

B09/S/b

**2013/14 NHS STANDARD CONTRACT
FOR SPECIALISED ALLERGY SERVICES (ALL AGES)**

SECTION B PART 1 - SERVICE SPECIFICATIONS

Service Specification No.	B09/S/b
Service	Specialised Allergy Services (All Ages)
Commissioner Lead	
Provider Lead	
Period	12 months
Date of Review	

1. Population needs

1.1 National/local context and evidence base

Allergic diseases are amongst the most common diseases of Western Society affecting up to 30% of the UK population (20 million) at some time in their lives. For the majority of patients (95%) these allergic diseases can be managed by primary or other non-specialist allergy services with routine therapies (e.g. topical (ointment, inhaler, nasal spray) steroids, antihistamines) coupled with advice (e.g. information regarding natural history, avoidance strategies, allergy management plans). A Specialist Service is however required for management of rare, severe or complex multisystem allergic disease as described below. The specialist service will provide the service for the top tier of complex and severe allergy, and the rest of the allergy service will be by provision through local commissioning arrangements.

Approximately 5% of patients with allergies are suitable for CCG commissioning, leaving approximately 0.1% (20,000) requiring referral to a specialist centre with half of those currently receiving specialist interventions such as immunotherapy or investigation for drug allergy.

A number of published reports indicate that provision for severe, multi-system or complex allergy is amenable and attractive for national commissioning arrangements:

- [Allergy the Unmet Need, Royal College of Physicians, 2010](#)
- [A Review of services for allergy: The epidemiology, demand for and provision of treatment and effectiveness of clinical interventions. Department of Health, 2006.](#)
- [House of Lords Science and Technology, 6th Report on Allergy 2007](#)

The model suggested for adult and paediatric services was set out in a [report by](#)

[the House of Lords Committee on Science and Technology](#) and further reinforced by a follow up [report by the Royal College of Physicians](#).

This envisaged a network of specialist allergy centres based in teaching hospitals with a hub and spoke structure involving the specialist allergist with their nursing, dietetic and administrative support services linking with organ based specialists and immunology laboratories and integrating with primary care services. Specialist allergy services would see patients because of the rarity or complexity of the conditions. They are defined as specialised because they will have been triaged from primary or secondary care through referral guidance, patient pathways or failure of treatment.

Specialist paediatric allergy centres fulfilling the same criteria but led by accredited Paediatric allergists fulfil a similar role (Children's National Service Framework. Department of Health 2004, Children and Young People's health – where next? The NHS Co-federation, 2011) and to take into account the special requirements of paediatric service provision ([Royal College of Paediatrics and Child Health Allergy care pathways](#), National Service Framework for children, [NICE food allergy for children](#), [DRACMA WAO milk allergy guideline](#)).

Although other specialties (gastroenterology, respiratory, ENT, ophthalmology, dermatology, general paediatrics, etc) may provide services which overlap to a degree with those provided by the specialist in allergic disease, they fulfil an organ-specific specialist role (i.e. management of severe eczema) or are locally commissioned non-specialist allergy services.

National policies

Policies relevant to this specification are:

- [Getting the right start: National Service Framework for Children, Department for Health 2003](#)
- [National service framework: long term conditions - GOV.UK](#)
- [Rare Diseases: UK Framework - GOV.UK](#)
- [Equity and excellence: Liberating the NHS - GOV.UK](#)
- [Improving care for people with long term conditions: 'at a glance' information sheets for healthcare professionals - GOV.UK](#)

National guidelines

National guidelines have been developed by the [National Institute for Clinical Excellence \(NICE\)](#) for allergic disorders and include the following:

- Food allergy in children and young people (CG116)
- Venom anaphylaxis - immunotherapy Pharmedgen (TA246)
- Anaphylaxis (CG134)
- Atopic eczema in children (CG57)
- Asthma (uncontrolled) - omalizumab (TA133)
- Asthma (in children) - corticosteroids (TA131)
- [RCPCH care pathways](#)
- [EAACI guidelines](#) and [Declaration on immunotherapy](#)

National guidelines have been developed by the [British Society for Allergy and Clinical Immunology \(BSACI\)](#) for many allergic disorders and include:

- RJ Powell et al BSACI guidelines for the management of chronic urticaria and angio-oedema. Clin Exp Allergy 2007;37:631-50
- GK Scadding et al. BSACI guidelines for the management of allergic and non-allergic rhinitis. Clin Exp Allergy 2008;38:19-42
- GK Scadding et al BSACI guidelines for the management of rhinosinusitis and nasal polyposis. Clin Exp Allergy 2008;38:260-75
- R. Mirakian et al BSACI guidelines for the management of drug allergy. Clin & Exp Allergy 2009 Jan;39(1):43-61
- Ewan P et al. BSACI guidelines for the investigation of suspected anaphylaxis during general anaesthesia. Clin & Exp Allergy 2010;40(1):15-31.
- Clark AT et al BSACI guidelines for the Management of egg allergy. Clin & Exp Allergy 2010;40(8):1116-29
- Krishna MT et al. BSACI guidelines for the diagnosis and management of Hymenoptera venom allergy. Clin & Exp Allergy 2011;41:1201-20
- Walker SM et al. BSACI guidelines for Immunotherapy for allergic rhinitis. Clin & Exp Allergy 2011;41:1177-1200

[BSACI](#) have also worked in partnership with primary care to develop specific guidance for primary care enabling appropriate referrals and care pathways with the majority of patients treated locally by their GPs.

- I Rafi & S Nasser. BSACI advises GPs on tackling chronic urticaria and angioedema. Guidelines in Practice 2007;10:33-42
- Anonymous. Management of Chronic Urticaria and angioedema.
- Anonymous. Rhinitis management guidelines. www.eguidelines.co.uk 2008;34:371-79
- I Rafi & S Nasser. New BSACI guideline aids GPs to recognise subtypes of rhinitis. Guidelines in Practice 2008;11:29-38
- Angier L, Nasser S, Rafi I, Scadding G. Primary Care has a pivotal role in managing rhinitis. Guidelines in Practice 2012;15:11-39
- Several other BSACI guidelines are in development.

The BSACI and Association of Anaesthetists have published joint guidelines on anaphylaxis during general anaesthesia:

- [N J N Harper et al Suspected anaphylactic reactions associated with anaesthesia. Anaesthesia 2009;64;199–211](#)

The Resuscitation Council UK have worked in partnership with BSACI and have published joint guidance on the emergency treatment of anaphylaxis:

- [Emergency treatment of anaphylaxis in adults: concise guidance. Guideline Development Group. Clin Med 2009;9\(2\):181-5](#)
- [J Soar et al Emergency treatment of anaphylactic reactions. Guidelines for healthcare providers. Resuscitation 2008; 77,:157—169](#)

Guidelines on the management of Hereditary Angioedema are available:

- Gompels, MM and Lock, RJ and Abinun, M and Bethune, CA and Davies, G and Grattan, C and Fay, AC and Longhurst, HJ and Morrison, L and Price, A and Price, M and D Watters, D. 2005. C1 inhibitor deficiency: consensus document. Clinical and Experimental Immunology , 139 (3) 379 – 394
- Cicardi M et al. Evidence-based recommendations for the therapeutic management of angioedema owing to C1 inhibitor deficiency; consensus report of an international working group. Allergy 2012;67:147-157

The World Allergy Organisation (WAO DRACMA) has developed guidelines on Milk Allergy:

- [World Allergy Organization \(WAO\) Diagnosis and Rationale for Action against Cow's Milk Allergy \(DRACMA\) Guidelines update – I – Plan and definitions - World Allergy Organization Journal](#)

There is ample evidence that specialist allergy treatment benefits patients:

- [Influence of a multidisciplinary paediatric allergy clinic on parental knowledge and rate of subsequent allergic reactions. Kapoor, S et al. Allergy. 2004 59:185-91](#)
- [Good prognosis, clinical features, and circumstances of peanut and tree nut reactions in children treated by a specialist allergy center. Clark, A & Ewan, P. JACI. 2008;122:286-9](#)

Guidelines for best Paediatric to adult care Transition practice have been developed and should be a key component of an adult and paediatric specialist service.

- [NHS England » Supporting young people to transition into adolescent and adult services](#)

2. Scope

2.1 Aims and objectives of service

The provider shall ensure that Specialist Allergy centres provide:

- A high quality, accessible and sustainable service for patients with severe and complex allergies that meets the needs of the local population and reflects effective resource use and incorporates the views of patients.
- Excellent, holistic, multidisciplinary care for patients with allergic diseases according to best practice guidelines defined by authoritative bodies, accredited or working towards accreditation through national accreditation organisations.
- The expertise required for the investigation, clinical assessment, treatment and management of patients with suspected and established allergic diseases.
- Equity of access to best practice standards, based on current guidelines for diagnosis and management for patients with allergic diseases and related complications.
- Integrated care with primary, secondary and other care providers and ensure close links with other expert centres at national and international levels.

The provider shall address individual needs for control of allergy, including self-administration/home therapy and (when indicated) desensitisation immunotherapy.

The service will deliver the aim to improve both life expectancy and quality of life for adults and children with allergy by:

- Preventing acute and chronic allergic symptoms.
- Halting the progress of complications if present and where possible.
- Reversing previous psychological damage and disability when possible.
- Recognising complications early and managing them optimally, particularly those not amenable to first line therapy.
- Delivery of safe and effective allergen immunotherapy and avoiding complications of immunotherapy.
- Developing approaches to management, based on individual needs, for the lifelong management of allergic disease, including self management/home therapy when possible.

2.2 Service description/care pathway

The provider shall deliver a diagnostic package for the investigation of suspected allergic diseases, including; initial consultation and follow-up in a dedicated allergy clinic, specialised allergy tests, food/drug provocation challenges, and respiratory / ENT investigation and desensitisation where indicated. Specifically this will require:

- Diagnostic services for the management of complex and rare allergies. The provider shall ensure that the following procedures are provided by Specialist Allergy Centres as appropriate:
- Complex skin testing using drugs/food/venom/latex (skin prick/intradermal).
- Component-resolved and other in-vitro specialist diagnostic testing.
- Allergen challenges – e.g. aspirin, Non-steroidal anti-inflammatories, antibiotic, other drug, food or other allergen challenges for high-risk patients where necessary.
- Methods to investigate allergen induced asthma including: Non-specific bronchial challenge with methacholine, mannitol or histamine to define airway hyper-responsiveness, or methods to measure airway inflammation such as induced sputum, exhaled NO where necessary.
- Access to bronchoscopy services for investigation of resistant asthma.
- Access to endoscopy services for patients with eosinophilic enteropathies.
- Radiology.
- Specialised Immunology Laboratory services with CPA accreditation or equivalent for allergy testing.
- Access to diagnostics for rare and emerging allergic diseases through European/USA laboratories.
- Access to Molecular techniques to diagnose myeloproliferative disorders involving eosinophils and mast cells including, a full range of fungal IgE testing, parasite serology, T cell phenotyping, radiology including CT scan and cardiac MRI, EMG studies, bone marrow examination and advanced molecular detection

of c-kit and FIP1L1-PDGFRalpha mutations associated with mastocytosis and myeloproliferative Hypereosinophilic syndromes.

The provider shall provide hospital-based outpatient and day-care with access to in-patient facilities. This will comprise:

- Regular dedicated allergy outpatient clinics for assessment and follow-up.
- Adequate clinical space in relation to the number of patients being treated.
- Adequate space for patients receiving infusions or training.
- A safe working environment for staff.
- Access to an appropriately staffed day-case facility that can provide immunotherapy and Biologic infusions. This service should be supported by clear guidelines, protocols, and pathways for patient care.

The provider shall provide support to other clinical specialties for complications of severe and multisystem allergic diseases including:

- Ear Nose and Throat, Respiratory Medicine, Gastroenterology, Ophthalmology, Dermatology, Infectious Diseases, Haematology/ Oncology, Paediatrics, Clinical Genetics, Rheumatology.

The provider shall have appropriate pharmacy facilities including:

- Appropriate storage and dispensing facilities for drugs and immunotherapeutic products.
- Pharmacy storage facilities for immunological therapies and good documentation of dispensing to individual patients.

The provider shall provide patient self-care as an option in their management based on the patients' wishes, abilities and circumstances, to include:

- Provision of information about when to seek advice for new or severe symptoms suggestive of poor control, new sensitivities or increased risk of severe reactions.
- Competency testing (for example in use of adrenaline auto-injector devices).

The Provider shall ensure that Allergy patients will be offered self-care as an option in their management including:

- Training for the administration of rescue medication at home. The self care options offered will be based on the patients' wishes, abilities and circumstances. The self-care training and monitoring package will form part of the commissioned service.
- Provision of home therapy as a package of care on a named patient basis including where necessary nursing supervision, deliveries of consumables to patients' homes, regular outpatient consultations and ongoing monitoring including tests.

The provider shall ensure that all centres and home care programmes should be working towards being accredited:

- Through [Improving Quality in Allergy Services \(IQAS\)](#), for allergic diseases under NSSDS17.
- Through [UKPIN](#) (under National Services Definition Set 16, NSSDS16) and the Immunology Specialist Service specification where care is provided for HAE or AAE (Hereditary or Acquired Angioedema) patients who require C1 esterase inhibitor.

The provider shall ensure that management of those allergies requiring other/new treatments (e.g. monoclonal antibodies or cytokines) on a named patient basis, where there is a suitable evidence base. This includes day case attendance, nursing supervision, the drug, pumps for subcutaneous or intravenous use, monitoring by biochemical tests, specialised immunopathological tests and medical follow-up.

The provider shall ensure that the Adult Specialist Allergy services should be provided by a multi-disciplinary team that includes:

- At least two Consultants in Allergy or equivalent with experience/training in the management of patients with complex/specialised allergy as described above and who maintain up-to-date Allergy CPD in their area of practice.
- Physicians, dieticians and nurses trained in Allergy or who have had long specialist experience in the practice of Allergy and who maintain up-to-date Continuing Professional Development in Specialised Allergy (CPD).
- There should be no single handed practice unless fully supported by network governance structures and regular MDT/network meetings.

The provider shall also ensure that:

Allergen immunotherapy/desensitisation therapy should be provided in conjunction with specialist nurses in an established allergy centre.

- There are mechanisms to ensure there is documented consent before undertaking drug or food provocation and there is documented consent and risk assessment before initiating treatment with blood products including C1 inhibitor.

The provider shall provide transition services:

- For children with complex allergy before referral to adult services based on the framework recommended by the Department of Health.
- Transfer arrangements and preferences should be discussed with the child and their family up to 12 months in advance. Shared protocols between child and adult services should be established.

The provider shall maintain the following links:

Secondary care links:

- Depending on the nature of the allergic disease, services are involved in shared care in relation to general medical needs, delivery of drugs.

- Secondary providers will be integrated with well-defined service delivery specifications and referral pathways linked within the network

Primary care links:

- Care plans of allergy patients are shared with primary care.
- Home therapy and management is arranged in liaison with CCGs.
- Clinic letters are sent to GPs and other specialties involved in a patient's care.

Private sector and third sector links:

- The service shall maintain a strong liaison with patient groups involved in allergic disorders to enable further community support and continuity of care.

Referral processes and sources

Referrals can be made from both primary and secondary care as follows:

- Due to the complex nature of severe allergies, tertiary referrals come from secondary care centres (general physicians) or other tertiary or specialist physicians (particularly dermatology, respiratory, ENT, gastroenterology and accident and emergency).
- Primary Care Physicians (Tier 1) shall refer patients directly to the service when standard approaches to management fail or the patient meets specialist referral criteria, though these cases will require screening by the centre to ensure the referral requires specialist input or can be managed through CCG commissioned local or regional allergy services which may be provided for the local population by the same facility. A care pathway with referral guidance should be developed.

Equity of access to services

- No patient should have to travel excessively for access to local expert centres.
- Patients with rarer diseases requiring referral to a national specialist centre or centres should have equitable access and distance to travel wherever possible, taking account of geographical issues.
- Some centres provide specialist services to other health economies (Wales, Scotland, Northern Ireland, Republic of Ireland).

Location(s) of Service Delivery

At present, there are approximately 50 services in the UK currently providing specialist allergy services as described. 31 adult allergy centres in England and Wales (17 staffed by immunologists) and 19 paediatric centres (7 of which are staffed by paediatric immunology specialists and 12 by paediatric allergy specialists and some of which are co-located with the adult service). (Royal Colleges of Physicians Report 2010 [Allergy services: still not meeting the unmet need – RCP London](#)). There will be approximately 20,000 new referrals of patients with adult allergic disease of sufficient complexity to require specialist opinion or management in England.

Days/Hours of operation

- The provider shall ensure that services are available during office hours.
- The provider shall ensure that there is a written agreed patient pathways for dealing with out of hours emergencies and a system for giving out-of-hours advice, particularly in relation to advice on matters such as anaphylaxis, drug, latex and anaesthetic allergy.

Response time and detail and prioritisation

- As per national waiting time targets

Service user/ carer information

- The provider shall ensure that centres will provide (in collaboration with patient organisations where they exist):
 - written disease-specific information leaflets
 - periodic educational events for patients
 - periodic educational events for GPs
 - information to patients and staff about patient support organisations
- The provider shall ensure that Specialist Centre Staff support patient groups with membership of Medical Advisory panels.
- The provider shall ensure that where possible patient information should be standardised nationally or across networks. National guidelines and patient information in many areas of allergy have already been developed by BSACI and the Anaphylaxis Campaign to harmonise care.
- Shared protocols and guidelines have already been developed in professional networks and in some multi-centre regional groups to harmonise care and should be used to underpin policy development with patient group involvement. Patient organisations have a large resource of information sheets which could be adapted and adopted in collaboration.

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).

*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.

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

2.4 Any acceptance and exclusion criteria

Inclusion Criteria:

Individuals requiring specialist allergy services would be characterised by:

- Increased risk of death because of severity of the allergy (anaphylaxis, angioedema, drug allergy, brittle asthma).
- Persisting poor quality of life despite routine therapies with restrictions to daily activities at home, school work (severe eczema / atopic dermatitis) with a major allergic component, asthma, hay fever (allergic rhinoconjunctivitis) and chronic urticaria.
- Requirement for safe allergen immunotherapy: Immunotherapy has been reintroduced into the UK with tighter controls and recommendations and should only be performed by experienced health care professionals in specialised centres with direct access to resuscitation facilities (CSM Update – desensitising vaccines, Br Med J, 1986).
- Rare diseases leading to allergic symptoms requiring complex investigations and therapies (mastocytosis, hereditary angioedema, eosinophilic enteropathies and other hypereosinophilic diseases).
- Diseases with allergic symptoms but where the cause is unclear (idiopathic) and specialist input is required to make a specific diagnosis, identify triggers, optimise management and prevent further recurrences.

The provider shall ensure that management of the following conditions is provided by specialist allergy services:

Condition	Inclusion criteria
Acute allergy	
Complex Anaphylaxis	Multiple or severe allergies (Clinical Guidance from NICE: guidance.nice.org.uk/cg134) recommends a specialist allergy referral for all presentations to A&E with suspected anaphylaxis and likewise for children or young people with multiple or severe food allergy (both IgE mediated and non-IgE mediated) (Food Allergy (Overview Food allergy in under 19s: assessment and diagnosis Guidance NICE) co-morbid asthma, growth failure or nutritional compromise or unclear cause.
Drug allergy	All (BSACI Guidelines 2009 & 2010) (including antibiotic, muscle relaxants, non-steroidal anti-inflammatory drugs (NSAIDs), general anaesthetics and local anaesthetics)
Bee and wasp venom allergy (NICE 2912)	All (The Technology Appraisal from NICE published in 2012 (Pharmalgen for the

	treatment of bee and wasp venom allergy Guidance NICE) – now withdrawn
Vaccine allergy	All (BSACI Guidelines 2009)
Latex allergy	If signs of anaphylaxis (BSACI position paper 2004)
Severe atopic disease	
Severe atopic dermatitis	Unresponsive to conventional therapy with allergic triggers (NICE CG57)
Severe allergic asthma	Unresponsive to conventional therapy including aspirin sensitive and severe fungal allergy (NICE TA133 2007 & BSACI Guidelines 2008)
Severe allergic rhinoconjunctivitis	Unresponsive to conventional therapy as defined by BSACI national guideline criteria, requiring immunotherapy or rhinosinusitis/nasal polyps in patients with multiple previous surgical procedures ((British Society for Allergy and Clinical Immunology (BSACI) rhinitis, rhinosinusitis and nasal polyps and immunotherapy guidelines 2008 & 2011))
Other	
Hypereosinophilic disorders	
Mastocytosis	
Hereditary Angioedema	Commissioned under NSSDS16 Immunology to the specifications of the Immunology Service Specification but also provided by some specialist allergy centres.

Exclusion criteria:

- Patients with non-complex allergy not requiring specialist review
- Symptoms such as Chronic fatigue Syndrome without evidence of allergy

Exit criteria:

Patients will leave the service when:

- Their allergic disease is controlled and suitable for self-management or management by non-specialised allergy services or Primary care physicians.
- Their allergen immunotherapy course is completed and no further follow-up is indicated.

2.5 Interdependencies with other services

The provider shall have access to related services required for the optimal care of patients with allergic conditions. This will include:

- Allergy specialists must liaise closely with colleagues in a range of specialties, including respiratory medicine (including A3D3 Respiratory: Severe Asthma), ENT surgery, dermatology, haematology, oncology, infectious diseases, gastroenterology and ophthalmology and behavioural medicine.
- The provider shall deliver close input from dietetic services - essential for the management of food allergy
- The provider shall ensure access to social workers, psychologists and respiratory physiotherapy/speech therapy for selected patients to complete the package of holistic care required for complex allergy patients.
- The provider shall deliver access to close support from a high-quality, accredited diagnostic immunology laboratory providing a range of routine and specialist allergy assays.
- The provider shall work collaboratively with their local Specialist Paediatric Allergy Centre (Specialist Services Definition E3j) to provide seamless care.

While most services do not have access to in-patient beds, admission pathways for relevant patients should be established with individualised care plans where necessary.

3. Applicable service standards

3.1 Applicable national standards, for example, NICE, Royal College

The provider shall ensure that the service participates in IQAS Allergy Accreditation or future Paediatric equivalent, initially by registering and working towards full accreditation. Accreditation shall eventually be mandatory for Specialist Centres.

The scheme is called [Improving Quality in Allergy Services \(IQAS\)](#).

The provider shall ensure that Centres shall be active members and participants of a UK Accreditation Scheme (IQAS or future Paediatric equivalent) as evidenced by:

- Full registration of the Centre within a specified timeframe informed by a gap analysis and action plan.
- If accreditation has not yet been achieved, Centres should be actively working toward accreditation.
- Patient information should be standardised nationally or within each network
- Where HAE care is provided the centre will register to accredit the service to UKPIN (UK Primary Immunodeficiency Network, <http://www.ukpin.org.uk/home/accreditation-standards.html>) standards as defined in the Immunology Specialist Service specification.

The provider shall ensure that allergic disorders are managed according to best practice guidelines and position statements as defined by:

- RCPCH (Royal College of Paediatrics and Child Health) patient pathways, BSACI, RCP (Royal College of Physicians), NICE guidelines and others.
- IQAS standards for allergy services or future paediatric equivalent (when developed).
- Collaborate with other expert centres at national and international levels.

- Where appropriate, all clinic letters should be copied to patients.

The provider shall provide a means of collating workload data on inpatient and home therapy workload linked to ICD10 coding including population of a national or local specialist workload monitoring tool (for example, a web-based database).

The provider shall provide data for the national/network dashboard for recording outcomes, process or proxy measures.

The provider shall act as ambassadors for the service and support patient and professional organisations improving support and care for conditions under their remit.

The provider shall develop regional care pathways or comply with national care pathways and referral criteria.

The provider shall ensure that specialist centre staff support peer accreditation processes by acting as inspectors.

The provider shall have active participation in training and development of the next generation of specialist allergists to ensure continuity of future service provision.

The provider shall ensure that Allergy Specialists maintain expertise by fulfilling the Allergy CPD requirements of the Royal College Physicians or equivalent undertaking team based practice.

The provider will ensure that the centre has an active role in audit.

The provider will ensure that:

- Each hub centre will operate in a hub or a network with sufficient patients in each type of complex allergic disease or HAE to maintain expertise. Many centres already network
- Each network develops a regional patient pathway for access to specialist allergy services which ensures that only patients with appropriate allergic disease or associated complications are referred.

4. Key service outcomes

Patient related outcomes (where relevant to the repertoire of the Service Provided):

- The provider shall demonstrate the efficacy of the service in excluding drug allergy e.g. to penicillin allowing use of beta-lactam antibiotics for severe chronic conditions such as bronchiectasis and the outcome of desensitisation to drugs such as penicillin when other antibiotics are not effective.
- The provider shall demonstrate the efficacy of desensitisation/immunotherapy by monitoring for (for example):
 - Significant improvement in Quality of Life (using validated tools like HRQOL and EQ5D measures).
 - Improvement in symptom scores.

- Reduction in time away from school and work.
- Reduction in medication use in patients (e.g. in severe hay fever undergoing pollen Subcutaneous and sublingual immunotherapy and severe insect venom allergy).
- Successful tolerance to future allergen exposure.
- The provider shall demonstrate the efficacy of exclusion of food allergy in children or adults on previously restricted diets resulting in fewer allergic reactions, health care service visits and by discharging patients with appropriate self-management plans where indicated.
- The provider shall monitor the % patients on omalizumab for asthma reviewed by allergist before commencing therapy and proportion continuing on therapy after 16 week assessment as per NICE guidance (where relevant).
- The provider shall demonstrate an improvement in symptom score, medication use and emergency attendances of patients on omalizumab for asthma by assessing these parameters before commencing therapy and after 16 week as per NICE guidance and at regular intervals if the therapy continues (where relevant).
- The provider shall demonstrate an improvement in symptom score, medication use and emergency attendances of patients with severe allergic eczema where allergen avoidance and eradication is instigated (e.g. food avoidance diets, reduction in bacterial load on skin using antiseptics).
- The provider shall ensure an improvement in patient confidence and effectiveness in the management of their allergies through public engagement strategy for the service to ensure that patient views of the service are measured (where necessary in collaboration with patient organizations). The provider shall undertake PREM (Patient Related Experience Measures) surveys for patients and carers on an annual basis and achieve >75% satisfaction and act on any deficiencies identified.
- The provider shall ensure that there are defined arrangements for maintaining expertise in the management of rare diseases where there are less than 5 patients per network. This may be achieved by ensuring that there are nominated individuals with expertise across the range of rare disorders per network and through regular educational meetings and through appropriate protocols or guidance.

Clinical governance:

- The provider shall ensure that they actively participate in regional network clinical meetings, to review and compare practice and share expertise in these rare conditions. A minimum attendance requirement at 50% of network meetings (from a minimum of 4 meeting per annum per network) will be necessary.
- The provider shall ensure mandatory participation in regional and national allergy audits
- The provider shall ensure that all services in a network share and compare their dashboard performances in a process of continuous quality improvement. The dashboard elements to be defined by the Immunology and Allergy CRG but to include:
 - Engagement and communication with GPs
 - Involvement of patients in their care

Coding and activity monitoring:

- The provider shall develop an approach to improving the recording and collection of routine activity and performance data.
- The provider shall ensure that out-patient as well as in-patient activity for diagnosed patients should be measured using hospital systems to detect patients with the relevant
- ICD (where one exists). This activity should include the cost of C1 inhibitor or other specified high cost drugs unless these are agreed contract exclusions.
- There should be a mechanism to collect data on activity related to patients treated at home.
- The provider shall deliver continual CPD and networking to keep abreast of new developments in Allergy diagnostics and therapy as there are regular developments in the specialty.
- The provider shall deliver a means for populating national and international disease registries.

Accreditation:

- All centres should participate and actively work towards IQAS or Paediatric equivalent Accreditation as specified in 3.1.
- All patients with a complex or severe allergic disease should be monitored regularly for development of disease progression and complications.

5. Location of provider premises

Specialist adult and Paediatric Allergy and combined allergy/Immunology centres that meet the service specifications detailed above.