

Introduction

The British Infection Association (BIA), in collaboration with the Royal College of Pathologists (RCPath), is seeking information about the current delivery of microbiology, virology and ID expertise across the NHS to inform discussions about future service provision following the COVID-19 pandemic.

We would like to gather this information for every NHS organisation (defined as individual Trusts or Health Boards) delivering infection services in each of the four UK nations. Our focus is on general rather than specialist services. Our questions acknowledge that some departments deliver services to multiple NHS organisations and across multiple sites.

For each organisation, we would request one person to be nominated to return the survey. We estimate completing the survey will take approximately 30 minutes and is likely to require input from colleagues, including those from outside your immediate department, to answer all questions as accurately and completely as possible. For this reason, a PDF version is included in the invitation email so this can be distributed to colleagues to collect responses before entering them online.

We appreciate the demands on your time and are sorry to add to them but if we can build a comprehensive picture, the survey will provide a uniquely valuable resource for the Association and Royal College but also individual departments making the case for future provision of infection services in the NHS. Our aim is to make the findings and data available to the memberships in due course. Thank you in advance for taking the time to help with this important work.

Martin Llewelyn, BIA President, David Partridge, BIA Secretary and Natasha Ratnaraja for the BIA Clinical Service Committee.

(With thanks also to Bridget Atkins and Angharad Davies for their valuable contributions to this survey.)

1. Please enter your contact details and the NHS organisation (i.e. Trust or Local Health Board) you are completing this survey on behalf of:

Name

Role

NHS organisation

Email Address

Consultant-Level Staffing

Surveying the training background and CCTs of consultants working within infection services across the UK is crucial to understanding areas which may have a relative deficit of consultant-level expertise.

2. How many consultant full-time equivalents (FTEs) according to training background and/or CCT do you employ? Please answer for consultants who are **currently in post** for an infection service (do not include vacant/unfilled posts).

| | |
|---|----------------------|
| Medical Microbiology | <input type="text"/> |
| Medical Virology | <input type="text"/> |
| Infectious Diseases | <input type="text"/> |
| Medical Microbiology/Infectious Diseases | <input type="text"/> |
| Medical Virology/Infectious Diseases | <input type="text"/> |
| Infectious Diseases/General Medicine | <input type="text"/> |
| Consultant Clinical Scientist- Microbiology | <input type="text"/> |
| Consultant Clinical Scientist- Virology | <input type="text"/> |
| Nurse Consultant | <input type="text"/> |
| Consultant Pharmacist | <input type="text"/> |
| Other, including staff grade doctors working at consultant level (please specify) | <input type="text"/> |

3. According to required specialty, how many **vacant or unfilled consultant FTE posts** in an infection specialty are there currently at your NHS organisation?

(If multiple specialties could fill a vacant post, select the most suitable.)

Medical Microbiology

Medical Virology

Infectious Diseases

Medical
Microbiology/Infectious
Diseases

Medical
Virology/Infectious
Diseases

Infectious
Diseases/General
Medicine

Consultant Clinical
Scientist- Microbiology

Consultant Clinical
Scientist- Virology

Nurse Consultant

Consultant Pharmacist

Other, including staff
grade doctors working at
consultant level (please
specify)

4. Does your NHS organisation have a organisation-operated Microbiology laboratory on-site staffed by Microbiology-accredited consultants?

Yes

No

If yes, please state the hospital site/s where these are situated:

Specialty Registrar Staffing

Specialty registrars, both in training and non-training grades contribute significantly to infection services in the UK.

5. How many registrar FTEs according to training background are currently working at your NHS organisation?

Please answer for registrars who are **currently in post** for an infection service (do not include vacant/unfilled posts).

Medical Microbiology

Medical Virology

Infectious Diseases

Medical
Microbiology/Infectious
Diseases

Medical
Virology/Infectious
Diseases

Infectious
Diseases/General
Medicine

Non-training grade e.g.
senior clinical fellow

Trainee clinical scientist-
Microbiology

Trainee clinical scientist-
Virology

Other including staff
grades (please specify)

6. How many **vacant or unfilled registrar FTE posts** in an infection specialty are there currently in your NHS organisation?

Medical

Microbiology/Infectious
Diseases

Medical

Virology/Infectious
Diseases

Infectious

Diseases/General
Medicine

Non-training grade e.g.
senior clinical fellow

Trainee clinical scientist-
Microbiology

Trainee clinical scientist-
Virology

Other including staff
grades (please specify)

Infectious Diseases

The following questions relate to ID, Microbiology and Virology specialty activities. We acknowledge that there may be a significant degree of overlap in roles and training background or that some departments may be merged into an overarching 'Infection Service'.

Please select tick 'Yes' for all specialties that apply to the activities carried out by the department/s in your NHS organisation. Make note of this in the 'Additional Details' box at the bottom of this page.

* 7. Does your NHS organisation have an ID department and/or employ ID-accredited consultants?

Yes

No

Additional details:

Infectious Diseases

8. Remote advice is provided away from the point of care (i.e. not at the bedside but rather over video link, phone or email) and is often initiated by the managing team seeking advice from an infection specialty service. Please answer based on current hours and practices.

Please tick whether the following is provided by **Infectious Diseases-accredited clinicians** at your NHS organisation:

- Remote advice during normal working hours (i.e. 0900-1700, Mon-Fri)
- Remote advice outside of normal working hours (i.e. other than the above)
- An on-site presence during all/part of working hours (0900-1700) at weekends
- None of the above

Any additional information on working hours:

9. Which other sites/NHS organisations does the **Infectious Diseases** remote advice service cover? (If the service covers a broader area, then please complete the 'Other' box e.g. 'Greater Manchester and North West England region')

NHS Organisation 1
name:

NHS Organisation 1
number of sites:

NHS Organisation 1 list of
sites:

NHS Organisation
2 name:

NHS Organisation 2
number of sites:

NHS Organisation 2 list of
sites:

NHS Organisation 3
name:

NHS Organisation 3
number of sites:

NHS Organisation 3 list of
sites:

NHS Organisation 4
name:

NHS Organisation 4
number of sites:

NHS Organisation 4 list of
sites:

NHS Organisation 5
name:

NHS Organisation 5
number of sites:

NHS Organisation 5 list of
sites:

NHS Organisation 6
name:

NHS Organisation 6
number of sites:

NHS Organisation 6 list of
sites:

Other (please specify):

10. Does your NHS Organisation provide a specialist **Paediatric Infectious Diseases** service providing in-person consults by a subspecialist paediatrician?

Yes

No

If yes, please state the hospital site/s:

Inpatient ID Services

Please answer the following questions according to your NHS organisation's current inpatient infection service capacity, even if this has changed as a consequence of the COVID-19 pandemic.

11. Does your NHS organisation have dedicated acute ID inpatient beds managed by an **Infectious Diseases** department or where an accredited Infection Specialty consultant is the named consultant?

Yes

No

If yes, please state the site/s where these beds are situated:

12. State the number of dedicated inpatient ID beds:

13. Of these, how many are:

Negative pressure side rooms without lobbies

Negative pressure side rooms with lobbies (non-positive pressure ventilated lobbies)

Side rooms with positive pressure ventilated HBN04-01-compliant lobbies

14. Is there a dedicated ID acute take?

Yes

No

15. Is there a dedicated High Consequence Infectious Disease (HCID) site within your NHS organisation?

Yes

No

If yes, how many ring-fenced beds are there?

Microbiology

The following questions relate to ID, Microbiology and Virology specialty activities. We acknowledge that there may be a significant degree of overlap in roles and training background or that some departments may be merged into an overarching 'Infection Service'.

Please select tick 'Yes' for all specialties that apply to the activities carried out by the department/s in your NHS organisation. Make note of this in the 'Additional Details' box at the bottom of this page.

* 16. Does your NHS organisation have a Microbiology department and/or employ Microbiology-accredited consultants?

Yes

No

Additional details

Microbiology

17. Remote advice is provided away from the point of care (i.e. not at the bedside but rather over video link, phone or email) and is often initiated by the managing team seeking advice from an infection specialty service. Please answer based on current hours and practices.

Please tick whether the following is provided by **Microbiology-accredited clinicians** at your NHS organisation:

- Remote advice during normal working hours (i.e. 0900-1700, Mon-Fri)
- Remote advice outside of normal working hours (i.e. other than the above)
- Reporting of all positive blood cultures (specify hours, if any, outside of normal working hours in comment box below)
- An on-site presence during all/part of working hours (0900-1700) at weekends

Any additional information on working hours:

18. Which other sites/NHS organisations does the **Microbiology** remote advice service cover? (If the service covers a broader area, then please complete the 'Other' box e.g. 'Greater Manchester and North West England region')

NHS Organisation 1
name:

NHS Organisation 1
number of sites:

NHS Organisation 1 list of
sites:

NHS Organisation
2 name:

NHS Organisation 2
number of sites:

NHS Organisation 2 list of
sites:

NHS Organisation 3
name:

NHS Organisation 3
number of sites:

NHS Organisation 3 list of
sites:

NHS Organisation 4
name:

NHS Organisation 4
number of sites:

NHS Organisation 4 list of
sites:

NHS Organisation 5
name:

NHS Organisation 5
number of sites:

NHS Organisation 5 list of
sites:

NHS Organisation 6
name:

NHS Organisation 6
number of sites:

NHS Organisation 6 list of
sites:

Other (please specify):

Virology

The following questions relate to ID, Microbiology and Virology specialty activities. We acknowledge that there may be a significant degree of overlap in roles and training background or that some departments may be merged into an overarching 'Infection Service'.

Please select tick 'Yes' for all specialties that apply to the activities carried out by the department/s in your NHS organisation. Make note of this in the 'Additional Details' box at the bottom of this page.

* 19. Does your NHS organisation have a Virology department and/or Virology-accredited consultants?

Yes

No

Additional details:

Virology

20. Remote advice is provided away from the point of care (i.e. not at the bedside but rather over video link, phone or email) and is often initiated by the managing team seeking advice from an infection specialty service. Please answer based on current hours and practices.

Please tick whether the following is provided by **Virology-accredited clinicians** at your NHS organisation:

- Remote advice during normal working hours (i.e. 0900-1700, Mon-Fri)
- Remote advice outside of normal working hours (i.e. other than the above)

Any additional information on working hours:

21. Which other sites/NHS organisations does the **Virology** remote advice service cover? (If the service covers a broader area, then please complete the 'Other' box e.g. 'Greater Manchester and North West England region')

NHS organisation 1 name:

NHS organisation 1 number of sites:

NHS organisation 1 list of sites:

NHS organisation 2 name:

NHS organisation 2 number of sites:

NHS organisation 2 list of sites:

NHS organisation 3 name:

NHS organisation 3 number of sites:

NHS organisation 3 list of sites:

NHS organisation 4 name:

NHS organisation 4 number of sites:

NHS organisation 4 list of sites:

NHS organisation 5 name:

NHS organisation 5 number of sites:

NHS organisation 5 list of sites:

NHS organisation 6 name:

NHS organisation 6 number of sites:

NHS organisation 6 list of sites:

Other (please specify):

Other specialist infection services

* 22. Does your NHS organisation operate any other tertiary infection-related department e.g. mycology not included in the answers to the previous questions?

Yes

No

23. Please briefly describe the nature of this department and the geographical area covered:

Infection Prevention and Control

IPC is a crucial aspect of infection services for every NHS organisation. Please answer the following questions based on staff currently in post.

We acknowledge that not all IPC activities are under the remit of an infection specialty department and as such this may require liaison with colleagues working elsewhere in your organisation.

24. What are the total PAs per week on average allocated for Infection Prevention and Control activities for the following staff:

Medical Consultants

Consultant Clinical Scientists

Other consultant-level staff (please specify)

25. Number of current IPC nurse FTEs:

26. What is the background of the current holder of the Director of IPC?

- Medical
- Nursing
- Clinical Scientist
- Other (please specify)

27. What is their medical specialty? (Select 'Non-medical' if not a doctor).

28. Does the DIPC hold another senior managerial role?

- Medical Director
- Deputy Medical Director
- Chief of Nursing
- Clinical Director
- No other senior managerial role
- Other (please specify)

29. What is the total number of PAs allocated to IPC activities per week for the Director of IPC?

30. For the current holder(s) of IPC Doctor role:

| | What is their specialty? | What is their designation? | Number of PAs allocated to IPC activities per week: |
|----------|--------------------------|----------------------------|---|
| Holder 1 | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Holder 2 | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Holder 3 | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Holder 4 | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Holder 5 | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Holder 6 | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Holder 7 | <input type="text"/> | <input type="text"/> | <input type="text"/> |

Inpatient Referrals and MDT

This section aims to quantify the contribution of infection specialists to the MDT for the management of complex patients and the amount of time dedicated to reviews of inpatients under other specialties.

We recognise that due to the COVID-19, the time spent on in-person ward-based consults/inreach may currently be reduced. Please provide estimates of time for your service as it currently operates.

31. Please estimate the number of consultant and registrar hours per week spent on general inpatient ward-based referrals/consults (i.e. with bedside review):

32. How many hours of this time is allocated in job plans?

33. Does your NHS organisation differentiate between Infectious Diseases and Microbiology in-person ward-based referrals/consults? If so, which are provided?

- No- joint service/generic infection consults
- Yes- Microbiology consults
- Yes- Infectious diseases consults
- None of the above provided

Briefly describe which sites within your NHS organisation these are provided at:

34. Please estimate the number of consultant and registrar hours per week spent on the following specific inpatient reviews and/or MDTs (these may currently be via video link due to the COVID-19 pandemic):

ICU/HDU

Bacteraemia

Antimicrobial stewardship

C. difficile

Infective endocarditis

Neonatal

Transplant

Burns

Bone/joint

Neurosurgical

Cystic fibrosis

Other (please specify)

Outpatient Services

We would also like to collect data on provision of some outpatient services provided by the infection specialities, in particular those not commissioned nationally.

35. Is an outpatient parenteral antimicrobial therapy (OPAT) service provided by your NHS organisation?

Yes

No

36. What is the total patient capacity for OPAT at any one time?

37. How many FTE OPAT nurses are employed by your NHS organisation?

38. Which other sites/NHS organisations does the OPAT service cover?

39. How many consultant PAs for general ID clinics (excluding commissioned HIV or hepatitis clinics) are allocated per week on average at your NHS organisation?

40. Do infection specialty clinicians provide outpatient care for the following?

Travel clinic

Chronic fatigue syndrome

Long Covid

41. Do infection specialty clinicians provide outpatient care for any joint clinics e.g. diabetic foot, complex surgical?

Yes

No

If yes, please specify:

General

The final few questions of this survey are designed to provide further insight into general demand on services at your NHS organisation.

42. How many acute inpatient beds are provided within your NHS organisation?

43. If applicable, how many of the following samples (including inpatients, outpatients and general practice) were processed in your NHS organisation lab/s in 2019 for the following:

Microbiology

Molecular virology

Serology

44. If applicable, please estimate the average number of consultant/registrar hours per week that are spent on the following laboratory-related tasks:

Authorising laboratory reports

Quality assurance activities

General troubleshooting

Final Comments

You have reached the end of the survey. Thank you for the time and care taken to complete these questions; we value your contribution to the future of infection services in the UK.

45. Please add any feedback below. We are hoping to make this an annual survey so we value any feedback that may help us improve future iterations.