

# NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

## NICE indicator validity assessment

### Indicator

The percentage of children who reached 18 months old in the preceding 12 months, who have received at least 1 dose of MMR between the ages of 12 and 18 months.

### Importance

Considerations	Assessment
<p>The Department of Health and Social Care (DHSC) will publish a vaccination strategy in Autumn 2020 to maintain and develop the UK immunisation programme.</p> <p>The first MMR vaccine (MMR1) is given as part of the routine vaccination schedule for England within a month of the first birthday.</p> <p>Routine childhood immunisations are part of the general medical services (GMS) contract.</p>	<p>The indicator reflects a specific priority area identified by the DHSC.</p>
<p>2018-19 data from <a href="#">NHS Digital and PHE Childhood Vaccination Coverage Statistics</a> shows national coverage of 90.3% for MMR1 at 2 years of age. Regional coverage reported by local authority ranged from 83.0% (London) to 94.5% (North East). Note the misalignment in measurement with the proposed indicator.</p>	<p>The indicator relates to an area where there is performance under the WHO recommended target of 95% national coverage.</p> <p>There is known variation in practice.</p> <p>The indicator addresses under-treatment.</p>
<p>MMR is the combined vaccine that protects against measles, mumps and rubella. These are highly infectious common conditions that can have serious complications such as meningitis, encephalitis and deafness</p>	<p>The indicator will lead to a meaningful improvement in patient outcomes.</p>

## Evidence base

Considerations	Assessment
<p><a href="#">Immunisations: reducing differences in uptake in under 19s</a> (2009, updated 2017) NICE public health guideline PH21, recommendations 1, 2 and 3</p> <p><a href="#">Immunizations – childhood</a> (2020) NICE clinical knowledge summary</p>	<p>The indicator is derived from a high-quality evidence base.</p> <p>The indicator measures receipt of the vaccine between 12 and 18 months of age although the immunisation schedule states this is due within a month of the first birthday. Measurement by 18 months old allows for delays, for example due to fever.</p>

## Specification

Considerations	Assessment
<p>Numerator: The number in the denominator who have received at least one dose of MMR between 12 and 18 months old.</p> <p>Denominator: The number of children who reached 18 months old in the preceding 12 months.</p> <p>Exclusions: Children with a confirmed anaphylactic reaction to a previous dose of the vaccine or any component of the vaccine. Children who are immunocompromised.</p>	<p>The indicator has defined components necessary to construct the indicator, including numerator, denominator and exclusions</p>
<p>This indicator would be reported at general practice level for practices with more than 20 eligible patients.</p>	<p>The indicator outlines minimum numbers of patients needed to be confident in the assessment of variation.</p>

## Feasibility

Considerations	Assessment
<p>The childhood vaccination schedule details that this vaccine is given at 12 months of age.</p> <p><a href="#">Cover of vaccination evaluated rapidly (COVER) data is collected by Public Health England</a> and reported quarterly and annually by NHS Digital and Public Health England including MMR between 12 and 24 months of age. Data is submitted by the local teams and child health record departments and reported nationally and regionally. From 2019-20 this will include general practice level coverage.</p> <p>The Childhood Immunisation Scheme is part of the GP contract in England, and children who have attained the age of 2 years but not yet 3 years should have MMR vaccination. Data for this is extracted quarterly.</p>	<p>Data at the age of 18 months is not currently collected by GPES, PHE or NHS Digital. The vaccination is scheduled to be given at 12 months of age, so it should be possible to extract the data from GP systems.</p> <p>The indicator is repeatable.</p>
<p>There are codes available for this vaccine and contraindication to the vaccine on SNOMED-CT.</p>	<p>The proposed indicator is measuring what it is designed to measure.</p> <p>The indicator uses existing data fields</p>

## Acceptability

Considerations	Assessment
<p>If the MMR has been given before the first birthday, this dose should be ignored. Individuals with unknown or incomplete vaccination history should be assumed to be unimmunised. The vaccine should not be given to those who are immunocompromised, those with a confirmed anaphylactic reaction to a previous dose of measles, mumps or rubella containing vaccine or component of the vaccine. Data quoted in the Green Book suggests rates of 0.65 to 3 anaphylaxis events per million doses of vaccines given (<a href="#">Immunisation against infectious disease</a>, 2013).</p> <p>There may be over-estimation of denominators and therefore under estimation of coverage in individual practices as children may have moved away but remained on the register.</p> <p>Parents may choose not to vaccinate their children.</p>	<p>The indicator assesses performance that is attributable to or within the control of the audience. Parent choice not to vaccinate should be considered and personalised care adjustments recorded accordingly.</p>
<p>Data for the GP additional services contract is collected quarterly by NHS Digital.</p>	<p>Practices currently submit data to NHS Digital. The results of the indicator can be used to improve practice</p>

## Risk

<b>Considerations</b>	<b>Assessment</b>
<p>Parents may choose not to vaccinate their children.</p> <p>Some data quality issues have been reported as part of COVER including missing data, late immunisations and systems in transition.</p>	<p>The indicator has an acceptable risk of unintended consequences. Care should be taken to respect patient choice and record personalised care adjustments accordingly.</p>

## NICE indicator advisory committee recommendation

The NICE indicator advisory committee approved this indicator for publication on the menu.