

# **Are Doctors effectively communicating changes in electronic drug charts with patients during inpatient stays? A Quality Improvement Study**

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## **Introduction:**

Electronic prescribing (EP) has been associated with reduced medication errors, administration errors and adverse drug events. However, there are also unintended and under recognised consequences of EP, namely the impact of EP on patient-clinician communication and education about changes in prescribed medication.

My hypothesis is that EP has facilitated more efficient and safer prescribing of medication, but that it has also reduced the engagement of patients in discussion about their medication. As prescribers in busy ward environments, we are making numerous changes to electronic drug charts on a continuous basis, oftentimes away from the patient's bedside. Inpatient admissions represent a golden opportunity to inform, educate and empower patients with regard to their prescribed medication. Given existing low levels of health literacy among patients, these cyber drug chart changes can deprive patients of an opportunity to learn more about their medication and discuss their medication. In the spirit of transparency and patient-centred healthcare models, prescribers should ensure that patients are kept updated in real-time about their progress and treatment. However, with EP, there is a potential that this important communication opportunity is being missed.

Therefore, this quality improvement project seeks to explore whether patients are aware of any changes to their medication during their inpatient stay, understanding of rationale for such changes and explore whether these changes have been communicated to patients.

Secondly, this project seeks to explore whether prescribers feel they inform patients of any changes to their drug chart and the barriers to such a conversation.

**Plan:**

This quality improvement project will take the form of a hand-written questionnaire for patients and doctors in two medical settings (acute medical unit, specialty ward – renal unit). The questionnaire will be conducted by the researcher at the bedside of low-risk covid patients with appropriate PPE precautions and social distancing.

**Inclusion criteria:**

All patients on AMU and on Champney's Ward

**Exclusion criteria:**

Patients lacking capacity and who cannot consent to participation

Patients identified by nursing staff as being too acutely unwell to complete survey

**Ethics**

- I will not access patient records for this QI project. The purpose is to assess patients' opinions and self-defined experiences rather than "fact-check". No identifiable or demographic patient details will be collected.
- Patients will be informed of the purpose of the QI project and consent will be verbal.
- Participation will be entirely voluntary with no risk to patients being involved in this study. There will be no change in clinical care as a result of participation or non-participation. However, if it is clear that patients have questions about their medication, the researcher will address these questions within his competency as an F2 doctor. If specific, clinical questions are outstanding, the researcher will flag these up to the clinical ward team. If the researcher notes any serious medication errors, these will be flagged up to the medical team.
- No formal ethics required as per NHS Health Research Authority decision tool (<http://www.hra-decisiontools.org.uk/research/>).

## **Questionnaire for Patients**

To what extent do you agree or disagree with the following statement:

1) Prior to admission, I knew what medication I was taking (for example, I could tell the Doctor/Pharmacist/Nurse the names of my medications).

- ☐ Not applicable – I was not taking any medication prior to admission
- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

2) Prior to admission, I was aware of the reason for taking all of my medication.

- ☐ Not applicable – I was not taking any medication prior to admission
- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

3) Prior to admission, I felt confident that I was managing my medication correctly.

- ☐ Not applicable – I was not taking any medication prior to admission
- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

4) During my time in hospital, I have been told of any changes that have been made to my medication or new medications that have been started.

- ☐ Not applicable – there have been no changes to my medication
- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

5) During my time in hospital, I have felt informed about the reason for changes to my prescribed medication.

- ☐ Not applicable – there have been no changes to my medication
- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree
- ☐ Strongly disagree

6) During my time in hospital, there have been changes to my medication that were not discussed with me in advance.

- ☐ Not applicable – I am not prescribed any medication during this admission
- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat disagree

- Strongly disagree

7) During my time in hospital, I have felt able to ask questions about my medication.

- Not applicable – I am not prescribed any medication during this admission
- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

8) During my time in hospital, I would like more opportunity to discuss any questions about my medication with the healthcare staff.

- Not applicable – I am not prescribed any medication during this admission
- Strongly agree
- Somewhat agree
- Neither agree nor disagree
- Somewhat disagree
- Strongly disagree

## **Questionnaire for Doctors**

- How often do you prescribe a medication away from a patient's bedside?
  - All of the time
  - Most of the time
  - About half of all times
  - Rarely
  - Never
  
- How often do you update and inform patients about changes to their medication (dose change, suspension of medication, changing drug)?
  - All of the time
  - Most of the time
  - About half of all times
  - Rarely
  - Never
  
- Are there barriers to informing and educating patients of their medication changes?