

Appendix E: Calculating opportunities for error in using CPOE for electronic prescribing

SCENARIO A

Mrs. Dorothea M Collins is a 84 year old woman who was admitted early this morning to the hospital (in W ward). She has hypertension, controlled atrial fibrillation and presented with acute pulmonary oedema. Her observations are stable, and she doesn't have any chest pain.

Following the consultant ward round this morning, you now need to chart her medications.

Please use the long hand method (not the 'Quick List') to prescribe her medications.

Paper Chart for Scenario A:

mimvastatin 80mg PO daily at 2200

metoprolol 50mg PO twice a day - 0800 and 2000

frusemide 40mg PO twice a day - 0800 and 1200

aspirin 150mg PO daily 0800

amiodarone 200mg PO three times a day – 0800, 1400 and 2000

lisinopril 5mg PO daily at 2000

NB: allergy status available on paper chart "Nil known".

Table 1: Error opportunities in Scenario A.

Prescribing error type	Critical subtask/ interaction with CPOE	Error opportunities
Wrong patient	Wrong item selected from CPOE list	1
Missed allergy	Failure to enter allergy information	1
Wrong medication	Wrong item selected from CPOE list	6
Incorrect dose	Wrong item selected from CPOE list	6
Incorrect route	Wrong item selected from CPOE dropdown list	6
Wrong formulation	Wrong selection from CPOE list	6
Incorrect administration time	Failure to change default time	10
Incorrect frequency	Wrong item selected from CPOE dropdown list	6
Medication omission	Failure to prescribe medication	6
Date error	Failure to change default date	6
Total		54

As shown in Table 1 there are 54 opportunities for error in Scenario A.