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National Treasury Management Agency

An Ghníomhaireacht um Éilimh ar an Stát
State Claims Agency

State Claims Agency
Quality, Clinical Risk and Patient Safety
Webinar Series 2021

*Implementing and Sustaining Change in
Health and Social Care*

Virtual Poster Viewing

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Systems and Services

DPD Testing Pre-Chemotherapy: Benefits of a Centralised Approach

DPD Testing pre-Chemotherapy: Benefits of a Centralised Approach

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Introduction

Dihydropyrimidine dehydrogenase (DPD) is the rate-limiting enzyme encoded by the DPYD gene responsible for the breakdown of fluoropyrimidines.

Complete DPD deficiency is rare (0.01-0.5% of Caucasians) while partial deficiency is estimated to affect 3-9% of the Caucasian population (1). Patients with complete or partial DPD deficiency are at increased risk of severe toxicity (e.g. diarrhoea, mucositis, neutropenia and neurotoxicity) during treatment with fluoropyrimidines.

5-fluorouracil (5-FU), capecitabine and tegafur are fluoropyrimidines widely used in chemotherapy regimens, primarily for the treatment of colorectal, breast, gastric, pancreatic and head and neck cancers.

In March 2020 the European Medicines Agency (EMA) completed a review on 5-FU and related substances which recommended pre-treatment testing for DPD deficiency to identify patients at risk of severe toxicity(2). A Direct Healthcare Professional Communication (DHPC) was subsequently issued from the HPRA (3) recommending pre-treatment testing to identify DPD-deficient patients.

Aim

- To agree an implementation strategy for DPD testing in line with recommendations
- To identify and update the affected NCCP national chemotherapy regimens

Methods

- **NCCP engaged with:**
 - NCCP Medical Oncology Leads Group
 - NCCP Molecular Diagnostics (drugs) Advisory Group
- Review of entire NCCP national chemotherapy regimen library to identify the affected treatment regimens
- Standardised wording developed for inclusion in national regimens
- Agreement established between stakeholders to ensure availability of DPD testing for all patients to be treated with fluoropyrimidine based chemotherapy

References

1. Henricks LM, Odam FL, Beijnen JH, Cats A, Schellens JH. DPYD genotype-guided dose individualization to improve patient safety of fluoropyrimidine therapy: call for a drug label update. *Annals of Oncology*. 2017 Aug 2;28(12):2915-22.
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3. Health Products Regulatory Agency. Direct Healthcare Professional Communication. Published 04/06/2020. Available at [https://www.hpra.ie/docs/default-source/default-document-library/important-safety-information-from-marketing-authorisation-holders-of-products-containing-5-fluorouracil-\(5-fu\)-capecitabine-and-tegafur-as-approved-by-the-hpra.pdf?sfvrsn=5](https://www.hpra.ie/docs/default-source/default-document-library/important-safety-information-from-marketing-authorisation-holders-of-products-containing-5-fluorouracil-(5-fu)-capecitabine-and-tegafur-as-approved-by-the-hpra.pdf?sfvrsn=5)

Results

National Chemotherapy regimens;
51 regimens including a fluoropyrimidine identified

All updated with standard wording to recommend DPD testing prior to first treatment

Hospitals recommended to implement pre-treatment DPD testing prior to initiating fluoropyrimidine therapy

DPD testing made available at all 26 hospitals providing chemotherapy

Benefits of a centralised approach

Ensures standardised result achieved across all affected chemotherapy regimens

Equity of Access

Enhances patient safety and minimises variation

Acknowledgements

The NCCP wish to acknowledge the contribution and collaboration of clinicians who took part in the development of this centralised approach to the introduction of pre-treatment DPD testing.

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National Cancer Control Programme

Covid-19 ICU Dashboard and Visualisation of 10 Day Rolling Test Results



COVID-19 ICU Dashboard & Visualisation of 10 Day Rolling Test Results

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Introduction

The COVID-19 pandemic of 2020 produced many challenges for staff in Tallaght University Hospital, especially for the staff in the Intensive Care Unit (ICU). The aim of the project was to create a COVID Dashboard for ICU staff that combined selected Clinical Chemistry and Haematology laboratory test results, to ensure the easy identification of COVID-19 patients with cytokine induced hyperinflammation¹.

Method: COVID-19 Dashboard

The first step was to identify the critical data. Clinical Chemistry tests were selected; LDH, CRP, eGFR, Procalcitonin and IL6. Haematology tests were then selected; WCC, Ferritin, Fibrinogen and D-Dimer². This data was extracted from the CliniSys WinPath Laboratory Information System (LIS) using two custom data queries. Critical limits were then identified for each test/analyte, see Table 1. The next step was to produce the dashboard view. Using Microsoft Excel, a column was selected and a specific rule was applied for each test using Excel Conditional Formatting, Icon Sets and Formatting Rules. Rules were set up to refer back to the critical table of analytes (Table 1, shaded values). The data from the LIS queries was then pasted into the Excel spreadsheet. Data from Clinical Chemistry and Haematology initially appeared on separate rows. A custom made Excel Macro was then applied to combine rows based on the MRN number. The result was a traffic light view with accompanying warnings, see Figure 1.

	T	U	V	W	X	Y	Z	AA	AB	AC
	WCC	Ferritin	Fibrinogen	D-Dimer	PCT	LDH	CRP	IL6	eGFR	
High	15	500	5.0	0.4	2.0	200	100	20	60	
Medium	11	450	3.0	0.3	1.5	100	50	15	30	
Low	9	400	1.5	0.2	1.0	100	3	5	30	
Units	x10 ⁹ /L	ug/L	g/L	ng/ml	ng/ml	U/L	mg/dL	pg/mL	ml/min	

Table 1: Critical Analytes

Result: COVID-19 Dashboard

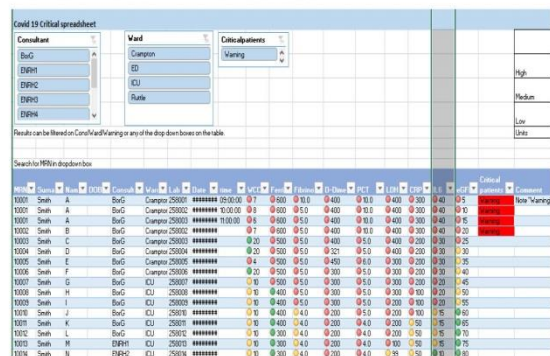


Figure 1: Dashboard View

Method: Visualising 10 Day Rolling Test Results

A custom WinPath LIS query was written to export specific Clinical Chemistry and Haematology result data to a Comma Separated Value (CSV) file. A Microsoft Access database was then used to process the file and import the result data into a structured table. A link was maintained between the CSV file and the database. This enabled the dynamic aspect of the solution, updating the CSV file automatically updated the database. An Excel spreadsheet was then used to graph the database data into one view that could be easily filtered by patient, see Figure 2. Again, a dynamic link was maintained between the graphs and the database. Exporting the daily CSV file to a specific location automatically updated the patient graphs, via the database. This allowed Lab result data for ICU patients to be presented on a 10 day rolling cycle by updating a single file.

Graphical representation was generated for the following lab results: D-Dimer, Fibrinogen, Lymphocytes, White Cell Count, C-Reactive Protein, Ferritin, IL6, LDH, Procalcitonin, eGFR, BNP and Troponin. ICU users could then access these 'COVID Panel Cumulative Review' graphs on a shared network folder, with access restricted to a specific set of staff.

Result: Visualising 10 Day Rolling Test Results

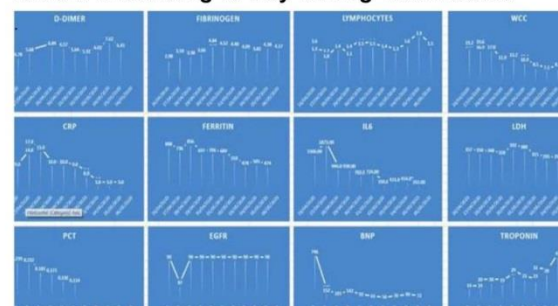


Figure 2: Graph View

Conclusions

ICU had to adapt fast to a new disease presentation with unprecedented numbers, an unknown therapeutic journey and a support system for patients that was longer and more labour intensive than any previous patient cohort. These 10 day graphics were invaluable in guiding where patients were in terms of inflammatory cascade and thromboembolic risk profile at the bedside.

"This project delivered on 'bringing the laboratory to the bedside' in an innovative collaborative way for patient benefit."
-C.Power, ICU Consultant

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1. Cytokine storm syndromes and immunosuppression. www.thelancet.com. Published Online, March 2020.
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A Clinical and Economic Evaluation, Intervention and Change of Parenteral Nutrition in NGH



Suspicious Cervix Screening Clinic – A Quality Improvement Initiative

Suspicious Cervix Screening Clinic- A Quality Improvement Initiative

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Introduction

COVID-19 has placed additional pressures on a traditionally over stretched and under funded healthcare system. The enforced hiatus from the delivery of outpatient services has seen the average waiting time for urgent gynaecological review in Tallaght University Hospital (TUH) lapse to over one year.

Complaints such as postcoital bleeding, intermenstrual bleeding, or the presence of a suspicious appearing cervix warrant urgent clinical assessment. These signs and symptoms raise the suspicion of life altering diagnoses, such as cancer, and as such delays in both patient presentation and further investigation can have significant consequences.

In an attempt to expediate the identification and further management of this cohort of patients, a quality improvement initiative was piloted in our institution. The “Suspicious Cervix Screening Clinic” (SCSC) is a multidisciplinary Advanced Nurse Practitioner (ANP) delivered clinic. It consists of a nurse sonographer, a candidate-ANP who is a sonographer and hysteroscopist, and an ANP colposcopist.

Methods

Eligible women were identified by a consultant gynaecologist following review of the urgent gynaecological waiting lists in TUH. 80 women were deemed suitable and another 15 patients were identified as eligible in “real time” i.e. initial referral received and triaged as urgent during the duration of the quality improvement initiative. Out of the selected 95 patients, 77 were offered an appointment following a telephone pre-assessment and 72 women attended the “Suspicious Cervix Screening Clinic”.

Results

All 72 women were assessed via a variety of examinations depending on their presenting complaint including VE/Speculum +/- colposcopy +/- hysteroscopy +/- TVUS (Figure 1).

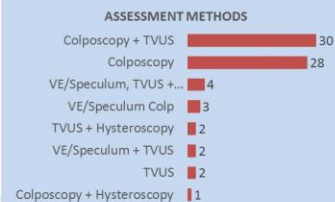


Figure 1: Bar graph picturing the examinations performed in the SCSC.

A total of 36 procedures to facilitate further investigation such as cervical screening (10), cervical, cervical and endometrial biopsies (14), vaginal and cervical swabs (11) and phlebotomy were performed (Figure 2).

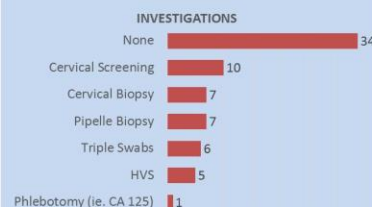


Figure 2: Bar graph outlining the investigations performed in the SCSC.

15 women received treatment on the day by means of polypectomy (5), silver nitrate application (5), Mirena insertion (4) and LLETZ + diathermy (1) (Figure 3).

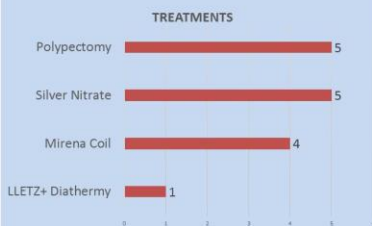


Figure 3: Bar graph depicting the treatments performed in the SCSC.

Overall, 59 patients were deemed suitable for discharge following one visit, with 37 being discharged on the day of assessment and the other 22 following review of results from investigations performed. 13 women were referred on for further assessment (Figure 4).



Figure 4: Doughnut graph picturing the outcome of those that attended the SCSC.

Outcome

The quality improvement initiative was able to assess a large cohort of eligible women in a timely manner and discharge the majority of patients after only one visit. It proved that a 6-10 week turnaround for eligible urgent referrals can be achieved by implementing this ANP delivered service. Due to the success of the “Suspicious Cervix Screening Clinic”, we are hoping to develop it into a sustainable service which would not only benefit our patients but also lessen the burden on the entirety of the TUH gynaecology department by significantly shortening the urgent waiting lists.



Tallaght University Hospital

Ospidéal Ollscoile Thamhlachta

An Academic Partner of Trinity College Dublin

If its "CAP" consider "CURB 65"



If it's "CAP" consider "CURB 65"



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BACKGROUND

Community Acquired Pneumonia "CAP" is the commonest indication for antimicrobial use in Naas General hospital accounting for 30% of antibiotic prescriptions, consistent with other acute hospitals nationally. The "CURB 65" Score is used to classify CAP severity and inform appropriate antibiotic prescribing. Incorrect classification of patients admitted with CAP leads to incorrect antimicrobial prescriptions e.g. inappropriate dual therapy, and the use of broad spectrum agents such as piperacillin-tazobactam. Compliance with CAP local prescribing guidelines in our hospital is 50%.

AIM

To reduce the rate of antibiotic prescriptions for CAP in our hospital that are not compliant with guidelines by 30% (from 51% to 36%) by Oct 2020.

METHODS

The IHI's Model for Improvement QI framework was employed using PDSA tests-of-change cycles:

- Establishment of a multidisciplinary QI team
- Peer based education sessions
- Design a poster to highlight the algorithm for empiric antibiotic management of CAP patients using CURB 65 score, figure 1
- Promotion of the prescribing app
- Routine supply of clarithromycin restricted to designated wards only
- Audit of guideline compliance and rapid feedback of results anonymised per team

MEASURES

- Audit documentation of CURB 65 score in patient charts
- Measures of guideline compliance and antibiotic use is available from participation in the Irish National Antimicrobial point prevalence study (PPS) October 2020
- Local audit on Moate ward before and after education sessions and introduction of CAP poster

CONCLUSION

This QI project has achieved its aim of reducing the rate of antibiotic prescriptions that are not compliant with guidelines by 30% - in fact the reduction achieved is 37%. Additional improvements made as part of this QI project include:

- Significant increase in amoxicillin use with reduction in clarithromycin use.
- Improved documentation of CURB 65 score.
- Positive feedback from education sessions and poster use.

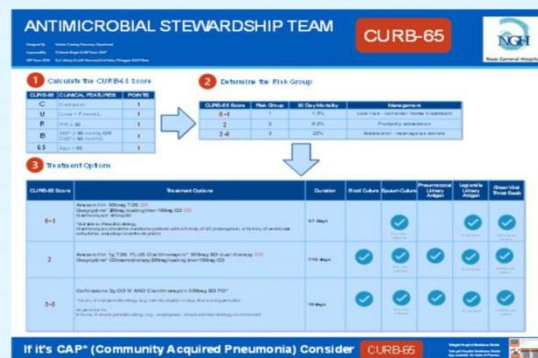


Figure 1: Algorithm for empiric antibiotic management of CAP patients using CURB 65 score

RESULTS

Data from the pharmacy department dispensing report shows a significant improvement in amoxicillin use (increase) with reduction in clarithromycin use, indicating an improvement in compliance with empiric guidelines, figure 2.

	Pre QI interventions	Post QI Interventions
Amoxicillin 500mg PO	600	1040
Clarithromycin 500mg PO	433	412

Figure 2: Quantities of Clarithromycin & Amoxicillin dispensed before and after QI interventions

PPS data 2020 compared to 2019 shows significant improvements in compliance with guidelines, figure 3.

	Baseline Data from PPS Audit Oct 2019	Provisional Data from PPS Audit Oct 2020	Improvement
Prescriptions that were not guideline compliant or microbiology approved	51%	32%	37% Reduction
Inappropriate duration	35%	10.6%	70% Reduction
Restricted agent use non compliant with local policy	27%	10.5%	61% Reduction
IV antimicrobials suitable for PO switch	33%	17%	48% Reduction

Figure 3: PPS data 2019 vs 2020 demonstrating significant improvements in compliance with guidelines

Positive feedback from education sessions and poster use with improved documentation of CURB 65 score and guideline compliance one month post interventions.

National Cancer Information System: Building an Electronic Drug File



National Cancer Information System: Building an Electronic Drug File



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The authors would like to acknowledge the contributions made by the NCIS National Back Office and the NCCP Regimen Team to the development and build of the national drug file for NCIS

Introduction

What is the National Cancer Information System (NCIS)?

- Single longitudinal record of patient's cancer care
- E-health project delivered by the National Cancer Control Programme (NCCP) in conjunction with the Office of the Chief Information Officer, Health Services Executive
- NCIS will be implemented in 25 publicly funded Irish hospitals providing systemic anti-cancer therapy (SACT) services
- NCIS provides functionality for electronic treatment planning, prescribing, scheduling, preparation and administration of SACT and supportive care

Drug File

- Treatment of cancer is complex – the data populated in the drug file underpin the preparation, dispensing and prescribing modules of NCIS
- In the absence of an existing drug file suitable for NCIS, a bespoke drug file needed to be built:
 - Underpins the national SACT regimen build in NCIS
 - Configured nationally
 - >150 data fields available for completion per drug

Data Fields

The NCIS Team, NCCP Systemic Therapy Programme and Vendor representatives worked collaboratively to determine fields for completion and content standardisation

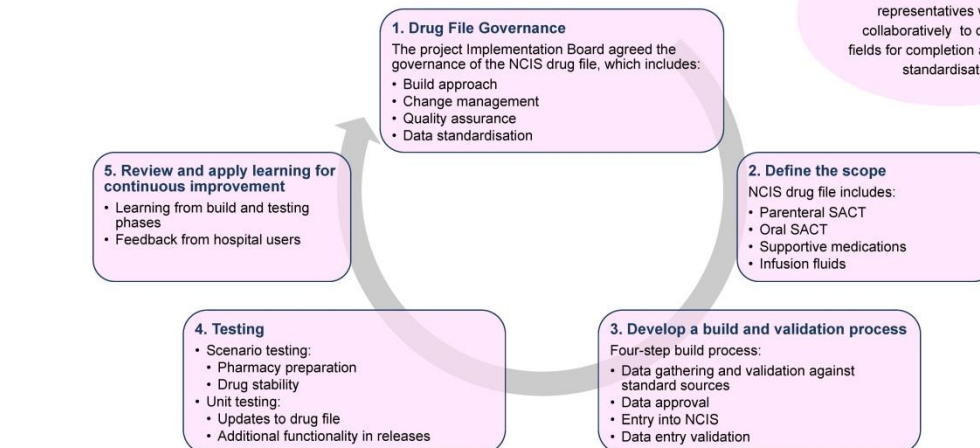
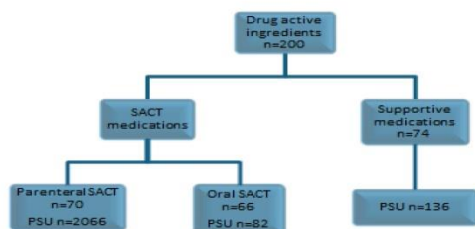


Figure 1: Breakdown of medications in the drug file for the National Cancer Information System

SACT: Systemic anti-cancer therapy

PSU: Pharmacy stock unit (includes dose-bands, additional brands, vial sizes and tablet strengths)



Results

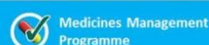
The NCIS drug file now contains 2284 lines of data, including:

- 70 parenteral SACT medications (average 55 data fields completed per drug)
- 66 oral SACT medications and
- 74 supportive medications

Conclusion

Development of a National Drug File requires a strong governance structure to ensure quality and clinical safety. Learning from the build and testing phases, as well as feedback from hospital users is fed back into the development process as a component of the NCIS quality improvement cycle, which iteratively informs the build. This constant process of learning and development is required to ensure the drug file continues to meet the needs of the end user and the project objectives.

Utilisation and Expenditure on Oral Anticoagulants under the Community Drugs Schemes in Ireland – an update



Utilisation and expenditure on oral anticoagulants under the Community Drugs Schemes in Ireland – an update.

April 2021

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Introduction

Direct acting oral anticoagulants (DOACs) are licensed for the prevention and treatment of venous thromboembolism and for stroke prevention in non-valvular atrial fibrillation. There are four DOACs currently licensed in Ireland – a direct thrombin inhibitor dabigatran (Pradaxa®), and three factor Xa inhibitors: apixaban (Eliquis®), edoxaban (Lixiana®), and rivaroxaban (Xarelto®). In Ireland, there has been an overall increase in anticoagulant prescribing, a significant reduction in warfarin usage and a large increase in expenditure [1].

In 2018, the Irish Medication Safety Network (IMSN) published a safety alert for the DOACs due to the high-risk of bleeding when used incorrectly [2]. The IMSN highlight the need to check concomitant therapy to reduce the risk of interactions, e.g. other anticoagulants, platelet aggregation inhibitors, NSAIDs, and antidepressants. Further, antithrombotic agents accounted for over 11% of medication incidents in Irish acute hospitals in 2018, according to the State Claims Agency Medication Incidents Report, with apixaban and rivaroxaban featuring in the Top 10 medications involved [3].

Aims

This study provides an update on the utilisation and expenditure on oral anticoagulants in the Ireland. We also investigated the co-prescribing of contraindicated or cautioned drugs.



Methods: This study was carried out using prescription dispensing data from the Primary Care Reimbursement Service (PCRS) pharmacy claims database. Drugs of interest were selected from the database using their relevant WHO-ATC code. Unfortunately, the indication for treatment is not recorded in the database.

Results

- The monthly expenditure on oral anticoagulants is now over €5.5 million, which is in contrast to the monthly expenditure in 2014 of less than €2 million. Apixaban is the most frequently prescribed DOAC, accounting for over half of the monthly expenditure on oral anticoagulants in 2020. There has been a sharp decrease in the utilisation of warfarin, with approximately 32,751 patients in 2014 and 13,000 patients by 2020 (Figure 1).
- Co-prescribing of cautioned or contraindicated drugs is shown in Table 1. The co-prescribing of DOACs was negligible. The frequency of co-prescribing with platelet aggregation inhibitors was over 11%, nonsteroidal anti-inflammatory drugs (NSAIDs) were co-prescribed in <2% of claims, and antidepressants were co-prescribed in approximately 10% of claims.

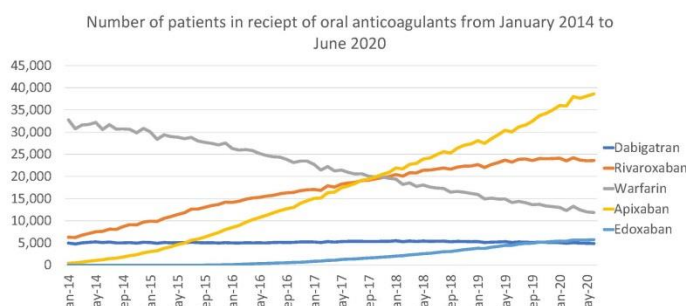


Figure 1. Number of patients receiving an oral anticoagulant under the Community Drugs Schemes in Ireland.

Table 1. Frequency of oral anticoagulant claims from January to June 2020 with co-prescribing of a contraindicated or cautioned drug.

	Dabigatran	Rivaroxaban	Apixaban	Edoxaban	Warfarin
Total claims:	33,033	160,567	252,805	38,138	88,278
Co-prescribed with:	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)	Frequency (%)
Platelet aggregation inhibitors	4,046 (12.3)	17,903 (11.2)	31,085 (12.3)	4,749 (12.5)	10,286 (11.7)
Aspirin	3,363 (10.2)	14,485 (9.0)	24,362 (9.6)	3,655 (9.6)	9,024 (10.2)
NSAIDs	427 (1.3)	2,478 (1.5)	3,014 (1.2)	410 (1.1)	478 (0.5)
Antidepressant	3,577 (10.8)	16,820 (10.5)	27,577 (10.9)	3,732 (9.8)	7,576 (8.6)
Amiodarone	884 (2.7)	5,028 (3.1)	8,845 (3.5)	1,600 (4.2)	2,140 (2.4)

Conclusion

The introduction of DOACs has resulted in an overall increase in anticoagulant prescribing, a significant reduction in warfarin usage and a large increase in expenditure. Under the remit of promoting safe, effective, and cost-effective prescribing of medicines, the Medicines Management Programme has published anticoagulation prescribing tips and tools which may be found on the MMP website: www.hse.ie/yourmedicines.

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Thank you to the HSE-PCRS for providing access to the data.

Improving Documentation for Elective Minor Plastic Surgery Procedures Across a Multi-site Service

Improving documentation for elective minor plastic surgery procedures across a multi-site service.

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INTRODUCTION

Our plastic surgery service operates across three physical sites and two separate hospitals. Patients attend for consultant led appointments and, if required, are listed for surgery on a pooled waiting list. This means that patients may have been seen in one hospital but subsequently scheduled for their surgical procedure in a different hospital (Figure 1).



Figure 1: Distribution of patients for procedures.

Working across multiple sites, means our access to operating lists for elective minor procedures is greatly increased. This reduces our waiting times, allows us to provide a plastic surgery service to a larger population and provides more training opportunities for non-consultant hospital doctors (NCHDs).

The majority of patients utilising this service are attending for biopsy or excision of skin cancers. If the patient's procedure is in a different clinical site to their original consultation, their medical chart is not available at the time of their procedure.

The NCHDs undertaking procedures, felt there may be ambiguity about the operative plan as the only information available at the time of surgery was the waiting list card, Figure 2. We felt this introduced a potential for error, relating to wrong site surgery, as outlined in the WHO Guideline for Safe Surgery 2009¹.

REFERENCES

1. WHO Guidelines for Safe Surgery 2009; Safe Surgery Saves Lives. Geneva: World Health Organization; 2009.

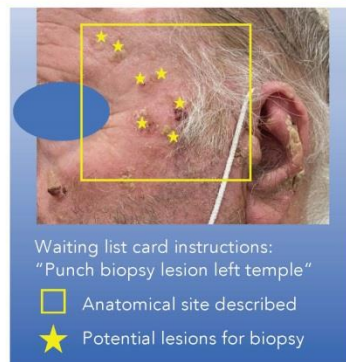


Figure 2: Potential for wrong site surgery.

RESULTS

A prospective review of patient information available to operating surgeons at the time of surgery over a one month period was conducted to quantify the problem.

Information available at time of surgery	% per lesion
Medical chart	27.5
Consultant clinic letter	30
Prior histology (where applicable)	26
Exact site documented	72.5
Surgeon clear on operative plan	55

We engaged with hospital management in all sites. Remote secure access to laboratory systems was obtained, so histology could be accessed across hospital sites. A pathway was also created to enable transfer of medical charts to the appropriate site for the day of surgery. A re-audit of information available after the above measures, improved to 100% in all categories.

We believe our insistence of strict adherence to the WHO guidelines¹ has prevented at least a near miss and potentially a wrong site surgery event.

Demonstrating the Need for Speech and Language Therapy within a Child and Adolescent Mental Health Approved Centre: A Speech and Language Therapy Quality Initiative

Demonstrating the need for Speech and Language Therapy within a Child and Adolescent Mental Health Approved Centre: A Speech and Language Therapy Quality Initiative.



Quinlivan, N., Ryan, E., Mulvin, R. & O'Neill, J. (2021)

Linn Dara Child & Adolescent Mental Health Service,
Dublin South, Kildare & West Wicklow Community Healthcare



Linn Dara Approved Centre

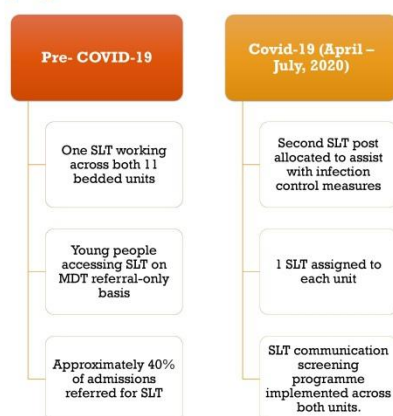
- 24 bed CAMHS in-patient unit for young people under 18 years with severe & complex mental health disorders in CHO 7.
- Rowan & Hazel Unit – 22 beds
- High Observation Oak Unit – 2 beds (not included in this project)
- Number of Admissions from April – July 2020: 39



SLT in CAMHS – The Evidence

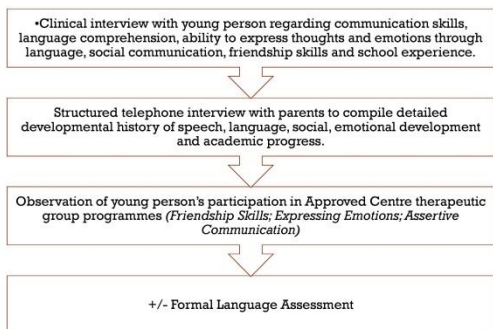
- High incidence of communication difficulties in young people with mental health difficulties (Cohen et al., 2013).
- 81% of children with social, emotional and mental health needs have significant unidentified language deficits (Hollo et al., 2014).
- Research supports a long standing association between children's communicative competence and their mental health.
- Loneliness and peer rejection in adolescents may contribute to adverse mental health outcomes for young people with compromised language skills (Durkin & Conti-Ramsden, 2010)

Adapting to COVID-19

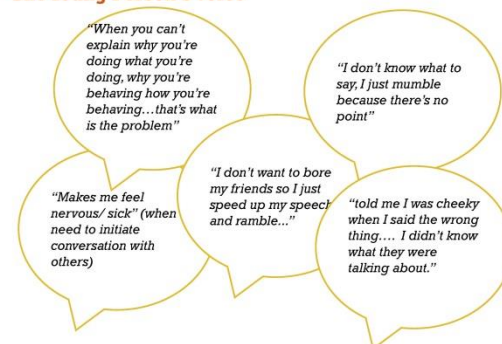


Screening Process

- 39 new admissions from April – July 2020 screened

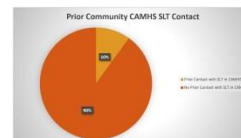


The Young Person's Voice



Results

- Most common difficulties reported by parents and young people were Social communication skills, particularly in relation to friendships, difficulty expressing emotions.
- 95% of Approved Centre (AC) admissions were assessed to present with communication difficulties (social communication +/- language difficulties)
- Only 10% of cases had contact with SLT (CAMHS/Other) prior to their admission to AC admission.



Learning Outcomes

- High incidence of communication difficulties in young people admitted to Linn Dara AC in line with research evidence
- These communication difficulties generally not identified prior to admission – 90% young people had not attended SLT in community CAMHS or in other community services prior to admission
- Therefore the direct impact of these communication issues on young person's mental health prior to admission was not realised by family and professionals.
- Earlier SLT input and full communication screening assessment in community CAMHS indicated.

The Future – SLT Service Developments

- Communication screening programme now fully established in Linn Dara Approved Centre
- SLT Engagement with parents of AC service users -> develop their understanding of young person's communication difficulties, the impact of these issues on mental health, and how communication in the home can be supported.
- Development and implementation of SLT therapeutic group programme across Linn Dara AC initially, and community CAMHS services secondly targeting assertive communication, friendship skills, & communicating emotions.
- Share the Learning – Project learning outcomes to be initially shared across Linn Dara CAMHS and then with the CAMHS community clinics and AC's nationally
- Implement this learning into new service staff induction.

References:
Cohen, N. J., Farnis, F., & In-Botter, N. (2013). Higher order language competence and adolescent mental health. *Journal of child psychology and psychiatry, and allied disciplines*, 54(7), 733-744. <https://doi.org/10.1111/jcpp.12290>
Durkin, K., & Conti-Ramsden, G. (2010). Young people with specific language impairment: A review of social and emotional functioning in adolescence. *Child Language Teaching and Therapy*, 26(2), 105-121. <https://doi.org/10.1177/0265659010368750>
Hollo, A., Wehby, J. H., & Oliver, R. M. (2014). Unidentified Language Deficits in Children with Emotional and Behavioral Disorders: A Meta-Analysis. *Exceptional Children*, 80(2), 169-186. <https://doi.org/10.1177/001454201408000203>

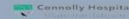
An Audit of VTE Prophylaxis Risk Assessment in Patients Requiring Lower Limb Immobilisation in Connolly Hospital Blanchardstown

An Audit of VTE Prophylaxis Risk Assessment in Patients Requiring Lower Limb Immobilisation in Connolly Hospital Blanchardstown



Tiarnán Daly¹, Stephen Fahy¹, Patrick Kenny¹

¹ Connolly Hospital Blanchardstown, Department of Orthopaedics, Dublin, Ireland



Introduction

- VTE rates in patients temporarily immobilised (\geq one week) range from 4%-40%
- Highest risk following orthopaedic surgery
- The use of VTE prophylaxis in this patient cohort is an ongoing debate
- Practitioners' fear of litigation due to rare, but potentially fatal, VTE events are the main driving force for the use of prophylaxis
- Currently no guidelines exist in Ireland to advise on this

Audit Aims

- To assess the use of VTE prophylaxis in Connolly Hospital Blanchardstown among lower limb casted patients
- Assessed against a standard: all lower limb casted patients should receive VTE prophylaxis

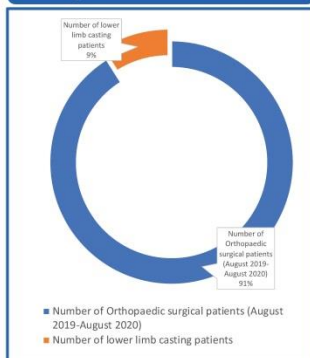
Methods

- Foot and ankle surgical patients in Connolly Hospital between 01/08/2019-31/08/2020 with below knee immobilisation (casting)
- Discharge summaries and prescriptions were reviewed for VTE risk documentation and VTE prophylaxis, respectively
- VTE prophylaxis included either Aspirin 150mg OD PO or Enoxaparin 40mg SC OD

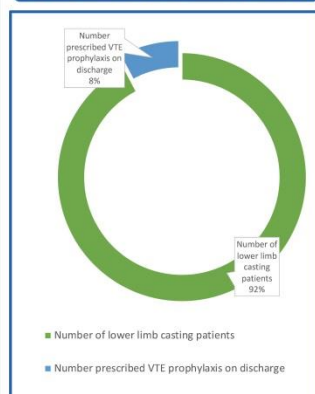
Results

- Total of 840 patients discharged from Connolly's Orthopaedic service from 01/08/2019-31/08/2020
- 83 patients were identified to have lower limb plaster casting
- Of these 83 patients, 7 were discharged on VTE prophylaxis

Graph depicting % of all Orthopaedic discharges whom were lower limb casted



Graph depicting % of lower casted patients who received VTE prophylaxis on discharge



Discussion

- Many countries have national guidelines in place for VTE prophylaxis in lower limb casted patients (e.g. UK, France, Germany)
- Ireland currently has no guidelines in place
- Discordance amongst clinicians globally sparks the need for a stratification tool
- L-TRiP (cast)** (Leiden-Thrombosis Risk Prediction for patients with cast immobilisation score) is one such tool that may be used
- L-TRiP (cast) predicts the occurrence of a VTE event based on intrinsic risk factors, patient medical comorbidities and specific fracture types

Conclusion

- L-TRiP (cast) is a robust scoring system that can easily risk-stratify lower limb casted patients
- Due to the lack of national guideline, this scoring system could potentially ease any confusion surrounding the prescription of VTE prophylaxis this high-risk patient cohort
- The results from this audit will provide necessary information to aid the formation of a national guideline
- We will reaudit this to reassess rates of VTE risk stratification amongst lower limb casted patients and close the loop on this audit.

People and Planning

Reducing Door to Swallow Screen Time for Stroke Patients Admitted to University Hospital Limerick

Reducing Door to Swallow Screen Time for Stroke Patients Admitted to University Hospital Limerick

Shiji Paulose¹, Aislinn Twomey², Ingrid O'Brien¹ & Jen Moloney³

¹ Stroke Clinical Nurse Specialist, ² Speech and Language Therapist, ³ Speech and Language Therapist Manager

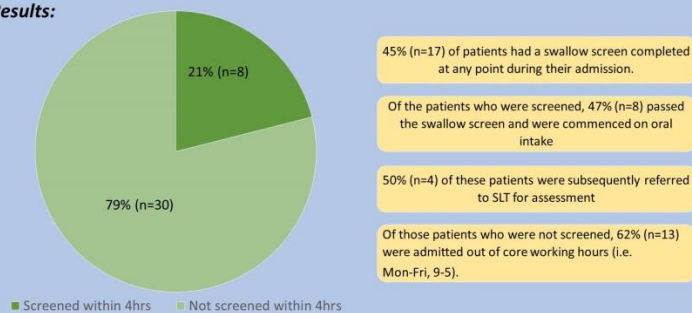
Introduction:

According to The National Guideline for Swallow Screening in Stroke (2017), all patients admitted to hospital with a suspected stroke should have a swallow screen completed within 4 hours. Any patient who fails this screen, should be kept nil per oral and referred to Speech and Language Therapy (SLT) for a comprehensive swallow assessment. In the University Hospital Limerick (UHL), the Stroke Clinical Nurse Specialists and Senior Nursing Staff working on the acute stroke unit are trained to complete the Massachusetts General Hospital Swallow Screen Tool (MGH-SST). Swallow screening is therefore available in the Emergency Department, Monday- Friday, between the hours of 9 and 5, and on the acute stroke unit 24 hours a day, 7 days a week.

Methods:

A clinical audit was completed to measure UHLs current performance against the national standard of swallowing screening. A retrospective chart review of patients admitted to UHL with a confirmed diagnosis of stroke during the month of June 2020 was completed. Data was gathered using a pre-determined chart audit tool and was collated using an Excel spreadsheet. Data analysis was completed using descriptive statistics.

Results:



Recommendations:

Just over one fifth of stroke patients admitted to UHL are meeting the nationally recommended key performance indicators for time from admission to completion of swallow screening. The following actions have been recommended and are currently underway:

- Completion of 'refresher' training for all nursing staff on the acute stroke unit, with ongoing updates of this training every 2 years
- Training of senior nursing staff in the Emergency Department and Medical Registrars across the Hospital to allow greater availability of swallow screening outside of core working hours
- Inclusion of the MGH-SST tool in the hospital's stroke assessment proforma paperwork
- A re-audit of the swallow screening pathway and compliance with the National Guideline for Swallow Screening, once actions 1 – 3 have been completed

References

- Cohen, A.K (2009). Creating a Swallow Screening Program at Mass General Hospital: A Model for Development and Implementation. Perspectives on Swallowing and Swallowing Disorders, 18 (4), 123.
- National Guideline for Swallow Screening in Stroke (2017). National Clinical Programme for Stroke.



Development of a Virtual Training Programme on "Nutrition Standards for Catering for Patients Acute Hospitals"

Development of a Virtual Training Programme on 'Nutrition Standards for Catering for Patients in Acute Hospitals'

Roisin McGann¹, Staff-Grade Dietitian; Sheila Bowers², Dietitian Manager, ^{1,2}Department of Dietetics, University Hospital Limerick Group (UHLG).

Background

Hospital malnutrition is a well-documented clinical issue, which has been associated with many adverse outcomes including delayed wound healing³; increased risk of infection⁴; as well as increased morbidity and mortality⁵. As a result, it is important that all catering staff have appropriate skills and competencies to ensure that patients nutritional needs are met⁶. The Covid-19 pandemic forced a stop to the group training sessions on patients nutritional requirements that were provided to catering staff by dietetics.

Initiative

To overcome this problem, a video was produced. The video presentation discussed the significance of malnutrition in hospitals, therapeutic diets, food allergens as well as some common scenarios that may occur at mealtimes in hospital (i.e. patients missing meals, patients refusing meals or non-adherence to protected mealtimes) which can impact on nutritional intake of patients. This was a dietetic led project which was supported by the catering department ULHG who facilitated the distribution of the presentation to catering staff. This presentation was developed in line with the recent Nutrition and Hydration guidelines⁶ with the overall aim to improve nutritional care for adult patients in acute hospitals.

Outcome:

Hospital catering staff have an essential role in delivering a patient-centred food and nutrition service to patients from their admission to hospital until their discharge. This virtual training resource ensures that training is available and accessible to both new and existing catering staff at a time that suits them.

Conclusion

The roll-out of this virtual presentation has shown that is possible to provide training and education to staff in challenging times. Virtual training could also be considered if workload demands limit ability to provide face-to-face training. This virtual training has the potential to improve nutritional services by educating and empowering all catering staff.

Development of an Integrated Diabetic Care Group in the Midwest Incorporating Acute and Community Diabetic Services

Development of an Integrated Dietetic Care Group in the Midwest incorporating acute and community dietetic services

¹Sheila Bowers, Dietitian Manager, ^{1,3}Department of Dietetics, UL Hospital Group (ULHG)

²Claire Molloy, Community Dietitian Manager, CHO3, ³Carmel Quinn, Senior Dietitian

Introduction

In October 2019 a meeting was organised between the Dietetics Department of ULHG and Community Dietetics CHO 3 with the purpose of integrating both services to provide a seamless dietetic service to patients in the Midwest, standardising practice and care delivery to patients receiving dietetic care and to provide a platform to share clinical skills and knowledge between community and acute hospital dietitians in clinical practice.

Actions

At the initial meeting following a brain storming session, 3 sub-groups consisting of both acute and community dietitians were created:

- Professional Supervision
- Continuous Professional Development (CPD)
- Dietsheets and patient resources– divided into paediatric and adults. A summary of the paediatric subgroup is provided as an example of this subgroup.

Each sub-group met and identified their individual group objectives, action plans and a time frame for achieving these.

Developments

The Professional Supervision subgroup developed a Professional Supervision Policy which describes the model of Professional Supervision for Dietitians, which will be implemented across the Department of Dietetics ULHG and Community Dietetics CHO 3.

The CPD subgroup undertook a CPD needs assessment. The results identified that the CPD requirements of both departments is generally similar but it may not be possible to fully integrate all CPD activities. The top priority for all respondents was to get clarification on the requirement for a personal CORU portfolio. So the group delivered a departmental update on the requirements for the CORU portfolio. ULHG will roll out a clinical education programme based on the feedback from the ULHG dietitians. There is a designated member in the group that sends out updates/training opportunities to ensure that all department members are kept up to date.

The Paediatric Dietsheets / patient resources subgroup have collated and categorised a list of 80 resources and dietsheets and each member has been allocated responsibility for reviewing and updating one or more categories. The group created a shared IT folder, accessible to both departments to facilitate effective sharing, review and updating of resources effectively.

Outcomes

Implementation of supervision across both departments will improve dietetic practice standards.

It will contribute to higher quality service outcomes for patients and service users, improve practitioner skills, whilst informing and consolidating training and development.

All department members are aware of all training opportunities that arise and appropriate training/upskilling can be arranged and delivered based on a dietitians training requirements.

The sharing, updating and development of diet sheets and resources (both adult and paediatric) will ensure that there is no unnecessary duplication which will ultimately save time, a valuable resource in today's clinical environment. It will also ensure that patients are receiving standardised up to date evidenced based advice whether they are attending the acute or community service.

Conclusion

The integrated dietetic group has resulted in sharing of knowledge and skills, development of a policy that will facilitate the roll out of supervision across both departments and sharing, streamlining, updating and development patient resources that are up to date and evidenced based.

Investigation of Exocrine Pancreatic Function amongst Paediatric Cystic Fibrosis Patients taking Ivacaftor at University Hospital Limerick (UHL)

Investigation of Exocrine Pancreatic Function amongst Paediatric Cystic Fibrosis patients taking Ivacaftor at University Hospital Limerick (UHL).

Donna Daly¹, CF Clinical Specialist Dietitian, Dr Magda Mulligan², Prof Barry Linnane³.
^{1,2,3}Paediatric CF Unit, UHL.

Introduction

Approximately 90% of patients with cystic fibrosis (CF) are pancreatic insufficient. Those patients require Pancreatic Enzyme Replacement Therapy (PERT) with all fat containing food or drink consumed. Ivacaftor is a relatively new medication which acts as a potentiator of cystic fibrosis transmembrane regulator (CFTR) protein. It increases the open probability of defected CFTR chloride channel. Ivacaftor is prescribed to CF patients who have at least one copy of a gating or residual function CFTR mutation. It has been postulated that the use of this drug may improve exocrine pancreatic function (EPF), which could improve absorption and have a positive outcome on BMI and overall nutritional status. These improvements in turn could contribute to improved respiratory function, blood glucose control, bone density and quality of life. Furthermore, improvements in EPF may necessitate changes in dietary advice and a reduction or discontinuation of PERT.

Method

EPF is measured by levels of faecal elastase (FE-1 µg/g) in a stool sample which was the primary outcome of this retrospective study. Participants provided stool samples at least 4 weeks post commencing Ivacaftor and at various intervals thereafter. Following receipt of ethical approval and consent/assent from parents of participants, a retrospective review of medical charts and hospital laboratory system (I-Lab) was carried. The following data was collected out up to July 2019: date of birth, genotype, gender, sweat chloride and conductivity, FE-1 (including baseline values), average PERT dosing pre and post commencing Ivacaftor. SPSS software was used to analyse the data.

Results

Data was collected for 12 paediatric CF patients, aged 3 to 16 years (7 female, 5 male) who are prescribed Ivacaftor. Our data show a significant reduction in average intake of PERT dose by over 50% when comparing PERT intake, pre- and post-Ivacaftor (Table 1). There was no overall significant change in FE-1 value (p-value=0.17) (Table 1); however two patients discontinued the PERT after two consecutive FE-1 values were recorded to be greater than 200µg/g, indicating "normal" EPF. One of these patients' most recent FE-1 levels showed a 10-fold increase from baseline. It is noteworthy that this patient had the lowest value of all subjects for sweat chloride prior to commencing Ivacaftor treatment (81 mmol/L). A weak correlation was noticed between FE-1 and baseline sweat chloride values (R2=0.45).

Table 1 - Changes in reported PERT doses, pBMI, sweat chloride, sweat conductivity, FE-1 results pre and post commencing Ivacaftor (the most recent recorded values).

		Pre-Ivacaftor	Post-Ivacaftor	p-value
Lipase IU/kg/day	Average±SD [Range]	6286±2344 [2427-10,162]	2935±1567 [841-5630]	<0.005
Body Mass Index percentile pBMI (%)	Average±SD [Range]	70±16 [41-92]	77±23 [16-98]	0.36
Sweat chloride mmol/L	Average±SD [Range]	114±15 [81-134]	41±13 [20-66]	<0.005
Conductivity mmol/L	Average±SD	111±7	37±15	<0.005

	[Range]	[98-121]	[20-72]	
Faecal elastase µg/g	Average±SD	46±31	124±147	0.17

Conclusion

The findings of this study provide a greater appreciation of the variation in response in EPF that may be anticipated for patients taking Ivacaftor. It demonstrates that complete reversion to pancreatic sufficient status is possible for some patients, however based on our findings; this cannot be predicted from other parameters such as genotype, or changes in biochemical indices. This study highlights the importance of regular monitoring of FE-1 levels as standard care, for patients taking Ivacaftor and the potential results of a reduction in pill burden and cost benefits for the HSE associated with a decrease or cessation in PERT use.

Supporting Patient Centred Healthcare: Remote Dietary Management of GDM

Title: Supporting patient centred healthcare; remote dietary management of GDM.

Authors: Niamh Murphy RD¹, Niamh Culhane RD², ^{1,2}Department of Dietetics, UL Hospitals, Limerick.

Background

Following a diagnosis of gestational diabetes (GDM), input and support from a registered dietitian is recognised as best practice. At UL hospitals the dietetic service provided twice monthly group education classes which empowered patients in the dietary self-management of GDM. Additional individual patient consultations were also available.

The COVID-19 pandemic forced a stop to these group classes. Outpatient dietetic intervention moved to one to one telephone consultations. Supporting the same patient volumes individually versus as a group became unsustainable. Waiting lists quickly grew, a risk for time sensitive pregnant women. Dietetic workload for GDM became unmanageable which in turn delayed intervention time for other high risk non GDM cases e.g. neonatal infants. Dietetic staff welfare also came under strain.

Initiative

Engaging patient representatives, the suggestion of video education to maximise access to care was considered. A video was created by the dietitian addressing topics previously discussed within the GDM group education classes. A web-link for the video now accompanies multidisciplinary education provided to the patient by the diabetes midwife on diagnosis. Following patient feedback the information was expanded to include "frequently asked questions" and "recipes".

The video is streamed via YouTube which offers subtitles and multi-language translation, written information can also be translated. This approach supports the WHO global strategy on people-centred and integrated health services³.

Challenges

Time and availability of skilled personnel were identified as principal challenges. Dietetic patient caseload was rationalised over a short time frame to focus on GDM resource development and address GDM waiting list, including those who required urgent individual consultations as identified by the diabetes team. Clinical directorate support was received. Due to the IT skillset of the dietitian, video and written education was created without delay; the video was piloted alongside a quality assessment questionnaire. Of those that completed the survey, the majority of patients reported the information was beneficial.

Outcomes

The web-link has allowed for improved access and timeliness of care; more women receive evidence based dietary education immediately on diagnosis versus previously having to wait ≥ 7 days for live group education. It also facilitates busy working mothers who can access the link 24h a day. It has contributed to improved workload management and perceived burnout among dietetic staff, offering more time for direct patient care.

Reflections

This quality initiative has highlighted the importance of integrated patient centred care among the dietary management of GDM. It recognises the importance of frequently evaluating services against the changing needs of patients as well as ownership and action when care is being compromised.

A limitation it notes however is need for thorough evaluation. It goes without saying one size does not fit all, highlighting the importance of a flexible care approach for those with differing digital access, learning or literacy skills.

³World Health Organization. (2015, February). WHO global strategy on people-centred and integrated health services. Retrieved from: <https://www.who.int/service-delivery/safety/areas/people-centred-care/global-strategy/en/>

Quality Assurance of Health and Safety Authority (HAS) Reportable Incidents on NIMS



Carbohydrates – To Count or Not to Count?



Carbohydrates- to count or not to count?

Type 1 Diabetes Education Quality Initiative

Moira O'Connell¹, Eva Copeland¹, Imelda Kane¹, Gillian O'Loughlin¹

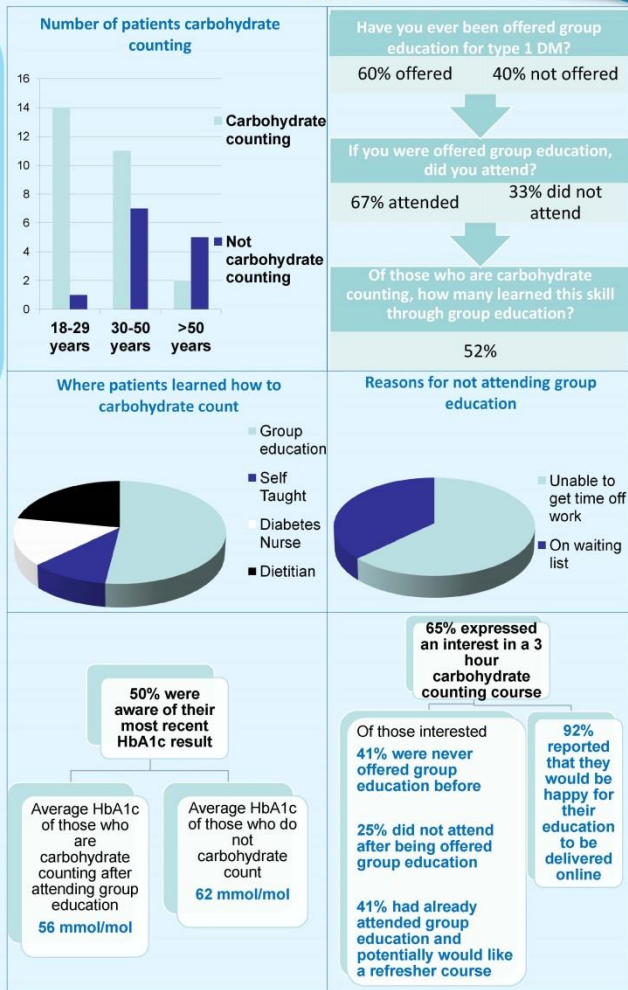
¹Dietetic Department, Naas General Hospital



Background

As part of the NCEC national clinical guidelines 2018 for Adult Type 1 Diabetes Mellitus (DM), it is recommended that structured education should be offered to all adults with type 1 DM at any stage throughout their diagnosis. Carbohydrate counting is an essential part of structured education and can also be offered as a stand-alone course for those waiting on more detailed structured education ¹. In Naas General Hospital (NGH), a 3 day structured education programme, BERGER, had been the group education of choice. However, as this course was not accredited, combined with the effects of the COVID 19 pandemic, the course has been suspended since June 2019. To address this gap in service, a survey was carried out to assess the demand and uptake of structured education.

Results



Methods

A survey was undertaken at the monthly type 1 DM clinic in Naas General Hospital between June and September 2020. A total of 56 surveys were completed. Incomplete surveys were omitted. A total of 40 completed surveys were analysed.

Conclusion and Recommendations

Providing standardised clinical care to patients in healthcare is challenging. This is due to a number of factors, including variations in environments of care and complex patient presentations. However it is clear that group education is beneficial to patients with type 1 DM and it should be offered to all, despite age and length of diagnosis ¹. In view of the current limitations placed on patients and staff due to COVID 19 restrictions, it is important that alternative methods of delivery of education, such as online courses, are considered and offered. From this survey, it is clear that there is a strong interest in these courses among patients.

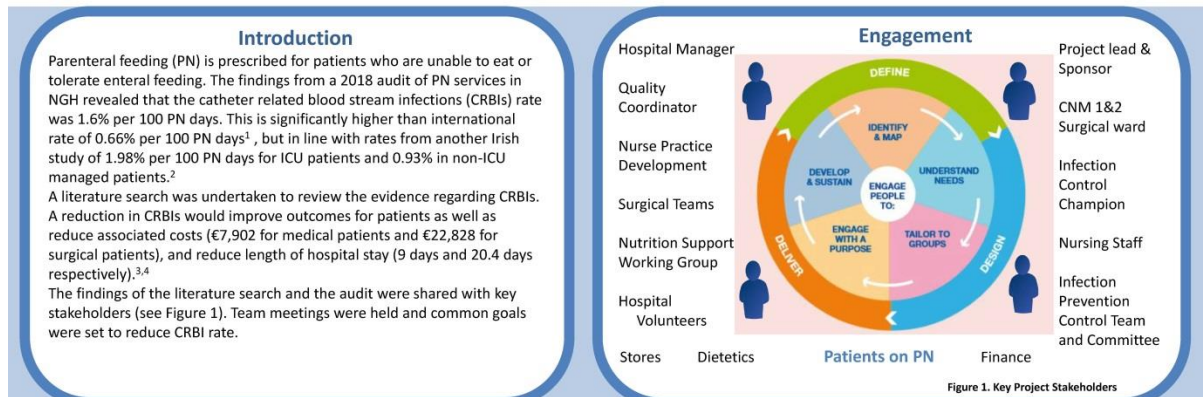
Reference: (1) Department of Health (2018) Adult type 1 diabetes mellitus [NCEC National Clinical Guideline No. 17]. Contact: Moira O'Connell #320.
Acknowledgements: OPD clerical staff, diabetes team, diabetes nurse specialists and dietetic dept. NGH.

A QI Initiative to Reduce the Rate of Catheter Related Blood Stream Infections in Patients Requiring Parenteral Nutrition

A QI initiative to reduce the rate of catheter related blood stream infections in patients requiring Parenteral Nutrition

People's Needs
Defining Change
HEALTH SERVICES CHANGE GUIDE
www.hse.ie/changeguide

Elaine Murray¹ Aoife Devitt¹ Fiona Lucey¹ Gillian O'Loughlin¹
¹Nutrition and Dietetics Department Naas General Hospital, Naas, Co. Kildare



DEFINE

Aim and Objectives

- To reduce CRBIs in patients receiving PN on a surgical ward in NGH by:
- Increasing awareness and learning on Aseptic Non Touch Technique (ANTT) with targeted education on ANTT for nurses
 - The introduction of Curodis disinfectant bungs for CVADs during PN breaks
 - The introduction of an inpatient information leaflet regarding CVAD care
 - To raise awareness of the initiative through a learning notice on surgical ward
 - Design of audit tool to track PN related CRBIs in ICU and non ICU setting.

DESIGN

Methodology, Evidence and Planning

- Collective initiative design with key stakeholders, roles assigned and outcome measurements agreed
- Discussion with stakeholders regarding feasibility of proposed quality improvements involving change in work practice for surgical nurses.
- Collaborative design of patient information leaflet with stakeholders.

DESIGN

Initiative	Measurement	Results
Targeted education on ANTT management of PN lines	Attendance sheets & re audit CRBI rate	6 nurses trained
Aim for 100% uptake of ANTT online training	ANTT statistics	100% Nov & Dec 2019 (Allen ward)
ANTT prompt list for Nursing notes	Nursing staff evaluation	Prompt list produced, pilot and evaluation ongoing
Produce patient information leaflet on CVAD care	Patient evaluation	Rolled out March 2020
Develop learning notice for Nursing Staff with Quality Coordinator	Quality Coordinator audit of staff awareness of learning notices	Shared February 2020
CUROdis disinfectant bungs on CVADs during PN breaks, introduced November 2019	CRBI rates	Ongoing
Design audit tool to track PN related CRBIs	Audit Tool	Audit tool created. Data collection ongoing



DELIVER

Discussion and Conclusion

- Implementation:** Initiatives requiring change in practice (targeted training) and multiple stakeholder input (leaflet) Required significant time and collaboration.
- Support:** Additional input from nurse practice development was required to provide targeted training when gaps identified with initial training.
- Measure:** Metrics from online ANTT training
Targeted training attendance sheets
Audit tool has been developed to 1) track impact each initiative has on PN related CRBI rate; 2) Monitor CRBI rate going forward.
- Celebrate success:** Improved working relationships, shared collaboration within teams and a range of disciplines.
- Sustain Improvement:** Nutrition Support Working Group and Infection Prevention Control Committee to review logistics of continuing ward based targeted training, CVC policy update in line with change in practice and monitor adherence to CVC care plans.

Safer Better Healthcare,
and Staff & Public Value
CHANGE OUTCOMES

Outcomes

- An Environment receptive to change has been created through:
- Increased awareness and understanding of desired change
 - Collaboration between disciplines to achieve change in practice.
 - Shared Values
 - Patient focused care, to ensure best patient experience



For more information
contact:

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Acknowledgements: Alice Kinsella, Hospital Manager, Gillian O'Loughlin, Dietitian Manager, Aoife Devitt & Fiona Lucey, Senior Dietitians, Fiona Grogan CNM 2, Jane Lyon CNM 1, Anne Marie Maguire SN, Staff Nurses Allen Ward, Fiona Galvin CNS Infection Prevention Control, Elaine Harris, Sinead Noone & Sinead Keogh, Margaret Tuohy, Nurse Practice Development, Mairead Holland, Quality Coordinator, Dietetics Department

References

- ¹Does Parenteral nutrition Increase the Risk of Catheter-related bloodstream Infection? A Systematic Literature Review. JPN 2017
- ²Catheter Associated Bloodstream Infections in Patients Receiving Parenteral Nutrition: A prospective Study of 850 Patients. Journal of Clinical Medicine Research 2013
- ³Sepsis Management, National Clinical Guideline No.6 (2020 Update) National Clinical Effectiveness Committee V3 July 2019
- ⁴Are educational interventions to prevent catheter-related bloodstream infections in intensive care cost effective. Journal of Hospital Infection. 2014

Moving and Handling Care of Bariatric Patients

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Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Introduction

The prevalence of obesity in Ireland is rising [1] and persons with obesity are more likely to be admitted to hospital [2] and require ICU [3]. Bariatrics is the medical field encompassing the management of persons with clinical obesity. HSE guidelines emphasise the need for consultation, planning and resource allocation to accommodate the patient handling needs of this cohort [4]. However, little is known about the proportion of bariatric patients in Irish hospitals, nor the strategies used to provide for their specific patient handling needs including the availability of appropriate bariatric equipment. This disparity may have implications regarding clinical risk, patient safety and quality of care for persons with obesity in the acute hospital setting.

Aims

The aim of this study was to survey Clinical Nurse Managers (CNM's) in order to explore the frequency, logistics and potential barriers to the provision of bariatric-specific patient handling care including equipment in the acute Irish hospitals setting.

Methods

A multicentre cross-sectional study design using an anonymous 24-item questionnaire was used to survey 322 Clinical Nurse Managers in seven acute hospitals. CNM's were surveyed, as they traditionally play a central role in the formulation and deliver of patient care at a ward level. Ethics approval was obtained, and a gatekeeper alerted potential participants and facilitated the distribution of questionnaires. Completed hard-copy questionnaires (n = 132) were returned to researchers by post. Descriptive statistics of frequencies and percentages were used, and associations were tested using chi-square analysis in SPSS v23.

Results

- The response rate was 41%. Most CNM's (93.1%) provided care for bariatric patients.
- 85.6% of respondents reported barriers to the provision of bariatric moving and handling care within their clinical area. Lack of bariatric equipment (75%), staffing (65.2%) and training (57.6%) were most frequently cited barriers (Figure 1).
- Only 11.4% reported their clinical settings owned all required bariatric equipment. Ownership of specific bariatric equipment is shown in Figure 2. Owning equipment provided significantly greater access to a suitable patient hoist ($p = 0.001$) and a chair ($P = 0.032$) compared to renting.
- Only 9% of CNM's stated that rented bariatric equipment "always" and 50% "usually" arrived in a timely manner. Reported frequency of delays in the delivery of specific types of rented equipment is shown in Figure 3.
- CNM's were most frequently responsible for ordering equipment. 39.7% indicated there was a clear system for ordering equipment.
- 74.4% of respondents stated they did not have guidelines for caring for bariatric patients and 46.2% considered this a barrier to the provision of care.

Acknowledgements

We would like to thank the CNMs, gatekeepers and research assistants for their contributions to the study.

Further information, contact: sara.dockrell@tcd.ie
Dockrell S, Hurley G. Moving and Handling care of bariatric patients: A survey of clinical nurse managers
Journal of Research in Nursing, 2020 0: 1-11 DOI: 10.1177/1744987120970623

Figure 1. Barriers to providing moving and handling care

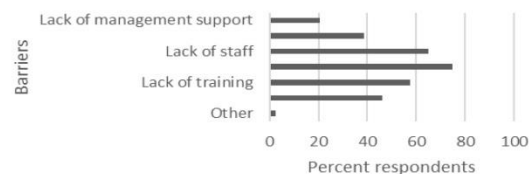


Figure 2. Ownership status of bariatric equipment

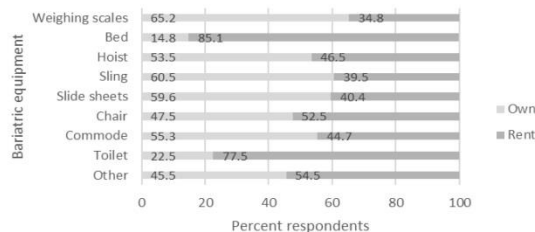
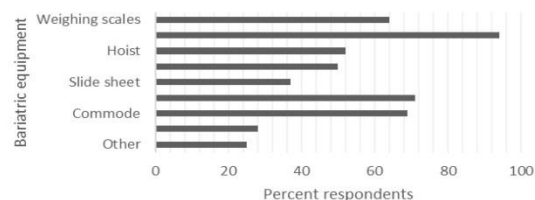


Figure 3. Delay in delivery of rented bariatric equipment



Conclusions

Nursing staff are consistently at the interface of patient handling care for persons with bariatric needs. Barriers to the delivery of quality patient handling care to bariatric patients were identified in this study. Most bariatric equipment such as chairs, hoists and beds are rented with significant delays in delivery reported. The need for education, training, dissemination of guidelines and clear systems of procurement were identified. To ensure compliance with HSE guidelines, there is an onus on hospitals to develop local policies and care pathways supported by clear clinical governance that minimise clinical risk, provide safe and quality care for persons with bariatric needs.

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20 Reducing Patient Experience (Waiting) Times in the Gastro OPD Clinic



20 Reducing Patient Experience (Waiting) Times in the Gastro OPD Clinic



A. Byrne, G. O'Loughlin, J. O'Rourke, E. O'Shea, M. Cassidy, M. Ward, C. Balfe, C. Kinsella, J. Rea, I. Cretu. Naas General Hospital

Background:



- Data from OPD weekly Thurs morning gastro OPD clinics, Jan & Feb 2020, revealed that the patient wait times from arrival to be seen by Doctor were 65 mins (median), 66.2 mins (average), range 2-122 minutes, StdDev 33.1.
- Service Users Survey, Feb 2020, n=27 patients:
 - The wait time bothers service users the most - 73%:
 - 2hr parking metre limit causes stress for service users
 - Service users state they "expect" and "accept" the long wait times and "have learned to put up with it"
- n=22 formal complaints received in 2019 regarding the long OPD clinic wait times
- Staff were frustrated at the long wait times from their own work context, the perspective of the service users and that the late clinic finish time delayed the start of the afternoon clinic



Aim:

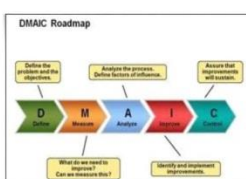
To reduce the OPD Wait Times from 65 to 35 mins (by 46%) for patients attending the Thurs am Gastro OPD Clinic in 3 months.



Methods:

The IHI's "Model for Improvement" framework using Plan-Do-Study-Act (PDSA) tests-of-change cycles was employed in addition to the Analyse (Root-Cause-Analysis) and Control (Sustainability) stages of the DMAIC (Lean) model – Define, Measure, Analyse, Improve, Control:

Changes:



- Scheduling of patient appointments is no longer "front-loaded" i.e. early appointment times were overbooked
- NEW patients are allocated a 30 minute slot & all new patients are seen by the Consultant, thus n=4 new patients are booked per clinic and their appointment times are not concurrent
- The numbers of routine follow-up, new and urgent patients to be seen were agreed by the MDT for the clinic
- Implementation of MDT review algorithm - The IBD Nurse and the Dietician review patients from the hospital waiting list and determine what patients can be seen by them only
- Implementation of follow-up scheduling algorithm – scheduling of patients OPD follow-up is best practice & standardized
- At the previous week's clinic, the medical team review all patients' charts scheduled to attend the next OPD clinic and deem each patient suitable for Virtual or Attend In-Person apt

Results:



- The median patient experience (waiting) time for this OPD clinic is reduced by 69% to 20 minutes, 25 minutes (average), Std Dev. 19, figure 1.

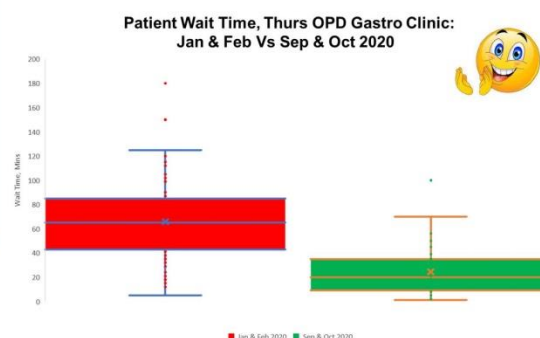


Figure 1: Box plot shows the median and variation in patient waiting times for Jan & Feb in red and Sep & Oct in green demonstrating a median reduction of 69% in waiting times achieved, from 65 to 20 minutes.

Discussion:

This improvement (reduction) in patient experience time is mainly attributed to the impact of Covid-19 on the OPD service: the high Attend-In-Person DNA rate and the implementation of virtual OPD clinics. However, the root-cause-analysis work done as part of this QI Project identified huge improvement opportunities for our service, exploited by our QI Project, with regard to the previous "front loading" scheduling of NEW patients to the clinic, implementation of a review of patients algorithm by the MDT (IBD nurse and dietician), standardised scheduling of follow up appointments and doctor's assessment of suitability of virtual appointment attendance

Conclusion:



The aim of reducing patient experience (wait) time in our OPD Gastro clinic was achieved. Our QI team is now planning to ensure that the learnings and improvements to our OPD service from this QI project will be spread to all OPD clinics in our hospital and will be sustained in the future. The use of MDT review & follow-up algorithms, flat-line scheduling of appointments and suitability assessment of patients to attend virtually are now standard practice at our hospital. Frontline ownership and effective staff engagement ensures continued success and effectiveness of this QI project.

Acknowledgements:

Thanks to DMHG, IHI & Paul Rafferty for providing our team with QI training.

For further information: Contact Anne Byrne anneby2@gmail.com

As the Evidence Emerges, Acute Hospitals Drug Management Programme (AHDMP) Response to COVID-19 Pandemic



As the evidence emerges, Acute Hospitals Drugs Management Programme (AHDMP) response to COVID-19 Pandemic

Hynes M¹, Gilvarry P¹, Doyle S¹, King F¹

¹ HSE Acute Hospitals Drug Management Programme (AHDMP), Dublin.

Introduction

The COVID-19 pandemic is a challenge for our healthcare system. The first COVID-19 case on the island of Ireland was identified on the 26th February 2020.¹ Globally, researchers are continually generating evidence of emerging treatments to treat COVID-19, from the new use of existing medicines to the availability of novel therapies against the virus. Patient safety is a core driver of the Acute Operations response to COVID-19.



Figure 1: AHDMP response across three domains

Method

The National Clinical Advisor and Group Lead, Acute Operations commissioned the AHDMP to develop national guidance to support prescribers in the management of COVID-19 patients. Evidence synthesis support is provided by the National Centre for Pharmacoeconomics "Evidence Review Group". AHDMP undertook guidance development with nominees of the relevant National Clinical Programmes. The guidance is shared with the relevant stakeholders and published on the HSE website making it publicly accessible.²



Figure 2: Medicines Criticality Approach

Aim

To support medicines access and patient safety in Irish hospitals during the COVID-19 pandemic, the AHDMP will provide:

- National clinical guidance on the use of medicines in the management of COVID-19.
- Medicines supply chain resilience with Marketing Authorisation Holders (MAH), forecasting demand for emerging indications while protecting the supply chain for pre-existing indications.
- Support for clinical trials investigating the management of COVID-19.

The AHDMP as a member of the MCAG, engaged with the MAHs of critical medicines identified by the National Clinical Programme Lead. The work was undertaken in collaboration with colleagues from the HSE, Health Products Regulatory Authority (HPRA) and Department of Health (DoH) to support continued availability of critical medicines. AHDMP worked with Clinical Research Coordination Ireland, Health Research Board (HRB), HPRA and DoH to support access to medicines for use in Covid-19 clinical trials aligned with the prioritisation proposed by the European Committee for Medicines for Human Use.³

Conclusion

During times of rapid change, interventions from national agencies that support quality and safety in healthcare are critical. The national clinical guidance provides an up-to-date, evidence-based, resource approved by clinician-experts for clinicians in the management of hospitalised patients with COVID-19. Engagement with the MAHs of critical medicines, supports continued availability and mitigates the risk of critical medicines shortages.

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Author contact details: AHDMP@hse.ie

An Exploration of a Virtual Tai Chi Class in a Hospice Setting

An Exploration of a Virtual Tai Chi Class in a Hospice Setting

Authors

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BSc Physiology

&

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General Nursing

A unique solution to an unprecedented challenge

During the first wave of the pandemic, our physiotherapy service was limited to essential reviews only
As an alternative to in-person exercise classes, we developed a unique virtual class

Our goals were to continue to engage residents in physical activity and limit the effect of deconditioning

We held a weekly virtual Tai Chi class for our residents

One Goal One MDT

Our MDT welcomed this new initiative and supported the needs of the residents
Ward Team – nurses, HCA's and physiotherapists – encouraging patients to take part and ensuring safety throughout the class
Off the ward – IT, facilities, risk management and chaplaincy – supporting us through the various technical obstacles

Take away thoughts

Although we were physically apart, we were able to take virtual steps together.



What does the literature say

Tai Chi holds many benefits for the elderly such as...

Positive Health and social well-being

Health, cognition and balance
[1], [2], [3], [4].

Benefits of our unique initiative

Residents enjoyed the **participation** and the opportunity to engage with **physical activity**

Statistical data reflecting multiple patient **interactions** without high-risk exposure
Fostered a unique approach to **holistic** patient care

Provided another opportunity for building MDT **team-working skills**

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The Birth Experience Survey Tracking (BEST) Practice Study: A Quality Improvement Initiative at the University Maternity Hospital Limerick

The Birth Experience Survey Tracking (BEST) Practice Study: a Quality Improvement Initiative at the University Maternity Hospital Limerick

K Dunlop¹, O Holmes¹, C Boyle¹, M Imcha¹

¹Department of Obstetrics and Gynaecology, University Maternity Hospital Limerick, Ireland

Introduction

- Negative experiences during childbirth place women at higher risk of developing postnatal depression, and may negatively affect attitudes towards future pregnancies.
- The National Maternity Patient Experience Survey highlighted communication surrounding the labour and immediate postnatal experience as areas for improvement at the University Maternity Hospital Limerick (UMHL).

Aim

The aim of this quality improvement initiative was to improve communication between care providers and patients surrounding the delivery and birth experience.

Methods

A postnatal debriefing checklist was developed in UMHL, and implemented by one obstetric team in October and November 2020.

Members of the obstetric team performed a structured debrief of the childbirth experience on day 2 postnatal.

Inclusion criteria: all women who gave birth in UMHL in October and November 2020, under the care of the Red Team.

Exclusion criteria: none.

A telephone survey was performed 6-8 weeks following discharge, to assess perceptions of the childbirth experience and quality of the debrief performed.

[illegible]

Results

- 45 women were debriefed, 28 women were followed up. 17 women were lost to follow-up.
- 82% of women felt the debrief allowed them the opportunity to have questions surrounding their birth experience answered.
- 82% of women felt it allowed them to process their experience
- 89% of women also felt that the debrief improved their overall childbirth experience.

Conclusion

A structured approach to communicating with patients regarding their childbirth experience was able to improve the overall childbirth experience. We are looking to implement this document and approach as standard of care, in order to continue to improve quality patient care and patient satisfaction with their childbirth journey.

Pathways and Processes

Interdisciplinary IBS Pathway Initiative



Interdisciplinary IBS pathway initiative



Eva Copeland¹, Elaine Murray¹, Stacey Collins¹, Gillian O'Loughlin¹, Mairead Mc Nally², Ion Cretu²
Dietetic Department¹, Gastroenterology Department², Naas General Hospital

BACKGROUND

Irritable Bowel Syndrome (IBS) is a common functional bowel disorder affecting 10-20% of the population, with as many as a third of these patients being referred on to the Gastroenterology services in acute hospitals.

The Rome IV criteria for IBS are clear. In patients who meet the diagnostic criteria and in the absence of alarm symptoms, minimal diagnostic investigations are required to safely establish a diagnosis of IBS. Endoscopic investigation is rarely warranted.

A multi-disciplinary approach is recommended in the treatment of IBS. Evidence supports the efficacy of simple dietary advice and a low FODMAP diet in certain patients.

Failure to address IBS symptoms with this recognised approach means patients have longstanding symptoms and unmet clinical needs contributing to an over-review of patients in Gastroenterology OPD, over-investigation of patients and referral for unnecessary endoscopy.

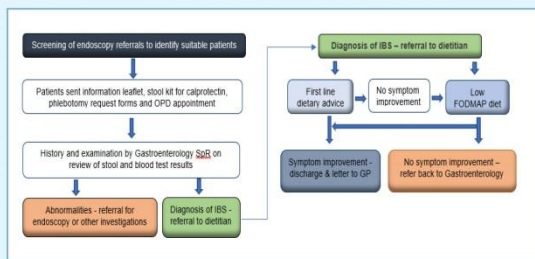
AIM

The aim was to develop an interdisciplinary pathway to improve patient care, patient flow and eliminate unnecessary invasive investigations.

METHODS

Patients were selected from Direct Access GP Referrals between May and November 2019 and triaged by a Specialist Registrar (SpR). Patients who met the inclusion criteria were invited to a clinical review prior to proceeding with endoscopy.

If a diagnosis of IBS was established, the patient was referred to the dietitian-led IBS pathway. Patients completed an IBS Symptom Severity Score and IBS Quality of Life Questionnaire. These patient reported outcomes (PROMS) were used to monitor patient progress on the pathway. Diet, lifestyle and symptoms were assessed at the initial dietetic appointment. Patients were given first line advice and/or a low FODMAP diet as per the NICE guidelines.



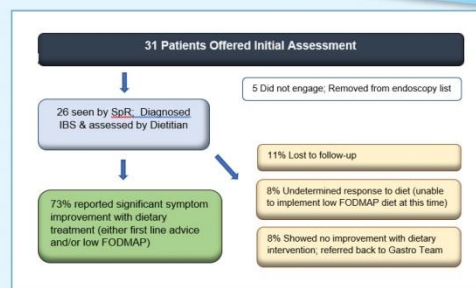
RESULTS



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Acknowledgements: Special thanks to Aine Dunne for all the secretarial support provided during this project.



Improvement in gut symptoms

A reduction of >50 points on the IBS symptom score indicates treatment response. The **symptom score reduction** ranged from 65 to 280 points, with both a mean and median reduction of 150 points.



Endoscopy

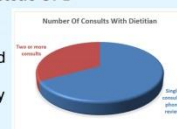
The Direct Access GP Referral system meant several patients were referred for both an OGD and colonoscopy. As a result of this pathway, a total of 27 colonoscopies and 12 OGD's were cancelled with **cost savings of €29,640.**

Patient satisfaction

Patients were seen by both the Gastro SpR and the Dietitian on the same day. Patients were asked to give feedback via Survey Monkey. Of the patients who responded, patient satisfaction rate was 86%.

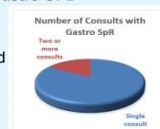
Dietetic OPD

67% discharged after first line dietary advice



Gastro OPD

84% discharged after one Gastro consult



CONCLUSION

This pilot interdisciplinary IBS care pathway demonstrated a patient-centred, evidence-based, best practise model of care.

Improved Patient Care: 73% of patients reported significant improvement in their IBS symptoms with dietary treatment.

Reduced Cost: Cancellation of unnecessary invasive endoscopies with a cost saving of €29,640.

Improved Patient Flow: Timely, appropriate dietetic intervention led to 84% of patients being discharged after one consult with the SpR.

Continuation of this pathway would ensure reallocation of scarce endoscopy slots and Gastroenterology OPD appointments, substantially reduce waiting lists and enable more effective management of a greater number of patients.

Malignant Hyperthermia Crisis – A Review of Current Supplies and Formation of a Kit

MALIGNANT HYPERTHERMIA CRISIS – A REVIEW OF CURRENT SUPPLIES AND FORMATION OF A KIT

Authors: Dr Tiarnan Morris, Ms. Cora Brennan, Dr Anne Bergin.
Department of Anaesthesia, Midland Regional Hospital Mullingar.

INTRODUCTION

Malignant Hyperthermia (MH) is a rare but life-threatening emergency. Successful management of MH depends upon early diagnosis and treatment. "Storing together the majority of items required to manage MH will reduce time spent gathering equipment and expedite initiation of successful treatment." – The Association of Anaesthetists (AAGBI), 2011. This audit and subsequent quality improvement project follows on from a previous audit undertaken in Midland Regional Hospital Mullingar (MRHM), which raised the question as to whether the MH kit in theatre is appropriately stocked. The AAGBI recommends that every theatre department be stocked with an MH trolley. This audit compares the MRHM kit to AAGBI recommendations.

METHODS

A literature review was undertaken to assess recommendations regarding Malignant Hyperthermia preparation in the operating theatre department. A review was undertaken of the locations of the necessary supplies needed to manage an MH crisis. This was subsequently compared to the AAGBI recommendations. Following this an MH kit was compiled as per AAGBI recommendations.

RESULTS

Equipment needed to manage an MH crisis is found in various locations in the theatre department. Required medications were stored in 3 separate locations: pharmacy press, theatre 1 emergency drug trolley, anaesthetic drug trolley. Phlebotomy equipment was in the recovery room. Guidelines for drug doses, task allocations, MH filter, temperature probe, arterial and CVC line packs on Invasive/MH trolley, in the theatre corridor. Since there is insufficient space for an extra trolley in the theatre department, a box was compiled.

MH BOX (Zip lock bags used in place of drawers)

Free in box: Dantrolene and sterile water (12 vials of each), task allocations (MHANZ, 2018), guideline, locations of cool fluids, short acting insulin and ice.
Bag 1: Syringes for drawing up dantrolene and TIVA.
Bag 2: Calcium chloride, amiodarone, sodium bicarbonate, beta blocker, glucose 20%, 50ml propofol vials.
Bag 3: Blood bottles, ABG syringes, urine bottles.
CVC and arterial line kits located on the invasive trolley easily accessible to all theatres.



From left to right:

Fig.1: Contents of new MH box
Fig.2: MH box
Fig.3: AAGBI MH guideline (AugustaWestland, 2012).
Fig.4: AAGBI recommended contents of MH kit (AAGBI, 2011).

Recommended Contents of Malignant Hyperthermia Management Kit	
AAGBI Safety Guidelines	
The following list represents all items required to manage malignant hyperthermia and should be kept together in a single location, such as a trolley or box.	
Component 1: Dantrolene	
• 12 vials of dantrolene 20mg/ml (12 vials of 20mg/ml)	
• 12 vials of sterile water 100ml (12 vials of 100ml)	
• 12 vials of glucose 20% (12 vials of 20%)	
• 12 vials of propofol 100mg/ml (12 vials of 100mg/ml)	
• 12 vials of sodium bicarbonate 8.4% (12 vials of 8.4%)	
• 12 vials of calcium chloride 10% (12 vials of 10%)	
• 12 vials of amiodarone 500mg (12 vials of 500mg)	
• 12 vials of insulin 100 units/ml (12 vials of 100 units/ml)	
Component 2: Insulin	
• 12 vials of insulin 100 units/ml (12 vials of 100 units/ml)	
Component 3: Syringes and needles	
• 12 vials of 10ml syringes (12 vials of 10ml)	
• 12 vials of 20ml syringes (12 vials of 20ml)	
• 12 vials of 50ml syringes (12 vials of 50ml)	
• 12 vials of 100ml syringes (12 vials of 100ml)	
Other items	
• 12 vials of glucose 20% (12 vials of 20%)	
• 12 vials of propofol 100mg/ml (12 vials of 100mg/ml)	
• 12 vials of sodium bicarbonate 8.4% (12 vials of 8.4%)	
• 12 vials of calcium chloride 10% (12 vials of 10%)	
• 12 vials of amiodarone 500mg (12 vials of 500mg)	
• 12 vials of insulin 100 units/ml (12 vials of 100 units/ml)	

DISCUSSION

Although there is a low incidence of MH, it carries significant morbidity and mortality, therefore excellent preparation is vital in managing crisis. A review of MH events in a cohort of patients referred to the MH Unit in Canada demonstrated that the time between onset of the first clinical sign and dantrolene administration was longer in patients who experienced complications (mostly renal dysfunction), compared with those who did not, and for each 10 minute delay, complications increased significantly. All patients who received dantrolene more than 50 minutes after the first clinical MH sign experienced complications (Riazi et al., 2014). The aim of preparation of this kit is to reduce time elapsed from diagnosis of MH crisis to administration of dantrolene by having an easily accessible and user-friendly kit with all equipment that will be required.

CONCLUSION

At the time of review, MH preparedness in MRHM differed from AAGBI recommendations. Following this study, an MH box was made which contains the required equipment outlined in the AAGBI guideline. To ensure this kit remains up to date we will request that the theatre nurses check the kit and replace expired or used drugs as part of the routine emergency equipment check. These changes will subsequently be re-audited in 6 months to assess for further improvements.

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Audit of Transfusion Practice in an Acute General Hospital and Investigation of Inappropriate Red Blood Cell Transfusions of Second or Multiple Units in Haemodynamically Stable Patients

Audit of Transfusion Practice in an Acute General Hospital and Investigation of Inappropriate Red Blood Cell Transfusions of Second or Multiple Units in Haemodynamically Stable Patients.



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Introduction

Blood transfusion is one of the most common therapies used in modern medicine. One in four people will need a blood transfusion during their lifetime. Red cell blood transfusions are most commonly used for supportive care in surgery like cardiovascular and transplant surgery and in therapy for solid and haematological malignancies. However, blood transfusion has the potential to harm the recipient of the blood products. Therefore, blood transfusion should be prescribed only when benefits are likely to outweigh the risks.

Patient Blood Management (PBM) is an initiative which was introduced to optimise blood usage through different strategies (Isbister, J. 2005). Commonly used PBM strategies include introducing a restrictive haemoglobin trigger and implementing a single unit transfusion policy. (Callum JL et al., 2014)

The American Medical Association and The Joint Commission identified that red blood cell transfusions were one of the five overused procedures in medicine. Studies showed that approximately 40% to 60% of all red blood cell transfusions in hospital blood banks were inappropriate. (Shander et al., 2011). As a result, hospitals under financial constraints showed growing support for conservative transfusion practices and the implementation of PBM strategies. This is important in order to minimise risk and improve patient safety as well as reducing cost and optimising blood usage.

Aims

- Perform a hospital wide audit using the Laboratory Information system (LIS) and Blood Track Management system to analyse transfusion data and assess current transfusion practices.
- Investigate and determine inappropriate transfusions of second and subsequent red cell units and identify clinical areas with high levels of unnecessary transfusion.
- Investigate improvements which could be implemented to current red cell transfusion practice within the hospital.

Materials and Methods

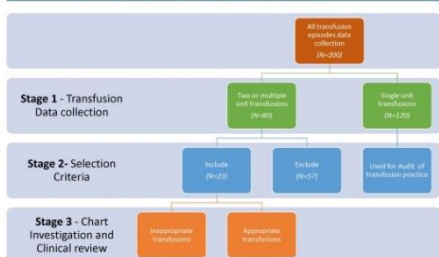


Figure 1: Study Design

Due to the Covid-19 pandemic the set time for data collection and analysis was significantly reduced, thus a contingency plan was set. In areas where results were limited, data from previous audits carried out in hospitals with similar transfusion practices were analysed to predict our expected results.

Conclusion

- The preliminary results of this study indicated that the Emergency Department was responsible for the highest number of possible inappropriate transfusions.
- A reduction of 5-7% of red blood cell unit transfusions in Naas hospital can be achieved post implementing a single unit transfusion policy. This will reduce recipient exposure to the risks of transfusion and saves units for those patients in real need of transfusion. This would also consequently reduce blood ordering which would put less pressure on the IBTS to supply blood and always meet demand.
- An estimated cost saving of approximately €14,750 - €20,650 per annum to the hospital could be achieved post implementing a single unit transfusion policy. Further savings can be achieved by implementing restrictive transfusion threshold policies.

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Results

Results for audit of transfusion practice in Naas General Hospital

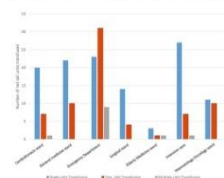


Figure 2: Medical Specialty Ward: Transfusion episodes

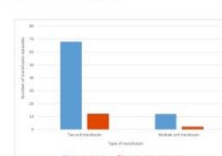


Figure 3: Transfusions episodes: Haemoglobin check

Results of investigation of possible inappropriate transfusion of second and subsequent red cell units

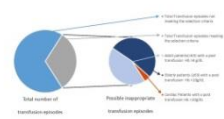


Figure 4: Total Transfusion Episodes: Possible inappropriate transfusion episodes

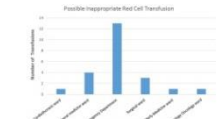


Figure 5: Medical Ward: Possible inappropriate transfusion

Discussion

The audit investigated current blood use in different medical specialities and trends in prescribing red cell units. It also investigated medical specialities transfusing multiple units of red cells without clinically reassessing the patient to determine if another transfusion was necessary. Initial analysis showed that the Emergency Department (ED) accounted for 39% (117 units) of all transfusion in NGH (Figure 2). The ED also accounted for the highest number of two unit transfusions (31 two unit transfusions episodes) (46%). The results also demonstrated that haemoglobin checks in-between transfusions were rarely carried out. The haemoglobin was checked 12 times (18%) prior to second unit transfusions in two unit transfusions and two times (17%) prior to each subsequent unit in multiple unit transfusions (Figure 3).

Each unit of packed red blood cells is expected to raise the circulating haemoglobin by approximately 1 g/dl (Nguyen, Dasgupta and Wahed, 2016). Therefore, it was decided that patients that had a post transfusion haemoglobin level of more than 1 g/dl above the haemoglobin transfusion guidelines would be investigated for inappropriate transfusion. 23 transfusion episodes (32%) met this selection criteria (Figure 4). The ED accounted for the highest number of possible inappropriate transfusions (57%) (Figure 5). It was also demonstrated by the results that patients receiving two unit and multiple unit transfusions were rarely transfused with a restrictive transfusion policy (Hb <7g/dl).

Possible inappropriate red blood cell transfusions accounted for 32% (23 of 72) in two unit and multiple unit transfusions. Although clinical analysis was not completed on each transfusion episode, looking at other similar studies we would still expect 15-25% of second and subsequent unit transfusions to be classified as inappropriate. This would result in an overall reduction in red cell usage of 5-7%. A reduction in red cell usage of 5-7% would net an annual cost saving of approximately €14,750- €20,650 in NGH. (€295 per red cell unit (IBTS 2018).

Improving Adherence to HSE Incident Management Framework Processes Following Patient Safety Incidents

Improving adherence to HSE Incident Management Framework processes following patient safety incidents



Claire Lehane, Patient Advocacy Service Manager; Andrew Kennedy, Patient Advocacy Service Communications Officer; Georgina Cruise, Patient Advocacy Service Team Leader

Visit: patientadvocacyservice.ie

Background

The Patient Advocacy Service is an independent, free and confidential service that provides empowerment advocacy support and information to people who want to make a complaint about an experience they have had in a HSE-funded public acute hospital.

The Service supports people to make a formal complaint through the HSE's 'Your Service, Your Say' complaints policy and also in the aftermath of patient safety incidents.

In supporting patients following patient safety incidents, we have seen how the failure of HSE services to adhere to the processes outlined in the Incident Management Framework (IMF) can affect the quality of service provided to a patient and lead to a lack of learning to improve patient safety.

Challenges & Supports

- Ensuring that the person's voice was heard.
- Writing to the HSE and advising them of their obligation under the IMF process.
- Ensuring learning was taken from the person.

Case Study

A person contacted the Patient Advocacy Service following a lack of communication from a hospital about a complaint they had made. Following an information request from the person, it became clear a review of the complaint under the Incident Management Process had taken place. The person had not been asked to contribute. When the hospital sent the review report, three years after the incident, the person was not happy with its contents. Supported by the Patient Advocacy Service's advocacy officer, the person reviewed the hospital's report, noting several inaccuracies in it and the Terms of Reference. The person contacted the hospital's Quality and Patient Safety Team to explain the inaccuracies and ask that learning be taken from their experience. The hospital has met with the person and rectified the report to reflect their experience.

Benefits & Outcomes

- ✓ Involving the person in the IMF review process ensures their voice is heard and their views are considered, leading to enhanced quality of patient care and relations.
- ✓ It also ensures learning can be taken from the process, and risks can be identified, leading to improved patient care and safety.

Anticoagulation Services in a Pandemic



Anticoagulation Services in a Pandemic

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Callaghan E¹., Jackson B¹., Prendergast M¹., Duggan M¹., Atkinson M¹., Kearney B¹., Desmond R.^{1,2}
1. Naas General Hospital; 2. Tallaght Hospital

BACKGROUND

Anticoagulants are frequently identified as one of the drugs which cause preventable drug harm and admission to hospital (Howard, R.L. *et al*, 2007). Warfarin is the most widely used oral anticoagulant drug and is used extensively for patients with Atrial Fibrillation, Venous Thromboembolism, Valvular heart disease and Prosthetic and Biological valves (Kaneko *et al*. 2014).

Warfarin efficacy is monitored using Prothrombin Time measurement (PT), recalculated to the International Normalised Ratio (INR). INR target ranges are guided for specific clinical presentations. The 5 day Anticoagulation service was established onsite at NGH in 2006. The current patient population is 520 with 220 – 250 visits per week and review periods can range from daily to 4 - 8 week intervals due to antibiotic therapy or other medical concerns. Staffing included a CMN 2 and five dedicated Warfarin titration staff nurses with Consultant Haematologist governance.

Prothrombin Time analysis (whole blood) is provided by the accredited (ISO 15189) Anticoagulation Laboratory service, and using fingerprick sampling and specialised strips, via a Near Patient testing (NPT) device located in the clinic. Additionally, 40 patients perform self testing at home with Patient Self Testing (PST) devices. NPT and PST testing are under the governance of the Point of Care Manager and adhere to National NPT Guidance, 2020.

The Sars CoV-2 virus was first reported in China in December 2019. On 24/03/20, in response to escalating cases in Ireland, the Government effected National measures. People over 70 years were advised to restrict their movements and the general population to reduce their contacts and adhere to Public Health guidance.

The Anticoagulation service re - organised patient management at the clinic and additional measures to ensure social distancing and ensure a safe environment. Despite these new measures, patients were reluctant to attend to have blood drawn for PT measurement and Warfarin titration, at an acute site where COVID positive patients were being managed and some were unable/ unwilling to travel and leave their homes (5 -10/day)

AIMS

- To ensure patient care was not compromised
- To ensure continuous adherence to therapeutic standards
- To provide a safe clinic environment
- To address non attendance issues
- To continue rapid PT result availability from the Laboratory
- To increase use of the Point of Care clinic device
- To ensure safe and uninterrupted availability of strips for self testers

"I currently attend the Warfarin clinic in the Vista health centre in Naas. They provide an amazing service. It is very quick and effective. I timed myself from the moment I left my car to when I returned from the clinic to be 4 minutes. I have been looked after by the following nurses, Maura, Roisin and Grace. What an amazing team. Absolutely brilliant. Please I am begging the HSE to continue on with this service at the vista after the pandemic." PM

METHODOLOGY

- A risk assessment was performed for non attendances at the Anticoagulation clinic
- Hospital Management were approached and a new clinic location was sourced within the Vista Primary Care centre
- Relocation of the clinic IT equipment retaining connectivity to both the Patient Administration System (PAS) and Laboratory Information System (LIS)
- A revised attendance system and socially distanced waiting area at Vista
- Increased use of NPT device
- PPE resources for staff

RESULTS

- The Anticoagulation service relocated to the VISTA Primary Care Centre on 23/03/20 including charts, existing IT equipment, phone number and NPT device with three staff members, the CNM, one experienced SN and a secretary
- IT connectivity supports were provided by the Technical Liaison Officer and IT Coordinator
- PPE training was undertaken and PPE sourced
- A dedicated patient appointment system was established and the waiting area re - designed to adhere to 2 meter distancing
- Patient's were contacted and advised of new location
- Symptomatic or close contact patients were sampled in their cars, with staff in full PPE or home sampling was arranged
- A local charity Blood Bikes, provided multiple daily deliveries of samples to the Laboratory for analysis and PT strip delivery to PST patients at home
- The NPT device usage was increased to provide real time INR measurements and facilitate real time titration and dosing (66 in Jan '20 to 214 Aug'20)
- Charts were relabelled with barcoded labels by the clinic secretary to facilitate Patient MRN scanning by NPT device
- The CNM2 successfully completed a Certificate in Nurse/ Midwife Prescribing on 29/09/20 to enhance patient safety
- A second NPT device was identified as a requirement and purchased

DISCUSSION

- Relocation of the Anticoagulation clinic to the Vista Primary Care centre, reassured patients of a safe environment, ensured their continued engagement and satisfaction with the clinic service and minimised adverse events.
- Hand sanitiser usage was identified as a possible cause of initial NPT discrepant results and addressed
- Service provision models, located in the community, outside of acute settings, are in line with Slainte Care

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Improving Blood Inventory Management: A Collaborative Approach

Improving Blood Inventory Management: A Collaborative Approach

Helena Begley¹ Fergus Guilfoyle², Alison Harper³

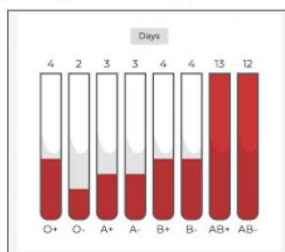
1. Naas General Hospital 2. Coombe Women & Infants University Hospital 3. Tallaght University Hospital



Introduction

Blood is a precious and perishable commodity and every effort should be made to use it effectively and appropriately. Blood management is a very fine balancing act between having sufficient stock to ensure clinical demand is always met while minimising expiry rates.

Figure 1: Typical blood supply vs demand issues



In May 2018, a meeting was held between the Blood Transfusion laboratories at Naas General Hospital (NGH), Coombe Women & Infants University Hospital (CWIUH), Tallaght University Hospital (TUH), the HSE and the IBTS. HSE data revealed that all 3 sites were ordering well above the recommended 12% stock level of O Negative blood.

Effective inventory management requires innovative ways to maximise use and minimise waste.

Aim

To improve blood inventory management across the three hospitals.

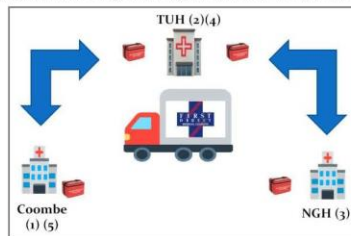
Objectives

- Reduce O Negative blood orders from the IBTS.
- Improve transfusion of O Negative units to O Negative recipients.
- Reduce overall blood outdating across the 3 hospitals.

Method

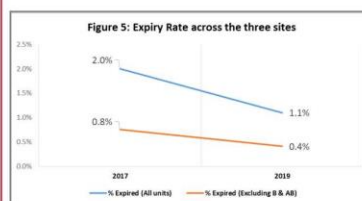
It was decided to trial a weekly blood exchange program between the 3 sites to see could the O Negative statistics be improved upon. Blood from NGH and CWIUH with 2 weeks to expiry was exchanged for blood with longer expiry dates from TUH. We included all blood groups.

Figure 2: Weekly exchange/transfer delivery route



Evaluation of Results

3. Rate of outdating of units has been halved.



Discussion & Conclusion

Initial aim was achieved. Additional benefits observed:

- Substantial cost savings due to reduced blood ordering.
- Reduction in crossover of blood groups to use expiring blood.
- Less pressure on staff if ordering additional stock during an emergency as it can be exchanged.
- A non-suitable unit in stock can be exchanged for a suitable antigen typed unit.
- Can obtain rarer groups rather than order from IBTS e.g. B-, AB+, AB- for a particular patient.
- Can switch units for alternative blood groups if large number of one particular blood group on site.
- Over-stocked short-dated units from TUH can be transferred to other sites if required.

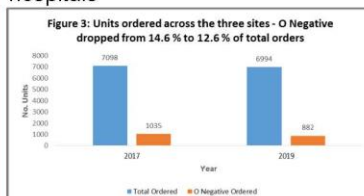
Blood exchange involves a lot of effort but the benefits far outweigh the challenges. The positive results to blood inventory management have made it a very worthwhile endeavour.

Sincere thank you to all Laboratory staff at NGH, TUH, CWIUH, Dylan Ward, Tony Finch, Marian Barry and FDM.

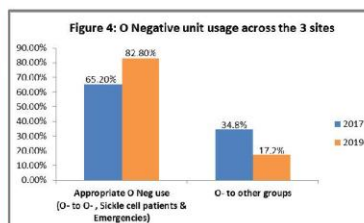


Evaluation of Results

1. Blood exchange has decreased O Negative ordering across all 3 hospitals



2. The proportion of O Negative units to O Negative recipients has improved dramatically.



ACDC (Accelerated Community Discharge Care Plan) Rock the World Again: A New Initiative for Hip Fracture Patients

ACDC (Accelerated Community Discharge Care Plan) Rock the World Again: A New Initiative for Hip Fracture Patients.

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(2)Department of Geriatric Medicine, University Hospital Limerick, Dooradoyle, Limerick, Ireland.
(3)University of Limerick School of Medicine, University of Limerick, Castletroy, Limerick, Ireland.

Background

- Hip fractures are associated with high one year mortality rates and poor functional outcomes ¹
- 3,751 reported hip fractures in Ireland (2018) ²
- University Hospital Limerick (UHL) has a well developed Orthogeriatric (OG) service ³
- National Office of Clinical Audit (NOCA) key recommendation = increase direct home discharge ²
 - Established a new initiative

Accelerated Community Discharge Care Plan (ACDC)

- Suitable patients selected for intensive inpatient care and direct home discharge
- Provided community support by nursing, physiotherapy and occupational therapy staff x 2/52
- Had to meet stringent inclusion criteria:
 - ✓ Medically fit for home discharge
 - ✓ 20 mile/32 km radius
 - ✓ No significant cognitive impairment
 - ✓ No active substance abuse
 - ✓ No communication difficulties
 - ✓ Baseline independence +/- family support
 - ✓ Potential to return to baseline
 - ✓ Motivated to engage with ACDC team

Methods

- Retrospective study comparing patients treated for a hip fracture between two timeframes:
 - December 29th 2019 – June 29th 2020
 - December 29th 2018 – June 29th 2019
- Data from March 23rd – May 11th was excluded from both years (COVID-19 pandemic).
- Data collected from the Irish Hip Fracture Database (IHFD) and the UHL electronic patient administration system.
- Three groups were compared for analysis.
 - Group 1 = enrolled to ACDC initiative
 - Group 2 = met criteria from previous year
 - Group 3 = Met criteria BUT
 - refused to partake in initiative or
 - lived outside catchment area







Results

- 141 patients were included

	Group 1	Group 2	Group 3
Number (N)	32	76	33
Median age	75	76	79
Female : Male	21:11	53:23	22:11
Discharged home	78.1% (N=25)	25% (N=19)	24.2% (N=8)
Mean LOS* (days)	9.3 ± 6.9 SD	11.39 ± 12.2 SD	12.45 ± 11.1 SD

Table 1: Comparison of primary outcomes for each group
*LOS = Length of stay

Irish Hip Fracture Standards (IHFS)

	IHFS 1: Admission to Orthopaedic ward <4hrs
	IHFS 2: Surgery within 48 hrs of admission
	IHFS 3: Minimise risk of pressure ulcers
	IHFS 4: Orthogeriatric review
	IHFS 5: Comprehensive bone health assessment
	IHFS 6: Specialist falls assessment

	Group 1	Group 2	Group 3
IHFS 1	20 (64.5%)	49 (64.5%)	21 (63.6%)
IHFS 2	22 (68.8%)	45/71 (63.4%)	22 (66.7%)
IHFS 3	1 (3.1%)	0 (0%)	0 (0%)
IHFS 4	28 (87.5%)	27 (35.5%)	32 (97%)
IHFS 5	29 (90.6%)	71 (93.4%)	33 (100%)
IHFS 6	32 (100%)	49 (64.5%)	33 (100%)

Table 2: Adherence to IHFS

Conclusion

- ACDC initiative has demonstrated promising improvements
- Increased home discharge rates and positive feedback has resulted in the provision of further funds to both extend and expand the project.

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An Initiative to Reduce Clinical Risk and Improve Quality of Care to Patients with Dysphagia in a Large Dublin Academic Teaching Hospital

An initiative to reduce clinical risk and improve quality of care to patients with dysphagia in a large Dublin Academic Teaching Hospital.

IDDSI Implementation working group, St James's Hospital .*

Introduction

This large Dublin academic, Model 4 hospital provides a comprehensive range of diagnostic and treatment services at local, regional and national level. Ten per cent of our in-patients require a texture modified diet at any given time.

It has been recognised internationally¹ that a standardised system to describe textured modified diets and thickened drinks is required, to safely manage patients with dysphagia. In 2019 the Health Service Executive (HSE) directed that the International Dysphagia Diet Standardisation Initiative (IDDSI) should be implemented by April 2020 in all HSE settings.

The previous system used to describe the textures of foods and drinks nationally and internationally, was not evidence-based and open to misinterpretation. This possibly contributed to

- Increased risk of patients receiving incorrect food /drinks as inpatients and across transitions of care with potential for increased risk aspiration/choking.
- Lack of clarity on foods and drinks recommended for patients with dysphagia, their relatives and the multidisciplinary team.

Aim was to implement the IDDSI framework.

Methods

Under the auspices of the Nutrition and Hydration Steering Committee, key stakeholders were identified and a pan-hospital interdisciplinary IDDSI Implementation Working Group was established with representatives from:

- Patients
- Speech and Language Therapy
- Clinical Nutrition and Dietetics
- Catering
- Nursing
- Medical and Surgical teams
- Centre for Learning & Development
- Quality & Safety Improvement
- Communications
- Pharmacy
- Information Management Systems
- Logistics

An analysis was undertaken to identify the actions and processes required to successfully implement IDDSI. A 'Go Live' date was agreed and key work streams and timelines established. Regular meetings were held to review and discuss the progress and problem-solve issues arising.

Specific tasks were undertaken by each discipline including reviewing, analysing, testing and validating of all food and drink items served to ensure they met the IDDSI framework standards.

A hybrid education programme was created consisting of online (HSELand), face to face tutorials and practical skill sessions to educate all relevant hospital staff.

Challenges and supports

- Tight timeframe to implement IDDSI across a large, busy healthcare organisation
- Considerable demands across disciplines in addition to normal duties without further designated resources.
- Releasing staff to facilitate/attend education and practical skill training
- National directive underpinned the need to address risk to patients with dysphagia
- The working group was supported by hospital management and all grades of staff, “working together with a shared purpose” which enabled collaborative decision making and was co-chaired by a representative from the National IDDSI Implementation Group

Benefits and outcomes

- The e-learning programme could be accessed by all staff on and off site with over 1100 staff trained to date.
- A reduction in the known incidents of harm and /or near misses related to dysphagia has been noted.
- Increased staff knowledge of texture modified foods and drinks
- On-going work to improve patient experience and patient safety in this area
- IDDSI framework successfully launched in Feb 2020.

References available on request.

**St James Hospital IDDSI implementation group members:*

Aisling Mc Hugh¹, Sandra Brady¹, Laura Brennan¹, Sharon O Hara², Eilish Duignan², Kara Fitzgerald², Debra Cross², Val O'Brien³, Julie O Grady³, Caoimhe Mulgrew⁴, Ceire Barry⁴, Gina O Donohoe⁴, Nuala Mc Ardle⁵, Bernie Doherty⁵, Brenda Killeen⁵, Jonathan Kavanagh⁵, Dr Declan Byrne⁶, George O Toole⁷, Aoife O Reilly⁸, Maeve Colleran⁸, Mary Bell⁸, Michael Mc Govern⁹, Marie Byrne¹⁰, Amy Lynch¹⁰, Ciara Boyle¹¹.

Department of Clinical Nutrition and Dietetics¹, Department of Nursing², Nurse practice development unit³, Department of Speech and Language Therapy⁴, Catering department⁵, Dept of Medical Gerontology⁶, Logistics Department⁷, Department of Pharmacy⁸, Centre for Learning and Development⁹, Department of Information Management Systems¹⁰, Communications Department¹¹.

Multidisciplinary Trauma Assessment Clinic (TAC): An Alternative Pathway of Care for Outpatient Orthopaedics in Beaumont Hospital



Title: Multidisciplinary Trauma Assessment Clinic (TAC): An alternative pathway of care for outpatient orthopaedics in Beaumont Hospital

Name: Gillian Gavaghan, Clinical Specialist Occupational Therapist; Niamh O'Reilly, Senior Physiotherapist; Ciaran Stanley, Specialist Registrar in Trauma and Orthopaedics; Marie Denham, Plaster Room Lead Nurse; James Walsh, Consultant Orthopaedic Surgeon



Introduction & Background

It is well established that outpatient clinics are overcrowded, leading to lengthy waiting times for patients, thus placing patients at greater risk of infection transmission, particularly during the COVID-19 pandemic (HSE, 2015).

Existing pathways of care in out-patient orthopaedic clinics involves 2.6 follow up appointments (HSE, 2015) which can result in repeated exposure to radiation through routine imaging, increased cost, and unnecessary clinic reviews. There may be a delay in occupational therapy (OT) and physiotherapy referrals, which leads to poorer functional outcomes (Midgley & Toeman, 2011).

Improving out-patient care focuses on streamlining services, cost saving, improving patient experience and reducing wait times (HSE, 2015; DOH, 2018). Trauma Assessment Clinics (TAC) are evidenced to be a safe and cost-effective pathway of care, associated with high levels of patient satisfaction (O'Reilly & Sheehan, 2020).

The Improvement Initiative

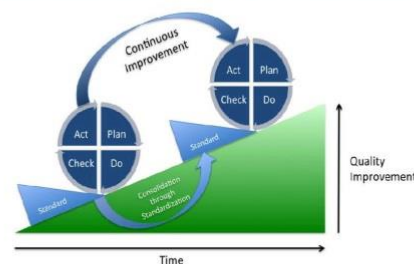
Through implementing a virtual multidisciplinary TAC the improvement initiative aimed to:

- Enhance patient outcomes
- Reduce the numbers of patients presenting to clinics
- Reduce waiting times/lists
- Reduce unnecessary steps in the patients journey through advanced practice therapy led management of appropriate patients under the clinical governance of orthopaedics. This will build on existing direct access pathways from ED to OT & Physiotherapy for specific diagnoses

Identification of key stakeholders is a key concept of quality improvement methodology along with the PDSA model of change, a well evidenced model of improvement within healthcare (HSE, 2018).



Change/Cycle



Decisions on patient care are made collaboratively by the TAC team – patients may be referred directly to OT hand therapy, physiotherapy, reviewed in clinic at the most appropriate time, or discharged from the TAC. Referral to the consultant led clinic is based on clinical need and can be made at any point in the patient journey. Imaging only occurs when there is a clinical need for same.

The number of TACs increased from one day per week to five days per week over an 8 month period based on concept proof and building 'buy-in' of stakeholders.

Challenges and Supports

- Technology has played a key role in enhancing TAC.
- Ensure no referrals were 'lost' or duplicated.
- The introduction of an electronic referral system is under development to ensure a clear plan of care for patients.
- Telehealth has been used to progress rehab of suitable patients.
- Existing resources were temporarily reconfigured to test this new way of working.
- An additional 0.5 OT & PT has since been funded temporarily to support the further development of TAC.
- Due to ongoing covid restrictions participation in usual activities has been limited – this has led to a reduction in acute orthopaedic presentations.

Benefits and Outcomes

No. of patients r/v'd in TAC	TAC → Clinic	TAC → d/c	TAC → OT	TAC → Physio
438	57%	5%	13.5%	24.4%
Therapy Led Care Savings (Savings based on figures from O'Reilly & Sheehan (2020) – €101 saving per patient from TAC versus traditional OPD review)		% of OT / Physio referrals managed without a return appointment to clinic		
Clinic slots	X-Ray Slots	Cost Savings		
444	444	€44,844		93%

TAC is a more efficient and cost-effective use of hospital resources, as outlined by this data. It enhances patient satisfaction, functional outcomes and significantly reduces the number of unnecessary steps in the patient's journey, thus minimising the patient's risk of exposure to hospital acquired infection and reducing the cost of treatment per person.

Key Learning & Future Directions

1. QI methodology supported us to understand if our change ideas were leading to an improvement in care or outcomes.
2. The importance of a robust referral pathway to minimise errors.
3. The value of collaborative multidisciplinary working to facilitate optimum patient outcomes and value-based care
4. It is anticipated that we will see a significant increase in acute orthopaedic presentations when covid restrictions are lifted and normal lifestyles recommence – this TAC pathway will redirect approximately >40% of patients away from traditional fracture clinics leading to enhanced outcomes for the patient, and savings for the organisation.

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Acknowledgements:

A thanks to the wider Occupational Therapy, Physiotherapy and Orthopaedic Departments who all supported this improvement initiative

“Red2Green” Multidisciplinary Huddle Improves Patient Flow and Inpatient Length of Stay



‘Red2Green’ multidisciplinary huddle improves patient flow and inpatient length of stay

Niamh Mathlin, Fiona Grogan, Emma Dunne, Claire Thornton, Patrice Lawler, Kay Hogan, Pamela Dempsey, Christine Gallagher, Kate Cleere, Orlaith Heslin, Niamh O’Loughlin, Lisa White, Sarah Duggan, Evelyn O’Shea, Alice Kinsella, Brian Kearney.



Background

“Red2Green” (R2G)¹ is a patient flow concept that originated in the NHS that was adapted for local use in Naas General Hospital (NGH). R2G (Fig 1.) huddles commenced in August 2020 with a focus on reducing the number of patients with extended stays, delayed discharges and optimising emergency department ‘Patient Experience Times’ in line with national targets.

Aim

To improve the inpatient journey^{2,3} with a focus on reducing i) Length of Stay (LOS) ii) Bed Days Used (BDU) iii) ED Patient Experience Times.

Methodology

A dedicated MDT QI team was established and agreed action plan was implemented for roll out of R2G across the hospital. R2G board rounds comprise of daily MDT huddles at ward whiteboards to:

- Establish/ review predicted date of discharge for each patient
- Collaboratively discuss patient care plans and cohesive discharge planning
- Proactively address patient flow issues
- Support referral to HSCPs and prioritisation to diagnostics
- Ensure timely referrals to community/rehab services for earlier dc’s
- Determine R2G status for each patient

R2G MDT White Board



Fig. 2

What is Red2Green?

Red2Green (R2G) is a visual aid used at the daily huddle to highlight patients incurring delays (Fig. 2)

A Red day is when;

- The patient no longer requires an acute hospital bed
- OR
- There are delays in the pathway of care through the acute setting

Examples of a Red day:

- Diagnostic delays
- Awaiting HSCP input
- Awaiting specialist consult
- Delayed Transfer of Care (DTOC)

A Green day is when a patient receives interventions necessary to progress their pathway of care through to discharge

A Green day is a day when all that is planned or requested progresses as scheduled, equalling a positive experience for the patient

A Green day is a day when the patient requires an acute level of care

Use of R2G combined with MDT communication and engagement in huddles is what creates value for the patient – not R2G itself

Fig. 1

Results

Comparisons for 4 month periods “Q4 2019 + Jan20” v “Q4 2020 + Jan 21”

Length of Stay (LOS)

- Avg. patient LOS across focus wards **reduced** by 3.4 days
- DTOC figures** and patients with **LOS over 30 days** has reduced by over 50% since R2G commenced, and these improvements have been sustained month on month.

Bed Days Used (BDU) reduced by 23%

Overall **ED Patient Experience Time (PET)** **reduced** on average by 4 hours

Data should be interpreted in context of COVID-19. Patient flow impacted intermittently by cohorting and other Infection Prevention and Control (IPC) requirements.

Additional Outcomes

Strengths

Benefits reported via formal feedback from MDT;

- Bed management meetings restructured with recognised efficiencies (eg reduced duplication of tasks)
- OT/Physio audits indicate their referrals are more timely and appropriate
- Weekly MDT meetings no longer required
- Improved MDT communication and teambuilding
- Assists MDT with daily planning and prioritisation

Challenges and Opportunities

- Inclusion of communication prompts at R2G huddle enables improved co-ordination of support for patient and families during COVID visiting restrictions
- Patient flow issues were challenged by COVID-19 infection control requirements. R2G supported compliance with requirements.
- Variable engagement from stakeholders overcome by active engagement

Conclusion

R2G is now an established daily practice in our hospital. Despite challenges associated with COVID-19, preliminary data demonstrates R2G has positively contributed to improving patient flow and inpatient experience time. The successes to date are attributed to frontline ownership and active engagement.

This QI initiative is on-going, with relevant audit to ascertain the impact over time, realise further improvements and inform future service planning. Active engagement with stakeholders also continues to ensure sustainability and support change management towards successfully embedding R2G throughout NGH long term.

References

- NHS Red2Green Service Improvement Campaign (2017)
- Five Fundamentals Improvement Programme for Unscheduled Care (2018)
- The 10 Step Integrated Care Programme for Older Persons Framework (2016).

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The Use of a Virtual Care Platform in Musculoskeletal Out-Patient Physiotherapy in Our Lady of Lourdes Hospital

The Use of A Virtual Care Platform in Musculoskeletal Out-Patient Physiotherapy in Our Lady of Lourdes Hospital

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Introduction

In March 2020, there was an instant loss of capacity in all healthcare settings due to covid-19. HSE Infection Control Guidelines recommended the closure of out-patient physiotherapy departments. In Our Lady of Lourdes Hospital (OLOLH), there are approximately 17,000-20,000 referrals to orthopaedic fracture clinic annually. Best practice guidelines recommend timely access to physiotherapy for acute post-fracture and post-operative patients identifying the number of physiotherapy appointments as a key predictor in both surgical and non-surgical success (NICE, 2016). Finding a method to strengthen integrated healthcare pathways to deliver quality physiotherapy in the home was imperative.

Patient Quality Improvement Initiative

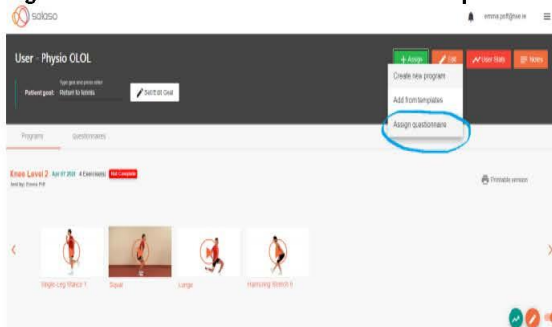
A quality improvement initiative was established to rapidly create patient care pathways using telehealth as a method of delivery. An E-health group was created of senior musculoskeletal physiotherapists, physiotherapy management and a digital health project manager. The use of a virtual care platform to deliver musculoskeletal physiotherapy was implemented and evaluated based on E-health and risk management guidelines.

Challenges & Supports

In 2017 a virtual fracture clinic was established in OLOLH, 50-60 patients per month received telephone follow-up. During covid-19, virtual referrals increased by 600% in two weeks and the patient criteria expanded. This created rapid demand for a telehealth pathway. A SWOT analysis of virtual care platform infrastructure was conducted and due to the immediacy of application the project requirements were shared with the RCSI Hospital Group COO and IT Coordinator.

The E-health group worked collaboratively with software developers to augment the virtual care platform to meet the needs of the service, such as the addition of Patient Reported Outcome Measures (PROMs).

Figure 1: Virtual Care Platform Salaso PROM Adaption:

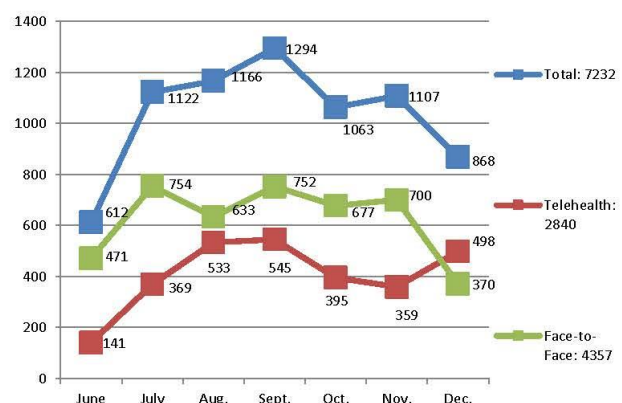


Benefits & Outcomes

The use of Salaso is estimated to have reduced physiotherapist-patient contact time by 21 minutes compared with other virtual care platforms. Out-patient physiotherapy staff in OLOLH and the HSE North-East were up-skilled on virtual care delivery based on best practice guidelines (ICSP 2020).

Despite infection control restrictions for face-to-face physiotherapy appointments during the covid-19 pandemic, OLOLH's acute musculoskeletal physiotherapy waiting list reduced following wave one. Patients were rehabilitated effectively and efficiently utilizing the platform. From June-December, 40% of musculoskeletal patient contacts were via telehealth (Figure 1). There was a 20% capacity increase of musculoskeletal physiotherapists due to the use of telehealth. Patient appointment time was reduced by an average of 42% due to eliminated travel time in addition to travel cost savings.

Figure 2: Musculoskeletal Physiotherapy Patient Contacts 2020:




A feasibility study further evaluating telehealth care delivery in OLOLH during covid-19 is currently underway in collaboration with the Royal College of Surgeons in Ireland. It is anticipated that the current model of a blended face-to-face and virtual care delivery will continue within out-patient musculoskeletal physiotherapy post covid-19.

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- Irish Society for Chartered Physiotherapists (2020). *Policy and Guidelines on e-Health for Physiotherapists in Private Practice*. Available at: file:///C:/Users/olphysio/Downloads/policy_and_guidelines_on_e-health_for_physiotherapists_in_private_practice_file_836.pdf
- National Institute for Health and Care Excellence (2016). *Fractures (non-complex): assessment and management*. Available at: <https://www.nice.org.uk/guidance/ng38/evidence/full-guideline-2358460765>


Physiotherapy Guidance for Outpatients Suspected to have Venous Thromboembolism



Working together, caring for you

Physiotherapy Guidance for Outpatients Suspected to have Venous Thromboembolism (VTE)

Authors: Jessie Ryan (Staff Physiotherapist); Colum Moloney (Senior Physiotherapist); Helen Sheehy (DVT Nurse Specialist); Patricia O Connell (Physiotherapy Manager). University Hospital Limerick.



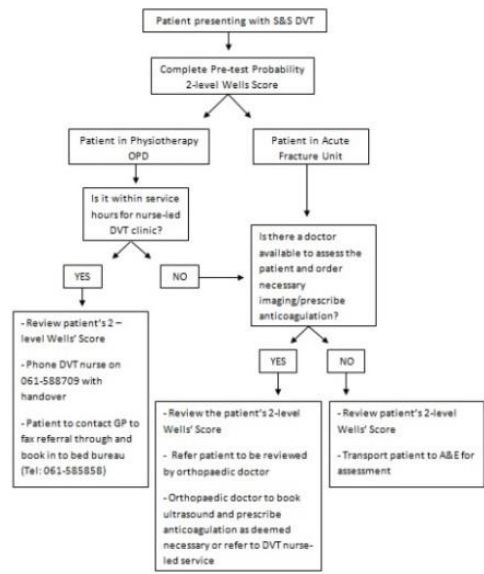
The voice of Physiotherapy in Ireland

Service description and driver for patient safety/quality improvement

Aim
To improve physiotherapists' understanding of risk factors for VTE, screening processes and referral pathway to the deep vein thrombosis (DVT) clinic.

A guideline was created for physiotherapists to screen and refer orthopaedic patients to the DVT clinic. This was informed by evidence from Thrombosis Ireland (2020), NICE (2020), Hillgrass, E (2016), Wells P *et al.*, (2000).

DVT Pathway



Challenges and Supports

- The project improved physiotherapist's understanding of their role, patient risk, screening tools and the referral process.
- There was an average increase in physiotherapist knowledge from 46% to 83% post in-service.
- Patient care was improved by using a streamlined approach and interdisciplinary communication.

The new pathway negated the need to send patients to ED or to their GP in order to access the DVT clinic, **reducing patient waiting times and associated risk.**

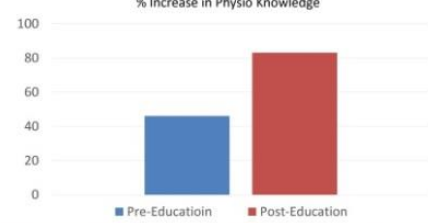
Patient safety/quality improvement initiative

The physiotherapists involved liaised with the DVT nurse specialist to create an algorithm for screening and referral. This was approved by the Consultant Haematologist and Orthopaedic Surgeon prior to being uploaded electronically.

- Education was provided to the physiotherapy outpatient staff via in-service training
- Physiotherapy knowledge was assessed before and after to ensure adequate understanding of the pathway
- A folder was created for future reference with patient information leaflets, current guideline and evidence
- The guideline will be reviewed on a yearly basis by the senior physiotherapist in outpatients and will be included in future staff induction.

Results

% Increase in Physio Knowledge



Education Stage	% Increase in Physio Knowledge
Pre-Education	46%
Post-Education	83%

Benefits and outcomes

- This project highlighted an apparent increased number of patients presenting with suspected VTE during the Covid-19 pandemic, which may warrant further research.
- Interdisciplinary communication was essential to guide new pathways for patients effectively and the use of technology assisted in the dissemination of information.
- The use of concise, readily accessible information was required for successful change.

Conclusion

- A new evidence-based physiotherapy pathway of referral was created for patients suspected to have VTE.
- Physiotherapists' knowledge of VTE risk factors and screening processes was improved following in service training

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Middelkorp S, Coppens M, van Haaps TT, et al. Incidence of venous thromboembolism in hospitalized patients with COVID-19. *J Thromb Haemost* 2020; (May).
Thrombosis Ireland. (2020). Available: <http://thrombosisireland.ie/wp-content/uploads/2019/04/A5-Am-I-at-Risk-Leaflet.pdf>. Last accessed 06/08/2020.
Hillgrass, E. (2016). Role of Physical Therapists in the Management of Individuals at Risk for or Diagnosed With Venous Thromboembolism: Evidence-Based Clinical Practice Guideline. *Physical Therapy*, 96 (2), 143-166.
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Wells P, Anderson D, Roger M *et al.* Evaluation of D-dimer in the diagnosis of suspected deep-vein thrombosis. *N Engl J Med* 2000; 349:1227-1235