

**NATIONAL INSTITUTE FOR HEALTH AND CARE  
EXCELLENCE**

**INDICATOR DEVELOPMENT PROGRAMME**

**Consultation report**

**Indicator area:** Vaccinations and immunisations

**Consultation period:** 26 June – 15 July 2020

**Date of Indicator Advisory Committee meeting:** 04 August 2020

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## Summary of indicators included in the consultation

ID	Indicator	Evidence source
IND 2020-84	The percentage of babies who reached 6 months old in the preceding 12 months, who have received at least 3 doses of a diphtheria, tetanus and pertussis containing vaccination before the age of 6 months.	<a href="#">Immunisations: reducing differences in uptake in under 19s</a> (2009, updated 2017) NICE public health guideline PH21, recommendations 1, 2 and 3. <a href="#">Immunizations – childhood</a> (2020) NICE clinical knowledge summary
IND 2020-85	The percentage of children who reached 18 months old in the preceding 12 months, who have received at least 1 dose of MMR on or after their first birthday and before the age of 18 months.	<a href="#">Immunisations: reducing differences in uptake in under 19s</a> (2009, updated 2017) NICE public health guideline PH21, recommendations 1, 2 and 3. <a href="#">Immunizations – childhood</a> (2020) NICE clinical knowledge summary
IND 2020-86	The percentage of children who reached 5 years old in the preceding 12 months who have received a reinforcing dose of DTaP/IPV and at least 2 doses of MMR on or after their first birthday.	<a href="#">Immunisations: reducing differences in uptake in under 19s</a> (2009, updated 2017) NICE public health guideline PH21, recommendations 1, 2 and 3. <a href="#">Immunizations – childhood</a> (2020) NICE clinical knowledge summary
IND 2020-87	The percentage of children who reached 5 years of age in the preceding 12 months who have received 1 dose of MMR on or after their first birthday.	<a href="#">Immunisations: reducing differences in uptake in under 19s</a> (2009, updated 2017) NICE public health guideline PH21, recommendations 1, 2 and 3. <a href="#">Immunizations – childhood</a> (2020) NICE clinical knowledge summary
IND 2020-88	The percentage of women who reached 32 weeks of pregnancy in the preceding 12 months who have received a pertussis-containing vaccine after 16 weeks of pregnancy.	<a href="#">Antenatal care – uncomplicated pregnancy</a> (2019) NICE Clinical Knowledge Summary.
IND 2020-89	The percentage of patients who reached 75 years of age in the preceding 12 months with a record of a shingles vaccine.	<a href="#">Shingles</a> (2019) NICE Clinical Knowledge Summary

## General comments

### Summary of consultation comments

Stakeholders welcomed the proposed vaccination and immunisations indicators and commented that NICE menu indicators can help to reduce inequalities. One stakeholder commented that this is an excellent way to collect data on immunisation. There was some concern about the impact of COVID-19.

Stakeholders commented on barriers to implementing the care described by these indicators:

- Language barrier
- Obtaining a reliable immunisation history for patients who have moved from other countries and aligning this with the routine immunisation schedule in England.
- Increasing numbers of parents declining or delaying childhood immunisations. One stakeholder noted that practices and Primary Care Networks (PCNs) do not have time or resources to address this and would benefit from official resources in accessible formats for signposting.
- Stakeholders commented that health inequalities especially in inner city practices can present a challenge when trying to increase uptake of vaccinations. Additional support may be required in areas struggling to maintain high levels of vaccination.
- Organisational structures and data availability.

Stakeholders commented on potential unintended consequences to implementing/using any of these indicators:

- Some stakeholders felt that incentivising rates of immunisation may be unfair for those practices in more deprived areas that would have low uptake despite more effort to follow-up with patients. This was also highlighted for areas with vaccine-averse populations.
- Stakeholders commented on the limited supply of vaccines. This may also present a barrier to implementation.

Some stakeholders commented on the complexity of the current vaccination and immunisation processes in primary care and the impact of this:

- Vaccination funding is currently separate to QOF.
- There are currently multiple schemes for measuring vaccination rates.
- There are multiple procurement pathways.
- Implementing a few immunisation indicators may lead to successful uptake of the selected vaccination programmes but does not ensure

adequate administration of the whole life course. This could lead to a perception that some vaccinations are more important than others. Stakeholders suggested specific additional indicators related to the pneumococcal vaccine in children and at-risk groups, influenza vaccine in 2 to 3-year olds and in pregnancy and an indicator for timeliness of the 16-week immunisation visit.

Stakeholders commented on potential for differential impact:

- Stakeholders commented that hard to reach groups need less conventional ways of engagement.
- There was concern that the current proposals do not cover those aged 5 to 64 years and may aggravate low uptake of vaccinations in this population.
- One stakeholder suggested consideration be given to immunisation of special groups such as children with sickle-cell disease as uptake of vaccination is generally better than the general population.

Stakeholders suggested ways that the indicators may be delivered differently to reduce health inequalities:

- Setting different levels of achievement for hard to reach groups.
- Additional support could be given in areas struggling to maintain high levels of vaccination and in vulnerable communities. Examples such as more effective reminder systems, integration of healthcare sites, public information campaign, community engagement.
- Children and adults with learning disabilities may need reasonable adjustments to have access to vaccinations.
- One stakeholder highlighted the role of the immunisation coordinator who supports quality improvement in primary care.

Stakeholders commented on the exclusions in the specifications for these indicators:

- Stakeholders commented that shared decision making is at the core of all primary care work and needs to be acknowledged in these indicators. There were concerns that practices would be penalised for patients who wish to opt-out of vaccination and stakeholders suggested that “declined vaccination” should be in the exclusions for these indicators. There were suggestions that this should be part of the measurement.
- One stakeholder highlighted that patients can be referred to a vaccine service or an allergy service to see if the vaccine can be given safely under supervision if they have had a previous anaphylactic reaction on specific vaccinations.

## **IND 2020-84: Diphtheria, tetanus and pertussis**

The percentage of babies who reached 6 months old in the preceding 12 months, who have received at least 3 doses of a diphtheria, tetanus and pertussis containing vaccine before the age of 6 months.

### **Rationale**

Diphtheria, tetanus and pertussis (whooping cough) are acute infectious diseases that can have severe complications. The routine immunisation schedule states that babies should receive the hexavalent (6-in-1) vaccine at 8, 12 and 16 weeks old for immunisation to diphtheria, tetanus and pertussis (DTaP) as well as poliomyelitis (IPV), haemophilus influenzae type B (Hib) and hepatitis B. The childhood immunisation schedule has been designed to provide early protection against infections that are most dangerous for young children ([Public Health England](#), 2019).

### **Summary of consultation comments**

- Stakeholders welcomed this indicator.
- One stakeholder felt that the target of 6 months should be increased to allow more flexibility.

## IND 2020-85: MMR (1<sup>st</sup> birthday)

The percentage of children who reached 18 months old in the preceding 12 months, who have received at least 1 dose of MMR on or after their first birthday and before the age of 18 months.

### Rationale

MMR is the combined vaccine that protects against measles, mumps and rubella. These are highly infectious common conditions that can have serious complications. The first MMR vaccine (MMR1) is given to children as part of the routine vaccination schedule for England within a month of their first birthday. The childhood immunisation schedule has been designed to provide early protection against infections that are most dangerous for young children ([Public Health England](#), 2019).

### Summary of consultation comments

- Stakeholders welcomed this indicator.
- One stakeholder suggested that this indicator should be timelier and reflect the routine immunisation schedule. They suggested measurement at 15 months of age. Another stakeholder suggested measurement at 2 years.
- One stakeholder highlighted that this vaccination may require an additional exclusion of “parental choice not to have the vaccination”. GPs should not be penalised if they have engaged with the family.
- One stakeholder commented that clinical systems may pick out patients as outstanding for MMR if they have had single vaccinations for these conditions.

## **IND 2020-86: MMR and diphtheria, tetanus, pertussis and poliomyelitis**

The percentage of children who reached 5 years old in the preceding 12 months who have received a reinforcing dose of DTaP/IPV and at least 2 doses of MMR on or after their first birthday.

### **Rationale**

MMR is the combined vaccine that protects against measles, mumps and rubella. DTaP/IPV is the vaccine that protects against diphtheria, tetanus, pertussis (whooping cough) and poliomyelitis. These are highly infectious common conditions that can have serious complications. The first three doses of DTaP/IPV are given at 8, 12 and 16 weeks of age and the reinforcing vaccination is offered at around 3 years and 4 months. The first MMR vaccine (MMR1) is given as part of the routine vaccination schedule for England within a month of the first birthday and a booster dose (MMR2) is given at around 3 years and 4 months of age. The childhood immunisation schedule has been designed to provide early protection against infections that are most dangerous for young children ([Public Health England](#), 2019).

### **Summary of consultation comments**

- Stakeholders welcomed this indicator.
- One stakeholder highlighted the misalignment with the routine immunisation schedule and vaccination at 3 years and 4 months. They suggested a timeframe of measurement at 4 years old.
- One stakeholder recommended that this indicator be split into two indicators to separate MMR from the DTaP/IPV as some parents could choose not to have one of the vaccines.
- One stakeholder commented that clinical systems may pick out patients as outstanding for MMR if they have had single vaccinations for these conditions.

## IND 2020-87: MMR (5<sup>th</sup> birthday)

The percentage of children who reached 5 years of age in the preceding 12 months who have received 1 dose of MMR on or after their first birthday.

### Rationale

MMR is the combined vaccine that protects against measles, mumps and rubella. These are highly infectious common conditions that can have serious complications. The first MMR vaccine (MMR1) is given as part of the routine vaccination schedule for England within a month of the first birthday. The childhood immunisation schedule has been designed to provide early protection against infections that are most dangerous for young children ([Public Health England](#), 2019).

### Summary of consultation comments

- Stakeholders welcomed this indicator.
- One stakeholder commented that the focus on MMR is important, but this indicator is limited in its use as it is not timely. However, it does monitor how many children catch-up their first dose. Another stakeholder pointed out the overlap with IND 2020-86.
- One stakeholder commented that clinical systems may pick out patients as outstanding for MMR if they have had single vaccinations for these conditions.



## IND 2020-88: Pertussis-containing vaccine during pregnancy

The percentage of women who reached 32 weeks of pregnancy in the preceding 12 months who have received a pertussis-containing vaccine after 16 weeks of pregnancy.

### Rationale

Pertussis (whooping cough) is a highly infectious disease and severe complications and death occur most commonly in infants under six months of age. Vaccination against pertussis in pregnancy is highly effective in protecting young babies until they can receive their own vaccinations from 8 weeks of age. Pregnant women are offered a vaccination that protects against pertussis (whooping cough) as part of the routine immunisation schedule ([Public Health England, 2019](#)). The vaccination should ideally be given between 16 and 32 weeks of pregnancy as vaccination after this period may not offer as high levels of passive immunity to the baby ([NHS England, 2020](#)).

### Summary of consultation comments

- Stakeholders commented that this indicator is important.
- One stakeholder commented that this indicator does not encourage vaccination after 32 weeks of pregnancy and suggested that the indicator timescale be extended to include this, or an additional indicator be added for vaccination to 38 weeks of pregnancy.
- Stakeholders highlighted the challenges in data extraction from primary care regarding pregnancy.
- One stakeholder commented that using primary care databases for researching pregnancy can be challenging and suggested further validation be considered to optimise this approach.

**Consultation question: The proposed indicator is at general practice level. If the vaccine is given in services other than general practice, for example in maternity services, would vaccination be routinely recorded in general practice IT systems and be suitable for data extraction?**

- Stakeholders replied that vaccination would only be routinely recorded in the general practice systems if given in a general practice setting.
- Stakeholders generally agreed that data sharing between services is difficult and there were comments that implementation of this indicator would be a challenge. Data transfer from maternity services to general practice may be incomplete meaning that uptake is underestimated. One stakeholder highlighted that a similar system is in place for pharmacists to

contact general practice about influenza vaccinations given in the community.

- One stakeholder commented that practices may have to adjust their coding methods to allow for accurate data extraction.

**Consultation question: The proposed indicator is at general practice level. Care during pregnancy may be shared between general practice and maternity services. Would this indicator be more suitable for CCG level measurement?**

- Stakeholders agreed this would be more suitable for a CCG level indicator although one stakeholder queried if CCGs had resource for this. One stakeholder commented it would also be suitable at Primary Care Network (PCN) level.

**Consultation question: The proposed indicator measures achievement based on gestational age at the time of vaccination. Is gestational age routinely recorded on general practice IT systems and suitable for data extraction?**

- Stakeholders commented that gestational age and estimated date of delivery (EDD) is often not shared with primary care and if on the system is a free text entry. There was also concern about accuracy of this on the system.

## IND 2020-89: Shingles vaccine

The percentage of patients who reached 75 years of age in the preceding 12 months with a record of a shingles vaccine.

### Rationale

Shingles is caused by the reactivation of a latent varicella zoster virus infection and is associated with symptoms such as rash, pain, photophobia and malaise. Post-herpetic neuralgia can develop, and the reactivated virus can also result in disseminated intravascular coagulopathy, as well as dissemination into other organs such as the lungs. Risk and severity of shingles increases with age; shingles is fatal for around 1 in 1000 over 70s who develop it. A shingles vaccine was introduced to the routine immunisation schedule in 2013 and offers the vaccine to those turning 70 years old. Patients remain eligible for the vaccination until their 80<sup>th</sup> birthday; the estimated effectiveness of the shingles vaccine decreases with age ([Public Health England](#), 2016). This indicator aims to increase uptake of the shingles vaccine at an earlier age to obtain the most benefit.

### Summary of consultation comments

- A stakeholder commented that this indicator seems a good way to ensure that this cohort is offered the shingles vaccine.
- One stakeholder commented on the complexity of the current shingles programme due to the age driven criteria.
- Stakeholders suggested the age band should be changed. One suggested 70 years of age and highlighted low coverage for this cohort (31.9%) and reiterated that risk and severity of shingles increases with age. This stakeholder suggested alignment with the PHOF. Another stakeholder felt that 73 years of age would be more appropriate.
- One stakeholder highlighted the shingles catch-up programme for those aged 70-79. Stakeholders suggested extending the age on this indicator to patients who have reached 80 years or add an additional indicator to cover this.
- One stakeholder noted that the vaccine can be given at the same time as the flu vaccine and annual reminders for this provides an opportunity to discuss the shingles vaccine.
- A stakeholder highlighted the 2021 routine shingles service specification for GPs and the need for this indicator to complement this.
- One stakeholder commented that patients often decline vaccination if they have previously had shingles. The stakeholder questioned whether this should be in the exclusion specification.
- One stakeholder commented that patients must understand they are eligible for the vaccination for uptake to be increased and suggested

tailored interventions would be required especially for BAME individuals and those living alone and in care homes.

## Appendix A: Consultation comments

ID	Proforma question no.	Stakeholder organisation	Comment
		<b>Question 1:</b> Do you think there are any barriers to implementing the care described by these indicators?	
General	1	Fosse Medical centre	Language barrier and obtaining imms history from other countries. Parents often just say that the child had 'all of the vaccines' – what does it mean? How reliable is it? When exactly did they have them? Getting copy often is too much hassle and they are not willing to do so. When they bring reg form in interpreter is not available to explain the importance of it. Thus, if QOF is introduced we will be mostly going on parents' 'say so' just to get it completed, rather than keep chasing parents up for the proper history.
General	1	PC24 Social Enterprise	Barriers to programme have always been engaging with the hard to reach groups and the traditional models we provide need looking at. How do we provide outreach vacs and imms work to improve uptake? Interface between school nurses and community services and cross organisation working is key to maximise the flu vac programme 2020 especially in light of NHSE Primary Care SOP advocating as few as possible health care professionals having contact with patients as possible to reduce risk.
General	1	Royal College of Paediatrics and Child Health (RCPCH)	Barriers: Despite the fact that the benefits of personal health care services such as immunisation, extends to more subtle qualities of life values like physical and social functioning in addition to infection control, barriers can exist in implementing the care implied by these indicators. For instance, organisational structural impediments, delays in data availability, financial barriers, vaccination shortages, racial and ethnic differences and the impact of culture to name a few. Unprecedented and uncertain times related to COVID-19 could also pose to be a barrier.

ID	Proforma question no.	Stakeholder organisation	Comment
General	1	Individual 1	Barrier – increasing numbers of parents are declining or wanting to delay childhood immms, presumably due to misinformation online. This is not something we have the time or resource to address at practice or PCN level. There needs to be an accessible official resource, ideally in video format rather than text (with subtitles in common non-English languages and BSL translation) for us to signpost people to. This should be endorsed by a professional body e.g. Royal College of Paeds and Child Health rather than just being from a single governmental organisation which could be seen to be pushing a manipulative agenda onto families
		<b>Question 2:</b> Do you think there are any potential unintended consequences to implementing /using any of these indicators?	
General	2	PC24 Social Enterprise	Unintended consequences include – vaccine supplies are not infinite, capacity and effectiveness of weight management services needs scrutiny, cancer patients need more co-ordinated care and contacts rather than more as many agencies are involved so a barrier to this would be an individual's ability to engage with multiple services – more joined up working may help.
General	2	Pfizer	Potential unintended consequences to implementing/using any of these indicators: Including only a few immunisation related indicators may lead to successful implementation and adequate uptake of the selected vaccination programmes, it does not necessarily ensure adequate administration of the whole life course vaccination and immunisation programme in the UK. Selecting certain vaccinations within the indications could lead to a perception that some vaccinations are more important than others.

ID	Proforma question no.	Stakeholder organisation	Comment
General	2	Royal College of Paediatrics and Child Health (RCPCH)	Unintended Consequences: Questioning how interventions can reach their desired goals is one of the main focus to implementing indicators. Unintended consequences (UCs) can have positive spill over effects or negative harms and as such evaluation of UCs is challenging. There has to be a consideration as to what works for whom and which subset of population, and under what circumstances, as there may be an unexpected impact at a population level for reasons which are hard to predict in advance. Sometimes not all policies work for all. Though developing a holistic stakeholder lead evaluation process has positive effects, better use of theory evidence, appropriate evaluation systems and articulating these mechanisms clearly can help mitigate some of the anticipated negative side effects Policies should be tested well and the potential for evidence should be maximised. It should also be borne in mind that unintended UCs may fall heavily on the disenfranchised. One should also identify potential avenues for future enquiries
General	General	Individual 2	The QOF payment for immunisations is a perverse incentive. In leafy suburbia where it is easy to contact patients and get them immunised or register their objection it is much easier to get high vaccination levels. In more deprived areas with more movement of people, a more diverse population it is much harder to achieve even lower levels of vaccination. As such a practice might well decide the effort required to chase patients is not worth it as their overall rates will inevitably low and so will attract a lower QOF payment despite having to work harder to achieve less. This is not fair!!

ID	Proforma question no.	Stakeholder organisation	Comment
		<p><b>Question 3:</b> Do you think there is potential for differential impact (in respect of age, disability, gender and gender reassignment, pregnancy and maternity, race, religion or belief and sexual orientation)? If so, please state whether this is adverse or positive and for which group.</p>	
General	3	PC24 Social Enterprise	Hard to reach groups need less conventional ways of engagement and using non health settings and utilising a broader range of health care professionals to administer them.



General	3	Pfizer	<p>Potential for differential impact in respect of age.</p> <p>The current indicator selection for vaccination and immunisation does <u>not</u> cover individuals aged over 5 until 64 years of age (excluding IND 2020-88, Pertussis-containing vaccine during pregnancy). This may lead to unintended differential impact in respect of age and aggravate the low uptake of vaccination by younger adults, such as those with chronic conditions who are eligible for vaccination due to their higher risk of infection and subsequent morbidity and mortality.</p> <p>Examples include adults aged 18-64 years eligible for pneumococcal vaccination. According to the 2019 Pneumococcal Polysaccharide Vaccine (PPV) coverage report, vaccine uptake for patients who became at risk between 1 April 2017 and 31 March 2018 and vaccinated from 1 April 2017 to 31 March 2019 varied between 6.5% (cerebrospinal fluid leaks) to 52.2% (cochlear implants). Potential causes for the low uptake presented in the report include the substantial variation of awareness of eligibility for PPV according to clinical indication among clinicians. It is also noted that there will be individuals eligible for vaccination who are not included in the denominators due to the ambiguity of certain clinical codes, that PPV coverage also varies by Local Team, and it is recommended that GPs should continue to encourage patients in risk groups and those aged 65 and above to receive the pneumococcal vaccine (1).</p> <p><u>Proposed indicator:</u></p> <p>% of at-risk individuals aged 18-64 recommended pneumococcal vaccination (2) who have received one pneumococcal vaccine dose</p> <p>Eligible clinical risk groups aged ≥18 include (2):</p> <ul style="list-style-type: none"> <li>• Chronic liver disease</li> <li>• Immunosuppression</li> <li>• Chronic respiratory disease</li> <li>• Chronic heart disease</li> <li>• Chronic kidney disease</li> <li>• Diabetes</li> <li>• Asplenia/ splenic dysfunction</li> <li>• Cochlear implant patients</li> <li>• Cerebrospinal fluid leaks patients</li> </ul> <p>Ref 1: <a href="#">Public Health England Pneumococcal Polysaccharide Vaccine (PPV) coverage report, England, April 2018 to March 2019 Health Protection Report Volume 13 Number 39 November 2019:</a></p> <p>Ref 2: <a href="#">Public Health England (2013). Pneumococcal: the Green Book, chapter 25.</a></p>
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ID	Proforma question no.	Stakeholder organisation	Comment
General	3	Royal College of Paediatrics and Child Health (RCPCH)	Potential for differential impact: Age has a positive impact. Disability has a positive impact. Pregnancy and Maternity has a negative impact. Gender has no impact. Race can be either positive or negative. Religion or belief can be positive or negative.
		<b>Question 4:</b> If you think any of these indicators may have an adverse impact in different groups in the community, can you suggest how the indicator might be delivered differently to different groups to reduce health inequalities?	
General	4	PC24 Social Enterprise	Set different levels of achievement for “hard to reach groups” – non-English speakers, housebound, homeless, BME
General	4	Royal College of General Practitioners (RCGP)	Health inequalities, especially when looking at inner city practices, is a significant challenge when looking at the proportion of children and adults taking up vaccinations. Investment in new parent education, health visitor services, school nurses and public health is essential to ensure the maximum uptake is achieved. Consideration should also be given to additional support in those areas struggling to maintain high levels of vaccination.

ID	Proforma question no.	Stakeholder organisation	Comment
General	4	Royal College of Paediatrics and Child Health (RCPCH)	Adverse impact of different groups in the community: a.) Research to understand particular problems in different groups to determine the immunisation status, especially in migrant population and to understand how barriers discourage certain population from receiving necessary immunisation is needed b.) Anti vaccine group: Parents may perceive risks in a broader, religious, cultural and personal context. Beliefs in natural herd immunity, misconception that the administration of too many vaccines weakens the immune system, safety concerns, alleged vaccine reactions can all act as barriers. c.) Social media can be damaging. Educational programmes specifically addressed and designed for the above groups are needed. As language can also be a barrier, education in the native language by native speakers helps. d.) Other methods that can help are, integrating health care sites, activation of effective reminder systems, improving accessibility to local services, addressing missed opportunities, adopting a system to collect and consolidate the vaccination status of single individuals. Developments of new vaccines and alternative routes of administration can be helped.
		<b>General comments on indicator proposals</b>	
General	General	British Medical Association (BMA)	<p>We support the aim of increasing vaccine and immunisation uptake but consider that these indicators may penalise practices for factors beyond their control, particularly in relation to those supporting population groups that are more vaccine averse.</p> <p>To be effective and fair, these indicators will require a concerted public information campaign and community engagement with a specific emphasis on vulnerable communities, nurseries and schools. This is especially true of MMR, but also of vaccinations generally.</p>
General	General	Fosse Medical Centre	Children coming from other countries would follow different vac schedules, i.e. Italy's imms are much later – would we be penalised for it?

ID	Proforma question no.	Stakeholder organisation	Comment
General	General	Merck Sharp & Dohme Limited	<p>Vaccination – At-risk groups pneumococcal vaccine indicator</p> <p>We recommend that an indicator be included for the at-risk population eligible for the pneumococcal vaccine to improve patient outcomes within this group and protect them from vaccine-preventable diseases.</p> <p>Pneumococcal disease can present as non-invasive or invasive infections caused by the bacterium <i>Streptococcus pneumoniae</i> (also called pneumococcus). Non-invasive disease includes middle ear infections (otitis media), sinusitis and bronchitis, whilst invasive pneumococcal disease (IPD) includes septicaemia, pneumonia and meningitis.<sup>1</sup> Those with underlying health conditions have been shown to be at an increased risk of pneumococcal disease, have more severe disease, higher rates of complications and higher mortality rates.<sup>2</sup></p> <p>Pneumococcal vaccines have been recommended for clinical at-risk groups since 1992 in the UK, but data on vaccine coverage rates has been limited. Recent coverage data from 2019-20 indicated vaccine coverage among patients at risk aged 2-64 years varied from 26.2% (chronic liver disease) to 76.5% (cochlear implants). This compared to an uptake rate of 69.0% for those 65 years and older.<sup>1</sup> Previous studies have also indicated low uptake rates amongst at-risk groups compared to those 65 years and older.<sup>3</sup></p> <p>Despite the increased risk and severity of pneumococcal disease amongst at-risk groups, there is varied and low uptake of the vaccine which indicates an opportunity to improve outcomes for this population group who are most vulnerable to pneumococcal disease. Inclusion of an indicator would allow for a renewed focus on these groups by GPs, especially considering the COVID-19 pandemic which has highlighted the need to protect those who are most vulnerable from infectious disease.</p>

<sup>1</sup> Public Health England. (2020). Pneumococcal Polysaccharide Vaccine (PPV) coverage report, England, April 2019 to March 2020. Available from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/899458/hpr1320\\_ppv-vc.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/899458/hpr1320_ppv-vc.pdf)

<sup>2</sup> Torres A, Blasi F, Dartois N, Akova M. Which individuals are at increased risk of pneumococcal disease and why? Impact of COPD, asthma, smoking, diabetes, and/or chronic heart disease on community-acquired pneumonia and invasive pneumococcal disease. *Thorax*. 2015;70(10):984-989. doi:10.1136/thoraxjnl-2015-206780

<sup>3</sup> Pebody RG, Hippisley-Cox J, Harcourt S, Pringle M, Painter M, Smith G. Uptake of pneumococcal polysaccharide vaccine in at-risk populations in England and Wales 1999-2005. *Epidemiol Infect*. 2008;136(3):360-369. doi:10.1017/S0950268807008436

ID	Proforma question no.	Stakeholder organisation	Comment
General	General	Merck Sharpe & Dohme Limited	<p>Vaccination – children pneumococcal conjugate vaccine indicator</p> <p>We recommend that an indicator be included for children eligible for the pneumococcal vaccine 12-month booster dose to protect them from vaccine-preventable diseases and achieve the required herd immunity target levels for wider protection.</p> <p>Invasive pneumococcal disease is a major cause of morbidity and mortality worldwide, and in the UK, with more than 5,000 confirmed cases reported in 2016/17 in England and Wales. It particularly affects the very young, the elderly, and those part of at-risk groups.<sup>1</sup></p> <p>In 2006, the UK introduced the pneumococcal conjugate vaccine (PCV) into the infant immunisation programme, alongside a 12-month catch-up for all children up to 2 years of age. In 2020 the programme has now shifted to a 1+1 schedule following JCVI recommendations. <small>Error! Bookmark not defined.</small></p> <p>Since the start of the programme the coverage rates have not achieved the WHO and NHS target levels of 95%.<sup>4</sup> This is important to address moving forwards if the UK is to sustain herd protection under the changed 1+1 schedule. Both the 12-week dose and 12-month booster dose are important, but the booster dose is particularly important. Not only does it provide individual protection, but it also prevents the vaccinated child from carrying pneumococcal bacteria in their nasopharynx and passing it on to others. This interruption of transmission is vital to sustaining high levels of herd protection for unvaccinated susceptible individuals.<sup>5</sup></p>

<sup>4</sup> NHS Digital. Childhood vaccination coverage rates. Available from:

<https://app.powerbi.com/view?r=eyJrjoiZTI3NWZhNzItMTYvZS00OWM2LTg0MzMtOGY5YTJjMGY0MjIiIiwidCI6IjUwZjYwNzFmLWJiZmUtNDAxYS04ODAzLTY3Mzc0OGU2MjllMiIsImMiOj9>

<sup>5</sup> Public Health England. (2019). Changes to the infant pneumococcal conjugate vaccine schedule Information for healthcare practitioners. Available from:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/849646/PCV\\_schedule\\_change\\_HCP\\_information.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/849646/PCV_schedule_change_HCP_information.pdf)

ID	Proforma question no.	Stakeholder organisation	Comment
General	General	Pfizer	<p>New indicator relating to pneumococcal conjugate vaccine (PCV)</p> <p>New indicator relating to pneumococcal conjugate vaccine (PCV) in maintaining high level of control over vaccine type pneumococcal disease:</p> <p>The percentage of children who reach 15 months old in the preceding 12 months, who have received the complete schedule of PCV before the age of 15 months.</p> <p>Context: Since its introduction, the UK paediatric PCV programme has prevented large numbers of vaccine type pneumococcal disease in both vaccinated children and unvaccinated people of all ages, the latter through generation of herd protection (1). Following the change in schedule to 1 primary PCV dose at 12 weeks of age and a booster dose at a year, for all babies born on or after 1<sup>st</sup> Jan 2020, Public Health England has outlined that a complete schedule (booster dose) at one year is important for direct protection and, by preventing pneumococcal carriage, will prevent pneumococcal transmission to others. This is critical for maintaining herd protection across the population, including infants, older adults and high-risk individuals (2)</p> <p>Ref 1: Ladhani SN, et al. Rapid increase in non-vaccine serotypes causing invasive pneumococcal disease in England and Wales, 2000-17: a prospective national observational cohort study. <i>Lancet Infect Dis.</i> 2018 18(4):441-451.</p> <p>Ref 2: <a href="#">Public Health England, Changes to the infant pneumococcal conjugate vaccine schedule, Training for healthcare practitioners</a></p>
General	General	Pfizer	<p>New indicator relating to timeliness of vaccination</p> <p>Timeliness of vaccination is important with respect to the childhood immunisation schedule as the childhood immunisation schedule has been designed to provide early protection against infections that are most dangerous for the very young (1). With immunisations at 8, 12 and 16 weeks, it is important that systems, approaches and capacity support timely access to immunisation appointments. We would recommend an indicator linked to the % of infants who have received their 16 weeks immunisation visit by 18 weeks of age.</p> <p>Ref 1: <a href="#">Public Health England (2013). Pneumococcal: the Green Book, chapter 11.</a></p>

ID	Proforma question no.	Stakeholder organisation	Comment
General	General	Pfizer	<p>Replacement indicator for the elderly IND-2020-89 relates to the percentage of patients who reached 75 years of age in the preceding 12 months with a record of a shingles vaccine. In the UK the elderly (<math>\geq 65</math> years) are also recommended a pneumococcal vaccine for the prevention of invasive pneumococcal disease (IPD), which primarily presents as bacteraemic pneumonia in this age group (1). Public health England have reported 30-day IPD mortality of 16.4% in adults aged 65-79 years (1). In 2018/19 coverage of pneumococcal polysaccharide vaccine (PPV) in adults aged <math>\geq 65</math> years, vaccinated any time up to and including 31 March 2019, was 69.2% and the proportion of those aged 65 years who were vaccinated in the last 12 months was 12.4% (2).</p> <p>As IPD is associated with high mortality rates, PPV is a vaccine for which immunisation rates could be improved and the recommended schedule covers a high proportion of the adult population than the proposed shingles indicator, an indicator for the percentage of patients who reached 65 years of age in the preceding 12 months with a record of pneumococcal vaccine could be introduced, in place of the shingles indicator</p> <p>Ref 1: Amin-Chowdhury Z, et al. Characteristics of invasive pneumococcal disease (IPD) caused by emerging serotypes after the introduction of the 13-valent pneumococcal conjugate vaccine (PCV13) in England; prospective observational cohort study, 2014-18. Clin Infect Dis. 2020 Jan 19. pii: 5709629. doi: 10.1093/cid/ciaa043.</p> <p>Ref 2: <a href="#">Public Health England. Pneumococcal Polysaccharide Vaccine (PPV) coverage report, England, April 2018 to March 2019. Health Protection Report Volume 13 Number 39 1 November 2019</a></p>

ID	Proforma question no.	Stakeholder organisation	Comment
General	General	Royal College of General Practitioners (RCGP)	QOF has been a useful tool to embed and standardise clinical approaches to care and has been an important source of income for practices. The relaxation of QOF in response to the COVID-19 outbreak has helped to reduce the administrative burden on practices meaning GPs have had more time to focus on clinical care. Whilst the RCGP supports the development of new indicators in line with emerging evidence, we believe that the reintroduction of QOF in the post-COVID19 recovery needs further consideration. We would like to see the relaxation of QOF requirements continue as general practice moves out of the immediate COVID-19 crisis enabling GPs to continue using their professional judgement to deliver the care their patients need.
General	General	Royal College of General Practitioners (RCGP)	Shared decision making is at the core of all primary care work and should be acknowledged. The option to opt out of vaccination is still maintained by patients and parents and the general consensus is that the “anti-vaccination” movement is in part responsible for the reduction in total numbers being vaccinated. When collecting the data of proportion of those vaccinated, it would be useful to determine the proportion of the total population vaccinated but also to understand that proportion have actively opted out, rather than not turned up to appointments. By adding an exclusion “declined vaccination” will enable a second denominator to be calculated showing the proportion of those who do not opt out of vaccination.
General	General	Royal College of General Practitioners (RCGP)	If payment is attached to these indicators it is essential that GPs are not penalised due to patient choice to opt out of vaccination or the lack of community support from health visitors, PHE and school nurses etc. An exclusion of “declined vaccination” should be offered.
General	General	Royal College of Nursing (RCN)	We support this addition to the QOF indicators.



ID	Proforma question no.	Stakeholder organisation	Comment
General	General	Royal College of Paediatrics and Child Health (RCPCH)	<p>One element that appears to be missing from the document is what may be described as a "feedback loop" from the child health information system to primary care practices. In the reviewer's role as immunisation coordinator, who has for many years provided monthly feedback to primary care practices, comparing practice uptake with immunisation uptake in surrounding practices within the health district provided very good motivation to improve.</p> <p>This process of feedback was accompanied by practice visits offering an "immunisation uptake" so that all involved with immunisation hopefully were saying the same things to parents/children especially in those clinical areas where there is concern e.g. epilepsy and whooping cough, MMR and autism. Using only this approach, immunisation uptake improved from sub 90% to over 95%. It does require having a local immunisation coordinator, who is also able to give clinical advice to general practitioners and health visitors in a timely manner.</p>
General	General	Royal College of Paediatrics and Child Health (RCPCH)	<p>The reviewer stated that this is an excellent way to capture data on immunisations. It may be worth considering immunisations for special groups e.g. in sickle cell children as generally this is better than in the general Paediatric population.</p>
General	General	Royal College of Paediatrics and Child Health (RCPCH)	<p>As immunisation is the most cost-effective medical intervention in child health, the inclusion of the childhood immunisation indicators is to be welcomed. The reviewer understands that the new GP contract will change the way payments are made, including making them linked to more timely administration of vaccines. Hopefully, this can be linked to the NICE indicators. In the UK, low uptake tends to be related to accessibility issues rather than parental refusal. It should therefore be possible to achieve higher rates than are currently seen. Hopefully, these indicators will drive improvement.</p>
General	General	Sanofi Pasteur	<p>Sanofi UK welcomes the new NICE QOF indicators as a way of promoting the prevention agenda and ensuring that as many people as possible are able to access preventative interventions where appropriate. It is vital that people are empowered to manage their own health needs.</p>

ID	Proforma question no.	Stakeholder organisation	Comment
General	General	Sanofi Pasteur	<p>There is the opportunity to improve influenza coverage through the addition of another NICE indicator related to the 2-3 year olds vaccinated in GP surgeries. Given that there are four other flu indicators in stroke, diabetes, CHD and COPD, the addition of another indicator could increase the current vaccine coverage rate of only 43.8%. This is one of the lowest coverage rates of all influenza programmes.</p> <p>(<a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/897927/LT_1920_formatted_amended_V2.ods">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/897927/LT_1920_formatted_amended_V2.ods</a>)</p>

ID	Proforma question no.	Stakeholder organisation	Comment
General	General	The Challenging Behaviour Foundation	<p>The Challenging Behaviour Foundation is the only charity in the UK that focusses on children, young people and adults with severe learning disabilities whose behaviour challenges and their families. The charity exists to demonstrate that individuals with severe learning disabilities who are described as having challenging behaviour can enjoy ordinary life opportunities when their behaviour is properly understood and appropriately supported. Challenging behaviour itself is often communication of an unmet need, so understanding the function of behaviour can help to improve the way a person's needs or wishes are understood.</p> <p>It is known that children and adults with learning disabilities experience significant health inequalities and on average die younger than the rest of the population. If adapted to target this group and used effectively, the NICE Indicator Programme guidance could help to reduce this inequality. The health inequalities experienced by this client group have been further exacerbated by the current pandemic. Data published during the pandemic shows there have been twice as many deaths of people with learning disabilities as normal during this period, and that the risk is higher for younger people than in the general population. (<a href="https://chrishatton.blogspot.com/2020/06/">https://chrishatton.blogspot.com/2020/06/</a>, data source: <a href="#">CQC</a>, <a href="#">LeDeR</a>)</p> <p>Appropriate reasonable adjustments need to be made to ensure children and adults with learning disabilities have access to and receive the same healthcare as the general population e.g. desensitization to receiving vaccines. NICE guidance needs to be strengthened to make sure annual health checks take place for people with learning disabilities as this is where several of the indicators included in the guidance might be picked up.</p>

ID	Proforma question no.	Stakeholder organisation	Comment
General	General	Individual 3	Currently practices are funded for delivering vaccines separately to QOF. Having worked in multiple practices over the years. I can say with certainty that those with the lower immunisation levels due to deprivation/ babies moving in after birth from other countries/high gypsy population are the ones that work the hardest to get patients in. Therefore, it is likely that practices making the least effort in middle class areas will be better funded than those chasing patients frequently. Depending upon how other funding is affected this method of payment might dis-incentivise these practices from chasing patients as they know they will never hit the payment thresholds. Where in areas like shingles you are currently funded per vacc.
General	General	Individual 3	If you don't intend to change other payment mechanisms, then practices that struggle to get patients to have vaccines through no fault of their own will be financially penalised twice.
General	General	Individual 4	I am all for progress and changing performance measures for the benefit of all but some realisms needs to be part of the process. As a practice we have been involved in NICE QOF pilots and these are incredibly beneficial as it allows us in primary care to give some feedback into how to make change even better. These indicators are a step for the positive but so so much more could be done to improve matters for patients and practices.

ID	Proforma question no.	Stakeholder organisation	Comment
General	General	Individual 4	<p>This is an attempt to put a sticking plaster over a gaping wound – it is but a temporary measure            What needs to be addressed is the complexity of all of the entire Vaccinations and immunisations processes.            We have various different schemes around the whole subject area and what we need is some focussed work to bring all of the issues together.            For the measurement of seasonal flu vaccinations inside QOF, we have Immform also measuring performance before you get to local and regional schemes.            We have a range of travel vaccinations free under the NHS and others that are chargeable – trying explaining to an irate patient they need to pay for x and y but z is free. Make them all chargeable or all free!            We have Hep B initiated in UTC's and A&amp;E and then dumped onto primary care to complete full courses and then get asked why we gave for travel purposes by our commissioners (err we gave it because someone got bitten by a drunk and had to get the first jab in A&amp;E and we did the follow ups            This is all before we come to the procurement and PPA aspects – some vaccines we buy, some we get given from centralised sources and then we have to unpick how we recover costs of purchase, costs of administration.</p> <p>This indicator means we move from a system we have embedded in practice and adds an extra burden because we will could be reporting activity now through QOF but also possibly also through CQRS and Open Exeter.</p> <p>If you are going to change Vaccinations and immunisations then do it all not just a piecemeal effort that will bring additional burdens to primary care</p>
		<b>Comments on individual indicators</b>	

ID	Proforma question no.	Stakeholder organisation	Comment
		<b>IND 2020-84 Diphtheria, tetanus and pertussis</b>	
IND 2020-84	General	British Medical Association (BMA)	The percentage of babies who reached 6 months old in the preceding 12 months, who have received at least 3 doses of a diphtheria, tetanus and pertussis containing vaccine before the age of 6 months. We support the principle of this indicator but believe the target of 6 months should be increased to allow more flexibility, and also subject to our general comments on vaccination and immunisation.
IND 2020-84	General	Rickleton Medical Centre	The indicator for this seems reasonable and a good way to check that vaccines are up to date.
		<b>IND 2020-85 MMR (1<sup>st</sup> Birthday)</b>	
IND 2020-85	General	British Medical Association (BMA)	The percentage of children who reached 18 months old in the preceding 12 months, who have received at least 1 dose of MMR on or after their first birthday and before the age of 18 months. We support the principle of this indicator but believe the 18 months target should be increased to 2 years, and also subject to our general comments on vaccination and immunisation.
IND 2020-85	General	Rickleton Medical Centre	The indicator for this seems reasonable and a good way to check that vaccines are up to date.
IND 2020-85	General	Royal College of General Practitioners (RCGP)	MMR (1 <sup>st</sup> birthday) An additional exclusion “parental choice not to have the vaccination” should be considered. GPs should not be penalised financially in this case if they have attempted and managed to engage with the family, but the parental choice is to decline the vaccination
IND 2020-85	General	Royal College of Paediatrics and Child Health (RCPCH)	Targeting this at 6 months is welcome. Diseases like Hib and pertussis are particularly severe in infants and it is essential the vaccine is given in a timely fashion. The uptake at 6 months is a much better indicator than at 12

ID	Proforma question no.	Stakeholder organisation	Comment
IND 2020-85	General	Royal College of Paediatrics and Child Health (RCPCH)	Once a child has reached 12 months, the MMR vaccine should be offered asap. The proposed indicator allows a 6 months delay which should be more than adequate. Measles, unfortunately, has not been eliminated in UK and it is good that emphasis should be put on timely administration of this vaccine.
IND 2020-85	General	Pfizer	The indicator currently reads: The percentage of children who reached 18 months old in the preceding 12 months, who have received at least 1 dose of MMR on or after their first birthday and before the age of 18 months. Recommend that this indicator should be more timely to encourage immunisers to provide protection against MMR more closely to the timing as per the recommended schedule: The percentage of children who reached 15 months old in the preceding 12 months, who have received at least 1 dose of MMR on or after their first birthday and before the age of 15 months.
IND 2020-85	General	Individual 4	We have the historic issue of MMR vaccinations with clinical systems saying MMR outstanding when patients have had single jabs – this confuses staff and patients alike
		<b>IND 2020-86 MMR and diphtheria, tetanus, pertussis and poliomyelitis</b>	
IND 2020-86	General	British Medical Association (BMA)	The percentage of children who reached 5 years old in the preceding 12 months who have received a reinforcing dose of DTaP/IPV and at least 2 doses of MMR on or after their first birthday. We support this indicator, subject to our general comments on vaccination and immunisation.
IND 2020-86	General	Rickleton Medical Centre	The indicator for this seems reasonable and a good way to check that vaccines are up to date

ID	Proforma question no.	Stakeholder organisation	Comment
IND 2020-86	General	Royal College of General Practitioners (RCGP)	MMR and diphtheria, tetanus, pertussis and poliomyelitis We recommend that MMR is separated from this indicator and an additional indicator is added to separate the DTaP/IPV and MMR vaccinations for example: "The percentage of children who reached 5 years old in the preceding 12 months who have received at least 2 doses of MMR on or after their first birthday by their 5 <sup>th</sup> birthday. GPs should not be penalised if some parents chose not to have one of the two vaccines. Adding the exclusion "Parental choice not to have vaccine" would also be beneficial.
IND 2020-86	General	Royal College of Paediatrics and Child Health (RCPCH)	These vaccines should be offered from 3 years 4 months old. The proposed indicator is for 5-year olds. It is not very timely and should be brought down to 4 years old. As children get older, it is less likely that the parents will be able to find time to attend the practice and the child is more likely to be in full time educational provision. By delaying to 5 years old, children will be exposed for at least an extra year more than is appropriate. The 5-year collection arose at a time when it was advised the vaccines were given at 3 ½ to 5 years. Now the advice is to give them at or soon after 3 years 4 months old, the collection is no longer timely. An indicator set at 4 years old allows ample time for catch-up
		<b>IND 2020-87 MMR (5<sup>th</sup> Birthday)</b>	
IND 2020-87	General	British Medical Association (BMA)	The percentage of children who reached 5 years of age in the preceding 12 months who have received 1 dose of MMR on or after their first birthday. We support this indicator, subject to our general comments on vaccination and immunisation.
IND 2020-87	General	Rickleton Medical Centre	The indicator for this seems reasonable and a good way to check that vaccines are up to date.
IND 2020-87	General	Royal College of Paediatrics and Child Health (RCPCH)	Although the reviewer agrees that concentration on measles/MMR is important, it was felt that this indicator is superfluous. It is not timely. The important indicators are for the first dose at 18 months and the second at 4 years. It does monitor how many catch-up their first dose. But it was felt that this is not a very useful indicator.



ID	Proforma question no.	Stakeholder organisation	Comment
IND 2020-87	General	Sanofi Pasteur	This indicator has significant overlap with IND 2020-86. This may be duplication? This indicator may also be diluting the impact of the desire to increase MMR vaccine coverage by rewarding only one dose of MMR by age 5
		<b>IND 2020-88 Pertussis-containing vaccine during pregnancy</b>	
IND 2020-88	General	British Medical Association (BMA)	The percentage of women who reached 32 weeks of pregnancy in the preceding 12 months who have received a pertussis-containing vaccine after 16 weeks of pregnancy. We are concerned about this indicator as many women are vaccinated by their midwives. It can be difficult to ensure the flow of patient information is timely and accurate from hospitals, which is exacerbated by variable coding in practices causing problems for data extraction. Practices may have to adjust their coding methods and maternity services will need to more proactively communicate this information.
IND 2020-88	General	Royal College of General Practitioners (RCGP)	<p>Pertussis-containing vaccine during pregnancy</p> <p>This indicator is excellent but does not “encourage” general practice to continue to make every effort to vaccinate a mother after 32 weeks.</p> <p>The committee could consider 3 options:</p> <ul style="list-style-type: none"> <li>Extend the indicator to two weeks before delivery</li> <li>Extend it to 38 weeks</li> <li>Add another indicator for pertussis vaccination of pregnant women from 33 weeks to either 38 weeks, or to two weeks before delivery.</li> </ul>

ID	Proforma question no.	Stakeholder organisation	Comment
IND 2020-88	General	Royal College of Paediatrics and Child Health (RCPCH)	Unfortunately, babies are still dying, albeit uncommonly, because their mothers have not been immunised. It is therefore an important indicator. However, the vaccine may be given by a general practice or a maternity unit. Data transfer from maternity unit to GP is not thought to be complete and current estimates of uptake are probably underestimated. To say the programme is not great would be very unfair and underestimates the work that has been done and the reduction in post neonatal morbidity and mortality which has been seen. It is not necessarily within the power of the general practice to sort out. The reviewer agreed that this is more suitable as a CCG level measurement. It is there that the overall responsibility and power rests. By making this clear, further improvement is more likely to be seen. Gestational age is part of the new birth notification and is on GP systems as part of the minimum dataset
IND 2020-88	General	Royal College of Paediatrics and Child Health (RCPCH)	This is possible if a.) the different health care sites such as GP and Maternity services are linked together. b.) If a system to collect and consolidate vaccination status of single individuals is practiced.
IND 2020-88	General	Royal College of Paediatrics and Child Health (RCPCH)	Though primary care data bases are being increasingly used for researching pregnancy, ascertaining pregnancy, their timings and outcomes from these data bases is challenging. Further validation is required to enhance and optimise this approach.
IND 2020-88	General	Sanofi Pasteur	The pertussis vaccination is often given by a midwife in settings other than the GP surgery. The success of this indicator may be reliant on the infrastructure and technology for the recording of the vaccination on the GP system. Coverage may be higher if the vaccine was given at the same time as they 20-week scan at hospital?

ID	Proforma question no.	Stakeholder organisation	Comment
IND 2020-88	General	Sanofi Pasteur	<p>In terms of maternal vaccinations, is there the opportunity to include influenza with pertussis to ensure protection from two severe infectious diseases and make every opportunity count. The current vaccination coverage rate for influenza vaccination in pregnant woman is 43.7%. This is one of the lowest coverage rates of all influenza programmes.</p> <p><a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/897927/LT_1920_formatted_amended_V2.ods">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/897927/LT_1920_formatted_amended_V2.ods</a></p>
IND 2020-88	General	Individual 5	<p>“The green book specifies that the vaccine should not be given to patients who have had a confirmed anaphylactic reaction to a previous dose of pertussis-containing vaccine or to any component of the vaccine (Public Health England 2014).”</p> <p>If patients have confirmed reaction to a component of the vaccine e.g. Egg they should be referred to a vaccine service or allergy service within paediatrics to see if the vaccine can be given safely under supervision</p>

ID	Proforma question no.	Stakeholder organisation	Comment
		<p><b>Question 6:</b> The proposed indicator is at general practice level. If the vaccine is given in services other than general practice, for example in maternity services, would vaccination be routinely recorded in general practice IT systems and be suitable for data extraction?</p>	
IND 2020-88	6	Fosse Medical Centre	Midwives do not administer pertussis vaccine in community so it wouldn't matter whether patients are being seen in the surgery or not as PN does it or done at the hospital.
IND 2020-88	6	Highcliffe Medical Centre	Yes, GP IT systems are suitable for data extraction.
IND 2020-88	6	PC24 Social Enterprise	Antenatal vacs and imms should be midwifery given but mix in many areas.

ID	Proforma question no.	Stakeholder organisation	Comment
IND 2020 -88	6	Rickleton Medical Centre	Vaccination is not routinely recorded in our system unless it has been given in a general practice setting. If it is given by the midwife, we wouldn't necessarily know unless notified. If entered on our system then there would be no issue with data extraction.
IND 2020 -88	6	Royal College of General Practitioners (RCGP)	Question 6: It would be beneficial to place a responsibility on Maternity Departments to inform the GP Practice (similar to Pharmacists informing GPs about the influenza vaccine). Some maternity services have access to GP records and can input directly, others could send information that primary care can then add to the record.
IND 2020 -88	6	Royal College of Paediatrics and Child Health (RCPCH)	Number 6- I am not sure that this vaccine would be recorded in GP IT systems as it is normally documented in the handheld notes by the patients and known to the midwifery team. If the community team had access to these systems then this is one way to have this recorded.
IND 2020 -88	6	Individual 1	Data on vaccination given outside practice would not be reliably captured in GP IT systems and it would be very difficult to untangle date of vaccination versus date the data was received by the practice which would affect calculation of what gestational age it was given
IND 2020 -88	6	Individual 4	Pertussis is often given by midwives and if given in clinics out of practice there is a major gaps around data system – yes they should tell us so we can add to our clinical systems but realistically its not perfect given they have enough to do before emailing details to us
IND 2020 -88	6	Individual 6	In Wirral, these vaccines are given by midwives with no record on GP notes. Maternity notes and visits are not routinely shared with the GP. Ensuring transfer of information to the GP record would be overly bureaucratic if there is no incentive for maternity services to do so and so negates the purpose of the indicator. It becomes a bureaucratic exercise of chasing information rather than simply increasing uptake amongst pregnant women.

ID	Proforma question no.	Stakeholder organisation	Comment
		<p><b>Question 7:</b> The proposed indicator is at general practice level. Care during pregnancy may be shared between general practice and maternity services. Would this indicator be more suitable for CCG level measurement?</p>	
IND 2020-88	7	Highcliffe Medical Centre	Yes, I think CCGs can measure the level of information
IND 2020-88	7	PC24 Social Enterprise	CCG monitoring antenatal/imms – is it resourced for this?
IND 2020-88	7	Rickleton Medical Centre	We feel this would be more suitable at a CCG level as we hardly have anything to do with ongoing care during pregnancy unless asked to prescribe medication etc
IND 2020-88	7	Royal College of General Practitioners (RCGP)	Question 7: Most antenatal care is now provided by maternity services with little GP input. Primary care can provide the vaccinations but are reliant on the patient or the maternity services informing the practice that the patient is pregnant so yes, ideally the responsibility should be shared across the health services at a PCN or CCG level.

ID	Proforma question no.	Stakeholder organisation	Comment
IND 2020-88	7	Royal College of Paediatrics and Child Health (RCPCH)	Number 7 – I am not sure
IND 2020-88	7	Individual 1	More suitable for CCG level measurement
IND 2020-88	7	Individual 6	This would be more appropriately done at CCG level with a contract variation to ensure recording of information.
		<p><b>Question 8:</b> The proposed indicator measures achievement based on gestational age at the time of vaccination. Is gestational age routinely recorded on general practice IT systems and suitable for data extraction?</p>	

ID	Proforma question no.	Stakeholder organisation	Comment
IND 2020-88	8	Fosse Medical Centre	EDD is coded in the record, but that can change few times depending on antenatal scans – those are usually coded by midwife, but would they also become responsible for marking the wrong date in error if new EDD added? Who is responsible for training midwife to code accurately, etc? If it affects our QOF we want to make sure it's done correctly. Also, what if patient miscarried and then got pregnant again? There will be quite a few EDD on the system in this case – how do your searches know which one to pick?
IND 2020-88	8	Highcliffe Medical Centre	Yes, I think it would be suitable for data extraction and we can link with System one/Ardens/Emis to look at templates and read codes.
IND 2020-88	8	PC24 Social Enterprise	Gestation date not routinely/consistently recorded.
IND 2020-88	8	Rickleton Medical Centre	Gestation is recorded, however this is a manual free text entry and therefore would not be suitable for data extraction.
IND 2020-88	8	Royal College of General Practitioners (RCGP)	Question 8: The data provided to practices is variable and relies on patient or maternity services sharing information in a timely way, this does not always happen. Gestational age is more accurate based on ultrasound data which again is not always shared with primary care. This information is always in the patient handheld record, and in the maternity services notes either in community or secondary care. This data extraction would be easier from maternity or secondary care services
IND 2020-88	8	Royal College of Paediatrics and Child Health	Number 8 – I would have thought that the mother would have registered with the GP linked maternity services and therefore this would be logged as pregnant, but this would not give a gestation age. If the scans were sent electronically to the GP this would be an account of gestational age, but this information would have to be inputted at the practice itself.
IND 2020-88	8	Individual 6	Pregnant women can self-refer to maternity services and so gestational age is often not recorded on GP notes



ID	Proforma question no.	Stakeholder organisation	Comment
		<b>IND 2020-89 Shingles vaccine</b>	
IND 2020-89	General	British Medical Association (BMA)	The percentage of patients who reached 75 years of age in the preceding 12 months with a record of a shingles vaccine. We support the principle of this indicator, but believe the target of 75 years should be increased to 80 years to reflect low public awareness of this issue and the fact that many patients need time to catch up on this vaccination, and also subject to our general comments on vaccination and immunisation.
IND 2020-89	General	Fosse Medical Centre	What about patients who already had shingles? Would they be excluded as well? They often refuse vaccination because of that.

<p>IND 2020 -89</p>	<p>General</p>	<p>Merck Sharpe &amp; Dohme Limited</p>	<p>We recommend that the current indicator under consultation be changed to evaluate percentage of patients who reached 70 years of age (instead of 75) in the preceding 12 months with a record of a shingles vaccine in order to lead to more patients being protected.</p> <p>Maximising the shingles vaccination programme</p> <p>In 2018-19 the cumulative shingles vaccine coverage rates (VCR) for 75-year olds was 75.9% versus 31.9% for the routine cohort (70- year olds).<sup>6</sup> A recent publication evaluating 5 years of data, post-implementation of the vaccination programme, demonstrates large and prolonged reductions in herpes zoster and post-hepatic neuralgia (PHN) consultations and hospitalisations through vaccination. Reductions in the routine cohorts (vaccinated aged 70) was found to be between 37% (for hospitalised zoster) and 75% (for PHN consultations) and, in catch up cohorts (vaccinated aged 78 to 79) of between 49% (for hospitalised PHN) and 66% (for PHN consultations).<sup>7</sup></p> <p>The risk and severity of shingles and the possibility of it leading to PHN generally increases with age, which supports the need to vaccinate individuals as soon as they are eligible.<sup>8</sup> Vaccinating as early as possible would support better patient outcomes and maximise the impact of the vaccination programme.</p> <p>Aligning with current targets and improving coverage</p> <p>The current Public Health Outcomes Framework (PHOF) sets out a vision for public health – that is to improve and protect the nation's health and improve the health of the poorest fastest.<sup>9</sup> As part of this framework, they provide a specific indicator for population coverage of shingles vaccination for 70-year olds. We would recommend that the shingles vaccination indicator suggested for the new QOF domain reflect the current PHOF indicator which includes targets of a lower threshold of 50% and upper threshold of 60%. Including both a lower and higher threshold would allow all practices to benefit from the QOF domain. Additionally, applying a target of 50% VCR to 70-year olds, which currently have a current VCR of 31.9%, results in an additional 100,848 eligible adults being vaccinated and at 60% an additional 156,570 adults.<sup>i</sup> Even by achieving the lower threshold of 50% VCR for the routine cohort, there would be a significant positive impact on VCRs across all eligible cohorts (71-79).</p> <p>The current indicator for 75-year olds, which currently have a VCR of 75.9%, would not result in a significant increase in individuals being protected compared to improving coverage of the routine cohort. Even by including a challenging target of 90%, would only allow for an additional 61,600 eligible adults being vaccinated versus the numbers highlighted above if the indicator focused on 70-year olds.<sup>i</sup></p> <p>Implementing call and recall and addressing inequalities</p>
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ID	Proforma question no.	Stakeholder organisation	Comment
			<p>Implementing call and recall and addressing inequalities</p> <p>For any indicator to be included for the shingles vaccination programme, patients must understand they are eligible, and measures should be in place to support uptake. The shingles vaccination indicator must be complemented, with requirements as part of the 2021 routine shingles service specification for GPs, to implement proactive call and recall mechanisms that would ensure patients understand they are eligible for the vaccine. As outlined by the recent GP contractual changes, national guidance should be published to outline standards of call and recall mechanisms that are required to be in place for all vaccination programmes including shingles.</p> <p>Addressing health inequalities in the uptake of the shingles vaccine will also be important to consider as uptake in England has been shown to be lowest amongst; non-White ethnicities, those living alone, in a care home and in more deprived areas.</p> <p>Tailored interventions to increase uptake in these groups should assist in reducing vaccination inequalities.<sup>10</sup></p>
IND 2020 -89	General	Rickleton Medical Centre	The indicator for this is valid and a good way to ensure this cohort of patients are offered the shingles vaccine.

<sup>6</sup> Public Health England. (2019). Cumulative shingles vaccine coverage report to end of June 2019 (quarter 4) and annual 2018 to 2019 coverage: England. Available from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/854877/hpr3019\\_shingles\\_annual\\_2018\\_2019\\_and\\_q4.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/854877/hpr3019_shingles_annual_2018_2019_and_q4.pdf)

<sup>7</sup> Andrews N, Stowe J, Kuyumdzheva G, et al. Impact of the herpes zoster vaccination programme on hospitalised and general practice consulted herpes zoster in the 5 years after its introduction in England: a population-based study. *BMJ Open* 2020;10:e037458. doi:10.1136/bmjopen-2020-037458

<sup>8</sup> Public Health England. (2013). 28a Shingles (herpes zoster). Available from: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/503773/2905109\\_Green\\_Book\\_Chapter\\_28a\\_v3\\_0W.PDF](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/503773/2905109_Green_Book_Chapter_28a_v3_0W.PDF)

<sup>9</sup> Public Health England. Public Health Outcomes Framework. Available from: <https://fingertips.phe.org.uk/profile/public-health-outcomes-framework>

<sup>i</sup> Calculations by MSD using public data on current VCR for each eligible age cohort and size of each eligible age cohort. Further information on calculated figures can be provided on request

<sup>10</sup> Jain A, Walker JL, Mathur R, Forbes HJ, Langan SM, Smeeth L, et al. (2018) Zoster vaccination inequalities: A population based cohort study using linked data from the UK Clinical Practice Research Datalink. *PLoS ONE* 13(11): e0207183. <https://doi.org/10.1371/journal.pone.0207183>

ID	Proforma question no.	Stakeholder organisation	Comment
IND 2020-89	General	Royal College of General Practitioners (RCGP)	<p>Shingles vaccine</p> <p>The shingles vaccination is still available on a “catch up basis” to those aged 70-79 so as it stands, this indicator will miss patients over 75 years of age who receive the vaccination.</p> <p>The committee should consider either extending the age on the indicator to “patients who have reached the age of 80 in the preceding 12 months” or to add an additional indicator to cover this catch up age group.</p>
IND 2020-89	General	Royal College of Paediatrics and Child Health (RCPCH)	<p>Patients become eligible for this vaccine at 70 years old. It can be given at the same time as the flu vaccine. Setting the indicator at 75 years old seems somewhat late. Yearly reminders for flu vaccine provide an opportunity to talk about the vaccine. 73 years old might be more appropriate.</p>
IND 2020-89	General	Individual 4	<p>We have had a Shingles programme that has required annual updates because of the bizarre and banal age driven criteria – whoever thought of this needs applauded for wasting so much of our time.</p>

