# Prescription Chart with Omissions and Errors (space for notes below)

INPATIENT MED	INPATIENT MEDICATION PRESCRIPTION CHART AND ADMINISTRATION RECORD  Surname Hospital no. Gender Allergies, sensitivities and adverse drug												
Surname Patient	Hospital no. 123456	<b>Gender</b> Male	reaction	ons			_						
First Name Joe	Admission Date 22/05/2020	Weight(kg) 60 kg	Medicir	ne/substance	and details	of r	eaction						
Date of Birth 18/03/1945	<b>Ward</b> Apple	Height(cm) 170 cm											
<b>Consultant</b> Noble	<b>Trainee Dr</b> A. Prescriber	Chart Of	•										
Other Charts in Use (tick)	Diabetes	Epidural	PCA	Parenteral Nutrition	Syringe driver	Oth	er (specify)						
Complete Electron Assessment	ic VTE Risk	Signature: A	. Prescr	iber	Date: 22.0	5.20	20						
MEDICINES MANAGEMENT													
Medication History Electronic Record	y Completed on Pa	atient		e and Designa harma Ward F			Date 23.05.2020						
Date and Time Discharge Prescription Written  Verified by (Name and Signature)  Date													

ONCE ON prophylax	LY MEDICATIONS - pre	emedicatio	on, loadi	ing doses, s	urgical a	antimicrobi	al
Date and Time	Medication Name	Dose	Route	Sign & Bleep	Given By	Date and Time	Pharmacy
22/05 22.00	Prednisolone	30 mg	РО	AP 123	AN	22/05 22.15	
22/05 22.00	Amoxicillin	500 mg	IV	AP 123	AN	22/05 22.15	
22/05 22.00	Furosemide	40 mg	IV	AP 123	AN	22/05 22.15	
22/05 23.15	Aminophylline in	300 mg	IV	AP 123	AN	22/05 23.30	
	100 mL Sodium						
	Chloride 0.9%						
	over 20 minutes						

## Codes for when medicine(s) not administered as prescribed

- 1 Patient away from ward 2 Patient unable to receive e.g. NBM 3 Patient refused
- 4 Self-medicating witnessed 6 Self-medicating not witnessed 7 Delayed administration state reason
- 8 Other state reason X Omitted on instruction of doctor

OXYGE	N PRESC	RIPTION					
Date Started	Dose (% or L/min)	Route Nasal Cannula, Simple Face Mask, Reservoir, Venturi, Humidified, other	Target saturation	Frequency – continuous or when required	Sign & Bleep	Date Stopped, Sign & Bleep	Nurse Sign
22/05	24%	Venturi Mask	88-92%	Continuous	AP 123	24/5 AP 123	AN

ORAL ANTICOAGU	JLANT PF	RESCRIPTIO	N - DIRECT	ORAL ANT	TCOAGULANT (DOAC)
Indication	Date	Length of	Sign &	Pharmacy	Refer to anticoagulant clinic
AF	Started	Treatment Long-term	Bleep A. Prescriber	28 TTA MP 24/5	Anticoagulant book & alert card given
	24/05	Long-term	123	IVIP 24/3	Patient counselled

Patients newly started on a DOAC e.g. apixaban, dabigatran, edoxaban, rivaroxaban, must be referred to the anticoagulant clinic, be provided with the relevant anticoagulant alert card and counselled on the medicine before discharge.

Medication	Medication Edoxaban		Time	Dose						Da	ite			
Edoxab					24									
	ate 24/05 Route PO		06											
<b>Date</b> 24/05	Route	РО	09	60 mg	mg AN									
<b>Sign &amp; Bleep</b> A.Prescriber	•		12											
A.Prescriber			18											
Instruction	S		22											
			24											

ORAL AN	ORAL ANTICOAGULANT PRESCRIPTION - VITAMIN K ANTAGONIST  Indication Date Length of Sign & Pharmacy Refer to anticoagulant clinic														
Indication		Date	Length of	Sign &	Ph	armacy	У	Refer	to a	ntico	agula	nt cli	nic		
		Started	Treatment	Bleep			Anticoagulant books given								
Target INR			Patient counselled												
provided v	Patients prescribed Vitamin K Antagonists e.g. warfarin, must have a follow-up appointment, be provided with a completed anticoagulant record book and counselled on the medicine before discharge.														
Medicatio	n		Date												
			INR												
Route	PO	De	ose at 18:00												
Sign & Bleep	)		Signature												
			Given By												

## **Pharmacy codes:**

S = stock drug IP = inpatient supply

POD = patient's own medicine

TTA = dispensed by pharmacy with instructions

POSH = patient's own supply at home

REGUI	AR PR	ESCRIPTION															
			D	ate	22	23	24										
Medica	tion		Time	Dose	Add	itiona	l Info	rmati	on								
Fnoxa	aparin		06														
o/c	. p c		09														
Route	SC	Sign & Bleep	12														
Date	22/5	A. Prescriber 123	18	40 mg													
Pharma	асу		22														
S 23/5 I	MP		24														
Medica	tion		Time	Dose	Add	itiona	l Info	rmati	on D	RIVE	N BY	OXY	GEN				
Salbu	tamol		06														
Sansa	carrior		09	5 mg		AN											
Route	NEB	Sign & Bleep	12	5 mg		AN		STO	)P								
Date	22/5	A. Prescriber 123	18	5 mg		$\top$		ΑF	Pres	cribe	er 24	1/05/	20				
Pharma	асу	-	22	5 mg	AN	上											
S 23/5 I	MP		24														
Medica	tion		Time	Dose	Add	itiona	l Info	rmati	on D	RIVE	N BY	OXY	GEN		 		
Inratr	opium	1	06														
ipiati	opian	•	09	500 mcg		AN	$\top$										
Route	NEB	Sign & Bleep	12	500 mcg		AN		STO	)P								
Date	22/5	A. Prescriber 123	18	500 mcg		T				cribe	er 24	1/05/	20				
Pharma	асу		22	500 mcg	AN	工						1					
S 23/5 I	MP		24														
Medica	tion		Time	Dose	Add	itiona	l Info	rmati	ion w	/ith/a	fter f	ood					
Predn	nisolon	ie	06														
ricar	50101		09	30 mg		AN	AN										
Route	РО	Sign & Bleep	12														
Date	22/5	A. Prescriber 123	18														
Pharma	асу		22														
S 23/5 I	-		24														
Medica	tion		Time	Dose	Add	itiona	l Info	rmati	on	_	_		_	_	_		
Amox			06	500 mg		AN	AN										
, 1110			09														
Route	IV	Sign & Bleep	12	500 mg		AN	AN										
Date	22/5	A. Prescriber 123	18														
Pharma	асу		22	500 mg	Х	AN	AN										
S 23/5 I	-		24														
Medica	tion		Time	Dose	Add	itiona	l Info	rmati	on						 	_	
	darone	ے	06	200mg			AN										
,	OII	_	09														
Route	PO	<del>12</del> 14	200mg			AN											
Date	23/5	A. Prescriber 123	18														
Pharma	асу		22	200mg		AN	AN										
S 23/5 I	-		24														
= 1 = .																	

REGUL	AR PR	ESCRIPTION																
			С	ate	22	23	24											
Medica	tion		Time	Dose	Add	lition	al Inf	orma	tion	Rate	shoul	d not	exce	ed 4 i	mg/n	ninut	9	
	emide	ı	06															
1 4103	cimac	•	09	40 mg		AN	AN											
Route	IV	Sign & Bleep	12															
Date	22/5	A. Prescriber 123	18															
Pharma	асу		22	40 mg		AN	AN											
S 23/5 I	-		24															
Medica	tion		Time	Dose	Add	lition	al Inf	orma	tion	Conta	ins b	udes	onide	and t	form	otero		
Symb			06							Rins	se mo	uth a	after (	use				
Syllid	icort		09	1 puff		Х	AN											
Route	INH	Sign & Bleep	12															
Date	22/5	A. Prescriber 123	18															
Pharma	асу		22	1 puff	Х	AN	AN											
POD 23			24	-														
Medica			Time	Dose	Add	lition	al Inf	orma	tion	<u> </u>			-		<u> </u>	-		-
			06															
			09															
Route		Sign & Bleep	12															
Date																		
Pharma	асу	1	22															
	•		24															
Medica	tion		Time	Dose	Add	lition	al Inf	orma	tion									
			06															
			09															
Route		Sign & Bleep	12															
Date			18															
Pharma	асу		22															
	-		24															
Medica	tion		Time	Dose	Add	lition	al Inf	orma	tion	<u> </u>			-		<u> </u>	-		-
			06															
			09															
Route		Sign & Bleep	12															
Date			18															
Pharma	асу	1	22															
	-		24															
Medica	ledication			Dose	Add	lition	al Inf	orma	tion				-					
2334	redication																	
Route		Sign & Bleep	09 12															
Date			18															
Pharma	acv	1	22															
	-,		24															
			24															

<b>AS REQ</b>	UIRED M	IEDICATIONS												
Medicat	ion		Date											
Salbut	amol													
Indicatio	on SOB - CC	)PD	Time											
Dose	Route	Start Date												
2 puffs	INH	22/5	Dose											
	=	ncy in 24 hours												
4-6 hou	ırly		Route											
Sign & B	leep	Pharmacy	Given											
A. Prescrib	oer 123	POD 23/5 MP	Ву											
Medicat	ion		Date											
Parace	etamol													
Indication Pain/Fever			Time											
Dose	Route	Start Date												
1 g	PO	23/5	Dose											
Max Dos	se/Frequer	ncy in 24 hours												
			Route											
Sign & B	-	Pharmacy	Given											
A. Prescrib	er 123	S 23/5 MP	Ву											
Medicat	ion		Date											
Indicatio	n		Time											
Dose	Route	Start Date												
			Dose											
Max Dos	Max Dose/Frequency in 24 hours													
Sign & B	Sign & Bleep Pharmacy													
Dience in	dicata tha	roscon whore entic	- 7 OD 0 ha	a ba	<u> </u>	<b>h</b> 0 0 0	- fo	<b>4</b> 10 0	+	 :	مام	 	bad	

Please	e indica	te the reaso	n where option 7 OR 8 has been chosen for not administered as prescribed
Date	Time	Signature	Reason for non-administration/delay and action taken

INFU	FUSION PRESCRIPTION    Pout												
	Route	Infusion Flo	uid	Medication		Duration	Signature			Admin	istration	1	
Date	/Line	Name and Strength	Volume	Approved Name and Dose	Rate	of Infusion	& Bleep	Date Given	Given By	Checked By	Start Time	Finish Time	Pharmacy
22/5	IV	Sodium Chloride 0.9%	250 mL	Aminophylline 250 mg	18 mL per hour		AP 123	23/5	AN	NU	00:15	14:10	
23/5	IV	Sodium Chloride 0.9%	1000 mL	Potassium 40 mmol		3 hours	AP 123	23/5	AN	NU	12:30	15:30	

Notes on Prescri	iption Chart		

## **Prescription Chart with Omissions and Errors Highlighted**

On the next page, find the same drug chart with the errors and omissions highlighted. If you did not manage to find them all, try again and compare the two prescriptions. Be sure to try and find the errors on the charts above before continuing.

Explanations and learning points can be found at the end of the document.

INPATIENT MED	DICATION PRES	CRIPTION CI	HART A	ND ADMINI	STRATION	I RE	CORD				
<b>Surname</b> Patient	Hospital no. 123456	Gender Male	reaction								
First Name Joe	Admission Date 22/05/2020	Weight(kg) 60 kg		ne/substance ne Knov		of re	eaction				
Date of Birth 18/03/1945	<b>Ward</b> Apple	Height(cm) 170 cm									
<b>Consultant</b> Noble	<b>Trainee Dr</b> A. Prescriber	Chart 1 Of 1	Date: 22/05/2020 Signature: A. Prescriber								
Other Charts in Use (tick)	Diabetes	Epidural	PCA	Parenteral Nutrition	Syringe driver	Oth	er (specify)				
Complete Electron Assessment	nic VTE Risk	Signature: A	. Prescr	iber	Date: 22.0	5.20	20				
MEDICINES MA	NAGEMENT										
Medication Histor Electronic Record Date and Time Dis			Name and Designation  M. Pharma Ward Pharmacist  Verified by (Name and Signature)  Date				23.05.2020				

Date and Time	Medication Name	Dose	Route	Sign & Bleep	Given By	Date and Time	Pharmacy
22/05 22.00	Prednisolone	30 mg	РО	AP 123	AN	22/05 22.15	
22/05 22.00	Amoxicillin	500 mg	IV	AP 123	AN	22/05 22.15	
22/05 22.00	Furosemide	40 mg	IV	AP 123	AN	22/05 22.15	
22/05 23.15	Aminophylline in	300 mg	IV	AP 123	AN	22/05 23.30	
	100 mL Sodium						
	Chloride 0.9%						
	over 20 minutes						

## Codes for when medicine(s) not administered as prescribed:

1 Patient away from ward 2 Patient unable to receive e.g. NBM 3 Patient refused

4 Self-medicating witnessed 6 Self-medicating not witnessed 7 Delayed administration – state reason

8 Other – state reason X Omitted on instruction of doctor

OXYGE	OXYGEN PRESCRIPTION													
Date Started	Dose (% or L/min)	Route Nasal Cannula, Simple Face Mask, Reservoir, Venturi, Humidified, other	Target saturation	Frequency – continuous or when required	Sign & Bleep	Date Stopped, Sign & Bleep	Nurse Sign							
22/05	24%	Venturi Mask	88-92%	Continuous	AP 123	24/5 AP 123	AN							

ORAL ANTICOAGL	JLANT PF	RESCRIPTIO	N - DIRECT	<b>ORAL ANT</b>	TCOAGULANT (DOAC)							
Indication	Date	Length of	Sign &	Pharmacy	Refer to anticoagulant clinic							
AF	Started	Treatment	Bleep A. Prescriber	28 TTA MP 24/5	Anticoagulant book & alert card given							
24/05 Long-term A. Prescriber MP 24/5 Patient counselled												

Patients newly started on a DOAC e.g. apixaban, dabigatran, edoxaban, rivaroxaban, must be referred to the anticoagulant clinic, be provided with the relevant anticoagulant alert card and counselled on the medicine before discharge.

Medication	1		Time	Dose				Da	ite			
Edoxaba	an			2000	24							
			06									
<b>Date</b> 24/05												
Sign & Bleep			12									
A.Prescriber 1	.23		18	30 mg	AN							
Instructions	s		22									
			24									

<b>ORAL ANTICOAGU</b>	LANT PR	<b>ESCRIPTIO</b>	N - VITAMI	N K ANTA	GONIST							
Indication	Date	Length of	Sign &	Pharmacy	Refer to anticoagulant clinic							
	Started	Treatment	Bleep		Anticoagulant books given							
Farget INR Patient counselled												
				•								

Patients prescribed Vitamin K Antagonists e.g. warfarin, must have a follow-up appointment, be provided with a completed anticoagulant record book and counselled on the medicine before discharge.

Medication		Date							
		INR							
Route	PO	Dose at 18:00							
Sign & Bleep		Signature							
		Given By							

### **Pharmacy codes:**

S = stock drug IP = inpatient supply TTA = dispensed by pharmacy with instructions POD = patient's own medicine

POSH = patient's own supply at home

REGULAR PRI	SCRIPTION																
		D	ate	22	23	24											
Medication		Time	Dose		itiona		rmat	ion	<u> </u>	<u> </u>	<u> </u>	I					
Enoxaparin		06															
Liioxapaiiii		09				Ħ.											
Route SC	Sign & Bleep	12				П	ST	OP									
<b>Date</b> 22/5	A. Prescriber 123	18	40 mg		AN		A.	Pres	crib	er 24	I/05/	20					
Pharmacy		22						ı	I	I	I						
S 23/5 MP		24															
Medication		Time	Dose	Add	litiona	l Info	rmat	ion	DRIVE	N BY	' AIR						
Salbutamol		06															
		09	5 mg		AN	$\top$											
Route NEB	Sign & Bleep	12	5 mg		AN		STO	OP									
<b>Date</b> 22/5	A. Prescriber 123	18	5 mg		$\Box$		ΑI	>res	cribe	er 24	/05/	20					
Pharmacy		22	5 mg	AN		L											
S 23/5 MP		24															
Medication		Time	Dose	Add	litiona	l Info	rmat	ion [	DRIVE	N BY	' AIR						
Ipratropium	l	06															
		09	500 micrograms		AN	+											
Route NEB	Sign & Bleep	12	500 micrograms		AN		ST	OP									
<b>Date</b> 22/5	A. Prescriber 123	18	500 micrograms		Π		1		cribe	er 24	1/05/	20					
Pharmacy		22	500 micrograms	AN	$\forall$												
S 23/5 MP		24															
Medication		Time	Dose	Add	litiona	l Info	rmat	ion	OR 5	DAY	S wi	th/aft	er fo	od			
Prednisolon	e	06															
		09	30 mg		AN	AN											
Route PO	Sign & Bleep	12															
<b>Date</b> 22/5	A. Prescriber 123	18															
Pharmacy		22															
S 23/5 MP		24															
Medication		Time	Dose	Add	litiona	l Info	rmat	ion	OR 5	DAY	S						
Amoxicillin		06	500 mg		AN	AN											
		09															
Route IV	Sign & Bleep	<del>12</del> 14	500 mg		AN	AN											
<b>Date</b> 22/5	A. Prescriber 123	18															
Pharmacy	•	22	500 mg	Х	AN	AN											
S 23/5 MP		24															
Medication		Time	Dose	Add	litiona	l Info	rmat	ion 2	00 mg	tds for	<mark>7 days,</mark>	then bo	l for 7 c	lays the	en od tl	hereaft	ter
Amiodarone	9	06	200 mg			AN											
		09	3														
Route PO	Sign & Bleep	<del>12</del> 14	200 mg			AN							Х	Х	Х	Х	х
<b>Date</b> 23/5	A. Prescriber 123	18															
Pharmacy		22	200 mg		AN	AN											
S 23/5 MP		24															
		-							_								

REGUI	AR PRI	SCRIPTION																
			D	ate	22	23	24											
Medica	tion		Time	Dose	Add	lition	al Inf	orma	tion	Rate	shoul	d not	exce	ed 4 r	ng/n	inute	9	
Furos	emide		06															
1 41 00			09	40 mg		AN	AN											
Route	IV	Sign & Bleep A. Prescriber 123	12	40 mg		AN	AN											
Date	22/5	A. Prescriber 123	18															
Pharma	асу		22															
S 23/5 I	MP		24															
Medica	tion		Time	Dose	Add	lition	al Inf	orma	tion	Conta	ins b	udes	onide	and f	form	otero		
Symbic	ort <mark>Turbo</mark>	ohaler 400/12	06							Rins	se mo	outh a	fter u	ıse				
			09	1 puff		X	AN											
Route	INH	Sign & Bleep	12															
Date	22/5	A. Prescriber 123	18															
Pharma	асу		22	1 puff	X	AN	AN											
POD 23	/5 MP		24															
Medica	tion		Time	Dose	Add	lition	al Inf	orma	tion	Conta	ins ti	otrop	ium					
Spiriy	a Handi	<mark>haler</mark>	06															
			09	18 micrograms			AN											
Route	INH	Sign & Bleep	12															
Date	24/5	A. Prescriber 123	18															
Pharma	асу		22															
POD 23	/5 MP		24															
Medica	tion		Time	Dose	Add	lition	al Inf	orma	tion									
			06															
			09															
Route		Sign & Bleep	12															
Date			18															
Pharma	асу		22															
			24															
Medica	tion		Time	Dose	Add	lition	al Inf	orma	tion			ı	ı	ı	ı			
			06															
	T	[a. a -:	09															
Route		Sign & Bleep	12															
Date			18															
Pharma	асу		22															
			24															
Medica	tion		Time	Dose	Add	lition	al Inf	orma	tion									
			06															
		l c:	09															
Route		Sign & Bleep	12															
Date			18															
Pharma	асу		22															
			24															

<b>AS REQ</b>	UIRED M	EDICATIONS													
Medicati	ion		Date												
Salbut	amol <mark>M</mark> I	OI 100 micrograms/puff													
Indicatio	n SOB - CC	)PD	Time												
Dose	Route	Start Date													
2 puffs	INH	22/5	Dose												
Max Dos	e/Frequer	ncy in 24 hours													
4-6 hou	rly		Route												
Sign & B	-	Pharmacy	Given												
A. Prescrib		POD 23/5 MP	Ву												
Medicati	_		Date												
Parace	tamol														
	<b>n</b> Pain/Fev	1	Time												
Dose	Route	Start Date													
1 g	РО	23/5	Dose												
Max Dos	e/Frequer	ncy in 24 hours													
<mark>4-6 ho</mark> ւ	urly max (	QDS	Route												
Sign & B		Pharmacy	Given												
A. Prescrib	er 123	S 23/5 MP	Ву												
Medicati	ion		Date												
Indicatio	n		Time					_							
Dose	Route	Start Date													
	-		Dose												
Max Dos	e/Frequer	ncy in 24 hours													
			Route				L								
Sign & B	leep	Pharmacy	Given												
			Ву												
Please in	dicate the	reason where option	n 7 OR 8 ha	s bee	en cho	sen f	or no	ot ad	lmin	ister	ed a	s pr	escri	bed	

Please	e indica	te the reaso	n where option 7 OR 8 has been chosen for not administered as prescribed
Date	Time	Signature	Reason for non-administration/delay and action taken

INFU	INFUSION PRESCRIPTION  Route   Infusion Fluid   Medication   Duration   Signature   Signature   Date   Civer   Checked   Start   Finish   Duration   Checked   Start   Finish   Civer   Checked   Start   Civer   Checked   Start   Civer   Checked   Checked													
	Pouto	Infusion Flu	uid	Medication		Duration	Signatura			Admin	istration	1		
Date	/Line	Name and Strength	Volume	Approved Name and Dose	Rate	of Infusion	& Bleep	Date Given	Given By	Checked By	Start Time	Finish Time	Pharmacy	
22/5	IV	Sodium Chloride 0.9%	250 mL	Aminophylline 250 mg	18 mL per hour		AP 123	23/5	AN	NU	00:15	14:10		
23/5	IV	Sodium Chloride 0.9%	1000 mL	Potassium 40 mmol		6 hours	AP 123	23/5	AN	NU	12:30	18:30	1 IP 23/5 US	

## Key learning points from the prescribing exercise are explained below

## 1. Allergy and ADR status

- The allergy and ADR status are not completed
- Incomplete documentation of allergy/ADR status can result in a patient experiencing a drug reaction which can potentially be fatal
  - o It may also result in optimal therapy being withheld
- Ensure allergy/ADR status is ascertained and documented before prescribing any medication

#### 2. Drug charts in use

- The number of charts is not documented
- It is important to make a note of the number of charts a patient has, so prescribers are aware of all prescribed medicines and to avoid missed doses
- Any additional charts in use should be documented on the main drug chart e.g. diabetic chart

#### 3. Medicines reconciliation

- This is the process of ensuring the patient's current medication history is correct on transferring between care settings and any changes made are clearly documented
- To ensure continuity of care, document the name of each medicine, the dosage, frequency and route of administration.
  - Additional information such as formulation, strength and device may be required for some medicines
- Symbicort inhaler is available in three different strengths and as two different delivery devices (metered-dose inhaler (MDI) and dry powder inhaler (DPI))
  - o Therefore, strength and device should be noted on the drug chart

- Salbutamol inhaler is available as two different devices.
  - The most commonly prescribed inhaler device for salbutamol is the MDI
  - Some patients may, however, be using a salbutamol DPI which is a different strength to the MDI device
  - o The strength and device should be noted on the drug chart
- The inhaler technique needs to be checked to ascertain whether the patient is using his inhalers correctly – this can usually be done by a Dr, nurse, pharmacist or pharmacy technician
  - o Discuss with a pharmacist if the patient is using their inhalers incorrectly

#### 4. Administration

- When reviewing a patient's medication, it is vital to check what the patient has actually received, as this may influence the management of the current situation
- There are no administration signatures for enoxaparin and therefore it is not known whether these doses have been omitted or the nurse has forgotten to sign

#### 5. Edoxaban

- Enoxaparin and edoxaban should not be given together
  - Enoxaparin must be stopped and edoxaban started when the next enoxaparin dose would have been due
- The patient's body weight and calculated creatinine clearance should be checked to ensure the correct dose of edoxaban is prescribed - refer to local Trust guidance and/or BNF
  - According to the patient's weight, the dose of edoxaban is incorrect and should be 30 mg OD

- Prior to initiation of edoxaban, a clotting screen, renal function, U+Es, FBC and LFTs should be carried out and assessed – refer to local Trust guidance and/or BNF for further details
- The patient should be counselled on edoxaban, given the relevant documentation and referred to anticoagulant clinic at some point before discharge

#### 6. Treatment of COPD

- Always prescribe in accordance with your local Trust COPD and antimicrobial guidelines
- The dose of nebulised ipratropium should be written as 500 micrograms
  - o Micrograms should not be abbreviated to mcg as it can be misread as mg
- It is recommended nebulised salbutamol and ipratropium are driven by air and not oxygen to avoid carbon dioxide retention in COPD patients
- For prednisolone the number of days treatment must be documented
  - If a reducing dose is required, the regime must be clearly stated
- For amoxicillin the number of days treatment must be documented
  - o The IV route should be reviewed daily and switched to the oral route when appropriate
  - o The time interval between amoxicillin doses should be equal e.g. 0600, 1400 and 2200

## 7. Diuretic therapy

- On admission, the furosemide was switched to the IV route and the dose increased
- The second dose of furosemide should usually be given at lunch time (and no later than 4 pm) to prevent the peak diuretic effect occurring at night and inconveniencing the patient
- Furosemide should be given by slow IV injection at a rate not exceeding 4 mg per minute due to the risk of ototoxicity associated with a more rapid rate of administration
- Dose and route of furosemide should be reviewed on a daily basis and according to clinical parameters

## 8. Aminophylline

- The patient requires an intravenous loading dose of aminophylline 5 mg per kg (diluted further usually in 100 mL sodium chloride 0.9 %) as an infusion over 20 minutes – check your local Trust IV medication administration guide
  - It is important to ascertain whether a patient is already taking oral aminophylline or oral theophylline, as these patients should not normally receive a loading dose of intravenous aminophylline
- The loading dose of aminophylline is followed by a maintenance intravenous infusion of aminophylline 300 micrograms per kg per hour (dose in elderly)
  - Check your local Trust IV medication administration guide for details on how to prescribe this
- Aminophylline is a narrow therapeutic index drug and a blood sample should be taken 4–
   6 hours after starting IV treatment
  - Aminophylline is monitored therapeutically in terms of plasma-theophylline concentration

## 9. Treatment of hypokalaemia

- It should be noted that furosemide, aminophylline, salbutamol nebuliser and prednisolone
   all have the potential to cause hypokalaemia
  - o Therefore, when prescribed concomitantly the risk of hypokalaemia is increased further
- The usual maximum concentration of potassium that can be infused peripherally is 40 mmols/litre
  - Each 20 mmol of potassium is usually given slowly over 2 to 3 hours using an infusion pump
- Commercially available ready-diluted potassium infusion must be used

 Potassium diluted with sodium chloride 0.9% are preferred for initial potassium replacement, as those diluted with glucose may further lower potassium levels

#### 10. Oral Amiodarone

- Amiodarone has a long half-life and requires a loading regime of 200 mg TDS for one week, 200 mg BD for the second week then 200 mg OD thereafter
  - When a change in dose is part of a standard initiation regime, this should be annotated clearly on the drug chart
- Prior to initiation of amiodarone, chest X-ray, potassium level, TFTs, LFTs and ECG, should be carried out and assessed – see BNF for further information
- Caution should be exercised when amiodarone is prescribed with medicines that may cause hypokalaemia as there is a risk of torsade de pointes

#### 11. Tiotropium

- Tiotropium is part of the patient's medication history and should be restarted once the ipratropium nebules are stopped, as part of the management of his COPD
- Tiotropium inhaler is available as different devices and strengths
  - o The device and strength should be noted on the drug chart
  - It is good practice to prescribe by brand name
- The inhaler technique should be checked

#### 12. Paracetamol

- The maximum dose of paracetamol is 1 g four times daily and the minimum time interval between doses is 4-6 hours
- The frequency and the maximum dose in 24 hours should be stated to avoid too frequent or over-dose by exceeding the maximum daily dose of paracetamol, which can lead to fatal consequences.