

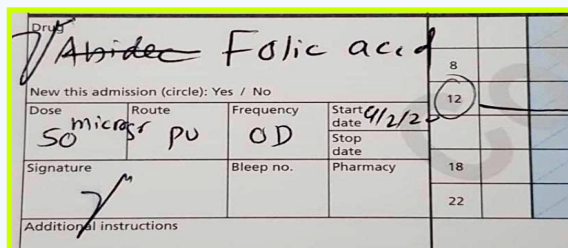
# Providing individualised feedback to improve the rates of prescription errors

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## Background:

The incidence of medication errors is higher in the paediatric population, who require dosing based on age, weight and body surface area. These errors might cause significant harm and could be prevented through improved prescribing practices.



Example of prescription error. This photo together with feedback was emailed to the prescriber.

## Aim:

To reduce the rates of paediatric prescription errors in one hospital by providing doctors with individualised feedback when an error is made.

### One minor error

- Prescriber sent photo of error & feedback

### Three minor errors or one significant error

- Prescriber required to complete RCPCH prescribing e-learning

### Most common errors

- Summarised & emailed to the whole team

## Methods:

When a pharmacist identifies a prescription error, the prescriber is emailed a photo of this error, accompanied with feedback about how it should be corrected. The most common errors are recorded and emailed to the whole team. If a doctor has made one significant or three minor errors, they are required to complete the RCPCH prescribing e-learning. Doctors are informed of this initiative during induction. To evaluate this project, drug charts were audited four times between 2018-2019. Data was collected on both chart and prescription errors. Univariate and bivariate analyses were conducted using chi-square, Fischer exact tests, Wilcoxon rank-sum test and two-sample tests of proportions.

## Results:

52 drug charts were audited in 2018 and 47 in 2019, with a mean of 3.68 prescriptions per chart. Generic drug names were used 71.43% (n=70) of the time. 100% of prescriptions were signed but 38.14% (n=37) were missing a bleep number.

There was significant improvement in use of generic drug names ( $p < 0.05$ ), dosing errors ( $p < 0.005$ ), use of correct units ( $p < 0.005$ ) and documenting the indication for antibiotics ( $p < 0.05$ ).

There were no significant changes in legibility, documentation of allergies, patient details, bleep numbers, or errors in medication frequency or route. ( $p > 0.05$ ).

## Conclusions:

The data showed improvements in the prescribing error rates following the introduction of individualised feedback. However, as some doctors left and some joined the hospital during the time-frame audited, it is not possible to definitively show that the improvements are secondary to this initiative.

To improve the project and encourage good practice, we have begun notifying doctors following excellent prescribing. We will then re-audit the data before and after feedback cycles to monitor for any reduction in prescribing errors.