

19 December 2017

By email

Dear

Request under the Freedom of Information Act 2000 (the "FOI Act")

I refer to your email of **24th November 2017** in which you requested information under the FOI Act from NHS Improvement. Since 1 April 2016, the Patient Safety functions under section 13R of the NHS Act 2006 have been exercised by the NHS Trust Development Authority, as part of the integrated organisation known as NHS Improvement.

Your request

You made the following request:

"Please could you answer the following questions for the 2016/17 financial year.

1. How many reports of medication errors did you receive where the degree of harm was recorded as death? Please provide a breakdown of where these incidents happened, (eg acute care, mental health etc).

2. For each incident please provide a summary showing the name and quantity of the drug they should have received and the name and quantity of the drug they did receive. I also require a medication incident category for each incident (eg: wrong dose, monitoring, omitted and delayed medicine). Please also provide me with a brief summary of the incident to a similar level of detail to that provided in the previous Fol response (T1520). Please note that I do not require the name of the venue, staff or patient."

Decision

NHS Improvement holds the information that you have requested and has decided to release all of the information that it holds.

It is important to note that we can only provide the incident descriptions as they are recorded where these were relevant to your request, therefore some of the information you requested such as the name and quantity of the drug they should have received and the name and quantity of the drug they did receive will not always be included. The incident descriptions

Wellington House 133-155 Waterloo Road London SE1 8UG

T: 020 3747 0000 E: nhsi.enquiries@nhs.net W: improvement.nhs.uk provided are verbatim but have been redacted to remove personal data further to the exemption in section 40 of the FOI Act. Redactions are indicated by square brackets.

Section 40 - personal information

NHS Improvement considers that some information is exempt from disclosure under section 40(2) of the FOI Act on the grounds that it amounts to personal data and the first condition under section 40(3)(a)(i) is satisfied, namely, that disclosure would amount to a breach of the first data protection principle (personal data should be processed fairly and lawfully) as the individuals concerned would have a reasonable expectation that their information would not be disclosed into the public domain. Section 40 is an absolute exemption and consideration of the public interest test in disclosure is not required.

The information we hold is from the National Reporting and Learning System (NRLS). By way of background, some information about the NRLS may be helpful. The primary purpose of the NRLS is to enable learning from patient safety incidents occurring in the NHS. The NRLS was established in late 2003 as a largely voluntary scheme for reporting patient safety incidents, and therefore it does not provide the definitive number of patient safety incidents occurring in the NHS.

All NHS organisations in England and Wales have been able to report to the system since 2005. In April 2010, it became mandatory for NHS organisations to report all patient safety incidents which result in severe harm or death. All patient safety incident reports submitted to the NRLS categorised as resulting in severe harm or death are individually reviewed by clinicians to make sure that we learn as much as we can from these incidents, and, if appropriate, take action at a national level.

The NRLS is a dynamic reporting system, and the number of incidents reported as occurring at any point in time may increase as more incidents are reported. Experience in other industries has shown that as an organisation's reporting culture matures, staff become more likely to report incidents. Therefore, an increase in incident reporting should not be taken as an indication of worsening of patient safety, but rather as an increasing level of awareness of safety issues amongst healthcare professionals and a more open and transparent culture across the organisation.

In total 72 patient safety incidents were reported to the NRLS, where the incident was categorised as 'Medication incidents' and the outcome was reported as death by the original reporter; and occurring between 1st April 2016 and 31st March 2017 (based on the date the incident was reported to have occurred) and exported to the NRLS on or before 5th December 2017.

Table1. Breakdown of the 72 incidents categorised as 'Medication incidents' where outcome was reported as death.

Care Setting of Occurrence	FY 2016/17
Acute / general hospital	53

Ambulance service	3
Community nursing, medical and therapy service (incl. community hospital)	5
General practice	10
Mental health service	1
Total	72

In response to part 2 of your request, **Annex 1** at the end of this response provides a summary of the 72 patient safety incidents reported as occurring between 1st April 2016 and 31st March 2017 where the incident was categorised as 'Medication incidents' and the outcome was reported as death by the original reporter. Please note that the NRLS collects medication incidents, which may be errors or may be Adverse Drug Reactions – that is, appear to relate to a known side effect of a drug and not medication error.

Review rights

If you consider that your request for information has not been properly handled or if you are otherwise dissatisfied with the outcome of your request, you can try to resolve this informally with the person who dealt with your request. If you remain dissatisfied, you may seek an internal review within NHS Improvement of the issue or the decision. A senior member of NHS Improvement's staff, who has not previously been involved with your request, will undertake that review.

If you are dissatisfied with the outcome of any internal review, you may complain to the Information Commissioner for a decision on whether your request for information has been dealt with in accordance with the FOI Act.

A request for an internal review should be submitted in writing to FOI Request Reviews, NHS Improvement, Wellington House, 133-155 Waterloo Road, London SE1 8UG or by email to <u>nhsi.foi@nhs.net</u>.

Publication

Please note that this letter [and the attached information] will shortly be published on our website. This is because information disclosed in accordance with the FOI Act is disclosed to the public at large. We will, of course, remove your personal information (e.g. your name and contact details) from the version of the letter published on our website to protect your personal information from general disclosure.

Yours sincerely,

NHS Improvement

Annex 1:

IN07 Description of what happened	MD02 Med Error Category	MD05 Approved Name (Drug 1)	MD06 Proprietary Name (Drug 1)	MD30 Approved Name (Drug 2)	MD31 Proprietary Name (Drug 2)
Patient I was a [age] y.o . patient in a residential home . She was anticoagulated with the drug Rivaroxaban at a dose of 20mg daily - the indication was atrial fibrillation and the dose was calculated on the basis of an eGFR . Patient I had a fall on [date] and sustained a minor trauma to the head (no evidence of external bruising or fracture) . However after the fall she was transferred to A+E because of drowsiness . A head CT scan showed she had a subdural haematoma . She subsequently died after return to the home for palliative care . Review of her death showed that if her Rivaroxaban dosage be calculated on the basis of her creatinine clearance using the Cockcroft Gault formula , then a dose of 15mg would have been correct . eGFR can significanly overestimate renal function , particulalry in elderly female patients . The higher dose of the drug may have been partly contributory to death , though not entirely causative . Death has gone to inquest	Wrong / unclear dose or strength	Rivaroxaban			
Request for Zomorph MR 10mg TWO bd , script issued for Zomorph MR 100mg TWO bd . Script located at surgery on [date] and Cancelled	Wrong / unclear dose or strength	Zomorph	Zomorph		
Female Patient who one day post operative Right hemiarthroplasty for fractured neck of femur , became restless throughout the afternoon of [date] with no urine output . doctors asked to review , patient complained of chest pain on review at 16.15 which was relieved by 2.5mg of diamorphine , anaesthetist required to site canulae and take bloods , ECG recorded no acute changes . At 18.15 reviewed again by the Doctor as the lab phoned through high potassium of 6.7 . Doctor prescribed 50ml of 50% dextrose with 10 units of actrapid of insulin and 10mls of calcium gluconate . However there was a delay in this being given as staff not sure how	Omitted medicine / ingredient	Dextrose insulin and calcium gluconate			

to administer . This was handed over to the night staff , however , before the dextrose , insulin and calcium gluconate could be administered the patient arrested and at 19:35 . During CPR the prescribed medication to correct the high potassium was administered , however the patient could not be resuscitated and sadly time of death was called at 20 ; 10 hours				
A [age] year old female patient was found deceased at her home . The case was referred to the coroner and the cause of death was amitriptyline , codeine and alcohol consumption . An inquest was held on [date] and my attendance was requested as a witness . The practice was asked to explain why this combination of medications was prescribed , whether it was contraindicated in alcohol dependency , whether her mental state had been reviewed and what the practice policy was for reviewing medications and issuing prescriptions especially of this nature . On reviewing the case it was found that the patient had been on both of these medications for many years . The amitriptyline was for her low mood and the codeine was for long term faecal incontinence . They are not contraindicated in alcohol dependency although obviously should be used with caution . There were no documented concerns of risk of self harm . The patient was offered reviews of her medications many times but did not engage with follow up . The practice has a robust prescribing policy to minimise the risk of patients over ordering medication , especially the opiate based ones . This patient [number] ; s medication was always requested appropriately and there was nothing to suggest over ordering . Throughout the patient had full mental capacity . The Coroner concluded that it was appropriate for the General Practitioner to prescribe these drugs . Following this I discussed the case with my clinical colleagues . I am auditing our patients who are on a combination of amitriptyline and codeine . I plan to invite them to discuss the combination of medications and also to discuss alcohol intake with them	Adverse drug reaction (when used as intended)	amitriptyline, codeine		
Patient prescribed rivaroxaban on [date] for atrial fibrillation . Fully counselled and opted fro NOAC . Admitted with heavy epistaxis on [date] and nose packed . Arrested over night . Cause of death : haemopericardium , ruptured left ventricle , mitral valve and coronary artery disease	Unknown	Rivaroxaban	Rivaroxaban	

An [age] year old man with a history of hypertension , atrial fibrillation , cardiac failure , cerebrovascular disease and post stroke epilepsy , vascular dementia and prostate cancer , of most significance . He was visited at home [date] . He had a 2 week history of not being his usual self . He had been more tired and vague and his wife thought his memory had been worse . He had not had a cough or any respiratory symptoms , his catheter had been draining well and his urine was unchanged , he had not had any systemic symptoms and he had no chest or abdominal pain . On examination he had a temperature of 37.9 and some chest crepitations . It was felt that he was probably developing a chest infection and a prescription was done for antibiotics . The prescription was issued via the electronic prescription service for his nominated chemist to deliver . Unfortunately the prescription was not delivered . Six days later he was admitted to hospital and treated for sepsis . He died two days following his admission . Following a significant event meeting in the practice including the community pharmacy involved it appeared that the prescription had been drawn down from the spine to the chemist where its status appears to have gone from being drawn down to printed without actually being so . It , therefore , left the pharmacy " ; inbox" ; without being seen by any of the pharmacy staff who remained unaware of it until alerted after the incident had been discovered	Other	Amoxicillin		
Patient with atrial fibrillation admitted to hospital discharged home with diagnosis of pneumonia but anticoagulation stopped (due to fall). Died following day, post mortem showed cause of death pulmonary embolism	Omitted medicine / ingredient	Rivaroxaban		
An [age] year old female patient went to the [hospital and date] . She had a week previously knocked her leg and been looking after it herself . The discharge letter clearly states that she is allergic to Penicillin but she was given a prescription for flucloxacillin 500mg . This lady is partially sighted and it was only due to her daughter seeing the prescription that she did not take any . Harm could have come to her .	Patient allergic to treatment	Flucloxacillin	Flucloxacillin	
patient was very stable on warfarin and had been for sometime and therefore had been on inr testing every 10 weeks for many months .	Adverse drug reaction (when	warfarin		

was admitted vomiting and found to have an inr > ; 10 and died of a subarachnoid haemorrhage .	used as intended)			
patient was prescribed tramadol - Marol 200mg MR1 twcie a day on a repeat prescription and was given 2 months supply (112 tablets) on each prescription . The prescription was a continuation from her previous practice where she was prescribed Marol tqablets 200mg MR . One tablet twice a day . Dosage of Marol (Tramadol0 never changed during the time treated at the practice . post mortem showed that the patient died of tramadol toxicity . Death caused practice toreview quantities of Marol prescribed . In 2016 the dates of 112 Marol was prescribed as follows : [dates] . the patient has been able to obtain Tramadol more frequently than the repeat prescription had been set up for and the practice investigated as a significant event to look at their repeat prescribing systems	Other	tramadol		
Patient saw GP on [date] notified GP that due to literature on statins being over prescribed patient decided not to take them . [date] GP noticed in docman coroners letter patient had passed away due to Ischaemic Heart disease and hypertension .	Omitted medicine / ingredient	statin	statin	
Patient was admitted on [date] with chest pain in fast AF , with bilateral pleural effusions and AKI . She was commenced on treatment dose tinzaparin on [date] , and her warfarin was held . On ward round on [date] it was noted to continue treatment dose tinzaparin . The drug chart shows that tinzaparin was stopped on ?[date] (not dated)on ward [number] at [hospital] . Ward round on [date] at [hospital] notes to commence Apixapan . Apixaban was prescribed on [date] . Apixaban has not been documented as having been given , held or refused . There is no indication in green ink that it was dispensed at either [hospital] or [hospital]	Omitted medicine / ingredient	apixaban		
Patient admitted to the hospital with back pain and difficulty passing urine . Usually on warfarin due to AF . Warfarin held on [date] . Pleural aspiration [date] . Warfarin not restarted , no INR check [date] or [date] . Developed left sided weakness . Documented too unwell for CT scan " likely Stroke " Patient made palliative . Nurse unable to start syringe driver as did not know how . Patient died	Omitted medicine / ingredient	Warfarin		
Patient bleeding and coagulopathic , with evidence of ongoing bleeding . Patient had already been given dalteparin . I prescribed	Other	Protamine sulphate		

100mg iv of protamine to at least partly reverse effect of dalteparin . I explained the importance of the drug to the A&E team and was assured it would be given . Drug not given since drug not available in A&E and could not get hold of drug . This is the second occasion that protamine has been prescribed in A&E but not given since unavailable . Both patients died .				
Patient required a 2.7% Sodium Chloride infusion under the advice of the Consultant Endocrinologist to correct severe hyponatremia . Sodium chloride and NaCl had been used in the prescription However , the solution provided was Sodium Bicarbonate and had been given to the patient in an infusion On Sunday , patient had been reviewed due to hyokalemia where an ECG was done that showed a prolong QTc of 466 . The patient was reviewed by an intensive care registrar who highlighted the low calcium levels that advised the sodium bicarbonate infusion to be stopped and was given IV calcium replacement and oral pottasium replacement . The medical registrar reviewed her on Monday morning and agreed with the plan of the intensive care team and planned to monitor urea and electrolytes On Monday morning ([date]) , she was assessed by the registrar (myself) and I found her to be complaining of inability to move her hands and legs The Consultant Endocrinologist reviewed the patient where he noted that the patient was given sodium bicarbonate The patient had been informed of the incident by the Consultant Surgeon and the Registrar	Wrong drug / medicine	sodium bicarbonate	sodium bicarbonate	
patient in bed [number] @11:12 saw on the nursing station monitor patient showing lot of ectopic beat on the ECG then arrived in the room with colleague saw monitor systole , immediate emergency button and pulled CPR started,1 cycle of CPR ABG done K=6.8 mmol and medication administered during the resuscitation as per consultant order the patient ROSC . [initial] was recorded as 3.9 prior to cardiac event	Wrong frequency	potassium		
visit made by rn as family report patient agitated . pt has terminal diagnosis . rn administer dose of midazolam different to that authorised	Wrong / unclear dose or strength	midazolam		
Heamotology patient received an immunosuppressant drug in the treatment of his lymphoma with a history of Hep B. Unfortunately he	Contra- indication to the	Rituximab (Chemo Regimen)		

developed acute hepatitis was transferred to [hospital] with liver failure and has died	use of the medicine in relation to drugs or conditions	
Patient admitted on [date], prescribed prophylactic dalteparin 5000 units OD administered at 8.54pm. Patient then prescribed treatment dose dalteparin for ?PE, 18,000 units dalteparin prescribed (incorrect dose, dose as per weight should have been 15,000 units) which was administered at 23.31pm. Patient therefore received 23,000 units of dalteparin on [date]. 18,000 units OD administered on [date]	Wrong / unclear dose or strength	DALTEPARIN
paediatric cardiac arrest in paeds resuscitation room .	Wrong quantity	Phenytoin
On the [date], a 69 year old male patient was admitted to the Emergency Department at [trust]. The patient presenting complaint was jaundice, liver failure, diarrhoea & vomiting and frequency of micturition. The patient had a past medical history of two myocardial infarctions, coronary artery bypass graft, duodenal ulcer and alcohol related liver disease The patient was diagnosed with a urinary tract infection and was commenced on gentamicin Following the initial dose, the gentamicin appears to have been prescribed and administered out - with agreed protocols The patient developed an acute kidney injury which contributed to a progressive deterioration in his condition. Despite input from the [service], a Consultant Intensivist and a Consultant Nephrologist, the patient died on the [date] This case has been referred to the Coroner	Adverse drug reaction (when used as intended)	GENTAMICIN
On the [date] a review of patients medication on (patient information system) it was discovered after seven days a number of medications had been discontinued by the system . We therefor commenced reviewing all patients medication and re - prescribing as necessary . Also safety net of twice daily check by nursing staff of medication tabs . Today on review of a previous patients records it was discovered a number of medication had discontinued again after 7 days . This medication included his anti platelet which was critical as the patient had a cardiac stent on the [date] . The patients	Omitted medicine / ingredient	ticagrelor

	1			
anti platelet medication stopped on the [date] . The patient had a further MI on the [date] and died on the [date]				
Patient had a large subdural Haematoma (acute on chronic)while in hospital . It appears there was a drug prescription error and patient was prescribed both Warfarin (which patient should be on) and prophylactic Tinzaparin (4500 units) at the time on admission on [date] . This dual anticoagulant prescription was not picked up by doctors , nurses or the pharmacy staff . Patient also had elevated INR possibly due to recent treatment with antibiotics . Due to comorbidities and frailty , patient is not suitable for surgical intervention and is for palliative management / comfort care	Wrong drug / medicine	tinzaparin		
Patient admitted from Cardiac Clinic ? unstable angina . Angiogram Near normal . I felt Pulmonary Emboli possible and D - dimer was strongly positive . CTPA confirmed multiple PEs. I prescribed Rivaroxaban but failed to notice that he'd been given full dose fragmin at 11:50 . He was given the first dose rivaroxaban at 20:30 . Unfortunately he had a large intracerebral bleed and died . He was at some increased risk of bleeding due to age and recent fall but I have no doubt my inappropriate Rx contributed to his death	Omitted medicine / ingredient	Rivaroxaban		
Patient admitted with three week history of abdominal pain . She died three days after admission . PM diagnoses 1a PE , 11 HTN . Patient had a VTE RA carried out which indicated Thromboprophylaxis was indicated . LMWH not prescribed during admission	Wrong / omitted / passed expiry date	enoxaparin		
3 DOSES OF LEVOFLOXACIN OMITTED . PATIENT SUBSEQUENTLY DIED OF CHEST SEPSIS . POSSIBLE OTHER ISSUES REGARDING SEPSIS BUNDLE , ASSESSMENT OF FLUID STATUS .	Wrong / omitted verbal patient directions	levofloxacin		
[date] [age] years old patient , frail , CCF with severe MR , AF , advanced CKD (baseline creatinine 240) , htn , glaucoma , admitted for mechanical fall with R NOF fracture , cemented hemi on [date] under general anaesthesia . In recovery low BP , low GCS , pinpointed pupils , reduced respiratory rate to 8 with worsening renal function , metabolic acidosis , T2RF , iperkalemia . Not responded to iv fluid resuscitation , naloxone . Reviewing the drug chart I realised that a high dose of morphine has been given in less	Wrong quantity	oramorph		

than 24 hours considering her creatinine clearance . (6) . On the day before surgery given oramorph 20 mg + 10mg + 10mg + 10 mg (total 50 mg) from the morning to midnight . Oramorph was prescribed by a FY2 doctor and given by different nurses				
Patient died 24 hrs post op	Omitted medicine / ingredient			
[age] F admitted on [date] with an AECOPD and type 2 respiratory failure . COPD admission bundle not used . Although it was documented clearly in the notes that the patients target saturation range should be kept at 88-92% , oxygen was not prescribed . The patient was given 3I of uncontrolled oxygen throughout the night with sats recorded between 97-98% with no attempt to down titrate her oxygen . On my arrival at 9am on [date] the patient was obtunded and in extremis . A blood gas was taken immediately which showed pH 7.166 , PaCO2 13 . NIV outreach alerted and NIV was started immediately on the patient	Contra- indication to the use of the medicine in relation to drugs or conditions			
Patient who underwent a TURBT , He did not have his warfarin restarted post operatively , and developed a CVA , then died of an aspiration pneumonia . There appears to be a number of errors that probably lead to this being missed : Nothing written about warfarin by the locum urologist in clinic booking the op , it was noted on the nurse preop checklist but not the surgeon ; the post - op surgeon doing the ward round did not ask / notice , nor did the juniors re - prescribe warfarin (which I am told should occur as an alert comes up to get them to prescribe their normal drugs) . The case was reviewed by surgical team who feel this is a serious incident and should be investigated . Would you mind datixing - hence the report .	Omitted medicine / ingredient			
Patient admitted with cellulitis . On admission on [date] INR 4.8 . INR not corrected . Patient continued to receive usual doses of warfarin . Prescribed Flucloxacillin which potentiates action of warfarin . INR not rechecked until [date] . Initial INR sample haemolysed . Given further dose of warfarin . [date] , patient dropped GCS to 3 / 15 with a fixed dilated pupil . CT brain showed a large left subdural haematoma with midline shift . Not amenable to	Contra- indication to the use of the medicine in relation to drugs or conditions	warfain		

surgical intervention . Patient will be palliated .				
Unwell patient with recurrent episodes of sepsis had a course of Trimethoprim started for the treatment of a UTI. Patient was on Methotrexate fro rheumatoid arthritis , which was originally discontinued on the [date] for an episode of sepsis , but was restarted again on the [date] . Drug interaction occurred resulting in a methotrexate related pancytopenia . This probably contributed to the difficulties in treating a subsequent episode of aspiration pneumonia from which the patient ultimately died from on the [date] .	Contra- indication to the use of the medicine in relation to drugs or conditions	trimethoprim		
This patient with panhypopituitarism developed a fever during the night , associated with clinically infected left leg ulcer . The doctor assessing the patient at 05.35 appropriately treated the infection and thought to double the hydrocortisone orally (as patient not hypotensive then) , however she was not due to receive it until breakfast time and by then she was drowsy and unwell and became hypotensive . The medical emergency team were called and the SpR assessing the patient gave fluids for suspected sepsis but no parenteral hydrocortisone (though it was charted on prn side in case of patient being unwell) . The patient went into PEA arrest on the way to HDU and resuscitation attempts were discontinued . This was a potentially avoidable death from hypopituitary crisis precipitated by sepsis , for which she did not receive parenteral hydrocortisone 100mg im to be given if the patient became unwell , I have been informed today that the ward nurses would not feel competent to give this on [ward] . Patient did not have hypoadrenal alert sheet in front of notes as not known to the endocrine service prior to her admission this time . Incident reported to the CCG . Ref [number] .	Other			
Patient was admitted [date] . She was treated for infection on a background of haemolytic anaemia . She had appropriate antibiotics prescribed but unfortunatelyt only for 2 days . This was not picked up or reviewed over the weekend . She deteriorated and died on [date] . She had missed 2 days of antibiotics .	Omitted medicine / ingredient	Co-amoxiclav		

[age] year old gentleman admitted [date] for elective shoulder replacement . Went to [unit] post op , issues with pain so started on Morphine . Plan for clexane if not mobile by [date] . Discharged to the ward [date] . On the [date] patient became hypotensive and dropped his oxygen saturations to 60% so was transferred to [unit] with a diagnosis of opiate toxicity , hospital acquired pneumonia and pulmonary oedema . Note again on the [date] for clexane if not mobile today . Responded on [unit] to naloxone and antibiotic , stepped down to [unit] on the [date] but became more SOB and hypoxic possibly after an IV Tramadol dose and readmitted later that evening to [unit] . On the [date] he deteriorated and became very hypoxic and hypotensive requiring Intubation , ventilation , inotropes and renal replacement . It was noted at about 5pm on the [date] that the patient had not received any chemical thromboprophylaxis whilst on [unit] or [unit] , he had received TEDs and IPC . An ECHO done on [unit] showed a dilated right ventricle and the differential for this would include a pulmonary embolus , unfortunately he was too unwell to do any definitive tests but he received treatment for a potential PE . The family are very upset about the potential harm from the morphine toxicity as they feel he had previously suffered problems from morphine , they believe this information had been passed on to the medical staff . I informed them on the [date] that the chemical thromboprophylaxis had been omitted too and that may have contributed to his current clinical condition . I apologised and explained that a full investigation would be instigated to look into why these events occurred . They were understandably angry at the potential harm and wanted to be informed of the results of any investigation . The patient died on the [date]	Omitted medicine / ingredient	No Drug Given	HEPARIN CALCIUM
Patient admitted with embolic right critical limb ischaemia . Had below knee amputation on [date] . Stepped down to ward . VTE prophylaxis omitted in error . Patient died from possible pulmonary embolism on [date] . Given thrombolysis on CPR . Not yet confirmed that patient died as reult of this omission - post mortem examination will be done . Ommission will be discussed with the patient wife when discussing need for post mortem exam	Omitted medicine / ingredient	dalteparin	
Patient came to have a percutaneous coronary angioplasty on	Omitted	clopidogrel	

[date] . The procedure was completed and the TOMCAT report states that the patient is to have lifelong Aspirin and be on clopodogrel for 12 months . The plan was always for the patient to go home that night and return for follow up in 2 months . The patient was discharged from [name] Ward at approximately 19:00 on [date] . Enoting nursing entry states the following - at 18:47 - " Cannula removed Copy of EDL given Follow up in three months Aspirin and clopidogrel for life Patient discharged safely , has been given advise on . R wrist , if bleeding occurs to apply pressure and seek medical advise . No further concerns expressed . " . The EDL includes the same blurb as the TOMCAT PCI report including details regarding the antiplatlet requirements . Under the heading of discharge medications it states that no medications were prescribed and that there were no changes to the patients pre admission medications The patient was not on clopidogrel pre admission	medicine / ingredient			
Drug error resulted in patient suffering a cardiac arrest (not immediately post drug error) . 50Insulin 50mls with 10mls Atropid was administered but patient should have received 50% Dextrose 10% Insulin	Wrong drug / medicine	insulins		
admitted to a medical ward on [date] with a DNACPR and DOLS in place . She came from the [name] care home (having been discharged from [number] 3 weeks previously following a repaired fractured neck of femur) . She was not eating or drinking and therefore the care home contacted the GP who sent her to hospital . She was suspected to have urosepsis , but during her stay did not receive her medications (including donepezil , mirtazapine and lorazepam in addition to antibiotic therapy for presumed urosepsis) due to refusal and lack of co - operation and no iv cannula . It is difficult to determine , but it is not apparent that this was escalated beyond documentation and medical staff notification . It was noted on [date] that no meds had been taken and a discussion was held with pharmacy and medical team due to medication refusal , but not clear as to what action was then taken	Omitted medicine / ingredient	mirtazapine		
Patient intubated and ventilated , remained hypotensive despite maximum dose phenylephrine via peripheral cannula , central line inserted by anaesthetist , Noradrenaline 8mg / 50mls commenced by anaesthetist via theatre AlarisPK pump . When I looked at the	Wrong frequency	noradrenaline		

pump from other side of the bed , noticed that around 15mls of 50ml syringe had been given , and that rate had been set wrong and patient had received around 15-17mls bolus . Anaesthetist still with pump , informed and stopped infusion immediately . Patient became hypertensive , became bradycardic , a 2nd anaesthetist came into theatre recovery , patient became hypotensive , loss of cardiac output , cardiac arrest call put out				
This gentleman was on life long warfarin following a PE and DVT 5 years ago . He was admitted from [place] Hospital after falling and suffering a Sub dural haematoma . His anticoagulation was stopped in preparation for theatre however postoperatively thromboprophylaxis was not commenced until the [date] . The patient died on the [date] , cause of death on death certificate ; 1a) PE . This case has been referred to the Coroner . This incident was identified and reported retrospectively and during the investigation we will also attempt to establish why this incident was not reported contemporaneously	Omitted medicine / ingredient			
Attended periarrest call to Renal outpatients. Patient found to be in septic shock, dropped BP and GCS on dialysis. Once stabilised it was noted that the pt had not received any Abx for the last three days. Linezolid was perscribed but crossed as not done as 'drug not available'. D/w [initials] on [name] who reports that the band [number] were not informed that the drug had not been given.	Omitted medicine / ingredient	linezolid		
1 . Patient was prescribed anticoagulation (Dabigatran) but it wasn't given for 2 days before the patient suffered a large ischaemic stroke . She was known to have AF and anticoagulation is a very important measure to prevent strokes in these cases . Clexane treatment dose is indicated when there is no availability of the oral tablets . 2 . When she was found with reduced responsiveness by the nursing staff at 7:30 am on [date] , it was handed over to the day team but didn't have a GCS assessment or a repeat of her vital signs until she ended up on the stroke ward 8 hours later . This was a medical emergency (Stroke) and monitoring blood pressure is of prime importance	Omitted medicine / ingredient	Dabigatran		
Patient was prescribed 20mg of Rivoroxaban on the [date] having been taken off Enoxaparin following surgery . dose missed / not	Omitted medicine /	Rivaroxaban		

given with no reasoning code entered for 3 days and 1 day a 2 for drug not available was entered . On the [date] a 4 for refused was entered on the enoxaparin . Therefore no anticoagulant given for 5 days	ingredient			
Patient seen in colorectal OPC Found to have rectal polyp ; did not have symptoms of obstruction or constipation Urgent colonoscopy ordered Bowel preparation given to patient Patient took bowel preparation as instructed [date] Developed abdominal pain Required emergency admission then surgery (Hartman procedure) for distal colonic perforation Died despite maximal care on ITU 2 days later of sepsis .	Adverse drug reaction (when used as intended)	moviprep		
This is the lead report for the [initials], please note that there were 3 other reports and a resus audit which have been attached to this incident and must be taken into account when the report is carried out . Reports [numbers] have been attached and rejected as merged documents I attended a cardiac arrest as the ICU registrar on [number] . The patient was found hypoxic with a reduced respiratory rate . He suffered a cardiac arrest and attained return of spontaneous circulation follwoning CPR and adrenaline . I was called for further ICU mangement at this point . When I attended he was heavily adrenaline dependant and suffered a further 2 cardiac arrests . Despite resusitaion continuing for over an hour he unfortunately passed away The patient was on the renal ward having been transferred in for ongoing management of AKI folowing THR performed at [place] . he was a known renal transplant patient . He came from [place] with a bupranorphine patch on and this should have been removed and discontinued . This is a medication that he was on for pain management however with AKI there is a risk that this could accumulate and cause respiratory depression . There was a note on the system that it should be removed from by the admitting doctor Unfortunately yesterday this gentleman had a new butrans patch placed . Given that he suffered a cardiac arrest possibly as a result of a respiratory arrest , evidenced by the NEWS chart , which indicates a reduced respiratory rate in the 2 hurs prior to his arrest . I feel that tis hould be investigated further . It is importnat to note that this gentleman was undoutably unwell and his arrest may well have been due to	Unknown	buprenorphine		

other causes		
A patient was admitted to [unit] from ED Resus with Sepsis requiring 20 mls of Metaraminol peripherally which was commenced in Resus , she was brought here for a central line and further inotropic support . When the patient arrived it was noted that there was no metaraminol infusion in situ , so I asked the Sister who transferred the patient here where the Metaraminol infusion was and she said that as the infusion had finished she did not replace it and brought the patient up to [unit] without any inotropic support at all . My colleague and I explained to her that this is a continuous infusion and should only be stopped if the blood pressure had returned to normal , and this was not going to be the case when the medical registrar had rang and said that the patient was already on the maximum of 20mls / hr . We immediately put her on our monitor and did the full set of observations and the NIBP and Arterial BP was 52mmhg systolic over 35mmhg diastolic with a map of 35	Omitted medicine / ingredient	metaraminol
Patient admitted to [name] on the [date] with staph aureus sepsis . Patient has had previous spinal surgery in [date] , the VTE completed by the admitting doctor has acknowledged this , however neither fragmin or teds prescribed on patients drug chart . Patient without any anticoagulation cover for approximately 48 hours . Patient transferred to [unit] on [date] with sepsis , type 1 RF secondary to ?PE . Patient was treated with treated dose Fragmin when on [unit] . Patient went on to have a PEA arrest on the [date] and PE was unable to be ruled out . Patient was treated with Alteplase	Other	fragmin
Patient presented to the ED with SOB and Tachycardia He was given Metoprolol initially , followed by Adenosine . He continued to be Tachycardic and advice was sought from the medical registrar who suggested Verapamil . This was administered at 17:40 and the patient detriorated at 18:40 and had a cardiac arrest . Vrapamil should not be given to a patient who just received a B - Blocker	Adverse drug reaction (when used as intended)	verapamil
[initials] patient was admitted from ICU for weaning of tracheostomy following a cardiorespiratory arrest at home . Admitted on [date] . This morning [initials] required a cannula inserting . Staff nurse [initials] at approx 07:10 gave [initials] Intravenous coamoxiclav	Wrong drug / medicine	

through the cannula but [initials] was not prescribed this medication . Medication checked for pt in next bed and this was checked by Staff Nurse [initials] . (It appears that the nurses did not check the patients) Shortly after this [initials] deteriorated suddenly and saturations decreased . Crash call was put out at approx 07:25 . CPR commenced and lasted approx 30 minutes . [initials] passed away				
Incorrect drug administered	Wrong drug / medicine	amiodarone		
Patient [initials] Diarrhoea . BM showed 1.2 Prescribed dextrose but not given Patient arrested . Found to have BM 0.2 .	Omitted medicine / ingredient	Drug name unknown		
Patient prescribed and given : - Aspirin - Clopidogrel - Fondaparinux (contraindicated if already on anticoagulation) . As current working diagnosis was acute coronary syndrome . (Despite documented to be taking dabigatran) . Patient reviewed by medical SpR . Diagnosis large (likely ulcerated) hiatus hernia . Troponin raised due to fast AF as dehydrated Clopidogrel prevented from being given Patient developed large volume bleed . Aspirated . Patient has now died	Contra- indication to the use of the medicine in relation to drugs or conditions	fondaparinux		
The patient had experienced a fall whilst an inpatient on a medical ward & had sustained a #nof ; therefore transfered to Ward [number] in order that surgical fixation of # could be undertaken . Surgery undertaken on [date] and operative plan clearly states , ' DVT prophylaxis with Enoxaparin prescribed . ' However on night of [date] , patient NEWS increased & escalated , reviewed by SHO who noted that no Enoxaparin had been prescribed . SHO prescribed stat dose of 20mg Enoxaparin (based on patients BMI) and a regular OD dose at 18:00 hours prescribed to commence later that day . But patients condition continued to deteriorate and died in the early hours of [date] . Post Mortem verbal report stated that cause of death was a pulmonary embolism	Omitted medicine / ingredient	enoxaparin		
Patient became unwell , possible cerebral infarction On reviewing notes , warfarin has not been given since admission . Several entry in both medical and nursing notes indicate that warfarin should be restarted but no action appears to have been taken	Omitted medicine / ingredient			

Incident detected when medical records not previously available examined for coroners report . Junior doctor charted enoxaparin 20mg subcutaneously in patient who was admitted with subdural haematoma after fall and that was not present on previous [month] CT head scan . This was administered for next three weeks before patient discharged on [date] and anticoagulation stopped . Patient readmitted next day and died on [date] . Subdural had increased in size on CT head scan done [date]	Contra- indication to the use of the medicine in relation to drugs or conditions	Enoxaparin		
Haemodialysis patient admitted with pleuritic chest pain and found on CTPA to have PE . Commenced and discharged on apixaban (FP10) which is contraindicated in end stage renal failure . Readmitted on [date] with headache confusion, epistaxis and developed reduced GCS . Required Beriplex to help reduce risk of bleeding from needed LP . Found later to have subarachnoid haemorrhage not amenable for neurosurgical intervention . Patient died [date]	Contra- indication to the use of the medicine in relation to drugs or conditions	Apixaban		
Fatal PE identified as cause of RIP at PM ([date]) . Index admission [date] , consultant to review as appears to have missed doses of enoxaparin . Possibly contraindicated	Wrong frequency	enoxaparin		
[initials] asked to deal with morphine script that needed signing on [date] . In doing so [initials] noted that it was for the oramorph concentrated solution which [initials] was having regularly 3 times a month in the last 5 months . On looking further [initials] established that [initials] had been over prescribed this medication from [date] to present	Wrong / unclear dose or strength	Oramorph Concentrated Oral Solution 20mg/MI		
patient admitted to hospital on [date] with suspected pulmonary embolus with a past history of deep venous thrombosis . ECG showed right ventricular strain pattern , subsequently confirmed on echocardiogram on [date] with a normal troponin (indicative of submassive / intermediate risk PE) . CT pulmonary angiogram perforomed on [date] confirming multiple bilateral pulmonary emboli with right heart strain . Despite clinical suspicion and subsequent confirmation on CTPA , treatment dose low molecular weight heparin appears not to have been given at 6pm on [date] . Patient deteriorated on [date] with brief PEA cardiac arrest with successful resuscitation and was admitted to HDU for stabilisation and	Omitted medicine / ingredient	Dalteparin		

consideration of thrombolysis . Within 30 minutes of arriving on HDU patient suffered an acute deterioration with PEA arrest and could not be resuscitated despite intubation & CPR as per ALS guideline including IV heparin and IV alteplase thrombolysis . Patient died after 1 hour of resuscitation					
Persistent hypoglycaemia in the day , initially nursing staff tried to correct with oral lucozade , however patient vomited According to inpatient drug chart , oral diabetic medication administered on 08.00-09.00hrs drug round . x2 nursing entries on ' variance / progress sheet ' in nursing documentation booklet for [date] , however no times assigned to these entries by registered nurse CT1 medical review documented on EPR at 15.25hrs with plan to adminsiter 1000mls 5% dextrose over 10 hours (100mls / hr) and to encourage oral diet . Peripheral cannula inserted at 17.30hrs , IV fluids commenced at 19.05hrs by ward staff . Patient found unresponsive in cardiac arrest at 22.00hrs According to POCT glucometer on ward capillary blood glucose levels checked : 10.30hrs 1.6mmol / L 11.41hrs 1.7mmol / L 12.26hrs 2.1mmol / L 14.44hrs 2.2mmol / L 17.26hrs 2.8mmol / L 20.10hrs 3.7mmol / L 22.03hrs 5.9mmol / L . According to patientrack observations on [date] checked at : 06.31hrs EWS 0 12.33hrs EWS 1 (hypotension) 20.13hrs EWS 1 (bradycardia) . Adult cardiac arrest team attended led by the night medical registrar . Unsuccessful resuscitation attempt . RIP .	Omitted medicine / ingredient	Unknown			
Steis ref : [number] The gentleman was approaching the end of his life in previous days and was recieving some antipatory drugs . He had sadly passed away by the time we became aware that he had recieved this medication	Other	Phenobarbitol	Phenobarbitol	Midazolam	
Patient with complex Parkinson disease (multiple treatments and 26 years since diagnosis). He was not reviewed in the ward by a consultant only by Registrar or CT1 (consultant reviewed only in AMU). Not a clear plan for feeding and treatment. Prognosis and Advanced care plan was not done, not discussed with his partner. Discussed with [hospital and job title] only on [date] but not referred to a specialist in Parkinson (neither Dr [Staff Name] or neurologist) as recommended. Very poor management of Parkinson disease. Medication was missed during whole admission and stat doses	Omitted medicine / ingredient				

signed (not appropriate). Patient developed an aspiration pneumonia because his level of consciousness dropped due to the lack of Parkinson medication		
Documented on W / R [date] to start gentamycin IV . Patient prescribed and given 480mg gentamycin IV at 14:00 on [date] . Gent levels taken at correct time ($23:07$). [initials] asked to review levels and prescribe at 07:00 [date] . Results not available at this time and documented in notes for day Dr to Rv Nil further written in notes regarding gentamycin prescribing / review for rest of the weekend . FY1 Dr did review low potassium and prescribed Sando K at 19:35 on [date] . Seen on consultant ward round 11:10 on [date] , plan to continue IV Gentamycin , but not picked up that hadn't had any all weekend When administering 22:00hrs medications on [date] S / N realised patient should be on gentamycin but had not had any prescribed / given for more than 72 hours	Other	none
Patient transferred out to [hospital] on [date]. 4 days earlier patient given rituximab and cisplatin and gemcitabine . Team only wanted patient to have rituximab due to her condition but not changed on chemo care drug chart or on chemo care notes . Documented in medical notes to review tomorrow re : GDP but confirmed and authorised on the chemo care system . Nurses and Pharmacy had no idea that this was meant to be held until the morning and therefore gave . Patient became unwell over next few days and as a result was transferred out to [place] as for full active care . Patient RIP two days later on [date] . Needs to be reviewed	Contra- indication to the use of the medicine in relation to drugs or conditions	rituximab
A patient was given therapeutic Low Molecular Heparin before and after a diagnostic pleural tap	Contra- indication to the use of the medicine in relation to drugs or conditions	heparin
Whilst attending a patient in aystolic cardiac arrest . I administered $3 \times 1:10,000$, and had another ready to give Adrenaline IV to the patient . Role was undertaken at scene after 20mins of ALS. I was	Wrong / omitted / passed expiry date	adrenaline

NHS Improvement is the operational name for the organisation that brings together Monitor, NHS Trust Development Authority, Patient Safety, the National Reporting and Learning System, the Advancing Change team and the Intensive Support Teams.

handed the adrenaline (case was opened) by [initials] and checked that it was the correct drug , amount and i thought the best Before date which I saw as [year] I cannot remember the month . Upon return to base I noticed that the adrenaline was dated [date] , the best before label was still attached to the paperwork . and the paperwork had not been filled in at the time the wrap was put in . Cardiac arrest drug pack was showing [date] on the outer . The bag was green tagged at the start of the shift. I was handed the adrenaline (case was opened) by [initials] and checked that it was the correct drug , amount and i thought the best Before date which I saw as [year] I cannot remember the month				
During a Cardiac arrest and whilst following ATLS protocol the Adrenaline 1:10,000 was administered out of date [date]. This discrepency was noted upon completeion of prf and clear up of remaining drugs. Full protocol was followed after this point.	Wrong / omitted / passed expiry date	adrenaline		
A 64 year old male patient was transferred to the Surgical Assessment Unit at the [name] Hospital from the Emergency Department at [name] Hospital on [date] . The investigation will aim to identify whether there were any care or service delivery issues in the treatment of the patient sepsis prior to his transfer	Omitted medicine / ingredient			
On [date] approx 13.30hrs the patient brother rang to report that the patient collapsed at home last Saturday and died CoD - 1a] Toxic Megacolon . 1b] Schizophrenia (Anti - Psychotic Medication)	Adverse drug reaction (when used as intended)	Zuclopenthixol decanoate		
Call out to patient , daughter who is a [healthcare professional] in [place] requested a syringe driver setting up . Dr visited yesterday and prescribed oramorph and the daughter had given 4 doses in 12 hours totalling 70mg , at 01.30 hours lost oral route so at 02.40 daughter administered 10mg of morphine sulphate IM I visited GP out of hours for [service] as syringe driver documentation written on wrong chart rewritten at GP out of hours and revisited patient and daughter had administered a further 10mg morphine sulphate IM , when I discovered this I immediately contacted co ordinator and advised the daughter that I would not set up the syringe driver and I immediately contacted GP out of hours at 06.30	Other			

Patient son contacted [hospital] Medical Director to advise his father was in hospital and end of life with an Acute Kidney Injury which he believed to be due to the medication prescribed by a visiting GP during his stay as an inpatient on [name] Ward at [name] Hospital . Later informed by Consultant that the patient died	Adverse drug reaction (when used as intended)	DEMELOCYCLINE				
---	--	---------------	--	--	--	--