



An analysis of the transition to electronic documentation of home medication reconciliation in the emergency department

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INTRODUCTION

- Prior to this analysis, a large tertiary care hospital implemented an electronic medication reconciliation process through the Prescription Writer module of Sunrise Clinical Manager, Eclipsys
- The implementation of this system relies on accurate home medication interview and entry into Prescription Writer
- The purpose of this analysis was to evaluate the transition to electronic documentation in the emergency department (ED) and identify possible areas for improvement

OBJECTIVES

- The primary objective identified whether home medications were documented in the chart, in Prescription Writer, or not yet documented and also the relationship between work load and electronic documentation
- The secondary objectives of the analysis identified complete additions, discrepancies, and missing fields between Prescription Writer documentation performed by ED staff and a home medication list compiled by a student pharmacist

METHODS

- During Phase I and Phase II, data collection was conducted at 12:45pm on Thursday, Friday, and Monday of two consecutive weeks
- Those patients who, at the time of data collection, had a length of stay greater than 60 minutes were included
- Documentation type and the relationship between electronic documentation and work load was recorded
- Two patients with the shortest length of stay (>60 min) with electronic documentation were identified, the student pharmacist then recorded a list of home medications for both patients
- Complete additions, discrepancies, and missing fields between student pharmacist documentation and ED Staff electronic documentation were recorded

CONCLUSION

- Although a significant portion of documentation was still performed in the paper chart, the ED staff had primarily moved to electronic documentation
- There still appears to be a significant amount of missing and discrepant information in electronic documentation when compared with that of a student pharmacist
- Further investigation into the underlying causes of this missing or discrepant information may be necessary
- The increased reliance on electronic documentation for multidisciplinary decision-making correspondingly increases the need for accurate and complete electronic medication reconciliation
- This analysis highlights the opportunities to improve this electronic process and, subsequently, improve patient care

RESULTS

Method of Documentation	
Phase I	
Electronic	66%
Chart	31%
None	3%
Phase II	
Electronic	73%
Chart	13%
None	14%

Discrepancies in Pharmacy Student vs. ED Staff Documentation	
Phase I	
Field	Number
Strength	4 (1% of possible discrepancies)
Dose	10 (3% of possible discrepancies)
Dosage Unit	5 (1% of possible discrepancies)
Route	1 (0.3% of possible discrepancies)
Frequency/Instructions	13 (4% of possible discrepancies)
Phase II	
Field	Number
Strength	5 (2% of possible discrepancies)
Dose	3 (1% of possible discrepancies)
Dosage unit	3 (1% of possible discrepancies)
Route	3 (1% of possible discrepancies)
Frequency/Instructions	1 (0.4% of possible discrepancies)

Missing Fields in pharmacy student and ED Staff documentation	
Phase I	
Field	Number
Strength	18 (5% of possible missing fields)
Dose	19 (5% of possible missing fields)
Dosage Unit	50 (14% of possible missing fields)
Route	22 (6% of possible missing fields)
Frequency/Instructions	20 (5% of possible missing fields)
Phase II	
Field	Missing
Strength	5 (2% of possible missing fields)
Dose	9 (4% of possible missing fields)
Dosage unit	6 (3% of possible missing fields)
Route	8 (3% of possible missing fields)
Frequency/Instructions	2 (0.9% of possible missing fields)