AUDIT CYCLE ON VENOUS THROMBOEMBOLISM RISK ASSESSMENT IN AN INTELLECTUL DISABILITY UNIT

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INTRODUCTION

VTE is a condition in which a blood clot (thrombus) forms in a vein, most commonly in the deep veins of the legs, known as a deep vein thrombosis (DVT).

The thrombus can dislodge from its original site and travel in the blood (embolism).

If it becomes lodged in the lungs, a condition known as a pulmonary embolism (PE) arises and can cause sudden death.

Hospital acquired thrombosis is avoidable and unfortunately kills patients under our care.

From May 2015 NHS organisations in Wales are expected to report the number of VTE cases associated with hospital admissions which are possible hospital acquired thrombosis (HAT) per calendar month.

AUDIT STANDARDS

NICE Quality Standards (QS3) recommend that *All patients, on admission, receive an assessment of VTE and bleeding risk using the clinical risk assessment criteria described in the national tool.*

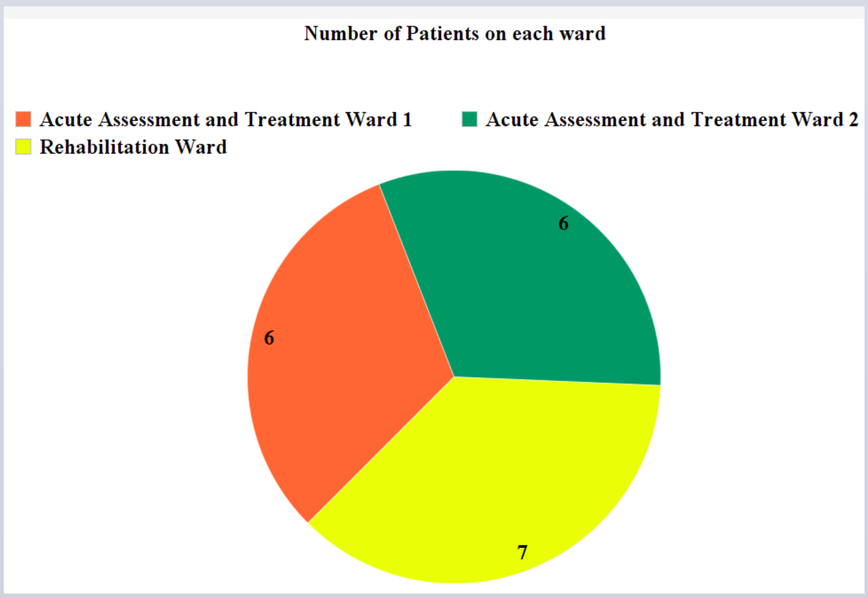
AUDIT OF CURRENT PRACTICE

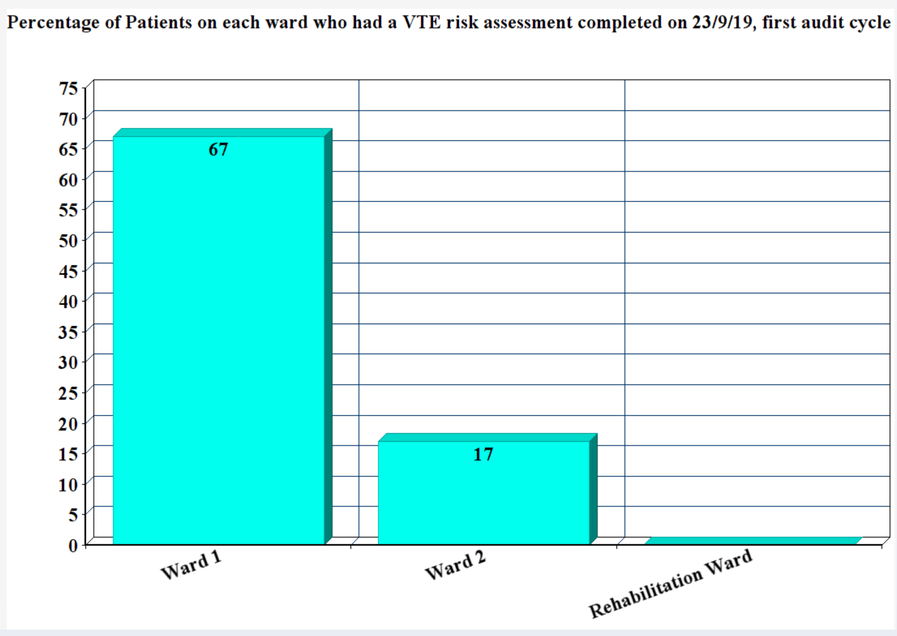
In-patient medication administration record for patients on 3 intellectual disability wards (2 acute assessment and treatment wards and 1 rehabilitation ward) were reviewed.
Data was recorded on percentage compliance on monitoring VTE Risk Assessment (RA) and the proportion who developed a HAT.

DATA COLLECTION TOOL

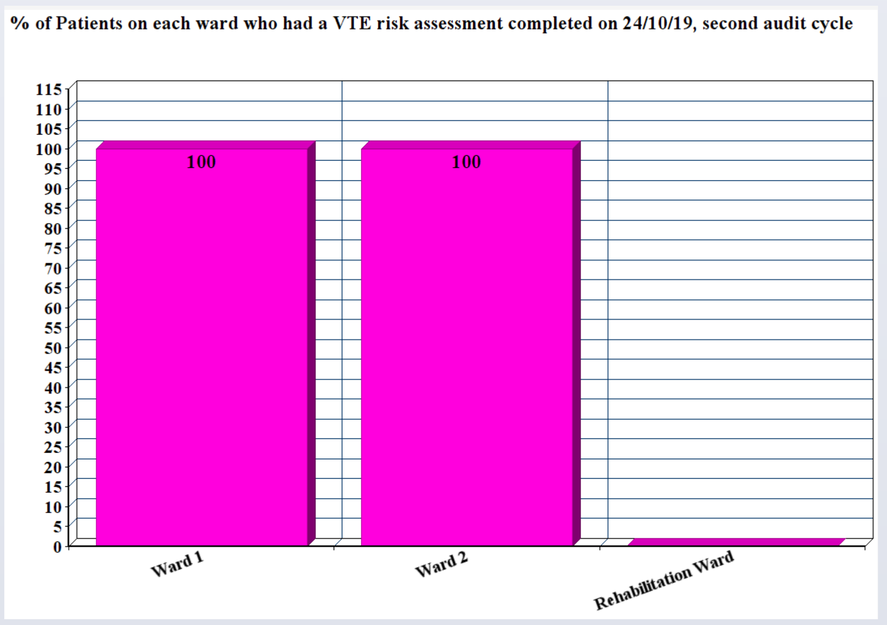
Date		ATU 1	ATU 2	RU
23/09/2019	Number of patients			
	Completed VTE RA			
	% completed VTE RA			
	% patients who developed HAT			
24/10/2019	Number of patients			
	Completed VTE RA			
	% completed VTE RA			
	% patients who developed HAT			
Key	ATU= assessment and treatment unit			
	RU= rehabilitation unit			
	HAT= hospital aquired thrombosis			

RESULTS



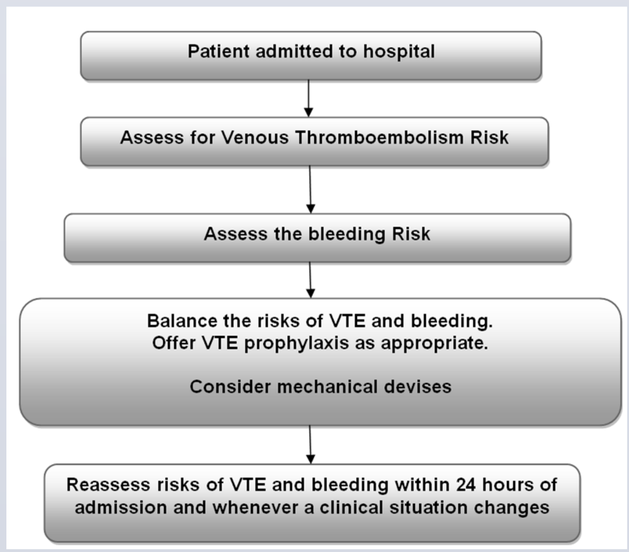


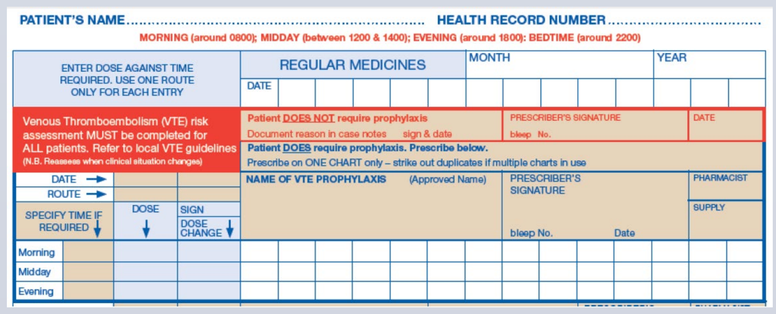
The NICE VTE policy and the HAT action log for the health board was disseminated and reviewed with the clinical teams. The audit cycle was repeated a month later.



None of the patients on the 3 wards developed a HAT during the audit cycle

IMPLEMENTING CHANGE AND SUSTAINING IMPROVEMENT





The importance of VTE risk assessment for every inpatient and the morbidity/mortality associated with HAT is discussed during peer group meetings and junior doctor inductions.

There is also further clarity needed regarding the scope of this policy relating to the nature of long term admissions into an intellectual disability rehabilitation unit and the factors which need to be considered before VTE is considered.

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Audit of the use of Hypnotic Medications in Mental Health Inpatient Units in Central Area, Betsi Cadwaladr University Health Board

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INTRODUCTION:

Insomnia is defined as a 'disturbance of normal sleep patterns commonly characterised by difficulty in initiating sleep and/or difficulty maintaining sleep'. We know that there are variations in sleep length and quality both for an individual night to night, and between individuals, however the majority of us will need between 7-9 hours per night to feel rested and refreshed.

Primary insomnia should be differentiated from insomnia with a clear cause such as substance abuse, physical and/or psychiatric comorbidities, as the management may be different. It is indicated by the WHO that 52% of people reporting a sleep problem have a well-defined mental health disorder.

Sleep disturbance can result in daytime fatigue causing distress and impairment in both social and occupational functional leading to a reduced quality of life. Hypnotic drug therapy should be kept for use only when simple non-pharmacological options such as sleep hygiene advice have been trialled and found to be ineffective, and the management of existing co-morbidities has been optimised. They should also only be used in people with insomnia who experience severe insomnia with significant interference with daily life and functioning.

The most commonly prescribed medications for insomnia are short-acting benzodiazepines and Z-drugs such as Zopiclone. In addition, up to 40% of people with insomnia will self-medicate with hypnotics available over the counter such as sedative antihistamines. One of the main issues with the use of benzodiazepines and Z-drugs is their propensity for tolerance development with prolonged use, leading to dependence and withdrawal on discontinuation. 'Rebound insomnia' is also a potentially unpleasant phenomenon for those who have managed to stop taking them. These risks can be lessened when restricting use to those with severe insomnia only, by using low doses and not continuing treatment beyond 4 weeks duration.

NICE recommend selecting the cheapest option when prescribing unless the patient experiences an adverse effect to the first-line treatment. Zopiclone is currently the cheapest in terms of acquisition costs for an adult dose (7.5mg) at £0.16.

We have noticed that inpatient psychiatric units across North Wales we do not follow a protocol when prescribing hypnotics, and therefore the advice and treatment we are giving to our patients is not always uniform and may not be evidence-based. We wanted to complete this audit to understand deficits in our prescribing practices and attempt to improve these for the benefit of our patients.

METHODS:

The first audit cycle reviewed the notes and medication charts and collected data of all inpatients in the Central area, i.e. the Ablett Psychiatric Unit and Bryn Hesketh Unit. The data was collected on 10/05/20 using the audit proforma (appendix 1). The standards followed were NICE TA77 Guidance on the use of zaleplon, zolpidem and zopiclone for the short-term management of insomnia.

RESULTS:

Of all 34 inpatients audited, 8 patients (24% of total inpatients) took a hypnotic to provide symptomatic relief of insomnia. 6 of these 8 patients (75%) used Zopiclone (first line treatment).

Standard	Compliance (%)
Sleep hygiene advice	0
Sleep chart use in those on hypnotics	38
Stop/review date	0
Tolerance and withdrawal effects	0
Lowest purchase price medication	83
Hypnotic switching	100

As can be understood from looking at the total figures, we are 0% compliant with giving (documenting) sleep hygiene advice for patients using hypnotic medications, 0% of the time we are writing a stop/review date on their treatment charts, and 0% compliant in documenting a discussion around tolerance and withdrawal effects. If something has not been documented, we have to assume that it has not happened.

Sleep chart compliance in those on hypnotic medication came out at 38%, interestingly these patients were all on Bryn Hesketh Unit, which appears to place all patients on a sleep chart regardless of whether or not they use a hypnotic agent. One other interesting point not reflected in the summary figures is that there is a patient on Dinas Female with a sleep chart who is not prescribed any hypnotics.

We have used the lowest purchase price medication (Zopiclone) in 83% of patients. Again, Bryn Hesketh is an anomaly because it is the only ward which used anything other than Zopiclone to treat insomnia.

We have been successful in avoiding switching from one hypnotic to another in 100% (all) of the patients whom are prescribed one, which complies with guidelines set out by NICE.

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References: https://www.nice.org.uk/guidance/ta77/chapter/1-Guidance

DISCUSSION:

Problem areas:
We have performed very poorly in giving out basis sleep hygiene advice to our patients. It may be that giving out this advice is time-consuming for nurses and medical staff, however there is nothing to say that written information for a patient to read would not be sufficient in the first instance. Bryn Hesketh require this information to be delivered in more 'creative' ways, due to their patients having dementia (see improvement needs).

A simple way of gaining objective evidence and monitoring insomnia is by the use of a 24 hour sleep chart. Bryn Hesketh have employed one per patient regardless of hypnotic medication prescription. Staff on Cynnydd Ward mentioned to us that they see their observations board as a 'sleep chart', in that they document during the checks when the patient is asleep and wakes up. We have considered that there may be a way to combine the two charts, thus saving staff time but ensuring that we are documenting our patients' sleep patterns.

Reasons for the choice of alternative hypnotic choice in place of Zopiclone at Bryn Hesketh are not clear, but may be related to the patient population at the unit (i.e. elderly, frail, organic mental illness). The prescriber may have been taking into account side effects or drug interactions. An alternative hypothesis would be that they have utilised the pharmacokinetics of the individual medications to their advantage. However, if prescribers wish to deviate from the gold standard, then these decisions should be justified and documented.

The mantra 'start low and go slow' is particularly important when looking a psychotropic drugs, and even more so in those populations more likely to develop side effects. Why the maximum dose of Zopiclone has been used in every patient prescribed it is a decision which is based on clinical presentation, however, we should all be aware of the need to review this on a regular basis, and stop when it is no longer required. NICE recommend no more than 4 weeks duration maximum. Unfortunately, some patients will be prescribed them on discharge and it can then be difficult for GPs to discontinue.

Similarly, discussions about tolerance and withdrawal effects were poorly documented, which corresponds to the suggestion by NICE that medical staff often fail to pass on this information to patients. It may be an important consideration for most people who are prescribed it, and you could argue that without knowing about this issue that a patient cannot make a truly informed choice.

Limitations:
NICE suggest using 3-6 months' worth of data however due to the Covid-19 outbreak and difficulties this would have caused in retrieving old volumes of notes, we used all current inpatients as a snapshot look at our prescribing of hypnotics. If we had looked retrospectively we may have been able to work out how long those patients discharged on hypnotics actually used them for.

Areas and suggestions for improvement:
The main areas where we have fallen down are giving sleep hygiene advice, use of sleep charts, giving a review/stop date, and having a conversation with patients about the risk of tolerance and withdrawal effects.

- We could either implement the use of sleep charts for every inpatient or consider designing a chart for both observations and sleep
- Formal training for staff on sleep hygiene or even CBT for insomnia
- Failing that, provision of visual aids or written information on sleep hygiene
- SALT team to provide appropriate visual aids for those with dementia experiencing insomnia
- Visual prompts on drug charts to ensure that prescribers provide a 'stop date' for hypnotics (in a similar way that antibiotics have these prompts)
- Creation of a protocol or guideline on hypnotic prescribing for BCUHB

Areas of good practice:
This audit has shown that of all inpatients, only 24% are prescribed a hypnotic which is lower than I would have expected. There is also 100% compliance with the recommendation that we do not switch from one hypnotic to another if the first one fails to treat.

CONCLUSIONS:

Sleep hygiene advice can revolutionise the sleep of a patient without the need for medication and increased pill burden. Many people would prefer to try these methods first and although may seem obvious many people do not follow basic sleep hygiene as they are not familiar with such a thing. Ensuring our patients are on a sleep chart will again reduce unnecessary prescription of psychotropic medication that comes with potential side effects and impacts on the quality of life of our patients

A stop or review date is a prompt for medical staff to ensure that we are not regularly prescribing these medications for longer than the suggested 4 weeks. Often without a review date patients are discharged on such medications and due to the tolerance and withdrawal effects they find it very difficult to come off them.

Increased compliance with the NICE guidelines in this area will ensure that our patients are receiving the gold standard care and ensure that we are not, as a Division, wasting budget that could be used elsewhere

ACTION PLAN:

- Present findings of audit to department in our weekly meeting
- Discussion with senior clinicians regarding the best method for encouraging use of the sleep chart
- Designing a protocol for BCUHB intranet in relation to MHLD prescribing of hypnotics
- Re-audit Autumn/Winter 2020

AN AUDIT OF THE MONITORING AND TREATMENT OF ADVERSE EFFECTS ASSOCIATED WITH CLOZAPINE USE AT TY LLYWELYN, MEDIUM SECURE FORENSIC UNIT, NORTH WALES

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DR. CAROLINE MULLIGAN, CONSULTANT FORENSIC PSYCHIATRIST
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INTRODUCTION

- Clozapine is an antipsychotic medication used in treatment resistant schizophrenia. It is the gold standard treatment for psychotic disorders and has a 50% response rate in previously treatment-resistant patients.
- The use of Clozapine must be closely monitored due to the frequency and severity of its own adverse effects.
- Our aim in completing this audit was to ensure that we are compliant with our Trust guidelines on side-effect monitoring, and ultimately to ensure that any patients with side effects are having these treated.

SIDE EFFECT	DESCRIPTION
Agranulocytosis	• Decline in no. of white cells, particularly neutrophils, leaving the patient at risk of being unable to mount an immune response to infection. • Patients are registered with a monitoring service and required to have regular FBC's to identify sub-clinical cases.
Constipation	• Due to its powerful anticholinergic effects, the intestinal tract can slow down leading to constipation and occasionally obstruction which can be fatal. • We should prescribe dual laxative therapy prophylactically to all Clozapine patients.
Seizures	• Clozapine can lower the seizure threshold, particularly in those with high plasma levels. • BCUHB recommend the prescription of prophylactic anticonvulsants in those with concentrations greater than 600mcg/L.
Other side effects	• Hypersalivation, Tachycardia, Myocarditis

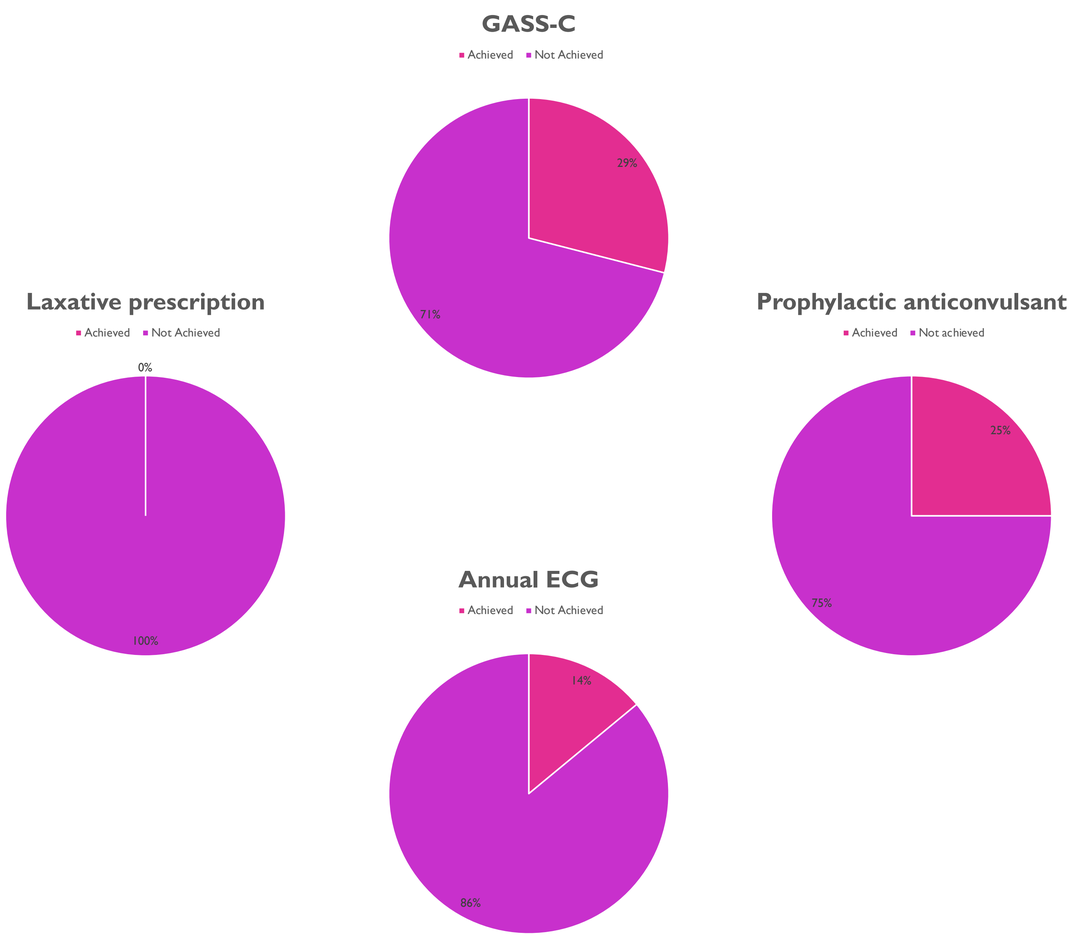
METHODS

- Audit standards: BCUHB guideline 'MM22: Guidelines for the use of Clozapine in adult patients' and NICE 'CG 178: Antipsychotic Medication'.
- All 7 patients at Ty Llywelyn taking Clozapine were included in the audit.
- Data was collected on 01/09/2020 using the audit proforma.
- A GASS-C (Clozapine side effect monitoring scale) was completed for each patient as part of the audit.

ACTION PLAN	TIMEFRAME
Update ECGs/assay levels	Complete
Laxatives for all patients on Clozapine	Complete
Presentation to department	December 2020
Re-audit	Spring 2021

RESULTS

- None (0%) of our patients were prescribed dual laxative therapy in accordance with the guidelines, and 57% were prescribed no laxatives at all.
- Only 29% of our patients had an up-to-date GASS-C filed in their notes, and from this we assume that the other patients have not had a formal discussion around side-effects for a year if not longer. Subsequently, we have completed a GASS-C for each patient and found that although 86% of patients were experiencing at least one side effect, none of them were prescribed the recommended treatment.
- Those with an assay level above 600mcg/L should be prescribed a prophylactic anticonvulsant. This only happened in 25% of those with high plasma levels.
- Finally, only one patient (14%) had had an ECG done in the last 12 months. These should be done annually.



DISCUSSION

- Clearly we have not been compliant with guidelines around Clozapine side effects and the reasons for this could be many, however we have already began to make improvements…
  - All patients now have an up-to-date ECG, laxatives prescribed, and GASS-C completed. From this, we have been able to identify the side-effects requiring intervention.
  - We have repeated the assay levels for those previously found to be high and will consider prophylactic anticonvulsants for those affected.

Metabolic Side Effects of Clozapine
South Ceredigion Community Mental Health Team

Author: Dr Harish Reddy, Consultant Psychiatrist

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol
Hywel Dda
University Health Board

Aim:
The aim of the audit was to identify patients at risk of developing Metabolic Syndrome who are on Clozapine in the South Ceredigion Community Mental Health Team.

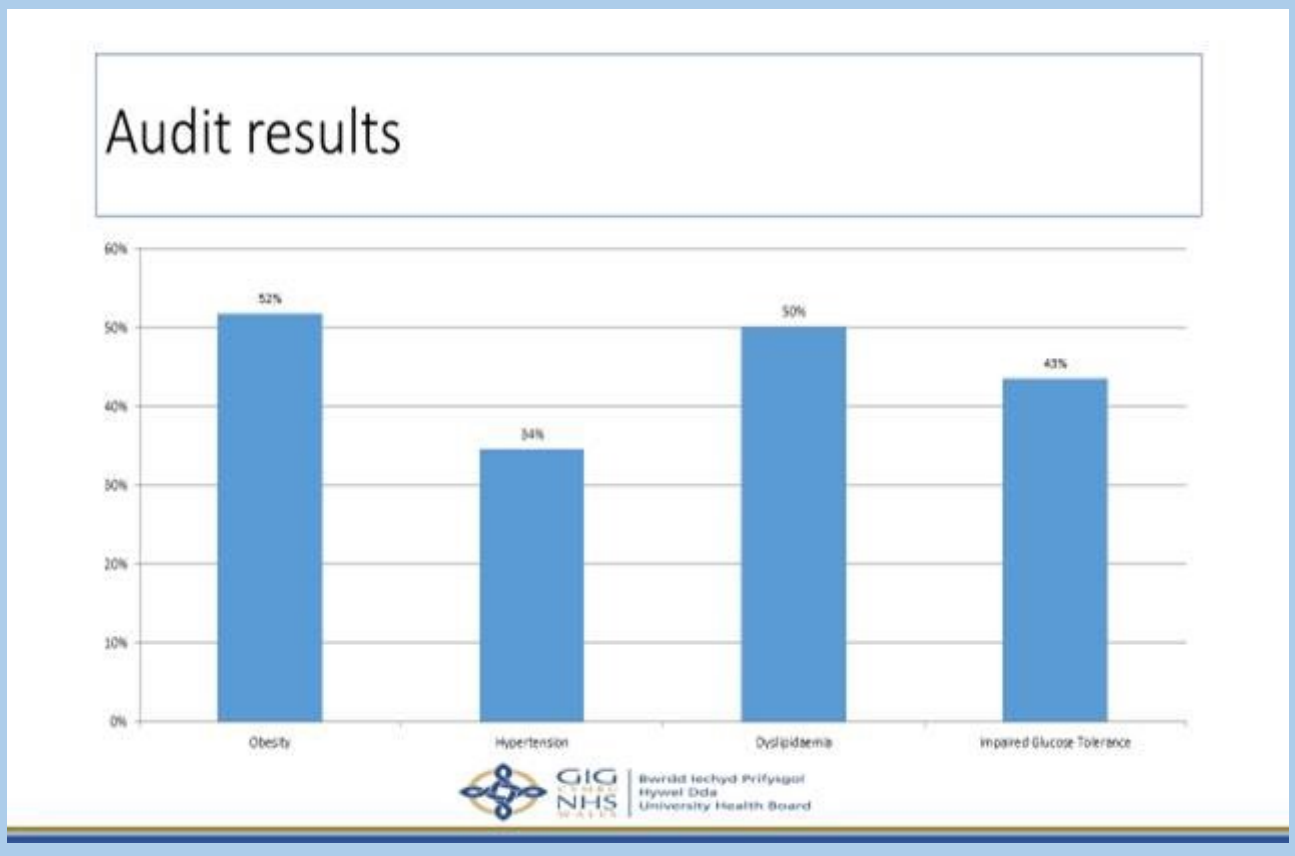
Background :
Anyone who has three of following attributes has Metabolic Syndrome. A large waist size (greater than 40 inches in men or 35 inches in women), high blood pressure (130/85 mmHg or higher), high triglycerides - a form of fat in the blood (150 mg/dL or higher), high blood sugar (a fasting level of 100 mg/dL or higher). Patients receiving Clozapine should be regularly monitored under clinical review particularly in relation to side effects of the drug and maintain minimum standards of review of both physical and clinical investigations once a year .

Audit baseline or standards :
To measure the screening of central obesity, blood pressure, serum glucose levels and lipid profile in the last year (2020).

Methods:
Data was collected from the blood results and electronic entries of patients who are on Clozapine in the South Ceredigion Community Mental Team. There were 31 patients, of which 20 were male and 11 were female. The age range was 31 years to 66 years and the average age was 46 years.

Results:
52% of the patients had obesity, 34% with Hypertension, 50% Dyslipidemia and 43% had increased glucose tolerance. 80% were only on Clozapine, 3% were on combined Amisulpride, 10% on combined on Aripiprazole, 3% on combined Quetiapine.

Implementing change:
Treatment of causes like making changes to lifestyle, weight reduction using a healthy diet and to include regular physical activity. Reduce abdominal obesity and provide nutritional intervention.



Antipsychotic prescribing for dementia patients in care homes: An audit of our practice.

Cristie Howells, Mental Health Nurse & Independent Prescriber **Dr Chakrabarti, Consultant Psychiatrist**
The Care Home Liaison Service, Cardiff & Vale UHB

Background:

NICE (2015) recognise that antipsychotic medications can be used to assist in managing the biological and psychological symptoms of dementia (BPSD), such as; agitation, aggression, severe distress and psychosis .

However, the Banerjee Report (2009) outlines the complexities of using antipsychotic medication to manage BPSD. The report indicates antipsychotic medication is overused, and that often the potential benefit of the drugs is outweighed by their adverse effects.

Methods:

The Care Home Liaison case load (800+ patients) has been used to identify patients who have a diagnosis of dementia, and are currently prescribed an antipsychotic medication.

Results:

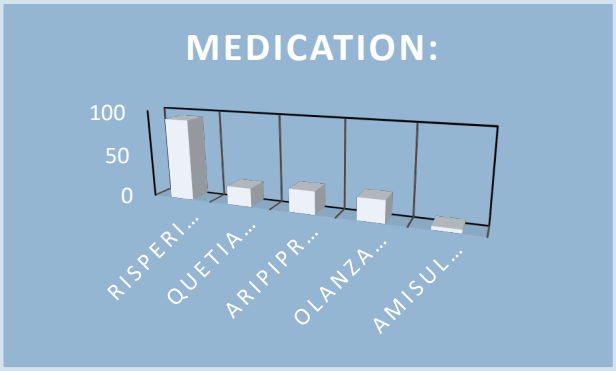
168 patients are currently being treated with antipsychotic medication, which is equivalent to 20% of the overall case load. 55% of these patients were prescribed Risperidone. Quetiapine, Aripiprazole and Olanzapine were selected in the remainder of cases almost equally, with the exception of 2% where Amisulpride was used.

These patients are across 47 care homes, resulting in an average of 3.6 patients per home. 65% of the patients who were prescribed and antipsychotic medication were female. In the majority of cases the medication was started for agitation, aggression, psychotic symptoms and distress. All medications were started on the lowest dose, then titrated up.

Moving forward:

As a team we plan on reducing the number of patient's being prescribed antipsychotic medication where possible. Our plan is;

- To produce a register of dementia patient's who are prescribed an antipsychotic medication.
- To provide regular review system for these patients, to meet NICE (2015) guidance.
- To introduce the role of a nurse prescriber to support the team in meeting these goals.

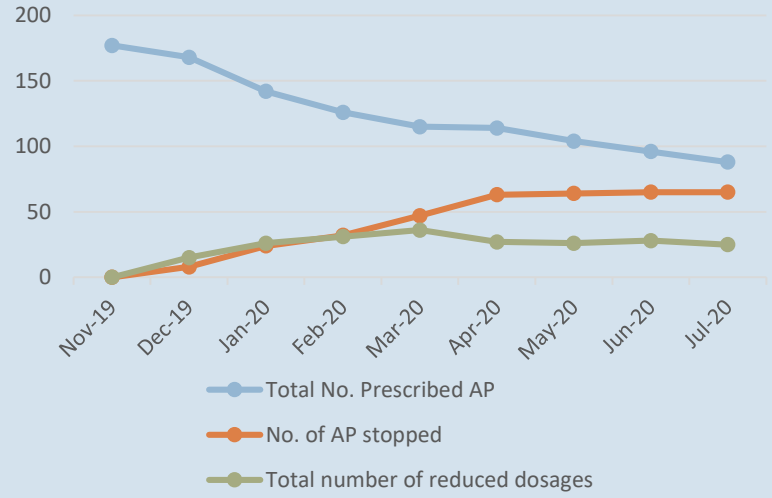


Antipsychotic prescribing for dementia patients in care homes: 8 month audit progress

Cristie Howells, Mental Health Nurse & Independent Prescriber **Dr Chakrabarti, Consultant Psychiatrist**
The Care Home Liaison Service, Cardiff & Vale UHB

Background:

NICE (2015) recognise that antipsychotic medications can be used to assist in managing the biological and psychological symptoms of dementia (BPSD), such as; agitation, aggression, severe distress and psychosis . However, the Banerjee Report (2009) outlines the complexities of using antipsychotic medication to manage BPSD. The report indicates antipsychotic medication is overused, and that often the potential benefit of the drugs is outweighed by their adverse effects.



Methods:

The Care Home Liaison Team have created a register of patients who have a diagnosis of dementia and are prescribed antipsychotics. Regular reviews have since been provided for this patient group to assess their on going medication needs.

Results:

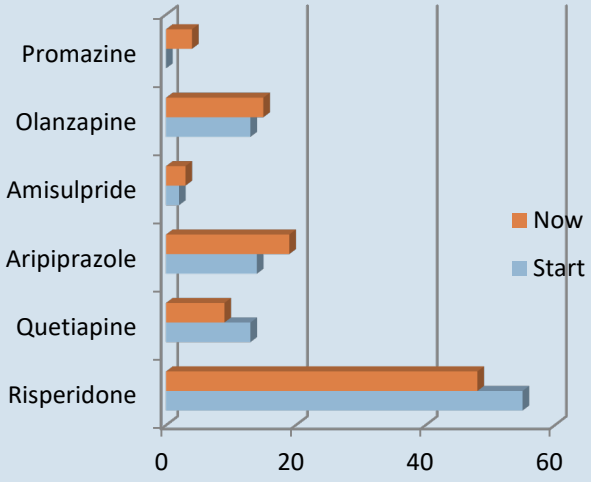
In 8 months:

- The number of patients diagnosed with a dementia and are prescribed antipsychotics have reduced by 50%.

- 10 of the care homes initially included on the register have now been removed as they no longer have patients meeting this criteria.

- There continues to be a promising number in the reduced dosages of antipsychotic medications also, with the view to these being stopped.

- Changes in prescribing percentages:



Antipsychotic prescribing for dementia patients in care homes: Phase 2 implementation

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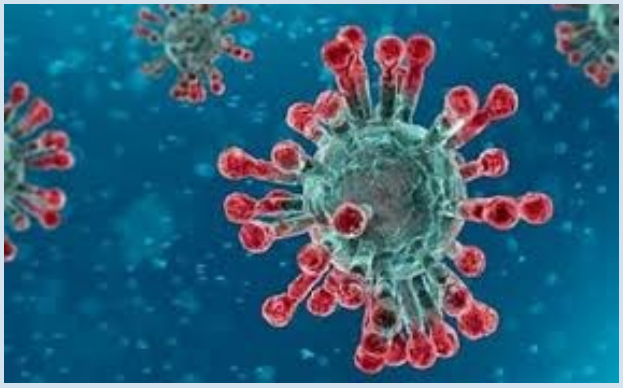
During the initial stage of this project the Care Home Liaison Team (CHLT) reduced the number of antipsychotic prescriptions for patient's with a diagnosis of dementia by 50%.

Following the initial months of the project COVID19 cases began in the UK meaning a change in the way CHLT practice- likely impacting the project outcomes/ results.



X

New Baseline Data

X

Individual drug comparisons

X

Number comparisons

X

Changes being made for phase 2 of the project:

- Increased remote clinics
- Change in prescribers (staffing)
- Rise in COVID cases and related research linking to COVID19 deliriums and patients with dementia, could this be impacting antipsychotic prescribing?
- The team would like to now include patients with duel diagnoses

Plan for phase 2:

- Collect baseline register from the CHLT caseload.
- Conduct remote clinics via phone/ virtual communication
- Review register at regular periods via medics and nurse prescribers

Quality Improvement Project: Adherence to National PPE guidance in Heddfan, Wrexham- Mental Health Unit

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INTRODUCTION:

Novel coronavirus 2019 was first described in December 2019 in Wuhan in China. Since those initial few cases, it has rapidly proliferated to a global pandemic, putting an inordinate amount of strain on healthcare systems around the world.

The Heddfan unit is an inpatient general adult/ older person's psychiatric unit based on the site of Ysbyty Wrexham Maelor in North Wales. During this pandemic various changes have been made to the provision of psychiatric services in Betsi Cadwaladr University Health Board (BCU) to combat the crisis. The Heddfan unit has been converted into Older person's mental health unit in total.

We recently had an increase in number of patients turning positive for COVID infection. We also had a majority of the staff being off sick/ unwell and Covid positive.

I believe that the technique of donning and doffing if followed as per PHE guidelines would be of help in both preventing the infection and also would be in terms of care and safety to both patients and staff.

AIMS & METHODOLOGY:

Aim:

- The aim of this audit is to assess whether healthcare staff are correctly donning and doffing PPE when within 2 metres vicinity of a patient

Objectives:

1. To ensure that the PPE guidance is strictly adhered to
2. To ensure that patient care is not compromised
3. To help us in areas of need in order to teach the staff regarding the techniques of PPE and thus patient and staff safety and care.

Standards were taken from Public Health England[2] (PHE) guidelines on Personal Protective Equipment

Method:
None of the staff were aware of this Audit and this was **entirely random observation during first cycle of Audit**

The PHE guidelines recommend washing hands with soap and water during doffing; we have accepted handwashing with alcohol gel. During the course of a normal day, we tacitly observed staff members donning and doffing PPE to assess if it was being done correctly as per the PHE guidance.

This was followed by the implementation of recommendations to improve adherence and then PDSA cycles and finally Re-Audit.

RESULTS: Part 1

1. We observed 50 members in total. Out of this 50, 37 of them washed their hands prior to donning apron. 32 of them wore the apron, mask and gloves appropriately while donning PPE, which is 64 % whilst **36% did not wear them appropriately** and about **10-14% did not wear PPE at all**.
2. In regard to doffing technique, overall utilising of hand gel was least performed in between the techniques. **A mere 7 out of 50 alone used hand gel**.
3. **Whilst 68% of them removed the gloves first, just over 50 percent of them removed the apron and mask correctly in an order as per PHE guidelines.**
4. **Final hand washing was achieved by 94% of them.**
5. **I had noticed that they were not able to recollect the PHE guidelines**. There was no availability for hand washing outside each room, hence we could use hand gel instead. There were no posters available in the clinics and outside in the communal area, which could re-inforce the staff regarding the PHE guidance.
6. **We personally felt that we need further training of the staff in Heddfan in this regard**.

PROFORMA FOR DONNING AND DOFFING OF PERSONAL PROTECTIVE EQUIPMENT ACCORDING TO PUBLIC HEALTH ENGLAND GUIDANCE

PPE DONNING (PUTTING ON PPE) TECHNIQUE ACCORDING TO PHE GUIDANCE

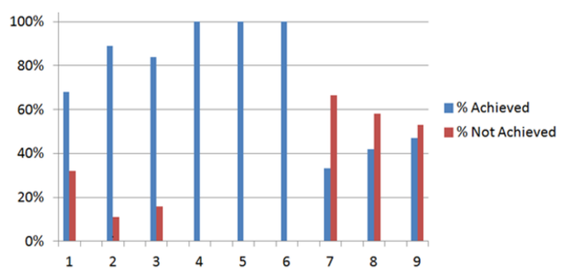
	TECHNIQUE	1.	2.	3.	4.	5.	6.	7.	8.
	STAFF CADRE								
1	Hand washing prior to donning								
2	Apron								
3	Surgical mask worn appropriately								
4	Eye Protection (if needed)								
5	Wearing Gloves last								

PPE DOFFING (TAKING OFF PPE) TECHNIQUE ACCORDING TO PHE GUIDANCE

	TECHNIQUE	1.	2.	3.	4.	5.	6.	7.	8.
1	Remove gloves first and right technique employed								
2	Wash hands/ use hand gel (First)								
3	Remove apron								
4	Eye Protection removed (if used)								
5	Wash hands/ use hand gel (Second)								
6	Remove mask								
7	Final hand washing (Final)								

The table below demonstrates levels of achieving the various standards 1-9 and compares them to each other. Blue being achieved, red representing not achieving the targets.

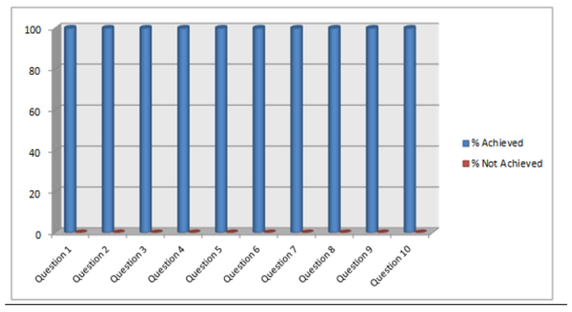
Table of standards from 1-9 (standards listed above) from old Audit (2018)



No.	Standard during donning	% Achieved	% Not Achieved
1.	Hand washing prior to donning	74	26
2.	Wearing Apron	64	36
3.	Wearing mask	64	36
4.	Wearing gloves	64	36

No.	Standard during doffing	% Achieved	% Not Achieved
1.	Removing gloves first	68	32
2.	Hand gel after removing gloves	14	86
3.	Removing Apron second	54	46
4.	Hand gel after removing apron	14	86
5.	Removing mask third	54	46
6.	Final Hand washing	94	6

Table of standards from 1-10 (standards listed above) from this Audit (2019-2020)



RESULTS: Part 2

1. Results from Part 1 led to recommendations which included PPE training of all the staff in Heddfan
2. Re-auditing and doing PDSA cycles

The training took place in Heddfan. Overall 148 individuals participated. Out of this majority were HCSW about 96 of them, 44 staff nurses and few doctors.

When asked if they were confident about PPE, prior to the training around half of them rated their knowledge at a level of 0 to 2 on a scale of 0-5. Hardly about 1/4th of them rated the score as 4 or 5 with 9 candidates of 148 agreeing their knowledge was 5/5 prior to the training. As a contrast to the confidence post training, almost 89% accepted that their confidence level was 5/5 and the remaining 11% said that the confidence level was 4/5.

With regard to awareness of Donning techniques and order of donning, almost over 40% of them did not know about donning and doffing. Likewise the knowledge of what needs to be donned first and then what comes after that was also very low: 1/4th of them did not know the steps of donning despite having seen the PHE guidelines and were donning in a wrong fashion.

Donning area

Assessment – compliance achieved against standard:

	Questionnaire	Prior to training	Post training
1.	On a scale of 1-5, how confident are you with PPE donning and doffing (4/5 and 5/5)	28 %	100%
2.	Are you aware of PHE guidance?		
3.	Are you aware of donning and doffing?	57 %	100%
4.	What is the step prior to donning?	54 %	100%
5.	What is the First step in donning?	25%	100%
6.	What is the Second step in donning?	25 %	100%
7.	What is the Third step in donning?	27 %	100%
8.	What is the PPE you doff first?	29 %	100%
9.	What is the second step in doffing?	76 %	100%
10.	What is the last PPE that you would remove?	51 %	100%
11.	What is the final step in doffing?	40 %	100%
12.	What should be done in between the doffing steps?	51 %	100%

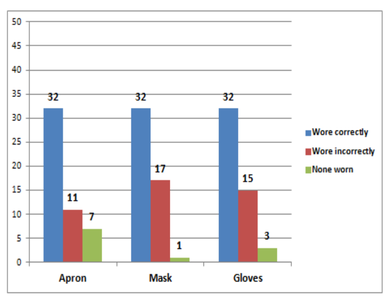
Doffing area

RESULTS: Part 3

PDSA cycle 1	PDSA cycle 2
1. During the first PDSA, we carefully observed around 8 staff donning and doffing. All 8 followed the donning technique correctly (Overall adherence was 100%) 2. With regard to doffing technique, 8/8 of them removed the PPE as per guidelines. Likewise, 6 of them used the hand gel in between the doffing whilst 2 of them forgot to use 3. The predictions regarding the adherence to protocol shows that the PDSA-1 was nearly successful.	1. Over the next 2 weeks, 8 staff were observed 2. All 8 followed the donning technique correctly (Overall adherence was 100%) 3. With regard to doffing technique, 8/8 of them removed the PPE as per guidelines. Likewise, 7 of them used the hand gel in between the doffing whilst 1 of them forgot to use 4. The predictions regarding the adherence to protocol shows that the PDSA-2 was nearly successful.

RESULTS: Part 3 : Re-Audit

AUDIT 1 VS AUDIT 2



The technique employed during Donning- AUDIT 1

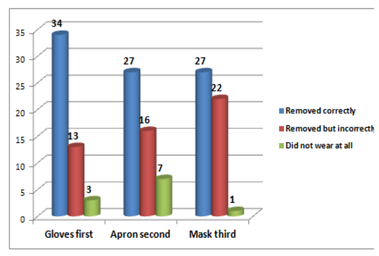
64% vs 36%

The technique employed during Donning- AUDIT 2

100% Vs 0%

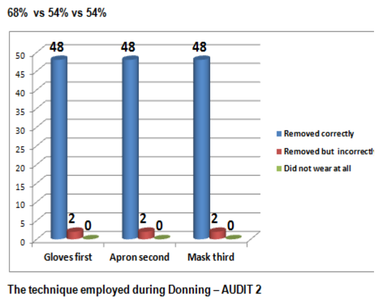
DOFFING TECHNIQUE AS PER PHE GUIDELINES

AUDIT 1 VS AUDIT 2



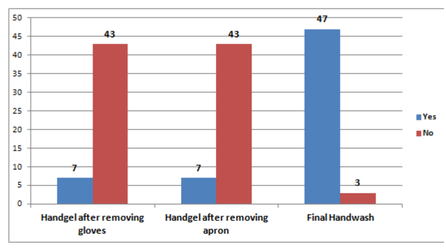
The technique employed during Doffing – AUDIT 1

68% vs 54% vs 54%



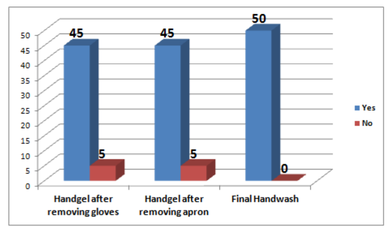
The technique employed during Donning – AUDIT 2

96% vs 4% vs 0%



The process of using handgel in between the doffing technique and after

14% vs 14% vs 94% - AUDIT 1



The process of using handgel in between the doffing technique and after

90% vs 10% vs 100% - AUDIT 2

DISCUSSION:

Overall the donning and doffing of PPE was not being followed and adhered to according to the standards from PHE during the first Audit.

In particular, during donning only 1/3rd of them donned the PPE as per guidance. While 7 of them did not wear apron at all, 3 did not wear gloves and 1 did not wear a mask.

Likewise, doffing technique was also poor, with only half of them removing apron and mask correctly. Unfortunately only 7 of the 50 people were observed to have used hand gel in between the doffing.

This could be potentially increasing the risk of spread of the corona virus between staff, patients and other wards. During a global pandemic, this represents a significant risk to the safety of both patients and the staff

The PPE training was successful and hence the PDSA cycles too. Following the re-audit, we noticed that the staff were complaint and the audit was successful

What have we achieved?

With the co-operation from the team in Heddfan, the results showed that:

- ✓ The Donning technique was followed by all the staff in Heddfan which was in line with PHE Guidelines
- ✓ The Doffing technique was followed by 96% of the staff which is nearly in line with the guidelines
- ✓ Over the last 3 months we have not had any infection spread/ cross contamination due to Corona virus.

References:

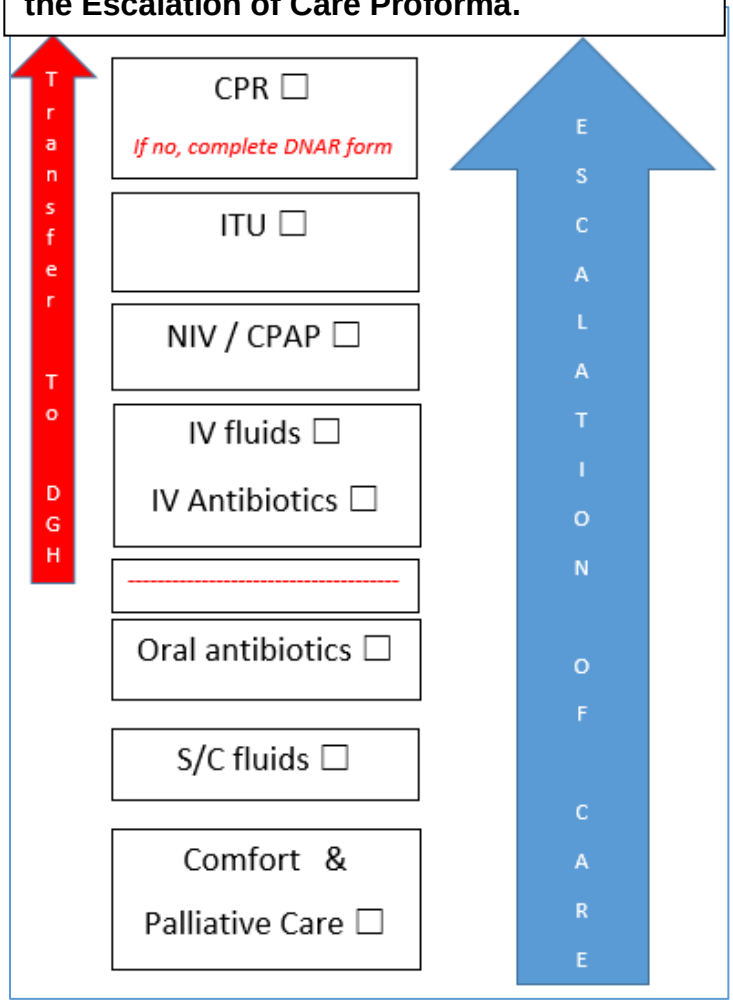
1. Gov.uk Website (last updated 13th July 2020) Corona virus (COVID-19) cases in the UK URL: https://coronavirus.data.gov.uk/(visited on 13/07/2020)
2. Gov.uk website (last updated 8th April 2020) COVID-19: Personal Protective Equipment use for non-aerosol generating procedures URL: https://www.gov.uk/government/publications/covid-19-personal-protective-equipment-use-for-non-aerosol-generating-procedures (visited on 13/07/2020)

Escalation of Care Planning on an Older Adult Inpatient Unit during the Covid-19 Pandemic.

Dr Alexander McDermott CT3, Dr Jennifer Rankin ST5. Cwm Taf Morgannwg University Health Board

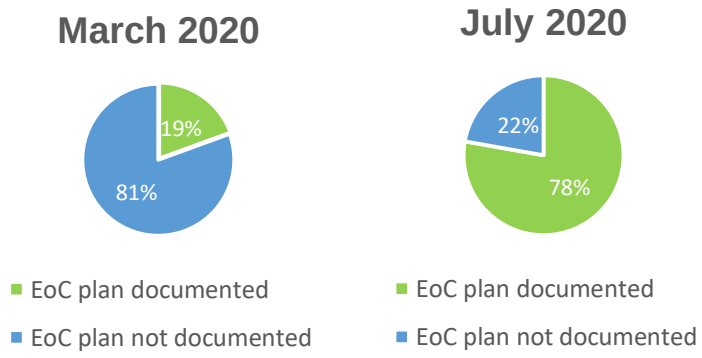
Background: Initial planning for Covid 19 pandemic involved difficult decision making for many clinicians. The Older Adult Mental Health Wards were relocated and merged at Angelton Clinic, an off-site unit separate to Princess of Wales Hospital. Therefore, it was essential that patients had clear escalation of care plans, made by senior clinicians who know the patients well, available to those working out of hours. This would aid decision making by those who may not know the patients background to feel comfortable to make timely and appropriate decisions.
GMC guidance recommends that if a patient has an advanced, progressive, incurable condition then the MDT must plan ahead to ensure safe and effective care.[1] Studies have also found that patients view escalation planning a positive component of their care[2]. This was of particular relevance during the Covid 19 Pandemic.

Graphic depicting Escalation Planning on the Escalation of Care Proforma.



Method: All inpatient notes were audited at Angelton Clinic in March 2020. Previous escalation of care forms were not being utilised appropriately. A PDSA cycle was then completed to allow the development of a new Escalation of Care proforma. Views were sought from the wider MDT. This was then completed after discussion with patients and families then placed clearly in the notes, with the DNAR form if that was appropriate.

Results: In March 2020, only 18% of patients had Escalation of Care plans in comparison to 84% of notes which had Do Not Attempt Resuscitation (DNAR) forms. Re-audit was completed 2 months later. 78% of notes had Completed Escalation of Care forms with 83% had completed DNAR forms.



Conclusion: The majority of patients had Escalation of Care forms completed by July 2020 which would have had a positive impact on patient care. Informal feedback from junior doctors working out of hours was that the forms were accessible, informative and user friendly. However, there was still not 100% compliance. To enable sustained improvement, the unit Nurse Practitioner will champion its completion. The QI project findings have also been shared with the newly rotated teams and proformas have been made available on all inpatient wards. Further qualitative work could be pursued to examine the usefulness of the proforma for staff as well as the impact of Escalation Forms on patients and carers.

1. General Medical Council - Treatment and care towards the end of life: good practice in decision making – 2010.
2. Obolensky L, Clark T, Matthew G, Mercer M A patient and relative centred evaluation of treatment escalation plans: a replacement for the do-not-resuscitate process. Journal Medical Ethics 2010; 36(9):518-20