

AUDIT: PRESCRIBING PRN MEDICATION

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SUMMARY

Background: PRN prescriptions enable healthcare staff to respond quickly to the urgent clinical needs of the user without having to contact the responsible clinician (RC). One problem, established amongst most institutions by NICE regarding the use of PRN, is that most of these institutions struggle to keep an updated or full record on the PRN medications. Thus, the aim of this audit was to check the record keeping of PRN medications, of two adolescent wards in St Andrews Healthcare Hospital, against the established standards.

Methods: The standards were acquired from the local trust's medicine policy and are based on good clinical practice and principles. Data were collected over a 3-month period covering all the 16 in-patients of two wards in St Andrew's Healthcare Hospital. Medical case records and drug charts were reviewed retrospectively. All PRN prescriptions were reviewed against the standards. The total percentage of compliance with the standards was analyzed using spreadsheet software.

Results: The significant results obtained were that 36% of PRN medications were not cancelled even if they had not been used for >1 month and 23% did not have clear indications of use. Majority of the other standards showed full compliance.

Recommendations: Some PRN medications were not cancelled even if not used for >1 month, most likely because it is often uncertain when a service user may require the PRN. This could be overcome by having screening tools such as START/STOP to alert the RC after a month. Also, when filling in the PRN medication chart, clear indication for use must be an obligatory section on the system, in addition to increasing awareness among staff about this common error. Finally, regular review by the RC is required through seasonal audits, especially by medical and pharmaceutical staff, which will help monitor errors as well as increase awareness about PRN prescribing practice.

Key words: PRN medication - 'as required' – psychiatry – inpatient – polypharmacy - prescription error - BNF

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Background

Medication is an important treatment option in mental health. Often service users are prescribed more than one medication. Many of these drugs have significant side effects. In addition to the regular long-term medications given, service users have the option of having “when required or as needed medication” commonly known as pro re nata (PRN) medications (Dorks, Schmiemann and Hoffman 2016). Although PRN medications have some risk associated with their use, they also have significant benefits. It is known that most hospitals struggle to keep an updated or full record on the PRN medications (Wright, Stewart and Bowers, 2012).

Fitzroy house, St Andrews Northampton is an adolescent service for young people with mental health issues.

The aim of this audit was to determine standards are being fulfilled in Fitzroy house (particularly Maple and Willow; female adolescent wards) for prescription of PRN medication.

Full details on the standards are listed below.

Standards

The standards are from the medicine policies and are based on good clinical practice and principles.

Following are the standards against which the PRN prescriptions are assessed:

- Use generic names
- Have a specified route of administration
- Each administration route to be prescribed separately
- Show the maximum dose allowed in 24 hours
- Show the minimum interval required between doses
- Indicate whether the same drug is also prescribed regularly
- Involve only one drug from any one therapeutic category of the British National Formulary (BNF) (Joint Formulary Committee. 2009)
- Be within BNF limits, unless high-dose prescribing is consented to (and where more than one route is prescribed, in total this should still be within BNF limits or cross reference)
- Have a specified review date and/or be reviewed at least once per month
- Be cancelled if not used for longer than 1 month
- Be reviewed if used on a regular basis (daily, for longer than 72 hours)
- Have clear indications for use
- Be rewritten if there are any alterations in the prescription

The agreed target is that these standards are met for all patients (Oakley et al. 2011).

Table 1. Number of p.r.n medications meeting the standards mentioned above

Patient	Standards												
	1(%)	2(%)	3(%)	4(%)	5(%)	6(%)	7(%)	8(%)	9(%)	10(%)	11(%)	12(%)	13(%)
A (n=9)	100	100	100	100	100	100	100	100	100	55	NA	88	100
B (n=3)	66	100	100	100	100	100	100	100	100	33	NA	100	100
C (n=7)	100	100	100	85	85	100	100	100	100	57	NA	100	100
D (n=6)	100	100	100	100	100	100	100	100	100	66	83	100	100
E (n=3)	100	100	100	100	100	100	100	100	100	66	NA	100	100
F (n=3)	100	100	100	100	100	100	100	100	100	33	NA	66	100
G (n=5)	100	100	100	100	100	100	100	100	100	60	80	40	100
H (n=4)	100	100	100	100	100	100	100	100	100	100	50	75	100
I (n=4)	100	100	100	100	100	100	100	100	100	0	75	75	100
J (n=7)	85	100	100	100	100	100	100	100	100	28	NA	57	100
K (n=2)	100	100	100	100	100	50	100	100	100	100	NA	100	100
L (n=6)	100	100	100	100	100	100	100	100	100	83	83	83	100
M (n=4)	100	100	100	100	100	75	100	100	100	100	75	75	100
N (n=2)	100	100	100	100	100	100	100	100	100	100	0	50	100
O (n=6)	66	100	100	100	100	100	100	100	100	66	33	66	100
P (n=4)	100	100	100	100	100	75	100	100	100	75	NA	50	100
<i>Average</i>	<i>94.81</i>	<i>100</i>	<i>100</i>	<i>99.06</i>	<i>99.06</i>	<i>93.75</i>	<i>100</i>	<i>100</i>	<i>100</i>	<i>63.87</i>	<i>59.87</i>	<i>76.56</i>	<i>100</i>

n: number of medications, NA: Not applicable)

Method

Data Collection

Data were collected over a 3-month period covering all the in-patients of Maple and Willow wards (female child and adolescent mental health service) in St Andrew's Healthcare Hospital. The total number of patients reviewed were 16.

Medical case records and drug charts were reviewed retrospectively. All PRN prescriptions were reviewed against the standards.

Data Analysis

The total percentage of compliance with the above standards was analyzed using spreadsheet software.

Results

The following table checks each of the standards against each patient's PRN prescriptions in table 1.

From the data collected the observations obtained are that:

- Every patient reviewed had PRN medications prescribed with the average coming up to 4.7 PRN medications prescribed per patient.
- 69% of the PRN medications were for physical conditions. The others included antipsychotics, anticholinergics and benzodiazepines.
- 36.13% of PRN medications have not been cancelled even if they had not been used for longer than one month (standard 10)
- 23.44% of PRN medications do not have clear indications for use (standard 12)

- 6.25% of PRN medications are prescribed regularly in addition to being added to the PRN.
- 5.19% of PRN medications are not prescribed using generic names (standard 1). These include lozenges, nutritional supplements such as fortisip and powder laxative.
- For patient C, one medication did not meet standard 4 and standard 5 resulting in the average for both being reduced by 0.9%.
- Every patient's medications are reviewed every month by the pharmacist and the RC
- All the other standards showed full compliance

Recommendations

According to the data obtained, each patient can be considered for poly-pharmacy as the average PRN medications each patient has is at a minimum of 4. Therefore, PRN medications are certainly of high prevalence and although most of the standards (2,3,6,7,8,9,11 and 13) are been met not all are been fulfilled.

Firstly, excellent prescribing practice demonstrated by the staff with regards to dosage, route of administration and following BNF regulations. This indicates the quality of prescribing practice within the team.

With some of the PRN medications, standards 10 and 12 were not fulfilled, most likely because it is often uncertain when a service user may require the PRN even after a month of not having to use them. Probably one way to overcome this problem while addressing these standards is to have screening tools such as START/STOP to alert the team after a month. This

would serve as a reminder to the team to review the need for having that PRN medication. Also, when filling in the PRN medication chart, clear indication for use must be an obligatory section on the system, in addition to increasing awareness among staff about adding indications to improve prescribing practice. This would ensure all PRN medications have this clearly stated and standard fulfilled.

A few PRN medications were not prescribed using generic names (standard 1), to resolve this issue a similar approach of having an obligatory section when filling the PRN drug chart must be on the system to ensure all medications have their generic names present on the system.

In summary, the best way to ensure all standards are met and fulfilled is by regular review by the RC and through repeated audits by medical and pharmacy staff. This will help monitor errors as well as increase awareness about PRN prescribing practice. Most of the PRN medications were associated with the physical wellbeing of the patient, an aspect of the patients' health which is very important.

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Contribution of individual authors:

Fathima Rawther: Wrote article, collection and analysis of data;

Duku Adelaide: Wrote article, data interpretation

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