Result. Total of 690 patients were studied. Of 690 patients 51 patients had the diagnosis of Bipolar Affective Disorder. 49 percent of them were prescribed Lithium. 48percent had their Lithium bloods checked and 60 percent had their Kidney function and thyroid functions checked according to the guidelines. There were no data available for around 7 percent of patients but their Lithium levels were indicated only in Clinical notes.

Conclusion. This audit has demonstrated that Lithium monitoring falls short of conforming to accepted standards. Data obtained by this audit have prompted an electronic alert system for patients on Lithium endorsing primary care, mental health and laboratory staff to work together to ensure supporting recommended Lithium monitoring.

Quality improvement in remote prescribing

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Aims. To evaluate attitudes in prescribing and utilising 'As Required' (referred to as PRN/Pro Re Nata) sedating medications (Benzodiazepines, Z-Drugs, Anti-psychotics, and Promethazine)

To evaulate current remote prescribing processes and improve safety and transparency

Method. Plan:

Review of remote prescribing policy. It was highlighted that current practice was not in line with NMC guidance of the time as no follow-up written instruction by a doctor was received. Concerns were also raised about the general safety of verbal communication of prescriptions out of hours. A survey was conducted to assess attitudes towards the prescription of 'PRN medication' and the role of psychological therapies as an alternative to both doctors and nurses working in ABUHB's Mental Health and Learning Disabilities division.

Do:

Survey results showed a nuanced response from both doctors and nurses but an agreement that there is a role for as required medication, especially in the context of acute mental distress, indicating safety around the process rather than elimination/reduction of PRN medication prescribing would be desired. This lead to an overhaul of the out of hours prescribing process between junior doctors and those receiving the 'verbal order' as detailed below: Phone conversation between a junior doctor and ward nurse receiving the verbal order. A digital form is then completed by the ward nurse including current regular medication, PRN medication (including times of use), physical health history, and any additional requested information such as QTc on 12 lead electrocardiogram (ECG) or current vital signs. The junior doctor may assist with obtaining the relevant information but there are clear prompts on the form, to ensure the pertinent questions regarding safe prescribing are considered by both parties. The dose and route of the medication are clearly documented by the junior doctor as well as time of prescription and the form is emailed back to the ward nurse. This process is far more transparent and much less prone to errors due to miscommunication. a. The prompts also save time ensuring the relevant information is on hand prior to discussion as opposed to searching for medication charts, ECGs, etc. b. Highlighting the importance of QTc monitoring to encourage safe prescription of anti-psychotics and Promethazine c. The prompts also highlight the importance of physical health and current vital signs with regards to safe prescribing d. The prompts are stored on a network drive alongside other verbal orders allowing for easier future auditing off remotely

off and on site These changes were highlighted via email, junior doctor forums, and induction of new doctors.

Study

A Round 2 survey was drafted to evaluate the new process and forms with an aim to ensure uptake and to identify any issues. Despite using the same channels to identify survey participants, the response rate was much lower than the Round 1 survey. See Round 2 results.

Act

With the limited feedback obtained the main issue identified was with regards to rapid tranquilisation of an aggressive patient who poses a risk to self and others. In this scenario it was deemed a risk to wait for an email form to be completed. Clarification emails were sent to relevant professionals to clarify that the rapid tranquilisation policy does allow for verbal orders with a subsequent digital order form to be completed at a later time when it is safe to do so.

Result. Round 1

Nurses n = 26
Doctors n = 27
Nursing

92% routinely request Z-Drugs and Benzodiazepines for treatment of insomnia
88% routinely request Benzodiazepines for treatment of agitation
73% routinely request Promethazine for for treatment of agitation
69% routinely request PRN Anti-Psychotics for treatment of agitation
35% would routinely request Promethazine for treatment of insomnia
19% would routinely request Haloperidol without a recent ECG (>3 months)
15% would request Benzodiazepines for treatment of psychotic symptoms
12% would request Lorazepam above British National Formulary maximum doses

As required medications dispensed per shift
54% report 0 to 3 times
23% report 4 to 6 times
23% report 6 to 10 times

Agitation was most commonly defined as
96% hostile behaviour/physical aggression
92% hostile/threatening/derogatory speech
81% visible anxiety
69% disturbed behaviour that is not threatening/derogatory towards others
31% patient reported anxiety without objective evidence

PRN medication use reviewed by doctors
Daily (8%)
Weekly (85%)
Monthly (8%)

5 most commmonly cited reasons contributing to PRN medication use
77% Ward atmosphere (ie. volatile ward environment)
69% Patient depdence (psychological/physiological)
54% Patient expectation
42% Limited expectation of benefit from psychological skill utilisation
42% Usual habit/culture of prescribing by doctors

What are your thoughts on the use of psychological interventions in an acute setting? [Open Ended, n = 22]

Reviewing the themes from the open ended responses:

Nursing staff feel positively about psychological interventions in the right setting at the right time but find challenges to

delivering them. Some staff cite the fact that a patient is admitted indicates their level of acuity requiring PRN utilization. Some responses indicate that patients may be medicating the normal human experience. Ward atmosphere, how ill the patient currently is, patient willingness, staff shortages, paperwork taking priority, lack of training in psychological therapies were all cited as challenges.

Doctors

96% routinely prescribe Benzodiazepines for treatment of agitation

92% routinely prescribe Z-drugs and Benzodiazepines for treatment of insomnia

63% routinely prescribe PRN Anti-psychotics for treatment of agitation

38% routinely prescribe Promethazine for treatment of agitation

29% routinely prescribe Promethazine for treatment of insomnia

25% routinely prescribe Benzodiazepines for treatment of psychosis

12.5% routinely prescribe Lorazepam above British National Formulary maximum doses

8% routinely prescribe Haloperidol without a recent ECG (>3 months)

Rapid Tranquilisation Policy

70% of doctors were familiar with the up to date Rapid Tranquilistion Policy

5 most commmonly cited reasons contributing to PRN medication use

19% nursing staff shortages

15% ward atmosphere (ie. volatile ward environment)

15% nursing staff expectations

11% usual habit of prescribing

11% patient expectations

What are your thoughts on the use of psychological interventions in an acute setting (n = 26)?

Reviewing the themes from the open ended responses:

Doctors are somewhat divided in their approach to psychological approaches, the majority stating or alluding to it being a first line management option but some citing staffing levels to be a deterrent. Others had a more nuanced view of it rather than a general first line treatment, requiring risk/benefit analyses before use. The minority did not know enough about psychological interventions or thought it often doesn't work.

Round 2

Nurses n = 8

Doctors n = 8

Nursing

Total responded n = 8

Acute psychiatric ward nurses n = 4

Psychiatric intensive care unit nurses n = 4

50% were unaware that physical health emergencies and rapiq tranquilisation can allow for the older process of 'verbal orders' followed by the form due to the imminent risks associated with delaying treatment to complete the form

100% (n = 8) were familiar with the digital order forms

87.5% (n = 7) were familiar with the digital order policy

With regards to form locations

87.5% (n = 7) had access to blank forms and would store them alongside paper medication charts

12.5% (n = 1) were not aware that the 'verbal order' policy was not digitised

With regards to digitised order requests:

75% (n = 6) did not report any change the frequency of requesting out of hours prescriptions

12.5% (n = 1) reported a reduction in requests

12.5% (n = 1) reported an increase in requests

75% (n = 6) reported that the digital order form puts up barriers to requesting medication out of hours

With regards to the form:

12.5% (n = 1) report that the form helps them formulate their requests

50% (n = 4) report that the form requires the appropriate amount of information

12.5% (n = 1) report that the form requires too much information

37.5% (n = 3) did not comment on the amount of information the form requires

With regards to safety:

25% (n = 2) report that the digitised system is safer

75% (n = 6) did not comment on safety

With regards to time to fill out the form:

87.5% (n = 7) report that the form is more time consuming

12.5% (n = 1) did not comment on time consumption

If given the option to revert to verbal orders:

37.5% (n = 3) would like to revert back to the old system

25% (n = 2) would like to remain on current system

37.5% (n = 3) did not comment on which system they'd prefer

Doctors

Total responded n = 8.

Consultants n = 2

Staff Grade doctors n = 1

Core Trainees in Psychiatry n = 3

Fixed term appointees n = 2

100% (n = 8) were familiar with the up to date rapid tranquilisation policy

With regards to the digital order forms

62.5% regularly see them in patient files (n = 5)

37.5% occasionally become aware of them (n = 3)

0% were unaware of the new digital order forms (n = 0)

With regards to inappropriate out of hours prescriptions

37.5% report that there was a reduction (n = 3)

50% report there being no significant change (n = 4)

12.5% report there being an increase (n = 1)

With regards to safety:

n = 6 reported the new system to be safer

n = 2 did not comment on safety

With regards to time:

n = 2 report it being more time consuming to use the digital orders

n = 6 did not comment on time consumption

With regards to returning to verbal order forms

n = 3 would like to remain on digital orders

n = 5 did not comment on returning to verbal order forms

Other:

n = 2 commented in the comment box that this change was overdue

n = 1 commented that the forms give insight into patient presentations and management

Conclusion. Doctors routinely prescribe Z-drugs and benzodiazepines, and would generally consider Haloperidol as a second line over Promethazine (while nurses had a slight preference for requesting Promethazine over Haloperidol). The role of 12 lead electro-cardiogram monitoring would require further exploration in separate audits, as both Promethazine and Haloperidol can cause QTc interval prolongation [4,5].

Doctors most commonly cited expectations by nursing staff as the main driver for PRN medication prescription. Profound differences were present with regards to rationale behind PRN medication use when comparisons between doctors and nurses self-reports were made. The majority of nurses cited ward atmosphere and patient dependence/expectation as main drivers, whereas a minority of doctors shared those views. This represents a concerning disconnect between professionals, although it can be explained by the higher proportion of time ward nurses spend on mental health wards and in direct patient care. Nursing staff, being the dispensers of medication, would also likely be the main professionals contacted for the request of PRN medication by patients.

Nuanced views were given to the role of psychological redirection. This was shared between doctors and nurses, although many cited concerns about nursing staff shortages leading to a possible overreliance on PRN medication. A minority of doctors (n = 2) would recommend psychological redirection after first line rapid tranquilisation was exhausted. The counterargument being that someone admitted onto a ward tacitly implies a high level of acuity and reduced appropriateness of psychological techniques.

Hypnotics most commonly being requested likely reflects the difficult nature to initiate and maintain sleep is an acute ward setting.

On review of the Round 2 results indicate that doctors and nurses agree that the new system is safer although more time consuming. Concerns were raised about rapid tranquilisation and immediate emergencies, although the revised policy would allow for the verbal order policy to be followed with a digital order in these circumstances. This was clarified via further communication with relevant parties.

The changes were more received more positively by doctors than nurses, with some nurses opting for the older system if possible. It was also raised that this may be putting up barriers for out of hours prescriptions, although the required information is arguably succinct and only requests vital information for safe prescribing. Further exploration of these concerns would be indicated. The Round 2 results were limited by the low sample size compared to the first round.Despite the limitations and concerns about the new system, digitising the system allows for further audits and studies to utilize much more robust methods of measuring out of hours prescriptions than self-reported measures employed in the initial rounds. Although they may not be directly compared to findings of this report, future baselines can be established and compared to in an objective manner.

Future Rounds

Proposed: To design and clearly display information on commonly requested medication by patients, empowering them to make more informed decisions on the medications they request. This could be in the form of leaflets patients could take or posters on areas where patients receive medication. One example is that Zopiclone is a very commonly requested medication on an as required basis although patients may not be as aware of the risks associated with chronic use.

Proposed: To design and clearly display information on psychologically informed techniques in patient areas such distress tolerance and sleep hygiene. This would be on mental health sites which do not currently display this information. To measure impact on PRN medication dispensation.

Proposed: Further exploration of patient perceived ward environment and measures that can be implemented to reduce anxiety/insomnia associated with inpatient admission.

Proposed: Exploration of proportion of inpatient initiated PRN medication progresses to long term use in the community (largely focused on hypnotics and benzodiazepines).

Dr QI - A quality improvement (QI) approach to designing and delivering QI training

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Aims. To develop and implement a QI training programme for trainees, Trust grade doctors and Consultants in Nottinghamshire Healthcare NHS Trust (NHFT) to enable them to deliver change in practice through acquisition of new knowledge and practical application of skills in QI projects using Model for Improvement.
Background. QI is crucial to improve patient care. Doctors are uniquely placed to input into patient safety and service delivery of healthcare. The skills required to be future clinical leaders and undertake improvement work are not innate and formal teaching and support is required.

What is DrQI?

DrQI is a trainee-led QI teaching programme developed in collaboration with Trainees improving patient safety through QI (TIPSQI) in North West deanery.
Method. A pre-implementation survey amongst doctors in NHFT in February 2019 (33 responses) suggested that 90% of doctors were interested in learning QI and about 48% preferred face-face workshops with support from the QI team.

A list of change ideas were created using a driver diagram with QI education and project support identified as key primary drivers.
PDSA cycles

Nine interactive workshops teaching key QI concepts (based on model for improvement) in NHFT, training more than 100 doctors. A workshop in Derbyshire Healthcare NHS Foundation Trust (70 doctors) and Nottingham University Hospital (20 doctors). Workshops were continually adapted based on qualitative and quantitative feedback. Different formats were tried including virtual sessions, game-based and problem-based learning approaches using small group activities.
Result. Pre-course and post-course questionnaires were used to assess change in understanding of individual components of QI methodology (SMART Aim, Driver diagram, PDSA cycles, outcome and process measures and run charts). Mean pre-course self-assessment score collated from seven QI workshops in NHFT (2019-2020) was 3.3 and mean post-course score was 7.68, showing an improvement in understanding of QI methodology.

Participants were asked to score the relevance (8.4) and quality of teaching (8.4) and the support from the QI team (7.4) on a scale of 1-10 (1 = poor and 10 = excellent). Additional free text feedback was obtained to help us improve the teaching programme.
Conclusion. Collaborative leadership trainee-led initiative to increase the QI capacity. A bottom up approach to complement the top down approach from the Trust QI team. Future steps include further collaboration and expansion of the scheme to other Trusts, Train the trainer sessions and building a network of QI champions.