

# MANAGEMENT OF PATIENTS WITH SUSPECTED INFECTIOUS DIARRHOEA

## INFECTION CONTROL SURVEY

Thank you for agreeing to participate in this study, which has two research objectives.

The first is to evaluate a newly developed technology – Mass Tag multiplex PCR – for the rapid simultaneous diagnosis of multiple entero-pathogens directly from stool, to rule out any infectious causative agents. The aim is to improve the hospital management of patients with suspected infectious diarrhoea, in particular avoiding/reducing isolation of patients with non-infectious diarrhoea.

The second objective is to evaluate rapid multi-locus sequence typing (MLST) of *C. difficile* direct from stool in terms of turnaround time and the ability to detect outbreaks in clinically useful time frames.

The aim of this survey is to learn more about how infection control (IC) departments **manage adult patients with suspected infectious diarrhoea** in a variety of different types of NHS Trust across the UK. All of the information that you provide will remain confidential and will be anonymised in all reports and presentations: you and your Trust/laboratory will never be identified by name. We will provide you with an anonymised summary of the findings across all the Trusts completing surveys.

All responses will be treated as **strictly confidential**; specific institutions and individuals will not be identifiable in the survey results. The policy documents requested are to aid the analysis of the health economic evaluation of the technology and will not be used by any institution or hospital for any other purpose. If you wish to forward these documents by post, please contact the study team (contact details are provided at the end of the survey) and we will forward a stamped addressed envelope.

We will send you a £20 Amazon voucher when we receive your completed questionnaire.

### Information for completing the survey

Please try to answer all questions. If you feel that you are unable to answer certain questions, please indicate why this is the case, if possible (e.g. lack of data, question not applicable in your setting etc.)

Unless otherwise indicated (in italics), please complete the questions in numerical order.

For multiple choice or yes/no questions, please indicate your chosen answer(s) by selecting the appropriate check box

For questions requiring a more detailed response, please answer in the text box that has been provided (deleting the "Type answer here" text)

## SECTION A: THE IC TEAM

1. Please list all of the hospitals that are part of your NHS Trust (including acute hospitals and community hospitals) and indicate the number of whole time equivalent (WTE) **IC** staff based at each hospital by cadre/grade:

Hospital	Number of IC staff (WTE)				
	Administrative staff	Grade 6 nurses	Grade 7 nurses	Grade 8 nurses	Doctors
Hospital 1					
Hospital 2					
Hospital 3					
Hospital 4					
Hospital 5					
<b>Total:</b>					

## SECTION B: MONITORING OF PATIENTS WITH INFECTIOUS DIARRHOEA

2. What percentage of the time of the **whole** infection control team is spent on the routine management of diarrhoea each day?

- 0-10%     
 11-20%     
 21-30%     
 31-40%     
 41-50%  
 51-60%     
 61-70%     
 71-80%     
 81-90%     
 91-100%

3. Please indicate how the IC team are informed about patients with suspected diarrhoea by estimating the percentage of these patients that fall into each of the following categories:

- %            A member of the IC team visits the ward  
%            Ward staff contact the IC team  
%            Laboratory result received by IC team  
%            Other: Please describe here

4. Please estimate the average number of patients with suspected infectious diarrhoea admitted to your trust per month:

patients per month

5. Please indicate how the IC team track the movements of patients with suspected or confirmed diarrhoea of infectious origin:

- Only bed moves are tracked                       Only ward moves are tracked  
 Both bed and ward moves are tracked             Neither bed nor ward moves are tracked

6. Which of the following systems are used to monitor patients with suspected or confirmed diarrhoea?

- Manual paper based system                      *(please go to Q7)*  
 Computer based system                            *(please go to Q8)*  
 Both manual and computer paper based systems    *(please answer Q7 and Q8 and describe how this system operates in the free text box below)*  
 Other: Please describe here

*If other is selected, please go to Q10*

7. What is the average number of hours per day that the IC team spend tracking patients with suspected or confirmed diarrhoea using a manual paper based system?

hours                      *(please go to Q10, unless a computer system is also used, in which case go to Q8)*

8. Please indicate which computer based system is used:

- CRS/PAS
- IC net
- Other: Please specify here

9. What information does this computer based system provide? Please indicate all that apply:

- Provides automatic alerts to notify IC staff of patients with potentially infectious diarrhoea
- Provides automatic alerts to notify IC staff of patients with confirmed infectious diarrhoea
- Identifies patients who have previously been admitted with an infectious diarrhoea
- Tracks patients with suspected or confirmed infectious diarrhoea through hospital system
- Collects regular data on the incidence of infectious diarrhoea
- Provides automated electronic transfer of test results from the local microbiology laboratory
- Other: Please describe here

10. How soon after initiation of symptoms does a patient with suspected infectious diarrhoea enter the monitoring system, on average? Please indicate the percentage of patients in each category:

- % Same day *(please go to Q11)*
- % Greater than one day *(please go to Q12)*

11. For those patients who enter the monitoring system on the same day, how many hours does it take for them to enter this system, on average?

hours

12. Is access to the monitoring system limited to the IC team?

- Yes *(Go to Q14)*
- No *(Go to Q13)*

13. If access to the monitoring system is not limited to the IC team, who else has access? Type answer here

### **SECTION C: TRAINING**

14. Does the Trust have a standard precautions policy?

- Yes *(Please send this policy with your completed questionnaire and go to Q15)*
- No *(Go to Q16)*

15. How has this document been made available to staff? Please consider all relevant types of staff and indicate all that apply:

- Email (targeted or via mailing lists)
- Given out in induction sessions
- Verbally / non formally
- Other: Please describe here
- Posted on departmental notice boards
- Informed via targeted training sessions
- Intranet

16. What is your average compliance with Standard precautions for the management of infectious diarrhoea?

%

17. This question relates to the cleaning policy within your Trust for patients with suspected or confirmed infectious diarrhoea.

(a) Please indicate, for each type of space within a ward, whether a terminal clean or curtain change is undertaken when the space is vacated by a patient with suspected or confirmed infectious diarrhoea:

Type of space	Terminal clean?	Curtains changed as part of the terminal clean? (window curtains if side room)
Side room	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Bed space in bay	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Whole bay	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

(b) Does use of gloves and aprons increase in cases of suspected or confirmed infectious diarrhoea?

- Yes Please give details  
 No

(c) Does the cleaning policy vary depending on whether the diagnosis is suspected or confirmed?

- Yes Please give details  
 No

(d) Does the cleaning policy extend to cover other locations in the hospital which the affected patient may visit e.g. for scans?

- Yes  No

(e) Do you carry out routine environmental testing?

- Yes Please give details of the type(s) of test  
 No

18. Does the Trust have a policy for the **management of patients with diarrhoea and vomiting**?

- Yes (Please send this policy with your completed questionnaire and go to **Q19**)  
 No (Go to **Q20**)

19. How has this document been made available to staff? Please consider all relevant types of staff and indicate overleaf all that apply:

- |  |  |
|--|--|
| <input type="checkbox"/> Email (targeted or via mailing lists) | <input type="checkbox"/> Posted on departmental notice boards    |
| <input type="checkbox"/> Given out in induction sessions       | <input type="checkbox"/> Informed via targeted training sessions |
| <input type="checkbox"/> Verbally / non formally               | <input type="checkbox"/> Intranet                                |
| <input type="checkbox"/> Other: Please describe here           |  |

20. Does the Trust have an **isolation** policy?

- Yes (Please send this policy with your completed questionnaire and go to **Q21**)  
 No (Go to **Q22**)

21. How has this document been made available to staff? Please consider all relevant types of staff and indicate all that apply:

- |  |  |
|--|--|
| <input type="checkbox"/> Email (targeted or via mailing lists) | <input type="checkbox"/> Posted on departmental notice boards    |
| <input type="checkbox"/> Given out in induction sessions       | <input type="checkbox"/> Informed via targeted training sessions |
| <input type="checkbox"/> Verbally / non formally               | <input type="checkbox"/> Intranet                                |
| <input type="checkbox"/> Other: Please describe here           |  |

22. Under what circumstances would a patient with suspected infectious diarrhoea be isolated? Type answer here

23. Across the whole Trust, what percentage of patients with suspected infectious diarrhoea are isolated in a side room?

% (If your response is 100%, go to **Q25**. Otherwise go to **Q24**)

24. When insufficient side rooms are available to manage multiple patients with suspected infectious diarrhoea, how are patients prioritised? Please indicate all of the reasons that apply, ranking them in priority order (i.e. 1 - top priority, 2 - second priority etc.). Do not number any reasons which are not applicable to your Trust.

- The most severely ill patients are prioritised
- Older patients are prioritised
- Particular pathogens or strains are prioritised
- Patients who have been sick for longer are prioritised
- Other: Please describe here

25. How long does it take, on average, from the first symptoms of infectious diarrhoea, for **patients to be isolated in a side room or cohorted in a closed bay**?

hours

26. Please indicate how many bed moves a typical patient with suspected or confirmed infectious diarrhoea would make across the entire duration of their inpatient stay:

- 0    1    2    3    4    5    More than 5

27. Does the Trust have a **Clostridium difficile** policy?

- Yes (Please send this policy with your completed questionnaire and go to **Q28**)  
 No (Go to **Q29**)

28. How has this document been made available to staff? Please consider all relevant types of staff and indicate all that apply:

- |  |  |
|--|--|
| <input type="checkbox"/> Email (targeted or via mailing lists) | <input type="checkbox"/> Posted on departmental notice boards    |
| <input type="checkbox"/> Given out in induction sessions       | <input type="checkbox"/> Informed via targeted training sessions |
| <input type="checkbox"/> Verbally / non formally               | <input type="checkbox"/> Intranet                                |
| <input type="checkbox"/> Other: Please describe here           |  |

29. Do staff receive training on the management of patients with potentially infectious diarrhoea, over and above the information which is provided in standard operating procedures and policies?

- Yes (Go to **Q30**)       No (Go to **Q31 in Section D**)

30. Please describe this additional training: Type answer here

#### **SECTION D: MANAGING OUTBREAKS**

31. Under what conditions would the Trust class multiple cases of infectious diarrhoea as an outbreak? Please indicate all that apply:

- For particular strains of pathogen
- Once a threshold level of cases has been reached
- Once an attributable death has been recorded
- Other: Please describe here

32. From 1<sup>st</sup> April 2010 until 31<sup>st</sup> March 2011 how many outbreaks of infectious diarrhoea were recorded across the whole Trust?

Viral gastro (no norovirus confirmed)  
C. difficile  
Norovirus  
Other causes: Please describe here

33. Under what conditions would the Trust consider closing a ward due to an outbreak of infectious diarrhoea? Please select all that apply:

- Once a single infectious case has been positively identified
- For particular strains of pathogen
- Once a threshold level of cases has been reached
- Once an attributable death has been recorded
- Other: Please describe here

34. From 1<sup>st</sup> April 2010 until 31<sup>st</sup> March 2011 how many wards were closed as a consequence of outbreaks of infectious diarrhoea across the whole Trust?

wards

35. Does the Trust have a policy of cohorting multiple patients with infectious diarrhoea in the same ward if tests indicate that these patients share the same causative agent?

- Yes (Go to **Q36**)                       No (Go to **Section E**)

36. If **Yes**, please describe this policy: Type answer here

## **SECTION E: YOUR VIEWS ON FUTURE TRENDS IN THE MANAGEMENT OF PATIENTS WITH SUSPECTED INFECTIOUS DIARRHOEA**

37. Please consider the following scenarios. These reflect potential developments in this clinical area that may come to fruition in the next four to five years. Please indicate how these scenarios might impact on the management of patients with suspected infectious diarrhoea within the Trust.

We are interested in your views on likely impact - there is no right or wrong answer.  
Your answers will remain anonymous.

**Scenario 1:** A consolidation of microbiology laboratory services has been proposed. The current model, with smaller microbiology laboratories based in hospitals and serving particular Trusts may be replaced by a model which requires samples to be sent for testing to a small number of regional microbiology centres spread at regular intervals throughout the UK, each serving multiple Trusts.

What impact might this have on the management of patients with suspected infectious diarrhoea within the Trust?

Type answer here

**Scenario 2:** This survey is part of a larger study investigating the feasibility of introducing a new diagnostic test in microbiology laboratories across the UK. Using a stool sample taken from a patient with suspected infectious diarrhoea, this test can accurately detect 30 pathogens in a single reaction and rule in or out an infectious causative agent within 24 hours of the stool sample being taken.

What impact might this have on the management of patients with suspected infectious diarrhoea within the Trust?

Type answer here

## **SECTION F: YOUR DETAILS**

Three surveys are being conducted as part of this study. Questionnaires are also being completed by Microbiology Laboratories and Microbiologists. These surveys will provide us with information on the management of patients with suspected infectious diarrhoea from different perspectives. Each questionnaire asks different questions.

So that we can identify the institutions who have completed each questionnaire and thus combine the results of all three surveys in our analysis, please could you provide the information in questions 38 to 42.

**Specific institutions and individuals will not be identifiable in the survey results.**  
**All results will be anonymised.**

38. Name of NHS Trust: Type answer here

39. Address: Type answer here

40. Your name: Type answer here

41. Your role: Type answer here

42. Your email address: Type answer here

Many thanks for taking the time to complete this questionnaire. All responses will be treated as **strictly confidential**; specific institutions and individuals will not be identifiable in the survey results.

Please forward the completed questionnaire to:

Lily O' Connor, Biomedical Research Centre, Microbiology, Level 6, John Radcliffe Hospital, Oxford University Hospitals NHS Trust, Headley Way, Headington, OX3 9DU.

Direct Line: xxx

Switchboard: xxx

Mobile: xxx

Email: xxx

Results will be disseminated to survey respondents and may be published in peer-reviewed journals.