



Quality improvement and patient safety / audit

April 2024

3As In Inpatient Smoking Cessation

(Dr Abeela Kanwal Awan, Dr Burhan Khan)

Background

Tobacco smoking remains the single biggest cause of preventable and premature death and disability in the UK. Offering advice and assistance for tobacco abstinence in hospitals is a critical aspect of improving overall health¹. Every healthcare encounter serves as an opportunity to Ask, Advise and Assist (3As) patients to quit smoking². In hospitalized patients, addressing tobacco use presents an invaluable opportunity to initiate and support successful quitting journeys¹.

Objective

This study aims to determine the prevalence of smoking amongst patients hospitalised in a DGH and to assess the utilisation of the 3As^{3,4}.

Methodology:

Cross-sectional survey on 06 occasions across 04 Medical wards of all patients admitted to hospital. These patients were interviewed, and data captured directly onto a survey form by the interviewer. Case notes were reviewed to corroborate details.

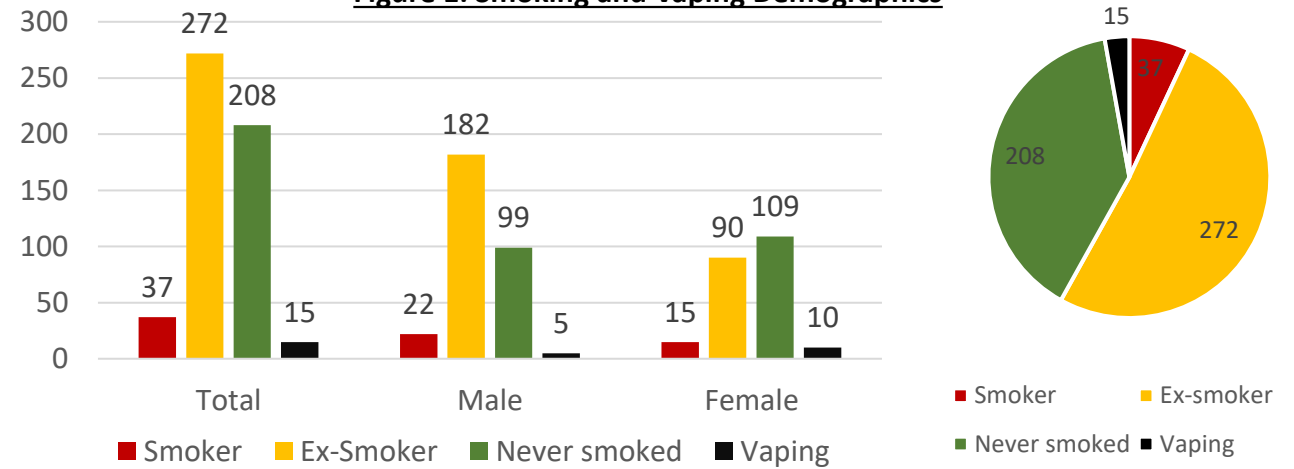
Results:

614 patients were surveyed, but only 532 were able to participate; Male : Female 298:234. (Fig 1) 6.95% of this cohort were smokers, 100% of them were asked if they smoked, were advised to stop smoking and were assisted in smoking cessation. In contrast, 2.81% of this cohort were currently vaping, and though their vaping status was identified 100% of the time, no further advice or assistance was offered. (Table 1)

Smoking & 3As:	No of patients	Percentage
Total no. of patients	532	86.64 % (532/614)
Total no. of smokers	37	6.95 % (37/532)
No. of smokers ASKED	37	100 % (37/37)
No. of smokers ADVISED	37	100 % (37/37)
No. of smokers ASSISTED	37	100 % (37/37)
Vaping & 3As:	No of patients	Percentage
Total no. of patients	532	86.64% (532/614)
Total no. of vapers	15	2.81 % (15/532)
No. of vapers ASKED	15	100 % (15/15)
No. of vapers ADVISED	0	0 % (0/15)
No. of vapers ASSISTED	0	0 % (0/15)

Table 1: Smoking/Vaping & the 3As

Figure 1: Smoking and Vaping Demographics



Conclusion:

Preliminary findings suggest excellent utilisation of the 3As in promoting smoking cessation amongst patients. Successful outcomes were associated with the combination of pharmacotherapy, counselling, and ongoing support. Improved patient engagement and satisfaction were observed, with participants expressing gratitude for the hospital's commitment to their overall well-being.

This is in marked contrast to similar surveys done in the Outpatient settings in the same hospital in 2011: Smoking prevalence 53/204 (26%); Asked 26/53 (49%); Advised 10/26 (38.5%); Assisted 06/10 (60%) and again in 2019: Smoking prevalence 103/505 (20%); Asked 67/103 (65%); Advised 40/67 (59%); Assisted 15/67 (22%)^{5,6}.

Adopting a systematic approach to identify, advise and assist smoking cessation combining pharmacological support and referral for counselling yields potentially promising results. Integration of such programs into routine hospital care can contribute to improved patient outcomes and long-term reductions in tobacco use.

References:

1. Quality Improvement: National smoking cessation audit 2021 <https://www.brit-thoracic.org.uk/quality-improvement/clinicalaudit/national-smoking-cessation-audit-2021/>
2. Smoking and health 2021: A coming of age for tobacco control? <https://www.rcplondon.ac.uk/projects/outputs/smoking-and-health-2021-coming-age-tobacco-control>
3. Stead L, Bergson G, Lancaster T: Physician advice for smoking cessation (Review). Cochrane Database Systemic Review 2008, 2:1–44.
4. Mara Buchbinder, Rachel Wilbur, Diana Zuskov, Samuel McLean, and Betsy Sleath. Teachable moments and missed opportunities for smoking cessation counselling in a hospital emergency department: a mixed-methods study of patient-provider communication.
5. Khan B, Smith L. Hospital clinicians use of smoking AAAs. European Respiratory Society (ERS) Annual Congress in Amsterdam, Holland; September 2011
6. N Kaushal, B Khan. Smoking cessation in secondary care Can we do better or is this as good as it gets? European Respiratory Society (ERS) Annual Congress 2020

Adjuvant Systemic Therapy For Melanoma - Analysis of factors leading to the timely initiation of treatment.

G Abraham¹, D Hanna¹, S Rashid¹, T Grunewald².
¹St. Bartholomew's Hospital, ²Imperial Health NHS Trust



INTRODUCTION



- Early-stage melanoma is associated with high rates of recurrence.
- Checkpoint inhibitors have dramatically improved outcomes for metastatic melanoma over the past decade and now they are available in the adjuvant setting for stage IIB-IIID disease.
- For BRAF V600 mutant, fully resected stage 3 disease, there is the alternative option of adjuvant BRAF/MEK inhibitors, dabrafenib/trametinib. Nivolumab Early is licensed for fully resected stage IV disease. Adjuvant treatment should commence within 12 weeks of surgery to reflect trial data.



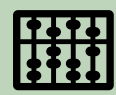
AIM

To characterize melanoma patients treated with adjuvant therapy in Barts Health NHS trust, assess time to initiating adjuvant therapy and recurrence rates.



METHODS

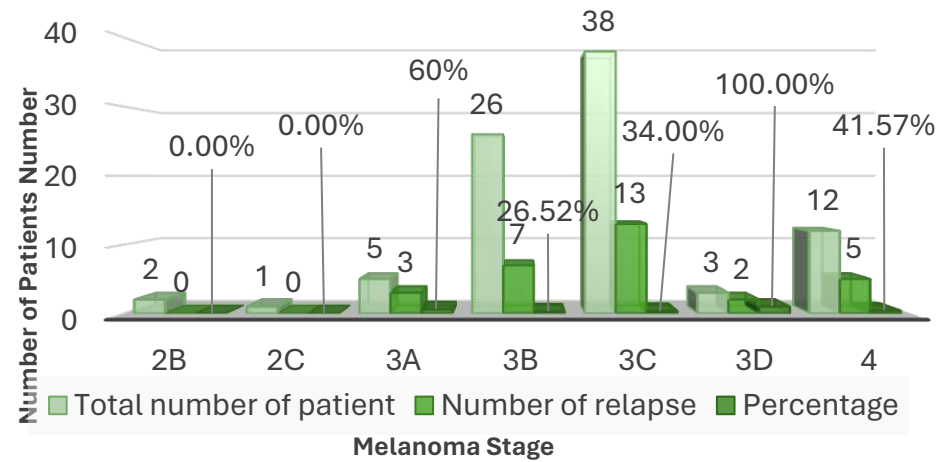
Data was collected retrospectively on all melanoma patients who started adjuvant treatment at Barts Health NHS Trust between 2020 to 2022. Data was collected on demographics, cancer stage, type of adjuvant treatment, toxicity, survival, and recurrence.



RESULTS

- The result from 87 patients who received adjuvant treatment revealed the following;
- Relapse rates were higher than estimations provided by the American Joint Committee on Cancer (AJCC) (Figure 1).
- Of these patients, 27 (31%) exceeded the 12-week target for commencing adjuvant treatment post-surgery.
- 50 (57%) patients received pembrolizumab; 27 (31%) dabrafenib/trametinib and 10 (11%) nivolumab; 33 (38%) patients harboured a BRAF V600 mutation.
- 18% (6/33) opted for immunotherapy and 82% (27/33) opted for targeted therapy.
- Reasons for delays included delays in scan scheduling/reporting (11[38%]) and pathology reporting (3 [11%]), late referral to medical oncology (1 [4%]), lack of chemo unit availability (4 [15%]), late referral to correct multidisciplinary team meeting (5 [19%]) and patients too unwell to start treatment (9 [33%]).

Figure 1: Relapse Rate in Patients Receiving Adjuvant Therapy



DISCUSSION AND CONCLUSION

- Our results show higher-than-expected relapse rates in patients receiving adjuvant treatment for melanoma. Additionally, 31% of patients did not commence treatment within the 12-week recommended timeframe.
- Recommendations on how to improve on this will be presented at the regional specialist skin MDT. Medical oncologists will aim to see all new patients within 8 weeks of surgery and chemotherapy booking requests will be made pre-emptively. We plan to re-audit in 12 months once these changes have been implemented.



REFERENCES



1. Eggermont, A. et al. Adjuvant Pembrolizumab versus Placebo in Resected Stage III Melanoma. *New England Journal of Medicine* 2018;378.
2. Long, G. V. et al. Adjuvant Dabrafenib plus Trametinib in Stage III BRAF -Mutated Melanoma. *New England Journal of Medicine*
3. Gershenwald, J. E. et al. Melanoma Staging: Evidence-Based Changes in the American Joint Committee on Cancer (AJCC) Eighth Edition Cancer Staging Manual. *CA Cancer J Clin* 2017;67.

Acknowledgments: Dr D Hanna, Barts Cancer Institute, London, UK contributed equally to the study

INCIDENCE OF INAPPROPRIATE CPR IN THE EMERGENCY DEPARTMENT

Is ReSPECT making a difference?

Dr. ALEXANDRA LISSETER

INTRODUCTION

A BMJ study suggested that 1 in 5 sick, older patients have a 'do not resuscitate' document and a large proportion only had this completed in the Emergency Department (ED) (1). ReSPECT forms were established to bring consistency to the communication of patients wishes, including 'do not attempt CPR' (DNACPR) (2). Current ED pressures could cause greater delay in these discussion, resulting in inappropriate cardiopulmonary resuscitation. Throughout my emergency medicine rotation, I witnessed resuscitation attempts on patients which were either unsuccessful or stopped due to poor reserve or co-morbidities. This led me to question how efficient we are at reviewing who is not suitable for CPR before an arrest happens.

AIMS

This QUIP aimed to assess the incidence of inappropriate CPR in two emergency departments, one uses ReSPECT forms whereas the other does not.

- To compare the occurrence of CPR on patients with a previous DNACPR across the two departments.

RESULTS AND FINDINGS

	Hospital A	Hospital B
Number of Arrests	21	10
Prior DNACPR/ReSPECT	4	0
Arrested < 30 minutes	9	4



Table 1 (above) shows both hospitals had a similar proportion of total arrests happen within 30 minutes of the patient's arrival.



Hospital B did not perform CPR on any patients with prior DNACPR/ReSPECT (with DNACPR).



Hospital A performed CPR on 4 patients with prior DNACPR. Of those four patients:

- One arrested within 30 minutes within the department.
- One had a DNACPR written for them only minutes before they arrested by a different specialty.
- Two had DNACPRs in the community which were accessible on the GP portal.

METHOD

Data was collected retrospectively from cardiac arrests in two ED's over 11 months. For each patient requiring CPR I reviewed the physical notes, hospital e-documents and the GP portal. I recorded:

- the number patients undergoing CPR, of these;
 - how many had prior DNACPR/ReSPECT forms
 - how often CPR occurred within 30 minutes of patient arrival.

CONCLUSIONS

Hospital A performed CPR on more patients with prior DNACPRs compared to hospital B. Occasionally, these DNACPRs were on the GP portal but were not easily accessible in the hospital setting due to the hospital's paper-based notes system. Hospital B uses ReSPECT forms which are brought in with the patient, these are therefore more accessible across settings with different systems: paper-based or IT and they are potentially a bridge between community and hospital decisions on DNACPR. Could the difference in the incidence of inappropriate CPR in this study be due to ReSPECT forms?

References: 1. Walker, J., et al. (2021) Do not attempt cardiopulmonary resuscitation (DNACPR) decisions for older medical inpatients: a cohort study. *BMJ Supportive & Palliative Care*. doi.org/10.1136/bmjspcare-2021-003084. 2. Hawkes CA, Fritz Z, Deas G, Ahmedzai SH, Richardson A, Pitcher D, Spiller J, Perkins GD; ReSPECT working group collaborators. Development of the Recommended Summary Plan for Emergency Care and Treatment (ReSPECT). *Resuscitation*. 2020 Mar 1;148:98-107. doi: 10.1016/j.resuscitation.2020.01.003. Epub 2020 Jan 13. PMID: 31945422.

Evaluating Implementation of ICD Deactivation Discussions in DNACPR Forms: Audit From Tertiary Care Hospital in UK

Arkadeep Dhali¹; Chihaw Hon²; Patience Ehilawa³
Internal Medicine Trainee Year 1¹, Internal Medicine Trainee Year 3², Consultant Respiratory Physician³- Nottingham University Hospitals NHS Trust, United Kingdom

INTRODUCTION

Implantable cardioverter-defibrillators (ICDs) are life-saving devices that are increasingly used in clinical practice. However, for patients approaching end of life, the device may no longer be appropriate. The Resuscitation Council UK (RCUK) recommends early discussions with patients and their relatives about ICD deactivation as part of advanced care planning, typically during the last year of life. The Do Not Attempt Cardio Pulmonary Resuscitation (DNACPR) form at Nottingham University Hospitals NHS Trust includes information about ICDs (section 10); however, this was not a pre-defined quality standard in the ongoing trustwide DNACPR audit.

This audit was initiated as part of the governance process within Respiratory Medicine. The aim was to evaluate the completion rate of DNACPR Section 10 and implement improvement measures.

METHODS

Section 10 of DNACPR forms (figure 1) across all medical wards across both hospital campuses of Nottingham University Hospitals NHS Trust were audited in April 2023. Chest radiographs and/or clinic letters were reviewed to distinguish permanent pacemakers (PPMs) from ICDs.

Section 10 was later included in the trust wide audit standard and a re-audit was conducted in November 2023.



Figure 1: Image of DNACPR form audited with highlighted section 10.

RESULTS

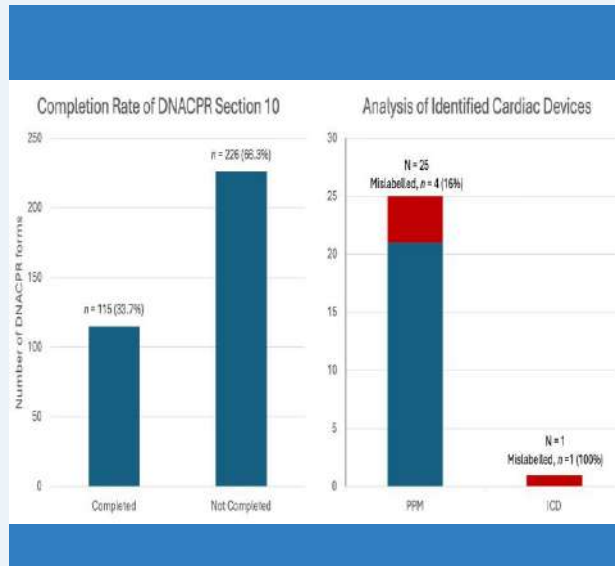


Figure 2: Proportion of DNACPR forms filled with relevant data

A total of 341 DNACPR forms were audited of which 318 (93%) were endorsed by a senior clinician. Section 10 was not completed in 66.3% of cases (figure 2), 32.6% (n=111) were labeled as having no ICD, and 1.2% (n=4) as having ICD.

Among the four DNACPRs labeled as having ICD, cardiology was not contacted in 3/4 (75%), and 1/4 (25%) was not completed. Of the 25 patients with permanent pacemakers (PPM), 16% (n=4) were incorrectly labelled as ICD. One patient had an active ICD incorrectly labelled as "no ICD" on the DNACPR form.

In the trust wide re-audit, section 10 was not completed in 45% (n= 120/266) cases.

CONCLUSION

Following our initial audit cycle, **Section 10 of DNACPR form was included in the trust wide audit standard.** It demonstrated improvement in completion of section 10 (reduced from 66.3% forms not completed to 45%).

Our proposed further actions include-

- (a) Enhancing education regarding the ICD deactivation protocol.
- (b) Adding an 'ICD check' section to the end-of-life and fast-track discharge documentation.
- (c) Consideration of incorporating information regarding ICDs into existing ReSPECT forms, at a National level.

Following the implementation of these further recommendations, we plan to conduct a reaudit to assess the overall improvement in outcomes. This strategic approach aims to address the identified shortcomings by promoting better system integration, enhancing practitioner knowledge, and incorporating critical ICD checks into essential documentation, ultimately ensuring a comprehensive and streamlined process. This may help minimise harm from inappropriate defibrillation for patients approaching end of life and allow such patients to have a dignified death.

REFERENCE

Resuscitation Council UK, British Cardiovascular Society, National Council for Palliative Care. Reactivation of implantable cardioverter-defibrillators towards the end of life: A guide for healthcare professionals. <https://www.resus.org.uk/sites/default/files/2020-05/CIEDs%20Deactivation.pdf> [Accessed 02 January 2024]

ACKNOWLEDGEMENT

With contributions from Ahmed Ahmed, Ali Al-Hilfi, Ekraj Bhandari, Mujtaba Bukhari, Mohsin Butt, Raad Chowdhury, Mohamed Gamea, Chris Gilmartin, Paige Johnson, Ahmed Kareem, Mehreen Khan, Ju Lyn Lim, Mahir Mohammed, Owoyemi Odukafe, Su Myat Phyu, Eric Rahul, Naseera Seadat, Abdur Shaik, Syarafina Zahidi.

Navigating the Horizon: An Assessment of Aviation and Space Medicine Education in UK

Medical Schools, Unveiling The Disparity Between Interest and Exposure

Catherine Graham^{1,2}, Aroun Kalyana¹, Harry Kyriacou¹

¹University of Cambridge, ²Barts Health NHS Trust

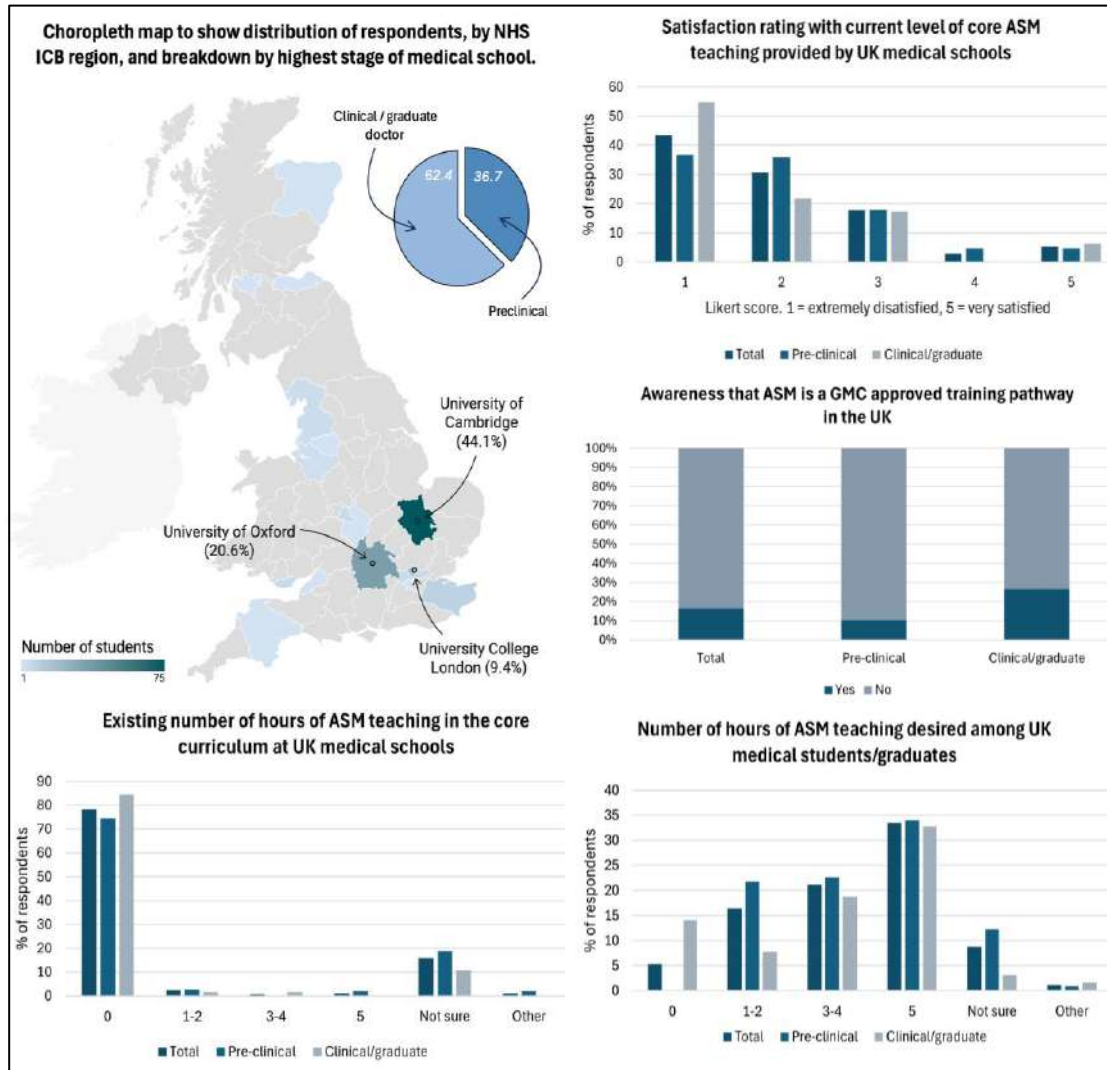


Background

Aviation and Space Medicine (ASM) gained recognition as a specialty by the UK's General Medical Council in 2016, and is poised to grow in importance with growing demand in aviation and the expanding global space sector, both in the UK and abroad. The predicted 41% growth of the commercial spaceflight industry within the next 5 years¹ amplifies the need for ASM physicians capable of addressing the unique health challenges associated with space travel. ASM extends beyond in-flight care, playing a crucial role in translating lessons learned in extreme environments to terrestrial healthcare. Recognising the influence of exposure and role models on student's specialty preferences², a study was conducted to assess the current level of ASM education provided to UK medical students compared to their desired level and interest in the specialty.

Methodology

A 29-question survey, consisting of multiple choice, Likert scale and free-text responses on these topics was distributed via Google Workspace's survey administration software to students from 37 UK medical schools, through contacting their medical societies and/or faculty administrators. To evaluate disparities in understanding the curriculum at various points in the medical degree journey, analyses were subcategorised into pre-clinical (62.4%) and clinical/graduate doctor (36.7%) stages.



References

1. The commercial space industry, led by Elon Musk's SpaceX, is expected to blast off with 41% growth over the next 5 years [Internet]. Fortune. Available from: <https://fortune.com/2023/07/24/space-industry-revenue-growth-five-years/> [Accessed 18 February 2024]
2. Kaminski A, Falls G, Parikh PP. Clerkship Experiences During Medical School: Influence on Specialty Decision. *Medical Science Educator*. 2021 Jun; 31(3): 1109-1114.

Results

The **170 respondents**, representing 18 different UK medical schools, revealed a **lack of awareness regarding, and education in ASM**.

- ✗ 83.6% were not aware that ASM is a GMC-approved training pathway, whilst 83.5% rated their knowledge of the UK ASM training pathway as 1 (no knowledge).
- ✗ 78.2% reported zero hours of ASM teaching in their medical school curriculum.
- ✗ 65.3% received no exposure to ASM outside of the core curriculum

However, **a strong interest in the specialty was identified**.

- ✗ 15.3% and 7.7% expressed strong consideration (rated 4 and 5, respectively) for pursuing a career in ASM.
- ✗ 37.6% expressed a desire for 1-4 hours and 33.5% for 5+ hours of ASM within the core medical school curriculum, predominantly through lectures.

Outside of medical school, the main exposure to ASM was through student societies (27.1%).

Discussion

Despite minimal exposure and educational opportunities, significant interest in ASM was evident among UK medical students. To address this gap, we recommend **curriculum development** – whilst recognising the already saturated core medical curriculum, we propose **introduction and expansion of optional modules** to align with students' demonstrated interest. We recognise the possibility of response bias in this survey, which could impact the overall representativeness of the findings. Despite this, **greater representation in the undergraduate curriculum** is essential to generate heightened awareness of ASM and its UK training pathway. This not only ensures that the option of a career in this specialty is **accessible** to all UK medical students, but that interested individuals are **adequately prepared** to embark on careers in this new, exciting era of Aviation and Space Medicine.

Quality improvement project (QIP) aiming to improve weekend handover

Carmel, Halevy¹; Mariana, Nalmpanti¹; Sara, Delvarr¹; Ella, Davidson¹; Puntrika, Tannirandorn¹; Caroline, Dawson¹; Vassiliki, Bravis¹

¹St Mary's Hospital, Imperial College Healthcare NHS Trust

Introduction

As junior doctors working weekend on-call shifts in general medicine, we noticed it was often unclear which patients needed to be reviewed, by whom, and what tasks needed to be completed.

Studies have consistently demonstrated that morbidity and mortality increases during the weekend.¹ Inadequate communication and handovers have been cited as contributing factors.²

Aims

As the Endocrine team we wanted to perform a QIP to improve our weekend handovers. Our aims were to:

- (1) Introduce consistent and clear handover documentation for tasks needed to be completed by weekend on-call teams
- (2) Reduce time spent by on-call teams trying to understand weekend tasks for our patient cohort

Materials & Methods

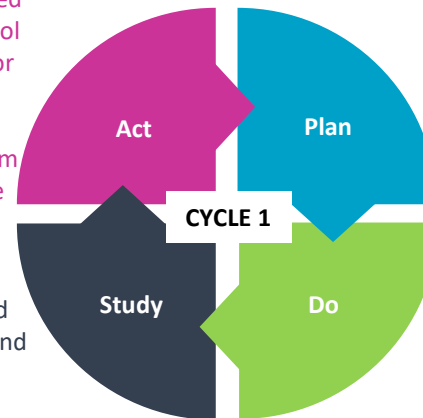
We completed 2 Plan-Do-Study-Act (PDSA) cycles:

Act:

Handover table changed to written short-cut tool with key statements for weekend tasks and questionnaire sent to medical education team to circulate to increase uptake

Study:

3 weeks of Friday ward round data analysed and post-intervention questionnaire sent to medical teams



Plan:

3 weeks of Friday ward round data reviewed and questionnaire sent to medical teams to explore existing views and time spent

Do - Intervention 1:

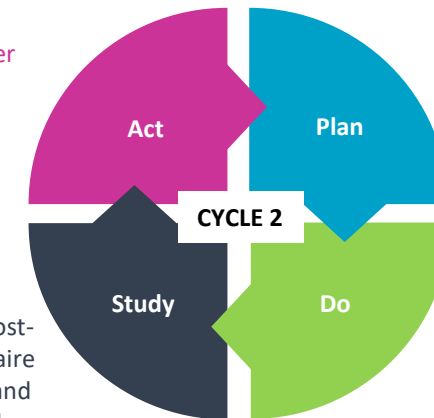
Standardised handover table with tasks for every Friday ward round introduced

Act:

Handover shortcut tool to include team member contact details and shortcut to be made available to whole medical team to use

Study:

3 weeks of Friday ward round data analysed, post-intervention questionnaire sent to medical teams and added to medical weekly newsletter



Plan:

3 weeks of Friday ward round data reviewed and questionnaire sent to medical teams with medical education team support to increase uptake

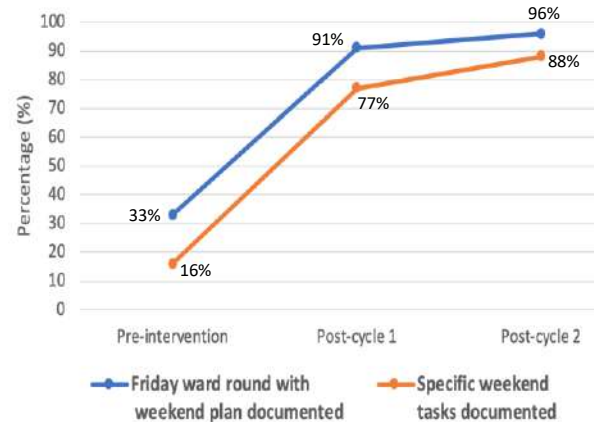
Do - Intervention 2:

Electronic shortcut tool with key statements for weekend tasks introduced

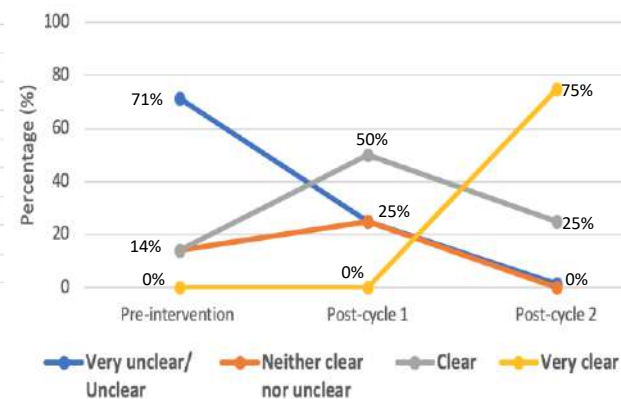
Results

We present our data in run charts below:

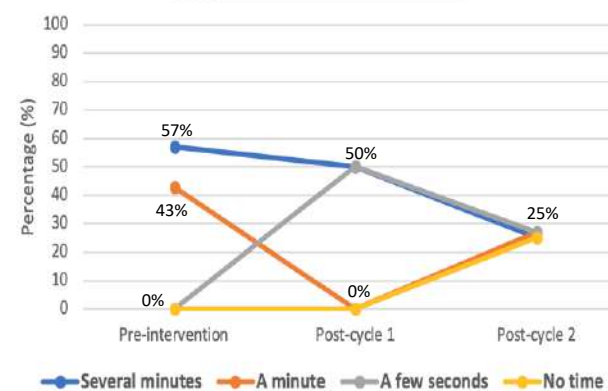
Run chart 1: Friday ward round data



Run chart 2: Junior doctor questionnaire results on clarity of endocrine team handover



Run chart 3: Junior doctor questionnaire results on time taken trying to understand weekend task list



Discussion & Conclusions

Results showed that introducing a 'structured weekend handover tool' resulted in clear and consistent documentation of actions required over the weekend, whereby run chart 1 shows weekend task documentation increased by 72% from pre-intervention to post-cycle 2. This led to improvement of clarity and a decrease in time needed for the on-call team to action plans, as evidenced by run chart 2 and 3. Furthermore, our team became increasingly concordant with the use of the tool with each cycle, whereby run chart 1 shows weekend plan documentation increased by 63% from pre-intervention to post-cycle 2, reflecting potential sustainability over time.

We aim to roll this structured weekend handover tool across out-of-hours working in our Trust. We plan to use the PDSA cycles to build towards that. Barriers we anticipate include rotation of junior doctors and pressure of time in acute services. However, this is likely to contribute to safer care provision and increased efficiency for those exact reasons.



Introduction

Board rounds are a daily meeting of the multi-disciplinary team to discuss important aspects of patients' care and facilitate hospital flow.^{1,2}

Previously, our board rounds were held at the main entrance to the ward; staff highlighted issues with **frequent interruptions** and **breaches in patient confidentiality**.

Our quality improvement project proposed a change of setting to the quiet room at the end of the ward, with the addition of teas and coffees. We aimed to investigate whether this affected:

- 1) the duration of board round
- 2) staff wellbeing

Methods

Baseline data collection on board round duration for 1 week

Cycle 1: We moved the board round setting from the reception area to the quiet room where coffee was provided

- Post-intervention data collection for 1 week

Cycle 2: We introduced a bell to remind the team to attend board round to avoid delays

- Post-intervention data collection for 1 week

We designed questionnaires based on the NHS staff survey core questionnaire to assess effects on staff wellbeing

Results

Effect on board round duration



Cycle 1) Board round duration was significantly reduced with change in setting: mean duration 31.1 from 39.6 minutes (p=0.04)

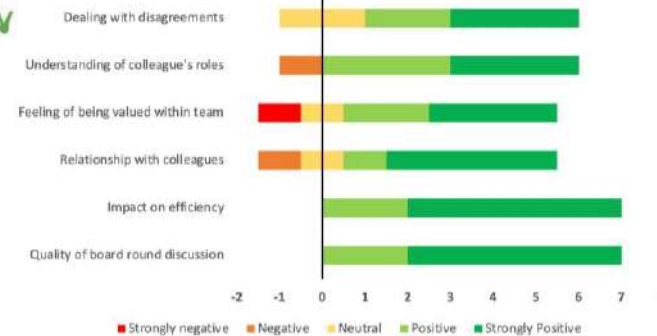
Cycle 2) There was no change to board round start time with addition of a bell (no less delays)

Questionnaire Comments



7 questionnaire responses from the MDT including senior sisters, physiotherapists, occupational therapists and doctors.

Survey Responses (modelled on NHS Staff Survey Core Questionnaire)



Conclusions

Having board round discussions in a quiet and calm environment is conducive to improved efficiency, patient-focused care and confidentiality. There is a clear feeling that the new format is beneficial to staff wellbeing.

Strengths: A simple intervention that could be introduced to other wards across the hospital with minimal disruptions or costs.

Limitations: The results are limited to one ward with a small number of respondents. We don't yet know whether this will be a lasting change and we have not been able to study whether the results correlate to patient-centred outcomes.

Areas for future focus

- teaching sessions to encourage other wards to take up this initiative
- trailing new board round styles in other patient populations to investigate generalisability
- investigate whether these changes translate to patient-centred outcomes such as length of admission

References

1. Saqib A, Waugh W, Jayasinghe R, Banerjee S. Patient Journey Champions: A project to facilitate delivery of effective board rounds for inpatients, aiding flow through the hospital. *Future Healthcare Journal*. 2020 Oct;7(3):e30.
2. Hellier C, Tully V, Forrest S, Jaggard P, MacRae M, Habicht D, Greene A, Collins K. Improving multidisciplinary communication at ward board rounds using video enhanced reflective practice. *BMJ Open Quality*. 2015 Jan 1;4(1):u206968-w2801

The role of Inreach Outreach Diabetes Specialist Nurse (IROR DSN) in reducing the average length of hospital stay of patients admitted with acute diabetic emergencies (Diabetes Ketoacidosis/ severe hypoglycaemia) and reducing the 30-day readmission rate- A retrospective analysis

Idampitiya C; Thorman S; Blundell R; Ranathunga I; Pambinezhut F
North Cumbria Integrated Care NHS Foundation Trust

Introduction:

- More than 4.7 million people in the UK have diabetes.
- Diagnoses are more than doubling in the last 20 years¹
- People with diabetes spent 1-3 days longer in hospital and have 6% higher mortality rate than the rest²
- 1 in 25 Diabetic ketoacidosis(DKA) rate in hospital²
- GIRFT indicators for improvement of inpatient diabetes care 22/23 Q4 – all metrics for the Trust above the benchmark.
- Identified gap in continuity of care for patients with complex needs and support for community staff.

GIRFT Indicators for improvement of Diabetes care

Mean length of hospital stay for patients admitted with DKA

Emergency readmission rate within 30 days following admission with DKA

Mean length of stay for patients admitted with hypoglycaemia

Emergency readmission rate within 30 days following admission with hypoglycaemia

Method:

- Introduction of inreach outreach (IROR) DSN role to support diabetes care for complex patients admitted with DKA, hyperglycaemia and hypoglycaemia whilst inpatient and in the community following discharge
- Inpatient diabetes team to identify suitable patients for referral to IROR DSN

Data collection and Results:

- Referrals to IROR DSN from 01/06/2023- 02/12/2023
- 20 patients referred following DKA
- 11 patients referred following severe hypoglycaemia
- Comparison of indicators of improvement by IROR DSN intervention with overall Trust metrics for 22/23 Q4

Metric	Provider (Trust) value	Benchmark value	IROR value
DKA mean length of stay	10.4	5.3	5.3
Emergency 30 day readmission rate following DKA	19.3	14.3	9.9
Hypoglycaemia mean length of stay	22.3	9.8	5.5
30 day readmission rate following hypoglycaemia	18.8	13.2	0

Conclusions

- IROR DSN intervention reduced the length of hospital stay and 30 day readmission rate of patients admitted with diabetic emergencies.
- Patients with complex needs / previous multiple admissions were targeted therefore the improvement is significant and cost effective.

References

1. GIRFT diabetes report. <https://www.gettingitrightfirsttime.co.uk/wp-content/uploads/2020/11/GIRFT-diabetes-report.pdf>
2. Diabetes UK, Making hospitals safer, 2018

A Nation-wide mapping programme for genetic syndromes in cancer



CUTTING-EDGE INITIATIVE

Who? Gibraltar Health Authority in collaboration with Geneticist at Royal Marsden NHS Foundation Trust

What? Next-generation programme to screen certain cancer types for Specialist-led germline testing since

January 2023

Why? To be aligned to NICE guidance (DG27 and DG42), NHS Long Term Plan and NHS England National Genomic Test Directory

AT 13-MONTH LANDMARK

94 non-breast probands



89 proceeded to tissue-based testing



11 referrals to Genetics: 8 colorectal (4 x MSI-high), 2 prostate (ATM/CDK12 and BRCA2) and 1 pancreas

GENETICS SYNDROME SCREENED AT MDT

Lynch

- Risk of colorectal, gastrointestinal and biliary tract, genitourinary system and pancreatic cancer
- Germline pathogenic variant in MLH1, MSH2, MSH6 or PMS2
 - 1 in 250 individuals

BRCA1-2

- Risk of breast, ovarian, prostate, pancreatic, etc
 - 1 in 400 individuals

Counselling on individual cancer risk over lifetime

Tailored screening and surveillance

Risk-reducing surgery

Chemo-prevention

Quality Improvement audit and care excellence

How would you reduce toxicity admissions for cancer patients?

Lopez Escola, Cristina; Kyle, Gomez; Juan, Roman Alonso; Mamta, Moreno; Juan Carlos, del Rio Valencia; Juan Ramon, Vazquez; Jorge Lucas, De Zacarias; Jessica, Griggs; Marta, Robles; Alvaro, Flores; Catalina, Fernandez Suarez; David, Ballesteros Quintanilla



Multi-Disciplinary
Oncologist, CNS, Pharmacist



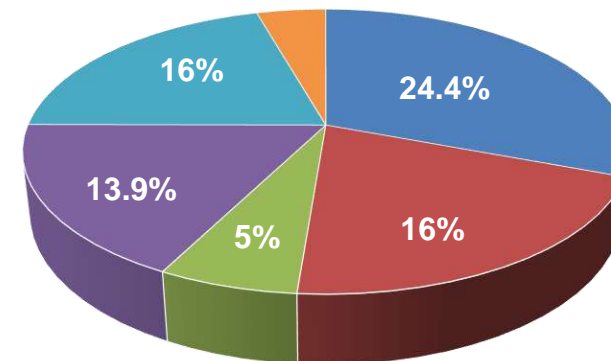
Systematic
For safe and high quality care



Impactful
188 e-records vs NHS England Digital data

Pre-chemo MDT - R&I Smart App and AI

2.5% admission rate (20.5% from NHSE) - mostly once, palliative intent and related to disease progression



■ Breast ■ NSCLC ■ SCLC ■ Gynae ■ Colorectal ■ Urology

Graph 1 - Admission rate by main tumour site (NSCLC - Non-Small Cell Lung Cancer; SCLC - Small Cell Lung Cancer)



Eleanor Buck ¹, Priya Sivakumaran ¹, Abdulmaid Elmi ¹, Fatima Jafri ¹, Robert Price ¹

¹ Geriatric Medicine Kingston Hospital Foundation Trust, United Kingdom

Introduction

- Falls are the most reported patient safety incident in healthcare. (1)
- Falls result in physical injury, functional decline, and psychological distress, with an increased incidence of these complications in patients aged over 65 (2).
- We worked with our local falls steering group to implement strategies to target modifiable risk factors, following the 2021 audit.
- The actions following audit cycle 1 included: Trust wide communications, poster display highlighting existing falls prevention interventions and a dedicated section within our trust wide handbook.

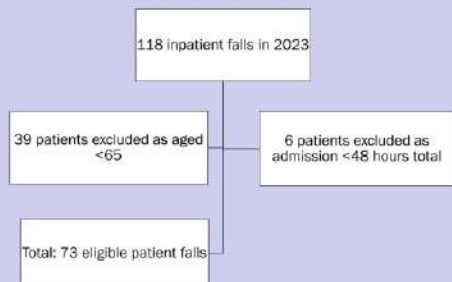
Aims:

- To analyse inpatient falls which occurred between 16th May 2023 and 1st September 2023 against NICE guideline CG161.
- To assess modifiable risk factors and evaluate how to reduce patient falls within our hospital.
- To compare our results to the audit completed in 2021 and assess the impact of actions taken to reduce patient falls following this.

Methods

- This was a retrospective audit of all patients who had an inpatient fall between 16 May 2023 -1st September 2023.
- This was compared to the first audit cycle completed 1st January 2021 - 31st July 2021.
- Patients excluded from the analysis included those aged under 65 and those admitted for less than 48 hours total.
- Data extracted included: timing and location of the fall, medications evaluated using the British Geriatric Falls Safe Care Bundle (3) medication list, lying and standing blood pressure, baseline mobility, physiotherapy assessment and 4AT.

Figure 1: Flowchart displaying the formation of the final dataset



Results

FALL SETTING

- In 2023, 73 eligible inpatient falls occurred, compared to 88 in 2021.
- In 2023, most falls occurred after midnight (29%, n=21) or in the afternoon (25%, n=18), while the least number of falls occurred during either morning or afternoon handover (7%, n=5 and 3%, n=2 respectively).
- Notably, 72% (n= 63) of falls in 2021 occurred on a Geriatrics ward, compared to 41% (n= 30) in 2023, suggesting a 31% reduction in falls on Geriatrics wards.

MEDICATION REVIEW

- 82% (n=60) of patients in 2023 took one or more moderate or high-risk medication compared to 85% (n=75) in 2021.
- With 34% (n= 25) of patients in 2023 on 3 or more moderate or high-risk medications.
- The most common medication was Bisoprolol in both audit cycles (38%, n=28 in 2023 and 39%, n= 34 in 2021).

POSTURAL HYPOTENSION

- In 2023, before the fall, 55% (n=40) had a lying and standing blood pressure recorded, of which 19% (n=14) had a significant postural drop.
- The number of patients with a lying standing blood pressure recorded increased by 10% in 2023 (55%, n=40).

BASELINE MOBILITY

- Data from 2021, shows 60% (n=53) of patients had baseline mobility recorded within either the Emergency Department or relevant speciality team clerking on admission which improved by 30% in 2023 (90%, n=66).
- Prior to their fall, 60% (n=44) of patients had a physiotherapy assessment recorded, which had increased by 6% compared to 2021 (66%, n=58).
- In 2023, most patients (63%, n=46) required a walking aid of which 100% were provided the necessary mobility aid.

DELIRIUM

- In 2023, 47%, (n=34) had a 4AT completed, of which 76% (n=26) had evidence of delirium (a score of 4 or more).
- In 2021 36% (n= 32) patients had a 4AT recorded prior to the fall.

MANAGEMENT FOLLOWING THE FALL

- In 2023, following the fall 89% (n=65) of patients had a review by a doctor, which identified most patients suffered no injuries because of the fall (75%, n=55).
- In 2021 77% (n=68) of patients had a post falls assessment by a doctor.

Figure 2: Number of patients prescribed each drug class, for the top 5 drug classes in 2023.

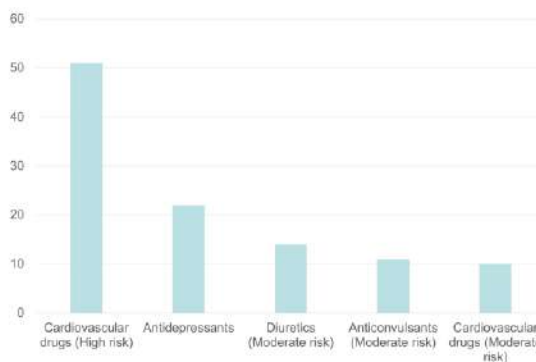
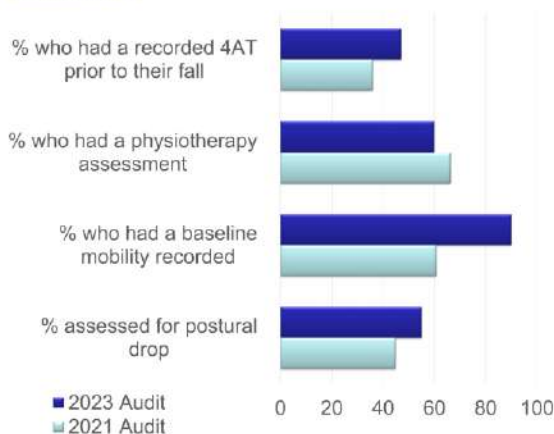


Figure 3: Comparison of 2021 and 2023 completion rates of the 4 components of the multifactorial falls assessment.



References

- National Audit of Inpatient Falls: Audit Report 2017 [Internet]. Falls and Fragility Fracture Audit Programme; 2017 [cited 2024 Feb 19]. Available from: <https://www.rcplondon.ac.uk/projects/national-audit-inpatient-falls-naif>
- Najafpour Z, Godarzi Z, Arab M, Yaseri M. Risk factors for falls in hospital in-patients: A prospective nested case control study. International Journal of Health Policy and Management. 2019 Mar 9;8(5):300-6. doi:10.15171/ijhpm.2019.11
- Fallsafe Care Bundle [Internet]. 2011 [cited 2024 Feb 19]. Available from: <https://www.bgs.org.uk/resources/fallsafe>

Discussion

- As the data set spans a three-month period, the patients reviewed as part of this audit may not represent some wider patterns of pre-fall assessment.
- Following a physiotherapy assessment, it was found all patients who required a mobility aid were provided one. However, it is unclear if the mobility aid was inappropriately sized or if it was being used by the patient at the time of the fall.
- Additionally, we identified the presence of delirium in patients who had a fall, however, did not record the number of patients with a diagnosed cognitive impairment.

Conclusions

- In 2023, compliance of greater than 50% was achieved in 3 parameters, with 4AT being the only parameter with less than 50% compliance.
- Additionally, use of concurrent high-risk medications requires further targeted intervention.
- A combination of both patient-related factors, medication review and prompt mobility assessment influence the risk of an inpatient fall.
- Therefore, a multidisciplinary approach is essential to reduce inpatient falls.

Actions

- We are collaborating with our pharmacy team to develop a flag alert on our electronic medical record if a patient is prescribed 2 or more high risk medications.
- Liaising with the trust pharmacy team to update and publish the falls risk medication list utilised within this project within our trust wide guidelines, "The Blue Book".
- Distribute information regarding the components of the multifactorial assessment and how to document this within our electronic medical record at teaching sessions and within internal communications.
- To ensure all members are present to participate in discussions regarding falls risk reduction at our daily multidisciplinary team.
- Following the above, the third cycle of this audit will be completed.

Evaluating the Appropriate Application of the NEWS2 SpO2 Scales in COPD inpatients: A Focus on ABG/VBG as Primary Markers, and Radiological Imaging

RCP Medicine 2024, Royal College of Physicians, London, UK, 25th – 26th April 2024

Farman, Fatima¹; Mohammed Murad, Awin¹; Rhodes, Imdhad¹; Jayalekshmi, Sangeetha¹; Khaled, Dibbeh¹;

Minhal, Punjabi¹; HayMar, Tun¹; Asfour, Hasan,¹; Singh, Raunak¹

¹University Hospitals of Leicester NHS Trust

Background:

- Hypercapnic respiratory failure is the inability of the respiratory system to provide sufficient alveolar ventilation to maintain a normal arterial pCO₂. It is defined as pCO₂>6.0 on ABG.
- NEWS2 consists of two SpO₂ Scales:
 - Scale 1** = target sats > 96% (for patients without hypercapnic respiratory failure).
 - Scale 2** = target sats 88-92% (for patients with hypercapnic respiratory failure).

Aims:

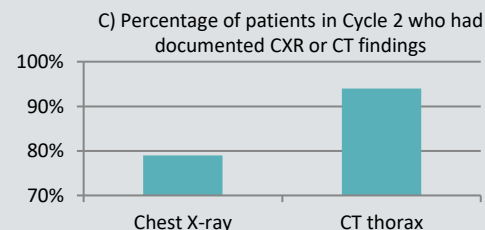
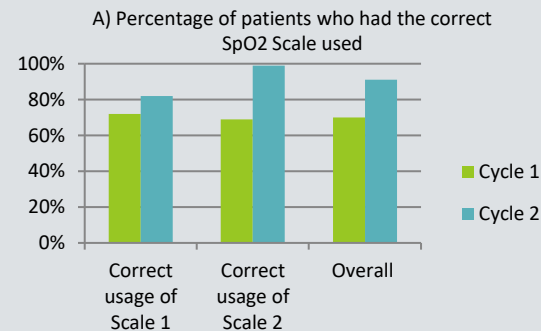
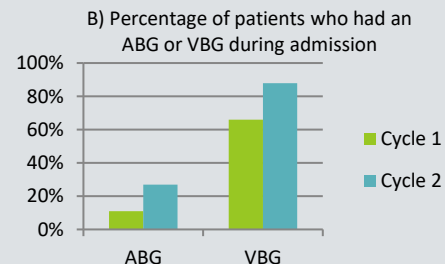
- To evaluate the appropriate implementation of the NEWS 2 SpO₂ Scales in COPD inpatients, ensuring that those with those without hypercapnic respiratory failure are on Scale 1, and those with hypercapnic respiratory failure are on Scale 2.
- To assess the usefulness of other surrogate markers (e.g. VBG findings, and radiological findings in COPD patients), as well as ABG's as a primary marker of respiratory failure.

Methods:

- Prospective audit of COPD inpatients on General Medicine wards at Leicester Royal Infirmary.
- Two audit cycles: the 1st cycle involved 21 patients, whilst Cycle 2 included 33 patients.
- Interventions implemented post-Cycle 1 included:
 - Raising awareness at departmental meetings.
 - Dissemination of educational posters.
 - Up-skilling junior doctors through teaching.

Results:

- Graph A:** Improvement in correct use of both Scale 1 and Scale 2.
- Graph B:** Improvement in patients having had either an ABG or VBG done during admission.
- Graph C:** During Cycle 2, the majority of patients had radiographic documentation of thoracic findings.



Conclusions:

- Education & training of junior doctors led to an improvement in correct use of SpO₂ Scales.
- Whilst ABG is the gold standard for identification of hypercapnic respiratory failure, other surrogate markers may be used to help select the correct scale e.g. HCO₃-levels on a VBG could be used for patients in whom ABG is not feasible or appropriate.
- Improving identification and documentation of radiographic findings would be helpful to improving COPD management.

Take home message:

Correct use of NEWS2 SpO₂ Scales, combined with improved recognition of radiographic findings, are important to providing good quality of care for COPD inpatients.

Diabetes in reach team involvement could help improve inpatient deintensification of blood glucose

lowering treatment in older adults with diabetes and frailty

Garima Gupta, Kashish Gera, Hnin Lwin, Anu Thomas, Mohamed Fazil, Kevin Thottungal, Vishnusankar Umasankar, HayMar Tun, Meri Davitadze, Eka Melson, Alison Gallagher, Kath Higgins

1. University Hospitals of Leicester NHS Trust
2. Leicester Diabetes Centre, University of Leicester



INTRODUCTION

- Older adults with diabetes and a clinical frailty score of 6 or above comprise 10% of acute medical admissions to Leicester Royal Infirmary.
- Hypoglycaemia has the potential to cause significant harm in older adults and key principles in the management of hyperglycaemia in this group include individualised goals of care with avoidance of hypoglycaemia to avoid overtreatment.
- Deintensification describes the simplification of blood glucose lowering regimens to achieve an individualised HbA_{1c} goal with a reduced risk of hypoglycaemia.
- Low rates of inpatient deintensification were shown in our previous study.
- Diabetes in reach (DiR) team consists of diabetologists working together with diabetes specialist nurses, proactively supporting non-specialists in inpatient management of diabetes.

METHODS

Electronic medical charts reviewed in all patients with diabetes and clinical frailty score (CFS) ≥ 6 who were discharged from the medical wards in 2022.

Data collected:

- Demographics: age, sex, ethnicity
- CFS
- Co-morbidities
- Deintensification rate
- Inpatient Hypoglycaemia = having an episode of CBG $< 4\text{mmol/l}$
- Inpatient mortality
- Re-admission rates

AIM: To assess the role of DiR in improving inpatient deintensification rate in people with diabetes and frailty

Baseline characteristics

Six hundred and sixty five people with diabetes and CFS ≥ 6 were included in our analysis. 51.9% (n = 345/665) female with a median age of 79 years (71-86).

DiR teams were involved in the care of 26.8% (n = 178/665) of the patients. 19% (n = 119/625) underwent deintensification of blood glucose lowering treatment during admission.

Result – odds of inpatient deintensification

Variable	aOR (95% CI)	p-value
DiR review	4.2 (2.6-6.8)	< 0.001
Inpatient Hypoglycaemia	5.7 (3.7-8.6)	< 0.001

aOR: adjusted for background characteristics and inpatient hypoglycaemia



Irrespective of inpatient hypoglycaemia, **being reviewed by the DiR team was associated with increased odds** of deintensification compared to those that were not reviewed by the DiR team

Of people who underwent deintensification, 61.3% (n = 73/119) were by DiR and 38.7% (n = 46/119) by parent team

Conclusion: The majority of inpatient deintensification in people with diabetes and frailty was initiated by the DiR team, compared to the parent team. DiR could play an effective and important role in improving inpatient deintensification rate in people with diabetes and frailty.

TEP-LYMPICS: Improving completion of Treatment Escalation Plan on Acute Medical Unit A Quality Improvement Project

Dr. Mosunmoluwa Monsuru-Oke, Dr. Humdi Muzammil
University Hospital Southampton NHS Foundation Trust.

Background

Treatment Escalation Plans (TEP) provide a structured approach to managing a patient's care, particularly when their condition deteriorates, or their current treatment is not achieving the desired results.¹

Level 1 – ward No organ support

Level 2 – HDU 1 organ support

Level 3 – ICU ≥ 2 organ support

Mechanical ventilation alone

Level 0- End of Life/Comfort care

In a previous audit, it was noted that documentation & completion ratios were not according to guidelines in the department.

AIM

- Establishing the level of TEP completion in Acute Medical Unit(AMU)
- Increasing the awareness of TEP among clinicians, nurses and other hospital staff
- Identify areas for improvement in TEP completion process and address any deficiencies.

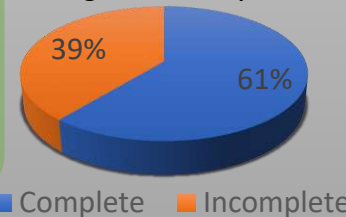


All patients should have TEP & DNAR document in place on the ward preferably at admission.^{2,3}

PDSA Cycles

CYCLE 1 (July,2023)
Total admissions: 119
Completed: 73
Incomplete:46

Figure 1- 1st Cycle

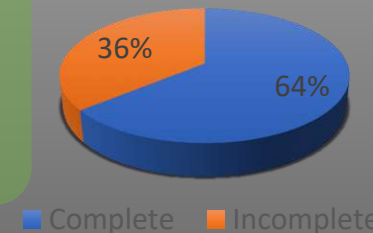


Intervention

- 1- Departmental presentation
- 2- Posters pasted across the AMU for awareness
- 3- Email reminders to all the doctors of the AMU
- 4- TEP-Lympics campaign to improve awareness

CYCLE 2 (Nov,2023)
Total admissions: 120
Completed: 77
Incomplete:43

Figure 2- 2nd Cycle



Discussion:

The key area for improvement was identified from the first PDSA cycle was that hospital policy allows for middle grades- ST3 and above and trained ACPs to complete TEPs initially.

In the first cycle only 1 (of 119) TEP form was initially signed by a doctor who wasn't a consultant. By the second cycle, the number had gone up to 11 (of 120). This was a major contributor to overall increase in TEP form completion.

The benefits of TEPs are several and well-documented, including shared decision-making with patients and relatives, and reducing unnecessary HDU/ICU referrals, amongst others.¹

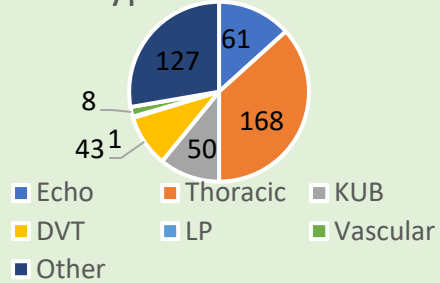
References:

1. Treatment escalation plans – a tool to aid end of life decision making BMJ Supportive & Palliative Care 2012
2. Royal College of Physicians, Royal College of Nursing. Ward rounds in medicine: principles for best practice. London: RCP, 2012.
3. Royal College of Physicians, Royal College of Nursing. Modern ward rounds: Executive summary and recommendations: RCP, 2021

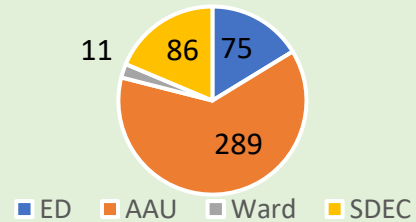
Introduction: Point of care ultrasound (POCUS) is an increasingly popular tool used in the care of patients by Internal Medicine Physicians and has recently been a mandatory addition to the AIM training curriculum. This is an audit of the first year of an Acute medicine department in the UK using POCUS; to try to determine when, where, why and how effectively the imaging modality is being used.

Method: We developed a novel reporting system whereby an electronic reporting template was used as part of the mandatory reporting of scans, which allowed us to comprehensively collect data from all formally reported scans over the course of 12 months. Each scan was assessed according to various parameters including, type of scan and how the scan findings compared to the provisional clinical diagnosis.

Type of scan



Location of scan



A review of a year of Point of Care Ultrasound scans in a UK Acute Medicine Department

Ian Oldrieve, Kayleigh Balchin, Shilpa Rajan, Mohammad Chowdry, Vinitha Baskaran and Nick Smallwood Acute Medicine Basingstoke Hospital.



Departmental scans requested as a result of the POCUS

Requested as inpatient	110
Already Requested	72
Requested as outpatient	34
Alternative scan requested	15
Not required	207
Cancelled previous request	14
Total	452

Reduced burden on inpatient radiology?

Relationship is currently unclear. Further analysis of the date is required to determine the context of "not required" ie. Not required at all or not required due to POCUS being sufficient

Conclusion POCUS is an established practice in Critical Care and Emergency Medicine however its utility in Internal Medicine is expanding and evolving. Therefore, this work attempts to understand how POCUS is being used in this setting to highlight areas for further development. We believe this is the first work of its kind in Acute Medicine in the UK and the results may help inform practice both locally and potentially nationally

Therefore, required implementation of Governance and SOP for use and reporting of POCUS

Potential pitfalls

Only 52% of images were uploaded to PACS

I.E referrals to anticoagulation team to continue patient management however there is no imaging confirming DVT on radiology system.

How does POCUS aid the diagnostic process when compared to the provisional clinical diagnosis?

Provisional clinical diagnosis	
POCUS confirmed clinical diagnosis	131
POCUS suggested an alternative	77
No provisional clinical diagnosis	26
No diagnosis made on POCUS	57
Ruled out concerning pathology	165
Total	456

A quality improvement project to make ward rounds more comprehensive in a tertiary respiratory medicine unit

Authors: Charlotte Miles, Ioanna Voyatzaki

INTRODUCTION

Previous studies in surgical settings have shown that the implementation of a checklist can improve the completeness of ward round entries [1] and patient perception of care [2].

We developed the **THORACICS** checklist covering:

Treatment escalation plan

Hydration

Oxygen prescription and target saturations

Relative update

Aperients

Comfort

Infection

Clots (venous thromboembolism prophylaxis)

Smoking status

with the aim of making respiratory medicine ward rounds more comprehensive at University College Hospital, London.

REFERENCES

1. Blucher, K.M., Dal Pra, S.E., Hogan, J. and Wysocki, A.P. Ward round checklist. ANZ J Surg 2014;84: 745-747.
2. Read, J., Perry, W. and Rossaak, J.I. Ward round checklist improves patient perception of care. ANZ J Surg 2021;91: 854-859.

MATERIALS AND METHODS

Following quality improvement methodology, we completed two Plan-Do-Study-Act (PDSA) cycles. We collected baseline data on documentation of THORACICS criteria on ward round entries on six days across a three-week period.

The first intervention was to display posters on the ward to encourage the medical team to use the THORACICS checklist. Data collection was repeated and analysed for any change.

The second intervention introduced a new ward round template incorporating the THORACICS checklist. We then repeated data collection.



Figure 1: THORACICS poster displayed on the ward

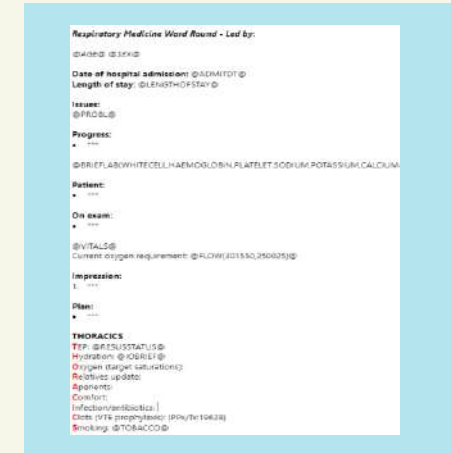


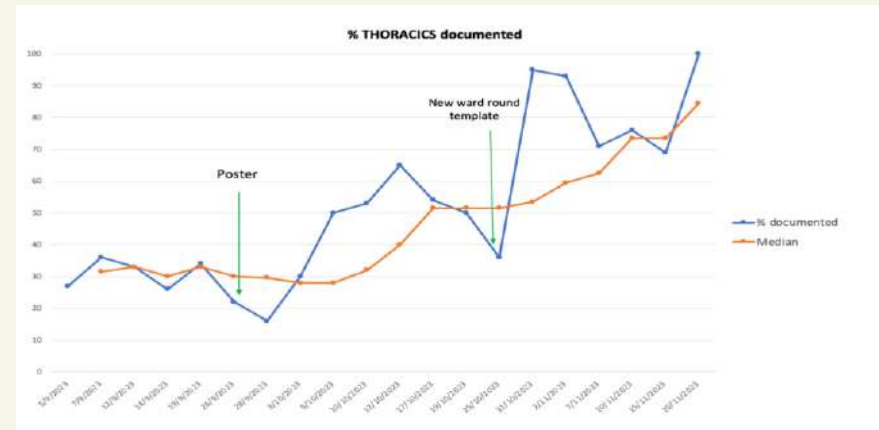
Figure 2: New respiratory medicine ward round template

RESULTS AND DISCUSSION

99 ward round entries were reviewed before the THORACICS checklist was introduced. The median percentage of checklist criteria documented on ward round entries was 30%.

99 ward round entries were reviewed following the first intervention, with the median percentage of checklist criteria documented increasing to 52%.

Documentation of the THORACICS criteria after the second intervention further increased to 85% (with 98 ward round entries reviewed).



Graph 1: Graph featuring data points for percentage (%) of THORACICS documented in respiratory medicine ward rounds pre-intervention, and post PDSA cycles 1 & 2.

CONCLUSION

Introduction of the THORACICS checklist increased the consistency of ward round documentation in respiratory medicine.

Incorporation of the checklist into a ward round template was more successful than displaying posters in encouraging the use of the checklist.

J Acharya, A Manzoor, R Lisk, R Mahmood

Department of Senior Adults' Medical Services, Ashford and St Peters NHS Foundation Trust, Chertsey, United Kingdom

Introduction

Older and frail patients are main service user in NHS, often having subtle presentations with geriatric syndromes. Complex interplay between medical and socioeconomic issues causes significant uncertainty to care providers leading to significant delays in care delivery and risk of hospital admission disproportionately.

It is, therefore, essential that their care is provided by a specialist team in a dedicated clinical area with the system in place for direct conveyance with timely assessments of these patients outside busy emergency departments at the point of presentation, preventing subspecialist care, avoiding hospital admissions where possible, and care provision outside the hospital, in or closer to their homes.

Method

OPAU established in October 2022 in the existing purpose-built Clinical Assessment Unit (CAU).

Monday to Friday 8-4 operational hours.

Team: Consultant Geriatrician lead, physician associate, and junior doctor.

Readily available MDT ad hoc use based on patient needs.

Direct telephone referrals to OPAU from southeast coast ambulance service (SECamb) before conveyance to the hospital.

Patients presented to ED out of hours seen by medical team and OPAU patients seen by frailty team; data collection from Autumn 2023 for those presenting with falls.

Results

Figure 1

Average time to arrival to post-take (hours)

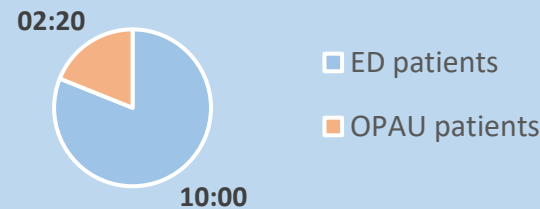


Figure 2

Average Length of stay (LOS)

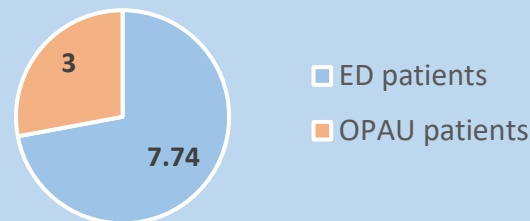


Figure 3

	ED patients with falls	OPAU patients with falls
Weekdays		
Total numbers	47	50
Avg. time to arrival to post take (hours)	10:00	02:20
Average LOS	7.74	3
LOS < 1 day	13%	60%
LOS 1-3 days	29%	12%
LOS 3-5 days	13%	6%
LOS >5 days	45%	22%
7 day re-admission	16%	14%
30 day readmission	11%	4%

Conclusion

Patients in OPAU were seen quickly, were more likely to be discharged same day, with short admission if required, and were less likely to be readmitted within 30 days.

We proposed dedicated assessment areas with extended hours of operation, direct conveyance as the way forward to tackle frailty effectively in our busy hospitals.

Quality Improvement: Falls Prevention in Cardiology inpatients aged over 65 years

Amar Ahmed¹, Deep Ghaghda¹, Jordyn Tetro¹

¹Department of Medicine for Older People, London Northwest NHS Foundation Trust, London, UK

Introduction

- Cardiology inpatients ranks among the top three wards at Northwick Park Hospital for the highest number of falls
- The elderly population (defined as >65) of cardiology inpatients face a heightened risk of falls due to the compounded effects of cardiovascular disease on frailty, coupled with multiple antihypertensive medications

Objectives

- Improving patient safety among elderly cardiology patients, through a two-pronged approach:
 1. Ensure assessment of lying-standing blood pressure (LSBP) is complete
 2. Optimisation of the bedside microenvironment (Call bell/mobility aids within reach, bed board documentation of mobility status)

Standards

- **Part 1** is based on the 2013 NICE guidance "Falls in Older People: Assessing Risk and Prevention."
 - High falls risk patients must have postural stability assessed
- **Part 2** did not rely on any specific guidelines. Our goal was to achieve a 100% outcome which consistently ensures the highest level of patient safety

Methods

- Data was collected using Cerner EPR and by in-person bedside assessment
- The reaudit was completed 1 month after the interventions.
- All patients on the Cardiology ward aged >65 and clinically appropriate (e.g. not bed bound, not acutely unwell, or end of life) were included in the audit.
- Interventions included:
 - Working within MDT (falls champion, nurse in charge)
 - Educating nursing and medical staff on how to enter LSBP on Cerner, importance of its measurement, correct measuring technique
 - Educating on correct bedside microenvironment
 - Agreed to assess LSBP on all new admissions to the ward

Results

	Cycle 1 (%)	Cycle 2 (%)
LSBP Recorded	12.8	57.4
Mob/transfer Status Noted	37.1	61.1
Call Bell in Reach	74.3	80
Mobility Aid in Reach	11.4	75

Table 1. Percentage change in measured outcomes pre and post intervention

Results

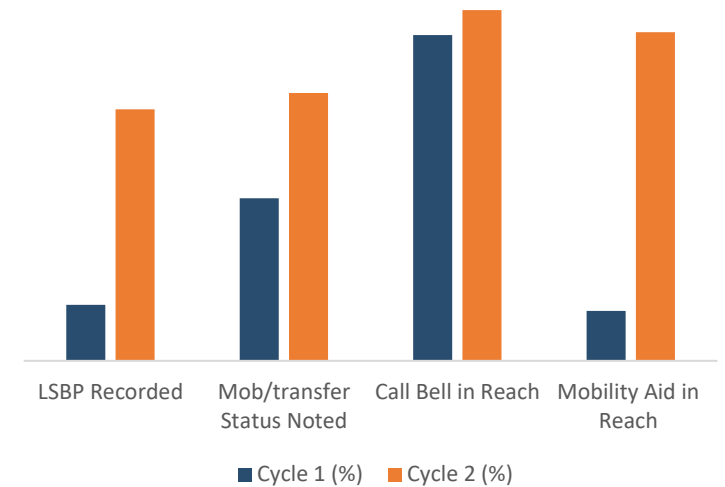


Figure 1. Graphical depiction of percentage change in measured outcomes pre and post intervention

Conclusion/Recommendations

- Analysing both cycles shows a clear improvement in LSBP measurement compliance and a strengthened commitment to maintaining a safe bedside environment
- **We recommend:**
 1. Conducting a repeat audit in six months to monitor the consistency of these positive changes
 2. Utilisation of geriatric mobility bed boards
 3. Assessing whether this translates to a reduction in falls.

IMPROVING COMPLIANCE WITH ADVANCED CARE PLANNING FOR HAEMATOLOGY INPATIENTS

Dr Kaustubh Ietkar, Dr Claire Burney

Aim

To increase the number of inpatients with a completed 'Recommended Summary Plan for Emergency Care and Treatment' (ReSPECT) form on the Haematology ward.

Rationale

It was observed that many inpatients did not have completed ReSPECT forms to guide treatment in the event of acute deterioration. This was seen as an area that required improvement.

Methodology

- Prospective data collected on the number of Haematology inpatients who had a completed ReSPECT form.
- Findings shared in the Haematology MDT to raise awareness.
- Discussed with nursing team and requested them to flag up pending RESPECT forms during board rounds (similar to VTE assessments).
- Posters displayed above the patient notes cabinet, highlighting the need to complete Respect forms.
- We spoke to the bone marrow transplant co-ordination team about including RESPECT discussions during pre-transplant assessment.
- Compliance re-audited in 3 weeks.

	Number of inpatients with ReSPECT forms	Total number of inpatients	Percentage of inpatients with ReSPECT forms
Initial	8	21	38.0%
After 3 weeks	20	26	76.9%

Results

On re-auditing, 76% of inpatients had ReSPECT forms (compared to 38% earlier). We plan to re-audit in a month's time to see if this improvement is being sustained.

Conclusion

We were able to find a solution to achieving a meaningful increase in compliance with RESPECT form completion due to engaging members of the MDT in the process of enacting a change. We implemented change at multiple levels so that it is systematic and sustained.



University Hospitals
Bristol and Weston
NHS Foundation Trust



Post AKI follow up clinics – How do they impact on patient journey

Author: Keila Calland & Andrew Williams Co Authors Dr Ragit Varia, Dr Saeed Rahman, Dr Mustakim Khandaker, Sophie O'Brien, Loreta Palas.

BACKGROUND

- AKI poses worldwide concern, for patients in various acute care settings.
- Increased healthcare expenditure with substantial clinical repercussions with an estimated cost of 1 billion pound.
- Preventative measures & prompt AKI identification can enhance outcomes.
- Ensure excellent care for patients with AKI by recognising at community level and extending through the emergency department, hospital environment, and post-discharge from inpatient care (Renal Association, 2019)

AIM

To illustrate how Post AKI clinic

- Enhances patient satisfaction outcomes
- Delivery of good quality care.
- Impact on primary and secondary care.

Did you know you had Acute Kidney Injury when you were in the hospital?

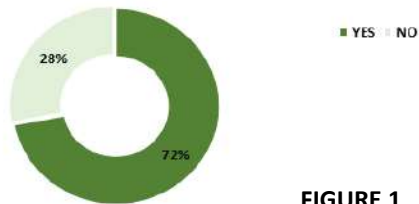


FIGURE 1

METHOD

- Invite all eligible patients identified as AKI to a clinic appointment.
- Nurse led & nephrology AKI appointments.
- Allocate thirty minutes per patient.
- Discuss with patient AKI diagnosis, risk factors, future management & recovery.
- Provide patient education and offer patient leaflet with health advice.
- Review medications.
- Develop future planning for ongoing management and prevention.

RESULTS

- 70% of patients knew little or nothing prior to the Post AKI clinic appointment (Figure 1).
- 87.6% understood more about the Aki after their appointment and 46% of those patient reported that was from a nurse, with 38.5% from a doctor (Figure 3)
- 85% of patients felt the clinic helped to understand the risk factors for AKI
- 84.5% of patients had a clear understanding of medicine management and sick day guidance (Figure 2).
- Readmission rate to the trust for AKI patients reduced to 14.8% from 17% (Figure 5).
- Average length of stay reduced to 16.8days from 20 days (Figure 4).

As a result of the clinic, do you understand more about certain tablets/medications to avoid if you are unwell or at risk of dehydration?

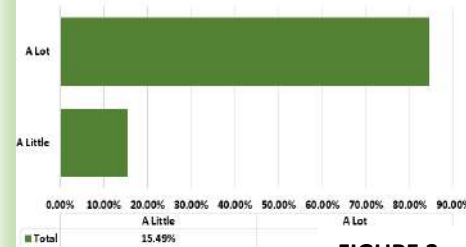


FIGURE 2

Percentage distribution of 'Has attending AKI clinic helped you to understand how to reduce your risk of AKI in the future?'

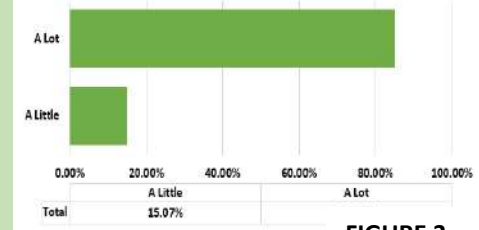


FIGURE 3

AKI AVERAGE LENGTH OF STAY
MAY 2023- JANUARY 2024



FIGURE 4

AKI READMISSION RATE
MAY 2023 - JAN 2024



FIGURE 5

CONCLUSION

The data illustrates enhanced patient satisfaction and experience. This directly benefits patients and aligns with the aims outlined in the NICE guidance for early detection and prevention (NICE, 2021a). Moreover, the Post AKI clinic has proven its effectiveness in reducing hospital readmissions and it contributes to a reduced length of hospital stay by instilling confidence in care teams for early discharge, accompanied by a comprehensive follow-up plan. In summary, the Post AKI clinic has proven to be a success for both patients and the hospital.

Background

The World Falls Guideline 2022¹ recommends that "Older adults who present with fall or at high risk for falls should have a LSBP measured as part of the multifactorial falls risk assessment". The commonest cardiac cause of falls is postural hypotension.

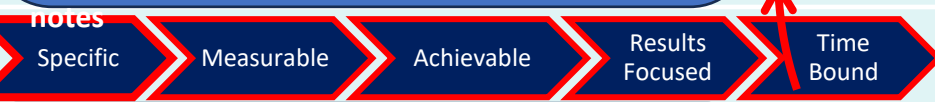
Without prompt documentation of LSBP how will we recognise and manage postural hypotension and mitigate current and future falls risk?

Pre-intervention(s) most patients did not have a LSBP measured and documented during admission

Aim & Measurement definition

To increase the number of adults aged 65 and over admitted with fall or at high risk for falls who have a LSBP correctly recorded and documented

By November 2023, all eligible adults aged 65 or over will have a LSBP documented in the



Outcome measure

Increase in percentage of eligible patients with a correctly recorded and documented LSBP

Process measure

Percentage of eligible patients with correctly recorded LSBP on their e-observations records

Data collection on electronic spreadsheets, electronic observations charts were reviewed

Methodology

Change ideas- is it logical? is it exciting? Is it quick?

Inclusion criteria

1. Patients aged 65 and over
2. Admitted to a care of the elderly ward
3. Admitted with a fall or at high risk for falls

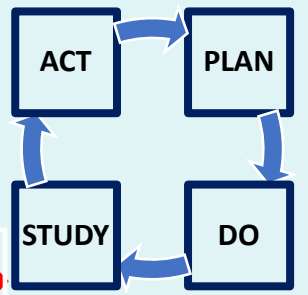
Royal College of Physicians Guidance 2017² was used for standard measurement of LSBP

FIRST PDSA

Poster in doctors' office and nurses break room outlining how to record and document LSBP

SECOND PDSA

Ward-based 1:1 teaching interventions to medical and nursing staff using Royal College of Physicians lanyard-sized flashcard's which outlined the correct measurement and recording of LSBP



Data analysis

Results

- Following cycle one, **50%** of eligible patients had LSBP documented.
- Following cycle two, **80%** of eligible patients had LSBP documented.
- Following two PDSA cycles, there was a **37.1% increase** in the average number of eligible patients who had LSBP correctly recorded and documented.

Conclusion

- Interventions of aide memoirs and education for nursing and medical staff improved the recording and documentation of LSBP.

Going forward

- Indications and correct measurement guidance for LSBP should be included in future ward staff induction information and departmental teaching sessions.
- Collect staff feedback on subsequent cycles.

References

1. Montero-Odasso, M, Van der Velde N, Martin FC et al. The Task Force on Global Guidelines for Falls in Older Adults , World guidelines for falls prevention and management for older adults: a global initiative, *Age and Ageing*, Volume 51, Issue 9, September 2022.
2. Measurement of lying and standing blood pressure: A brief guide for clinical staff. 2017. <https://www.rcplondon.ac.uk/projects/outputs/measurement-lying-and-standing-blood-pressure-brief-guide-clinical-staff>

Procedure for measuring lying and standing blood pressure (BP)

- Use a manual sphygm if possible
- Lie down 5 minutes. Take BP 1
- Stand up. Take BP 2 in 1st min
- After 3 minutes, take BP 3

A positive result is:

- a drop in systolic BP of 20 mmHg or more
- a drop to below 90 mmHg on standing
- a drop in diastolic BP of 10 mmHg with symptoms

For more information, visit rcp.ac.uk/falls/bp

Use of Proton Pump Inhibitors (PPI) in patients with Acute Coronary Syndrome Receiving Dual Antiplatelet Therapy (DAPT)

¹Liandra Rams Ramachenderam, ¹Ayesha Mashadi, ¹Jessica Wong Sun Wai, ²Timothy Gilbert, ²Norfolk and Norwich University Hospital

BACKGROUND

Cardiovascular diseases (CVD) accounted for an alarming 17.9 million deaths globally in 2019. Acute coronary syndrome (ACS) is often the most common initial presentation of CVD. ACS encompasses of ST-elevation Myocardial Infarction (STEMI), Non-ST elevation Myocardial Infarction (NSTEMI) and unstable angina. It accounts for over 100,000 admissions to hospitals annually (1) and has a mortality rate of around 15% pre-hospitalisation and 10% during a hospital admission. (2) European Society of Cardiology (ESC) guidelines recommend use of Dual Antiplatelet Therapy (DAPT) which comprises of aspirin and a P2Y12 as treatment for ACS. DAPT is estimated to increase the risk of UGI bleed by 1.2-2.4%. To reduce this risk of bleeding, ESC guideline until recently recommended Proton Pump Inhibitor (PPI) in all patients receiving DAPT.

OBJECTIVES

The aim of this quality improvement project was to assess:

- 1) Current compliance rates
- 2) Recommend effective measures to improve compliance rates to 100%.

METHODS

Data on all patients who presented to our cardiac centre with either a STEMI or NSTEMI over a 6-month period was collected. We excluded patients transferred from nearby district general hospitals for Percutaneous Coronary Intervention (PCI). We analysed electronic records, prescription charts and discharge summaries to assess the compliance rates on the use of PPI in patients receiving DAPT and incidence rates of GI bleed in this cohort of patients.

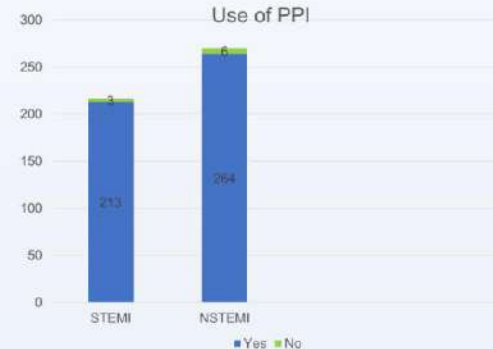
RESULTS

- 543 patients attended our hospital with either a STEMI or NSTEMI over the 6-months.
- Mean age of affected patients was 81 years with 69.73% males compared to 30.27% females.
- STEMI was the cause of ACS in 44.4% of our patients.
- Clinicians initiated DAPT in 486 patients.
- 98.1% of all patients had PPI prescribed alongside DAPT.
- 3 patients on DAPT had an UGI bleed and 2 deaths due to this.
- 100% of patients who had an incidence of UGI bleed had not received PPI therapy.
- No clear documentation of the risk of bleeding using scores such as CRUSADE or ACUITY

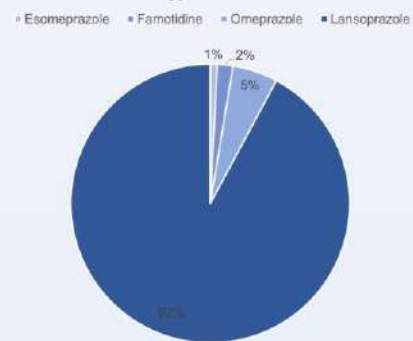
Diagnosis on admission



Use of PPI



Type of PPI



CONCLUSIONS

- Only 1.8% of patients on DAPT did not receive PPI cover.
- 33.3% had an UGI bleed event in the same admission.
- Of those who had an UGI bleed- 66.7% died as a result of this.
- Key to improve awareness by education- induction, flyers and liaising with pharmacist colleagues and IT team.
- Re-audit.

REFERENCES

1. British Heart Foundation. Our Vision Is a World Free from the Fear of Heart and Circulatory diseases. UK Factsheet [Internet]. British Heart Foundation. 2023. Available from: <https://www.bhf.org.uk/-/media/files-for-professionals/research/heart-statistics/bhf-cvd-statisticsuk-factsheet.pdf>
2. Asaria P, Bennett JE, Elliott P, Rashid T, Iyathooray Daby H, Douglass M, et al. Contributions of event rates, pre-hospital deaths, and deaths following hospitalisation to variations in myocardial infarction mortality in 326 districts in England: a spatial analysis of linked hospitalisation and mortality data. *The Lancet Public Health*. 2022 Jul;7(10).
3. Valgimigli M, Bueno H, Byrne RA, Collet JP, Costa F, Jeppsson A, et al. 2017 ESC focused update on dual antiplatelet therapy in coronary artery disease developed in collaboration with EACTS. *European Heart Journal*. 2017 Aug 26;39(3):213–60.
4. Byrne RA, Rossello X, Coughlan JJ, Barbato E, Berry C, Chieffo A, et al. 2023 ESC Guidelines for the management of acute coronary syndromes. *European Heart Journal*. 2023 Aug 25;44(38).

No conflict of interest

Unmasking patients' insight into SGLT2 inhibitors

A collaborative quality improvement project to enhance patient education and safety

Key Information

- Total **100 Patients** with HF and T2DM
- 98% felt it was "**extremely important**" to know important medication information
- 69% did **not** know why they were on SGLT2i
- **Lack of knowledge** of side-effects of SGLT2i

1. Background

- Sodium-glucose cotransporter 2-inhibitors (SGLT2i) are used in Type 2 diabetes (T2DM) and Heart Failure (HF)
- Side-effects of SGLT2i include risk of UTI, DKA and diabetic foot complications
- Increasing awareness and knowledge of their medications can improve patient adherence

2. Methods

- ❑ Face-to-face survey of 100 patients on SGLT2i was carried out at University Hospitals Coventry & Warwickshire NHS Trust (UHCW)
- ❑ Patients asked questions on:
 - Drug indication
 - Awareness of potential side-effects (e.g. UTIs)
 - Knowledge of the "sick-day-rules"
 - Awareness of risk of diabetic ketoacidosis (DKA) & lower limb amputation in diabetic patients
- ❑ Findings were used to develop a patient information leaflet (PIL) with accompanying QR code [Fig 7]

3. Results

- Mean age 72 (72.5±12.8), 75% male, with n=53 for HF & n=47 for T2DM
 - 69% unclear of indication for SGLT2i [Fig 1]
 - 12% read the manufacturer's PIL [Fig 2]
 - 5% aware of sick-day rules [Fig 3]
 - 12% aware about the risk of UTI [Fig 4]
- For T2DM patients (n=54):
 - 11% aware of risk of dehydration and DKA
 - 5.6% aware of risk of foot complications
- Higher rates of hospitalisation in T2DM [Fig 5]
- 98% felt that it was important to receive drug side-effect information from prescribing clinician [Fig 6]

"I understand why I'm on this medication"

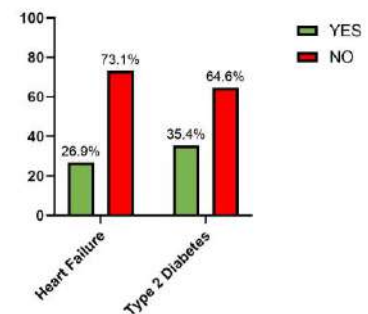


Figure 1: Most patients did not understand their indication for SGLT2i

"I've read the manufacturer's Patient Information Leaflet"

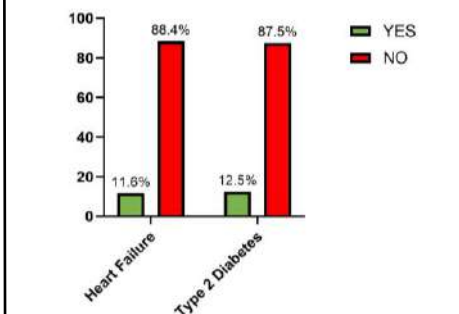


Figure 2: On average, across both groups, only 12% of patients had read the manufacturer's PIL

"I am aware of the sick days rules"

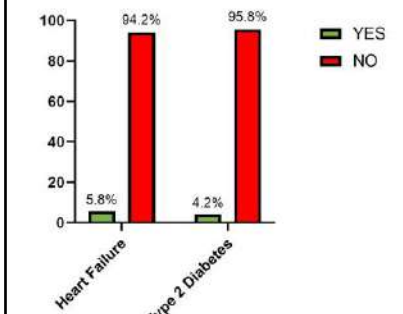


Figure 3: Knowledge of the 'sick day rules' was low across both groups, on average 5%

"I'm aware of the risk of UTI & Genital infections"

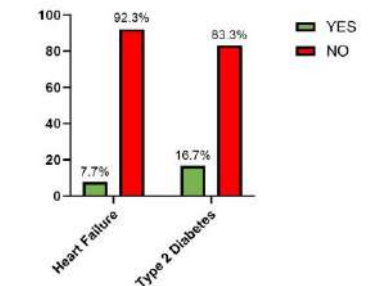


Figure 4: Both groups had low awareness of the risk of UTIs and Genital infections

"I have been admitted to hospital due to adverse effects of the drug"

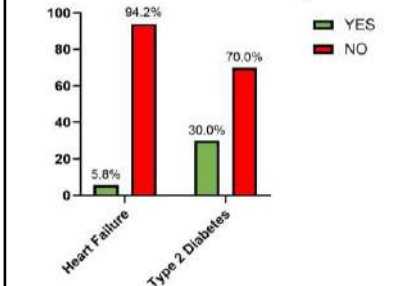


Figure 5: There were significantly more admissions in patients with T2DM for side-effects of SGLT2i

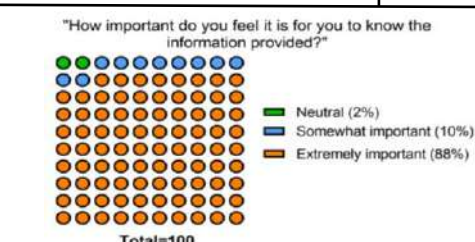


Figure 6: 88% of patients felt that it was "Extremely important" to know the risks vs. Benefits of SGLT2i, especially when being started on it



Figure 7: QR code and PIL created after the survey which aims to provide key information to patients

SGLT2 inhibitor medicines for heart failure – patient leaflet
Dapagliflozin (Forxiga[®]), Empagliflozin (Jardiance[®])

You have been prescribed a medication called a SGLT2 inhibitor (SGLT2i) for your heart failure team. This medication was originally developed to treat diabetes, but it was found to also protect the heart and reduce the symptoms of heart failure. It is now commonly prescribed to people with and without diabetes as a treatment for heart failure.

The information in this leaflet will help you to get the best out of your medication. More information is available in the manufacturer's leaflet dispensed in the box with your medication.

How do they work?
SGLT2 inhibitors act in the kidneys to stop glucose, salt and water being absorbed back into the bloodstream. These substances are passed out in the urine instead. We do not know the exact mechanism of the benefits in heart failure, but we know that taking a SGLT2 inhibitor reduces the risk of hospital admission and death from heart problems.

What are the common side effects?
Common side effects of these medicines include urine infections and infections in the genital area due to the increased amount of sugar in the urine. These are usually mild and can be treated – ask your GP or pharmacist for advice if you develop any discomfort in this area. There are things that you can do to reduce infections:

- Wear loose fitting underwear
- Wash regularly with unperfumed soap

It is important to keep well hydrated (drink at least 8-8 glasses of fluid per day, unless advised otherwise by your healthcare professional) whilst taking these medicines. If you become unwell with an illness that means you are at risk of dehydration (e.g. diarrhoea or vomiting) it is best to stop your SGLT2i until you are eating and drinking normally again. If you are unsure, contact your GP for advice.

Loss of sugar in the urine due to these medicines may reduce the calories that your body absorbs and can sometimes make you lose weight. If you find that you are losing weight unintentionally, please speak to your GP.

Rare side effects
Very rarely, these medicines can cause an increase of acid in the blood called 'diabetic ketoacidosis', even in people who do not have diabetes. Symptoms of this can include nausea and vomiting, abdominal (centre of tummy) pain, rapid breathing, and dehydration. If you experience these symptoms, seek immediate medical help from your GP or NHS 111. The risk of this side effect is increased if you follow a very low carbohydrate (ketogenic) diet; please seek advice from a health professional before starting any new diet. It is also important to keep alcohol intake within the recommended limit of 24 units per week.

There is an extremely low risk (1 in 100,000) that these medicines can cause a severe spreading skin infection in the genital or groin area called Fournier's gangrene. If you develop severe pain, redness or swelling in this area, seek medical help immediately.

Monitoring
You will need to continue your usual monitoring as advised by your specialist or GP. This will usually include regular checks of your blood pressure and pulse, and blood tests.

If you start to experience any new symptoms, or your symptoms worsen, please contact your GP or heart failure nurse. In particular, the symptoms to watch out for are:

- Increased weight
- Increased breathlessness, needing more pillows at night
- Swollen feet, ankles, legs, or abdomen
- Increased tiredness

More information about living with heart failure can be found on the NHS website:
<https://www.nhs.uk/conditions/heart-failure/about-us/>

For more support and information about your new medication, ask your Community Pharmacist about the New Medicines Service.

4. Discussion

- Survey showed the need for a better patient information leaflet due to:
 - o Lack of understanding of the indication for SGLT2i
 - o Reduced awareness of side-effects
 - o Limited knowledge of medication safety information
- Unclear if admissions for "side-effects" were due to SGLT2i, or due to other pre-disposing co-morbidities (ie peripheral vascular disease) and different co-prescribed medications
- Most patients felt it was important to be informed of the risks and benefits of new medications
- Information about when the SGLT2i was started was not collected - this would both affect patient's knowledge retention and incidence of complications
- Future directions for the study include:
 - o Re-audit after a patient-friendly information leaflet is made and provided to patients on SGLT2i
 - o Further study patients' insight in relation to their SGLT2i medication

5. Conclusion

This survey shows a lack of patient understanding into the indication for SGLT2i as well as of important side-effects and complications. Patients feel that it is important that relevant information is given regarding risk of side effects when SGLT2i are commenced. We aim to re-visit the survey once the Patient Information Leaflet has been used, to identify an improvement in patient insight into SGLT2i

Dr Lior Saad, Dr Pratyusha Saha,
Dr Mohamed Anwar, Dr Michael Kuehl,
Dr Prithwish Banerjee, Dr Patrick Tran;
University Hospitals Coventry and Warwickshire

Consultant diabetologist-led inpatient multidisciplinary diabetes foot service

M Tabasum, L Kinnear, M Rufino, J Williams, L Parsons, L Harris, M Syed, I Daugirdairte, K Gibson-Bailey, A Hoque, J Gleeson, U Srinivas-Shankar

Department of Diabetes and Endocrinology, Wirral University Hospital NHS Foundation Trust

Introduction & Aims

Most hospitals in United Kingdom are spoke sites for vascular surgery with inhouse orthopaedic services.

In many hospitals, patients with diabetes foot disease are under various medical teams, potentially delaying optimal management.

We obtained the views of consultant physicians about the consultant diabetologist-led inpatient multidisciplinary diabetes foot team (MDFT).

Methods

We sent a Google Forms questionnaire to consultant physicians and sought their experience of the MDFT, the referral process, frequency and reasons for referral and suggested areas for improvement.

Results

Received 23 responses from consultants. Over three quarters (78%) were aware of electronic referral system to MDFT. Most (95.2%) found the process user friendly.

A significant proportion were not aware of the inpatient diabetes foot pathway and care bundle.

Over two-thirds (71.4%) reported that the patient was reviewed within 24-48hrs of the referral. Suggested improvement to MDFT review included early patient triage to the diabetes ward.

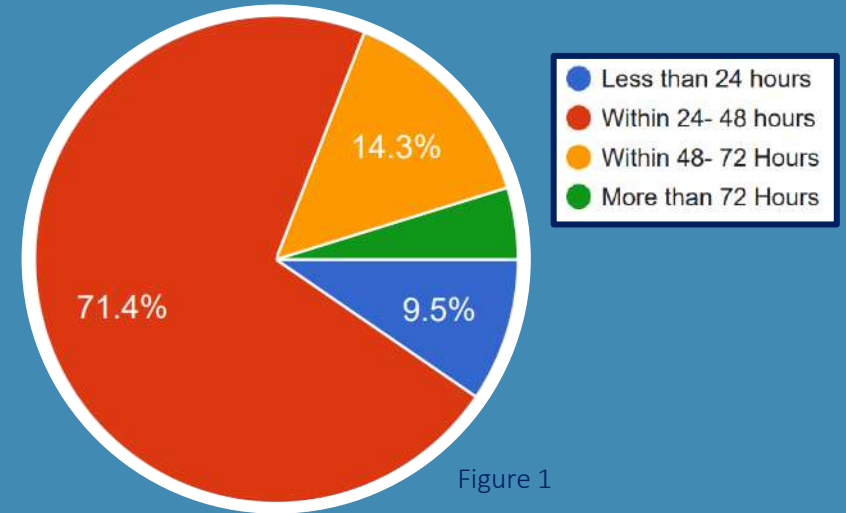
95.5% reported that the service was Good to Excellent.

Conclusion

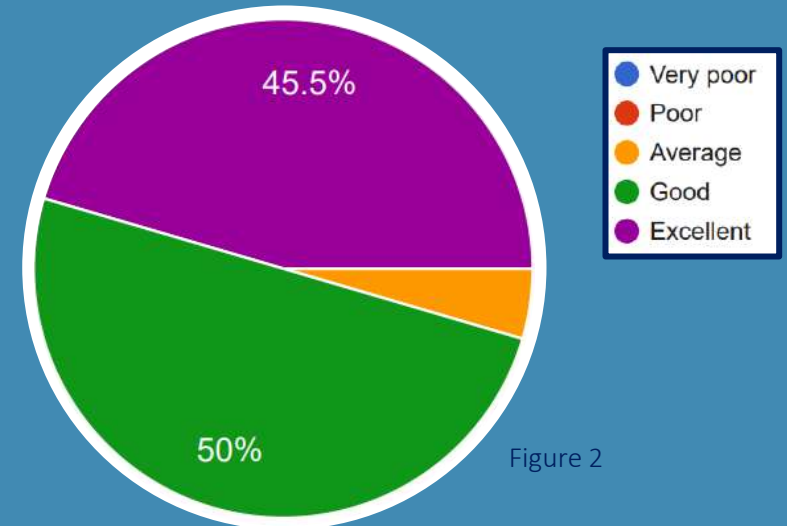
Consultant diabetologist-led MDFT provides timely review of inpatients with diabetes foot disease.

Inpatient multidisciplinary diabetes foot pathway and care bundle must be easy to access.

Time from referral to review by MDFT



Consultant physician experience with MDFT



Exploring clinicians' awareness of language line and barriers in accessing NHS interpreting services

Authors: Maria Irimia¹, Trusha Kolke¹, Antony Cyriac¹, Cristina Cepraga¹, Giulio Romani¹, Aleksandra Bieluczyk¹, Pushpashtree Krishnamurthy¹, Nusrat Azmi¹, Mina Saeed¹

¹Musgrove Park Hospital, Taunton, United Kingdom

Background: According to the 2021 Census, 5.1 million people (8.71%) living in England and Wales do not speak English as their first language, an increase by 0.9 million compared to 2013. Language barriers are known to increase vulnerability and to contribute significantly to health inequalities. As part of the 2010 Equality Act, the National Health Service (NHS) has adopted several legislations promoting language support services, to improve the health outcomes of non-native patients.

Aim and methods: This audit assessed clinicians' awareness of language line services available in our trust, and explored several limitations in using these services.

Results: Forty-six clinicians completed the questionnaire. Twenty-seven (58.7%) were doctors working at F2/SHO levels. Twenty-five (54.3%) were working in a medical specialty. Thirty-three (71.8%) were aware of language line services, and forty-four (95.6%) agreed that language barriers and cultural differences can impact patient care. Thirty-one (67.4%) reported having at least once a month.(figure1) Four (8.7%) reported always using language line.(figure2) Forty-four (95.6%) reported they often used friends and relatives to interpret, whilst thirty-five(76.1%) used online translating platforms. Nineteen (41.3%) would use the language line for all non-natives in all circumstances.(figure3) Figure 4 outlines limiting factors in using translation services.

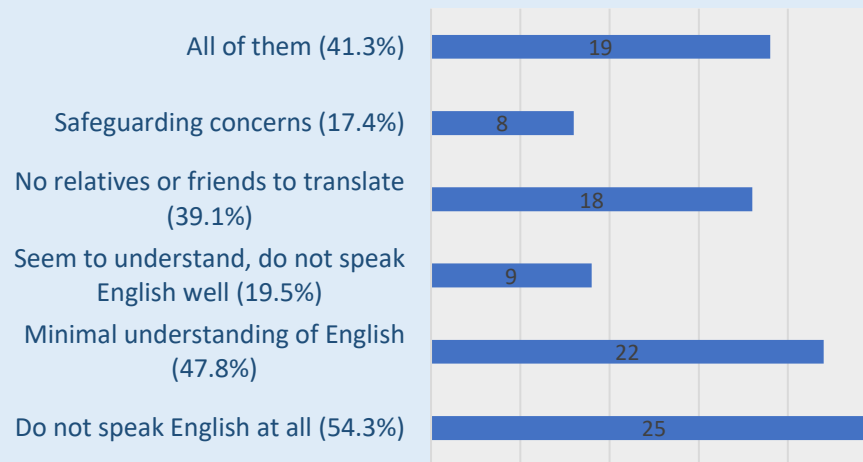


Figure 3. language line use: situations

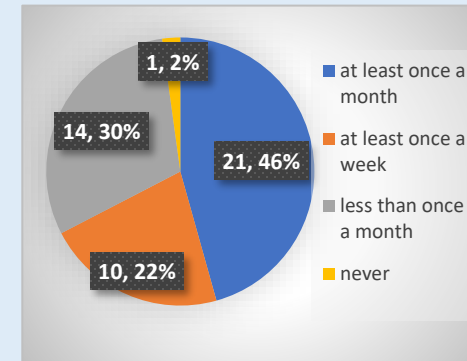


Chart 1. Frequency of encounter with non-native patients

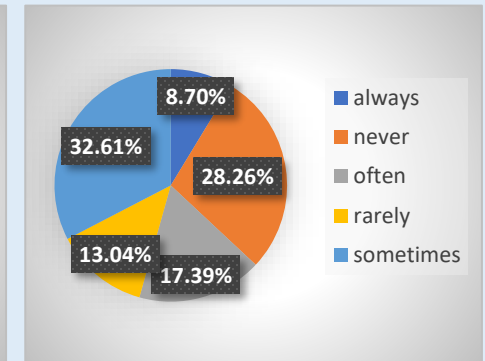


Chart 2. Frequency of using language line to communicate with non-native patients

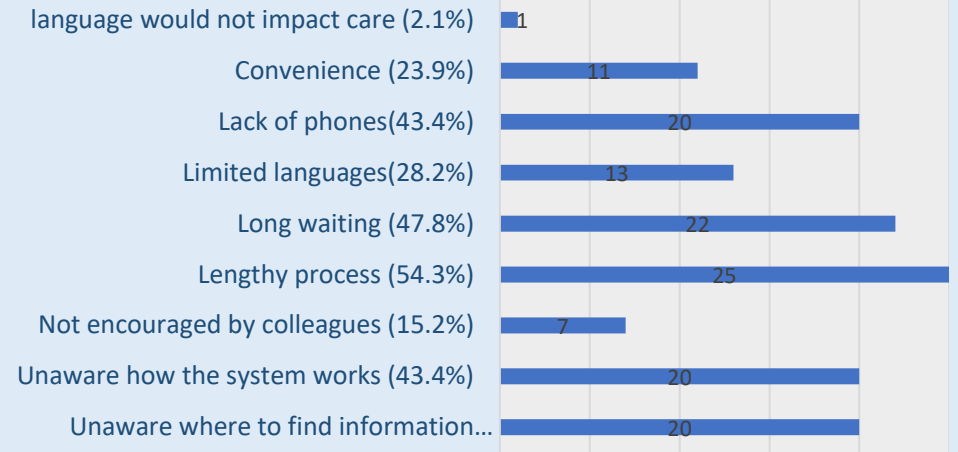


Figure 4. language line use: limitations

Conclusion: NHS language line services have been available for a long time. Despite this, they are not consistently being used, due to important limiting factors and lack of awareness. This audit highlights the importance of promoting language line services and advocating for non-native English-speaking patients' rights, as a way to achieve health equity.

Multiple Transfusion Request Audit

Dr Maryam Shahidianakbar (JCF), Dr Emma Livesey (IMT), Dr Ellen Bickley (Foundation Doctor), Dr Priya Chahwala (JCF), Dr Eleana Loizou (Consultant)
Mersey and West Lancashire Teaching Hospital, Whiston Hospital, Warrington Rd, Prescot, UK



Introduction & Motivation

Blood transfusions are common in hospitals but are not without risk:

- . Allergic reactions
- . Hemolytic reactions
- . Blood borne infections
- . Transfusion related lung injury
- . Bacterial contamination
- . TACO - Transfusion Associated Circulatory Overload
- . Iron overload
- . Dilutional coagulopathy
- . Hyperkalemia
- . Citrate toxicity.

Important Questions

- Why are we transfusing?
- How many units do I **actually** need? Have we rationalised the number of units we have ordered?
- If the indication is anaemia, have we investigated for a cause of anaemia?
- Have we tested haematinics? Have we assessed for ongoing bleeding?
- If we are transfusing more than one unit, are we actively minimising risks by re-assessing patients?
- Is the patient going to be re-assessed between units? Is it necessary overnight?

Data

- Data period: June, July, and August 2022; 121 patients in total
- Evaluated patient who had 3 or more units of RBC requested and their indications.
- Single order = 57 patients (55%); Multiple requests within 24 hours = 47 patients (45%)
- Excluded from data = 17 (given in emergency or unable to locate records)
- 10 patients' data excluded as unable to find evidence

NUMBER OF UNITS	NUMBER OF PATIENTS	PERCENTAGE
0	8	7%
1	10	9%
2	27	24%
3	35	32%
4	23	21%
5	3	3%
6	1	1%
7	2	2%
8+	2	2%

40% of those with 3 or more units requested within 24 hours did not have more than 2 units transfused

Figure 1: Units transfused from these requests

What Happens If I Order Too Much Blood?

- If stored incorrectly - **wasted**
- Excess strain on laboratory resource
- Temptation to use anyway - increases risk for patient

Pre-operative/surgery

- Little or no documentation in notes regarding pre-operative requests
- No reference to the "Maximum surgical blood ordering schedule" (MSBOS)
- MSBOS-outline a designated number of units reserved for a patient in relation to a procedure
- Group and save is usually sufficient (unless special antibodies present)
- Other trusts who do more complicated surgeries such as AAA, hepatectomy, and trauma may require more units requested
- If patient deemed high risk, more blood is available, but this is NOT routine.
- Once G + S sent, if required urgently in theatre, lab can release blood in 15 minutes by electronic issue
- Therefore, regular ordering of units of RBC pre-op is not appropriate at Whiston and referral to MBOS should be done.

Transfused overnight	Number	Percentage
Yes	67	69%
No	30	31%
Total	97	100%

For 70% of the patients, at least one unit of blood was deemed appropriate overnight due to the clinical status of the patient; either hemodynamically unstable or significantly symptomatic

Figure 2: Transfused overnight

Adverse reactions/events

- Total = 3
- Temperature spike leading to review of transfusion
- Fluid overload with pulmonary congestion
- Displaced cannula leading to abandonment of transfusion

Documented clinical review between units

- 93 patients had more than one unit of blood transfused
- 43% had no documented clinical reviews between units
- 57% had at least 1 clinical review between units

What Can We Learn From This?

- Overall poor documentation with regards to blood transfusions:
 1. Unclear documentation in clinical notes about indication for transfusion and number of units given
 2. Requests for transfusions are frequently poor; no clear indication on group and save requests and blood prescriptions
 3. Pre-op requests not in keeping with MSBOS guidance
- Clinical reviews should be completed between units of blood – assessment of adverse effects and need for further transfusion
- Need to reflect on the number of units ordered – are we wasting resources? Do we need to order 3?

Improving ECG interpretation skills of junior doctors:

Embracing the rhythm of the heart

1. MAY MYAT NOE THAINT (University Hospital Monlands);
2. MYO THU (Royal Infirmary of Edinburgh);
3. MAY THWAY KO (Lincoln County Hospital);
4. YIN NWE AYE (Ipswich Hospital);
5. AHSANUL HAQUE (Queen Elizabeth Hospital Kings Lynn)
6. HTET YU YA OO (University Hospital Southampton)



The Queen Elizabeth
Hospital King's Lynn
NHS Foundation Trust



01. Introduction

In daily clinical setting, clinicians are encountering cardiovascular related cases in enormous number where recognising life threatening features on ECG is crucial. Especially for junior doctors, making timely referrals could save many lives. On the other hand, being able to rule out insignificant findings on ECG could avoid use of NHS resources unnecessarily through inappropriate referrals and investigations. In our experience at our hospital, a notable gap in ECG interpretation skills of junior doctors has been picked up through post take ward rounds and front door clerking. Considering that, we have commenced our project of reinforcing the ECG interpretation skills of junior doctors expecting to improve the quality of patient care within the trust.

02. Materials and Methods

During the first cycle, junior doctors were surveyed regarding challenges they encounter with ECG interpretation and their confidence level in recognising common cardiovascular cases and typical ECG presentations. Accordingly with their response, weekly ECG teaching sessions were implemented, topics based on data of survey questionnaires. At the end of the first cycle, another survey was conducted to analyze and compare the results with the previous survey. The second cycle was then planned based on the analysis of the first cycle's report, incorporating the feedback from junior doctors.

03. Results

DATA COMPARISON

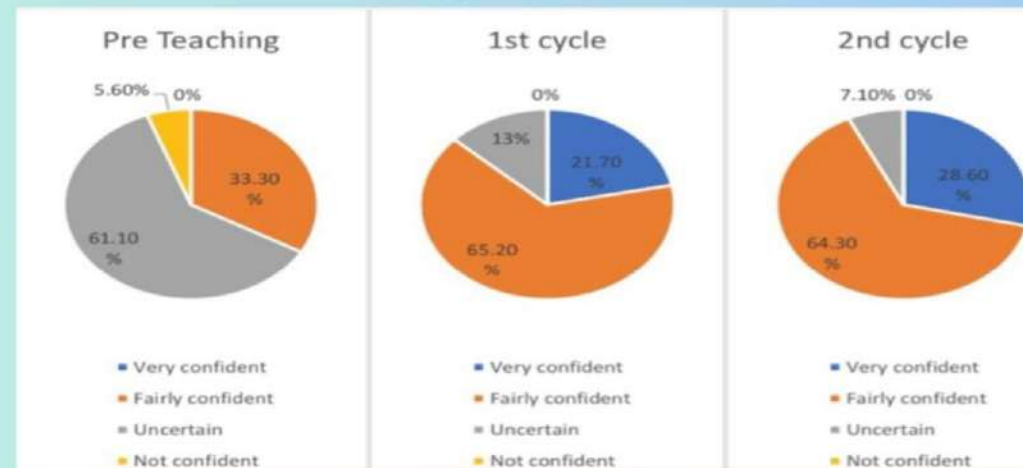


Fig 2

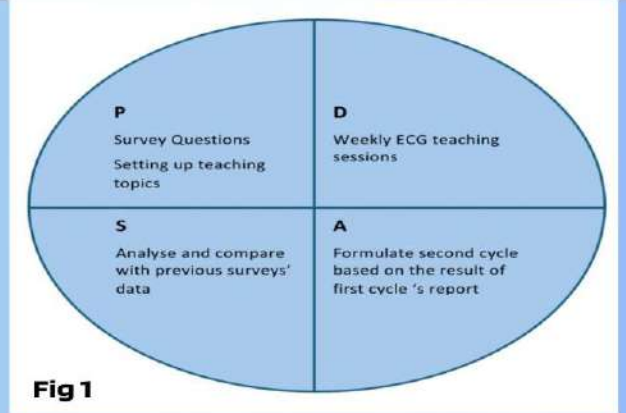


Fig 1

04. Conclusion

In summary, deciphering ECG is a fundamental clinical proficiency that poses a considerable challenge for many novice physicians. Nevertheless, with the aid of adequate knowledge reinforcement, structured theoretical education, and interactive case-based conversations, this proficiency can be approached in a manner that enables most doctors to become well-acquainted and self-assured in handling various ECG types, encompassing ischaemia, arrhythmias, and heart blocks. We take great pride in showcasing our Quality Improvement Project (QIP) as it has successfully exhibited a substantial enhancement. However, it is crucial that we uphold and cultivate our knowledge and skills through continuous learning.

Thoracic Ultrasound Experience among East Kent doctors

Mon Myat Aung - Medical Education/ Respiratory Fellow (mon-myat.aung@nhs.net)
Danielle Delong - Respiratory Physician Associate
Asheer Jawed - Respiratory Consultant
Khalil Ur Rehman - Respiratory Consultant

Introduction and Objectives

The role of thoracic ultrasound (TUS) in pleural procedures has been growing significantly and various training programmes across the UK are incorporating it as a compulsory requirement. All internal medicine trainees (IMTs) are expected to be competent in diagnostic thoracentesis and therapeutic chest drain, both of which also require TUS competence. In order to enhance TUS skill among junior doctors in East Kent, we developed structured training sessions linked with respiratory consultants led pleural clinics at William Harvey Hospital.

Discussion

Our project demonstrates that provision of structured TUS training can play a vital role in enhancing junior doctors' TUS competence and procedural skills for chest drains. After attending clinical skill lab sessions, further training can be provided through pleural clinics. We agreed the exposure to TUS guiding procedures should be made readily accessible to our trainees and non-training doctors who are expected to be competent and to be performing in clinical practice.

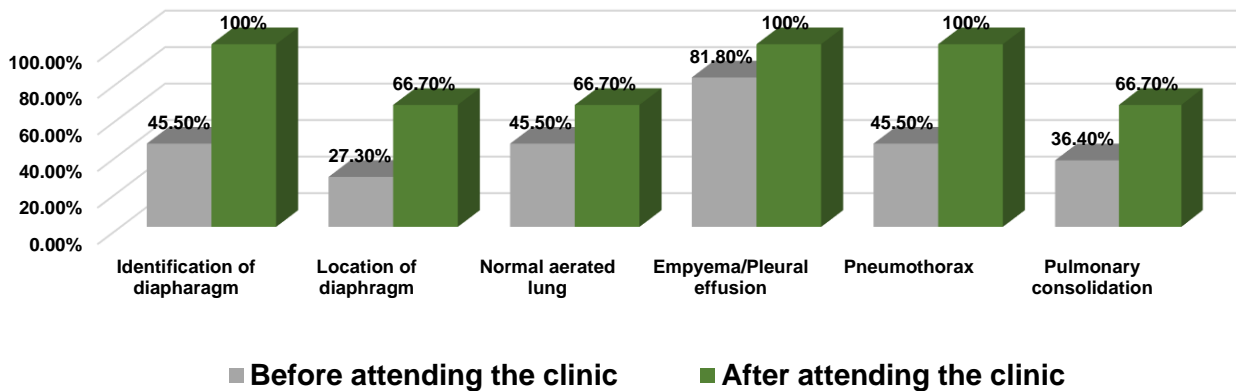
Methodology

This project ran from 20/11/23 to 31/01/24. We collected data on 14 participants' knowledge of TUS via online questionnaire before and after attending pleural clinics.

Conclusion

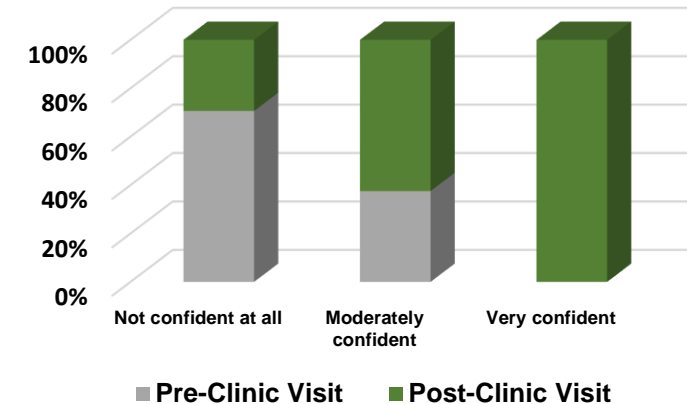
TUS experience through specialist pleural clinic has significantly improved the knowledge and confidence of IMTs and LEDs in performing TUS guided procedures and as educators we should emphasise extending this support to our junior doctors.

Attendee's TUS knowledge improvement



How would you rate yourself regarding performing TUS guided procedures?

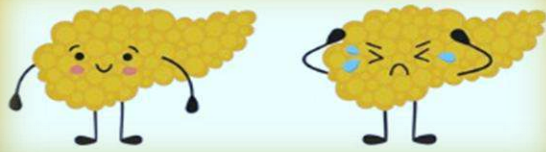
100% - recommend their colleagues to attend our clinic
100% - would like to come back again



References

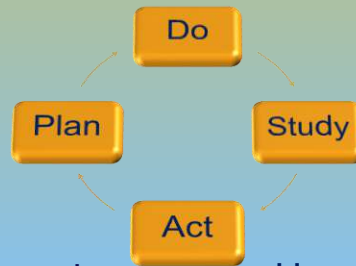
David J. McCracken, Christian B. Laursen, Graham Barker, Fergus V. Gleeson, Kathy M. Cullen, Najib M. Rahman (2019) Thoracic ultrasound competence for ultrasound-guided pleural procedures
Joint Royal Colleges of Physicians Training Board (2023), Internal Medicine Training (IMT) Stage 1 ARCP Decision Aid – 2019 (2023 update). Available at <https://www.jrcptb.org.uk/training-certification/arcp-decision-aids>
TJT Sutherland, A Dwarakanath, H White and JA Kastelik (2013) UK national survey of thoracic ultrasound in respiratory registrars. Available at <https://doi.org/10.7861/clinmedicine.13-4-370>

Evaluation of the knowledge of inpatient management of hyperglycaemia and insulin use among foundation doctors



03. Method

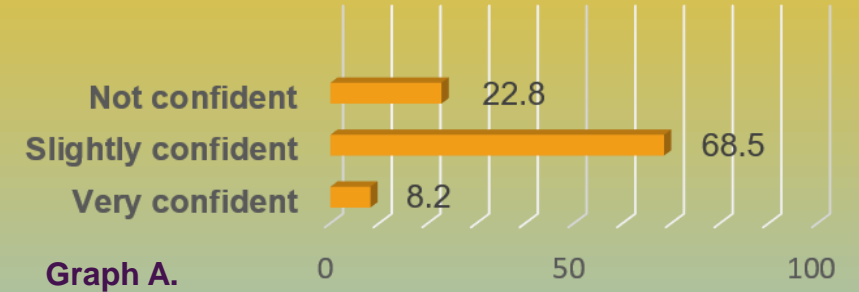
- A. Survey to evaluate the self-rated confidence of foundation doctors in managing hyperglycaemia
- B. Quiz to assess knowledge with score >80% (4/5 questions) being satisfactory



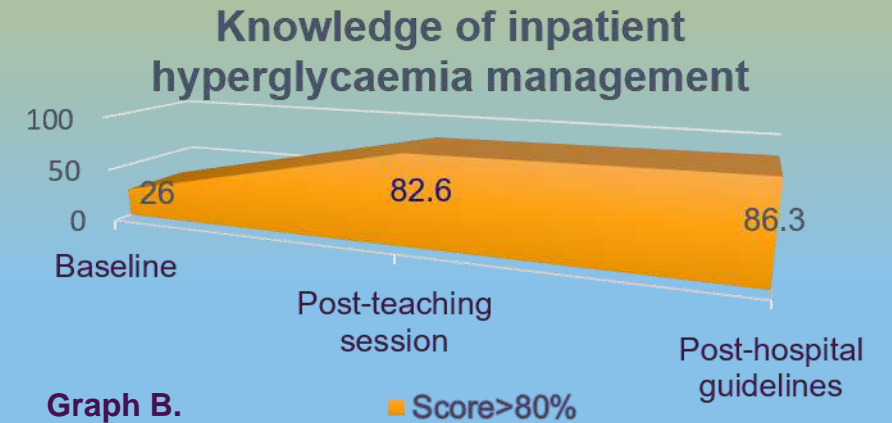
Clinical scenario based teaching sessions

Hospital protocol based on JBDS and GIRFT guidelines

04. Result



Graph A.



Graph B.

■ Score >80%

05. Conclusion

Effective management of hyperglycaemia is a critical clinical skill that requires both teaching and practice. Incorporating scenario-based teaching sessions into foundation year training together with concise guidelines can equip junior doctors with the skills necessary to provide optimal care for their patients with diabetes

1. Introduction

Suboptimal glycaemic control in hospitalized patients is associated with an increased risk of complications and extended hospital stays.

02. Objective

To assess and improve the skillset of foundation doctors in managing hyperglycaemia and insulin use in hospitalized patients at a district general hospital

Guidelines for the management of diabetic ketoacidosis (DKA) have been poorly adopted and implemented, resulting in a lack of improvement in outcomes.

NEVIL CHACKALAPARAMBIL PHILIP^{1,3}; ABIGAIL HALLUM²; ANU ABRAHAM^{1,3}; MARIA SKARIA³; LAKSHMI RENGARAJAN^{1,3}; ALEXANDER SOLOMON⁴; CANAY ONDER¹; DOLU FALOWO⁵; JAELE NIZZA⁶; KATHERINE KINNEAR⁷; RAJEEV RAGHAVAN⁸

1. University Hospitals Birmingham NHS Foundation Trust; 2. Sandwell and West Birmingham Hospitals NHS Trust; 3. University of Birmingham; 4. Russel's Hall Hospital; 5. Walsall Manor Hospital; 6. Wirral University Teaching Hospitals NHS Foundation Trust; 7. South Warwickshire University NHS Foundation Trust; 8. The Royal Wolverhampton NHS Trust



Introduction

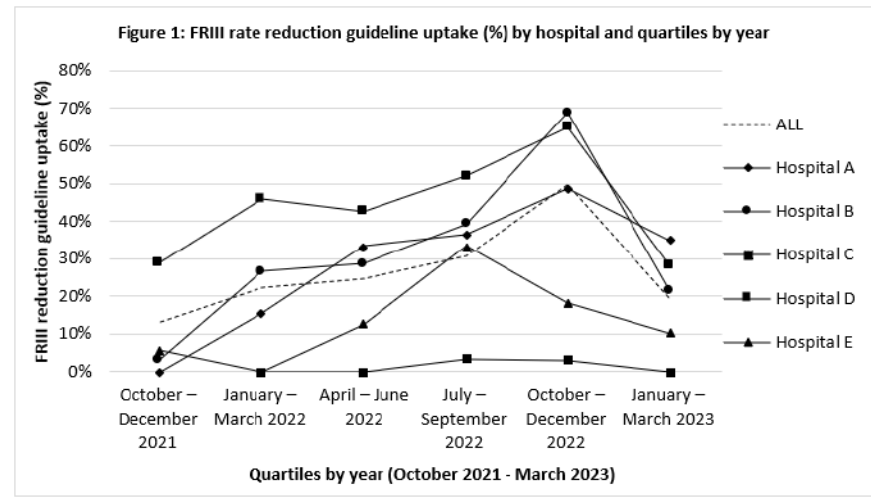
- JBDS-IP recommendation -> FRIII 0.1 to 0.05 units/kg/hour when blood glucose <14 mmol/L.
- Reduce risk of complications
- No data to support real world improvement.

Methods

- 5 UK hospitals part of DEKODE initiative.
- Retrospective review of DKA episodes from central database.
- DKA management based on JBDS-IP guidelines
- Specific parameters relevant to FRIII reduction guidelines identified.
- Hypoglycaemia was defined as blood glucose < 4mmol/L.

Results

- 753 DKA episodes.
- 29% (n=218/753) had appropriate FRIII reduction.
- Retrieved complete data for implementing FRIII reduction in 180/218 cases.
- Slow uptake of reduced rate FRIII, reaching 49.7% over 18 months (Fig 1)
- Significant lag between starting 10% Dextrose and FRIII rate reduction when blood glucose <14mmol/L. (Table 1)



Conclusion

- Suboptimal adoption of guidelines.
- Therefore no favourable effect on rate of complications or outcomes in DKA episodes with reduced-rate FRIII was demonstrated.
- Significant delay in adjusting the FRIII when glucose levels were <14mmol/L.
- Understanding the barriers and facilitators is vital in creating resources for safe implementation of guidelines.

Our recommendation.

Review Checklist during DKA Management at 0, 5, 9, 9 & 13 Hours

Patient Name: _____ Date: _____
 Hospital No: _____ Ward: _____

Date & Time of DKA Diagnosis: _____
 Long acting insulin given during DKA episode: Yes/No _____

Time since Diagnosis	0 hours	5 hours	9 hours	9 hours	13 hours
Blood Glucose <14mmol/L	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
If glucose <14, FRIII reduced to 0.05 u/kg/hr	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
10% Dextrose started if glucose <14mmol/L	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No
Total fluids given* (Recommended)	<input type="checkbox"/> 2000ml	<input type="checkbox"/> 3000ml	<input type="checkbox"/> 4000ml	<input type="checkbox"/> 5000ml	
Hourly Glucose (Recommended)	<input type="checkbox"/> (1)	<input type="checkbox"/> (1)	<input type="checkbox"/> (1)	<input type="checkbox"/> (1)	
Hourly Ketones (Recommended)	<input type="checkbox"/> (1)	<input type="checkbox"/> (1)	<input type="checkbox"/> (1)	<input type="checkbox"/> (1)	
pH & K ⁺ (Tested through Venous Blood Gas) (Recommended)	<input type="checkbox"/> (1)	<input type="checkbox"/> (1)	<input type="checkbox"/> (1)	<input type="checkbox"/> (1)	
Ketones <0.6mmol/L for 2 consecutive hours	Yes/No	Yes/No	Yes/No	Yes/No	
If yes - then DKA resolution documented	Yes/No	Yes/No	Yes/No	Yes/No	

Signature: _____
 Name of Staff: _____
 Date & Time: _____

*Total fluid given should take into account fluids given for renal impairment & heart failure

Reference

1. Dhatariya KK, Glaser NS, Codner E, Umperiez GE. Diabetic ketoacidosis. Nat Rev Dis Primers. 2020;6(1):40. doi:10.1038/s41572-020-0165-1
2. Rosenstock J, Ferrannini E. Euglycemic Diabetic Ketoacidosis: A Predictable, Detectable, and Preventable Safety Concern With SGLT2 Inhibitors. Diabetes Care. 2015;38(9):1638-1642. doi:10.2337/DC15-1380

Parameter	FRIII reduction (n=180)	No hypoglycaemia (n=154)	Hypoglycaemia (n=26)	p-value
Time of DKA onset to glucose <14mmol/L (Median [IQR] hours)	3.9 (2.4 - 6.5)	4.0 (2.6 - 7.1)	2.8 (1.6 - 4.5)	0.004
Time from glucose <14 to 10% Dextrose administration (Median [IQR] hours)	0.5 (0.1 - 1.8)	0.5 (0.1 - 1.6)	0.6 (0.2 - 3.1)	0.427
Time from glucose <14mmol/L to FRIII reduction (Median [IQR] hours)	3.2 (0.7 - 6.5)	3.2 (0.7 - 6.2)	3.5 (1.2 - 8.9)	0.243
Time from DKA diagnosis to hypoglycaemia (Median [IQR] hours)	-	-	11.7 (5.9 - 19.3)	-

Table 1 : Time intervals during diabetic ketoacidosis (DKA) episode in FRIII rate reduction group.

Background

There has been a renewed focus on the **appropriate completion** of Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) orders in response to Care Quality Commission (CQC) reviews following the COVID-19 pandemic.

Previous DNACPR audits at Guys and St Thomas NHS Foundation Trust (GSTT) have been conducted within **general medicine**.

Recognising the need for a more **coordinated** and **holistic approach**; this Trust-wide audit was established to include **all directorates** with inpatient clinical activity.

Methods

A specific **audit tool** was developed and trialed 2021-2022.

Subsequently, a selection of DNACPR forms were reviewed monthly from January – June 2022 with a maximum sample size of 30 patients for each directorate.

DNACPR decisions: A Trust-Wide Clinical Audit

Authors: Dr Nicole Hrouda (*Senior Clinical Fellow, GSTT*) and Dr Daniel Furmedge (*Consultant, GSTT*)

Aims of the audit

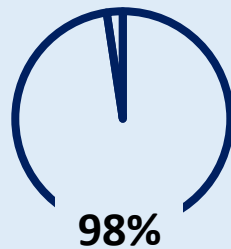
Evaluate the appropriateness of clinical decision-making

Review the quality of mental capacity assessment (MCA)

Establish whether patients and/or their representatives have been included in decision-making

Results

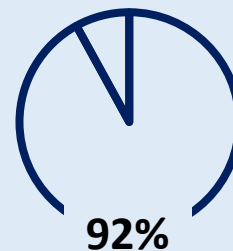
All 237 DNACPR orders were determined to be **clinically appropriate**. There were no examples of age, learning disabilities or mental health disorders being used as a justification for the DNACPR decision. Most patients with a DNACPR order **also had a treatment escalation plan (TEP)**.



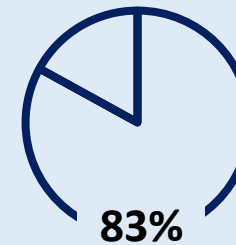
Of DNACPRs were authorised by a senior doctor



Of patients had a formal capacity assessment



Of DNACPRs included documentation of discussion with the patient



Of DNACPRs included documentation of discussion with their representative

Conclusions

- ❖ Overall, the results were **reassuring** across **all directorates**. The use of a Trust-wide audit tool established that performance was **consistent** which offers greater **assurance** and **reliability**.
- ❖ There was an improvement in documentation of MCA due to a **tick-box assessment** in the form itself.
- ❖ Most patients (and/or their representatives) were involved in decision making but with pockets of poor practice **highlighting areas for improvement**.
- ❖ Previous DNACPR decisions were often not discussed with the patient when they were reinstated, which could **exclude** patients who had **regained capacity** from being involved in these decisions later.
- ❖ The greatest challenge in conducting the audit was ensuring **consistency of data collection** across directorates; particularly in assessing **more subjective** elements like quality of communication and documentation.
- ❖ This audit will continue annually and will be improved through in-person training and more detailed guidance in the audit tool.

Patient Experience: Quality Of Information Provided By Clinicians For Imaging In The Ambulatory Unit

Authors

Ojoma Emeje, Kotze Jacobus, Tabassum
Musharrat, M. Malik, Philip Ike, Mridula Rajwani

Affiliations

John Radcliffe Hospital
Oxford University Hospital NHS Trust

INTRODUCTION

In acute medicine, medical imaging is pivotal for patient care. Over half of the 60 daily ambulatory assessment unit patients require diagnostic imaging. Time constraints may hinder thorough explanations, impacting patient experience. Effective communication during imaging scans is vital for patient-centered care. Inadequate information provision can affect patient satisfaction and outcomes¹.

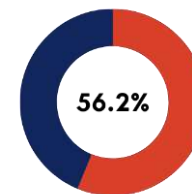
OBJECTIVE

To enhance patient satisfaction and outcomes by evaluating and improving the adequacy of information provided by healthcare providers regarding radiology scans in the Ambulatory Assessment Unit (AAU) of a tertiary hospital.

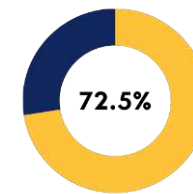
ANALYSIS

PRE-INTERVENTION

Physicians served as the primary source of information. There was room for improvement with regards to the explanations provided by physicians about purpose of scans and information received about scan results, level of satisfaction 56.2% and 72.5% respectively. Preferences for other modalities of dispersing information, ie, leaflets, websites, online videos were identified.



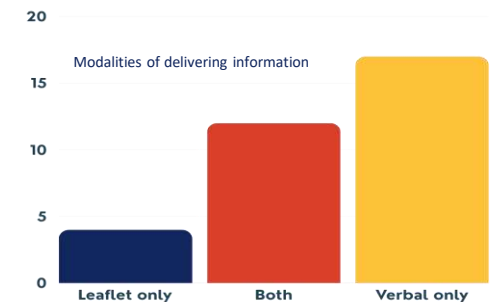
Level of satisfaction: information received on purpose of scan



Level of satisfaction: information received about scan result

POST INTERVENTION

The second cycle which was conducted with the use of QR codes involved over 30 patients. 51.5% of participants received information verbally, 12.1% obtained it through patient information leaflets, while the remainder received a combination of both modalities. **Over 90%** demonstrated high level of satisfaction with the adequacy of information received about their scans.



METHODOLOGY

We conducted a real-time survey, utilizing questionnaires (provided digitally with QR codes and paper-based if needed), with a sample size of 80 patients who underwent various imaging procedures during their visit to the AAU department within a frame of 1 month.

We gathered data on:

- awareness of scan type
 - healthcare provider conveying scan details
 - patient contentment with explanation quality (including reasoning, expectations, and results)
- favored communication methods for scan information dissemination.

INTERVENTION

Our intervention centered on enhancing physician awareness by implementing customized communication strategies, including local presentations within the unit and creation of a roadmap featuring checkboxes for patient imaging. Additionally, provision of supplementary materials, such as patient information leaflets (digitally through QR codes as well as paper-based copies) prior to scans

CONCLUSION

Improving communication in radiology procedures within acute medical settings is crucial for enhancing patient satisfaction and comprehension. Tailored strategies, such as local presentations and supplementary materials, have shown to notably enhance patient experience. Our ongoing efforts focus on refining interventions, replicating successes across diverse settings, and assessing the generalizability and scalability of these practices to achieve sustainable improvement.

Two Cycles Quality Improvement Project on Compliance and Management of Acute Hyperkalaemia in Adults

Okkar MYINT ZAW, Laura CHASE, Anna ZATORSKA, Tasnim MOMONIAT

Introduction

- Prompt recognition and management of hyperkalaemia is essential to prevent patient morbidity and mortality.
- Ongoing monitoring of ECGs, biochemistry and serum blood glucose is important to ensure the resolution of hyperkalaemia and to prevent the risk of hypoglycaemia with Insulin/Glucose infusion.

Aim

- To assess the compliance of the management of acute hyperkalaemia in adults according to the York Hospital Trust's guideline (August 2011)⁽²⁾ and UK Kidney Association's (UKKA) guideline (June 2020)⁽¹⁾.
- To feedback the data to the trust's updated guideline for the management of acute hyperkalaemia in adults (V1 November 2023)⁽³⁾ to increase the compliance.

Do

- In the first cycle of QIP, 39 patients were analyzed with K+ of 6.5 mmol/L or more and admitted between June and November 2022.
- In the second cycle of QIP, 39 patients were analyzed with K+ of 6.5 mmol/L or more and admitted between June to November 2023.
- A&E, Medicine and Surgical patients were included in the sample but not Renal and Pediatrics.

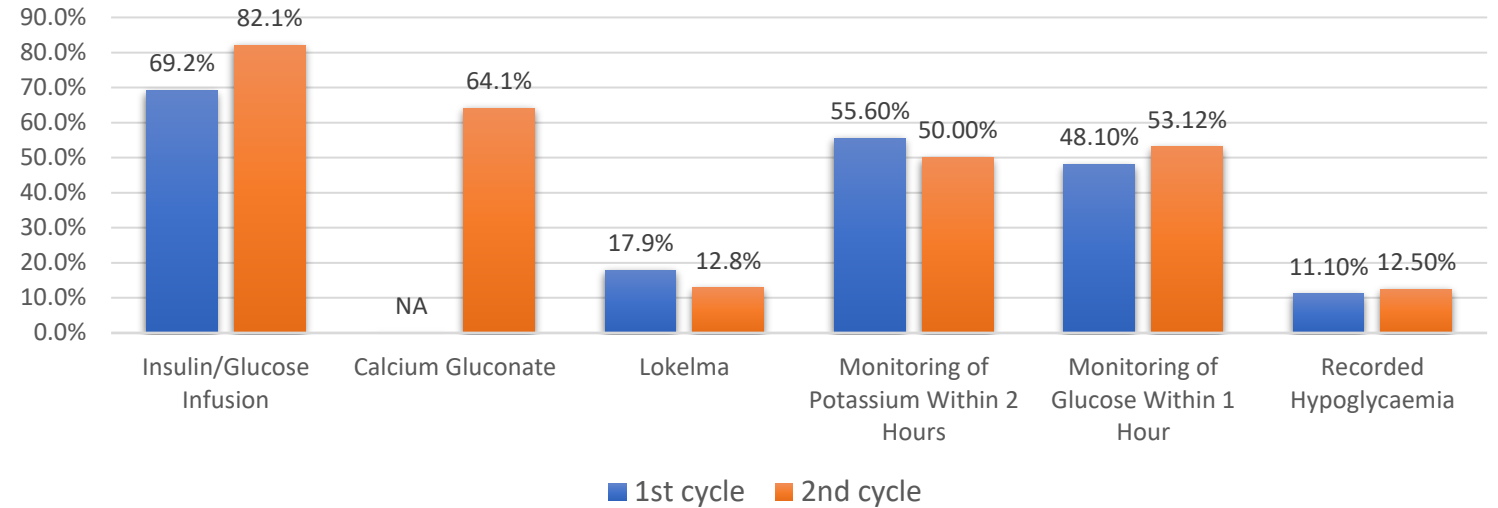
Study Areas

- Length of inpatient stay, mortality, and dialysis.
- ECG monitoring before and after the treatment of acute hyperkalaemia.
- The use of Insulin/Glucose infusion, Calcium Gluconate and Sodium Zirconium.
- Monitoring interval and frequency of potassium and capillary blood glucose after the treatment.
- Proportion of patients with recorded hypoglycaemia after treatment with Insulin/Glucose infusion.

References

1. Alfonzo A, Harrison A, Baines R et al (2020) 'Clinical Practice Guidelines Treatment of Acute Hyperkalaemia in Adults' *Renal Association UK*
2. Jones C, Ridley L (2011) 'Protocol for Management of Acute Hyperkalaemia in Adults' York and Scarborough Teaching Hospitals NHS Foundation Trust
3. Momoniat T, Cooke M, Myint Zaw O (2023) 'Management of Acute Hyperkalaemia in Adults' York and Scarborough Teaching Hospitals NHS Foundation Trust

Hyperkalemia Treatment and Monitoring



Interventions

- As per MHRA safety alert in June 2023, potential risk of underdosing with Calcium Gluconate was reflected, and dose was corrected in the trust's updated guideline for the management of acute hyperkalaemia in adults (V1 November 2023)⁽³⁾.
- The importance of monitoring glucose and potassium and the trust's updated guideline were circulated by email and presented in the governance meeting.

Discussion

- Although national UKKA's guideline advocates 10 units of insulin in Insulin/Glucose infusion, our local trust guideline suggests 6 units of insulin and around 12% of patients still had hypoglycaemia event in both cycles.
- From this study, we would like to highlight the importance of monitoring glucose and potassium and it is reflected by adding the mandatory monitoring column in the new updated guideline. (V1 November 2023)⁽³⁾
- Although the study on ECG changes were not audited, we have noted that IV Calcium Gluconate was given to most patients without ECG changes which needs to be audited on the next study.

Enhancing Patient Care: A Quality Improvement Initiative for Effective Handover from Acute Medical Ward for the Elderly to Downstream Wards

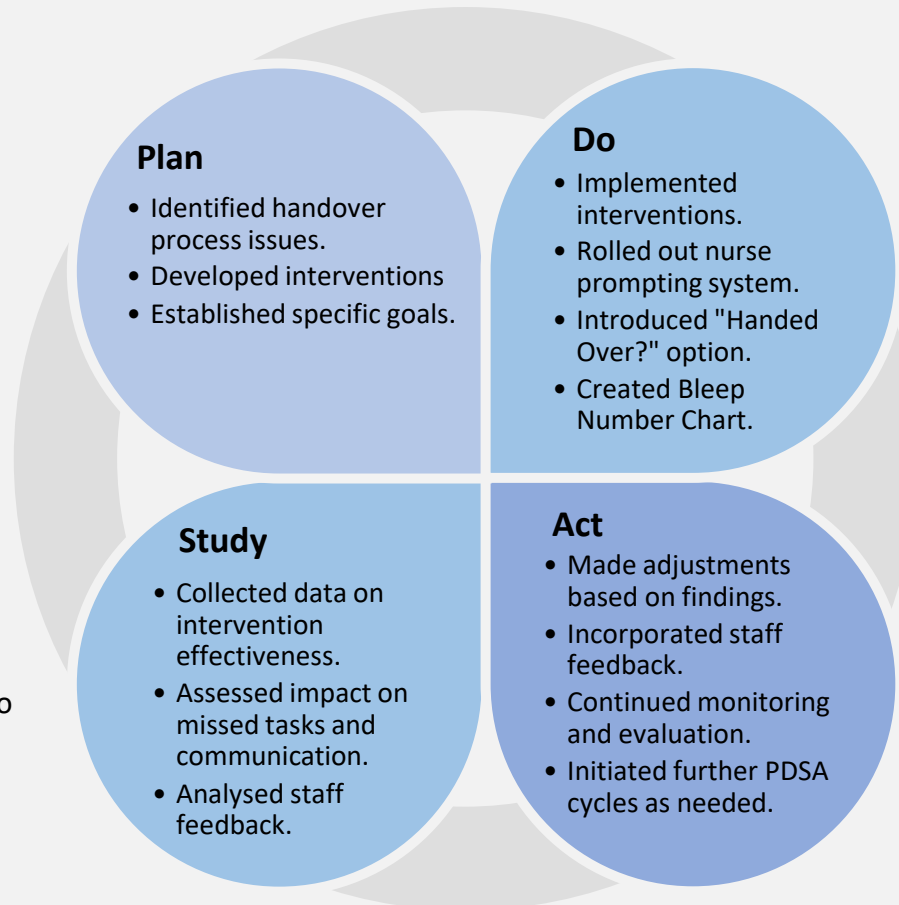
Dr Orzo Raj Shrestha, Dr Bipin Sapkota, Dr Honey Joshi, Dr Abi McGinley

PROBLEM STATEMENT

Patients transferred from the Acute Medical Ward for the Elderly to downstream wards experienced missed blood tests and overlooked tasks, leading to potential risks in patient care continuity and outcomes.

INTERVENTIONS IMPLEMENTED

- **Nurse Prompting:** Proactive notification system facilitating timely handovers.
- **"Handed Over?" Option:** Visual cue on patient boards to confirm handover completion.
- **Bleep Number Chart:** Creation of a centralized communication tool featuring bleep numbers for all downstream wards.

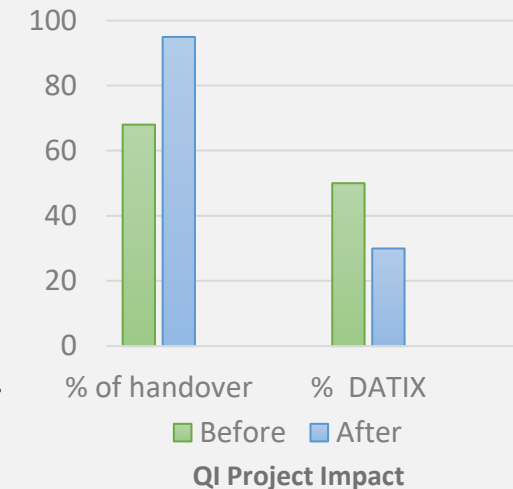


RESULTS

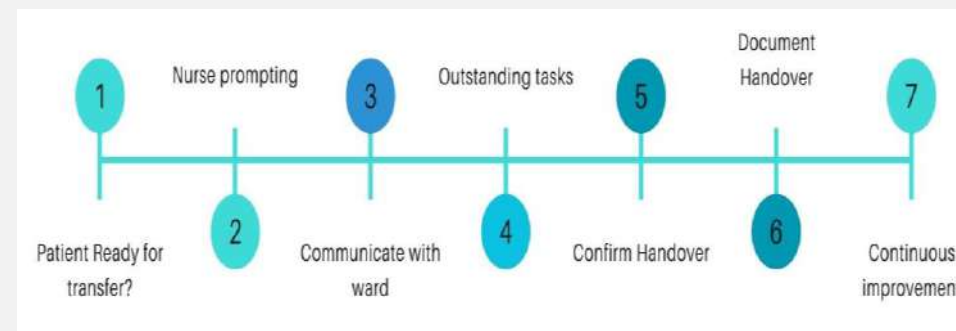
- **Significant decrease in missed blood tests** and communication-related incidents.
- **Enhanced collaboration** between nursing and medical staff, leading to a more cohesive and efficient handover process.
- **Improved efficiency in handover process**, contributing to improved patient care quality and safety.

CONCLUSION

- Multidisciplinary QI approach effectively addressed **safety concerns and enhanced communication.**
- Findings shared in departmental teaching sessions and QI meetings to **promote best practices.**
- **Exemplary model for optimizing patient handover processes.**



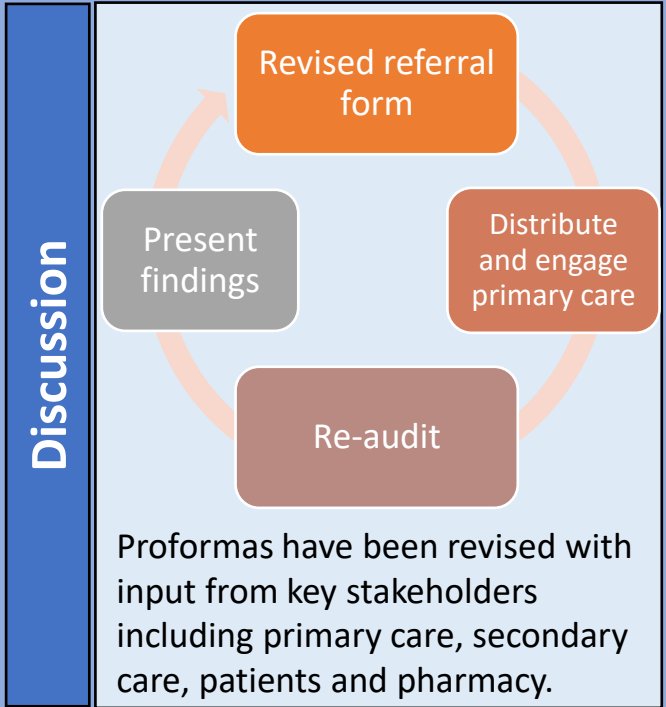
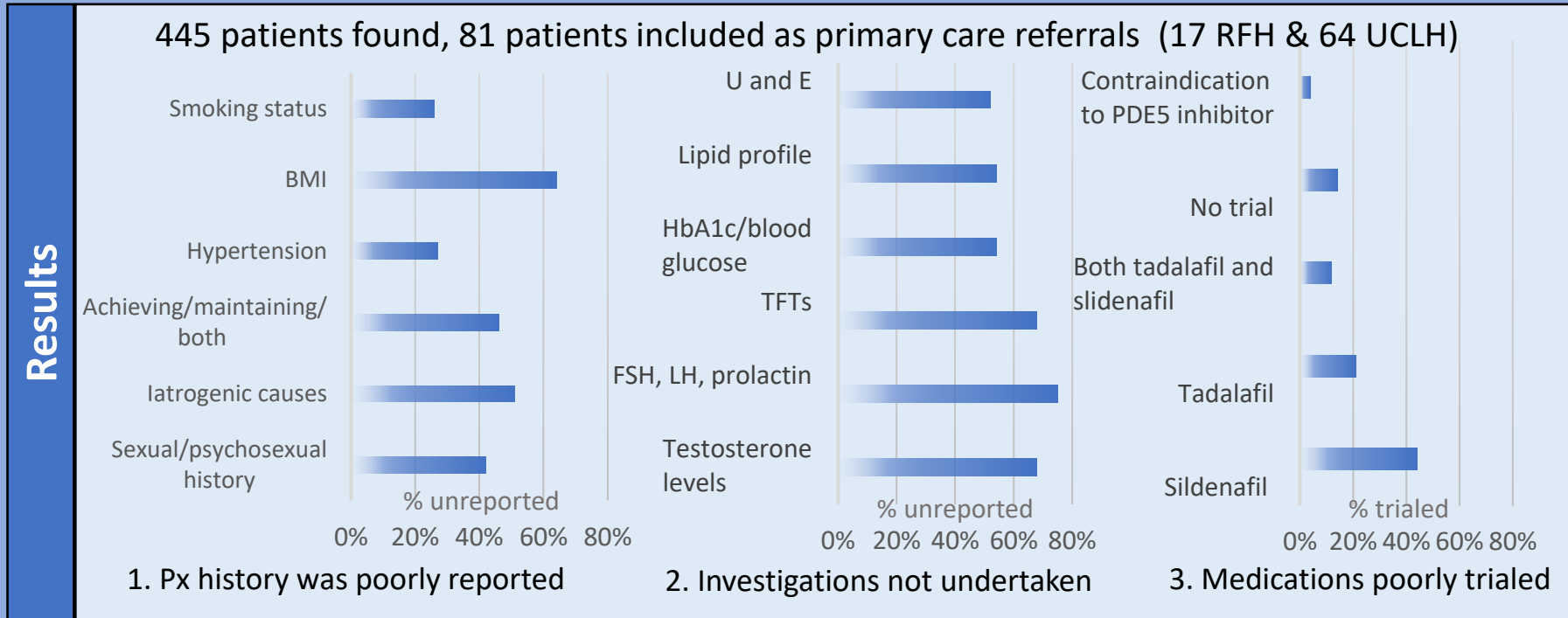
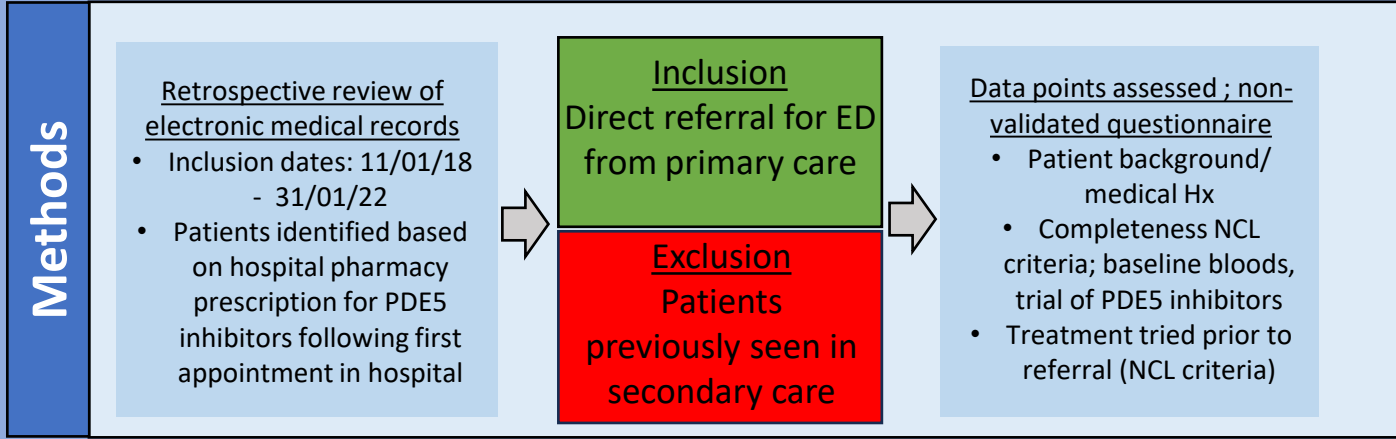
PROCESS MAP



Audit of General Practitioner (GP) referrals for Erectile Dysfunction (ED) within North Central London Integrated Care System (NCLICS)

Parth Ankur Tagdiwala*, Ali Pasyar*, Matthew Megson**, Wai Gin Lee**
 *University College London Medical School
 **University College London Hospitals Foundation Trust

Background	<ul style="list-style-type: none"> There is limited data regarding compliance by GPs for referral pathways within NCL for ED referral to secondary care Large diagnostic backlog in secondary care – for non cancer referral <ul style="list-style-type: none"> Referral forms are too complex
Aims	<ol style="list-style-type: none"> To identify all new patients referred by GPs For ED to RFL and UCLH NHS foundation trusts To assess compliance with the primary care referral pathway for ED



Introduction

Cardiovascular diseases account for approximately one-third of global mortality, with 7.5 million deaths attributed to ischaemic heart disease[1]. Diabetes mellitus and metabolic syndrome significantly elevate the risk of cardiovascular diseases, affecting 8.8% of the world's population[2]. A study revealed that a 1% increase in HbA1c concentration led to a 30% rise in all-cause mortality and a 40% increase in cardiovascular or ischaemic heart disease mortality among individuals with diabetes. Conversely, reducing HbA1c by 0.2% was associated with a 10% decrease in mortality[3]. A similar retrospective study from Birmingham demonstrated that 14.3% of ACS patients were pre-diabetic, with 10.8% newly diagnosed with diabetes[4]

Aim

The European Society of Cardiology recommends HbA1c screening in ACS patients as diabetes is a major cardiovascular risk factor. A quality improvement project was conducted to determine compliance with guidance and improve diabetes screening to optimize diabetic treatment, reduce the risk of further cardiovascular events, and reduce mortality.

References

1. Bueno H. Epidemiology of acute coronary syndromes. James S, editor. ESC CardioMed. 2018 Jul;12:13–8.
2. Tesfaye A, Josef H, Wube TB, Girma Z, Negasa B, Muche T, et al. Magnitude of, and Factors Associated with Cardiovascular Disease Among Type Two Diabetes Mellitus Patients. Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy. 2020 Nov; Volume 13:4123–9.
3. Sherwani SI, Khan HA, Ekhzaimy A, Masood A, Sakharkar MK. Significance of Hba1c Test in Diagnosis and Prognosis of Diabetic Patients. Biomarker Insights [Internet]. 2016 Jan;11(11):BMI.S38440. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4933534/>
4. Lugg ST, May CJH, Nightingale P, Tuffley RPE, Al-Hourani J, De P. HbA1c screening for new onset diabetes following acute coronary syndrome: is it a worthwhile test in clinical practice? Journal of Diabetes & Metabolic Disorders. 2017 Apr 4;16(1).

Methodology

Retrospective data was collected in Arrowe Park Hospital and 3 cycles were carried out.

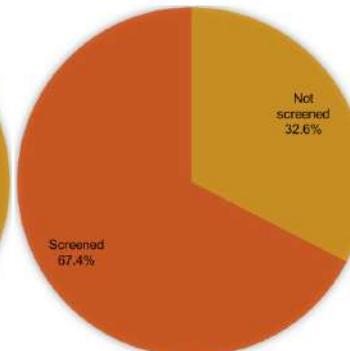
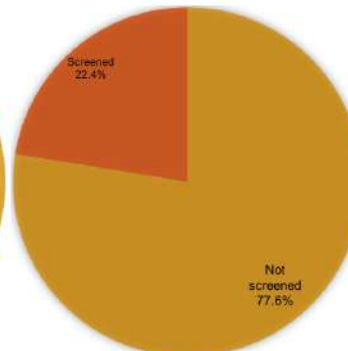
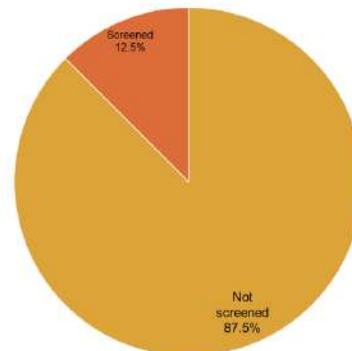
1st cycle of data collection was carried out from August 2022 to October 2022 and included 40 patients.

1st Intervention: Teaching sessions were organised in Cardiology, Emergency & Acute Medicine departments to emphasise the importance of HbA1c screening in ACS patients

2nd cycle of data was carried out from April 2023 to June 2023 and included 49 patients.

2nd Intervention: placing ready reckoner stickers at key locations in cardiology, prompting HbA1c screening.

3rd cycle data was carried out from November 2023 to January 2024 and included 43 patients with significant improvement in HbA1c screening



Results

According to the data collected from the first cycle of the data collection cycle, it was apparent that there was a need for improvement in compliance with guidelines for screening patients for diabetes in ACS. Teaching sessions organised in acute units proved helpful, and compliance increased from 12.5% to 22.4%. A retrospective review of the data showed that 3 patients who missed HbA1c screening were diagnosed with diabetes at a later stage. As there was room for further improvement, further interventions were carried out to improve compliance. At this stage, ready reckoner stickers were placed on computers in the Cardiology unit to serve as a reminder prompting HbA1c screening in ACS patients. Substantial improvement was noted, and 67.4% of patients with ACS were screened for diabetes with HbA1c. 3 patients were newly diagnosed with type 2 diabetes, and one patient was diagnosed with prediabetes.

Learning points

- The cost-effectiveness of HbA1c screening compared to the economic burden of uncontrolled diabetes and cardiovascular disease.
- Patient education is essential for lifestyle changes, smoking cessation, exercise, and achieving reasonable diabetes control to reduce cardiovascular risk factors.
- Recognising missed diagnostic opportunities to prevent significant burdens to individuals and healthcare services.
- Advocating for judicious resource utilisation and healthcare education is vital for sustainable healthcare transformation.
- Effective collaboration of Multi-Disciplinary Teams from admission to discharge to improve quality of care.
- Educating clinical and nursing colleagues about screening cardiovascular risk factors and optimising treatments to improve prognosis.

An Audit on Compliance to the ULHT protocol in the investigation and management of Hypokalaemia

Authors

Dr. Rafid Mustafa

Dr. Befkadu Abay

Dr. Mohammed Abdalla

Dr. Hakam Al-Karadsheh

Dr. Mohammad Shaik Hosseim

Introduction

Hypokalaemia is a common electrolyte imbalance among inpatients.

Classification

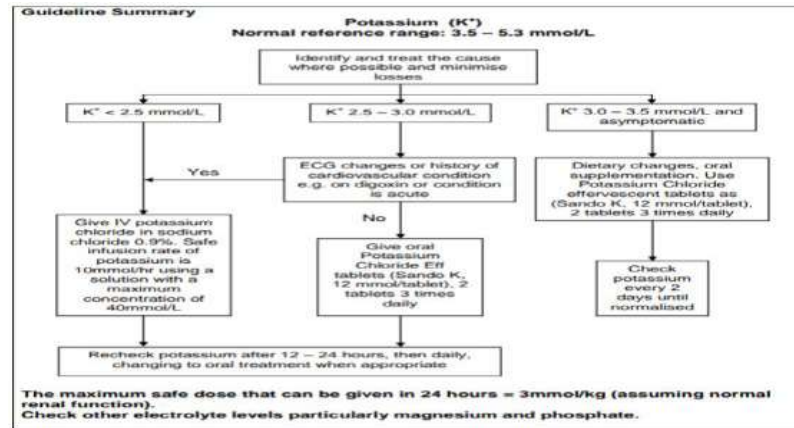
Mild Hypokalaemia - 3.0 – 3.5 mmol/L

Moderate Hypokalaemia - 2.5 – 2.99 mmol/L

Severe Hypokalaemia - ≤ 2.5

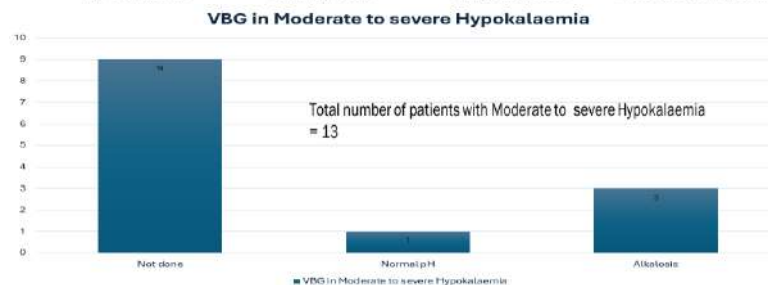
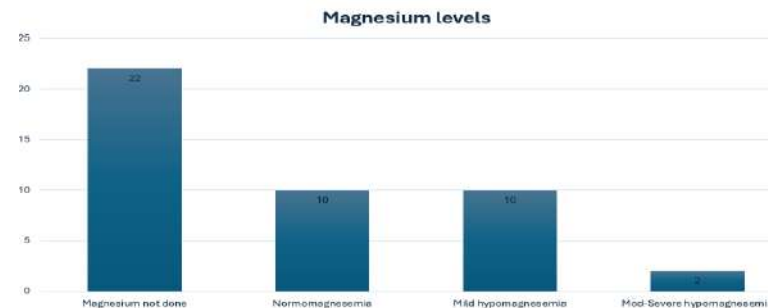
Audit Standard

- All patients with hypokalemia should have magnesium level checked
- All patients with moderate/severe hypokalemia should have a blood gas
- All patients with moderate/severe hypokalemia should have an ECG
- All patients with hypokalemia should have their culprit medications stopped (Exception to the standard include some medications like steroids, insulin and antibiotics – where the decision should be made on a case by case basis)
- All patients with moderate hypokalemia with ECG changes or severe hypokalemia should receive intravenous (rather than oral) potassium replacement
- Maximum safe dose of potassium that can be given in 24 hours is 3 mmol/kg (Exception to the standard - potassium replacement during DKA/HHS protocols)
- All patients with potassium administration rate above 10 mmol/hr should be on a cardiac monitor (Exception to the standard - patients with DKA or HHS)
- All patients with intravenous potassium replacement should have potassium level checked at least every 24 hours
- All patients with oral potassium replacement should have potassium level checked at least every 48 hours

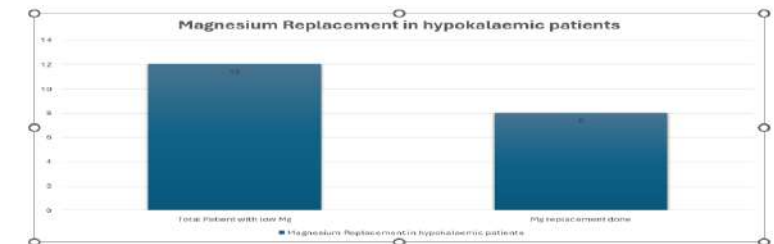
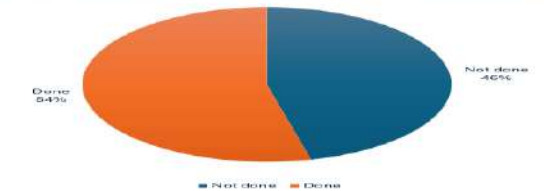


Methodology

- Prospective review of case notes and laboratory records of patients with **hypokalemia** admitted in the medical ward in between 1st December 2023 to 31st January 2024
- Total number of patient: 44



ECG IN MODERATE TO SEVERE HYPOKALAEMIA



Conclusion

Nearly 70% of our patients had only mild hypokalaemia
Blood gas were done only in 30% of patients
ECG was done in 54 % of patients
This corresponds to moderate/severe hypokalaemic patients in the audit
Magnesium levels were done only in 50% of hypokalaemic patients.
Among patients with low magnesium, it was replaced only in two-third – scope for improvement
Diuretics (thiazide and loop) were the commonest cause of hypokalaemia
As resistant hypertension and refractory hypokalaemia were not present, special investigations including cortisol, ARR and random urine electrolytes were not done
66% (29/44) was treated with oral potassium and 16% (7/44) with IV potassium. 18% (8/44) improved without any K replacement
Cardiac Monitoring was used only 1/7 patients during IV replacement - whether this indicate a poor compliance can't be commented – as data on hourly rate of IV potassium replacement is not collected
Repeat U&E were done as per the protocol only in 91% of hypokalaemic patients – scope for improvement

An Audit on Management of Familial Hypercholesterolemia in Outpatient Clinic settings

Rafid Mustafa, Siti Abd Hadi, Aditya Sudarshan, Sathia Mannath, Cornelius Fernandez, Nyi Htwe

INTRODUCTION

Familial hypercholesterolemia is caused by a genetic defect with an autosomal dominant inheritance. It could be heterozygous (inherited from 1 parent) or homozygous (inherited from both parents). Heterozygous FH is common (1 in 250-500) whereas homozygous FH is rare (1 case per 1 million).

OBJECTIVES

To audit the local practice to national guidelines (QS41 NICE, August 2013).

To study the efficiency of Simon Broome or DLCN criteria in clinical diagnosis of FH

To study the genetic mutation that is prevalent in FH patients in the local area.

To study the frequency of PCSK9 inhibitor use to achieve LDL targets in FH patients.

To study the proportion of FH patients achieving LDL targets.

To study the extent of cascade testing after a positive genetic mutation test.

METHODOLOGY

Retrospective audit on Lipid Clinic cases at Pilgrim Hospital between 2016 and 2020.

Those who had a high clinical suspicion of FH were selected (sample size was 63).

45 were tested negative and 18 were tested positive for genetic mutation

OBSERVATIONS

- 98% of patients had an appropriate work up for FH prior to referral to the lipid clinic.
- Only 11% of lipid clinic patients were assessed with Simon Broome or DLCN criteria.
- 6% of genetic mutation positive cases met Simon Broom criteria (low sensitivity).
- 28% of genetic mutation positive cases met DLCN criteria (moderate sensitivity)

5. 97% of lipid clinic patients were assessed for stigmata of FH including xanthoma

6. Every lipid clinic patient with high clinical suspicion of FH had genetic mutation test.

7. Every FH patient were given lipid-modifying therapy to reduce LDL by 50% in 1 year

8. 89% patients with proved genetic mutation were offered a cascade testing

	DLCN Definite	DLCN Probable	DLCN Possible	DLCN Unlikely
Simon Broome Definite	-	1 (6%)	-	-
Simon Broome Possible	5 (28%)	6 (33%)	2 (11%)	2 (11%)
Simon Broome Suspect	-	-	2 (11%)	-
Comparison of number of patients among those positive for genetic mutation, against the Simon Broome (definite/possible) and DLCN criteria (score >5)				
Simon Broome Definite	-	-	-	-
Simon Broome Possible	1 (2.3%)	11 (25%)	15 (34%)	5 (11.4%)
Simon Broome Suspect	-	1 (2.3%)	7 (16%)	4 (9%)
Comparison of number of patients among those negative for genetic mutations, against the Simon Broome (definite/possible) and DLCN criteria (score >5)				

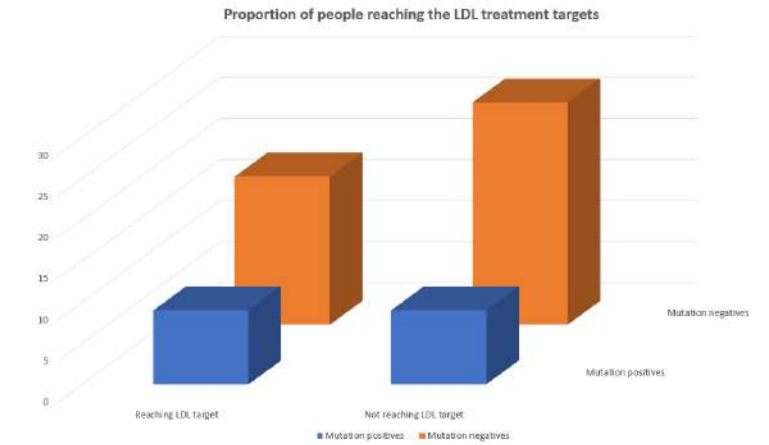
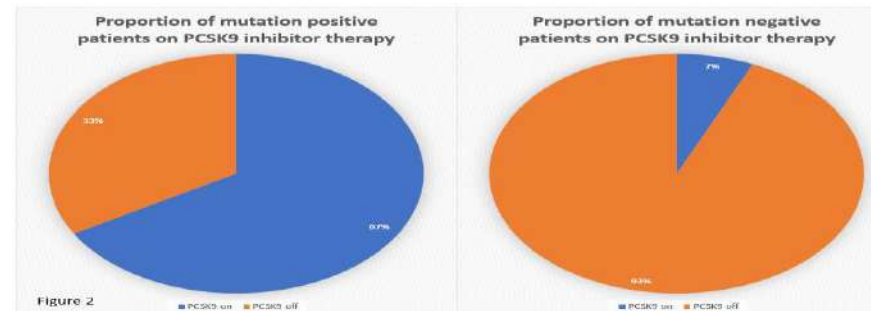
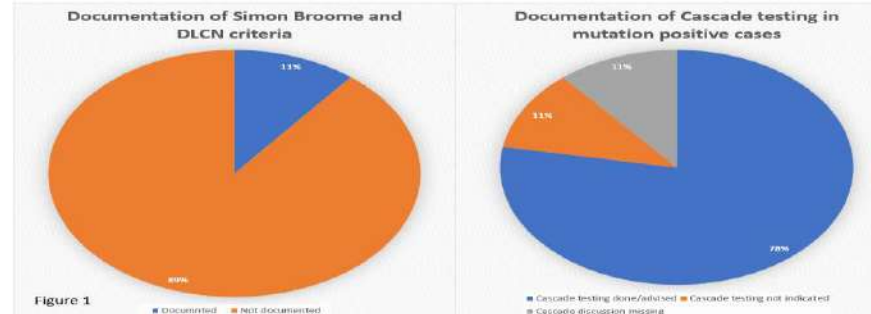


Figure 4

CONCLUSIONS

- Overall, there is a good compliance to NICE standards.
- Noted poor compliance in the documentation of the clinical assessment using Simon Broome or DLCN criteria, the most likely reason for which is the time constraints.
- Simon Broome's criteria has a low sensitivity compared to DLCN criteria probably due to its qualitative nature, and due to its reliance on tendon xanthomas which are rare.
- Clinicians seeing possible FH patients should be familiar with DLCN criteria, so that they can complete it in the limited time available during the outpatient clinic settings.
- Genetic tests showed that LDLR mutation contributed to 78%, ApoB to 17%, and ApoE to only 5%. This is comparable to JACC data showing proportion of LDLR mutation of 90%, ApoB 5-10%, and PCSK9 <1% among FH patients.
- As 67% of mutation positives are on PCSK9 inhibitors (compared to only 7% of mutation negatives), the proportion of people reaching the LDL targets are high in the mutation positives compared to the mutation negatives.
- Cascade testing should be improved to reach 100% compliance as the diagnosis of FH has implications not only on the patient, but also on the family



The Hepatology Clinic In The Digital Era: A Retrospective Review Of PBC Patient's Clinic Letters Pre And Post Introduction Of The UK-PBC Primary Biliary Cholangitis (PBC) Care Bundle

Rana Al-Najjar, Lujain Hassan, Hazel Woodland

Introduction & Aim

Primary biliary cholangitis (PBC) is a chronic autoimmune liver disease with a prevalence of 25 per 100,000 In the United Kingdom. The aim of the management of PBC must include both symptom burden as well as disease progression. (1) According to the first population-based, nationwide study of healthcare delivery in PBC within the UK, there are significant gaps in care across the UK PBC population. (2)

To establish the effect of appropriate utilization of digital resources on patient care and healthcare delivery for primary biliary cholangitis patients in the hepatology clinic.

Methods

A systematic retrospective analysis of clinic letters, pre and post digitisation, of 18 patients diagnosed with PBC that attended the Hepatology between 2022 and 2023 at a single institution was undertaken. The clinic letters were scrutinised for the presence of parameters relating to patient treatment and disease complications. A second data collection was performed from the digitised clinic records which were available in the form of an online single data record (fig. 1). The data collected was matched to the UK-PBC consortium guideline standards and a statistical analysis was performed. Following the study, the PBC form was then updated to be in line with the new UK-PBC Primary Biliary Cholangitis (PBC) Care Bundle to include, but not limited to, dose adjustment as per the BNF, indications for second-line therapy, presence of sicca symptoms, and HCC surveillance.

Primary Biliary Cholangitis Review

Date of review: 19/09/2023

Date of diagnosis: Jan 2023

M2 positive: Yes No

Liver biopsy performed: Yes No Unknown

Diagnosis comments: The appearances are those of a low grade chronic hepatitis. This could represent autoimmune hepatitis - granulomas may be seen in this condition. However, this may alternatively represent very early primary biliary cholangitis and therefore measurement of the serum antimitochondrial antibody/M2 titres is recommended.

Height and Weight Recording

Please Note: The height and weight measurements entered here will be transferred to the Electronic Prescribing System and may be used to calculate drug doses. If the patient's height and weight are estimated, ensure you enter this in the appropriate field.

Label:

Has the patient's height been measured: Yes No

Height (Actual): 163 cm

Label:

Has the patient's weight been measured: Yes No

Weight (Actual): 93.8 kg

Fig. 1

Results

This study showed that in the pre digitization clinic letters the following parameters were available: height 0% (n=0), weight 38.8% (n=7), BMI 16.6% (n=3), diagnosis date 55% (n=10), anti-mitochondrial antibodies detectable 38% (n=7), Liver biopsy 33% (n=6), UDCA dose (mg/kg) 67.6% (n=12), fatigue assessment 27.7% (n=5), pruritus assessment 11.1% (n=2), fibroscan recorded 11.1% (n=2).

The post digitization clinic records showed: height 78% (n=14), weight for 89% (n=16), BMI 89% (n=16), diagnosis date 100% (n=18), anti-mitochondrial antibodies detectable 89% (n=16), Liver biopsy 61% (n=11), UDCA dose (mg/kg) 94% (n=17), fatigue assessment 78% (n=14), pruritus assessment 66% (n=12), fibroscan recorded 94% (n=17).

The paired T test was used for statistical analysis which showed significant difference in the pre and post digitization data, proving the benefit of digitization. (fig. 2)



Fig. 2

Conclusion

This study confirms that utilizing the digital forms in clinic has a positive impact on the continuous and progressive data collection of treatment modifying parameters for PBC patients. In some parameters there has been more than 50% percentage increase in information recording. Additionally, the forms provide a useful aide-memoire, ensuring a uniform collection of data. The study clearly demonstrated the effectiveness and efficiency of utilizing available technology and digitization, in this case pre-populated online forms, to enhance and streamline patient care delivery.

Second Stage of Project

The following parameters were implemented to the forms, and data will be re-audited for the second cycle:

1. Prompt to direct patients towards the useful websites
2. Dose of UDCA updated from 12-16mg/kg to 13-15mg/kg
3. Prompt about when to consider second line therapy
4. Symptoms: sicca added.
5. Is HCC surveillance indicated (liver stiffness >14.9kPa)

References
Hirschfield GM, Dyson JK, Alexander GJ, Chapman MH, Collier J, Hübscher S, Patanwala I, Pereira SP, Thain C, Thorburn D, Timiakos D. The British Society of Gastroenterology/UK-PBC primary biliary cholangitis treatment and management guidelines. Gut. 2018 Sep 1;67(9):1568-94.
Abbas N, Smith R, Flack S, Aspinall R, Jones RL, Leithead J, Thorburn D, Braniff C, Heneghan M, Yeoman A, Thain C. Critical shortfalls in the management of PBC: results of the first nationwide, population-based study of care delivery across the UK. Journal of Hepatology. 2022 Jul 1;77:S96-7.

Bettering communication around Advance Care Planning including DNACPR discussions and use of the Urgent Care Plan for patients admitted under Care of Older People



Dr Rena Kaur, Dr Maryam Noeman, Dr Imran Mannan (Supervising Consultant)
With thanks to Dr Simon Tavabie (Palliative Care Registrar)

1) Introduction

Advance Care Planning (ACP) enables patients and their families to plan 'their future wishes and priorities for care'¹.

Urgent Care Plans (UCPs) are for patients with a shorter life expectancy and centre around ceilings of care, understanding disease progression, CPR decisions and patients' preferences².

We identified a need to improve the quality and frequency of these conversations.

Our aim was to assess current practice, improve communication around ACP and the use of UCPs for patients admitted to elderly medicine.

2) Materials and methods

Data was collected from 40 patients with frailty admitted to the elderly medicine ward over a 6-week period.

We collected information on:

- Demographics and clinical frailty scale
- Treatment escalation plan (TEP) and DNACPR discussions
- Use of UCPs

Following data collection, a **focus group** took place with the medical team to identify **any barriers to ACP**.

Our intervention was a teaching session delivered by the palliative care team. Survey data was collected pre- and post-teaching session to assess impact.

3) Key findings and discussion

Data collection identified:

- 75% patients had TEP discussions
- 78% patients having a DNACPR order placed appropriately
- 25% patients had a UCP on admission but only two were reviewed
- No UCPs were initiated during that admission

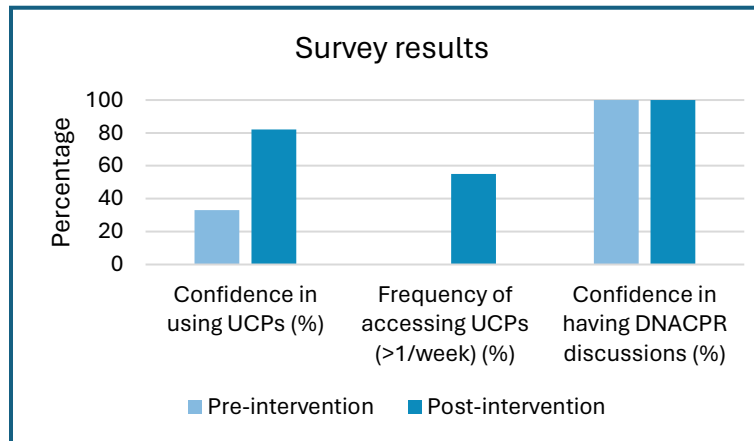


Figure 1: Pre- and post-education intervention

References: 1) The Gold Standards Framework. *Advance Care Planning*. 2018. <https://www.goldstandardsframework.org.uk/advance-care-planning> [Accessed 20th February 2024]. 2) Bielinska AM, Archer S, Obanobi A, Soosipillai G, Darzi LA, Riley J, Urch C. Advance care planning in older hospitalised patients following an emergency admission: A mixed methods study. *PLoS One*. 2021 Mar 5;16(3):e0247874.

Competing clinical demands of staff

Lack of confidence

Insufficient time

What are the main barriers to having ACP discussions?

Need for senior input

Practical difficulties accessing and editing UCPs

Figure 2: Focus group data from medical team

4) Conclusion and next steps

- Doctors are confident having DNACPR discussions. Junior doctors are less confident in using UCPs in daily practice, but post-intervention data showed significant improvements.

Future steps to address barriers:

1. Implement a training programme for the MDT in UCP, in the older people department and expand it to other medical teams.
2. Improve the electronic health record clerking proforma by building a prompt on ACP for all team members and automating an ACP template in the discharge summary.

Predicting outcomes in patients with acute kidney injury: Our experience in a district general hospital

Roy R, Mehmood S, Nayyar M, Ali L

Introduction:

- Acute kidney injury is characterised by a sudden decline in renal function.
- In the UK, 1 in 5 hospital admissions is associated with an acute kidney injury.
- There are several well-recognised risk factors for developing an acute kidney injury including age, underlying co-morbidities, cancer, immunosuppression, sepsis and medications⁽¹⁾.
- Here, we share our experience of managing patients presenting with an acute kidney injury, specifically looking at recognising risk factors and interventions that will improve treatment outcomes in these patients.

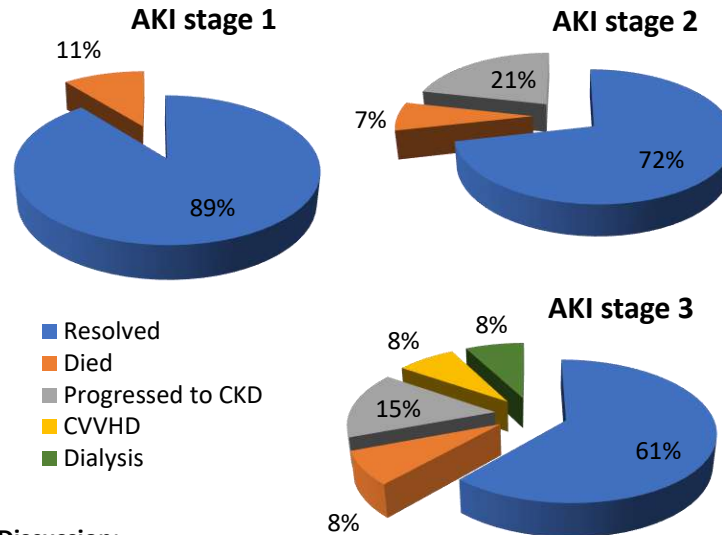
Methods:

- We retrospectively reviewed the notes of patients admitted with acute kidney injury to our hospital in November 2023.
- Data such as demographics, co-morbidities, stage of AKI, cause of AKI, imaging performed and medications on admission was collected.
- Outcomes measured included resolution of AKI, continuous veno-venous haemodialysis, renal dialysis and progression to CKD.

Results:

Avg Age	72.69
Male	27
Female	25
AKI stage 1	28
AKI stage 2	12
AKI stage 3	12
Avg Cr	253.5

ACE-i	9 (17%)
ARB	8 (15%)
Diuretics	20 (38%)



Discussion:

- The average age of patients was 73 years.
- 27 (52%) were male and 25 (48%) female.
- 28 (54%) had AKI stage 1 on admission, 12 (23%) had AKI stage 2 and 12 (23%) had AKI stage 3.
- 33 (64%) had an underlying cardiovascular co-morbidity and 18 (35%) had pre-existing CKD.
- 9 (17%) patients were on an ACE-inhibitor, 8 (15%) were on an angiotensin receptor blocker and 20 (38%) were taking diuretics.
- Infection was the most common cause of AKI stage 1 (54%), with chest (40%) being the most common source.
- 5 (18%) patients had ultrasound renal tract and 2 (7%) had a CT renal tract.
- Hydronephrosis was seen in 1 patient.
- This patient had a previous history of renal calculi.
- Vasculitis screen was negative in all 4 (14%) patients.
- AKI resolved in 25 (89%) and 3 (11%) died.

- Infection was still the most common cause (42%) in those with AKI stage 2.
- Ultrasound renal tract was performed in 4 (33%) patients and hydronephrosis was seen in 1 patient.
- Vasculitis screen was performed in 3 patients and was normal.
- 3 (25%) progressed to CKD and none required CVVHD or dialysis.

- In those with AKI stage 3, 4 (33%) had an infection with urine being the commonest source (75%).
- 8 (67%) had an ultrasound renal tract and 1 showed hydronephrosis due to an enlarged prostate.
- 5 (63%) showed a cortical abnormality.
- Vasculitic screen was performed in 3 patients and 1 (33%) of these was positive.
- 2 (17%) progressed to CKD.
- 1 required CVVHD followed by long-term dialysis.

Conclusion:

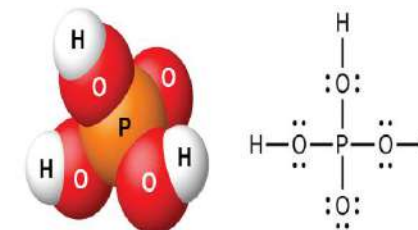
- Underlying cardiovascular disease increases the risk of developing AKI.
- AKI stage 2 and 3 are associated with an increased likelihood of progression to CKD.
- Patients with AKI stage 3 are more likely to need long-term renal dialysis.
- Vasculitis screen should be considered in patients with AKI stage 3.
- Renal ultrasound scan should be considered in all patients with AKI stage 3 and those with history of urinary tract obstruction.
- Recognising risk factors and early interventions such as these will facilitate an early diagnosis which will improve outcomes in these patients.

References:

1) National Institute for Health and Care Excellence. Acute Kidney Injury. URL: <https://cks.nice.org.uk/topics/acute-kidney-injury/>

Phosphate low? Oh no! Or does it really matter?

Shilpa Rajan, Nicholas Smallwood
(Basingstoke and North Hampshire Hospital)



INTRODUCTION:

In many Trusts serum phosphate forms part of the 'Bone profile' panel and is analysed as part of routine bloods in the ED or as part of acute admission bloods for the unwell patient. We hypothesised that many requests may not be indicated, and lead to unnecessary intervention with significant cost and resource implications.

METHODS:

One month of phosphate results (n=20348) from our DGH laboratory were reviewed and the moderate and severe hypophosphatemia results and interventions were analysed. Indications for phosphate analysis included reduced GCS, risk of refeeding, post-surgical involving the GI tract, monitoring electrolytes or critically unwell patients. Conditions that were not considered relevant for phosphate analysis included sepsis, chest pain, breathless, 'tired all the time', 'routine bloods', fall. Where equivocal, we recorded the test as indicated.

CONCLUSION:

In this analysis, approximately 65% of phosphate tests are not indicated, with the majority being done at the front door. This equates to over 13 000 tests in this month, and a 10p per test (personal communication) may have cost over £1300. Replicated nationally, this leads to significant cost and resource implications and Trusts should consider whether to exclude phosphate from routine blood panels as part of admission bloods, unless clearly indicated.

REFERENCE:

Trust guidelines on the severity of hypophosphatemia.

RESULTS:

Out of the 20348 results, 207 were moderately low (0.4-0.59 mMol/L) and 35 severe (<0.4). Of the 242 (1.2%) moderate and severe results, complete records were available for 190(79%).

Of the 242 total records:	35 were front door (ED) & 23 were GP.	14 were critical care	170 were wards.
Of the 190 complete records:	Of the 35% that were indicated:	Of the 65% that were not indicated:	
35% were indicated	89% (59) were treated	65% (81) were treated including 20 incorrectly given IV therapy.	
65 % were not indicated	11 % received no treatment	35% were not treated	

Evaluating the prescription of topical medication on Care of the Elderly Wards

S Bratsos, H Mihsein, R Ginsberg, E Hoy

Introduction

Regular medications should be prescribed on admission to hospital by medics in A&E. However, it was identified that topical dermatology medications are commonly missed in admission clerking. This quality improvement project (QIP) aimed to identify patients on elderly care wards who have regular emollient prescriptions and whether they are prescribed in a timely manner. We performed an intervention to increase timely prescriptions.

Method

Patients on five geriatric wards at Northwick Park Hospital were examined. Each ward was looked at on a single day during one month for both the first and second Plan Do Study Act (PDSA) cycles, 3 months apart. For each patient the Summary Care Record (SCR) was checked for regular emollient prescriptions, and this was compared to emollient prescriptions documented on electronic medical records. The variables measured include number of emollients, their indication and days until prescription; timely prescription was considered to be within one day of admission. We then designed a poster and displayed this in A&E as well as the acute medical wards in order to increase timely prescription of emollients.

Next steps...

Interventions to further improve our project include the involvement of on call pharmacist. This would allow for a more targeted approach towards highlighting the importance of topical medication prescriptions, during the screening process of patients' medications on admission.

Results

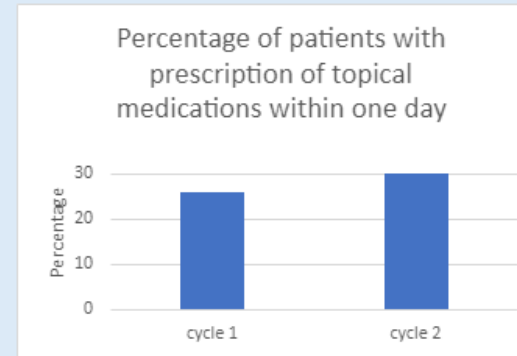


Figure 1. Percentage of patients with timely topical medication prescribing

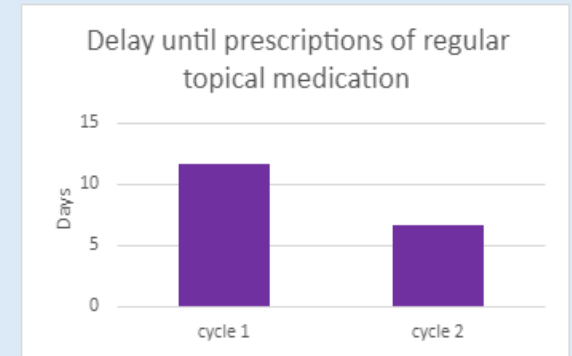


Figure 2. Delay until prescriptions of regular topical medications (days)

156 patients on 5 geriatrics wards were included in the first cycle, 46 were regularly prescribed emollients and 12/46 (26%) had a timely prescription in hospital. Average delay until prescription was 11.5 days since admission.

In cycle 2 there were 150 patients on the geriatrics wards with 30 having regular topical medication prescriptions. 9/30 (30%) had timely prescriptions on admission. Delay in prescription for those who were not prescribed on admission reduced to average of 6.6 days.

Conclusion

Our intervention resulted in a reduction of almost 50% in the delay until prescriptions of regular topical medications were prescribed throughout the geriatric wards, from an average of 11.5 to 6.6 days. These delays may have been due to the extreme time pressures and work load required of doctors working shifts in A&E, or the lack of awareness surrounding the importance of the application of some of these topical medications for several patients.

Limitations:

- The project was carried out at time of winter pressure as well as doctor strikes
- Improvements made by the project may not be sustained with rotation of junior doctors



Review Of Inpatient Referrals For Rheumatology : Can We Manage The Patient On Outpatient Basis?

Authors : Dr. Srikanth Nandamoodi; Dr. Ramya Padala; Dr. Anupama Nandagudi; Dr. Anurag Bhardwaj

01 Background/Aims

With the increasing demand for inpatient beds on the NHS, we need to ensure that patients are being admitted only if necessary for long term conditions including rheumatic diseases. We wanted to determine whether the length of inpatient stays for patients could be reduced and whether they could have been managed differently on an outpatient basis. This study's aim is to evaluate the inpatient stay of patients with rheumatic diseases admitted to Basildon University Hospital.

02 Methodology

This is a retrospective review of medical records of 94 patients admitted at Basildon Hospital between May 2022 to July 2022. We evaluated patient details, including age, sex, their primary medical and rheumatological diagnoses, care they received, and the circumstances surrounding their hospital admission. We also tried to determine how many of these inpatients could be treated as outpatients.

03 Analysis

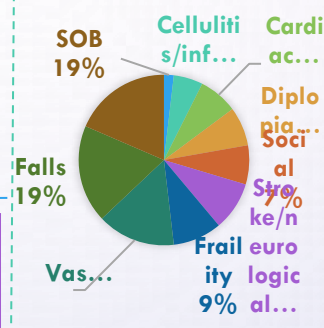
Age group(Years)	Number of Pt
80-89	22
60-69	19
50-59	17
70-79	17
<50	14
>90	5

Table : 1

Treatability as OP	No. of Pt
No data	3
Can be treated as OP	37
Can't be treated as OP	54

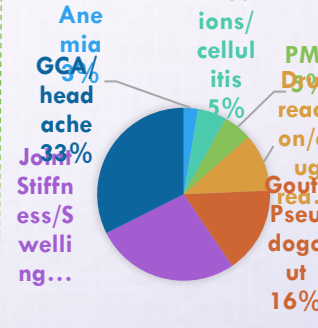
Table : 2

3. Patients who can't be treated as on outpatient



Graph 1

4. Patients who can be treated as on outpatient



Graph 2

5. Most common reasons for long term stay



Graph 3

6 rheumatological reasons



Graph 4

04 Results/Findings

Of 94 patients, 51% were males, their age ranged from 21 to 94 years (median 66 years). Commonest age group was 80- 89 years comprising 22% of patients. Maximum number of inpatients stayed equally between 2-7 days and 15 to 30 days occupied 22 % each. The inpatient stay varied from 1 to 149 days with 13% patients staying more than 30 days. Most common indication of long-term hospital stays were social problems 38%. frailty 31% and infections 31%. The primary reason for admission was rheumatological in 42% of patients and medical in 55% of patients. There was no data available for 3%. The rheumatological reasons included GCA 32%, joint Swelling/pain 22%, vasculitis 14%, crystal arthropathy 14%, PMR 13% and drug reactions 5%. Medical reasons included infections 24%, falls 18%, neurology/strokes 14%, respiratory (Non-infectious & SOB) 11%, oncology (meningioma/frontal lobe tumour/RCC) 5% and others. Treatment from rheumatology team during admission was steroids 36%, DMARDS 23%, joint injections 10%, NSAIDS 2%, IVIG 3% etc. Rest of the patients (26%) were under investigation for diagnosis. After evaluation it was felt that 39% of these patients could have been managed on outpatient basis and 58% required inpatient care.

05 Conclusion

This audit shows that 39% of admitted patients with rheumatological complaints can be managed on an outpatient basis. The concept of emergency or hot clinics as outpatient may be an efficient alternative for these patients.

06 Related Literature:

- Pacheco D, Alvarez ME, Vizcarra G, Fuentealba C, Marinovic MA, Ballesteros F. Characteristics of hospitalization of patients with rheumatic diseases admitted to a tertiary care hospital. Rev Med Chil [Internet]. 2001 [cited 2024 Feb 14];129(6):653-9. Available from: <https://pubmed.ncbi.nlm.nih.gov/11510206/>
- Researchgate.net. [cited 2024 Feb 14]. Available from: https://www.researchgate.net/publication/331669405_Spectrum_of_Rheumatic_Diseases_in_Egypt_is_Similar_Different_from_that_in_NonArabic_Countries_An_Inpatient_Comparison.pdf
- Sangha O. Epidemiology of rheumatic diseases. Rheumatology (Oxford) [Internet]. 2000 [cited 2024 Feb 14];39(suppl_2):3-12. Available from: <https://pubmed.ncbi.nlm.nih.gov/11276800/>
- Organisation [Internet]. Nhs.uk. [cited 2024 Feb 14]. Available from: <https://rightdecisions.scot.nhs.uk/organisations/organisation?name=nhs-lanarkshire>
- Rheumatology admission criteria [Internet]. GOSH Hospital site. [cited 2024 Feb 14]. Available from: <https://www.gosh.nhs.uk/wardsand-departments/departments/clinical-specialties/rheumatology-information-parents-and-visitors/refer-patient-rheumatologydepartment/rheumatology-admission-criteria/>
- Org.uk. [cited 2024 Feb 14]. Available from: <https://www.rheumatology.org.uk/Portals/0/Documents/Policy/Adult-rheumatology-referralguidance.pdf?ver=2022-08-04-104812-413>

Table 1: Age range in year
Table 2: Treatability as an outpatient basis
Graph 1: List of medical conditions that cannot be treated as an outpatient.
Graph 2: List of medical conditions that can be treated as an outpatient.
Graph 3: Reasons of long term hospitalization
Graph 4: Rheumatological reasons for admission



Reinforcing DVLA Guidance In Patients With Acute Coronary Syndrome In A District General Hospital With The Aim To Improve Discharge Summaries: A Quality Improvement Project

Author: S. Amini

Rotherham District Hospital NHS Foundation Trust

Introduction

- Driver & Vehicle Licensing Agency (DVLA) reinforces rules and demands abidance to them for safety reasons.
- It is doctors' legal and professional responsibility to inform patients of DVLA rules on discharge.

Aims

- To augment number of times DVLA advice was given to acute coronary syndrome (ACS) patients.
- To create confidence in junior doctors to give DVLA advice on ACS patients.
- To create a mandatory computerised proforma on discharge summary.

Results and conclusion

- The baseline data showed only 7% of patients were given DVLA advice after a confirmed ACS event.
- In post-intervention 1, it dropped to 0%
- In post-intervention 2, 100% of all DVLA advice given was related to ACS patients.

Conclusion:

- We demonstrated our intervention was effective regarding ACS, however further training is necessary to include giving DVLA advice to other medical conditions.

References

1. Naneishvili T, Khalil A, Mayo-Evans A, Glancy J. Improving DVLA advice provided to the patients with acute coronary syndrome upon discharge. Future Healthc J. 2021;8(3):e629-e30.
2. General Medical Council. Good medical practice. GMC, 2019.
3. Driver and Vehicle Licensing Agency. Assessing fitness to drive: a guide for medical professionals. DVLA, 2024.

Materials and methods

- Two-month baseline data collection after confirmation of ACS.
- Cycle 1 intervention:
 - Informal presentations to junior doctors
 - Laminated template of DVLA driving guidance in ACS for both group 1 & 2 drivers.
 - Creation of a Whatsapp group to remind doctors of the DVLA rules
- Cycle 2 intervention:
 - Computerised discharge summary included a mandatory field regarding DVLA advice (figure 1).

Field	Value	Yes	No	Comment
Reason for Admission	Appendicitis			
Discharge Date				
Diagnoses				
Procedures				
Medications				
Management Plan and Follow Up	tonofibung			
Information Given				
Relevant Driving Advice Given to Patient		<input checked="" type="checkbox"/>	<input type="checkbox"/>	

- Figure 1- Proforma of the computerised discharge summary with a new entry regarding DVLA advice (highlighted in yellow)

DON'T GET CAUGHT WITH COLD FEET: IMPROVING THE FOOT CARE OF DIABETIC PATIENTS ON

HAEMODIALYSIS

Dr Will Marshall - School of Cardiovascular and Metabolic Health, University of Glasgow, United Kingdom



BACKGROUND & AIMS

Foot ulceration is a major cause of morbidity and mortality in diabetic patients on haemodialysis (HD).

Foot screening reduces the risk of **amputation** by **17%**.

We aimed to assess the concordance of **diabetic foot care** against **national standards**** in QEUH HD unit.

METHODOLOGY



Electronic renal database search to identify all prevalent diabetic patients on HD in QEUH, Glasgow.

Audit conducted **01/12/2022 – 15/12/2022**.

Sources of data:

- Electronic renal database
- SCI-Diabetes
- Clinical Portal
- Physical review in HD unit



Data recorded:

- Time since diabetic foot review and foot risk
- Use of specialist footwear

** NATIONAL STANDARDS

Defined by Joint British Diabetes Societies for inpatient care (JBDS-IP) 'management of adults with diabetes on dialysis' (August 2022).

Please scan the QR code to the right for these national standards (guideline 5B).



RESULTS



N = 17 (36.1%) had foot screening in the last 3 months*
Median time since foot screening was 6.5 months

- Mean time 18.9 months
- IQR 3.65– 15.5 months

***All diabetic HD patients should have foot screening every 3 months**

N = 3 (6.3%) wore any form of foot protection during HD*

- 2 had a single boot for foot ulcers
- 1 had a single boot for a Charcot joint

***The heels of all patients should be protected with a pressure relieving device during HD**



N = 27 (57.4%) were graded as high risk of foot disease*

***All diabetic HD patients should be graded as high risk of foot disease.**

RECOMMENDATIONS

Diabetes champion HD nurse

Diabetes day

- Weekly foot inspection in HD unit for each patient on one of their sessions

Diabetes education days

- Podiatry input
- CPR for feet

CONCLUSIONS



In patients with diabetes, foot screening, assessment of risk of foot disease and provision of specialist footwear to be worn during HD are all done poorly in QEUH HD unit.

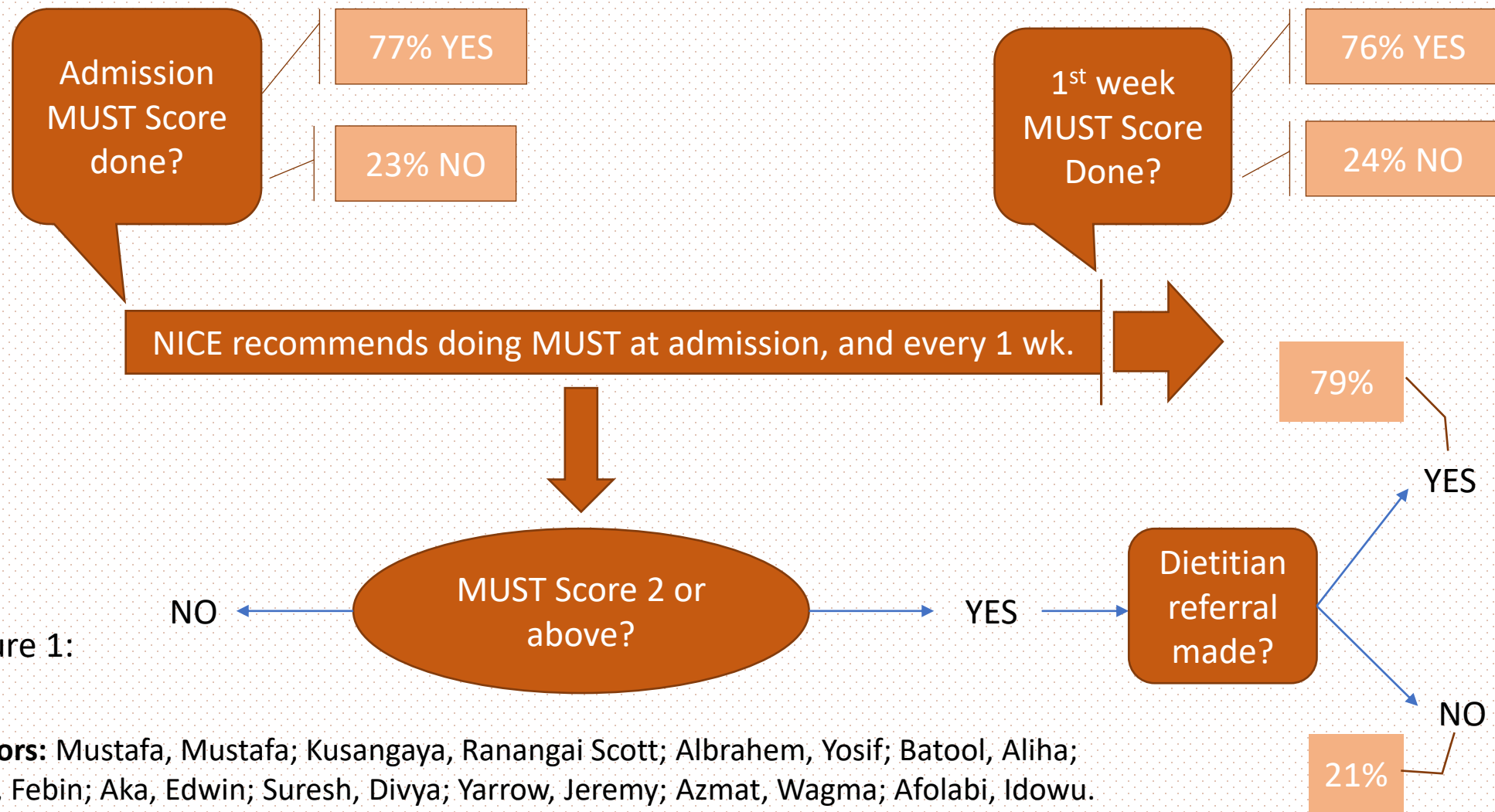
Significant change is necessary (see recommendations) to reduce future risk of significant morbidity and mortality in this high-risk patient group.



Want to know more?
Will.Marshall@glasgow.ac.uk

ARE WE ADEQUATELY SCREENING FOR MALNUTRITION?

166 patients from Geriatric wards in Kettering General Hospital
Mean age of patients: 82.6
Time of data collection: Last quarter of 2023



Recommendations:

- Raise awareness about our findings to our local teams, present them at national/regional conferences.

Actions:

- Posters to prompt adhering to the MUST score
- Findings were presented in departmental meetings and in the nutrition & hydration day (13/03/2024)

Figure 1:

Authors: Mustafa, Mustafa; Kusangaya, Ranangai Scott; Albrahem, Yosif; Batool, Aliha; Bilijo, Febin; Aka, Edwin; Suresh, Divya; Yarrow, Jeremy; Azmat, Wagma; Afolabi, Idowu.

Improving Inpatient Results Endorsement in a Tertiary Cardiac, Respiratory and Cancer Centre

Zaid Abdulelah¹, Aditya Vaishnav¹, Ahmad Maswadeh¹, Arvind Singhal¹, Andrew Wragg¹

1. St Bartholomew's Hospital, Barts Health NHS Trust, London, UK



Introduction

The timely follow up of results of investigations that are requested during a clinical encounter is a fundamental patient safety issue. This lack of follow up on test results is considered a vital patient safety concern by the WHO (2) and can lead to patient harm. At a large tertiary Cardiac, Respiratory and Cancer Centre in the UK, multiple serious incidents were reported where patients presented with advanced disease that could have been diagnosed earlier with timely review and acting upon earlier investigations.

Strategy

In response these serious incidents, a priority quality improvement project was initiated with the aim of electronically endorsing all test results in a timely manner. The first intervention was a multi-disciplinary team (MDT) educational approach, where hospital staff were reminded about the importance of result endorsement and instructed on how to do this on different hospital communications platforms including the trust intranet. This was followed by appointing a designated champion in each ward who would follow their area's progress and would further encourage results endorsement. Simultaneously, opinion surveys were conducted to evaluate barriers for results endorsement. Using QI methodology, multiple primary and secondary drivers were identified (Figure 1), including test results being mostly reviewed but not electronically endorsed, and lack of awareness of how to endorse and why results should be endorsed. A further package of interventions included intensive daily reminders during ward rounds, training sessions and providing posters and leaflets on how to endorse results. Education around results endorsement was also added to junior doctor inductions for new starters.

Results

The baseline result endorsement was 39% when these issues were identified. Transient increase in results endorsements were noted around periods where staff received reminders to endorse test results, though there was considerable variation. However, sustained improvement, with an endorsement rate averaging >80% over six months, was achieved only after implementing the more substantial change ideas (appointing a champion for each ward, posters and formal training in induction) in response to the staff identified barriers. Transient drops in endorsement were seen around staff changeover dates. A time series is shown in Figure 2.

Figure 1. Driver Diagram

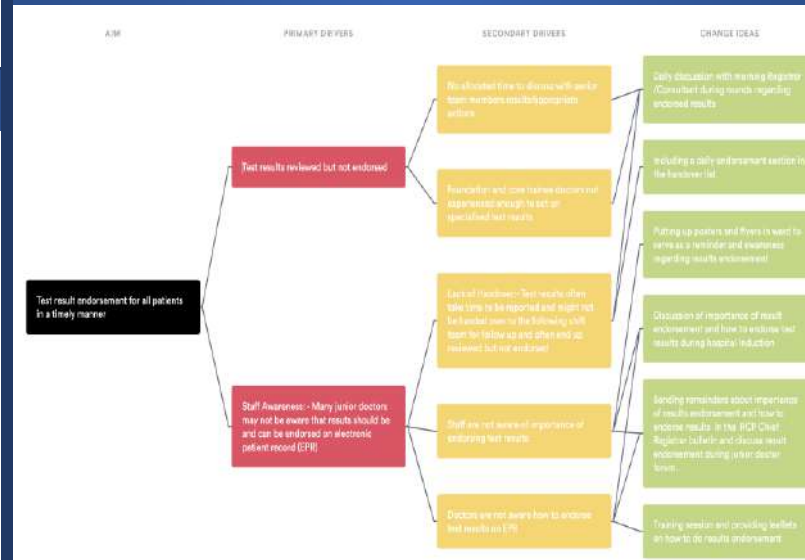


Figure 2. % Endorsed Time Series



Conclusion

Test results endorsement for all patients in a timely manner is crucial. E-mail reminders resulted in transient improvements in endorsement, but a more intensive change package of posters and in-person education led to more sustained change. However, owing to regular staff rotation, these interventions must be continuous to maintain consistently high results of endorsement rates.

References

- 1) World Health Organization. Summary of the evidence on patient safety: implications for research.

