NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

NICE indicator validity assessment

Indicator IND218

The percentage of children who reached 5 years old in the preceding 12 months, who have received 1 dose of MMR between the ages of 1 and 5 years.

Importance

Considerations	Assessment
The Department of Health and Social Care (DHSC) will publish a vaccination strategy in Autumn 2020 to maintain and develop the UK immunisation programme.	The indicator reflects a specific priority area identified by the DHSC.
The first MMR vaccine (MMR1) is given as part of the routine vaccination schedule for England within a month of the first birthday.	
Routine childhood immunisations are part of the general medical services (GMS) contract.	
2018-19 data from NHS Digital and PHE shows 94.5% national coverage for MMR1 at 5 years of age. Regional coverage reported by local authority ranged from 90.4% (London) to 96.6% (North East) (NHS Digital, 2019).	The indicator relates to an area where there is known variation in practice.
	The indicator addresses under-treatment.
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.	The indicator will lead to a meaningful improvement in patient outcomes.

Evidence base

Considerations	Assessment
Immunisations: reducing differences in uptake in under 19s (2009, updated 2017) NICE public health guideline PH21, recommendations 1, 2 and 3 Immunizations – childhood (2020) NICE clinical knowledge summary	The indicator is derived from a high-quality evidence base. The indicator measures receipt of the first dose of MMR between 1 and 5 years of age although the immunisation schedule states that this is due within 1 month of the first birthday. Measurement by 5 years old aims to encourage vaccination in those children who have missed the first dose to give protection before they start school.

Specification

Considerations	Assessment
Numerator: The number in the denominator who have received one dose of MMR between 1 and 5 years old.	The indicator has defined components necessary to construct the indicator, including numerator, denominator and exclusions.
Denominator: The number of children who reached 5 years old in the preceding 12 months.	
Exclusions: Children with a confirmed anaphylactic reaction to a previous dose of the vaccine or any component of the vaccine. Children who are immunocompromised.	
This indicator would be reported at general practice level for practices with more than 20 eligible patients.	The indicator outlines minimum numbers of patients needed to be confident in the assessment of variation.

Feasibility

Considerations	Assessment
The childhood immunisation schedule and green book suggests that a first dose of MMR should be given within one month of the first birthday.	The indicator is repeatable.
Cover of vaccination evaluated rapidly (COVER) data is collected by Public Health England and reported quarterly and annually by NHS Digital and Public Health England. Data is submitted by the local teams and child health record departments and reported nationally and regionally. From 2019-20 this will include GP level coverage.	
There are codes available for this vaccine and contraindication to the vaccine on SNOMED-CT.	The indicator is measuring what it is designed to measure.
	The indicator uses existing data fields.

Acceptability

Considerations	Assessment
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 indicator assesses performance that is attributable to or within the control of the audience. Patient choice to vaccinate should be considered and personalised care adjustments recorded accordingly.
The vaccine should not be given to those who are immunocompromised and those with a confirmed anaphylactic reaction to a previous dose of the vaccine or to any 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 (Public Health England, 2013).	
There may be over-estimation of denominators and therefore under estimation of coverage for individual practices as children may have moved away but remained on the register.	
Parents may choose not to vaccinate their children	
Data for the GP additional services contract is collected quarterly by NHS Digital.	Practices currently submit data to NHS Digital. The results of the indicator can be used to improve practice.

Risk

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

NICE indicator advisory committee recommendation

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