

# Exercises in CLINICAL ACCURACY CHECKING

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**T**hese checking exercises attempt to address the pharmaceutical and medical issues that arise in different specialties. The prescriptions in this issue deal with the use of drugs on infectious diseases and hepatology wards. Readers are

invited to identify the problems and determine solutions for them. The prescriptions are followed by a discussion of the main issues.

It must be emphasised that these tests were introduced to assess the performance of checkers in a dispensary situation where time is at a premium. It should also be noted that these prescriptions have passed through the dispensary at Addenbrooke's NHS Trust, although the patients' names have been removed to maintain confidentiality. The check list used by candidates is shown in Figure 1. Figure 2 (p175) relates to prescription 1, and Figure 3 (p176) relates to prescription 2.

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## CLINICAL ACCURACY CHECKING TEST

### Task

1. You have – **minutes** to review the following prescription charts and identify the problems. You have – **minutes** to document your answers

### Total time allowed: – minutes

2. You are only able to make **ONE** intervention per prescription

**For each of the prescriptions**, using the answer sheets provided:

3. Document the ward and clinical specialty

4. List briefly the endorsements you would make to the chart

5. List briefly the patient's major medical problem(s) suggested by the drug therapy

6. List briefly the most important pharmaceutical problems you would try to resolve **if you were checking the chart at ward level** (maximum of **SIX** problems)

7. State the **ONE priority intervention** you would make for **EACH of the charts** given that you are **checking the chart in the dispensary** (NB: Occasionally, more than one intervention may be needed)

8. Briefly state the **action** you would take to resolve the priority intervention

9. State the urgency of the **priority** intervention from one of the following:

Urgent = chart must be amended by a doctor or pharmacist before being dispensed

Less urgent = any other action, such as sending an intervention note to the doctor, highlighting the problem to the ward pharmacist, telephoning a nurse or doctor for further information.

10. Materials allowed:

Martindale's Extra Pharmacopoeia	BNF
Paediatric formulary	Hospital formulary
Compendium of data sheets and SPCs	Calculator
Trissel's handbook of injectable drugs	Hospital IV monographs
Renal drug handbook	
List of wards — specialty and current ward pharmacist	

### Answer sheet

(Candidate name:.....)

Prescription number 1

Review panel:

Ward Clinical specialty

Chart endorsements:

Medical problems:

1.	5.
2.	6.
3.	7.
4.	8.

Pharmaceutical problems:

1.	4.
2.	5.
3.	6.

Priority intervention number 1 2 3 4 5 6  
(circle the appropriate number)

Suggested action to resolve the priority intervention:

Urgency: Urgent Less urgent  
(circle as appropriate)

Figure 1: Instructions for candidates: state the ward and clinical specialty in order to focus attention on likely problems. For example, if the patient was on a medical ward specialising in renal disease, the pharmacist must be particularly vigilant about renally excreted drugs. The chart endorsements refer to the discharge or to take out (TTO) prescription where one exists or otherwise to the inpatient chart. Please note: candidates are given six minutes to review each prescription, and three minutes to document their answers for each prescription

Prescription Chart											
Patient Details				DRUG SENSITIVITIES							
Surname B		Hospital No 123456		Weight		Doctor must also enter this information on FRONT of case folder must not be administered unless this box has been completed					
First Names A		Date of Birth 15.5.47	Sex F	Height		Date 11.1.02		Drug/Substance NKDA		Signature A Doctor	
Consultant A Consultant		Ward Infectious diseases									
Regular Prescriptions						Regular Prescriptions					
January						January					
Month and date → 11 12						Month and date → 11 12					
Tick times or enter other times						Tick times or enter other times					
DRUG (APPROVED NAME)				6		8		10		12	
Calcichew				6		8 *		AN		AN	
Dose	Route	Start Date	Stop Date	12							
500mg	po	11.1.02		14							
Signature A Doctor			Pharm	18							
Additional Instructions				22	*	AN					
DRUG (APPROVED NAME)				6		8		10		12	
EPO				6		8 *		X		X	
Dose	Route	Start Date	Stop Date	12							
3,000units	s/c	11.1.02		14							
Signature A Doctor			Pharm	18							
Additional Instructions 2 x week				22							
DRUG (APPROVED NAME)				6		8		10		12	
Amlodipine				6		8 *		AN		AN	
Dose	Route	Start Date	Stop Date	12							
5mg	po	11.1.02		14							
Signature A Doctor			Pharm	18							
Additional Instructions				22							
DRUG (APPROVED NAME)				6		8		10		12	
Furosemide				6		8 *		AN		AN	
Dose	Route	Start Date	Stop Date	12							
250mg	po	11.1.02		14							
Signature A Doctor			Pharm	18	*	AN					
Additional Instructions				22							
DRUG (APPROVED NAME)				6		8		10		12	
Rifampicin				6		8 *					
Dose	Route	Start Date	Stop Date	12							
600mg	po	12.1.02		14							
Signature A Doctor			Pharm	18							
Additional Instructions				22							
DRUG (APPROVED NAME)				6		8		10		12	
Pyridoxine				6		8 *					
Dose	Route	Start Date	Stop Date	12							
10mg	po	12.1.02		14							
Signature A Doctor			Pharm	18							
Additional Instructions				22							
DRUG (APPROVED NAME)				6		8		10		12	
Isoniazid				6		8 *					
Dose	Route	Start Date	Stop Date	12							
200mg	po	12.1.02		14							
Signature A Doctor			Pharm	18							
Additional Instructions				22							

Figure 2: Patient's details and regular drugs (prescription 1)

## PRESCRIPTION 1

Figure 4 (p179) shows the solution to prescription 1. This prescription is for a renal patient with tuberculosis and the main pharmaceutical care issues have to do with the requirements for dose modification in patients with renal failure. A common drug-drug interaction is also highlighted.

The endorsements required would be “before food” for Calcichew, “30 to 60 minutes before food” for rifampicin and isoniazid, and epoetin (plus the brand name) for EPO. The pharmacist needs to establish on which days of the week epoetin should be given, and endorse the administration boxes on the drug chart with an “X” on the days it should not be given. This is especially important when patients are admitted to wards (such as an infectious diseases ward) where the staff may not be familiar with renal drugs.

Large doses of calcium preparations such as Titalac or Calcichew are commonly taken by renal patients as “phosphate binders” to prevent the absorption of dietary phosphate, in addition to their calcium supplementation role. These agents need to be taken 15–30 minutes before meals in order to bind phosphate effectively. It is important that nursing staff understand this and the administration times should be recorded on the chart. However, care should be taken to check the indication for calcium supplementation. This is because calcium supplementation is sometimes used between meals to maximise calcium absorption, such as after a parathyroidectomy operation.

The possible requirement for dose reduction is an important issue during the clinical assessment of prescriptions for renal patients. There are some features that should alert a pharmacist to the possibil-

ity of renal failure. These include a prescription chart originating from a renal ward, and the presence (on the chart) of drugs prescribed for patients with end-stage renal disease. In this case, the prescription includes epoetin, calcium carbonate and high dose furosemide, all of which should make the pharmacist suspect renal failure.

Before advising on dose adjustments, the pharmacist needs to obtain information on the extent of renal impairment and whether or not the patient is receiving renal replacement therapy. The possibility of drug toxicity, as well as the patient's clinical state, must also be considered before giving specific recommendations about dose reductions. The Renal Drug Handbook<sup>1</sup> is the most commonly used reference source for such information at Addenbrooke's Hospital.

The pharmacist should make sure that baseline liver function tests are checked before initiation with isoniazid, rifampicin and pyrazinamide, because of their association with liver toxicity.<sup>2</sup> The patient's weight also needs to be established in order to check the prescribed doses of antitubercular drugs.

Rifampicin is extensively metabolised in the liver, with 5–30 per cent of the dose being excreted unchanged in the urine.<sup>1</sup> Generally, doses do not need to be reduced in renal impairment unless the patient has abnormal liver function or weighs less than 45kg.<sup>1,3</sup> Rifampicin is excreted into peritoneal dialysis fluid and may cause the fluid to develop an orange-yellow colour.<sup>1</sup>

Isoniazid is predominantly metabolised by hepatic acetylation, with renal excretion of unchanged drug accounting for up to 30 per cent of the dose, depending on the patient's acetylation status.<sup>3</sup> The recommended dose in patients with severe renal impairment is

Prescription Chart											
Surname		Hospital No		Weight		DRUG SENSITIVITIES					
F		647382				Doctor must also enter this information on FRONT of case folder must not be administered unless this box has been completed					
First Names		Date of Birth		Sex		Date		Drug/Substance		Signature	
S		30.10.50		M		2.1.02		NKDA		A Doctor	
Consultant		Ward		Height							
A. Consultant		Hepatology									
Regular Prescriptions						Regular Prescriptions					
January						January					
Month and date						Month and date					
Tick times or enter other times						Tick times or enter other times					
2						2					
3						3					
4						4					
DRUG (APPROVED NAME)						DRUG (APPROVED NAME)					
Aspirin						Fludrocortisone					
Dose						Dose					
Route						Route					
Start Date						Start Date					
Stop Date						Stop Date					
12						12					
14						14					
Signature						Signature					
A Doctor						A Doctor					
Pharm						Pharm					
18						18					
Additional Instructions						Additional Instructions					
22						22					
DRUG (APPROVED NAME)						DRUG (APPROVED NAME)					
Pravastatin						Enoxaparin					
Dose						Dose					
Route						Route					
Start Date						Start Date					
Stop Date						Stop Date					
12						12					
14						14					
Signature						Signature					
A Doctor						A Doctor					
Pharm						Pharm					
18						18					
Additional Instructions						Additional Instructions					
22						22					
DRUG (APPROVED NAME)						DRUG (APPROVED NAME)					
Ranitidine						Chlordiazepoxide					
Dose						Dose					
Route						Route					
Start Date						Start Date					
Stop Date						Stop Date					
12						12					
14						14					
Signature						Signature					
A Doctor						A Doctor					
Pharm						Pharm					
18						18					
Additional Instructions						Additional Instructions					
22						22					
DRUG (APPROVED NAME)						DRUG (APPROVED NAME)					
Furosemide						Pabrinex					
Dose						Dose					
Route						Route					
Start Date						Start Date					
Stop Date						Stop Date					
12						12					
14						14					
Signature						Signature					
A Doctor						A Doctor					
Pharm						Pharm					
18						18					
Additional Instructions						Additional Instructions					
22						22					
DRUG (APPROVED NAME)						DRUG (APPROVED NAME)					
Salbutamol						Thiamine					
Dose						Dose					
Route						Route					
Start Date						Start Date					
Stop Date						Stop Date					
12						12					
14						14					
Signature						Signature					
A. Doctor						A Doctor					
Pharm						Pharm					
18						18					
Additional Instructions						Additional Instructions					
22						22					
DRUG (APPROVED NAME)						DRUG (APPROVED NAME)					
Digoxin											
Dose						Dose					
Route						Route					
Start Date						Start Date					
Stop Date						Stop Date					
12						12					
14						14					
Signature						Signature					
A Doctor											
Pharm						Pharm					
18						18					
Additional Instructions						Additional Instructions					
22						22					

Figure 3: Patient's details and regular drugs (prescription 2). The figures in the 6am row of digoxin are the plasma levels

200–300mg daily.<sup>1</sup> If the patient is receiving haemodialysis therapy, the dose should be given after the dialysis session, as it may be removed during dialysis.<sup>1</sup> Pyridoxine therapy is recommended for prophylaxis of peripheral neuropathy associated with isoniazid. The usual dose is 10mg daily.<sup>1</sup> However, some authors recommend that a dose of 100mg daily be given to haemodialysis patients due to a reported increased incidence of neurotoxic side-effects in such patients. These side effects are because of abnormal metabolism of pyridoxine and rapid clearance of the active metabolite.<sup>4</sup>

Pyrazinamide is excreted primarily by hepatic metabolism with only a small percentage being excreted unchanged in the urine. Dose reduction is not required in patients with renal impairment.<sup>1</sup>

It is possible that ciprofloxacin was included in the antitubercular regimen as an alternative to ethambutol due to suspected drug resistance. Ethambutol is also associated with an increased incidence of visual disturbances in patients with renal failure.<sup>2</sup>

The co-administration of quinolone antibiotics such as ciprofloxacin and calcium results in the formation of insoluble compounds in the gut. This interaction is clinically significant and may result in inadequate treatment of a potentially serious infection such as tuberculosis.<sup>5</sup> Care must be taken to separate administration times by at least two hours.<sup>5</sup> At Addenbrooke's, the calcium is usually

administered before meals, and ciprofloxacin is given at 10am and 10pm.

A competent candidate would be expected to recognise that this patient is likely to have renal failure, establish the patient's weight and also check if any dose adjustments are needed. The drug-drug interaction between calcium and ciprofloxacin should also be highlighted and appropriate action suggested. The ward pharmacist is better placed to check the appropriateness of the choice of antitubercular therapy for this patient and that baseline liver function has been established.

## — PRESCRIPTION 2

Figure 5 (p179) shows the solution to prescription 2. This prescription is for a patient on a hepatology ward and the pharmacist should be alerted to the possibility of hepatic impairment because of the prescribed alcohol withdrawal regimen (thiamine, chlordiazepoxide and Pabrinex [high dose vitamins B with C injection]). The main pharmaceutical care issues for this patient are thus the appropriate choice and duration of medicines prescribed for alcohol withdrawal and a consideration of dose adjustment if hepatic impairment is confirmed.

The major medical problems for this patient are not immediately apparent, although investigation of the medical notes might reveal an arrhythmia (digoxin with aspirin), hyperlipidaemia (pravastatin), wheezing (salbutamol), prophylaxis against deep vein thrombosis/pulmonary embolism (enoxaparin) and postural hypotension (fludrocortisone). One possible use of low-dose furosemide is in the treatment of ascites associated with alcoholic liver disease, although this would normally be as an adjunct to spironolactone<sup>6</sup> to achieve the desired fluid loss. Aspirin should be endorsed "dissolve or mix in water before taking, with or after food". The dosage unit of digoxin and fludrocortisone should ideally be written out as "microgram" (rather than mcg) to reduce the risk of a dosing error.

In alcoholic patients, withdrawal symptoms usually arise within hours of the last alcohol intake and peak at 24–48 hours. The symptoms fall into three categories: autonomic hyperactivity (such as tremor, nausea, vomiting, anxiety, sweating and agitation), excitation of neurons leading to convulsions and, more rarely, the potentially fatal delirium tremens (characterised by hallucinations, confusion and disorientation, altered consciousness and more severe autonomic hyperactivity).<sup>7,8</sup> Chlordiazepoxide is used at Addenbrooke's to sedate the patient during the acute withdrawal phase. Its long half-life (over 24 hours<sup>9</sup>) allows a smoother withdrawal from alcohol than the short-acting chlormethiazole.<sup>10</sup> The more addictive chlormethiazole also has a narrower safety margin and is contraindicated in those patients who continue to take alcohol<sup>2</sup> due a possible association with fatal respiratory depression.<sup>11</sup>

In line with the protocol for the management of acute withdrawal,<sup>11</sup> chlordiazepoxide should be prescribed as a reducing regimen starting with a dose of 20–40mg four times a day and reducing gradually to stop over 7–9 days. In case of failure of control in severely agitated patients, additional doses may be prescribed on an "as

required" basis, up to a maximum daily dose of 200mg on days 1–2 of the protocol.<sup>11</sup> It is recommended that the duration should not exceed nine days due to the risk of dependence.

Chlordiazepoxide is cleared by the liver. Therefore, patients with liver disease may have reduced clearance or enhanced central nervous system (CNS) sensitivity.<sup>9</sup> A 50 per cent dose reduction may be necessary in patients with severe liver dysfunction,<sup>11</sup> otherwise a shorter acting benzodiazepine, such as oxazepam, can be used.<sup>9</sup> Dose reduction may also be required due to decreased plasma protein binding in alcoholics with low plasma protein levels.<sup>9</sup> Patients should be monitored by experienced nursing staff for the therapeutic endpoints of effective sedation with avoidance of convulsions, while at the same time avoiding over-sedation, respiratory depression and hypotension.<sup>11</sup> In this patient, the chlordiazepoxide reducing regimen has not been prescribed and, depending on the state of the patient's hepatic metabolic processes, the initial dose may be inadequate. The pharmacist should intervene by checking for hepatic impairment, and also by ensuring that appropriate reducing doses are marked on the "regular" section of the chart according to the protocol and additional "rescue" chlordiazepoxide doses are prescribed on the "as required" section.

The absorption of thiamine is markedly reduced by alcohol<sup>8</sup> and this is frequently exacerbated by poor diet in an alcoholic patient. Thiamine deficiency can precipitate a serious neurological condition known as Wernicke-Korsakoff syndrome during alcohol withdrawal.<sup>12</sup> This is a medical emergency that carries with it the risk of collapse and sudden death (estimated 10–20 per cent mortality rate<sup>13</sup>) or irreversible damage to the CNS.<sup>12</sup> Thiamine is a co-factor in glucose metabolism and Wernicke-Korsakoff syndrome, a form of encephalopathy, can be precipitated by a glucose load,<sup>13</sup> such as that found in intravenous (IV) fluids used to maintain fluid and electrolyte balance during the acute phase of alcohol withdrawal. For

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patients at risk of severe withdrawal symptoms, Pabrinex IV high potency injection (which is presented as a pair of ampoules), is used as supplementation to provide a loading thiamine dose of 500–750mg every eight hours<sup>7</sup> (2–3 pairs of Pabrinex administered intravenously every eight hours<sup>6</sup>) for up to two days.<sup>11</sup> Since the oral absorption of thiamine doses above 5mg is limited,<sup>12</sup> the oral route for supplementation is normally considered only in low-risk patients where withdrawal symptoms are not severe.<sup>11</sup> The recommended oral dose is variously given as 100mg daily,<sup>13</sup> 100mg twice daily<sup>12</sup> or 300mg daily,<sup>11</sup> and it could be argued that doses should be divided to maximise absorption. The dose should continue for 7–10 days once the patient is able to eat.<sup>13</sup>

In this patient, Pabrinex was prescribed as a once-daily dose. The Committee on Safety of Medicines advises that the IV route should not be used unless essential, due to the risk of serious adverse reactions such as anaphylaxis.<sup>2</sup> The pharmacist should therefore check on the expected severity of withdrawal symptoms and advise the doctor on an appropriate dose of the IV preparation if the patient is high-risk or recommend an oral thiamine preparation if the patient is low-risk. The pharmacist should also point out that the first dose of thiamine should precede the administration of a glucose load. Instructions for IV drug administration at Addenbrooke's are not routinely endorsed on drug charts as IV drug monographs are available on all wards and via the hospital intranet. However, for high-risk drugs such as Pabrinex, it would be prudent to mark on the chart that it should be administered slowly over a minimum of 10 minutes.<sup>2</sup>

Once thiamine stores have been replenished, it is advisable to continue with a vitamin B preparation that will provide the recommended daily amount of thiamine (0.9–1.5mg for healthy men or 0.8–1.1mg for healthy women<sup>13</sup>) particularly in those patients with inadequate diets or who are malnourished. Suitable preparations include Vitamins Capsules BPC (two capsules daily provide 2mg thiamine), Vitamin B Tablets, Compound (two tablets daily provide 2mg thiamine) or Vitamin B Tablets, Compound, Strong (two tablets three times daily provide thiamine 30mg daily). The Addenbrooke's protocol favours two Vitamins Capsules BPC daily giving 30mg ascorbic acid, 15mg nicotinamide, 1,000µg riboflavin, 5,000units vitamin A, and 600 units vitamin D, as well as 2mg thiamine. However, it should be noted that this preparation provides more than the recommended daily intake of both vitamins A and D. The recommended daily dietary intake of vitamin A for adult males and females is approximately 2,330 and 2,000 units, respectively.<sup>12</sup> For vitamin D, the recommended daily dietary intake is 200–400 units for healthy adults.<sup>12</sup> Since both vitamins A and D are fat-soluble and can accumulate to cause toxic effects, the dose would have to be reduced at some point in this patient. An overdose of vitamin D, for example, can cause acute hypercalcaemia, and in the long term, hardened arteries, renal calculi or further liver impairment.<sup>8</sup> The pharmacist should ensure that a vitamin preparation is prescribed for long-term use when the patient is discharged.

Other drugs on the chart may have to be reviewed if hepatic impairment is established. The pharmacist might be able to check this using the hospital information system. The dose of pravastatin is at the lower end of the range. Although plasma protein levels may be low in liver impairment, pravastatin is less protein-bound than simvastatin (50–60 per cent compared with 95 per cent<sup>14</sup>). Therefore plasma levels of pravastatin will not be affected as much. All statins, however, undergo extensive first pass hepatic metabolism,<sup>14</sup> so that a lower dose may be required in hepatic impairment. Statins as a class can also cause an increase in liver enzymes but these are usually asymptomatic and reverse on discontinuation of the drug. The ward pharmacist is better placed to ensure the appropriateness of dose and the safe use of pravastatin.

Digoxin is excreted renally and has low plasma protein binding. However, it is subject to enterohepatic recycling.<sup>14</sup> The main concern surrounding its use in this patient may be the potential for

hypokalaemia and hypomagnesaemia (and thus a risk of digoxin toxicity) associated with "refeeding syndrome"<sup>15</sup> following a period of malnutrition in an alcoholic patient once adequate nutrition is restored. The risk of hypokalaemia is exacerbated here by the concurrent use of fludrocortisone and furosemide. The ward pharmacist must monitor serum potassium carefully and ensure that appropriate amounts of potassium are included in the enteral diet or IV fluids. The pharmacist should also monitor for digoxin toxicity. This is most easily done by recording the apex pulse on the patient's drug chart.

Enoxaparin is the standard low molecular weight heparin used at Addenbrooke's for the prevention of deep vein thrombosis. The recommended dose in medical patients is 40mg once a day,<sup>2</sup> but in this case a lower dose (20mg) has been prescribed. Blood clotting factors are manufactured in the liver, therefore any advice for the prescriber would depend on results of liver function tests in this patient. If it was established that this patient had significant liver impairment, as well as impairment of clotting, the pharmacist could question the use both of enoxaparin and aspirin, especially since aspirin can cause gastrointestinal bleeding, even at low doses. It may be more appropriate for the ward pharmacist to request input from the haematologist rather than intervene directly.

A competent candidate should highlight the regular administration of chlorthalidopoxide as the priority intervention, as it is associated with a risk of dependence. However, the pharmacist should also demonstrate awareness of the risks associated with administration of intravenous vitamins B and C injection and seek to establish the appropriateness of the low prescribed dose.

*Summaries of the solutions to the exercises are found on p179*

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**Answer sheet (answers are shown in magenta)** Candidate name:.....

Prescription number 1  
 Ward: **Medical** Clinical specialty: **Infectious diseases**

Chart endorsements:  
 1. EPO — epoetin, specify brand and mark administration boxes “X” on days not given  
 2. Calcichew — before meals  
 3. Rifampicin — 30 to 60 minutes before food  
 4. Isoniazid — 30 to 60 minutes before food

Medical problems:  
 1. Renal failure  
 2. Hyperphosphataemia/hypocalcaemia  
 3. Anaemia  
 4. Hypertension/angina

Pharmaceutical problems:  
 1. Calcichew — administration times need amending to meal times  
 2. Establish patient’s weight in order to check antitubercular drug regimen  
 3. Check if baseline liver function tests were done before treatment with antitubercular drugs was started  
 4. Ciprofloxacin–calcium interaction  
 5. Check renal function. Establish whether dose adjustments are required and if patient is receiving renal replacement therapy

Priority intervention **Number 4, but candidate must also mention numbers 2 and 5**

Suggested action to resolve the priority intervention:  
 1. Contact ward for patient’s weight, renal function and whether patient is receiving renal replacement therapy  
 2. Contact doctor to explain the drug interaction between ciprofloxacin and calcium, and recommend separating their administration times

Urgency: **Less urgent**

Figure 4: Solution to prescription 1

**Answer sheet (answers are shown in magenta)** Candidate name:.....

Prescription number 2  
 Ward: **Hepatology** Clinical specialty: **Medicine**

Chart endorsements:  
 1. Aspirin — dissolve or mix in water before taking, with or after food  
 2. Digoxin — write “micrograms” in full, record apex pulse  
 3. Fludrocortisone — write “micrograms” in full

Medical problems:  
 1. Hyperlipidaemia  
 2. Postural hypotension  
 3. Prophylaxis against alcohol withdrawal syndrome  
 4. Prophylaxis against deep vein thrombosis/pulmonary embolism  
 5. Gastrointestinal protection  
 6. Arrhythmia, possibly atrial fibrillation, with stroke prophylaxis  
 7. Oedema

Pharmaceutical problems:  
 1. Appropriate choice and dose of sedation therapy for alcohol withdrawal  
 2. Appropriate dose and/or administration route of Pabrinex  
 3. Appropriate dose of pravastatin  
 4. Appropriateness of the use of enoxaparin and/or aspirin  
 5. Appropriate continuation of vitamin (thiamine) supplementation  
 6. Monitoring for hypokalaemia and hypomagnesaemia with digoxin

Priority intervention **Number 1, but candidates must also mention number 2**

Suggested action to resolve the priority intervention:  
 1. Speak to the prescriber and ensure that chlordiazepoxide is prescribed as a reducing regimen in line with the protocol, with addition of “as required” doses  
 2. Check on degree of risk of alcohol withdrawal syndrome, then advise on correct dose of Pabrinex or change to oral thiamine only

Urgency: **Less urgent**

Figure 5: Solution to prescription 2