



Department
of Health

NHS
England

Public health functions to be exercised by NHS England

Service specification No.1

Neonatal hepatitis B immunisation programme

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Public health functions to be exercised by NHS England

Service specification No.1

Neonatal hepatitis B immunisation programme

Prepared by Public Health England

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Service specification No.1

This is a service specification within Part C of the agreement ‘Public health functions to be exercised by NHS England’ dated November 2013 (the ‘2014-15 agreement’).

The 2014-15 agreement is made between the Secretary of State for Health and NHS England under section 7A of the National Health Service Act 2006 ('the 2006 Act') as amended by the Health and Social Care Act 2012.

This service specification is to be applied by NHS England in accordance with the 2014-15 agreement. An update to this service specification may take effect as a variation made under section 7A of the 2006 Act. Guidance agreed under paragraph A38 of the 2014-15 agreement may inform the application of the provisions of this service specification.

This service specification is not intended to replicate, duplicate or supersede any other legislative provisions that may apply.

The 2014-15 agreement including all service specifications within Part C is available at www.gov.uk (search for ‘commissioning public health’).

1. Purpose of the neonatal hepatitis B immunisation programme

- 1.1. This document relates to the newborn hepatitis B vaccine, which protects newborn babies who are at risk from hepatitis B infection from their infected mothers. Hepatitis B is a chronic infection of the liver which can cause serious illness and premature death. This vaccine forms part of the national immunisation programme and is delivered alongside the hepatitis B antenatal screening programme. The purpose of the service specification is to enable NHS England to commission the newborn hepatitis B vaccine immunisation services of sufficient quantity and quality. This means achieving timely vaccination with high coverage rates in this group in appropriate settings across England as well as within upper tier local government areas. This programme requires evaluation and monitoring within the context of populations with protected characteristics as defined by the Equality Act 2010.
- 1.2. This specification forms two distinct parts. Part 1 (sections 1 and 2) provides a brief overview of the vaccines including the diseases they protect against, the context, evidence base, and wider health outcomes.
- 1.3. Part 2 (sections 3, 4 and 5) sets out the arrangements for:
 - front-line delivery
 - the expected service and quality indicators, and
 - the standards associated with the programme.These underpin national and local commissioning practices and service delivery.
- 1.4. The existing programme provides a platform on which local services can develop and innovate to better meet the needs of their local population and work towards improving outcomes. This specification will also promote a consistent and equitable approach to the provision of the commissioning and delivery of the newborn hepatitis B vaccine across England. It is important to note that this programme can change and evolve in the light of emerging best practice and scientific evidence. NHS England and providers will be required to reflect these changes accordingly in a timely way as directed by the National schedule.
- 1.5. *Immunisation against infectious disease* (known as the Green Book), a UK document, issued by Public Health England (PHE) provides guidance and the main evidence base for all immunisation programmes. This service specification must be read in conjunction with the electronic versions of the Green Book and all the official public health letters, and reflected in the commissioning of immunisation programmes. This specification must also be read in conjunction with additional evidence, advice and recommendations issued by the JCVI (Joint Committee on Vaccination and Immunisation). Best practice guidance was also issued by Department of Health (DH) in 2012 and is an important reference tool to support the delivery of high quality and robust Hep B antenatal screening and vaccination services.
<https://www.gov.uk/government/organisations/public-health-england/series/immunisation-against-infectious-disease-the-green-book>

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<https://www.gov.uk/government/policy-advisory-groups/joint-committee-on-vaccination-and-immunisation>

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_126195

- 1.6. This service specification is not designed to replicate, duplicate or supersede any relevant legislative provisions that may apply, e.g. the Health and Social Care Act 2012. The specification will be reviewed annually and amended in line with any new recommendations or guidance, and in line with reviews of the Section 7A agreement.

2. Population needs

Background

2.1. Immunisation is one of the most successful and cost effective public health interventions and a cornerstone of public health. High immunisation rates are key to preventing the spread of infectious disease, complications and possible early death among individuals and protecting the population's health through both individual and herd immunity. The neonatal Hep B vaccine is routinely used to protect newborns who have been exposed to hepatitis B infection from their mother at the time of birth. These babies are at extremely high risk from developing chronic hepatitis B infection and therefore going on to develop liver disease and liver cancer.

Hepatitis

- 2.2. Hepatitis B infection is a risk to public health. Mortality rates from liver disease are rising in the UK. Whilst there are multiple causes of progressive chronic liver disease, around 25% of all liver disease cases in the UK are due to hepatitis infections. A major cause of liver disease is infection with hepatitis B virus (HBV). When not treated, persistent HBV infection leads to premature death due to either cirrhosis or hepatocellular carcinoma in a large proportion of infected individuals. Childhood infection accounts for an estimated 21% of all new persistent infections acquired in the UK.
- 2.3. If a pregnant woman has a chronic HBV infection, then:
- there is a 70–90% likelihood that hepatitis B infection will be transferred to the baby for the 10–15% of infected women who are of high infectivity
 - there is a 10% likelihood that that hepatitis B infection will be transferred to the baby for the 90% of infected women who are of lower infectivity
 - around 90% of babies infected at the time of birth will develop persistent HBV infection and be at risk of serious liver disease in later life
 - timely immunisation can prevent development of persistent HBV infection in over 90% of these cases.
- 2.4. Chronic HBV infection is unevenly distributed throughout the UK with some areas of the country having a higher prevalence of infection than other areas. The prevalence is generally highest in populations who have migrated from endemic countries (including most of Africa and Asia). Hepatitis B service delivery models therefore need to be flexible and responsive according to local need. Department of Health policy has supported the provision of universal screening of pregnant women for hepatitis B and immunisation of babies at risk since 2000. The aim of the antenatal screening and infant immunisation pathway is to prevent perinatal hepatitis B infection.
Hepatitis B Antenatal Screening and Newborn Immunisation Vaccine Programme.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_126195

Neonatal Hep B – key details

2.5. The key details are that:

- around 25% of all chronic liver disease in the UK is due to viral hepatitis infections.
- hepatitis B infection transmitted from mother to child accounts for 21% of newly acquired hepatitis B infections in the UK
- pregnant women are offered screening for hepatitis B, The UK National Screening Committee has issued guidance to support the commissioning and delivery of an effective screening programme.<http://www.screening.nhs.uk/hepatitisb>
- where pregnant women are identified through the screening process as being chronically infected with hepatitis B (Hepatitis B surface antigen positive) it is recommended that the baby is vaccinated. Babies born to women of high infectivity should also receive a single dose of hepatitis B specific immunoglobulin.
- the baby is vaccinated using an accelerated schedule comprising of three vaccines followed by a booster dose at 12 months of age. The baby is also given a blood test at 12 months to check whether or not infection has been prevented.
- timely immunisation can prevent persistent hepatitis B infection in around 90% of individuals who would have otherwise developed the infection.

3. Scope

Aims

3.1. The aim of the neonatal hepatitis B vaccine programme is to protect those children, identified to be at risk through screening of their mothers, from becoming persistently infected with hepatitis B.

Objectives

3.2. The aim will be achieved by delivering a targeted evidence-based immunisation programme that:

- identifies the eligible population and ensures effective and timely delivery with optimal coverage based on the target population set out in paragraph 4.7
- is safe, effective, of a high quality and is independently monitored
- is delivered and supported by suitably trained, competent health-care professionals who participate in recognised ongoing training and development in line with national standards
- delivers, manages and stores vaccine in accordance with national guidance
- is supported by regular and accurate data collection using the appropriate returns
- will ensure the appropriate handover of mother and baby from maternity services to those services completing the immunisation schedule in a timely manner
- that builds in robust arrangements for completion of the immunisation schedule and a 12-month blood test to identify where immunisation has been unsuccessful at preventing transmission.
- ensures referral of those infants who become persistently infected with hepatitis despite vaccination to specialist care.

Direct health outcomes

3.3. In the context of health outcomes the neonatal hepatitis B vaccine programme aims to:

- reduce the number of newborns at risk from developing persistent hepatitis B infection
- reduce the number of preventable hepatitis B infections and their onward transmission
- achieve on time vaccination and high coverage across all groups identified
- minimise adverse physical/psychological/clinical aspects of immunisation (e.g. anxiety, adverse reactions).

Baseline vaccine coverage

- 3.4. Local services must ensure they maintain and improve current immunisation coverage with the aspiration of 100% of at risk newborn babies being offered immunisation in concordance with the Green Book, and the *Hepatitis B antenatal screening and newborn immunisation programme Best practice guidance* and other official DH/PHE guidance.

Wider health outcomes

- 3.5. The national immunisation programme supports the commitment made in the *NHS Constitution* that everyone in England has ‘the right to receive the vaccinations that the Joint Committee on Vaccination and Immunisation (JCVI) recommends that you should receive under an NHS provided national immunisation programme’.
- 3.6. This right is set out in the *NHS Constitution* that was originally published in 2009, and renewed in 2012. The right is underpinned by law (regulations and directions), the regulations require the Secretary of State for Health to fund and implement any cost-effective recommendation made by JCVI where the Secretary of State has asked JCVI to look at a vaccine. Where JCVI makes a recommendation that the vaccine should be offered as part of a national immunisation programme, the Department of Health will fund and implement the programme.
- 3.7. The programme can be universal like MenC or a targeted programme like hep B, and those who fit the JCVI criteria (for example, HPV criteria include age and gender) will have a right to receive the vaccine. To balance this right, the *NHS Constitution* introduced a new patient responsibility that states ‘You should participate in important public health programmes such as vaccination’. This does not mean that vaccination is compulsory. It simply reminds people that being vaccinated is a responsible way to protect their own health, as well as that of their family and community.
- 3.8. The NHS Health and Social Care Act 2012, is wholly consistent with the principles of the *NHS Constitution* and places new legal duties which require NHS England and clinical commissioning groups (CCGs) to actively promote it.
- 3.9. The immunisation programme also works towards achieving the World Health Organization’s (WHO) *Global immunisation vision and strategy* (2006) which is a ten-year framework aimed at controlling morbidity and mortality from vaccine preventable diseases.

4. Service description / care pathway

Roles

- 4.1. NHS England is responsible for the commissioning of local provision of immunisation services and the implementation of new programmes through general practice and all other providers. NHS England is accountable to the Secretary of State for Health for delivery of those services. Other bodies in the new comprehensive health system also have key roles to play and it is vital to ensure strong working relationships.
- 4.2. Public Health England (PHE) undertakes the purchase, storage and distribution of vaccines on a national level. It also holds the coverage and surveillance data and has the public health expertise for analysing the coverage of, and other aspects of, immunisation services. It is also responsible for the implementation of the national immunisation schedule, including the national communication strategy, setting standards and following recommendations as advised by JCVI and other relevant organisations.
- 4.3. Directors of public health (DsPH) based in local authorities play a key role in providing independent scrutiny and challenge and publish reports on the health of the population in their areas, which could include information on local immunisation services and views on how immunisation services might be improved. NHS England should support DsPH in their role as far as practicable with detailed local information, such as analysis including vaccine coverage amongst their communities (in particular social, geographical, equality and diversity characteristics).

Local service delivery

- 4.4. The delivery of immunisation services at the local level is based on evolving best practice that has been built since vaccinations were first introduced more than a hundred years ago. This section of the document specifies the high-level operational elements of the newborn hepatitis B vaccine programme, which can be delivered in a variety of health care settings, based on that best practice that NHS England must use to inform local commissioning, contracts and service delivery. There is also scope to enable NHS England and providers to enhance and build on specifications to incorporate national or local service aspirations that may include increasing local innovation in service delivery. It is essential, in order to promote a nationally aligned, high-quality programme focusing on improved outcomes, increasing coverage and local take-up that all the following core elements are included in contracts and specifications.
- 4.5. The following elements must be covered:
 - target population
 - vaccine schedule
 - consent
 - assessment prior to immunisation
 - vaccine administration
 - vaccine storage and wastage

- vaccine ordering
 - documentation
 - reporting requirements (including adverse events and vaccine preventable diseases)
 - staffing and training
 - premises and equipment
 - patient involvement
 - governance
 - service improvement
 - interdependencies
 - local communication strategies.
- 4.6. Most of these elements are covered in the Green Book, which must be read in conjunction with this service specification
<https://www.gov.uk/government/organisations/public-health-england/series/immunisation-against-infectious-disease-the-green-book>

Target population

- 4.7. Providers are required to make the newborn hep B vaccines available to:
- all newborns identified through the hepatitis B antenatal screening programme to be at high risk of hepatitis B infection.
- 4.8. This includes babies born to mothers found to be hepatitis B surface antigen positive through the antenatal screening programme and babies born to women who deliver without being screened but are known to be hepatitis B surface antigen positive.
- 4.9. For babies born to women of high infectivity (as defined in *Immunisation against infectious disease* 2006 (a dose of hepatitis B specific immunoglobulin (HBIG) should be given with the first dose of vaccine.
<https://www.gov.uk/government/organisations/public-health-england/series/immunisation-against-infectious-disease-the-green-book>

Vaccine schedule

- 4.10. A locally commissioned service should immunise all newborn babies identified as “at risk” following the proposed schedule.

	Scheduled age	Target standard
Dose 1	Birth	Within 24 hours of birth With HBIG where indicated
Dose 2	1 month	
Dose 3	2 months	
Dose 4	12 months	At least one month from dose 3
Blood test	12 months	To check the child’s infection status (test for HBsAg)
Dose 5	With pre school booster	To be given to those at continued risk from Hep B

- As the child has already been exposed to infection (at the time of birth), to ensure adequate protection, providers should aim to give the first dose as soon as possible after birth.
- Children found to be positive for hepatitis B surface antigen at 12 months of age should be referred for specialist assessment.
- Providers should also aim to complete the schedule at near as possible to the recommended ages. Sufficient immunisation appointments must be available so that individuals can receive vaccinations on time – waiting lists are not acceptable.
- Further information on scheduling is available in the relevant chapters or *Immunisation against infectious disease 2006*
<https://www.gov.uk/government/organisations/public-health-england/series/immunisation-against-infectious-disease-the-green-book>
- For further information follow
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_126195

Consent

- 4.11. Chapter 2 in the Green Book provides up to date and comprehensive guidance on consent, which relates to both adults and the immunisation of younger children. There is no legal requirement for consent to be in writing but sufficient information should be available to make an informed decision.
- 4.12. Therefore providers are required to ensure that:
- consent is obtained prior to giving any immunisation

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- consent is given voluntarily and freely
- individuals giving consent on behalf of young children must be capable of consenting to the immunisation in question
- for young children not competent to give or withhold consent, such consent can be given by a person with parental responsibility, provided that person is capable of consenting to the immunisation in question and is able to communicate their decision. Although a person may not abdicate or transfer parental responsibility, they may arrange for some or all of it to be met by one or more persons acting on their behalf
- relevant resources (leaflets/factsheets, etc.) in an appropriate format are used as part of the consent process to ensure that all parties (both parents/and where appropriate individuals) have all the available information about the vaccine and the protection it offers. In some cases this may involve use of a trained interpreter. Professionals must be sufficiently knowledgeable about the disease and vaccine and to be able to answer any questions with confidence
- the patient has access to the patient information leaflet (PIL).

Requirements prior to immunisation

4.13. As part of the commissioning arrangements NHS England is required to ensure that the providers adhere to the following. That providers have:

- systems in place to assess eligible individuals for suitability by a competent individual prior to each immunisation
- systems in place to identify, follow-up and offer immunisation to newborns at risk from developing hepatitis B. (Timely vaccines based around the schedule detailed in 4.10 is essential to promote full protection)
- arrangements in place that enable them to identify and recall under or unimmunised individuals and to ensure that such individuals are immunised in a timely manner
- arrangements in place to access specialist clinical advice so that immunisation is only withheld or deferred where a valid contraindication exists.

Vaccine administration

4.14. As part of the commissioning arrangements, NHS England is required to ensure the providers adhere to the following:

- professionals involved in administering the vaccine, have the necessary skills, competencies and annually updated training with regard to vaccine administration and the recognition and initial treatment of anaphylaxis

- regular training and development (taking account of national standards – see section 5) is routinely available. Training is likely to include diseases, vaccines, delivery issues, consent, cold chain, vaccine management and anaphylaxis
- the professional lead must ensure that all staff are legally able to supply and/or administer the vaccine by either:
 - working under an appropriate patient group direction (PGD)
 - working from a patient specific direction (PSD)/prescriptions
 - working as a nurse prescriber (if appropriate).

Vaccine storage and wastage

- 4.15. Effective management of vaccines is essential to reduce vaccine wastage. NHS England must ensure that providers will:
- have effective cold chain and administrative protocols that reduce vaccine wastage to a minimum reflecting DH national protocols (Chapter 3 of the Green Book and the *Guidelines for maintaining the vaccine cold chain*) and includes:
 - how to maintain accurate records of vaccine stock
 - how to record vaccine fridge temperatures
 - what to do if the temperature falls outside the recommended range
http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_130276.pdf
 - Immform information
<https://www.gov.uk/government/organisations/public-health-england/series/immform>
 - ensure that all vaccines are delivered to an appointed place
 - ensure that at least two named individuals are responsible for the receipt and safe storage of vaccines in each general practice/premise
 - ensure that approved pharmaceutical grade cold boxes are used for transporting vaccines.
 - report any cold chain failures to the local coordinator, PHE Screening and Immunisations Area Team and NHS England.

Vaccine ordering

- 4.16. Hospital providers can obtain vaccine through NHS framework agreements. In other settings supplies may be obtained from nationally approved pharmaceutical wholesalers who will have local arrangements for the delivery of these vaccines or direct from the manufacturers.
- 4.17. Hepatitis B specific immunoglobulin for babies born to mothers of high infectivity is supplied free of charge from Public Health England. Supply should be ordered in the antenatal period using the form on the website.
<http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/HepatitisB/Forms/>

For unbooked deliveries, stock can be accessed through the 24-hour on-call service (0208 200 6868).

Documentation

4.18. Accurate recording of all vaccines given and good management of all associated documentation is essential. Providers must ensure that:

- the patient's medical records are updated with key information that includes:
 - any contraindications to the vaccine and any alternative offered
 - any refusal of an offer of vaccination
 - details of consent and the relationship of the person who gave the consent
 - the batch number, expiry date and the title of the vaccination
 - the date of administration of the vaccine
 - the site and route of administration
 - any adverse reactions to the vaccine
 - name of immuniser.
- regardless of the setting of where the vaccine is administered, the parent-held record must be updated. The individual record which must include:
 - the batch number, expiry date and the title of the vaccination
 - the date of administration of the vaccine
 - the site and route of administration
 - any adverse reactions to the vaccine
 - name of immuniser.

Reporting requirements

4.19. The collection of data is essential. It has several key purposes including the local delivery of the programme and the monitoring of coverage at national and local level, outbreak investigation and response as well as providing information for Ministers and the public. In-depth analysis underpins any necessary changes to the programme, which may include the development of targeted programmes or campaigns to improve general coverage of the vaccination.

- Providers must be able to provide and/or allow access to their systems to determine BOTH the denominator eligible population AND the numerator of that eligible population who have received vaccination.
- The maternity provider must ensure that information on which children are at risk and on vaccines administered is submitted directly to the local relevant population immunisation register, the local immunisation co-ordinator, the Child Health Information System (CHIS), the local health protection team and the GP. CHIS is a patient administration system that provides a clinical record for individual children, it records the vaccination details of each individual child resident in the local area from birth.

- Providers must also ensure that information on vaccines administered is documented and that this information is transferred to the general practice record and to the CHIS.
- Following an immunisation session/clinic or individual immunisation, local arrangements must be made for the transfer of data onto the relevant CHIS. Where possible this should aim to be within two working days.
- Arrangements will also be required to inform neighbouring areas when children resident in their area are immunised outside their local area through the CHIS system.
- Systems must be in place to inform CHIS of any newly registered children aged under 5 years old, including those that may require completion of any vaccination schedules.
- Any reported adverse incidents, errors or events during or post vaccination must follow determined procedures, in addition teams must keep a local log of reports and discuss such events with the local immunisation coordinator.
- Suspected adverse reactions must be reported to the MHRA via the Yellow Card Scheme card, including the brand number and batch number in addition to following local and nationally determined procedures, including reporting through the NHS.
<http://www.mhra.gov.uk/Safetyinformation/Howwemonitorthesafetyofproducts/Medicines/TheYellowCardScheme>
- Providers are required to report cases of suspected vaccine preventable diseases to the local PHE centre.
- Any cold chain failures must be documented as an incident and reported to the local immunisation co-ordinator and registered on Immform as appropriate.

Staffing including training

- 4.20. To deliver a national immunisation programme it is essential that all staff are appropriately trained. NHS England must ensure that providers:
- have an adequate number of trained, qualified and competent staff to deliver a high quality immunisation programme in line with best practice and national policy
 - are covered by appropriate occupational health policies to ensure adequate protection against vaccine preventable diseases (e.g. measles, flu and hepatitis B)
 - meet the HPA *National minimum standards in immunisation training* 2005 either through training or professional competence and to ensure that annual training is offered to all staff
 - have had training (and annual updates) for all staff with regard to the recognition and initial treatment of anaphylaxis

- ensure that all staff are familiar with and have online access to the latest edition of the Green Book ensure that all staff are registered to receive *Vaccine Update* <https://www.gov.uk/government/organisations/public-health-england/series/vaccine-update>
- ensure that all staff are aware of the importance of and can access all official public health letters that announce changes to or new programmes, the Director of Immunisation letters, and additional guidance on the (PHE) website.

Premises and equipment

4.21. Appropriate equipment and suitable premises are needed to deliver a successful immunisation programme. NHS England must ensure that providers have:

- suitable premises and equipment provided for the immunisation programme
- disposable equipment meeting approved quality standards
- appropriate waste disposal arrangements in place (e.g. approved sharps bins, etc.)
- appropriate policies and contracts in place for equipment calibration, maintenance and replacement
- anaphylaxis equipment accessible at all times during an immunisation session and all staff must have appropriate training in resuscitation
- premises that are suitable and welcoming for young children, their carers and all individuals coming for immunisation including those for whom access may be difficult.

Governance

4.22. It is essential to ensure that there are clear lines of accountability and reporting to assure the ongoing quality and success of the national programme. Commissioning arrangements must ensure that:

- there is a clear line of accountability from local providers to NHS England
- at the provider level there is appropriate internal clinical oversight of the programme's management and a nominated lead for immunisation
- provider governance is overseen by a clinical lead (for example, the local immunisation coordinator) and immunisation system leader
- there is regular monitoring and audit of the immunisation programme, including the establishment of a risk register as a routine part of clinical governance arrangements, in order to assure NHS England of the quality and integrity of the service
- for providers to supply evidence of clinical governance and effectiveness arrangements on request for NHS England or its local offices
- PHE will alert NHS England to any issues that need further investigations

- the provision of high quality, accurate and timely data to relevant parties including PHE, NHS England and local authorities (LAs) is a requirement for payment
- data will be analysed and interpreted by PHE and any issues that arise to be shared quickly with NHS England and others
- local co-ordinators will document, manage and report on programmatic or vaccine administration errors, including serious untoward incidents (SUIs), and escalate as needed which may include involving NHS England and relevant partners and where appropriate for NHS England to inform DH.
- that NHS England press office will liaise closely with DH, PHE, and MHRA press offices regarding the management of all press enquiries.
- have a sound governance framework in place covering the following:
 - information governance/records management
 - equality and diversity
 - user involvement, experience and complaints
 - failsafe procedures
 - communications
 - ongoing risk management
 - health and safety
 - insurance and liability.

Service improvement

- 4.23. NHS England and providers will wish to identify areas of challenge within local vaccination programmes and develop comprehensive, workable and measurable plans for improvement. These may be locally or nationally driven and are likely to be directed around increased coverage and may well be focused on particular hard to reach groups. Suggestions for improving service and uptake:
- 4.24. NICE guidelines (NICE 2009 *Reducing differences in the uptake of vaccines*) highlight evidence to show that there are particular interventions, which can increase immunisation rates and reduce inequalities. Providers must also consider the following suggestions:
- up-to-date patient reminder and recall systems (particularly for those being vaccinated in a non-school setting)
 - well-informed health-care professionals who can provide accurate and consistent advice
 - high quality patient education and information resources in a variety of formats (leaflets, internet forums and discussion groups)
 - effective performance management of the commissioned service to ensure it meets requirements
 - local co-ordinators or experts based in PHE to provide expert advice and information for specific clinical queries

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- For NHS England and providers to have clear expectations to improve and build upon existing immunisation rates.

Interdependencies

4.25. The immunisation programme is dependent upon systematic relationships between stakeholders, which include vaccine suppliers, primary care providers, NHS England as well as secondary maternity services community maternity and mother and baby settings. The NHS England Area Screening and Immunisations Team (SIT) are expected to take the lead in ensuring that inter-organisational systems are in place to maintain the quality of the immunisation pathway. This will include, but is not limited to:

- ensuring all those involved in the pathway are sure of their roles and responsibilities
- developing joint audit and monitoring processes
- agreeing joint failsafe mechanisms, where required, to ensure safe and timely processes along the whole pathway
- contributing to any initiatives led by NHS England/PHE to develop/improve the childhood immunisation programme
- maintaining an up-to-date population based immunisation register to provide coverage data and for outbreak investigation and response
- maintaining robust electronic links with IT systems and relevant organisations along the pathway.
- local feedback and review of coverage and disease surveillance data
- clear description of and access to advice on the arrangements for provision of and reimbursement for immunisation services.

Communication strategies

4.26. It will be important to develop and implement communication strategies to support both the introduction of new vaccines and the maintenance of existing programmes. Such strategies may be developed on a national basis, local strategies may also be further developed to support national programmes or address specific issues.

5. Service standards and guidance

- 5.1. To support the delivery of an effective and high quality Childhood Immunisation Programme, NHS England and providers must refer to and make comprehensive use of the following key resources:
- Green Book – Immunisation against infectious disease (DH 2006)
<https://www.gov.uk/government/organisations/public-health-england/series/immunisation-against-infectious-disease-the-green-book>
 - Quality criteria for an effective immunisation programme (HPA, 2012)
<http://www.hpa.org.uk/Publications/InfectiousDiseases/Immunisation/1207Qualitycriteriaforimmprogramme/>
 - National minimum standards for immunisation training (HPA June 2005)
http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1196942164323
 - *Protocol for ordering, storing and handling vaccines* (DH Sept 2010)
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_120010
 - National Patient Safety Agency – *Advice on vaccine cold storage*
<http://www.nrls.npsa.nhs.uk/EasySiteWeb/getresource.axd?AssetID=66112&type=full&servicetype>
 - Official immunisation letters (DH)
<https://www.gov.uk/government/organisations/public-health-england/series/immunisation#publications>
 - Immform information
<https://www.gov.uk/government/organisations/public-health-england/series/immform>
 - British National Formulary <http://www.bnf.org/bnf/index.htm>
 - JCVI (Joint Committee on Vaccination and Immunisation)
<https://www.gov.uk/government/policy-advisory-groups/joint-committee-on-vaccination-and-immunisation>
 - NICE guidance 21 Sept 2009 – Reducing differences in the uptake of immunisations (including targeted vaccines) among children and young people aged under 19. <http://www.nice.org.uk/PH21>
 - Resuscitation Council – *UK guidelines* <http://www.resus.org.uk/pages/guide.htm>
 - WHO – World Health Organization – *Immunisations*
<http://www.who.int/topics/immunization/en/>
 - NICE – Shared learning resources:
<http://www.nice.org.uk/usingguidance/sharedlearningimplementingniceguidance/examplesofimplementation/eximresults.jsp?o=575>

Public health functions to be exercised by NHS England

- Hepatitis B antenatal screening and newborn immunisation programme
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_126195