

B07/S/a

**2013/14 NHS STANDARD CONTRACT
FOR SPECIALISED SERVICES FOR INFECTIOUS DISEASES (ADULT)**

SECTION B PART 1 - SERVICE SPECIFICATIONS

Service Specification No.	B07/S/a
Service	Specialised Services for Infectious Diseases (Adult)
Commissioner Lead	
Provider Lead	
Period	12 months
Date of Review	

1. Population Needs

1.1 National/local context and evidence base

Incidence and prevalence rates for infectious diseases (ID) are heavily influenced by ethnicity, migration, dispersal, and local factors. In general the burden of infection is greater in urban areas. National surveillance of various infections is undertaken for various diseases including: human immunodeficiency virus (HIV), hepatitis, tuberculosis (TB), sexually transmitted infections, meningo-encephalitis and imported infections.

Infectious diseases services are provided by multidisciplinary teams including ID consultants and clinical microbiologists as well as clinicians from many other organ-based and syndrome based specialities. Specialised ID services are currently provided in around 20-25 specialist ID centres in England, including Cutaneous Infections at Kings College Hospital NHS Foundation Trust.

Specialist ID centres deal with less common or more serious cases of ID dependent on the specialist diagnostic facilities and clinical expertise available in individual units. These facilities are serviced by teams of doctors with specialist training in ID and microbiology, with support from their colleagues in nursing, radiology and pharmacology. The multidisciplinary ID team co-ordinates a rapid and effective evaluation of the infection and its risk of transmission and provides appropriate diagnostic and medical management on a 24 hour basis.

Admissions to the specialised infectious disease services are equivalent to

approximately 500 admissions per million population or approximately 25,000 admissions in England per annum.

2. Scope

2.1 Aims and objectives of service

The service aims to maximise the survival of patients infected with infectious diseases by providing a high quality service.

Prevention – including awareness raising, vaccination, advice, other health or behavioural intervention.

Diagnosis – with microbiology. In complex infectious, specialist diagnostics required.

Treatment – multidisciplinary team (MDT) approach involving ID specialist and/or speciality clinician. Input likely to include nursing, radiology and pharmacology. Management of drug resistant infections. In complex and rare infections, treatment is likely to include use of isolation facilities. Treatment adherence is often critical so appropriate support for patients required.

Control - In complex and rare infections, treatment is likely to include use of isolation facilities – including negative pressure rooms - with appropriate air handling and air filtration systems (for protection of staff and public as per Health & Safety Executive and Advisory Committee on Dangerous Pathogens guidelines). Other specialist facilities include specimen containment equipment. Surveillance reporting provided.

2.2 Service description/care pathway

This specification is limited to the inpatient care of adults with infectious diseases identified by diagnoses defined by the ICD10 codes detailed in Appendix 1 in conjunction with the associated treatment function code 350 (adults).

Because of the high level of treatments associated with outpatient activity in Infectious Disease Services, outpatient activity is restricted to review outpatient appointments undertaken within the treatment code 350 (adults).

Pregnancy

Pregnant women with pre-existing conditions as discussed in this specification require assessment and/or management from highly specialist tertiary maternity care delivered within a dedicated multidisciplinary service staffed by a maternal medicine specialist, a physician, and supporting multidisciplinary team with extensive experience of managing the condition in pregnancy.

In view of this, nationally commissioned condition specific services must have

outreach arrangements with highly specialised tertiary maternity units with access to appropriate tertiary medical, surgical, fetal medicine, clinical genetics and level 3 Neonatal Intensive Care services. These specialised maternity services must have a critical mass of activity to maintain expertise, ensure best practice, training opportunities and for the organisational infrastructure, staffing, facilities and equipment to be clinically and economically efficient. They should have robust risk management and performance monitoring processes.

All such women must receive personalised pre-pregnancy and maternity care planning from specialised tertiary maternity services to allow optimal disease management in the context of the pregnancy. This will reduce avoidable morbidity, mortality and unnecessary intervention for mother and baby.

Women with conditions discussed in this specification must be referred immediately once they are pregnant to plan their care. This must include access to termination of pregnancy and specialist advice re contraception. The individualised care plan must cover the ante natal, intrapartum and postnatal periods. It must include clear instructions for shared care with secondary services, when appropriate including escalation and transfer protocols and clear guidelines for planned and emergency delivery.

2.3 Population covered

The service outlined in this specification is for patients ordinarily resident in England*; or otherwise the commissioning responsibility of the NHS in England (as defined in Who Pays?: Establishing the responsible commissioner and other Department of Health guidance relating to patients entitled to NHS care or exempt from charges).

Specifically, this service is for adults with an infectious disease requiring specialised intervention and management, as outlined within this specification.

*Note: for the purposes of commissioning health services, this EXCLUDES patients who, whilst resident in England, are registered with a GP Practice in Wales, but INCLUDES patients resident in Wales who are registered with a GP Practice in England. Legislation for Scotland and Northern Ireland provides that the responsible authority for an individual's healthcare provision is the one where a person is usually resident and is not based on GP practice registration as provided by English legislation.

2.4 Any acceptance and exclusion criteria

This specification does not include HIV services, paediatric infectious diseases or the following highly specialised ID services which are covered in separate and specific service specifications :

- High Security Infectious Diseases (HSIDU)
- Tropical Diseases
- Human T-cell Lymphotropic Virus Type 1 (HTLV1)

- Complex Bone & Joint Infections

Whether or not a referral to Infectious Diseases requires specialised care and treatment can only be confirmed after the first outpatient appointment, new referral attendances are excluded from outpatient care in this service specification, and will be the commissioning responsibility of Clinical Commissioning Groups.

2.5 Interdependencies with other services

Treatment of infectious diseases requires interdependencies with other services including but not limited to:

- Highly specialised Infectious Disease Services detailed in separate service specifications:
 - High Security Infectious Diseases (HSIDU)
 - Tropical Diseases
 - Human T-cell Lymphotropic Virus Type 1 (HTLV1)
 - Complex Bone & Joint Infections
- Interdependent Services :
 - Cancer Services
 - Services for Blood and Marrow Transplantation
 - Services for Women's Healthcare
 - Neurosciences Services
 - Burns Care Services
 - Renal Services
 - Intestinal Failure and Home Parenteral Nutrition Services
 - Cardiology and Cardiac Surgery Services
 - HIV Treatment and Care Services
 - Allergy Services
 - Immunology Services
 - Liver, Biliary and Pancreatic Medicine and Surgery Services – specifically, reference should be made to treatment protocols for patients with hepatitis C genotype 1 being considered for treatment, and patients with hepatitis B or C with cirrhosis and/or HIV co-infection, should be subject to Specialised Commissioning via designated centres running a hub and spoke system
 - Children; particularly sections on: cardiology & cardiac surgery, ENT, gastroenterology, hepatology, neurosciences, ophthalmology, orthopaedic, renal, respiratory, HIV, and surgery services
 - Dermatology Services
 - Rheumatology Services
 - Respiratory Services – specifically, reference should be made to treatment protocols for TB set out in the Respiratory Services specification.
 - Orthopaedic Service

Early presentation, testing and diagnosis are critical in prevention, management and control of infectious diseases, requiring clear pathways with local services in primary care, community care and voluntary sector

A number of infectious diseases require network management arrangements and clear pathways and responsibilities should be identified

2.6 Key Components of a Specialised Infectious Diseases Service

- Combined Inpatient and outpatient care
- Microbiological, histopathological and radiological diagnostics
- Provision for administering intravenous antibiotics at home safely (OPAT)
- Dedicated inpatient beds staffed by specialist nurses and professionals allied to medicine
- More than one whole time equivalent consultant on the Specialist Register for Infectious Diseases
- MDT outpatient clinics
- Access to other specialised services as required
- A clinical governance structure and service lead
- Quality measures such as patient experience surveys and clinical outcome measures

3. Applicable Service Standards

3.1 Applicable national standards e.g. NICE, Royal College

Management of Hazard Group 4 viral haemorrhagic fevers and similar human infectious diseases of high consequence - Advisory Committee on Dangerous Pathogens – May 2012

- <http://www.dh.gov.uk/health/files/2012/07/FINAL-VHF-guidance-for-publication.pdf>
- Health Protection Legislation (England) Guidance 2010
- http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/@ps/documents/digitalasset/dh_114589.pdf
- Getting Ahead of the Curve (2002)
- http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4060338.pdf
- Immunisation against infectious disease (The Green Book) (2006)
- http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_134694.pdf
- Hepatitis C - Action Plan for England (July 2004)
- http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4084713.pdf
- Reducing health care associated infections (HCAIs): code of practice for the prevention and control of health care associated infections' (2007)

NICE Guidance

www.nice.org.uk

Technology Appraisals:

- TA252 : Hepatitis C (genotype 1) – telaprevir : April 2012
- TA253 : Hepatitis C (genotype 1) – boceprevir : April 2012
- TA173 : Hepatitis B - tenofovir disoproxil fumarate: July 2009
- TA154 : Hepatitis B - telbivudine: Aug 2008
- TA153 : Hepatitis B - entecavir: Aug 2008
- TA106 : Hepatitis C - peginterferon alfa and ribavirin: Aug 2006
- TA96 : Hepatitis B (chronic) - adefovir dipivoxil and pegylated interferon alpha-2a : Feb 2006
- TA75 : Hepatitis C - pegylated interferons, ribavirin and alfa interferon Clinical Guidelines: Sept. 2004

Clinical Guidelines

- CG139 : Infection control: March 2012
- CG117 : Tuberculosis : March 2011
- CG102 : Bacterial meningitis and meningococcal septicaemia: June 2010

4. Key Service Outcomes

To include:

- Improved diagnosis and risk management to prevent onward transmission
- Optimised management of co-infections
- Readmission rate
- Mortality (30 day and 1 year)
- Patient satisfaction scores
- MRSA and C.difficile rates within Department of Health targets
- Length of stay
- Access to care (waiting times, failure to attend appointment rates, adherence to “one- stop shop” principle).
- Number of complaints and time to response/resolution
- Clinical infection recurrence rate
- Clinic letters sent out within 96 hours of appointment
- 100% compliance with NICE guidance on VTE prophylaxis
- MRSA and C.difficile rates within DoH targets
- 100% compliance with Waterlow and MUST score assessments
- Complaints

Appendix 1

Infectious Diseases Service Specification ICD10 Codes

Adult ICD10 Codes

Primary ICD10 Code (Adults)	
Code	Description
A17.0	Tuberculous meningitis
A17.1	Meningeal tuberculoma
A17.8	Other tuberculosis of nervous system
A17.9	Tuberculosis of nervous system unspecified
A18.5	Tuberculosis of eye
A18.4	Tuberculosis of skin and subcutaneous tissue
A22.0	Cutaneous anthrax
A22.1	Pulmonary anthrax
A22.2	Gastrointestinal anthrax
A22.7	Anthrax septicaemia
A22.8	Other forms of anthrax
A22.9	Anthrax, unspecified
A23.0	Brucellosis due to <i>Brucella melitensis</i>
A23.1	Brucellosis due to <i>Brucella abortus</i>
A23.2	Brucellosis due to <i>Brucella suis</i>
A23.3	Brucellosis due to <i>Brucella canis</i>
A23.8	Other brucellosis
A23.9	Brucellosis, unspecified
A24.1	Acute and fulminating melioidosis
A24.2	Subacute and chronic melioidosis
A24.3	Other melioidosis
A24.4	Melioidosis, unspecified
A31.1	Cutaneous mycobacterial infection
A75.0	Epidemic louse-borne typhus fever due to <i>Rickettsia prowazekii</i>
A75.2	Typhus fever due to <i>Rickettsia typhi</i>
A75.3	Typhus fever due to <i>Rickettsia tsutsugamushi</i>
A77.0	Spotted fever due to <i>Rickettsia rickettsii</i>

A77.1	Spotted fever due to Rickettsia conorii
Primary ICD10 Code (Adults)	
Code	Description
A77.2	Spotted fever due to Rickettsia sibirica
A77.3	Spotted fever due to Rickettsia australis
A79.1	Rickettsialpox due to Rickettsia akari
A79.8	Other specified rickettsioses
A79.9	Rickettsiosis, unspecified
A82.0	Sylvatic rabies
A82.1	Urban rabies
A82.9	Rabies, unspecified
A91.X	Dengue haemorrhagic fever
A96.0	Junin haemorrhagic fever
A96.1	Machupo haemorrhagic fever
A96.8	Other arenaviral haemorrhagic fevers
A96.9	Arenaviral haemorrhagic fever, unspecified
A98.0	Crimean-Congo haemorrhagic fever
A98.1	Omsk haemorrhagic fever
A98.5	Haemorrhagic fever with renal syndrome
A98.8	Other specified viral haemorrhagic fevers
A99.X	Unspecified viral haemorrhagic fever
B00.0	Eczema herpeticum
B20.0	HIV Disease leading to secondary infections
B20.1	
B20.3	
B20.5	
B20.7	
B30.3	Acute epidemic haemorrhagic conjunctivitis (enteroviral)
B35.8	Deep and complex dermatophytosis
B38.0	Acute pulmonary coccidioidomycosis
B38.1	Chronic pulmonary coccidioidomycosis
B38.2	Pulmonary coccidioidomycosis, unspecified
B38.3	Cutaneous coccidioidomycosis

B38.4	Coccidioidomycosis meningitis
Primary ICD10 Code (Adults)	
Code	Description
B38.7	Disseminated coccidioidomycosis
B38.8	Other forms of coccidioidomycosis
B38.9	Coccidioidomycosis, unspecified
B39.0	Acute pulmonary histoplasmosis capsulati
B39.1	Chronic pulmonary histoplasmosis capsulati
B39.2	Pulmonary histoplasmosis capsulati, unspecified
B39.3	Disseminated histoplasmosis capsulati
B39.4	Histoplasmosis capsulati, unspecified
B39.5	Histoplasmosis duboisii
B39.9	Histoplasmosis, unspecified
B40.0	Acute pulmonary blastomycosis
B40.1	Chronic pulmonary blastomycosis
B40.2	Pulmonary blastomycosis, unspecified
B40.3	Cutaneous blastomycosis
B40.7	Disseminated blastomycosis
B40.8	Other forms of blastomycosis
B40.9	Blastomycosis, unspecified
B41.0	Pulmonary paracoccidioidomycosis
B41.7	Disseminated paracoccidioidomycosis
B41.8	Other forms of paracoccidioidomycosis
B41.9	Paracoccidioidomycosis, unspecified
B42.1	Lymphocutaneous sporotrichosis
B43.0	Cutaneous chromomycosis
B43.8	Other forms of chromomycosis
B43.9	Chromomycosis, unspecified
B47.X	Mycetoma
B50.0	Plasmodium falciparum malaria with cerebral complications
B50.8	Other severe and complicated Plasmodium falciparum malaria
B51.0	Plasmodium vivax malaria with rupture of spleen
B51.8	Plasmodium vivax malaria with other complications

B52.0	Plasmodium malariae malaria with nephropathy
B52.8	Plasmodium malariae malaria with other complications
Primary ICD10 Code (Adults)	
Code	Description
B55.0	Visceral leishmaniasis
B55.1	Cutaneous leishmaniasis
B55.2	Mucocutaneous leishmaniasis
B55.9	Leishmaniasis, unspecified
B56.0	Gambiense trypanosomiasis
B56.1	Rhodesiense trypanosomiasis
B56.9	African trypanosomiasis, unspecified
B57.0	Acute Chagas' disease with heart involvement
B57.1	Acute Chagas' disease without heart involvement
B57.2	Chagas' disease (chronic) with heart involvement
B57.3	Chagas' disease (chronic) with digestive system involvement
B57.4	Chagas' disease (chronic) with nervous system involvement
B57.5	Chagas' disease (chronic) with other organ involvement
B67.0	Echinococcus granulosus infection of liver
B67.1	Echinococcus granulosus infection of lung
B67.2	Echinococcus granulosus infection of bone
B67.3	Echinococcus granulosus infection, other and multiple sites
B67.4	Echinococcus granulosus infection, unspecified
B67.5	Echinococcus multilocularis infection of liver
B67.6	Echinococcus multilocularis infection oth / multiple sites
B67.7	Echinococcus multilocularis infection, unspecified
B67.8	Echinococcosis, unspecified, of liver
B67.9	Echinococcosis, other and unspecified
B69.0	Cysticercosis of central nervous system
B69.1	Cysticercosis of eye
B69.8	Cysticercosis of other sites
B69.9	Cysticercosis, unspecified
B73.X	Onchocerciasis
B74.0	Filariasis due to Wuchereria bancrofti

B74.1	Filariasis due to <i>Brugia malayi</i>
B74.2	Filariasis due to <i>Brugia timori</i>

Primary ICD10 Code (Adults)	
Code	Description
B74.3	Loiasis
B74.8	Other filariases
B74.9	Filariasis, unspecified
B74.8	Other filariases
B74.9	Filariasis, unspecified
B78.0	Intestinal strongyloidiasis
B78.1	Cutaneous strongyloidiasis
B78.7	Disseminated strongyloidiasis
B78.9	Strongyloidiasis, unspecified
B81.2	Trichostrongyliasis
B81.3	Intestinal angiostrongyliasis
B81.4	Mixed intestinal helminthiasis
B81.8	Other specified intestinal helminthiasis
B82.0	Intestinal helminthiasis, unspecified
B88.1	Tungiasis (sandflea infestation)
B83.2	Angiostrongyliasis due to <i>Parastrongylus cantonensis</i>
B83.8	Other specified helminthiasis
B83.9	Helminthiasis, unspecified
B90.0	Sequelae of central nervous system tuberculosis
B92.X	Sequelae of leprosy
Z20.3	Contact with and exposure to rabies
Z22.6	Carrier of human T-lymphotropic virus type-1 [HTLV-1] infect