Does the use of Electronic Patient Records in Medicines Information improve the quality of the information and advice provided?



Authors: Helen Wilson and Elizabeth Braun Pharmacy Department, Bradford Teaching Hospitals NHS Foundation Trust, Bradford, UK.

Focal Points

• Aim: To determine whether the use of Electronic Patient Records (EPR) enhances the service provided by Medicines Information (MI)



- In approximately half of enquiries the advice given was changed as a result of reviewing EPR
- The use of EPR in MI improves the quality of the information and advice provided and can lead to further clinical intervention

Introduction

EPR was introduced to the Trust in 2017; newly providing MI with remote access to electronic drug charts and patient medical notes. The aim of this project was to determine whether access to EPR improves the quality and accuracy of information provided by MI.

Method

We designed a data collection tool and prospectively collected information on all enquiries where we accessed EPR in May 2019.

Results

44 enquiries were included. The information provided by the enquirer was factually

of enquirer information different to the information on EPR

of questions or

clinical situations clarified because of using EPR

of enquiries

we changed



different to the information on EPR in 14/44 (32%) of enquiries. As a result of using EPR: the question or clinical situation was clarified in 33/44 (75%) of enquiries; in 20/44 (45%) of enquiries we changed our advice; in 16/44 (36%) of enquiries a different or additional intervention was made.

Discussion

EPR has had a positive impact on the quality of information and advice provided by MI. Using EPR removes the need to rely solely on the enquirer to provide complete, correct and relevant information. Comprehensive questioning is not always enough.

In several cases significant harm was prevented and patient care was enhanced by making an additional unrelated intervention. These included identifying drug history discrepancies, prescribing errors of critical medicines, management of other conditions and interactions. This demonstrates the importance of access to complete patient information when undertaking work in MI, and highlights the importance of our input; we offer tailored advice for individual patients as an integrated part of their clinical care. MI pharmacists have always had the skill set to do this, but now have an additional tool.



Eczema management advice; notes indicate the patient is more concerned about this than the condition being asked about.

Co-amoxiclav suspected of deranging LFTs; notes indicate multiple recent courses of other drugs in primary care that

In other cases the difference made by using EPR was less significant, but allowed assurance that appropriate advice was provided; e.g. checking that microbiologist advice was being followed, or confirming how much opiate a patient had actually taken.

These results also have implications on the way we train pharmacy staff. We believe that using EPR is not a substitute for basic MI questioning skills, but a useful addition to our current practice.

One of the limitations was that EPR was not used for all enquiries, and individual judgement was used to decide when to use EPR. In light of the level of inaccuracy found in the patient information provided we will look to incorporate use of EPR in to our standard work processes. Further work could be done to look at the impact of EPR on all enquiries.

Can I give fluconazole to a patient with a prolonged QT?; fluconazole already prescribed and patient has low potassium. We suggested an alternative treatment and other management of QT prolongation.

could have been the cause.

FY1 under pressure and with limited knowledge of patient; we saved them time and still found the information we needed.