HSIB

HEALTHCARE SAFETY INVESTIGATION BRANCH

WWW.HSIB.ORG.UK

INTERIM BULLETIN

ELECTRONIC PRESCRIBING AND MEDICINES ADMINISTRATION SYSTEMS AND SAFE DISCHARGE

19 DECEMBER 2018

PUBLICATION REF: I2018/018

This interim bulletin contains facts which have been determined up to the time of issue. It is published to inform the NHS and the public of the general circumstances of events and incidents and should be regarded as tentative and subject to alteration and correction if additional evidence becomes available.

HSIB

HEALTHCARE SAFETY INVESTIGATION BRANCH

NOTIFICATION OF EVENT AND DECISION TO INVESTIGATE

The Healthcare Safety Investigation Branch (HSIB) identified an issue within the management of high risk medication in primary and secondary care. The key areas of focus were electronic prescribing and medicines administration (EPMA) systems; the primary/secondary care interface; and the potential impact on services at weekends. Following a detailed scoping investigation, the Chief Investigator authorised a full investigation as it met the following criteria:

Outcome Impact – What impact has a safety issue had, or is having, on people and services across the healthcare system?

The reference incident has highlighted some of the risks associated with prescribing for patients in hospital and on discharge, particularly when patients are taking unusual medication regimens at home prior to admission. Such risks are exacerbated when patients are moved between wards and departments. In addition, there may be unavailability of support service provision seven days a week (NHSE, 2017)[1] to perform tasks such as medicines reconciliation.

In the two years from April 2017, 234,460 medication incidents were reported on the National Reporting and Learning System, 23% of which related to prescribing. One per cent of all medication incidents led to moderate harm, severe harm or death.

Systemic Risk - How widespread and how common a safety issue is this across the healthcare system?

Medicines are prescribed across primary and secondary care using a mixture of electronic and paper systems, but with an increasing reliance on electronic systems.

[1] NHS England (2017) Seven Day Services Clinical Standards. https://www.england.nhs.uk/publication/seven-day-services-clinical-standards/

HSIB
HEALTHCARE SAFETY INVESTIGATION BRANCH

The widespread use of anticoagulants to treat atrial fibrillation (AF)[2] is supported by the National Institute for Healthand Care Excellence (NICE) guideline CG180 in 2014[3].

Learning Potential – What is the potential for an HSIB investigation to lead to positive changes and improvements to patient safety across the healthcare system?
There are opportunities for HSIB to share learning on a national level to positively influence processes and practices to reduce prescribing and administrative errors when using EPMA systems, in the context of improving the safe discharge of patients from secondary to primary care.

HISTORY OF THE EVENT

A 75 year-old woman was admitted to hospital early evening on a Friday in March 2018 with a history of dysphagia (difficulty swallowing), vomiting and worsening shortness of breath. The patient had been diagnosed with incurable lung and kidney cancer in August 2017. In September 2017, she was commenced on anticoagulant medication by injection (dalteparin) for atrial fibrillation, which had been diagnosed several years earlier.

On the Sunday that same weekend in March 2018, she was discharged from hospital in the afternoon. The dalteparin was stopped on the Trust's EPMA system and an oral anticoagulation medicine (apixaban) started; this was to avoid the need for a daily injection. However, the patient continued to take both dalteparin and apixaban at home, as she wasn't aware that she needed to stop the dalteparin.

[2] Fitzpatrick T et al. (2017). Cancer, Atrial Fibrillation and Stroke. Thrombosis Research 2017, 155; 101-105 https://www.sciencedirect.com/science/article/pii/S0049384817303213

[4] NICE (2014) Atrial fibrillation: management. Accessed via: https://www.nice.org.uk/guidance/cg180

HSIB
HEALTHCARE SAFETY INVESTIGATION BRANCH

Following discharge, the patient had a further four interactions with health care professionals from primary and secondary care, however it was not recognised that she was administering two anticoagulation medications. The error was detected 15 days after discharge by a hospice nurse who visited the patient at home. The GP visited on the same day and stopped both anticoagulation medications. The patient declined admission to hospital to treat a possible gastrointestinal bleed with a blood transfusion.

In April 2018, the patient was admitted to a hospice due to a deterioration in her condition and died the following day.

NATIONAL CONTEXT

1 A national Medication Safety Programme has been initiated in response to the World Health Organisation (WHO) 3rd Global Patient Safety Challenge: 'Medication Without Harm'. The target of the WHO challenge is to reduce avoidable medicated-related harm by 50% in five years.

2 The Five Year Forward View[4] plans and the Global Digital Exemplar[5] roll out have driven the implementation of electronic patient records and prescribing systems. In England, the procurement and variation in systems elevates risk due to interoperability issues and the lack of standardisation.

[4] NHS England (2014) Five Year Forward View. https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf

[5] NHS England (2014) Global Digital Exemplars. https://www.england.nhs.uk/digitaltechnology/connecteddigitalsystems/exemplars/

HSIB
HEALTHCARE SAFETY INVESTIGATION BRANCH

3 The requirement for seven day medical services (NHSE 2017)[6] means that support services (including pharmacy) are required: "Support services, both in the hospital and in primary, community and mental health settings must be available seven days a week to ensure that the next steps in the patient's care pathway, as determined by the daily consultant-led review, can be taken".

IDENTIFIED SAFETY ISSUES

The HSIB investigation will explore the risks around the discharge process when using EPMA systems, in the context of the availability of support services in trusts at weekends.

The HSIB has analysed the reference incident, applying a human factors-based approach to examine the systemic issues which contributed to the sequence of events. From this, it became evident that the focus of the national investigation should be EPMA systems and safe discharge rather than anticoagulation medications specifically.

The following areas have been identified for detailed investigation:

1 Impact of EPMA systems on the safe discharge of patients, capturing the primary and secondary care interface and communication with the patient/family.

2 Influence of weekend working on patient safety in the context of the availability of support services and specialist input.

[6] NHS England (2017) Seven Day Services Clinical Standards. https://www.england.nhs.uk/publication/seven-day-services-clinical-standards/

HSIB

HEALTHCARE SAFETY
INVESTIGATION BRANCH

NEXT STEPS

The HSIB investigation will consider safety initiatives including shared electronic systems across primary care and secondary care. This will be reviewed in the context of national standards for weekend working, identifying which support services operate on a seven day working system; and how medical care is organised at weekends.

The HSIB are engaging with subject matter experts to guide and advise the investigation team, and with key stakeholders.

The HSIB investigation will continue to explore the identified safety issues and welcomes further information that may be relevant, regardless of source.

HSIB will report any significant developments as the investigation progresses.