



Centre for Medication Safety and Service Quality

# National survey of medication systems in English NHS hospitals

Thank you for taking part in this survey.

This survey aims to identify which in-patient and discharge medication systems are currently in use across the NHS.

Your response is invaluable to us as it will contribute to the knowledge and understanding of medication systems used in the NHS, and inform future development of strategies to:

**(1) reduce medication errors, (2) streamline hospital medication systems and (3) reduce wasted medications.**

As a thank you for your participation, we will send you a copy of the results once the national survey is complete.

**Please answer the questions in relation to the main acute hospital in your trust.  
If your trust has multiple acute hospitals, please choose one of these on which to  
base the questionnaire.**

Only one questionnaire is required for each trust.

We appreciate that you might not be familiar with all the systems used in your hospital. Please complete the questionnaire as fully as you can and feel free to ask colleagues as appropriate. There is also a 'not sure' option for some questions.

Your answers will remain confidential.

The questionnaire will take approximately 20 to 30 minutes to complete.

Please return your completed questionnaire using the freepost envelope provided  
by **Friday 22<sup>nd</sup> July 2011**

Thank you for your time, we really appreciate it.

If you have any questions about this survey please feel free to contact us:

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# PART ONE

This section is about the medication processes and resources currently in use at your hospital.

## A: About your hospital

1. What is the name of the trust that you work in?

2. How many acute hospitals are there in this trust?

\_\_\_\_\_ acute hospitals

3. What is the name of the hospital that you are answering this questionnaire for? Please answer the questions in relation to the main acute hospital in your trust. If your trust has multiple acute hospitals, please choose one of these on which to base the questionnaire.

4. What in-patient group(s) does this hospital treat?

- Adults only  
 Paediatrics only  
 Mixed adult and paediatrics

5. Approximately how many in-patient wards are there in this hospital?

\_\_\_\_\_ in-patient wards

## B: Pharmacy service

For this section, please exclude any intensive care, maternity and/or mental health wards in your hospital. Please answer each statement in relation to what you see **in practice** on in-patient wards in this hospital, and not what could or should happen. **Please select one option for each part of the question, unless stated otherwise.**

6. In general, a ward pharmacist visits the wards:

- a. twice daily, every weekday on  All wards (*skip to Question 7*)  
 Most wards  
 Some wards  
 One ward  
 No wards  
 Not sure

- b. once daily, seven days a week on  All wards (*skip to Question 7*)  
 Most wards  
 Some wards  
 One ward  
 No wards  
 Not sure

- c. once daily, every weekday on  All wards (*skip to Question 7*)  
 Most wards  
 Some wards  
 One ward  
 No wards  
 Not sure

- d. two or three times a week on  All wards (*skip to Question 7*)  
 Most wards  
 Some wards  
 One ward  
 No wards  
 Not sure

6. Continued.

- e. rarely or never on  All wards  
 Most wards  
 Some wards  
 One ward  
 No wards  
 Not sure

- f. other (please specify):  All wards  
 Most wards  
 Some wards  
 One ward

7. Typically, how many hours a day is the pharmacy open in this hospital? (for in-patient medication supply)

a. On weekdays \_\_\_\_\_ hours/day

b. On Saturdays \_\_\_\_\_ hours/day

c. On Sundays \_\_\_\_\_ hours/day

8. When the in-patient pharmacy is closed, which of the following are available? (Please select all that apply)

- a.  On call pharmacist  
b.  Resident pharmacist  
c.  None of the above

### C: Medication supply and storage on in-patient wards.

For this section, please continue to exclude any intensive care, maternity and/or mental health wards in your hospital. Please answer each statement in relation to what you see **in practice** on in-patient wards in this hospital, and not what could or should happen. **Please select one option for each part of the question, unless stated otherwise.**

**9. (i) In general, in-patient wards in this hospital use:**

- |  |   |
|--|---|
| a. patients' own supplies (medications from home) on                             | <input type="checkbox"/> All wards<br><input type="checkbox"/> Most wards<br><input type="checkbox"/> Some wards<br><input type="checkbox"/> One ward<br><input type="checkbox"/> No wards<br><input type="checkbox"/> Not sure |
| b. ward stock on   | <input type="checkbox"/> All wards<br><input type="checkbox"/> Most wards<br><input type="checkbox"/> Some wards<br><input type="checkbox"/> One ward<br><input type="checkbox"/> No wards<br><input type="checkbox"/> Not sure |
| c. non-stock medications labelled for in-patient use (no directions on label) on | <input type="checkbox"/> All wards<br><input type="checkbox"/> Most wards<br><input type="checkbox"/> Some wards<br><input type="checkbox"/> One ward<br><input type="checkbox"/> No wards<br><input type="checkbox"/> Not sure |
| d. one-stop dispensing supplies (directions on label for patient) on             | <input type="checkbox"/> All wards<br><input type="checkbox"/> Most wards<br><input type="checkbox"/> Some wards<br><input type="checkbox"/> One ward<br><input type="checkbox"/> No wards<br><input type="checkbox"/> Not sure |
| e. other (please specify):<br>_____  | <input type="checkbox"/> All wards<br><input type="checkbox"/> Most wards<br><input type="checkbox"/> Some wards<br><input type="checkbox"/> One ward   |

**9.(ii) In your experience, which three types of medication supplies (a to e above) are most commonly used on in-patient wards in your hospital? (please enter the relevant letter from above)**

**Most common:** \_\_\_\_\_

**2<sup>nd</sup> most common:** \_\_\_\_\_

**3<sup>rd</sup> most common:** \_\_\_\_\_

**10. (i) In general, non-stock medications are ordered during pharmacy opening hours:**

- |  |   |
|--|---|
| a. via the ward pharmacist on their ward visit                   | <input type="checkbox"/> All wards<br><input type="checkbox"/> Most wards<br><input type="checkbox"/> Some wards<br><input type="checkbox"/> One ward<br><input type="checkbox"/> No wards<br><input type="checkbox"/> Not sure |
| b. via the ward pharmacy technician on their ward visit          | <input type="checkbox"/> All wards<br><input type="checkbox"/> Most wards<br><input type="checkbox"/> Some wards<br><input type="checkbox"/> One ward<br><input type="checkbox"/> No wards<br><input type="checkbox"/> Not sure |
| c. by contacting the ward pharmacist outside of their ward visit | <input type="checkbox"/> All wards<br><input type="checkbox"/> Most wards<br><input type="checkbox"/> Some wards<br><input type="checkbox"/> One ward<br><input type="checkbox"/> No wards<br><input type="checkbox"/> Not sure |
| d. by taking the drug chart to pharmacy                          | <input type="checkbox"/> All wards<br><input type="checkbox"/> Most wards<br><input type="checkbox"/> Some wards<br><input type="checkbox"/> One ward<br><input type="checkbox"/> No wards<br><input type="checkbox"/> Not sure |
| e. by computer/electronically                                    | <input type="checkbox"/> All wards<br><input type="checkbox"/> Most wards<br><input type="checkbox"/> Some wards<br><input type="checkbox"/> One ward<br><input type="checkbox"/> No wards<br><input type="checkbox"/> Not sure |
| f. other method(s) (please specify):<br>_____                    | <input type="checkbox"/> All wards<br><input type="checkbox"/> Most wards<br><input type="checkbox"/> Some wards<br><input type="checkbox"/> One ward   |

**10.(ii) In your experience, which three methods (a to f above) are most commonly used on in-patient wards in your hospital? (please enter the relevant letter from above)**

**Most common:** \_\_\_\_\_

**2<sup>nd</sup> most common:** \_\_\_\_\_

**3<sup>rd</sup> most common:** \_\_\_\_\_

**11. (i) In your experience, which of the following methods are used to obtain medications for in-patient wards outside of pharmacy opening hours? (Please select all that apply)**

- a.  Borrow from another patient's supply on the same ward (already labelled and supplied from hospital pharmacy)
- b.  Borrow from another ward (ward stock)
- c.  Contact the on-call pharmacist
- d.  Obtain the medication from a reserve/emergency drug cupboard (non-electronic)
- e.  Obtain the medication from reserve/emergency drug cupboard (electronic)
- f.  Other method(s) (please specify):

\_\_\_\_\_

**11. (ii) In your experience, which three methods (a to f above) are most commonly used to obtain medications out of hours in this hospital? (please enter the relevant letter from above)**

**Most common:** \_\_\_\_\_

**2<sup>nd</sup> most common:** \_\_\_\_\_

**3<sup>rd</sup> most common:** \_\_\_\_\_

**12. In general, oral medications are prescribed on:**

**(i) in-patient paper drug charts**

- All wards
- Most wards
- Some wards
- One ward
- No wards
- Not sure

**(ii) in-patient electronic prescribing system**

- All wards
- Most wards
- Some wards
- One ward
- No wards
- Not sure

**13. (i) In general, oral medications on the wards are stored in:**

- a. medicines cupboard  All wards
- Most wards
- Some wards
- One ward
- No wards
- Not sure

**13. (i) Continued. In general, oral medications on the wards are stored in:**

- b. shelves or units without doors  All wards
- Most wards
- Some wards
- One ward
- No wards
- Not sure

- c. drug trolley (non-electronic)  All wards
- Most wards
- Some wards
- One ward
- No wards
- Not sure

- d. electronic drug trolley  All wards
- Most wards
- Some wards
- One ward
- No wards
- Not sure

- e. electronic storage cabinet (stationary)  All wards
- Most wards
- Some wards
- One ward
- No wards
- Not sure

- f. fridge  All wards
- Most wards
- Some wards
- One ward
- No wards
- Not sure

- g. controlled drugs cupboard (non-electronic)  All wards
- Most wards
- Some wards
- One ward
- No wards
- Not sure

- h. controlled drugs cupboard (electronic)  All wards
- Most wards
- Some wards
- One ward
- No wards
- Not sure

- i. patient's lockable bedside cabinet  All wards
- Most wards
- Some wards
- One ward
- No wards
- Not sure

Question 13 continues on next page

**13. (i) Continued. In general, oral medications on the wards are stored in:**

- j. patient's bedside table or belongings  All wards  
 Most wards  
 Some wards  
 One ward  
 No wards  
 Not sure
- k. patient specific container located away from patient's bedside (e.g. in medication room)  All wards  
 Most wards  
 Some wards  
 One ward  
 No wards  
 Not sure
- l. other location(s) (please specify):  
 \_\_\_\_\_  
 All wards  
 Most wards  
 Some wards  
 One ward  
 No wards

**13. (ii) In your experience, where would oral medications most commonly be retrieved from (a to l above) at the time of administration in your hospital? (please enter the relevant letter from above)**

Most common: \_\_\_\_\_

2<sup>nd</sup> most common: \_\_\_\_\_

3<sup>rd</sup> most common: \_\_\_\_\_

**D: Medication administration, policies and guidance**

For this section, please continue to exclude any intensive care, maternity and/or mental health wards in your hospital. Please answer each statement in relation to what you see **in practice** on in-patient wards in this hospital, and not what could or should happen. **Please select one option for each part of the question, unless stated otherwise.**

**14. In general, regularly prescribed medications are administered on scheduled drug rounds on:**

- All wards  
 Most wards  
 Some wards  
 One ward  
 No ward  
 Not sure

**15. For oral medications that are not stored at the patient's bedside, how are the medications transported to the patient from where they are stored?**

- a. Lockable electronic drug trolley  All wards  
 Most wards  
 Some wards  
 One ward  
 Not available  
 Not sure
- b. Lockable drug trolley (non-electronic)  All wards  
 Most wards  
 Some wards  
 One ward  
 Not available  
 Not sure

**15. Continued. For oral medications that are not stored at the patient's bedside, how are the medications transported to the patient from where they are stored?**

- c. Trolley with no locks (non-electronic)  All wards  
 Most wards  
 Some wards  
 One ward  
 Not available  
 Not sure
- d. Tray/basket  All wards  
 Most wards  
 Some wards  
 One ward  
 Not available  
 Not sure
- e. Medicines cup/oral syringe  All wards  
 Most wards  
 Some wards  
 One ward  
 Not available  
 Not sure
- f. Other (please specify):  
 \_\_\_\_\_  
 All wards  
 Most wards  
 Some wards  
 One ward  
 No wards  
 Not sure

**16. Excluding controlled drugs, which medications, if any, require a double check at administration in your hospital? (i.e. administration is checked by a second member of staff)**

a. Intravenous medications	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> Not sure
b. Intravenous fluids	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> Not sure
c. Oral chemotherapy	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> Not sure
d. Parenteral chemotherapy	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> Not sure
e. Doses administered to paediatric patients	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> Not sure
f. Specific drugs (e.g. heparin, insulin, please list)	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> Not sure
	_____
	_____
	_____
	_____

**17. What medication administration related policies and guidance is there in your hospital?**

a. Self-administration of medications by in-patient	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> Not sure
b. Nil-by-mouth policy	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> Not sure
c. Intravenous administration guide (hard copy)	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> Not sure
d. Intravenous administration guide (electronic copy)	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> Not sure
e. Guidance on what to do if medication is not available on the ward	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> Not sure
f. Guidance on out of hours access to medications	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> Not sure

**18. Which of the following practices are routinely used on at least one ward in this hospital?**

a. Administration of medications by the patient's carer (e.g. parent, spouse)	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> Not sure
b. Nurses wear an overall/sash with "Do not disturb" or similar words during drug administration	<input type="checkbox"/> Yes
	<input type="checkbox"/> No
	<input type="checkbox"/> Not sure

**Additional comments**

**19. Please tell us about any initiatives that have been implemented in your hospital to improve any of the following: pharmacy service to in-patients, medication supply and storage on in-patient wards and/or medication administration. Please feel free to add any other comments you may have about the pharmacy service and/or medication processes in your hospital.**

# PART TWO

This section is about current and/or planned electronic prescribing systems at your hospital.

## E: Electronic prescribing systems

Thinking about **all in-patient and discharge** services in your hospital, please answer the following questions about electronic prescribing. **In this part, please also include any systems used on intensive care, maternity and mental health wards.**

Examples of electronic prescribing systems are:

- Comprehensive hospital wide prescribing systems (e.g. JAC, Cerner)
- Speciality targeted applications/software (e.g. ChemoCare, Varian)
- Systems relating to a specific part of the prescribing process (Electronic discharge prescribing)

<b>20. Does your hospital have any electronic prescribing system in use at the moment?</b>	Yes <input type="checkbox"/> (continue to Question 21)	No <input type="checkbox"/> (skip to Question 30)
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**21. Is there more than one electronic prescribing system in use in your hospital at the moment?**

- Yes  If Yes, please insert number of systems: \_\_\_\_\_
- No
- Not sure

**22. Please insert the name of the electronic prescribing system(s) you have in the hospital.**

Examples of electronic prescribing systems are:

- Comprehensive hospital wide prescribing systems (e.g. JAC, Cerner)
- Speciality targeted applications/software (e.g. ChemoCare, Varian)
- Systems relating to a specific part of the prescribing process (Electronic discharge prescribing)

	System 1	System 2	System 3	System 4
_____	_____	_____	_____	_____

**23. How long has the system(s) been in place?**

	System 1	System 2	System 3	System 4
a. <1 year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. ≥ 1 < 2 year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. 2 – 5 year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. > 5 year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Not sure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please add any other comments you have about the questions on this page.

**24. Please answer all statements from (a to c) for each system you have in place.**

The system you have allows:

	System 1	System 2	System 3	System 4
a. Prescribing for in-patients	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
b. Prescribing for discharge	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
c. Others , please specify	_____			

Please add any other comments you have. Insert the letter of the point you are referring to i.e. a. (comment) and name of system if necessary.

**25. Please answer all statements from (a to h) for each system you have in place.**

The system you have is in routine use in:

	System 1	System 2	System 3	System 4
a. Adult intensive therapy units	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure
b. Paediatric intensive therapy units	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure
c. Adult medical wards	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure
d. Adult surgical wards	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure
e. Paediatric medical wards	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure

Question 25 continues on next page



**25. Continued. Please answer all statements from (a to h) for each system you have in place.**

The system you have is in routine use in:	System 1	System 2	System 3	System 4
f. <b>Paediatric surgical wards</b>	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure
g. <b>Cancer services</b>	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> All wards <input type="checkbox"/> Some wards <input type="checkbox"/> One ward <input type="checkbox"/> No wards <input type="checkbox"/> Not sure

h. **Others, please specify type of wards** \_\_\_\_\_

Please add any other comments you have. Insert the letter of the point you are referring to i.e. a. (comment) and name of system if necessary.

**26. Which best describes your system for each statement? Please answer all statements from (a to f) for each system you have in place.**

The system is:	System 1	System 2	System 3	System 4
a. <b>An in-house designed system</b> 'originally designed internally within the Trust'	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
b. <b>Supplied by an external software supplier</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
c. <b>A stand alone application</b> 'operates without other programs'	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
d. <b>Is linked with, or includes, the pharmacy dispensing software</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
e. <b>Is linked to other systems/ software in the hospital</b> e.g. laboratory reports	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
f. <b>Is interfaced with other technologies</b> e.g. bar-coding, electronic pumps.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure

Please add any other comments you have. Insert the letter of the point you are referring to i.e. a. (comment) and name of system if necessary.

**27. Which best describes your system for each statement? Please answer all statements from (a to o) for each system you have in place.**

The system currently offers:	System 1	System 2	System 3	System 4
a. <b>Dose checking</b> 'checks that dose is within normal dose range'	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
b. <b>Dose calculations</b> <i>e.g. calculates dose per weight, calculate infusion rate, etc.</i>	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
c. <b>Free text prescribing option</b> 'i.e. typing drug name without selecting from a list of drugs'	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
d. <b>Drug interaction alerts</b>	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
e. <b>Multi level control for prescribers</b> 'different levels of authority tailored per prescriber'	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
f. <b>Prescribing by selecting a drug from a drop down (or similar) menu</b>	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
g. <b>Access to drug management information</b> <i>e.g. BNF, policies, guidelines, formulary</i>	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
h. <b>Allergy checker</b> <i>e.g. electronic alert appears on screen</i>	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
i. <b>Orders laboratory investigations</b>	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
j. <b>Displays laboratory results</b>	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
k. <b>Drug stock checking</b> 'checks if formulary drugs are available or out of stock'	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
l. <b>Discharge/transfer summaries</b>	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure

Question 27 continues on next page

27. Continued. Which best describes your system for each statement? Please answer all statements from (a to o) for each system you have in place.

The system currently offers:	System 1	System 2	System 3	System 4
m. Prompts drug administration by nursing staff	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
n. Records drug administration	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
o. If there is any other key features of the system, please specify:	_____	_____	_____	_____
	_____	_____	_____	_____

Please add any other comments you have. Insert the letter of the point you are referring to i.e. a. (comment) and name of system if necessary.

28. Which best describes your system for each statement? Please answer all statements from (a to d) for each system you have in place.

On the current system, can the following be prescribed?	System 1	System 2	System 3	System 4
a. Continuous Intravenous infusions (IVIs)	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
b. Sliding scale insulin	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
c. Warfarin	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure
d. Tapering doses <i>e.g. corticosteroids</i>	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure	<input type="checkbox"/> Not applicable <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not sure

Please add any other comments you have. Insert the letter of the point you are referring to i.e. a. (comment) and name of system if necessary.

**29. Which drugs (if any) are prescribed on a supplementary paper drug chart? (Please select all that apply)**

System 1	System 2	System 3	System 4
<input type="checkbox"/> None	<input type="checkbox"/> None	<input type="checkbox"/> None	<input type="checkbox"/> None
<input type="checkbox"/> Continuous IVs	<input type="checkbox"/> Continuous IVs	<input type="checkbox"/> Continuous IVs	<input type="checkbox"/> Continuous IVs
<input type="checkbox"/> Insulin	<input type="checkbox"/> Insulin	<input type="checkbox"/> Insulin	<input type="checkbox"/> Insulin
<input type="checkbox"/> Warfarin	<input type="checkbox"/> Warfarin	<input type="checkbox"/> Warfarin	<input type="checkbox"/> Warfarin
<input type="checkbox"/> Tapering doses	<input type="checkbox"/> Tapering doses	<input type="checkbox"/> Tapering doses	<input type="checkbox"/> Tapering doses
<input type="checkbox"/> Other (please specify)	<input type="checkbox"/> Other (please specify)	<input type="checkbox"/> Other (please specify)	<input type="checkbox"/> Other (please specify)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Please add any other comments you have. Insert the name of the system if necessary.

**30. Does your hospital intend to introduce a new prescribing system(s)? If Yes, when:**

No                      <1 year                      1-2 years                      >2 year                      Not sure

                                                                                                                      

Please add any other comments you have.

**31. Please provide your details below if you are happy for us to contact you in case any of your responses require further clarification. Your contact information will remain confidential.**

Name: \_\_\_\_\_

Role/job title: \_\_\_\_\_

Email address: \_\_\_\_\_

Phone number: \_\_\_\_\_

Bleep number: \_\_\_\_\_

**32. Thank you for completing this survey. The information you have provided will help us to identify what medication systems are currently in use and will contribute to the development of future strategies to (1) reduce medication errors, (2) streamline hospital medication systems and (3) reduce wasted medications. Would you be willing to be contacted for the next stage of our research?**

Yes       No