multiple disadvantage and no differentiation between gradient and targeted interventions. Our new framework, EQUALS M+, includes Ethnicity and/or race, Qualifications (income/wealth/employment of the individual), Underprivileged areas, Age, LGBTQ+, Sex and/or gender. M refers to multiple disadvantages and the + refers to additional disadvantaged groups.

#### **Key Messages**

EQUALS M+ encapsulates the key dimensions of health inequities whilst for allowing context-specific flexibility. High-quality evidence assessing what works to address complex disadvantage is needed to guide policy to prevent widening inequalities.

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using PROGRESS ensures consideration of socially

stratifying factors to illuminate inequities in health. Journal of Clinical Epidemiology. 2014;67(1):56-64.



Research & original work poster group - 2

# Malignant melanoma in Northern Trust during 2013, 2019, 2020 and 2021 – changing patterns of cases diagnosed by GP referral and disease stage shift.

#### **Authors**

McKillen RJ, Hawkins ST, Bennett D, Skillen L

Northern Ireland Foundation School

#### Background

Malignant melanoma (MM) is the 5th most common cancer in the UK and its increasing incidence creates service pressures. Our aim was to assess patterns of MM diagnoses arising from GP referrals and disease-stage shift in the Northern Trust (NT) and the impact of the COVID-19 pandemic on dermatology services.

#### Methods

MM patient data from 2013, 2019-2021 was collected via hospital records, merged with the Northern Ireland Cancer Registry and analysed using STATA v15.

#### Results

NT has the largest number of melanoma cases in NI with an average of 96 annually (2016-2020) vs 51-88 in other trusts. The number and proportion of MM GP referrals increased by 112% between 2013 [41/88 (47%)(GP referral/Total MM)] and 2019 [87/104 (84%)]. In 2020, the number and proportion of GP referrals decreased [60/74 (81%)]. Breslow depth and disease stage also increased with 26% of tumours in 2021 being pT4 at diagnosis vs 15% in 2020 and 10% in 2019.

#### **Key Messages**

The reduced number and proportion of GP-referred MM cases in 2020 and the concomitant increase in the incidence of more advanced tumours highlights the impact of COVID-19 and the need for early intervention to ensure a sustainable MM service in NI.

#### References

Antrim Area Hospital, Northern Health and Social Care Trust

Royal Victoria Hospital, Belfast Health and Social Care Trust

Northern Ireland Cancer Registry, Queen University Belfast

Public Health Agency, Northern Ireland



Research & original work poster group - 2

# Long-term survival of hemi sternotomy aortic valve replacement versus median sternotomy aortic valve replacement.

Authors

J Chan, A Singhania, G D Angelini, H Vohra

Severn Foundation School

#### Background

Hemi-sternotomy aortic valve replacement (HSAVR) has been shown to be a safe and effective treatment when compared to median sternotomy aortic valve replacement (MSAVR). The long-term survival between the two techniques has not been fully evaluated.

#### Methods

A single-centre, retrospective study including 655 patients underwent isolated aortic valve replacement between August 2015 and March 2020. A one-to-one propensity score matching (PSM) was performed. Operative characteristics, transfusion rates, in-hospital outcomes and long-term survival were compared between the two groups.

#### Results

After PSM, there were 129 patients in each group. The mean age for MSAVR and HSAVR were 71.41 (SD 9.32) and 71.31 (9.45), respectively. HSAVR was associated with a longer cross-clamp time (70.91 (SD:17.44) vs 67.66 (SD:29.48) minutes, p=0.01) but not cardiopulmonary bypass time 92.92 (20.76) vs 104.33 (117.73) minutes, p=0.14), respectively. There is no difference in hospital survival (1.6% vs 0%, p=0.5) between MSAVR and HSAVR. The median follow-up for HSAVR and MSAVR are 7.99 and 8.01 years, respectively. There is no difference in long-term survival (p=0.75) and repeat intervention (p=0.48).

#### **Key Messages**

There is no difference between HSAVR and MSAVR in long-term survival and need for repeat intervention.

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Research & original work poster group - 2

# Understanding the wellbeing of foundation doctors and evaluating the impact of a brief, individualised triage intervention to support wellbeing: A single centre, mixmethods evaluation

#### Authors

Dr Emily Taylor (FY2), Miss Rohini Aggarwal (Consultant, Director of Postgraduate Medical Education SCO), Dr Katie Hobson (Consultant)

North West of England Foundation School

#### Background

UK junior doctors are experiencing increasing levels of stress and burnout, evidenced by recent GMC and BMA surveys.(1-3) Within Salford Care Organisation (SCO), three cases of junior doctor suicide have occurred, including the death of a doctor who recently completed foundation training. The wellbeing of SCO foundation doctors is unknown, and no foundation-specific wellbeing support is currently available.

#### Methods

This is a prospective, mixed-methods study of 50 foundation doctors within SCO over 12 months (August 2023-2024). Participants complete weekly WHO-5 wellbeing questionnaires. Participants with a 'low' score are invited to a wellbeing 'check-in'/triage meeting. Variation in scores pre- and post-intervention are analysed. Intervention observational data and qualitative/quantitative data from post-invitation questionnaires is also collected.

#### Results

Preliminary data from the first phase of this study will analyse the impact of our monitoring/intervention programme on participant's wellbeing. In the second phase, we will examine wellbeing variation on an individual and cohort basis over time, supplemented by observational and qualitative data to understand the factors which may influence this and identify specific wellbeing needs.

#### **Key Messages**

The information gained from this study will inform and adapt wellbeing processes within SCO and the wider foundation programme to identify vulnerable doctors early and facilitate the provision of appropriate support.

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Research & original work poster group - 2

# A validated web-application (GFDC) for automatic classification of glaucomatous visual field defects using Hodapp-Parrish-Anderson criteria

#### Authors

Arun J Thirunavukarasu, Nikhil Jain, Rohan Sanghera, Federico Lattuada, Shathar Mahmood, Anna Economou, Helmut C Y Yu, Rupert Bourne

**Oxford Foundation School** 

#### Background

Glaucoma is the most frequent cause of irreversible blindness worldwide [1]. Perimetry (visual field) analysis is an essential component of glaucoma diagnosis, prognostication, and management decisions. However, subjectivity and ambiguity of visual field classification limits accuracy and reliability, and patients frequently receive substandard care as a consequence [2–5]. Standardised rules for classifying glaucomatous visual field defects exist, but these are labour-intensive and therefore impractical for day-to-day clinical work [6].

#### **Methods**

We developed a web-application, Glaucoma Field Defect Classifier (GFDC), coded to provide automatic classification of visual field results based on extensively validated Hodapp-Parrish-Anderson criteria. We then trialled GDFC in a single-centre cross-sectional study of 168 consecutive visual field results from 89 patients collected during glaucoma clinic attendances. To provide a gold-standard comparator to gauge GFDC's accuracy, two independent researchers graded the same fields applying the same criteria, with disagreement resolved by a third independent researcher.

#### Results

GFDC exhibited perfect accuracy, making identical decisions to human clinicians applying Hodapp-Parrish-Anderson criteria. 100% of mild, moderate, and severe glaucomatous field defects were correctly identified by the web-application. Interpretability analysis reveals that GFDC correctly identifies data represented by perimetry data. The web-application is hosted online for external clinicians and researchers to access and use (https://gfdc.app).

#### **Key Messages**

#### References

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CR101 Case report poster group - 1



# Granulocyte Colony Stimulating Factor (G-CSF)-induced aortitis in a woman with breast cancer: a case review

#### Authors

Kay Graham, Sofia-Amalia Marinopoulou, Craig Anderson

Scotland Foundation School

#### Background

Granulocyte Colony Stimulating Factor (G-CSF) is used in conjunction with cytotoxic chemotherapy regimens to reduce the severity and duration of neutropenia, increase tolerability of the chemotherapy and decrease the prevalence of infections.1 Aortitis is the inflammation of the aorta and is most commonly caused by rheumatological conditions such as giant cell arteritis or secondary to infections such as tuberculosis.2 Here, we add to the growing body of evidence that aortitis can be considered a recognised side effect of G-CSF therapy. 3-5

#### **Case Presentation**

A 64-year-old woman with breast carcinoma treated with G-CSF cover alongside adjuvant chemotherapy presented with intermittent fever and epigastric pain. There were no localising signs of infection. Results demonstrated a C-reactive protein of 243mg/L (range 0-5) and neutrophil count of 27.6x109/L (range 2-7). The patient did not respond to antibiotics and a contrast enhanced CT scan showed a descending aortitis.

#### Outcome

She was diagnosed with G-CSF aortitis and treated with high dose intravenous steroids at which point her condition improved rapidly.

#### **Follow Up Discussion**

Clinicians should be aware of the link between G-CSF administration and the development of aortitis and should consider aortitis in their differentials when a patient presents with fever in the absence of infection following G-CSF therapy.

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CR102 Case report poster group - 1



### Hepatoxicity Secondary to Diet Pill Use – A Case Report

#### Authors

#### Prerana Bhandari

Kent, Surrey & Sussex (KSS) Foundation School

#### Background

The use of online diet pills has increased due to rising rates of obesity, difficulty achieving and maintaining weight loss and a rise in social media influence. The contents of these pills are largely unregulated and there have been numerous case reports documenting severe supplement-related adverse effects, leading to liver transplants, ICU admissions, and fatalities. We present a case of diet pill induced hepatotoxicity, highlighting the importance of patient education and dangers of using such pills.

#### **Case Presentation**

A 48-year-old female presented with a 2-week history of progressive fatigue, malaise, anorexia, and dark-colored urine. Blood tests revealed grossly deranged liver function tests. Had started taking "herbal supplements" for weight loss 4 weeks ago.

#### Outcome

Rapid resolution of deranged liver function tests and symptoms; returned to normal range by day 110 post stopping diet supplements.

#### Follow Up Discussion

Mass spectrometry found 4 ingredients all of which were unlisted on the packaging and 2 are currently banned in the UK. Patients may avoid seeking medical advice, assuming these supplements are safe, yet they can lead to significant harm. Healthcare practitioners should inquire about supplement use, and improved postmarket surveillance, regulation and reporting are vital for public safety and risk assessment.

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Case report poster group - 1

# Laryngeal Tuberculosis: A rare presentation in the United Kingdom.

#### Authors

Alison Ferguson – alisonferguson95@gmail.com (Foundation Doctor)

Darren Yap – Darren.yap@mkuh.nhs.uk (ENT Specialist Registrar MRCS DOHNS)

Rabinder Randhawa – Rabinder.randhawa@mkuh.nhs.uk (Department of Respiratory and Chest medicine, Milton Keynes Unive

Wessex Foundation School

#### Background

Laryngeal tuberculosis (TB) is a rare form of TB found in the United Kingdom (UK). It requires prompt and aggressive treatment to reduce the risk of infectivity and progression of the disease to the surrounding structures. We present a case of laryngeal TB which was initially thought to be a malignant process.

#### **Case Presentation**

A fit and well 49-year-old male patient presented with a 3-month history of dysphonia and dry cough. The patient originates from The Philippines but has resided in the UK for over 15 years. Nasendoscopy showed an irregular, raised lesion in the intraarytenoid region. CT of neck and larynx showed a mass with possible cartilage invasion. Tissue histology and microbiology analysis of the suspected lesion confirmed the diagnosis of laryngeal TB. The patient was initiated on standard treatment for active TB and followed up by the respiratory and ENT departments on multiple occasions, showing no evidence of TB related complications.

#### Outcome

This paper highlights the importance of a thorough multi-disciplinary approach in the diagnosis and management of a rare condition in the UK.

#### Follow Up Discussion

Laryngeal TB is a rare extra-pulmonary manifestation of TB worldwide. This report presents an unusual case of laryngeal TB diagnosed in the UK. Literature review

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Case report poster group - 1

# Postoperative Tachycardia: A Sign Warranting Careful Analysis.

#### Authors

Lavindren Luke Panneerchelvam.

Yorkshire & Humber Foundation School

# Background

Postoperative tachycardia is a common sequela following surgery due to pain, operative stress or anaemia. This case report highlights the importance of thoroughly investigating postoperative tachycardia.

# **Case Presentation**

A 51-year-old lady with colorectal cancer was admitted for an ileostomy closure. The ileostomy reversal was successful, and she was expected to undergo routine postoperative recovery. Three hours after the procedure, she developed tachycardia. An ECG demonstrated sinus tachycardia. Physical examination revealed a soft abdomen. She had a white cell count of 21.6, CRP of 47, and normal coagulation parameters. The impression was that the aberration in heart rate was secondary to postoperative pain. Alterations were made to optimise analgesia. Over the next 24 hours, she remained tachycardic and started vomiting. Two further ECGs showed sinus tachycardia.

## Outcome

Concerned about an anastomotic leak, a CT scan was ordered, which demonstrated acute bowel infarction. An emergency laparotomy revealed an ischaemic bowel, liver, & gallbladder. Following surgery, she was transferred to Intensive Care, where she passed away.

# Follow Up Discussion

Although postoperative tachycardia is most likely a response to surgery, sinister pathologies such as hypercoagulability, ischaemia, & anastomotic leaks should be ruled out before alluding to postoperative pain.

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# 10 year delayed complication of tear trough filler: Case Report

## Authors

Swapnil Parmar, Tsong Qwong (Supervisor)

East Anglia Foundation School

# Background

Tear trough fillers have gained popularity recently for aesthetic reasons. However, there are also non-cosmetic indications in ophthalmology. Dermal fillers typically consist of hyaluronic acid (HA), due to its biocompatibility and easy reversibility. Complications normally include swelling, lumps, xanthelasma-like reaction and discolouration. The delayed complications have been found to occur on average around 16.8 months.

# **Case Presentation**

A 50 year old male patient presented with a 2 year history of bilateral lower lid swelling with redness. Past surgical history included previous hyaluronic acid tear trough fillers 10 years ago. Topical hydrocortisone 1% showed no improvement and MRI scan showed no evidence of structural changes.

# Outcome

Bilateral injection of hyaluronidase dissolved fillers to improved outcomes.

# Follow Up Discussion

HA can persist for many years and can cause presenting complaints of swelling, discolouration and lumps and nodules years after surgery.

The case highlights the need for a thorough surgical history and to include fillers as a differential for presenting symptoms.

With the increased use of HA in eye pathologies, ophthalmologists need to make patients aware of delayed reactions. This allows patients to make a more informed decision.

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Case report poster group - 1

# Benign Cystic Mesothelioma – a rare intra-abdominal tumour

#### Authors

Abigail Powell, Georgios Karagiannidis, Lawrence Toquero

East Anglia Foundation School

# Background

Benign cystic peritoneal mesothelioma is a rare intra-abdominal tumour with fewer than 200 cases reported in the literature (1). It has a high local recurrence rate, and typically affects women of reproductive age (2). There is currently no guidance for its treatment with some advocating for surgical removal, and others hyperthermic intraperitoneal chemotherapy. (3).

# **Case Presentation**

A 40-year-old female presented with a five-day history of gradual onset abdominal pain, with nausea and vomiting, anorexia and fever in the context of normal inflammatory markers. She was initially investigated with an ultrasound scan that showed free fluid in the pelvis and a 'multilocular cystic structure'. A subsequent CT scan showed a tubular fluid containing lesion in the right paracolic gutter, thought to represent an infective collection or a pseudomyxoma.

## Outcome

The patient's case was discussed with the Basingstoke Peritoneal Malignancy Institute who felt that the lesion may be a benign cystic mesothelioma. She was then taken for a diagnostic laparoscopy, with the diagnosis confirmed on histology.

# Follow Up Discussion

This case highlights the importance of seeking a second opinion. It also demonstrates the need for full clinical evaluation- despite normal laboratory results, her abdominal pain persisted, hence radiological investigations and MDT discussion were needed to

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CR110 Case report poster group - 1



# The Silent Resurgence: A Case of Ocular and Oto-Syphilis.

Authors

Kathleen Rafferty

Severn Foundation School

## Background

Syphilis, caused by Treponema Pallidum, is experiencing a concerning resurgence, with rapidly rising prevalence worldwide. In 2022, the UK reached the highest number of infectious syphilis diagnoses since 19481 (1). This case underscores the importance of considering syphilis as differential in patients presenting with atypical symptoms.

# **Case Presentation**

This case report details a 52-year-old man with no prior syphilis history presenting with rapidly worsening tinnitus and blurred vision. The patient was referred to a sexual health clinic, where laboratory investigations confirmed syphilis infection. He was treated with a two-week course of procaine penicillin and adjunctive corticosteroids.

## Outcome

Although there was marked initial improvement in the tinnitus, this plateaued, and the patient suffered irreversible visual changes.

# Follow Up Discussion

The escalating prevalence of syphilis is a global public health concern. Enhancing awareness of syphilis resurgence and its multifaceted clinical manifestations is essential for early detection, timely treatment, and the prevention of life-altering consequences. Maintaining vigilance and implementing proactive syphilis screening among sexually active individuals can contribute to reversing the trend of rising syphilis cases and mitigating its detrimental impact on public health.

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Case report poster group - 1

# Spotting the zebra amongst the horses: The difficulties of diagnosing rare conditions on the acute medical take

#### Authors

1st Author: Jessica Clair Smith

2nd Author: Rebecca Dickinson

Scotland Foundation School

# Background

"Common things are common" is often said in medical circles (1). A 72-year-old man with benign prostatic hypertrophy presented to the acute medical take with urinary urgency, frequency, dysuria and fevers.

# **Case Presentation**

Examination demonstrated left flank tenderness and scrotal swelling. Admission investigations showed raised inflammatory markers and acute kidney injury. He was treated for urinary sepsis with intravenous antibiotics and fluid resuscitation. Malignancy was within the differential. A renal and scrotal ultrasound demonstrated normal findings other than fluid around the testes. Despite appropriate management of infection, he continued to be pyrexial with a deteriorating renal function suggestive of an alternative diagnosis of intrinsic renal disease (2). Serology results were positive for antineutrophilic cytoplasmic antibodies and renal biopsy confirmed necrotising crescentic glomerulonephritis.

# Outcome

He required dialysis and within twenty-four hours of starting steroids, he became apyrexial. He improved but remained dialysis dependent on discharge.

# Follow Up Discussion

Urinary tract infections are a very common presentation on the acute medical take. Approximately one third of patients with prostatic enlargement develop urinary tract infections (3). Ongoing pyrexia despite good antibiotic cover should raise the suspicion of an alternative diagnosis (4). It is important to stay alert for uncommon pathologies presenting through the front door.

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CR112 Case report poster group - 1



# **Urachal Abscess: Case Report**

## Authors

Dr Craig Whitelaw, Mr Mohammed Saqib

North West of England Foundation School

# Background

The urachus is an embryological remnant which normally obliterates before birth. When incomplete obliteration occurs, malformations arise: Patent urachus. Urachal sinus. Vesico-urachal diverticulum or urachal cyst.

Usually diagnosed in infancy, most resolve within 2 years. Mostly asymptomatic unless infection.

Can go unrecognised until adulthood, may present as an acute abdomen. Can undergo malignant transformation.

# **Case Presentation**

34F attended A&E unwell with lower abdominal pain, tachycardic and pyrexial. Abdomen soft with severe tenderness suprapubically and at RIF with guarding. Inflammatory markers raised.

CTAP with contrast: collection anterosuperior to the bladder. Diagnosed as a urachal abscess. Treated with IV antibiotics. Improved. Transferred to a tertiary centre.

## Outcome

Patient improved clinically.

MR abdomen post-antibiotics revealed the cyst had shrank to 2.1 cm.

The appearance on MR was still indeterminate and malignancy could not be ruled out.

A 3-month follow-up MR scan was carried out which revealed complete resolution.

## Follow Up Discussion

Urachal remnants predispose to several complications.

Risk of infection is high.

Rare condition, unlikely to encounter, not in clinician's differential list.

Presentation is non-specific and can mimic other presentations. This can cause a delay in initiating treatment.

Treatment is not currently standardised.

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#NFDPD

There is a risk of malignant transformation.



Management in the paediatric population is different – more conservative.

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Case report poster group - 2

# A Unique Case of Bronchoperitoneal Fistula

#### Authors

Kisshan Raj Balakrishnan

Wales Foundation School

## Background

Bronchoperitoneal fistula (BPF) is a rare but fatal complication [1]. BPF is explained as a channel linking the bronchial tree and the peritoneal cavity. It could be due to infection, bronchial wall erosion by a tumour, or trauma [2].

## **Case Presentation**

We present a case of 68-year-old-man with a background of polycystic kidney, COPD and liver disease admitted for abdominal pain.

A CT was done which visualized an increase in size in both larger liver cyst and a probable infection in the sub-diaphragmatic cyst. A laparotomy was done for de-roofing of multi-cyst liver disease alongside a cholecystectomy. Re-look laparotomy was subsequently done for further drainage of the liver abscess and a visible fistula was identified through the dome of the right diaphragm. Inhalation was noted to cause gas to escape through the abdomen indicating BPF.

## Outcome

This case report highlights the importance of reporting cases of BPF. This can shine light on the potential of early diagnosis and surgical intervention on patients with BPF.

## Follow Up Discussion

BPF causes substantial impact on the quality of life of a patient and can be lifethreatening [3]. It can also increase the threat of complications like sepsis, pneumonia and respiratory failure.

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CR202 Case report poster group - 2



# Acute kidney injury induced by antimicrobial medications in a patient with metabolic encephalopathy.

#### Authors

## Dr Amina Waheed

Essex, Bedfordshire & Hertfordshire (EBH) Foundation School

# Background

This case report demonstrates the danger of treating all patients immediately with antimicrobial agents, without carefully considering the need for such agents. It also demonstrates the nephrotoxicity of co-amoxiclav and/or acyclovir.

## **Case Presentation**

Mr NA, a 34 year old gentleman, presented with confusion and hallucinations on the background of 10 days of non-productive cough, fever and coryzal symptoms. He had word-finding difficulties and reported visual hallucinations. His past medical history included Crohn's disease and was taking regular azathioprine and folic acid. Chest X-ray showed a right lower zone pneumonia. Mr NA was treated with acyclovir for potential viral encephalitis and co-amoxiclav. Within 24 hours of commencing these medications, the patient's previously normal renal function deteriorated; his creatinine rose to 424, urea 7.6, normal electrolytes, indicating a Stage 3 acute kidney injury. The acyclovir was stopped and co-amoxiclav switched to doxycycline. His renal function recovered in the following days, and he was diagnosed with likely acute interstitial nephritis. MRI head demonstrated a hypointense region in the left thalamus, and EEG was consistent with metabolic encephalopathy, likely secondary to his pneumonia as he was on immunosuppressant medication.

## Outcome

Nephrotoxicity is listed as a very rare side-effect of co-amoxiclav, and there are very few

## Follow Up Discussion

#### References

1 https://bnf.nice.org.uk/

CR203 Case report poster group - 2



# Polyarticular septic arthritis in the seemingly well patient

#### **Authors**

# Lewis Cobb

# London Foundation School

# Background

Septic arthritis is perhaps the most important differential we must consider in an acutely swollen joint; however it is often neglected as a differential when several joints are involved. Monoarticular septic arthritis accounts for 85% of cases (1) leaving a still significant contribution from polyarticular septic arthritis (PASA).

# **Case Presentation**

I report a case of PASA in a 58 year old female. She presented with new onset back pain alongside arthralgia and swelling in the shoulders, wrists and left knee. The patient recalled no prodromal symptoms or inoculation of the joints. Investigations identified a possible discitis on imaging and positive bacterial aspirate from the joints. She received washouts and an extended course of IV antibiotics. It was later discovered she had experienced a significant burn in the weeks prior to admission which was the likely entry point for infection. Further blood tests also discovered a diagnosis of hepatitis C likely acquired from IV drug use the patient had engaged in as a teenager.

# Outcome

Detailed above in case presentation

# Follow Up Discussion

The case presented here demonstrates the importance of having PASA as a differential in multiple joint swelling, the importance of asking for all relevant history despite the patient's demographic and the necessity of ruling out immunocompromise in unusual presentations.

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#NFDPD



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pages, 2015. https://doi.org/10.1155/2015/602137



Case report poster group - 2

# A Rare Case of Retroperitoneal Spindle Cell Carcinoma (SpCC)

Authors

Sally Fong Li Er

Trent Foundation School

# Background

Spindle cell carcinoma (SpCC) is a rare variant of squamous cell carcinoma (SCC) that can occur anywhere in the body. Its low incidence limits comprehensive research for pathology and treatment. I present a case of a patient recently diagnosed with retroperitoneal SpCC.

## **Case Presentation**

A 67-year-old man was referred to the Emergency Department due to abnormal ultrasound findings. He presented with abdominal pain, distension and a palpable mass in the right lower abdomen. Blood test were normal. Ultrasound and CT scans revealed a solid heterogenous 15.4 x 13.5 x 8.9 cm mass. A biopsy confirmed malignant spindle cell tumour, grade T4N0M0.

He was Initially referred for endoscopy and ultrasound in September 2021 due to abdominal pain, reflux and weight loss. No abnormalities were found. He was diagnosed with reflux, but symptoms persisted, raising uncertainty about the potential missed tumour.

# Outcome

His case was referred to the Retroperitoneal and Sarcoma Multidisplinary Team. Chemotherapy (Doxorubicin and Ifosfamide) was chosen over surgery due to the risk of needing lifelong total parenteral nutrition.

# Follow Up Discussion

SpCC is rare, hampering research and treatment options. More study is crucial to enhance understanding of disease presentation, investigation, prognosis, and management for improved patient quality of life and lifespan.

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Case report poster group - 2

# A case of chronic post-operative endophthalmitis caused by acinetobacter lwoffii, occurring eight months post-cataract surgery.

#### **Authors**

Dr. Rhys Gitau-Jones (Foundation Year 2 Doctor, Wrexham Maelor Hospital)

Mr. Chong Ng (Consultant Ophthalmic Surgeon, Abergele Eye Hospital)

Wales Foundation School

## Background

Chronic post-operative endophthalmitis (CPE) is a serious intraocular infection that occurs greater than six weeks after eye surgery. Vision loss can be significant, and diagnosis is crucial as prognosis is dependent on prompt treatment with intravitreal antibiotics.1

## **Case Presentation**

A 69 year old male with diabetes mellitus presented with one week of blurred vision and pain in left eye (LE). He had undergone uncomplicated cataract surgery eight months previously. Visual acuity (VA) was limited to hand movements, and examination revealed injected conjunctiva, geographically corneal oedema, and ocular hypertension. Initial treatment consisted of topical steroids, cycloplegics, and ocular hypotensives.

## Outcome

At day five, there was no improvement in VA, and minimal hypopyon was visible. The patient was diagnosed with CPE, and underwent same-day vitrectomy with intravitreal antibiotic therapy. Vitreal fluid culture was positive for acinetobacter lwoffii. Response to treatment was poor and by week four there remained no improvement in VA.

## Follow Up Discussion

CPE can pose diagnostic difficulties for clinicians, with non-specific symptoms developing far outside the typical window for post-operative complications. Acinetobacter lwoffii has been reported to cause post-operative endophthalmitis acutely2, but to our knowledge this is the first reported case of CPE caused by this organism.

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Case report poster group - 2

# Combined Intra-Abdominal, Intra-Thoracic and Subcutaneous Splenosis.

#### Authors

Eyad Wahab, Ahmad Khalifa, Mohamad Saeed.

West Midlands Central Foundation School

# Background

Splenosis is a rare condition that results from the auto-transplantation of splenic parenchyma into unanticipated locations, usually after traumatic splenic rupture. Common locations include the abdomen and pelvic cavity, with less common locations such as the thorax or subcutaneous tissue also being reported.

# **Case Presentation**

approximately 10 days duration. The pain was not relieved by any over-the counter (OTC) analgesic medications and there was no associated nausea or vomiting. Upon physical examination, a painful swelling was palpated on a healed surgical scar in the left lateral abdomen. Past surgical history included an emergency exploratory laparotomy with left nephrectomy, splenectomy, partial left colostomy and left colostomy due to a bomb attack during the Lebanon war at age 10.

## Outcome

A 21-year-old woman developed rare intra-abdominal, intra-thoracic, and subcutaneous splenosis 11 years after trauma. Typically benign, splenosis is diagnosed non-invasively with imaging or scintigraphy. In cases of malignancy risk or inconclusive imaging, CT-guided FNA or VATS biopsy is needed. Surgery is reserved for symptomatic cases.

## Follow Up Discussion

Our approach had limitations, as we lacked follow-up and histopathology results for a definitive diagnosis, relying solely on gross pathology and imaging. Moreover, incomplete patient history documentation made it challenging to assess potential diaphragmatic involvement in splenic tissue dissemination into the thoracic cavity.

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# Guillain-Barré Syndrome with Cognitive Impairment

**Authors** 

John Saganty

West Midlands North Foundation School

# Background

Guillain-Barré Syndrome (GBS) is an acute inflammatory condition of the peripheral nervous system and presents with ascending symmetrical muscle weakness.(1) While it is linked with psychiatric conditions, it is rarely associated with cognitive impairment.(2)

# **Case Presentation**

This 76-year-old female with diagnosed anxiety and depression, presented to hospital by ambulance with lower limb weakness which was preceded by a flu-like illness three weeks prior. The patient was diagnosed with GBS Miller-Fisher variant and after being stepped down from critical care, demonstrated signs of cognitive impairment. Not knowing the reason for her admission and current health. Fluctuating between periods of lucidity and confusion in a single conversation.

# Outcome

The patient was successfully treated for GBS, however rehabilitation physiotherapy was complicated by the cognitive impairment which did not return to baseline. This prevented the patient from understanding its value, often being aggressive and uncooperative, delaying her recovery.

# Follow Up Discussion

It remains unclear whether the cognitive impairment is secondary to an acquired brain injury from prolonged ITU admission, peri-arrest, episodes of hypoxia and delirium or whether this could be a direct consequence of GBS. Previously, one case reported cognitive impairment with Miller-Fisher variant, which resolved with treatment.(3) However, in our case, cognitive impairment did not resolve.

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# Amyand Hernia With Periappendicitis In A Patient With Recurrent Inguinal Hernia

Authors

Dr. Mohit Saravana Perumal

East Anglia Foundation School

# Background

Under 1% of all appendix specimens post appendectomy are found to be neoplastic and Amyand hernia in itself is estimated to make up 1% of all adult inguinal hernia.

## **Case Presentation**

A case report of a 83 year old male presenting to the A&E with a 2 day history of severe RIF pain associated with diarrhea. Past medical history includes 2 left sided and 1 Right sided inguinal hernia repair. Examination revealed a Right sided non-reducible tender inguinal hernia. CT-AP confirmed the same with the appendix inside the hernia sac showing changes of acute inflammation consistent with Amyand hernia. During the open repair of the hernia, a sac of significant size was seen enclosing an inflamed appendix of 11 cm in length and 1.6 cm in transverse diameter. With the first look at the hernia sac and its size, a possible malignant diagnosis was considered. With appendicitis, mesh repair remains controversial due to its chances of increasing wound infection, sepsis and fistula formation and hence the hernia sac was reduced without a mesh and an appendectomy was conducted.

## Outcome

Surgical histology showed severe acute transmural appendicitis associated with periappendicitis, subserosal liponecrosis, abscess formation and serositis, with findings persistent with a rupture.

## Follow Up Discussion

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Case report poster group - 2

# Pearls and Pitfalls in Investigating Hyponatraemia: A Case of An Unusual Cause of Hyponatraemia.

#### Authors

Dr Alexandra Thomas, Dr Hema Jagannatha, Dr Venkat Molakalapalli

Severn Foundation School

# Background

Hyponatraemia is the most common electrolyte imbalance encountered clinically.1 Investigating its aetiology remains challenging due to the multitude of potential causes.

# **Case Presentation**

An 80-year-old gentleman presented multiple times to A&E with vomiting, which he worried was secondary to accidental pesticide ingestion. He was haemodynamically stable with no new focal neurology or abdominal pain. Medical history included gout and medications included allopurinol. Investigations revealed moderate hyponatraemia (125), which was corrected with IV NaCl 0.9%, and a normal chest x-ray and recent CTCAP.

He later presented to A&E with confusion and abdominal pain. Investigations revealed severe hypotonic hyponatraemia (serum Na+ 122, urinary Na+ 83, plasma osmolality 258, urine osmolality 428).2 A 9am cortisol (12) indicated adrenal insufficiency and he was treated with hydrocortisone. A pituitary profile subsequently performed by the endocrine team revealed marked hyperprolactinemia with hypopituitarism (Testosterone<0.3, FSH 2.0, LH<0.5, Free T4 5.3, TSH 6.88, Prolactin 13117). CT head showed a 14x22x15mm prolactinoma, which was treated with cabergoline.

## Outcome

(see above)

## Follow Up Discussion

Prolactinoma symptoms in men remain non-specific, however presentation with isolated hyponatraemia remains unusual. Overall, this case highlights the importance of a systematic approach in assessing individuals presenting with new hyponatraemia, to include adrenal and thyroid function tests and appropriate follow-up.

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# Central Pontine Myelinolysis CPM: A Patient study Case Report

Authors

Dr. Chelsea Walton

Northern Foundation School

# Background

Central pontine myelinolysis (CPM) also known as osmotic demyelination syndrome is an infrequent neurological disorder that occurs after rapid iatrogenic correction of sodium. Most cases of Central pontine myelinolysis have been associated in patients with a history of chronic alcohol abuse, malnutrition and diuretic use (1). We report a case of a 59 year old patient who was diagnosed with CPM.

# **Case Presentation**

A 59 year old male with a history of chronic alcohol dependence admitted with low GCS, was treated for acute alcohol withdrawal and a profound hyponatraemia of 101 mEq/L which was treated with immediate fluid resuscitation. The sodium was corrected initially by 15mmol/L in the first 10 hours of treatment. Neurological examination showed distinct global limb weakness, cerebellar dysfunction, bulbar symptoms including swallowing and hypophonia developed <7 days from correction. MRI confirmed diagnosis an acute diagnosis of osmotic demyelination involving the central pontine white matter and less prominently the basal ganglia and thalami.

# Outcome

In the context of hyponatraemia, we aim to increase Na by 4-6mmol/L/day with a maximum of

# Follow Up Discussion

Both untreated and overtreated hyponatraemia can result in severe and in some cases, fatal neurological complications. High risk groups of patients including chronic alcohol abuse should be identified.

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