

# 11<sup>TH</sup> MCHFT EXPOSITION

## BOOK OF ABSTRACTS



1st July 2016



**Leighton Exposition**

**Book of Abstracts**

**‘Inspiring Innovation’**

1<sup>st</sup> July 2016

# Acknowledgements

## Mid Cheshire Hospitals NHS Foundation Trust (MCHFT)

### MCHFT Organising Committee

Hilary Moulton	Clinical Audit Lead
Charis Emmett	Research Management & Governance Lead
Tracy Sellors	Senior Clinical Audit Facilitator
Susan Smith	Senior Librarian, Joint Education and Training Library
Jack Fairhall	Interim Medical Education Manager, Postgraduate Medical Centre
Jonathan Forrester	Communications Manager
Karen Bailey	Assistant Management Accountant
Cherie Nevitt	Clinical Effectiveness Administration Assistant

### MCHFT Support Teams

Clinical Audit  
Research Management and Governance  
Joint Education and Training Library  
Postgraduate Medical Centre  
Communications

### Adjudicators

Professor Jacky Hayden CBE	Dean of Postgraduate Medical Studies, Health Education England
Chief Operating Officer Jacqui Pirmohamed	Clinical Research Network, NWC
Alison Lynch	Director of Nursing and Quality, MCHFT

### MCHFT Financial Support/Sponsors

Research and Development Charitable Funds

# LEIGHTON EXPOSITION – 2016

## ‘Inspiring Innovation’

1<sup>st</sup> July 2016: 10:00 - 15:00

Postgraduate Medical Centre, Leighton Hospital, Crewe

### **PROGRAMME**

- |       |  |
|-------|--|
| 09:30 | Registration   |
| 10:00 | Welcome & Official Opening of the Exposition: <ul style="list-style-type: none"><li>• <i>Edward Timpson, MP</i></li></ul>  |
| 10:15 | Introduction of Adjudication Panel: <ul style="list-style-type: none"><li>• <i>Professor Jacky Hayden CBE<br/>Dean of Postgraduate Medical Studies, Health Education England</i></li><li>• <i>Chief Operating Officer Jacqui Pirmohamed<br/>Clinical Research Network, North West Coast</i></li><li>• <i>Alison Lynch<br/>Director of Nursing and Quality, MCHFT</i></li></ul> |
| 10:30 | Start of Competition for Best Poster   |
| 12:30 | Lunch  |
| 13:30 | Announcement of Competition Winners & Presentation of Awards   |
| 14:00 | Continued Viewing and Discussion   |
| 15:00 | Close  |

**Tea and coffee will be available throughout the day**

# Past Winners

## 2015 DELIVERING QUALITY

<b>1st</b>	“Clinical Audit of End of Life Care for Anticipated Deaths at MCHFT” <i>Edwards C, Fullerton L, Estcourt K &amp; Platt R</i>
<b>2nd</b>	“Intraoperative Complications of Cataract Surgery: Risk Stratification” <i>Damani A &amp; Kotamarthi V</i>
<b>3rd</b>	“Elimination of Hospital Acquired Moisture Lesions” <i>Shenton R, Hartley J &amp; Wilkinson R</i>
<b>Student</b>	“Student Quality Ambassadors and the 15 Steps Challenge” <i>Hensman L</i>

## 2014 EVIDENCING QUALITY

<b>1st</b>	“Codeine as Analgesia Post-Tonsillectomy in Paediatric Patients: An Audit of Practice” <i>Wilson L &amp; Greene M</i>
<b>2nd</b>	“Sepsis in Acute Surgical Admissions – Compliance With the Sepsis Six Guidelines and Its Correlation With 30-day Morbidity and Mortality” <i>Gerakopoulos S, Balance L, Slavin J</i>
<b>3rd</b>	“The Urgent Care Centre at MCHFT, The IV @ Home for Cellulitis Pathway” <i>Tildsley D, Farrington M, Couper K, Brunt E, Slater R, Bickley R, Butler-Barnes J, Brown T, Muirhead R, Hammond E, Chapple S, Lockett C, Chishti Z, Lam C, Roughsedge N, Billington C, Davies M, Burns L</i>
<b>Student</b>	“Audit of Blood Glucose Monitoring and Insulin Dose Adjustment in Patients with Diabetes” <i>Butler R &amp; Ritchings A</i>

**2012**

**EXCELLENCE AND INNOVATION**

<b>1st</b>	“The Assessment and Monitoring of Urinary Catheters on Medical Wards in Leighton Hospital” “A Review into Stroke Mortality in Leighton Hospital: Terminal Events” “A Review into Stroke Mortality in Leighton Hospital: Post Stroke Complications” <i>Somauroo MI</i>
<b>2nd</b>	“CT Dose Audit” <i>Greenwood S</i>
<b>3rd</b>	“An Audit of Medicines Reconciliation Accuracy at MCHFT” <i>Wilkinson L</i>
<b>Student</b>	“How Did You Get Here” <i>Parr K</i>

**2011**

**CHANGING PRACTICE,  
INFLUENCING OUTCOMES**

<b>1st</b>	“Achieving a 14 Day Turn Around in Gynae Cytology” <i>Randall A</i>
<b>2nd</b>	“Performing the Foundation Teaching Programme at Leighton Hospital: Going Back to the Foundations” <i>Jackson V, Wilson A &amp; Zaman S</i>
<b>3rd</b>	“Implementing NICE Workplace Health Guidance in Mid Cheshire Hospitals” <i>Preece R</i>
<b>Student</b>	“What are the Sources of Anxiety When Attending a Sexual Health Clinic and can we Improve Patient Experience” <i>Virdee T</i>

**2010**

**QUALITY COUNTS**

<b>1st</b>	“Are Intubated Patients Having Their Cuff Pressure Documented Appropriately and Maintained within an Acceptable Range of Pressures” <i>Eyeington C</i>
<b>2nd</b>	“Does Volume-Outcome Relationship Exist in the Hospital Episode Statistics (HES) Data? A Quantitative Analysis of Hospital Volume & In-Hospital Mortality for Complex Cancer Surgery Based on HES” <i>EI-Dhuwaib Y, Cade D, Slavin JP &amp; Willmott S</i>
<b>3rd</b>	“Do We Follow NICE Fever Guidelines in Assessment of Infants in a District General Hospital Paediatric Unit” <i>Yelland M &amp; Thompson A</i>
<b>Student</b>	“Opportunistic Chlamydia Screening: Can Chlamydia Screening in the Emergency Department Reach a Different Section of the Target Population” <i>Stanley L &amp; Ellks R</i>

**2009**

**SHARED LEARNING**

<b>1st</b>	“Communication Friendly Environments – Promoting Autonomy and Access for People with Memory and Cognitive Impairment” <i>Learoyd J &amp; Dementia Care Pathway Group</i>
<b>2nd</b>	“The Effect of Consultant Caseload on re-Operation for Recurrence following Inguinal Hernia Repair in England” <i>EI-Dhuwaib Y, David G, Corless DJ &amp; Slavin JP</i>
<b>3rd</b>	“Medicines Reconciliation on Admission at a District General Hospital” <i>Ritchings A, Thomas K, Bradbury C &amp; Allen T</i>
<b>H.C.</b>	“Admissions for IV Antibiotics in Children with Cystic Fibrosis – An Audit of Admission Documentation in Multidisciplinary Case notes” <i>Bowen A &amp; Ellison J</i>

**2008**

**IMPROVING QUALITY**

**1st** “Collaborative Working : Implementing National Guidelines to Recognise and Respond to Acute Illness Amongst the Obstetric In-Patient Population”  
*Hancock A & Hulse C*

**2nd** “Patient Satisfaction – Post Stapled Haemorrhoidopexy in a District General Hospital”  
*Ved A & Chowdhary S*

**3rd** “Implementation of Healthcare Recommendations Arising from the Victoria Climbié Inquiry 2003”  
*Pugh RE, Gardner S & Rozzell M*

**Student** “The Challenge and Evidence Based Solution of the Management of Pain in Elderly Medical Patients”  
*Talbot A & de Mellow WF*

**2007**

**MAKING KNOWLEDGE COUNT**

**1st** “Chlamydia Screening in Schools in Central & Eastern Cheshire”  
*Ritchie D & Hall J*

**2nd** “Orthopaedic Re-Admissions for Fracture Neck of Femur”  
*Pegg D, Simpson H & Rozzell M*

**3rd** “Therapies Early Supported Discharge Team: A Pilot for Stroke Patients”  
*Prowse J & Masterson H*



**2006**

**GETTING EVIDENCE INTO PRACTICE**

- |            |   |
|------------|---|
| <b>1st</b> | “A Prospective Study of the Relationship of Severity Assessed by CURB-65 Score & Mortality in Patients with Community Acquired Pneumonia”<br><i>Kedia R, Kumar A &amp; Khetan S</i> |
| <b>2nd</b> | “Patient’s Satisfaction with Day Case Tonsillectomy”<br><i>Chan P</i>   |
| <b>3rd</b> | “Repeat Hospital Admissions following Cholecystitis in England 2003 / 2004”<br><i>David G, Al-Sarira A, Corless DJ &amp; Slavin J</i>   |

**2005**

**INAUGURAL EXPOSITION**

- |            |   |
|------------|---|
| <b>1st</b> | “Colorectal Symptoms in the Community – A Ticking Time Bomb”<br><i>Soin G, Armitage J, Selvachandran SN &amp; Cade D</i>  |
| <b>2nd</b> | “Is a DRE Essential in Diagnosing Early Prostate Cancer?”<br><i>Phillip J, Marr C, Hough C &amp; Javle P</i>  |
| <b>3rd</b> | “A Prospective Study of Yield of Fibre optic Bronchoscopy (FOD) and CT Thorax for Lung Cancer in Patients with Haemoptysis with Normal or Non-localising CXR”<br><i>Kedia R et al</i> |

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- 16 Turnaround Time for Paediatric Hearing Aid Ear Moulds
- 17 Antibiotic Prescribing in Surgery

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- 23 Screening for Hypogonadism: Real World Considerations: Results from the Cheshire Primary Care Cohort
- 24 Social Deprivation, Diabetic Foot Ulceration And Mortality: Conclusions of a Primary Care Based Study
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## Abstract 1

### EXPLORING THE LIBRARY & KNOWLEDGE SERVICE ROLE IN GUIDELINES MANAGEMENT

#### Author(s):

Smith, S., Senior Librarian, Mid Cheshire Hospitals NHS Foundation Trust; Owen, S., Assistant Librarian, Wrightington, Wigan and Leigh NHS Foundation Trust; Gilroy, D., Library and Knowledge Service Development Manager, Health Education England Yorkshire & Humber and Pratchett, T., Knowledge and Library Services Manager, Lancashire Teaching Hospitals NHS Foundation Trust.

#### Background/Introduction/Aims:

This was a collaborative project between Health Libraries North West Quality Group and Yorkshire and Humber Health Library and Knowledge Network to review the current roles of Library and Knowledge Services (LKS) in producing and disseminating guidelines, with a view to identify and share current best practice and provide evidence to be used by those who were keen to become more involved in the process.

#### Methodology:

A Survey Monkey questionnaire was disseminated to Library & Knowledge Service (LKS) staff across NHS England to explore the extent of their involvement in the dissemination of externally produced guidelines and supporting the production and management of internally produced guidelines. The survey was disseminated via the LIS-Medical and LIHNN mailing lists to library staff working in the 215 Library services in NHS England. Responses were analysed using Survey Monkey and qualitative responses themes coded by the task & finish group.

#### Results:

Preliminary analysis of the survey indicates 113 responses relating to the delivery of current awareness alerts of external guidelines, which represents a 51% return rate from the 215 services. 3 results from Higher Education Institutes and response from NHS Wales were discarded as out of scope. 57% of LKS services disseminate externally produced guidelines within their organisations. Those offering the service were predominantly clinical focussed, but 41% LKS services disseminate guidelines to support non-clinical staff as well.

In relation to the management of internal guidelines, we received 88 responses, with only 10% not providing a literature search service to support guideline development: 53% deliver the service systematically for updating the guidelines. Other LKS supporting services offered: cataloguing (18%), alerting when guidelines are due for review (10%), archiving (9%), writing guidelines (1%), proof reading (14%), reference check (22%) and 28% other responses that indicate the LKS lead the process or have a knowledge management role.

#### Conclusions/Recommendations:

There is evidence to suggest that this is an emerging role for LKS. The study highlighted a confusion in terminology around what counts as a guideline, standard operating practice/procedure and policy, with variance between organisations. Before ascertaining best practice there needs to be further understanding of document classification and an extension of the survey to review practice of non-LKS departments that lead or are involved in the process. This is the first step in assessing national best practice, with future research requiring cross-departmental collaboration.

#### Actions taken:

The results will be presented at the Health Libraries Group Conference, Sept 2016 and disseminated through LIS-Medical. The research will be fed into work streams around Health Education England's Knowledge for Healthcare Framework. Follow-up is planned to review case studies around LKS best practice and to develop a toolkit to support the Library Quality Assurance Framework Section 5.4 Knowledge Management.

## Abstract 2

### AN AUDIT OF THE PRIMARY VISION SCREENING SERVICE IN SOUTH CHESHIRE AND VALE ROYAL

**Author(s):**

Lovegrove S, Orthoptist, Eye Care Centre

**Background/Introduction/Aims:**

In 2013, an audit on our primary vision screening service showed that we were no longer meeting the revised national recommended vision screening guidelines. In 2014 we changed our primary vision screening.

Previously children were invited to a vision screen by an Orthoptist at 3 years 6 months in community clinics. Now they are screened at school entry, with opt out consent, by School Nursing Assistants who have been trained and are supported by Orthoptists.

The aim of the audit was to prove that the change to our primary vision screening service is meeting national guidelines.

**Methodology:**

This was a prospective audit of the school entry vision screening service.

**Results:**

- The percentage of children screened has increased from 65.3% to 99.7%.
- 100% of children are being screened using the recommended test which has increased from 42%.
- 100% are screened between 4 and 5 years old, which has increased from 13%.
- They are being screened by professionals who have been trained and are supported by Orthoptists.
- 60% of children referred by the School Nursing Assistants were confirmed to have visual loss by the Orthoptist at their secondary Orthoptic assessment. This confirms the need for a secondary Orthoptic assessment to prevent unnecessary invasive investigation of a cycloplegic refraction.
- 97% of children who are referred from their secondary Orthoptic assessment are confirmed to have visual loss that requires observation or treatment.

**Conclusions/Recommendations:**

This audit confirms that the change to the primary vision screening service in South Cheshire and Vale Royal has brought it in line with the national recommended vision screening guidelines.

**Actions taken:**

We will audit the vision screening service annually to ensure the standards are maintained.

### Abstract 3

## DEVELOPING ONE STOP PR BLEEDING CLINIC SERVICE (QUALITY IMPROVEMENT PROJECT)

### Author(s):

Kazem M A, Bruce C A, Hardman J H, Nockolds C L, Khan A U  
General Surgery Department, Leighton Hospital

### Background/Introduction/Aims:

The Royal College of Surgeons in England published in 2013 commissioning guide for rectal bleeding. In this guide it was recommended to offer one stop clinic for assessment and treatment of both haemorrhoids and anal fissures.

Currently our patients who are referred for assessment and treatment of haemorrhoids will require a minimum of two appointments; one as OPD attendance and the second one for the endoscopy. Some of these patients may even have a follow up at a later date, generated following the scope to discuss findings of the scope and offer treatment.

Our aim was to assess if introducing a one stop rectal bleeding clinic will reduce patients waiting time, as it will offer assessment and treatment at the same time.

### Methodology:

A prospective audit of patients' outcomes who were seen in the one stop clinic was undertaken. At the same time a similar cohort of patients was identified, this cohort went through the current pathway. We compared outcomes of both groups with regard to waiting times and follow up. Patients' questionnaire was used to assess patients' perspective with regard to the idea of one stop clinic for PR bleeding.

### Results:

30 patients were seen and treated in six sessions between March - June 2015. 28 patients were identified for the comparison group.

Average waiting time to OPD was 7.4 weeks vs 9.6 weeks in the current pathway, and for Flexible Sigmoidoscopy was 7.4 weeks vs 17.3 weeks in the current pathway. None of the one stop patients waited more than 18 weeks for their treatment. 67.9% of patient seen in the colorectal clinic as per current pathway had a follow up appointment after the scope in comparison to only 6.7% in the one stop PR bleeding clinic.

Patients' survey demonstrated high satisfaction, and a significant number would recommend the service to family or friends.

### Conclusions/Recommendations:

One stop PR bleeding clinic reduced waiting time to OPD and flexible sigmoidoscopy and reduced follow up visits. It recommended offering this service on a regular basis.

### Actions taken:

Currently the colorectal team is working on developing this service to be offered on a regular basis.



## Abstract 4

### INTRANET REFERRAL PATHWAY - QUALITY IMPROVEMENT PROJECT

#### Author(s):

Apati N, Beeston M, Williams B, Duckett S

Cardiology/ Medicine and Emergency Care Division and IT Service, Leighton Hospital, Crewe, United Kingdom

#### Introduction/Aims:

Inpatient referrals to the cardiology team were previously performed via a faxed referral pathway. A review identified significant weaknesses in this process due to:

- delays in patient assessment impacting on length of stay and quality of care
- incoherent and ineligible referrals
- no referring consultant information
- missed or lost referrals
- potential risk of breaching data protection
- no governance structure

We conducted a pilot project that was later implemented in the form of an intranet referral pathway to address these issues, in conjunction with an intranet-based cardiology rota ensuring clear designation of responsibility within the team for referrals.

Our aim was to ensure that all routine inpatient referrals were seen within 48 working hours, and urgent referrals seen within 24 hours.

#### Methodology:

We initially piloted and set up an intranet referral pathway for heart failure referrals in May 2014. With the assistance of local IT services, we amended the referral system to include all cardiology referrals. We developed an online system as an easy-to-use website with drop down boxes, tick boxes, and mandatory fields. The structured and simplified referral system aligned to a cardiology rota allowed us to manage referrals. Furthermore, we were able to analyse the data in real time to review the appropriateness of referrals, measure patient flow, average time for patient review and quantify workload within our department.

#### Results:

Since going live on the 11<sup>th</sup> August 2015, a total of 745 referrals (530 General Cardiology and 215 Heart Failure) have been received, approximately 20 referrals per week. Accepting the bias of weekend days, bank holidays and omission of actioning referrals at the time of review, our results showed that:

37% of general cardiology referrals were actioned within 24 hours, 87% within 48hrs, with only 13% not actioned within 48hrs.

35% of heart failure referrals were seen within 24 hours, 82% seen in 48 hours, with only 18% seen after 48 hours.

#### Conclusions:

The on line referral service has addressed the weakness of the previous system allowing tracking of referrals, evidence of work load and providing a governance structure that was not previously present. This has significant benefit for patient care and the potential to now expand into other specialties.

## Abstract 5

### RCM ANNUAL MIDWIFERY AWARDS 2015: MOTHERCARE AWARD FOR MIDWIFERY SERVICE OF THE YEAR

#### Author(s):

McNamara S, Divisional Quality Support Midwife, Women & Children's, MCHFT  
Sellors T, Senior Clinical Audit Facilitator, Clinical Audit, MCHFT

#### Background/Introduction/Aims:

MCHFT Maternity Service had no direction, a poor management structure and limited leadership. The Supervisors of Midwives [SOMs] were not integrating effectively into the service. The birthing pool in the Labour Ward was rarely utilised and there was no stand-alone Midwifery Led Unit [MLU]. The unit lacked designated Triage, Induction of Labour area, had only one Maternity Theatre and had no accreditation for breast feeding. Poor integration between the Hospital and Community Midwives resulted in low staff morale and poor engagement with management. There was no service user involvement and any feedback received was from complaints and often negative. The division looked at:

- Evidence of innovation and excellence in the provision of the maternity service
- Involvement of service users in design of services to provide choice
- Evidence of effective team working throughout the service
- Involvement and engagement with the midwifery team to ensure midwives and maternity support workers are enabled to work effectively
- Evidence of sustainable and responsive planning to ensure that the workforce is meets demographic and service imperatives

#### Methodology:

The following areas were addressed:

#### Staffing reconfiguration:

- Following a consultation with staff, clinical areas were staffed by a core group of midwives with the remainder working on a rotational basis
- Advanced Midwifery Practitioners were allocated to lead within a Clinical Area
- Community Midwife Team caseloads were re-distributed within GP Surgeries to re-establish multidisciplinary relationships with GPs and service users
- An Infant Feeding Team was developed to drive forward Baby Friendly Initiative [BFI] standards

#### Refurbishment of the Unit:

- A re-designed Labour Ward Suite opened. Plans were displayed within the Antenatal Clinic, service users were asked for feedback and their ideas incorporated
- A stand-alone MLU
- A refurbished Antenatal-Postnatal Ward
- A new Level 2 Neonatal Intensive Care Unit

#### Results:

- In January 2014 the Care Quality Commission [CQC] Maternity Survey scored 9.1 out of 10
- Achieved Clinical Negligence Scheme for Trusts [CNST] Level 3 in March 2014
- The CQC Inspection in October 2014 has rated the Trust as "Good"
- The SOMs were awarded the British Journal of Midwifery Award for Leadership in Midwifery Award March 2015
- Divisional Quality team nominated for Divisional Team of the Year 2014 & 2015
- BFI Stage 3 Accreditation achieved in May 2015

#### Actions taken:

- All newly qualified Midwives are now placed on a preceptorship programme

- The Supervisor of Midwives are represented at divisional meetings and committees and liaise with the Head of Midwifery and Director of Nursing
- Complementary therapies offered on the MLU
- Collaboration with Staffordshire University to take cohorts of midwifery students

## **Abstract 6**

### **DELIVERING THE EVIDENCE TO INFORM PRACTICE: A DOUBLE-BLIND, RANDOMISED, PLACEBO-CONTROLLED TRIAL OF VAGINAL PROGESTERONE**

**Author(s):**

Dixon, C. and Brown, J., Research Midwives, MCHFT

**Background/Introduction/Aims:**

Previous research suggested that progesterone administration may be effective in preventing preterm birth in high risk singleton pregnancies but there is uncertainty how it works and longer term effects on the child. Leighton Hospital was one of 65 sites in the UK for the OPPTIMUM study to contribute to 6,408 high risk women being tested of which 1,228 women were randomised. The objective of the study was to determine whether vaginal progesterone prophylaxis given to reduce the risk of preterm birth affects neonatal and childhood outcomes. This is the largest trial of progesterone to prevent preterm birth.

**Methodology:**

The study was a double-blind, randomised, placebo-controlled trial of vaginal progesterone (200mg daily). The women were identified and approached in the antenatal clinic. The study comprised a screening phase between 10-24 weeks of pregnancy followed by randomization of eligible women. The participant administered the vaginal study medication daily, commencing from 22–24 weeks of gestation until 34 weeks or delivery of the baby, whichever was sooner. The infants were followed up and assessed at two years of age.

**Results:**

The primary outcomes included fetal death or birth before 34 weeks and 0 days gestation, a composite of death and major morbidity, brain injury or bronchopulmonary dysplasia (neonatal), and a standardised cognitive score at 2 years of age. OPPTIMUM provides strong evidence that the use of progesterone from 22–24 to 34 gestational weeks has no demonstrable effect on 2 year neuro developmental outcomes, either as cognitive scores or impairments, suggesting that progesterone prophylaxis to prevent preterm birth appears safe for the baby (at least up to 2 years of age).

**Conclusions/Recommendations:**

The trial failed to prove the hypotheses that progesterone prevents preterm birth, reduces adverse neonatal outcome or have a beneficial effect on childhood outcome.

**Actions taken:**

The results of OPPTIMUM should prompt a major review of the use of progesterone for preterm birth prophylaxis, a search to identify any sub groups of women who might specifically benefit, and finding alternative strategies to prevent preterm birth in women at risk. The study helps us to plan how best to care for pregnant women at high risk of preterm birth and we will be able to give future women at risk much more information about the effects of progesterone.

## Abstract 7

### AUDIT OF ARTERIAL BLOOD GAS TEST REQUESTS FOLLOWING INTERVENTION BY ALTERATION OF REQUESTING SOFTWARE

**Author(s):**

Ellerton, L. and Norman–Bruce, H. FY2 Trainees, MCHFT

**Background/Introduction/Aims:**

Arterial blood gases (ABGs) are frequently used in acute phases of assessment to ascertain the oxygenation and other critical parameters of a patient's blood. Critically ill patients often have varying levels of hypo- or hyperthermia which, due to the way a blood gas analyser functions, alters the partial pressure results obtained. The laboratory is able to adjust for temperature when processing if data is provided. Interpreting an ABG result without the physiological parameters to contextualize the data is difficult. It can make the uncomfortable test misleading and impact clinical decision-making. The main aim of the improvement project was to increase documentation in line with local standard operating procedure.

**Methodology:**

This was a local project using retrospective data provided by laboratory staff at Leighton Hospital, Crewe. Total data of 624 blood gas samples were processed during the allocated times. 246 blood gas results were collected during three consecutive weeks in February 2015 and 378 during a four week period after alteration of the electronic ordering system. Results in the audits included only the blood gas requests that were sent to the main laboratory. Data analysis was performed by one author and verified by the second for accuracy.

**Results:**

In the initial round of data collection 246 samples were received. Of these, 33 stated as venous (excluded from then on) and 109 samples "not specified". The second round had 378 samples with 55 stated as venous (excluded as before) and 9 samples "not specified", resulting in an increase in sample type documentation of 42% ( $p < 0.001$ ). Fraction of Inspired Oxygen (FiO<sub>2</sub>) documentation was increased by 31% ( $p < 0.001$ ). Temperature documentation increased by 8% ( $p = 0.004$ ).

**Conclusions/Recommendations:**

All documentation regarding blood gas requesting increased significantly after the electronic requesting system was changed. Documentation of temperature of the patient at time of sample did not improve as considerably as FiO<sub>2</sub> and sample specification documentation. The main reason for this is the method of data collection is from the PATH system (not the requesting system) and those processing samples often do not copy temperature into the "details" box.

**Actions taken:**

The additions made to the ordering system will now be a permanent feature.

## Abstract 8

### ASSESSMENT OF COELIAC SCREENING

**Author(s):**

Shahbaz, F., Core Medical Trainee; Yoong, K., Gastroenterologist; Heald, A., Endocrinologist, MCHFT

**Background/Introduction/Aims:**

Coeliac disease is believed to be present in up to 1 in 100 of the population of which 10–15% of people with the condition are clinically diagnosed. The purpose of this assessment is to increase awareness of health care providers to improve current practice of recognition, and screening of coeliac screening in primary and secondary care set-up. Coeliac disease is a multi-specialities condition, and in accordance with the 2009 NICE guideline (CG86), coeliac screening should be conducted at point of diagnosis for co-related conditions, to improve early diagnosis and complication reduction.

**Methodology:**

A retrospective study was conducted of 75 patients diagnosed with: Irritable Bowel Syndrome (IBS) (N=35), Type 1 Diabetes mellitus (T1DM) (N=26), Autoimmune thyroiditis diagnosed (TD) (N=11), Combined IBS & T1DM (N=3). Compliance with NICE guidelines of coeliac disease screening was reviewed by clinical speciality.

**Results:**

Acute physician diagnosis of IBS has 100% compliance with selected guidelines, followed by Gastroenterology at 64%, and least compliance by GP and in Surgical Departments, 20% each. Although T1DM is in the majority diagnosed by GP and Endocrinology, they do not achieve regular compliance with screening guidelines. Paediatric medicine has 50% compliance in T1DM diagnosis. All autoimmune TD is diagnosed by Endocrinology, who also demonstrated poor compliance with guidance.

**Conclusions/Recommendations:**

Variable compliance exists between specialties due to less frequent diagnosis of coeliac disease; therefore, clinicians are less familiar with the NICE guidelines and subsequent health benefits. Coeliac disease can be treated effectively with a gluten-free diet. It is important to identify people with the undiagnosed disease to provide satisfactory individual treatment, and to improve the overall health of the community. It was also determined to improve the recognition of coeliac disease and to increase the number of people diagnosed with the condition. Although the study was limited, we increased awareness of coeliac screening, between specialities. We will still recommend to design a pathway for Acute Medical Unit and Trust guidelines, and to revise Quality and Outcomes Framework (QOF) alert for EMIS System, in GP.

**Actions taken:**

- Set up Coeliac screening pathway for multiple specialities.
- Contacted EMIS administrator for updating EMIS software, to remind outstanding coeliac screening QOF alert.

## Abstract 9

### AUDIT OF ELECTROPHORESIS TESTING

**Author(s):**

King, S, Clinical Biochemistry, Pathology, MCHFT

**Background/Introduction/Aims:**

To assess the appropriateness of patient selection, initial and follow up investigations for serum and urine electrophoresis testing at Mid Cheshire Hospitals NHS Foundation Trust.

**Methodology:**

A retrospective audit for January 2015 was carried out using data from both Leighton and Macclesfield Hospital sites. This was compared against standards from the 2013 British Committee for Standards in Haematology (BCSH) guidelines for the diagnosis and management of multiple myeloma and the 2009 British Journal of Haematology (BJH) guidelines for the investigation of newly detected M-proteins and the management of monoclonal gammopathy of undetermined significance (MGUS).

**Results:**

Neither site was found to provide urinary light chain quantitation. Urine total protein measurements were not performed on monoclonal band positive urines at either site, despite the assay being available. Serum creatinine, immunoglobulins and urine protein electrophoresis were not consistently requested in follow up investigations for positive paraprotein detection. Additionally, the follow up testing of monoclonal positive bands in serum was not always requested in a timely manner.

**Conclusions/Recommendations:**

It was agreed to communicate the findings with service users via Pathology newsletters and the setup of a CCG forum, whilst the need for future provision of urinary light chain quantitation will be assessed in discussion with clinical haematology across sites. Urine total protein and creatinine will be added to future urine electrophoresis requests, and new coded comments will alert clinicians to the frequency of follow up required dependent on paraprotein type and concentration. Re-audit is scheduled for 2017 following implementation of the agreed changes.

**Actions taken:**

Urine total protein and creatinine were added to the urine electrophoresis request profile on Lab Centre. New coded comments were made active in Lab Centre to recommend required follow-up testing frequency for patients with newly identified paraproteins. The audit was presented within the biochemistry department and communicated to service users. Re-audit is scheduled for January 2017.

## Abstract 10

### A COMPARISON OF ANTIBIOTICS PRESCRIBED IN ENT ADMISSIONS VERSUS HOSPITAL GUIDELINES

#### Author(s):

Dr Charles Sparrow, ENT F2  
Dr Jamie Peoples, ENT F2  
Mr Gopinath Narasimhan ENT SpR

#### Background/Introduction/Aims:

Antibiotic resistance is a rapidly evolving concern worldwide, with incorrect prescriptions being a primary contributing factor to the rise of drug resistant bacteria. As a result, it is vitally important that these medications are used correctly in practice. We subsequently investigated the prescription techniques of antibiotics in acute ENT admissions, with the intention of improving the number of correct antibiotic prescriptions we made.

#### Methodology:

This was a retrospective audit over a 4 month period, examining antibiotic prescription practice on both adult and paediatric ENT patients. We only included patients who had been admitted to the wards from the community, excluding those post-operative. Using a pro-forma we designed, we reviewed if the patient had been prescribed an antibiotic, and whether it was indicated for use by local guidelines. We also assessed if the medication prescribed had been given on discharge, and if the total course given had been for the correct duration.

#### Results:

Thirty set of notes were audited of which 21 were judged to have required antibiotic treatment. 100% of patients who required antibiotic treatment received antibiotic therapy, while 33% of patients were prescribed antibiotics when not indicated. 84% of antibiotics prescribed when indicated were done so correctly. However, only 5% of all patients who were prescribed antibiotics were given the course for the correct duration.

#### Conclusions/Recommendations:

Given that developing antibiotic resistance is a huge concern worldwide, we should be reducing not only the amount of antibiotics given, but also the duration of their course. We concluded that our antibiotic prescription practice can be improved, in both drug given and treatment length.

#### Actions taken:

We have developed an antibiotic pro-forma for common ENT pathologies requiring antibiotics. This will be used when admitting and discharging patients, with the intention of reducing incorrect prescriptions, including unsuitable durations. We will re-audit.

## Abstract 11

### LOCAL ANAESTHETIC FOR ARTERIAL BLOOD GAS SAMPLING

**Author(s):**

Darlington, C., Emergency Medicine, Emergency Department, Leighton Hospital

**Background/Introduction/Aims:**

Arterial blood gas (ABG) analysis is one of the most commonly used point of care tests in the Emergency Department (ED). The information it provides makes it an invaluable procedure when assessing critically ill patients. In the ED, patients rarely have established arterial access, so peripheral arterial puncture (AP) must be performed. It cannot be disputed that the procedure itself, although minimally invasive, can be painful. Therefore, the aim of this work was to examine and critically appraise existing literature to establish if the infiltration of local anaesthetic prior to AP significantly reduced reported pain scores, and to see how this related to local practice and patient experience within the department.

**Methodology:**

The literature search found 5 published papers which looked specifically at the infiltration of LA prior to AP and its effects. This was then compared to data collected from staff and patient surveys carried out within the ED of Leighton Hospital. Staff were asked to report whether or not they used LA prior to AP and their reasons for their answers, and patients were asked to report pain scores after AP and their satisfaction with the procedure.

**Results:**

Whilst all published papers recommended the use of LA, they were all of poor quality, leading to questions of the accuracy of the results. Local surveys suggested that in practice, the use of LA prior to AP is minimal and has little effect on patient experience.

**Conclusions/Recommendations:**

Whilst the British Thoracic Society recommends the use of LA prior to all non-emergent APs, and the body of evidence currently available suggests that its use has some effect on patient pain scores, the quality of this research is poor and further work needs to be carried out to provide good evidence to persuade practicing clinicians that the use of LA makes a significant difference to patient experience and pain scores.

**Actions taken:**

A research proposal for a randomised control trial has been written and is awaiting submission to more closely analyse the effect of LA prior to AP in our own working environment. Hopefully this will provide good quality data which will either support or refute the use of local anaesthetic for arterial puncture.



## Abstract 12

### A REVIEW OF PREDICTED LENGTH OF STAY OF STROKE PATIENTS AT LEIGHTON HOSPITAL FOLLOWING THE INTRODUCTION OF THE SPECIALIST COMMUNITY STROKE TEAM

#### Author(s):

Sharp N, Therapy Team Manager Stroke and Rehabilitation  
Sharp J, Advanced Clinical Specialist Physiotherapist, Community Stroke  
Salehin M, Consultant Physician/Stroke

#### Background/Introduction/Aims:

All stroke patients admitted to Ward 6 are categorised using the Warrington Categorisation Tool. This is an MDT assessment considering physical, cognitive and speech impairment. The tool rates the severity of stroke on a scale from 1 (most severe) to 6 (minimal effect) and from this assessment, patients receive a predicted discharge date (PDD). Following the introduction of the Specialist Community Stroke Rehabilitation Team (SCSRT) with Early Supported Discharge, it was felt that these predicted dates no longer applied to the current stroke service at Mid Cheshire Hospitals. The SCSRT provide specialist stroke rehabilitation in the community setting, allowing appropriate patients to be discharged earlier. Predicting the discharge dates enables the two teams to coordinate the seamless transfer from inpatients to the community setting, and improve the patient experience.

#### Methodology:

Data was collected for 12 months following the introduction of the SCST, looking at patient's length of stay dependent on the categorisation and comparing this to the original predicted length of stay.

#### Results:

Category 1 patients had a mean length of stay of 14 days; the initial PDD was 4 weeks.  
Category 2 patients had a mean length of stay of 49 days; the initial PDD was 10-12 weeks.  
Category 3 patients had a mean length of stay of 32 days; the initial PDD was 8 weeks.  
Category 4 patients had a mean length of stay of 12 days; the initial PDD was 2-4 weeks.  
Category 5 patients had a mean length of stay of 5 days; the initial PDD was 1-2 weeks.  
Category 6 patients had a mean length of stay of 3 days; the initial PDD 1-3 days.

#### Conclusions/Recommendations:

The data showed the predicted length of stay associated with the original categories were no longer applicable to the current stroke service. From looking at the ranges of length of stay and mean length of stay per Category, a modified Warrington Categorisation PDD was indicated as a more accurate representation of the current service.

#### Modified length of stay:

Category 1: 2-4 weeks  
Category 2: A. 6 weeks and B. 9 weeks  
Category 3: 6 weeks  
Category 4: 3 weeks  
Category 5: 1 week  
Category 6: 1-3 days

#### Actions taken:

The new modified Warrington Categorisation Predicted discharge dates have been introduced into practise and will continue to be audited to ensure appropriateness to the service.

## Abstract 13

### “DISCORDANT EXPECTATIONS” – A META-SYNTHESIS OF WOMEN’S EXPERIENCES OF UNSUCCESSFUL BREAST FEEDING

#### **Author(s):**

E. Nocton RM, BHSoc (Hons) Midwifery, MClIn Res. Workforce Development Lead, Women’s & Children’s Division.

#### **Background/Introduction/Aims:**

The World Health Organisation recommends that every infant is breastfed exclusively for the first six months of life, yet in the UK only 81% of women initiate breastfeeding and only 1% of infants are exclusively breastfed at six months. Many women who fail to breastfeed successfully say they would have liked to carry on for longer. This qualitative systematic review aims to explore women’s experiences of unsuccessful breastfeeding.

#### **Methodology:**

A systematic literature search was undertaken to identify all studies that met the inclusion criteria: qualitative empirical research studies focused on women’s experiences of ceasing breastfeeding prematurely, published in the English language from 1990 onwards or mixed methods empirical research with sufficient qualitative textual data for synthesis. Studies were quality appraised using Walsh & Downe’s (2006) framework for appraisal of qualitative research. Synthesis of the themes and metaphors from the included studies was undertaken using Noblit & Hare’s (1988) meta-ethnographic approach to qualitative meta-synthesis. A line-of-argument synthesis and a conceptual model were developed to express the synthesis.

#### **Results:**

Six studies met the inclusion criteria and were included in the meta-ethnographic synthesis. Four key themes were identified; ‘discordant expectations’, ‘clash with reality’, ‘external influences’ and ‘adjustment to bottle-feeding. Women experienced discord between their expectations and the lived, embodied struggle to breastfeed. This clash with reality led to incremental disillusionment and cessation of breastfeeding. The external influences of partners, family and healthcare providers could have both a positive and negative effect on the adjustment to bottle-feeding, which was typically characterised by intense feelings of guilt and a sense of failure.

#### **Conclusions/Recommendations:**

When women’s experiences of breastfeeding are unsuccessful, they need support from midwives and other healthcare professionals to ensure that they do not associate breastfeeding failure with failure of themselves as mothers and women.

#### **Actions taken:**

This meta-ethnography was submitted as my dissertation for my MClIn Res, will be submitted for publication and has been disseminated to the Infant feeding Lead for MCHFT.

## Abstract 14

### INSPIRING NEW TREATMENT FOR PATIENTS WITH CHRONIC HEART FAILURE WITH REDUCED EJECTION FRACTION

**Author(s):**

J.Meir, Dr S.Duckett, Dr A,Davé, R.Miller, B.Burnham & D.Bailey

**Background/Introduction/Aims:**

MCHFT Emergency Medicine Research Team offers various National Institute for Health Research (NIHR) portfolio heart studies which aim to evaluate best practice treatments. In 2012/13 approximately 900,000 people in the UK had heart failure, with approximately 42,000 requiring hospital admissions in England. 72% of these had reduced left ventricular ejection fraction. 30-40% of patients diagnosed with heart failure die within the first year.

**Methodology:**

The PARADIGM-HF was a “double blind randomised study to evaluate whether LCZ696 when compared to Enalapril is safe and effective in preventing cardiovascular death or heart failure hospitalisation in patients with chronic heart failure with reduced ejection fraction”. The aim was to recruit 7,980 patients worldwide with 200 recruited in the UK.

**Results:**

The PARADIGM-HF study ended early after recommendation from the Data Monitoring Committee because LCZ696 showed superiority to Enalapril. Specifically; compared with Enalapril treatment LCZ696 led to a significant reduction in the outcome of cardiovascular death or heart failure hospitalisation. The early closure meant that results could be reported to the medical community and health authorities so LCZ696 could be approved for patient use.

**Conclusions/Recommendations:**

LCZ696 named Sacubital valsartan, is now at the final stage for consideration at the National Institute for Health and Care Excellence (NICE) for treatment of heart failure with reduced ejection fraction. In September 2015 Sacubital valsartan was given approval by the Medicines and Healthcare products Regulatory Agency (MHRA) to the Early Access to Medicines Scheme (EAMS) to be made available to eligible patients with this diagnosis. It is the first time a drug not intended to treat cancer has been recognised under EAMS.

Patients who take part in research contribute to improving healthcare and quality for everyone.

**Actions:**

The PARADIGM Extension follow on study was opened at MCHFT with the aim to evaluate the safety and tolerability of LCZ696. It also gave the participants of the first trial the opportunity to remain on LCZ696 until approval was in place.

We are now also participating in a further study (PARAGON) to evaluate the drug in patients with heart failure with preserved ejection fraction and early indications show great benefits for these patients too.

60 heart failure patients at MCHFT are the first in England to access LCZ696 in a clinical pilot study as a result of our participation in the research project.

## Abstract 15

### **GIVE THE DRUG QUICK TO FLICK THE SWITCH ... HOW REDUCING DOOR TO NEEDLE TIME IN STROKE THROMBOLYSIS IMPROVES FUNCTIONAL OUTCOME AND REDUCES MORTALITY**

#### **Author(s):**

Palmer J, Mustill C. Stroke Specialist Nurses, MCHFT.

#### **Background/Introduction/Aims:**

Stroke thrombolysis is an effective and recognised treatment for ischaemic stroke and if delivered in the recommended timeframe has been proven to improve the morbidity and mortality of those patients suffering stroke. MCHFT has provided a stroke thrombolysis service since 2012, and, as the experience of the team has grown, it was anticipated that the door to needle time would decrease therefore improving patient outcomes and survival.

#### **Methodology:**

A retrospective review of 45 thrombolysis case studies took place over a time period of 2 years, 2014-2016. This was to establish how many patients had been admitted during 2014-2015 and 2015-2016 with stroke and of those how many were assessed by the Stroke Specialist nurses and received thrombolysis. Of those patients thrombolysed, timelines were analysed to establish door to needle times and patient outcomes following treatment. The outcomes were measured using the Modified Rankin Scale.

#### **Results:**

- 2014-2015 - 859 referrals were received, 290 actual strokes - 23 thrombolysed
- 2014-2015 - mean door to needle time = 91minutes
- 2015-2016 - 795 referrals were received, 286 actual strokes - 22 thrombolysed
- 2015-2016 - mean door to needle time = 80 minutes
- Patients admitted in 2015-2016 had a reduced door to needle time by 11 minutes compared to 2014-2015
- Patients discharged in 2015-2016 had a lower Modified Rankin scale score compared to those of 2014-2015 showing a decrease in disability

#### **Conclusions/Recommendations:**

In conclusion it is recommended that patients who present at MCHFT with a suspected stroke are referred to the Stroke Specialist nurses to assist medical staff in rapid assessment, management and treatment, to allow the patient to receive thrombolysis earlier to reduce disability or death following stroke.

#### **Actions taken:**

In order to achieve the recommendation the following actions took place:

1. Stroke specific training delivered by the Stroke Consultant to ED Consultants/Registrars and Medical Specialist Registrars.
2. Stroke Specialist Nurses provided theoretical and practical training to senior nurses working on the stroke ward to ensure that a stroke assessment service is available 24/7.
3. Informal discussions with paramedics/ED staff re: rapid transfer and assessment of the stroke patient.

## Abstract 16

### TURNAROUND TIME FOR PAEDIATRIC HEARING AID EAR MOULDS

**Author(s):**

Warren, L., Associate Specialist in Paediatrics, Paediatric Audiology, MCHFT; Kilby, D., Audiology Assistant, Audiology, MCHFT; Palin, D., Senior Audiologist, MCHFT

**Background/Introduction/Aims:**

Well-fitting earmoulds are needed for hearing aids to function optimally. Children need new earmoulds quite frequently as they grow. An earmould impression is taken by a senior audiologist and this impression is then posted by an assistant audiologist to the manufacturer (Starkey). There has been concern that it has taken too long for the earmould to be processed. The NDCS (National Deaf Children's Society) in their recent 'Listen Up' report (2014) restates the message from the Department of Health's Transforming Services for Children with Hearing Difficulties and their Families: A Good Practice Guide (2008) that "children should get an appointment for new earmould impressions within two working days and receive their new earmoulds back from the manufacturer within three days." We would like to meet this standard and hope that this audit will show where any possible delays are happening.

**Methodology:**

A retrospective audit was conducted between 9<sup>th</sup> February and 3<sup>rd</sup> June 2015. The data collected was the date the earmould impression arrived in the workshop, the date it was processed, the date it arrived at Starkey and the date Starkey invoiced. This was entered by an Audiology Assistant into the data collection sheet.

**Results:**

A total of 94 samples were audited. It is only possible to achieve a 3 day turn-around if the ear moulds are processed on the same day and put into the hospital post before 3.30 pm and processed by the Starkey laboratory within 24 hours. This was only possible with 13% of the sample (12 earmoulds), whereas 63% took 4-5days and the remaining 24% took 6-8 days.

**Conclusions/Recommendations:**

The Paediatric Audiology Earmould Service at MCHFT has performed significantly better than the national service average, which the NDCS survey states as only 3.5% meeting the standard. However the service is not even close to meeting the 3 day target although 39% of the earmoulds were processed on the same day and 86% within 1 day at the MCHFT Audiology workshop.

**Actions taken:**

- Discussion with Adult audiology department if earmould impressions can be taken to post room before 3.30 pm
- Discussion with Adult audiology department regarding provision of cover for absence of staff
- Letter to Starkey to address delay

## Abstract 17

### ANTIBIOTIC PRESCRIBING IN SURGERY

#### Author(s):

Sutton. S., FY1 General Surgery, MCHFT

Hardman. J., Consultant Colorectal Surgeon, MCHFT

#### Background/Introduction/Aims:

Development of antibiotic resistance is a growing concern currently being addressed by the Department of Health and Department for Environment Food and Rural Affairs with the release of the UK five year antimicrobial resistance strategy (AMR) 2013 to 2018. The strategy identifies 3 core areas in the battle against resistance which concentrate on: education, conservation and research.

Conservation of antibiotics is achievable on a local level by adhering to antibiotic policies. At Mid Cheshire Hospitals NHS Foundation Trust, recent changes have been applied to the antibiotic policy for the treatment of intra-abdominal infections to limit outbreaks of *Clostridium difficile*, maintain the effectiveness of current antibiotics and reduce rates of resistance.

#### Aims:

1. To assess if patient's are receiving the appropriate antibiotic as per local policy
2. To assess appropriate course duration of intravenous antibiotics
3. To assess appropriate oral antibiotic stepdown for intra-abdominal infection

#### Methodology:

An observational cross-sectional survey was completed weekly over 4 weeks for general surgical patients being treated with antibiotics.

#### Results:

60 antibiotic prescriptions were recorded in total. 60.78% followed local protocol, 23.53% did not and 15.69% partially followed. 38 (63.33%) prescriptions were intravenous. 73.08% were justifiable, 26.90% were unjustifiable. 10 Intra-abdominal infections were identified that were stepped down to oral antibiotics. 3/10 (30%) were switched to the appropriate oral antibiotic.

#### Conclusions/Recommendations:

Results demonstrate low adherence to antibiotic guidelines in surgical patients, which may reflect poor knowledge of updated guidelines.

Better dissemination of updated guidelines with laminated charts on ward round trollies, a prompt on the drug chart for the consideration of patients at risk of *C. difficile* and increased microbiology input may improve adherence to the antibiotic protocol and help fulfil the AMR strategy.

#### Actions taken:

1. Laminated charts, of the antibiotic policy, on the ward round trollies
2. Wardex to include a tick box: 'Is patient at risk of *C.diff?*' on the antibiotic section
3. Microbiology ward-rounds or weekly meetings with microbiology to discuss surgical cases

## Abstract 18

### NEGATIVE FOR DEEP VEIN THROMBOSIS (DVT) BUT HIGH CLINICAL SUSPICION? IS THERE A NEED TO RE SCAN AFTER A NEGATIVE FULL LEG ULTRASOUND SCAN?

#### Author(s):

Minshull, S.K., Trainee Vascular Scientist, Vascular Ultrasound  
Hammond, E.J., Lead GP, Urgent Care Centre  
Farrington, M.A., Nurse Practitioner, DVT lead, Urgent Care Centre  
Brown, T., Healthcare Technician, Urgent Care Centre

#### Background/Introduction/Aims:

Approximately 1 in 1000 people/annum in the general population typically, exhibit DVT symptoms. Pulmonary Emboli (PE), which can be fatal, are the most severe manifestation of a DVT.

Where high clinical suspicion of DVT exists but an initial *proximal* ultrasound scan is deemed negative, current guidelines infer that a repeat scan is pertinent 6-8 days later to exclude a distal (calf) DVT that could propagate up the leg (NICE, 2012, SIGN, 2010). NICE guidelines are exclusive to centres which perform limited proximal leg scans (groin to knee only) as an initial diagnostic scan.

UK recommendations for this cohort initially include prescribed anti-coagulation medication, which carries associated risks, in the interim between scans; therefore potentially negative DVT patients are receiving treatment unnecessarily.

Using results from the Urgent Care Centre (UCC) outpatient DVT pathway, we aimed to establish how frequently negative *whole leg* ultrasound scans were deemed positive following a one week interval rescan to surmise if whole leg scanning eliminates the need for a rescan.

#### Methodology:

Retrospective analysis of secondary data on re-scans from the UCC outpatient DVT pathway over a 5 year period (2011-2016) was conducted. The full sample of initial negative re-scans included 140 patients and descriptive statistics were then applied to this data.

#### Results:

1.43% (2 out of 140) of patients with an initial negative full leg ultrasound result became positive (for calf DVT) over the 5 year data collection period. No patients became positive for a proximal DVT. Further investigation into the clinical background of the two patients that did become positive demonstrated that it could not be confidently said that they were true negatives at the initial scan.

#### Conclusions/Recommendations:

The negative to positive scan result conversion rate following an initial negative full leg scan is very low, and zero for proximal DVT. Therefore it is recommended that typically one full leg ultrasound scan carried out by trained practitioners is sufficient to exclude DVT and withhold anticoagulation therapy.

#### Actions taken:

This research provided evidence to support a change in practice in the DVT pathway, whereby re-scans are only recommended in those with initial negative *whole leg* ultrasound if no other clinical reason can be established for the symptoms of DVT. Significant clinical impact should result in those patients negative for DVT through withholding unnecessary anticoagulation medication and positive financial implications by not prescribing unnecessary medication and releasing scan slots for new patients.

## Abstract 19

### A REVIEW OF THE IMPACT OF INCREASING THERAPY STAFFING LEVELS ON 21B - REHABILITATION WARD - FOR 6 MONTHS FOR WINTER PRESSURES

#### Author(s):

Sharp, N., Therapy Manager for Stroke and Rehabilitation  
Hope, G., Senior Occupational Therapist, Ward 21b  
Potts, S., Therapy Assistant Ward 21b

#### Background/Introduction/Aims:

Staffing levels for Physiotherapy and Occupational Therapy (OT) on Ward 21b are currently limited, and not sufficient to see patients on a daily basis. It is felt that this may increase the patient's length of stay, affect the patient experience and increase their dependency upon discharge.

#### Methodology:

During the winter pressure funding, staffing levels were increased to a minimum level for a rehabilitation ward, as stipulated by NHS England, for a 6 month period (October-March). The substantive staffing is for: 0.5 band 6 and 1.0 band 5 Physiotherapist, 1.0 band 6 OT and 1.3 Generic Assistant. The winter pressures funding provided an additional 0.5 band 6 Physiotherapist, 1.0 band 5 OT and a 0.5 band 4 Generic Therapist.

By doing this, patients could be seen on at least a daily basis. A 24 hour approach to referrals was reinforced, taking a joined up approach with all members of the multi-disciplinary team. Increased staffing allowed for improved quality of care from group work, joint treatments and timely discharge planning. It also allowed for flexibility in staffing when people were on leave/ sickness.

Data collected looked at length of stay, response time to referrals including therapy completion dates, patient outcomes (Elderly Mobility Score (EMS), Barthel, and discharge destination) and patient experience (questionnaire).

#### Results:

**Increased staffing levels:** Winter pressure funding has significantly increased patient contacts and improved the patient experience. 218 contacts for OT were completed in August 2015 compared to 497 in February 2016 (128% increase). Whilst 275 contacts for physiotherapy were completed in August 2015 compared to 484 in February 2016 (76% increase).

**Improved length of stay:** Figures show in comparison from previous years, an average reduction per month, in length of patient stay resulting in a general average 2 day shorter stay. December 2015 average stay was 19.8 days compared to June 2015 where average stay was 23.4 days.

**Patient Experience:** Completed patient questionnaires revealed a high level of satisfaction with therapy input but some concerns over the lack of input at weekends.

**Patient Outcomes:** Over 6 months 77% of patients showed an improvement in EMS, and 80% showed an improvement in Barthel scores.

#### Conclusions/Recommendations:

By increasing staffing levels to a minimum level for a rehabilitation ward, we saw significant improvements in length of stay, increased patient contacts, improved patient outcomes, and improved patient experience with increased number of patients returning home with reduced care input. The lack of therapy staff at the weekend was noted.

#### Actions taken:

- Ongoing audit is now in place as staffing has returned to substantive levels.
- Feedback has been provided to the Trust on the positive impact of increasing staffing levels.
- Seven day service reviews planned.



## Abstract 20

### A CLINICAL CASE REPORT OF A PATIENT WHO PRESENTED WITH SIGNS AND SYMPTOMS OF SEPSIS, EVENTUALLY DIAGNOSED WITH SARCOIDOSIS

#### Author(s):

Faizur, R. M. E., FY2, MCHFT

Heald, A., Consultant in Diabetes and Endocrinology, MCHFT

#### Background/Introduction/Aims:

Infection is the first diagnosis which is investigated in any patient presenting with fever. Sarcoidosis is one of the non-infective causes of pyrexia. It is a multisystem inflammatory disease that commonly presents with a cough or dyspnea.

#### Case Study:

A 48-year-old woman, admitted with a one-week history of fever was actively investigated for an infection. Whilst on holiday in the Grand Canyon, she had developed severe ankle swelling and small, painful, erythematous lesions on her knees (like insect bites). There had been recent treatment for bilateral anterior uveitis.

Blood tests revealed an elevated C-reactive protein (CRP) but normal white cell count (WCC).

The case was discussed with the infectious diseases consultant, who suggested that the probability of contracting one of the tick-borne infectious diseases from America, such as Rocky Mountain spotted fever was very low, as she did not camp overnight at the Grand Canyon.

The patient was started on broad-spectrum antibiotics with the diagnosis of pyrexia of unknown origin. Her CRP continued to increase and she remained febrile. Her WCC, however, remained normal throughout.

CT scans of her chest, abdomen and pelvis, revealed bilateral hilar and mediastinal lymphadenopathy with irregular nodular lesions in both lung apices and fibrotic changes in the right lung apex. Differential diagnoses included lymphoma, tuberculosis and sarcoidosis. Retrospectively, it was discovered that her grandfather had sarcoidosis. The presenting symptoms along with the CT findings pointed towards a diagnosis of sarcoidosis.

A course of steroids was commenced and her symptoms improved. She had an endobronchial ultrasound and a lymph node biopsy, which showed non-caseating granulomas, in keeping with sarcoidosis. The patient currently remains under active follow-up.

#### Key Messages:

From this case, the significance of a detailed travel history and ordering appropriate investigations is apparent. It is important to keep in mind the non-infective causes of pyrexia, as not all patients presenting with a fever will have an underlying infection.

## Abstract 21

### THE RISK OF MALIGNANCY INDEX (RMI) TRIAGE OF SUSPECTED OVARIAN MALIGNANCY

#### Author(s):

Canavan, L., Obstetrics and Gynaecology, MCHFT

Bajrami, A., General Medicine – Diabetes and Endocrinology, MCHFT

#### Background:

Ovarian malignancy is the 7th most common worldwide, with a lifetime risk of ovarian cancer of 1.4%. 80% of women have advanced disease at presentation leading to poor survival outcomes; with best outcomes are achieved by follow-up full staging laparotomy by specialist gynaecology oncologists. 21.1% of women have abnormal ovarian pathology so the challenge is to select appropriate cases for referral. RMI is one such predictive model recommended by the National Institute for Health and Care Excellence (NICE) in the UK.

The objective of this study is to audit the initial investigation and RMI triage of women with suspected ovarian malignancy at Leighton Hospital.

#### Methodology:

A retrospective case note review was conducted from July 14 to September 15. 50 patients were identified as attending 2 week wait with suspected ovarian mass, of which 37 had easily locatable notes. There is no specific code, so identification of case was carried out by a Gynaecologic Oncology Nurse Specialist. Proforma for data collection was entered into an Excel spreadsheet.

#### Results:

The mean age of patients was 57 (22-80), whereby 32% were pre-menopausal, 57% post-menopausal and 11% had an unknown menopausal status. The majority (76%) of cases were referred from primary care.

From the final diagnosis, 73% of cases were benign and 27% malignant. The 20 malignant cases were discussed at a multidisciplinary team meeting with 60% referred to regional cancer centre for treatment, 83% cases referred had malignant diagnosis confirmed.

From the RMI triage, 1 woman had low risk RMI as ultrasound did not demonstrate ovarian pathology; she was later diagnosed with stage 4 epithelial adenocarcinoma of ovarian or primary peritoneal pathology. The Ca-125 values were <35 iu/ml in 30% of patients with malignancy. Only 22% women with benign pathology showed elevated Ca-125 and none had high risk RMI scores

#### Conclusions/Recommendations:

Ca-125 and imaging results cannot be interpreted in isolation and must be correlated with clinical suspicion to identify the minority of women with low risk RMI. Alternative predictive models have been developed and could be combined into clinical practice along with the RMI. A need to improve documentation was identified.

#### Actions taken:

- Presented at the Departmental Monthly Audit meeting in order to encourage better documentation of the RMI score
- Assured healthcare staff that they are currently appropriately triaging people:
  - Low number of referrals to cancer centre with benign pathology (17%)
  - 60% of patients discussed at MDT referred to centre.

## Abstract 22

### SOCIOECONOMIC DEPRIVATION AS MEASURED BY THE INDEX OF MULTIPLE DEPRIVATION (IMD) AND ITS ASSOCIATION WITH LOW SEX HORMONE BINDING GLOBULIN (SHBG)

#### Author(s):

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#### Background/Introduction/Aims:

SHBG is an integrated marker of insulin resistance with lower levels associated with high body mass index (BMI). Given established links between BMI and socioeconomic disadvantage, we investigated how SHBG varies by IMD.

#### Methodology:

Using laboratory data from a Midlands UK population of mixed ethnicity, SHBG was measured on 1,325 women of varied ethnicity.

#### Results:

Mean age was 28.7 (95% Confidence Interval (CI) 28.2-29.1) years. 48.2% of women were of Caucasian origin, 15.5% of Southern Asian ethnicity and 2.6% were of African or other origin (33.7% were of unknown origin).

SHBG increased with age (Spearman's  $\rho$ ;  $p=0.195$ ;  $p<0.001$ ) and was lower in women of South Asian ethnicity (median 33.5 (interquartile range (IQR) 22–53 nmol/L)) versus white Europeans (median 42.0 (IQR 28-64);  $p=0.0001$ ).

SHBG level was lower in individuals with greater socioeconomic disadvantage as measured by IMD (Spearman's  $\rho$  = -0.09;  $p=0.004$  for SHBG versus IMD).

In multivariate logistic regression, IMD women in the quartiles 2–5 (higher socioeconomic disadvantage) were more likely to have an SHBG of less than 30 nmol/L (compatible with significant insulin resistance) versus quartile 1 (odds ratio (OR) 1.71 (95% CI 1.17–2.53), adjusted for age (OR=0.97 (95% CI 0.95–0.98)) and ethnicity (for South Asian ethnicity OR=2.00 (95% CI 1.42–2.81)).

#### Conclusions/Recommendations:

Lower SHBG levels in women are associated with a higher level of socioeconomic disadvantage. Our findings support the link between socioeconomic disadvantage and low SHBG and for the utility of SHBG as a potential marker of insulin resistance in the population.

## Abstract 23

### SCREENING FOR HYPOGONADISM: REAL WORLD CONSIDERATIONS: RESULTS FROM THE CHESHIRE PRIMARY CARE COHORT

#### **Author(s):**

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#### **Background/Introduction/Aims:**

Testosterone levels are increasingly being checked in primary care as awareness of the risks of male hypogonadism grows. We looked at what tests are performed to screen for hypogonadism and to rule out secondary hypogonadism.

#### **Methodology:**

All participants attended GP practices in Central and Eastern Cheshire. Data search was performed with the assistance of the clinical database EMIS®, the provider of the majority of GP operating systems in this area. The testosterone level was the first recorded on the system, as for other analytes.

#### **Results:**

The anonymised records of 9,094 male patients aged 18–80 years living in Cheshire who had undergone a check of serum testosterone in the ten years up to 3 March 2016, were analysed. Overall screening rate was 4.3%.

Of the 8,788 men with a testosterone result, 1,924 men (21.9%) had a total testosterone level <10 nmol/L. Just 689 of 8,788 men (7.8%) had a sex hormone binding globulin (SHBG) result, corresponding to 30.5% of those potentially hypogonadal. More socially disadvantaged men were less likely to be screened.

Of the 1,924 potentially hypogonadal men with a serum testosterone <10 nmol/L, 588/1,924 (30.6%) had a check of serum prolactin. With regard to measurement of luteinizing hormone (LH) and follicle-stimulating hormone (FSH) for the 1,924 potentially hypogonadal men, 46.3% had LH measured and 41.7% had FSH measured.

Only 19.1% of 1,924 men with a hypogonadal total testosterone level were subsequently put on testosterone replacement.

#### **Conclusions/Recommendations:**

Screening in primary care identified a significant minority of men who had potential hypogonadism. Interpretation of a low serum testosterone requires a serum prolactin, LH and FSH measurement in order to rule out secondary hypogonadism. Also SHBG measurement with a view to estimation of free testosterone aids interpretation of the testosterone results.

Addition of these tests helps greatly in relation to decisions concerning management of potential hypogonadism.

## Abstract 24

### SOCIAL DEPRIVATION, DIABETIC FOOT ULCERATION AND MORTALITY: CONCLUSIONS OF A PRIMARY CARE BASED STUDY

#### Author(s):

Anderson, S.G., *Cardiovascular Sciences Research Group*; Shoo, H., *Diabetes and Endocrine Department, East Cheshire NHS Trust*; Khan, A., *Department of Medicine, MCHFT*; Saluja, S., *The University of Manchester*; Dunn, G., *Department of Podiatry, east Cheshire NHS Trust*; Heald, A., *Department of Medicine, MCHFT / The School of Medicine and Manchester Academic Health Sciences Centre, University of Manchester*.

#### Background/Introduction/Aims:

Our aim was to determine whether social deprivation in the presence of diabetes is an independent predictor of developing foot ulceration (FU) and to determine whether deprivation modifies the association between diabetes and mortality in those who develop diabetes.

#### Methodology:

A retrospective analysis of 13,995 adults (median follow-up of 10.5 years) with type 1 (1,344) and type 2 (12,651) diabetes, 2005-2015. We used Poisson regression and proportional hazards models to estimate incidence rates and risk of mortality.

#### Results:

The mean age of the population was 69.4 (16-89) years. The incidence of FU was greater in patients with type 2 (8.5%) compared to type 1 diabetes (5.2%). Occurrence was similar by sex (8.4 vs. 8.0%, male vs. female) but increased with age and deprivation index. Individuals in the highest quintile of deprivation were 62% more likely to develop FU vs usual care.

2,946 (21.1%) deaths were recorded. The development of FU was associated with greater age-sex adjusted mortality rates (25.9% vs. 14.0%). A 71% (50-90%) increased risk of mortality was observed in those who developed FU. This risk increased per quintile of deprivation (HR: 13% (8-19%).

The increased risk of mortality in patients with FU (HR: 1.70 (1.41-2.04)) was not attenuated after adjusting for age, sex, Townsend deprivation score (per quintile), smoking, hypertension, statin, beta-blocker, metformin and insulin use.

#### Conclusions/Recommendations:

Foot ulceration is a major predictor of increased mortality in diabetes and must be recognised as such. Social disadvantage is an independent predictor both of foot ulceration and of mortality in diabetes patients with foot ulceration.

## Abstract 25

### SELF-ADMINISTRATION OF MEDICINES AT ELMHURST INTERMEDIATE CARE CENTRE (EICC)

#### Author(s):

Hamman, S., Professional Lead – Diagnostics & Clinical Support Services, MCHFT; Clarke, J., Manager – Elmhurst Intermediate Care Centre, MCHFT; Platt, R.J., Clinical Audit Facilitator, MCHFT

#### Background/Introduction/Aims:

The self-administration of medicines was started in response to the need for patients to understand their conditions, consequent medications and to take ownership of the administration of their own medicines, whilst also aiming to drive down the number of hospital re-admissions. The Intermediate Care setting aims to get patients back to a level of health, where they own their medicines and understand why they are taking it and assisting their rehabilitation to independent living. This reduces the nurses' accountability for medicines administration and creates a culture where ownership is given back to the patient. This increases the ownership of medicines administration by patients with the support and guidance of the nursing staff.

#### Methodology:

A multi-disciplinary team of nurses, pharmacists, doctors, community intermediate care teams (acute and community sectors) supported by the clinical audit facilitator, formed a task and finish group. The group developed a self-medication policy for the bed-based intermediate care setting that satisfied the governance requirements for primary and secondary care. In conjunction with education and training for the nursing staff, the policy was implemented and a baseline audit and patient satisfaction survey were carried out. Based on these results, the policy was further developed and adapted. To complete the cycle, a second audit was undertaken twelve months later.

#### Results:

The results of the second clinical audit showed full compliance (100%) in all areas, except security of medication locker keys, where one patient had forgotten to take their key to breakfast with them.

#### Conclusions/Recommendations:

It has been shown that since the initial clinical audit, the assessment of patients for self-administration of medications has been embedded into routine practice, which is evident by the comprehensive use of the documentation found in the patient health records.

However, whilst the number of patients who are capable and well enough to self-medicate ebbs and flows, patients are being assessed in a more timely fashion following their admission. To summarise, the process has been established into the culture of the rehabilitation environment and is being executed safely and routinely.

#### Actions taken:

An aide memoir, in the form of a laminated notice, has been devised. This will be attached to the front of the medication locker of each patient, assessed as suitable to self-medicate at Level 2, reminding them to retain their key about their person at all times.

## Abstract 26

### AN AUDIT OF RETINOPATHY OF PREMATURITY SCREENING OUTCOMES

**Author(s):**

Tiew, S., Wong, E., Asher, R., Asghar, A., Walker, S. Ophthalmology, MCHFT.

**Background/Introduction/Aims:**

It is said that Retinopathy of Prematurity (ROP) is one of the few causes of childhood visual disability in which blindness should, by timely treatment, be preventable. This is somewhat of an over-simplified statement and it would be more accurate to reflect that ROP visual disability has been reduced by effective screening and treatment programmes. ROP screening has been audited in the Leighton Eye Care Centre since 1991. This is the third audit since 1991 Leighton Neonatal Intensive Care Unit (NICU) comprehensive database. We continue to report the outcomes from 2013 to 2014.

**Methodology:**

A retrospective follow-on audit was conducted. All the ROP screening was undertaken by senior ophthalmologists; the data collection was prospectively collected by lead nurse co-ordinator of service. This was entered into a standard data collection proforma. Total sample size (n) of new data analysed between Jan 2013 - Dec 2014 was 76.

**Results:**

All babies less than 32 weeks gestation were screened. All babies with a birth weight of less than 1501g were screened. Babies with aggressive ROP were referred within 48 hours but one baby was not treated within 72 hours by the tertiary centre.

**Conclusions/Recommendations:**

Workload of ROP screening has remained steady over the past 25 years. Neonates are slightly older and 200g heavier. Incidence of ROP in the local population has decreased by 16%.

Our main recommendation is to share audit information with the local tertiary centre to improve compliance with Good Practice Point of national standard.

**Actions taken:**

The results will be disseminated within the local department and tertiary centre.

## Abstract 27

### A PHENOMENOLOGICAL EXPLORATION OF 'SUPERVISORS OF MIDWIVES' VIEWS OF THE CURRENT ROLE OF SUPERVISION OF MIDWIVES IN THE UK

**Author:**

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**Speciality:**

Divisional Quality Support Midwife & Supervisor of Midwives

**Background / Introduction / Aims:**

Professional regulation in midwifery has become a controversial issue. On the one hand the Nursing & Midwifery Council [NMC] wish practitioners to remain autonomous without all the 'red tape;' but notwithstanding the priority remains public protection and excellence of care. It poses the question, why remove statutory Supervision of Midwives? Is the blame for failing Trusts purely a result of inadequate midwifery supervision, or were there significant failings in clinical governance, management and midwifery practice?

The impetus for undertaking this research stems from the authors' concerns as a practising Supervisor of Midwives [SOMs] at the adversarial effect the removal of SOMs from statute may have on the women receiving maternity care.

**Methodology:**

A qualitative study utilising a phenomenological approach was conducted. Data was collected by way of a focus group discussion. Thematic analysis was employed to analyse the data. A purposive sample of 8 SOMs was recruited to the focus group.

**Results:**

Four themes developed from the study: *Impact on patient safety*; *Impact on midwives who are being investigated*; *Impact on newly qualified midwives* and *Impact on SOMs*. Supervisors were fearful that the removal of supervision from statute would impact on patient safety and that midwives would lose the supportive mechanism from a SOM during an investigation or RCA. The SOMs identified the challenges to midwifery practice and the potential impact on newly qualified midwives in the delivery of safe, effective care.

The findings question whether the NMC fully understand the effects the removal of statutory supervision could have on midwifery practice. At a time where there appears to be so many failings in the health service, it seems counterintuitive to lose a system that plays a key role in public protection.

The findings demonstrated the discontent with the current state of supervision as it awaits its pending removal from statute. The research obtained from the focus group suggests that the concerns expressed by the SOMs are echoed by other SOMs UK wide.

**Conclusions / Recommendations:**

This study has identified that Supervision of Midwives has contributed to patient safety and quality of care, and is supported in the literature. The SOMs within this study acknowledge that the current time of uncertainty surrounding the removal of statutory supervision has been challenging and disheartening both personally and professionally, with many feeling powerless, and their voices unheard. There are strong implications for the NMC to establish a secure model for the provision of professional midwifery leadership, support and advocacy for women in the United Kingdom. A model of midwifery supervision and a framework for provision needs to be developed.

**Actions taken:**

- Findings disseminated to the MCHFT Supervisors of Midwives
- Findings discussed with the Local Supervising Authority Midwifery Officer [LSAMO]
- To publish the study in the *British Journal of Midwifery*, Summer 2016



- To present a list of recommendations to the Head of Midwifery on how to maintain the Supervision of Midwives at MCHFT when removed from statute

## Abstract 28

### A PROJECT TO IMPLEMENT VENEPUNCTURE FOR 3<sup>RD</sup> YEAR PRE-REGISTRATION NURSING STUDENTS

#### **Author(s):**

**Madeley N, Practice Education Facilitator, Corporate Division**

#### **Background/Introduction/Aims:**

The Nursing and Midwifery Council (NMC) do not identify the clinical skill of venepuncture as a requirement of the pre-registration nursing programme for the adult field of nursing. However, it is commonly a clinical skill that newly qualified nurses in an acute hospital are expected to attain. The Shape of Caring (Willis, 2015) review has identified that to meet the increasing demands of healthcare, universities and clinical placements should work in greater collaboration to prepare student nurses. The review also identifies that students should be developing a number of skills, including venepuncture, which traditionally have been considered as 'advanced' or 'post-registration'.

Anecdotal evidence suggested that locally there was support for the inclusion of venepuncture into the pre-registration nursing training. A small informal survey was conducted and this identified that there was support locally for the inclusion of venepuncture to the nurse training.

#### **Methodology:**

The University and Trust were contacted to gain an agreement to initiate the project, and a formal agreement was attained. A Standard Operating Procedure (SOP) was devised and ratified by the learning and Development Forum. This SOP lays out the requirements for training and supervision for students in the Trust. A venepuncture study day was provided for the March 13 cohort of adult nurses in May 2016.

#### **Results:**

An evaluation tool was devised and distributed to the cohort. All students in the project, who received the venepuncture training and had a subsequent placement in the Trust, performed the skill of venepuncture on their clinical placement. The students in the project also identified that overall they felt supported and that the training delivered by the University and Practice Education Facilitators (PEF) team prepared them to practise the skill.

#### **Conclusions/Recommendations/Actions:**

Venepuncture has now been included locally into the pre-registration nursing programme for 3<sup>rd</sup> year nursing students. Student nurses can practise the skill under direct supervision when on a clinical placement at MCHFT, once they have received venepuncture training delivered by the PEF team and University.

To date, 63 student nurses have received venepuncture training following the introduction of the project. As a result of the project, the University are liaising with other Trusts to explore the possibility of students performing the skill to placements in other NHS Trusts.

## Abstract 29

### RE-AUDIT OF NOVEL COMPRESSION THERAPY IN CHRONIC VENOUS LEG ULCERS: PROMISING EARLY EXPERIENCE

**Author(s):**

Patullo L, Rajagopalan S, Platt R.

**Background/Introduction/Aims:**

Chronic venous insufficiency (CVI) with leg ulcers are a significant workload to healthcare professionals and causes poor quality of life (QoL) to patients. Compression therapy is offered to heal these ulcers but compliance is suboptimal in at least a third of patients. We piloted the JuxtaCURE<sup>TM</sup> compression system, an adjustable compression device that offers a simple and consistent alternative to bandaging/stocking to assess healing rates and compliance.

**Methodology:**

Serial patients attending the vascular out-patients with non-healing venous ulcers, despite the standard treatment were prospectively recruited to have the JuxtaCURE<sup>TM</sup>. Site, size, and chronicity of wound were documented on index visit and follow-up visits until discharge/ near healing. Questionnaire was sent to assess compliance.

**Results:**

JuxtaCURE<sup>TM</sup> was offered to patients with clinical diagnosis of venous leg ulcer, n=18 (21 legs). The duration of the ulcers prior to treatment was median 24months IQR (17-66). The wound size improved from 38cm<sup>2</sup> (4-209) to 15cm<sup>2</sup> (0-56), p<0.02; 7 patients had complete healing. All patients self-reported high compliance compared to their previous therapy.

**Conclusions/Recommendations:**

This pilot study suggested high compliance and enhanced wound healing. While this is a small group pragmatic prospective study, with a learning curve for the users/prescribers it suggested that JuxtaCURE<sup>TM</sup> could be offered to wider group of patients, with better compliance. Self-application minimises the human/material cost and time compared with other forms of compression.

**Actions taken:**

Juxta-cures is now seen as a valuable source of compression therapy in patients that are not getting optimum compression from standard bandaging or hosiery. Standard Operating Procedure (SOP) now in place for the use of Juxta-Cures across the trust.

## Abstract 30

### A LOT OF WORK FOR 5 QUESTIONS: UNDERSTANDING VALUE AND IMPACT IN NHS LIBRARY & KNOWLEDGE SERVICES

#### Author(s):

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#### Background/Introduction/Aims:

In 2014 Health Education England released the Knowledge for Healthcare Framework (KfH) to inform the development and transformation of NHS Library & Knowledge Services (LKS) across England. A Value & Impact Task & Finish Group (TaF) was established as part of the Quality & Impact Work Stream, with the aim of creating a suite of tools to help better understand the value and impact of LKS. Impact is seen as the difference or change in an individual or group resulting from their contact with library services (BS ISO 16439:2014 - 3.25). The work was to be a refresh on an existing toolkit; following suggestions for wider applicability in terms of sector and service. Target set is 95% NHS LKS using the toolkit by 2020.

#### Methodology:

Members of the TaF were selected by Regional LKS Leads for their interest and expertise in the area. The TaF recruited a 'virtual reference group' from academics/specialists in the field and through an open invite to all librarians across the UK to help scrutinise the workings. The literature was reviewed for impact tools used in LKS across all sectors. A survey was conducted using Survey Monkey, to establish the current position of LKS impact work on a local level and to identify best practice methodologies and tools used, as well as what was required of the new toolkit. Regional LKS Leads were requested to share returns from Section 1.3C Library Quality Assurance Framework (LQAF) – Impact, which were judged to be 'fully compliant' and therefore best practice.

#### Results:

From the questionnaire 136 services (63%) out of the 215 services identified in KfH responded. Results show that 95.5% of responding services collect impact information. The LQAF submissions were shared by regional leads from 25 services. The prominent tool requested was a short off-the-shelf questionnaire which could be applied to all sectors and all services. This would be used as a scoping tool with interview guidelines for use with the Critical Incident Technique to 'dig deeper' for qualitative responses. All tools identified were cross-referenced against the framework established from the group remit, literature and questionnaire and a set of 5 core questions identified. The resultant impact questionnaire was tested by the TaF members in practice with local LKS clients with 214 respondents across services.

#### Conclusions/Recommendations:

The tools were refreshed and new guidance developed. Alison Brettle was commissioned to develop a value mapping toolkit to incorporate the tools, which was rolled out June 2016. Identifying high value and impact services will help determine the form of LKS going forward. The TaF have agreed to continue until March 2017 to further evaluate then refine the toolkit and investigate best practice into the data collection elements at a national scale (benchmarking and case studies). Interest in the toolkit has been received from outside England; recommendations have been made to make this publically available.

#### Actions taken:

- Delivery & maintenance recommendations have been fed back to the Quality & Impact Group
- Use of the toolkit has now been embedded into the annual LQAF returns for 2016
- An extensive marketing plan including regional presentations, workshop at the CIIP Health Libraries Group conference (Sept 2016) and write-ups planned for regional communications and the Health Library Journal
- The toolkit will be integrated into local evaluation processes at the JET Library, and will be used to inform service decisions and incorporated into marketing plan

## Abstract 31

### SUCCESSFUL OUTPATIENT MANAGEMENT OF MASSIVE LYMPHOEDEMA WITH LYMPHORRHEA

#### Authors:

Owain David, 3rd Year Medical student, Keele University on vascular secondment  
Louise Patullo, Sister, OPD vascular surgery, Leighton Hospital  
Sriram Rajagopalan, Consultant Vascular Surgeon, Vascular alliance (UHNM & Leighton)

#### Background:

Primary lymphoedema is progressive disabling condition caused by compromised lymphatic drainage. Incidence in the UK is around 1 in 6000 with one or both lower extremities typically affected. Patients suffer severe functional impairment and psychological distress as well as increased susceptibility to infection. Management includes compression therapy, exercise and there is a role for antibiotic prophylaxis. We highlight the role of a modern compression device and its success.

#### Methodology:

We present the management of a 55-year-old otherwise healthy male with bilateral primary lymphoedema affecting both legs with lymphorrhoea resulting in immobility, recurrent cellulitis and depression. Following his antibiotic treatment under medical team, we assessed him for compression therapy. We documented index visit limb measurements and had photographed his legs. After careful product search wherein most compression material were unsuitable for his limb girth, we applied external compressions with an adjustable wrap-around Velcro-strapped compression device (Juxtafit–Medi) which was “off the shelf” despite his limb girth. The management approved funding for one leg initially as the product was new and expensive (~£200).

#### Results:

On index visit the girth of his legs at mid-calf was 60cms and mid-thigh was ~ 68-70cms bilaterally. Both legs had massive lymphorrhoea, in a background of papillomatosis, fibrosis, and lymphangiectasia. In 6-8 weeks our patient’s limb swelling on the compressed side dramatically reduced by 40% and the lymphorrhoea had stopped totally and remained uninfected. With the success of the first limb we treated the second limb in a similar way and achieved similar success. The patient’s satisfaction and compliance was excellent. The surgical Out Patient Department (OPD) sister reviewed him with serial limb measurements and ensured that Primary Care and patient took equal responsibility in managing the legs with the novel compression device resulting in the success

#### Conclusions/Recommendations:

Management of this kind of scenario is the first of its kind in Leighton offered by vascular OP services with clearly achievable success. We have 4 patients to date using modern compressions with good outcomes. Lymphoedema services for the Leighton catchment is often referred to St Luke’s (Winsford) where the work is predominantly for post cancer lymphoedema and turn down for primary lower limb pathology is routine. The success of this case highlights the scope to improve our services in out-patients and a case for Lymphoedema service for Cheshire and Staffordshire as part of vascular alliance.

## Abstract 32

### PHARMACY TECHNICIAN ADMINISTERING MEDICINES TO IN-PATIENTS ON WARD 21B

#### Author(s):

Harris Y, Powell J, Thomas K

#### Background/Introduction/Aims:

On ward 21b patients are routinely on multiple medications. The largest medication round is usually in the morning when it can take one nurse 2 to 4 hours depending on the number and the manipulation of the medicines required. Nursing staff have numerous conflicting priorities and are often disturbed whilst administering medicines.

The aim of this project was to employ a band 4 pharmacy technician to administer the morning and lunchtime medicines to in-patients on ward 21b.

#### Methodology:

The band 4 pharmacy technician (registered with the General Pharmaceutical Council) competent in administering oral medication was employed to;

- Administer the morning and lunch-time medicines
- Release nursing time to provide direct patient care
- Order medication from pharmacy
- Recycle medicines to reduce wastage
- Promote the utilisation of patients own medicine
- Keep the medicine trolley tidy and well stocked to help facilitate efficient medication rounds

Pre- and post-intervention audits were performed to assess impact.

#### Results:

The pharmacy technician administering medication to patients five days each week provided continuity and helped build good relationships with the patients. As it is a more focussed role, the technician had more time to spend with patients explaining how to take their medicines and why these medications had been prescribed. This helped with their understanding and future self-management.

An audit of medicines returned from ward 21B via the pharmacy green bin was carried out before and during the pilot. Medicines suitable and unsuitable for reuse were documented. In the pre-pilot audit 28% of medicines were found to be suitable for reuse, post-pilot 86% of medicines returned could be reused. The quantity of medicines returned during the pilot was considerably smaller which suggested that fewer items are being dispensed unnecessarily to the ward. Also the amount of medicines classified as patients own collected in the pharmacy bin was considerably lower during the pilot, suggesting that they had been utilised on the ward and returned to the patient on discharge.

Omitted doses audits carried out on ward 21B before and during the pilot showed the number of omitted doses decreased during the pharmacy technician pilot. Showing better continuity and meaning patients correctly received the medication they were prescribed and at the right time.

#### Conclusions/Recommendations:

Employing a band 4 pharmacy technician to administer medicines to in-patients has shown to improve the number of omitted doses, release time to care for nursing staff, improve the patient experience and produce some cost savings through reduction in medication waste.

#### Actions taken:

The pilot is still ongoing on ward 21B. With the benefits of this pilot being realised it would be hoped that the pilot would be converted into a substantive position.

Further pilots are being discussed for hospital admission areas where a pharmacy technician administering medication may have a large impact on releasing nursing time to care and medicines management.

## Abstract 33

### MANAGEMENT OF LARGE NON-PEDUNCULATED COLORECTAL POLYPS (RETROSPECTIVE SINGLE CENTRE 6 YEAR REVIEW)

**Author(s):**

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**Background/Introduction/Aims:**

Large non-pedunculated colorectal polyps (LNPCP's), defined as greater than 20mm, carry an increased risk of colorectal cancer. They are challenging lesions for endoscopic resection and are associated with an increased risk of incomplete excision and complication.

Aim: To compare current practice to established evidence based guidelines (British Society of Gastroenterology Rutter et al 2015).

**Methodology:**

Single regional screening centre (MCHFT) retrospective study examining all bowel screening patients meeting criteria between April 2009 – April 2015; with comparison to gold standard guidelines and key performance indicators.

**Results:**

A total of 46 LNPCP's were identified in 40 screening patients (26 male; 14 female) during the time frame identified. Polyp size varied from 20mm->60mm; 74% of patients had polyps between 20-40mm. Histology confirmed 41% were tubulo-villous adenomas with low grade dysplasia; 15% adenocarcinomas. The majority of polyps identified were left sided (52%), with a propensity to recto-sigmoid. Assessment of polyp malignant risk was poorly completed; 94.3% lacking documentation. Discussion at local MDT occurred for only 35% of complex polyps. 78.1% were removed piecemeal. Of the 38 LNPCP's initially managed with Endoscopic Mucosal Resection (EMR), 29% had same site recurrence, with a 0% post-procedure complication rate (perforation/bleed). 19.6% went on to surgical intervention.

**Conclusions/Recommendations:**

Documentation of potential malignant risk factors was poor, highlighting a greater awareness of documentation at time of endoscopy. Low threshold for discussion at appropriate MDT once polyps identified as complex, to guide the need for en bloc excision (EMR/surgery)

**Actions taken:**

Presented at local Colonoscopy Workshop – to be presented regionally.

Will need re-audit to assess if Key Performance Indicators have improved.

## Abstract 34

### COST SAVING IN TRAUMA AND ORTHOPAEDICS: LOAN KIT ANALYSIS

**Author(s):**

Donnelly, T., Boyce Cam, N.

**Background:**

Mid-Cheshire Hospitals NHS Foundation Trust current end of year forecast predicts a budget deficit of £8.6 million. All departments have been tasked with engaging with the Board in their efforts to curb spending whilst maintaining that 'our primary focus remains on the quality, safety and experience of the care that we provide to our patients'. Within the Orthopaedic department we sought to identify potential cost-savings concerning the loan charges attributed to the use of surgical instruments.

**Methodology:**

Using data gathered from the Sterile Services Department as well as a prospective database of requested loan equipment we were able to analyse 12 months of data from January-December 2015. Through further scrutiny the most common equipment requested was evaluated, specifically in terms of cost to hire versus purchase. Quotes were requested from a breadth of UK company representatives to look at possible alternatives which fulfilled surgical requirements but potentially offered financial savings.

**Results:**

Three different kits emerged as most commonly hired:

1. Zimmer® explant - £6750 was spent in 1 year on hire costs. The purchase price of this is £11,000. However there are similar items on the market for a much reduced cost of £8688. After the initial outlay this would provide savings of £5040.
2. Lavender® centrifuge - £3440 was spent on hiring the centrifuge from Lavender® who would provide the centrifuge free of charge on condition of increasing the associated PRP processing kits by 33%. A centrifuge and similar kit is available from Arthrex®, with only 20 kits/year being required for consignment of a centrifuge. As the single-use disposable PRP processing kit through this company is also cheaper changing to this supplier would confer savings of £2996 a year.
3. Acumed® radial head replacement. Hire cost over 12 months was £1320 against a purchase price of £4625. As such we decided this is currently not utilised often enough in order to provide a worthwhile saving.

**Conclusions:**

We recommend that the department trial explant systems from alternative suppliers to ensure their surgical quality prior to purchasing a set, rather than continue in the current fashion to hire equipment. The Arthrex® system has immediate financial benefits and we would recommend that as a Trust we switch to this supplier.

This has been presented at our departmental audit meeting with support from all consultants.



## Abstract 35

### SERVICE EVALUATION OF THE COMBINED ANTENATAL ENDOCRINOLOGY CLINIC TO IDENTIFY AREAS FOR IMPROVEMENT IN REGARDS TO PATIENT EXPERIENCE AND QUALITY OF CARE

#### Author(s):

Bajrami A & Dr. Z.M.Qureshi, General Medicine – Diabetes and Endocrinology, Leighton Hospital.

#### Background/Introduction/Aims:

The Combined Antenatal clinic offers pregnant women with diabetes or gestational diabetes the opportunity to have 3 appointments with the Ultrasonographer, Obstetrician and Endocrinologist in one morning in order to increase compliance with the antenatal care appointment.

During the clinic I noticed that some patients were becoming frustrated with the waiting times. The staff were under pressure to see everyone very quickly, and at times it was not very clear who had to be seen and by who etc., adding further stress.

The aims of the service evaluation were two-fold:

- Measure patient waiting times to see the varied health professionals
- Identify areas for improvement in the running of the Combined Antenatal Clinic through a patient interviews and staff questionnaire, in order to provide a better service for the patients and create a better working environment for healthcare staff

#### Methodology:

A Prospective audit of 20 patients. Data was collected during 2 consecutive clinics: 22/09/2015, 06/10/2015. At the start of the clinic, patients who had appointments with Obstetrics AND Endocrinology were identified; selected patients were then asked to give written consent. Two of the selected patients were randomly chosen (Patient 1 and 5) to be shadowed throughout their appointments by the interviewer for process mapping. Staff questionnaires were given to all healthcare staff working in the clinic

#### Results:

The results showed the following:

- Long patient waiting times (range 45 -135mins)
- 60% of patients were happy with the service provided by the staff members
- 85% of patients recommended an improvement in waiting times
- 25% of patients recommended improvements in waiting room facilities
- Clinics often overbooked

#### Recommendations:

- Have a separate Endocrine clinic at least once a month/fortnight
- Consultants to identify high risk patients amongst the ones attending and see them together.
- Registrars to inform secretaries of annual leave/on call rota, to avoid overbooking of clinics on those particular days.
- Improve the facilities available in the waiting area

#### Actions taken:

- Endocrinology SpR to inform the secretaries in advance regarding when they are on-call or on annual/study leave to ensure the clinics are not overbooked on those specific days.
- Endocrinology and Obstetric Consultants to identify high risk patients amongst the ones attending at the start of clinic and see them together
- Discuss with Medicine and Women & Children's service managers regarding a separate antenatal Endocrinology clinic at least once a month.

## Abstract 36

### MULTI ARM MULTI STAGE (MAMS) TRIAL DESIGN

**Author(s):**

Adamson, V, Hough C, Mansfield C.

**Introduction:**

Clinical trials seek to evaluate the potential benefits and harms of new treatments. They are designed and conducted to ensure patient safety and produce valid results (Medical Research Council, MRC 2014). Exciting new therapies are becoming available and efficient designs identify effective treatment regimens.

**Methodology:**

The Multi-Arm, Multi-Stage (MAMS) design devised by MRC is a new efficient, adaptive approach for conducting Randomised Controlled Trials (RCTs). It allows several agents to be assessed simultaneously against a single control group in an RCT.

By assessing several treatments in one trial, the MAMS design allows reliable information on the value of treatments to be acquired more quickly and with smaller numbers of patients compared with separate Phase II and III trials. This adaptive design allows continuing investment to be focused on treatments that show promise, whilst discontinuing investigation of therapy with insufficient evidence of activity. This allows the trial to assess the impact in terms of the definitive primary outcome measure.

Initiating clinical trials is resource-intensive and time-consuming. The MAMS design provides a cost-efficient method requiring fewer research approvals. This increases the likelihood that a single trial will identify a successful treatment and decreases the likelihood that the whole trial could be stopped prematurely. The chance that all treatment regimens are either insufficiently tolerated or ineffective is reduced if there are many arms. Furthermore, if all arms stop early, the trial has successfully closed off multiple avenues of research allowing other approaches to be examined more speedily. (MRC 2014).

**Results:**

The multi-arm multi-stage (MAMS) trial is a new paradigm for conducting RCTs allowing simultaneous assessment of a number of research treatments against a single control arm. MAMS trials provide earlier answers and are potentially more cost-effective than a series of traditionally designed trials. The MAMS design will potentially facilitate evaluation and testing of new therapies.

**Conclusions/Recommendations:**

The MAMS design represents a significant step forward in the potential for speeding up the evaluation of new treatment regimens. It allows researchers to assess multiple therapeutic approaches simultaneously by using an intermediate outcome measure to focus resources on those treatment options showing early evidence of positive activity. This increases the chance of a single trial providing a positive result and saves time and money compared to separate sequential trials and as such this design will become more commonly used.

**Actions:**

MCHFT are currently participating in two National Institute of Health Research portfolio trials using a MAMS design: FOCUS 4 (for patients with colorectal cancer) and STAMPEDE (for patients with prostate cancer).

## Abstract 37

### AUDITING THE USE OF THE RADIOGRAPHIC SKELETAL SURVEY IN THE IMAGING OF SUSPECTED MULTIPLE MYELOMA

**Author(s):**

Elmahdi E, Radiology, Radiology Dept., Leavesley S, Radiography, Radiology Dept., Adapala R, Radiology, Radiology Dept.

**Background/Introduction/Aims:**

We found that a number of patients are having unnecessary exposure to radiation when being investigated for suspected Multiple Myeloma. We wanted to demonstrate this by examining i) the pathology based tests undertaken PRIOR to the Radiographic Skeletal Survey (RSS) and ii) if alternative, more sensitive imaging (MRI/CT), had been undertaken in addition to the skeletal survey.

**Methodology:**

A retrospective audit was undertaken in our department looking at patients who had undergone a RSS in the past year for the investigation of Multiple Myeloma. We compared the date of the survey with the date of histology results, blood biochemistry and other imaging investigations that had been undertaken within the preceding 3 months.

**Results:**

We found that 8 patients out of a cohort of 19 had a skeletal survey performed where it was not deemed appropriate. This was due to either;

- Having more superior/sensitive imaging (MRI or CT) undertaken 3 months prior to the RSS that wasn't taken into account,
- the appropriate biochemical/histological investigations were not performed or
- Inadequate clinical information given on the request card.

Of the 19 patients who had a RSS only 2 had the films undertaken that met the BSCH 2014 guidelines for the RSS. This meant that patients only had a portion of the recommended Plain Films undertaken.

**Conclusions/Recommendations:**

We propose that patients who are suspected to have Multiple Myeloma should have the appropriate biochemical and histological investigations performed prior to imaging. Once a suspicion of Multiple Myeloma is established, more sensitive imaging modalities (MRI/CT) should be used. This is due to their greater sensitivity/specificity to look for lytic lesions and to stage the patient in accordance to the Durie/Salmon Plus staging system (2006). This will also adhere to the new NICE guidance published in February 2016.

**Actions taken:**

We will present our findings in our departmental meeting and propose the above recommendations.

## Abstract 38

### **SYMPTOMATIC PERINEAL HERNIAS: A RARE BUT CHALLENGING PROBLEM AFTER LAPAROSCOPIC ABDOMINOPERINEAL RESECTION FOR RECTAL CANCERS. A CASE REPORT TO ILLUSTRATE A COMBINED ABDOMINOPERINEAL APPROACH AND BIOLOGICAL MESH REPAIR.**

#### **Author(s):**

Ýmisson B – Medical Student (University of Manchester)  
Hamad A, Department of General Surgery, Leighton Hospital  
Govindarajah N, Department of General Surgery, Leighton Hospital  
Lumley E, Department of General Surgery, Leighton Hospital  
Khan A, Department of General Surgery, Leighton Hospital

#### **Background/Introduction/Aims:**

Perineal hernia is a rare condition that can occur postoperatively following abdominoperineal resection of the rectum or other major pelvic resections. The current literature has limited described surgical techniques for their repair given its low prevalence as a surgical complication.

In this case; we describe a 69-year-old gentleman who presented with a symptomatic perineal hernia 4 months post abdominoperineal resection for low rectal adenocarcinoma. At the time of laparotomy, the patient was found to have herniated loops of small bowel within the perineum with associated adhesions.

We aim to propose a combined abdominoperineal approach with biological mesh repair as a safe and effective technique for this rare postoperative complication.

#### **Methodology:**

We have successfully employed a combined abdominoperineal approach with a biological mesh to repair the perineal hernia in this particular case.

#### **Results:**

There were no immediate postoperative complications and at the last follow up – no evidence of any recurrence or further complication was noted.

#### **Conclusions/Recommendations:**

We have successfully employed a technique for repair of perineal hernias post AP resection at MCHFT in this case patient. Due to the increasing detection of rectal tumours combined with advanced laparoscopic skills from the operating surgeons at MCHFT we will eventually see more patients with symptomatic perineal hernias postoperatively.

As a result we would advocate this repair technique as a consideration for patients within this Trust.

#### **Actions taken:**

Documented this repair technique having reviewed current literature and practice to advise that the combined abdominoperineal approach with biological mesh repair as safe and effective technique for suitable patients with symptomatic perineal hernias within MCHFT.

## Abstract 39

### ACCESS TO FLUIDS ON GERIATRIC INPATIENT WARDS

**Author(s):**

Nicola Connelly, St3 Ward 4, Nadia Dimitrova, Ward 6 and Zaufishan Naeem Ward 6.

**Background/Introduction/Aims:**

Access to fluid on inpatient medical wards is important in meeting patient's fluid requirements and preserving general health. Dehydration has been associated with increased risk of infection and delirium amongst other things.

There are measures in place to reduce the risk of dehydration in inpatients at Leighton Hospital, including the 2-hourly checks which are done on medical wards which include charting fluid intake. However, no standards exist or have measured whether patient have access to fluid from their beds.

**Methodology:**

All inpatient geriatric patients were assessed through a spot audit sample. This included 3 wards, one of which was a rehabilitation ward.

72 patients assessed on 3 wards. 13 excluded due to being nil-by-mouth or because they required assistance.

**Standard**

100% of patients should have access to drinking fluid within reach of their position in bed/sat out in the chair (unless they are nil-by-mouth for a medical reason or require assistance for safe drinking or have another specified reason).

**Results:**

71 patients were sampled and 13 were excluded leaving a cohort of 58 patients to be assessed.

11/58 could not reach drinking water (19%).

13 excluded from study for the reasons listed. Nil by mouth (x6), cognitive impairment, relatives having moved table away momentarily (x2), end of life care, bloods being taken by phlebotomist so table moved, patient with dementia requiring extra assistance.

2 of the 11 patients who could not reach their drinks had a current AKI. (18% of those who could not reach their water).

**Conclusions/Recommendations:**

See below

**Actions taken:**

Meeting with ward managers on wards 4,6 and 21B to discuss results (which will be kept ward anonymous) and ensure all wards having 2-hourly fluid checks and changing this to ensure fluids easily reached and fluid intake documented for all patients. Raising awareness amongst staff involved in patient care. Then re-audit.

## Abstract 40

### HYPOGLYCAEMIA IN THE OVER 75s: WHAT CAN WE DO TO PREVENT IT?

#### Author(s):

A.H. Heald<sup>1,2</sup>, Cholakova V<sup>1</sup>, Khan A<sup>1</sup>, Donnahey G<sup>3</sup>, Livingston M<sup>4</sup>, <sup>1</sup>Department of Medicine, Leighton Hospital, Crewe; <sup>2</sup>The School of Medicine and Manchester Academic Health Sciences Centre, University of Manchester, Manchester; <sup>3</sup>EMIS Health, Fulford Grange, Micklefield Ln, Rawdon, Leeds; <sup>4</sup>Department of Blood Sciences, Walsall Manor Hospital, Walsall; United Kingdom

#### Introduction:

The importance of achieving optimal glycaemic control to reduce the incidence of diabetes complications is indisputable, but many barriers impede the attainment of this. In older people hypoglycaemia can result in injury, hospitalization and in some cases has life threatening consequences. Previous studies have indicated that a lower HbA1C predisposes to hypoglycaemia.

#### Aims:

Here we report the results of a health care record search of patients with type 2 diabetes in Cheshire, UK aged 75 years or more, in relation to how HbA1C level and treatment may put them at risk of hypoglycaemia.

#### Methods:

Latest HbA1c level and body mass index (BMI) were determined. Incident hypoglycaemia as recorded for the previous 10 years was determined from the GP records as was the Townsend index of social disadvantage.

#### Results:

The anonymised records of 5974 type 2 diabetes (T2DM) patients (2934 men and 3040 women) aged 75 years or more were analysed.

Mean age of the men was 81.0 (95% confidence interval (CI) 80.9-81.2) years and of the women was 82.2 (95% CI 82.0-82.4) years.

Hypoglycaemic events to a degree to be formally recorded (this would normally signify a hypoglycaemic episode resulting in collapse / third party assistance) were recorded in 4.9% of men and 5.1% of women.

The prevalence of hypoglycaemia was higher in those with a higher concurrent HbA1C. Mean HbA1C for those people with a recorded hypoglycaemic attack(s) was 57.9 (95% CI 56.4-59.4) mmol/mol compared to those with no history of hypoglycaemic episodes at 51.6 (95%CI 51.3-52.0) mmol/mol ( $p < 0.002$ ).

There was a slight fall in HbA1C by age (normalized  $\beta$  -0.069,  $p < 0.001$ ) and no difference by level of social disadvantage.

Treatment with a sulphonylurea or insulin very significantly increased the likelihood of a hypoglycaemic episode: Odd ratio (OR) 8.94 (95% CI 6.45-12.42),  $p < 0.001$ , independent of age, BMI, Townsend Index and gender.

#### Conclusion:

We have here shown that in a significant proportion of men and women with type 2 diabetes in a primary care sample, prevalence of hypoglycaemia is greater in those individuals with higher HbA1C and in those with sulphonylurea / insulin treatment.

Avoidance of untoward hypoglycaemia in older people requires pro-active medication and dietetic reviews.

## Abstract 41

### UN-BEE-LIEVABLE EFFECTS OF HONEY IN THE TREATMENT OF MOISUTRE-ASSOCIATED SKIN DAMAGE

**Author(s):**

Hutton, J. Trauma and Orthopaedics, Ward 15.

**Background/Introduction/Aims:**

Effects of honey used in a barrier cream to prevent moisture lesions: This project was motivated by the increased incidence of moisture-associated skin damage within the organisation. One of the main risks of this type of skin damage is that it can develop into pressure ulcers if not managed effectively. Medihoney™ (a honey barrier cream) has recently been introduced and was piloted on Ward 15. The aim was to evaluate the effects of Medihoney™ Barrier Cream on moisture-associated skin damage.

**Methodology:**

An audit was undertaken between 13 Oct – 28 Nov 2015 to evaluate the clinical performance and effectiveness of Medihoney™ Barrier Cream on 10 patients aged 79 to 87 years old on an Orthopaedic Trauma Ward. The total number of Medihoney™ applications was 109.

Group A = 4 patients treated with Medihoney™ Barrier Cream for prevention

Group B = 6 patients treated with Medihoney™ Barrier Cream with moisture lesions.

Nursing staff documented the experience utilising an evaluation form.

**Results:**

All nursing staff involved in the trial preferred Medihoney™ Barrier Cream compared to the previous barrier cream. The reasons were due to its moisturising and healing properties, plus the elimination of having to cleanse the skin after each use, which can cause pain. Previous barrier creams can be labour intensive as they require an application every time skin is cleansed. Overall results demonstrated the successful prevention and treatment of moisture lesions in this small patient group.

**Conclusions/Recommendations:**

Due to the debilitating effects of moisture-associated skin damage to patients it is imperative that prevention and treatment of these conditions are managed appropriately and efficiently to prevent further skin damage. There is significant research advocating the use of honey in wound care, and this audit has shown honey used in a barrier cream to be beneficial and well-regarded by staff. However, to prove the full efficacy of Medihoney™, further trials need to be completed with a larger patient sample.

**Actions taken:**

Staff education re appropriate skin care regimes and using Medihoney™ appropriately for prevention and treatment. React to Red has also been commenced on the ward overseen by tissue viability link nurse based on the ward. A further audit is also required.

## Abstract 42

### PAEDIATRIC PATIENTS ATTENDING THE BREAST CLINIC: DO WE MEET THE STANDARDS AND WHICH PATIENTS BENEFIT THE MOST?

**Author(s):**

Kleidi E, Pope V, Breast and Oncoplastic Surgery, Leighton Hospital MCHT NHS Trust

**Background/Introduction/Aims:**

The One-Stop Breast Clinic (OSBC) offers examination, imaging, and, if required, biopsies, on the same patient visit. Breast units often get paediatric referrals along with the adult ones. In the absence of a regional dedicated paediatric breast service in the region, the Manchester Breast Cancer Pathway Group has recently (2016) suggested guidelines for these referrals.

The primary aim of this study was to assess current practice at Leighton Hospital regarding paediatric referrals to OSBC, based on the guidelines. The secondary aim was to evaluate which patients actually benefit from this service.

**Methodology:**

Patients <18 years old attending the OSBC during a 3-year period (04/2012-03/2015) were retrospectively identified. Patient clinic letters and imaging reports were analysed. Data collected involved patient demographics, time of appointment, examining physician, the presenting complaint and management. The standards that we measured against were timing of appointments, management of patients by age, and overall benefit of the OSBC service. According to the new guidelines, paediatric patients should be scheduled to be seen first at clinic. Patients aged <10 years old should be referred to paediatrics. Data analysis was performed using the SPSS 19.0 tool.

**Results:**

A total of 61 patients were analysed. Female/male ratio was 4/1. Mean age was 15.7 years and 98.4% of patients were >10 years old. Adherence to the early clinic appointment guidance was met in 35% of patients. 33% of patients in the age group 11-15 years old had imaging with breast ultrasound versus 70% of patients in the age group 16-17 years old ( $p=0.271$ ). Patients aged 16-17 years old were more likely to require an intervention (treatment or follow-up) compared to patients aged 11-15 years old ( $p=0.048$ ).

**Conclusions/Recommendations:**

The practice here is broadly in line with the new Pathway Group guidelines. Audit standards were met regarding age of referral to breast clinic (98.4%). Action should be taken to offer children the first appointments in clinics. Patients >15 years old benefit the most from the OSBC as the majority required an ultrasound, and this was done at the same visit.

**Actions taken:**

To improve adherence, we plan to inform local GPs of the new paediatric breast referrals guidelines and schedulers on timing of children's appointments. A suggestion will be made to the Manchester Pathway Group to increase the age of children who can be referred to paediatrics instead of breast services from <10 years to <14 years old.



## Abstract 43

### A REVIEW OF PATIENT SATISFACTION FOLLOWING SPEECH AND LANGUAGE THERAPY SERVICE PROVISION ON THE ACUTE STROKE AND REHABILITATION WARD AT LEIGHTON HOSPITAL

#### Author(s):

Seiler, A., Advanced Clinical Specialist Speech & Language Therapist, MCHFT.

#### Background/Introduction/Aims:

The Speech and Language Therapy (SLT) Team on Ward 6 provide assessment and rehabilitation for patients with acquired communication and swallowing problems following stroke. Impairment of swallowing may occur in up to 65 percent of stroke patients and about a third have some difficulty with speaking, understanding speech, reading or writing. Our patients often find it difficult to access service user feedback questionnaires due to communication barriers. For this reason, a questionnaire was devised which incorporates pictures, simple sentences and bolded keywords. This enabled many of the patients to access the information and to provide feedback about SLT service provision.

#### Methodology:

Questionnaires were given on discharge from the SLT service. Data was collated from October 2015 – January 2016. Exclusions were made for patients who were placed on the end of life care pathway and for those medically unwell.

- 76 patients were discharged from the service during this period
- 13 were for end of life care / medically unwell
- 39 questionnaires were returned (62% of the total 63 eligible for a questionnaire)

#### Results:

- 97% said that the SLT team explained their job role
- 90% had discussed and agreed goals
- 92% found the SLT Service 'Very Helpful'
- 86% of those with communication impairment felt more confident after therapy
- 89% were able to use therapeutic strategies to improve functional communication
- 100% of those with swallowing impairment said that SLT helped them to understand their swallowing difficulty

#### Qualitative feedback:

Overwhelmingly positive comments including:

'More than we expected from an NHS service'

'One to one tuition very helpful ... I will be forever grateful'

'First class', 'really surprised at the amount of help and information'

#### Conclusions/Recommendations:

Patients asked for:

- More therapy and weekend working (the team currently cover one session over a bank holiday weekend)
- More diagrams of the throat and swallow

#### Actions taken:

- Patients are provided with diagrams to explain their swallowing difficulty
- Strive to maintain a quality service; incorporating use of Therapy Assistant time, Volunteer Services, lunch club sessions and joint working with family / carers
- Highlight need for staffing review to enable an increase to intensity of therapy and provision of weekend working; based on national best practice guidelines for stroke

**The Exposition Organising Committee would like to thank everybody involved for their help in making the 2016 Exposition possible.**

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