Aim and Rationale

- Measurement and recording of patients’ weight is integral part of the admissions process.
- Commonly prescribed medications such as paracetamol, gentamicin and enoxaparin are all dosed based on patients’ weight. Inaccurate prescription calculations have been known to lead to increased morbidity and mortality.
- We set out to complete a closed loop audit determining how often patient weights were recorded on the drug chart or inpatient nursing assessment and how frequently medicines were dosed by weight were prescribed in the absence of an admission weight.

Methods

- 12 clinical areas across one hospital in East Anglia were used.
- Comprising 2 assessment units and 10 wards, both medical and surgical.
- The frequency of recording patients’ weight in the drug charts and inpatient nursing assessment was noted, in addition to the number of medications which should have been dosed by weight prior to prescription.
- The first loop was completed in February 2018.
- Following detailed discussion of the results with the multidisciplinary team change was implemented and the audit repeated in June 2018.

Prescribing in the absence of recorded weight

- In the first loop of the audit we looked at prescriptions which based on BNF recommendation should be prescribed by weight in 240 patients.
- Of these we divided prescriptions into STAT medications, anticoagulation and regular medications prescribed by weight.
- As shown in figure 1, we saw that fewer than 1% of patients with no recorded weight were not prescribed any medication which should be dosed by weight from the 3 classes of medications.

First loop audit - Results

- Of 240 patients included only 41.3% of drug charts across the clinical areas have a patient weight recorded on them.
- Despite this closer to 7/10 of the inpatient nursing assessment booklets have an actual weight included in their MUST score section.
- Fewer than 5% of cases where there is no documented weight is there a reason for not weighing the patient, as shown in figure 2.
- Admissions units have lower rates of completion of patient’s weights on drug charts and having weighed the patient as shown in figure 3.

Second loop audit - Results

- The number of drug charts with patient weight recorded has increased form 4/10 drug charts in the first loop audit across the clinical areas to 7/10 in the second loop audit, as shown in figure 4.
- There are less estimates of patients’ weights and more accurate documented patient weights in the nursing inpatient assessment, as shown in figure 5.
- There was no significant changes (around 5% in both loops) where there is no documented weight is there a reason for not weighing the patient.

Assessment units vs ward patients

- All clinical areas showed an increased in both drug chart and inpatient nursing assessment recording of patient weights.
- The assessment units showed the largest improvement rate increasing recording on drug charts by 114% on re-audit, compared with 66.4% increase for wards.

Conclusion

- Discussion with all members of the multidisciplinary team – nursing, pharmacy and medical, allowed a team approach to improve measurement and recording of patient weight on the prescription charts for patients.
- With this improvement, fewer dose related medication errors occurred improving patient safety on the wards and acute admissions units.
- Further audit loops are planned to measure long term outcomes.

References