Contributory factors to patient safety incidents when patients are discharged from hospital with medicines

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Background

Patients experience adverse drug events after leaving hospital [1]

They can be disoriented and anxious after care is transferred [2]

Incongruence between discharge medicines lists and medicines use a few days after discharge. [3]

Non-adherence after discharge [4]

Patients report poor preparation to use medicines [5]
Aim:
• To determine the potential vulnerabilities in the system of discharging patients with medicines.

Objectives:
• To explore the context of staff-patient interactions about cardiology medicines prescribed and provided to patients at discharge.
• To explore the contributory factors to possible preventable harm to patients when they are given their medicines at discharge.
Observations in two cardiology wards (36 days) Nov 2013-June 2014

Continued until theoretical saturation and no new phenomena were observed

Observation schedule and field notes

Analysis using the Yorkshire Contributory Factors Framework (YCFF) [6]
Results

The YCFF allowed categorisation of possible contributory factors to potential errors.

Defences against these contributory factors – as they were observed and interpreted – were also identified.
Active failures

Skill-based mistakes

- Not checking the patient’s locker for medicines before beginning a discharge

Execution failures (slips and lapses)

- Selecting written information about the wrong patient and speaking to that patient about the wrong medicines
- And forgetting (a lapse) to give patients medicines – for example, a patient left the ward without being given a GTN spray

Violations (against policy)

- Agreeing to patients leaving without waiting for medicines
- Not counselling patients about medicines before they left
Individual factors

Variations in practice

- Levels of information and soliciting questions
- Communication styles
- Familiarising with notes
- Taking medicines out of the bag
- Anticipating problems
- Perceptions of importance of task
Team factors

- Waiting for TTOs, and pharmacy checks
- Availability of staff for query resolution
  - Delaying discharge compounding other factors
- Pharmacist co-ordinating process (a defence)

Patient factors

- Levels of concentration and perceived interest
- Frustration
- Ability to keep up and make notes

Task characteristics

- Multi-disciplinary and cross-departmental
- Internal transfer to a discharge lounge increasing risk
Physical environment
- Semi-public domain
- Nature of the discharge lounge

Scheduling and bed management
- Pressure for beds
- Transfer to discharge lounge
- Interruptions

Training
- Non-specialist staff in the discharge lounge (struggling to pronounce medicines)

Policy
- Lacks detail on implementation
“The discharge happened quickly. Only one new medicine (isosorbide mononitrate) and slightly more time was taken to discuss this one. The nurse took the leaflet out of the box to discuss the side effects of this medicine with the patient. The patient was standing up, dressed and ready to go home. The nurse was also standing up and tipped the medicines onto the bed. The nurse was about to go on a break. The patient asked for information about exercise but was given a leaflet about diet. The patient had been worried about doing exercise because he enjoys the gym and walking.”

(Field notes: Site 2, Ward, 7/1/14)
Summary

Implications

• Safety could be improved by taking into account the individual capabilities of patients
• Physical environment of ward and individual variation in practice at ward level
• Limited guidance about what patients should be told about their medicines when their care is transferred
• Some patients went on to experience PSIs

Methodological limitations

• Using YCFF and observations presents challenges
• Difficult to know the causes of errors if upstream
• Cannot know cognitive processes
Issues for discussion

• Improving the method
  – Use of framework
  – Choice of data collection

• Staff training on discharge and associated risks


