Yagmur Esemen et al., Madridge J Intern Emerg Med. 2019
http://dx.doi.org/10.18689/2638-1621.a2.008

International Conference on
Emergency Medicine and Critical Care
July 25-26, 2019 Rome, Italy

Gotta Prescribe 'em All: Quality Imprrovement Project on Medication Omissions in the Emergency Department

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Medication errors in the hospital are preventable causes of patient harm and mortality. A recent report(1) analyzing 36 studies revealed that 237 million medication errors occur in the NHS in England every year. Research shows medication errors are most likely to happen in emergency departments and when patients are transferred from one level of care to another (2). A retrospective 10 year study identified omission of medications to be the commonest cause of medication administration errors in acute healthcare setting (3). Failing to prescribe important medications at hospital admission can lead to medication omissions during a patient's hospital stay. This is why, it is important to go through medication reconciliation process and prescribe patients' regular medications early on. This is especially true for essential medications such as anticoagulants, antiparkinsonian medications and insulin.

This project investigated the use of inpatient drug chart in the ED observation unit, a small, short-stay ward within the department. Initial retrospective case note analysis showed that only 36% of patients admitted to the observation unit had undergone medication reconciliation and had the inpatient medication chart filled during admission. This caused omission of important medications and complicated patients' discharges. In several cases, patients developed erratic blood sugar levels due to missing their insulin and needed longer admissions for correction. In one case, an elderly patient developed delirium after missing her regular eye drops.

In order to identify the main issues for the poor prescribing practice and opportunities for improvement, a survey was done amongst the ED doctors. The main issue identified was that ED doctors did not know how to access accurate medication history for confused and unwell patients. In order to address the issue, three main PDSA cycles were completed: 1-Five-minute verbal teaching during morning ward rounds,2-Placing information leaflets around the department and 3-Presentation at the departmental induction for new doctors. ED doctors were taught to access the Summary Care Record as a tool of obtaining accurate medication histories. Prescription rates improved with each intervention from 36% to 79%. The improvements were found to be sustainable over a longer period.