Introduction

Learning from Excellence (LfE) is a positive event reporting initiative with two main aims: to capture and learn from episodes of excellent practice and to boost morale through positive feedback. As part of the multidisciplinary team, pharmacists share responsibility for ensuring good antimicrobial stewardship and are a resource for prescribers to direct best antimicrobial therapy in a population with altered pharmacokinetics. The pharmacist can help re-enforce the principles of good antimicrobial stewardship including adherence to antibiotic guidelines from antibiotic choice to length of therapy, appropriate IV or oral switches and complete documentation of antimicrobial prescribing.

Method

Within the context of the PRAISe Project, 31 prescription charts were screened weekly by the PICU research team. Positive reports were generated for excellent work related to antimicrobial stewardship during the intervention phase. The PICU research team recorded frequency of pharmacist interventions that improved prescriptions and the PICU pharmacists recorded the nature of their input e.g. dosing advice. The PICU Pharmacists interventions were split into proactive or reactive: proactive involving confirmation that prescriptions were individualised to best therapy for patients and reactive if a prescription was incorrectly written or no clarification was sought from the pharmacist during ward round.

From the appreciative inquiry two working practices for the PICU pharmacists were added to the daily role.

1) RAG rating antimicrobials prescriptions by highlighting the antibiotic prescription red, amber or green as decided by the microbiology team.

2) listing the antimicrobials prescribed for each PICU patient at the daily microbiology round, attending the round and provision of decisions of the microbiology round to be kept with the culture results on PICU.

Results

The PICU research team recorded 453 interventions to the prescriptions and the PICU pharmacists recorded a further 604 different interventions. Proactive interventions increased during the intervention phase and continued after positive reports for excellent antimicrobial stewardship stopped as shown in table 1 below.

- Total PICU pharmacist recorded interventions 138
- Proactive interventions by pharmacists 68 (49.2%)
- Total PICU research team recorded interventions 98

It was anxiously noted by the PICU pharmacists that following introduction of RAG rating of the antimicrobial prescriptions both prescribers and nursing staff would request highlighting of the antimicrobials that could be de-escalated.

During and post intervention phases prescribers would increasingly ask the PICU pharmacist for advice pre-prescribing in patients with pharmacokinetic challenges to ensure that the prescription was the best for the patient: “optimising stewardship through better pharmacokinetic pharmacodynamics”

Broad categories were given to the pharmacists interventions for analysis.

- Advice: e.g. therapeutic drug monitoring, IV to oral switch
- Antibiotic choice: e.g. guideline deviation, escalation/de-escalation needed
- Consumption: not stopping at course length, negative cultures not acted on
- Documentation/other: e.g. missing indication, missing review or stop date
- Dosing regimen: e.g. dosing for altered PK/PD, method of administration

38 interventions suggested made by the PICU pharmacists were rejected with almost two thirds (25) being reactive interventions.

Conclusions, lessons learned and further work

It appears that providing clinicians with positive feedback about their good prescribing habits encourages them to proactively seek pharmacy input to ensure best directed therapy for antimicrobials. This contributes to the overall quality of antimicrobial stewardship and patient care on the unit.

References