Measure #394 (NQF 1407): Immunizations for Adolescents – National Quality Strategy Domain: Community/Population Health

2017 OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

MEASURE TYPE:
Process

DESCRIPTION:
The percentage of adolescents 13 years of age who had the recommended immunizations by their 13th birthday

INSTRUCTIONS:
This measure is to be reported a minimum of once per performance period for patients seen during the performance period. There is no diagnosis associated with this measure. Performance for this measure is not limited to the performance period. This measure may be reported by eligible clinicians who perform the quality actions described in the measure based on services provided and the measure-specific denominator coding.

This measure will be calculated with 4 performance rates:
1) Patients who had one dose of meningococcal vaccine on or between the patient's 11th and 13th birthdays
2) Patients who had one tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) on or between the patient's 10th and 13th birthdays
3) Patients who had at least three HPV vaccines with different dates of service on or between the patient's 9th and 13th birthdays
4) All patients who are compliant for Meningococcal, Tdap and HPV during the specified timeframes.

Measure Reporting:
The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

DENOMINATOR (REPORTING CRITERIA FOR ALL RATES):
Adolescents who turn 13 years of age during the measurement period

DENOMINATOR NOTE: The same denominator is used for all rates.

Denominator Criteria (Eligible Cases):
Patients who turn 13 years of age during the measurement period
AND
Patient encounter during the performance period (CPT or HCPCS): 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, G0402
AND NOT
DENOMINATOR EXCLUSIONS:
Meningococcal, Tdap and/or HPV vaccine contraindicated OR patient allergic to the meningococcal, Tdap, and/or HPV vaccine
OR
Patients who use hospice services any time during the measurement period: G9761
NUMERATOR (REPORTING CRITERIA 1):
Adolescents who had one dose of meningococcal vaccine on or between the patient’s 11th and 13th birthdays

Numerator Options:
Performance Met: Patient had one dose of meningococcal vaccine on or between the patient’s 11th and 13th birthdays (G9414)

OR

Performance Not Met: Patient did not have one dose of meningococcal vaccine on or between the patient’s 11th and 13th birthdays (G9415)

NUMERATOR (REPORTING CRITERIA 2):
Adolescents who had one tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) on or between the patient’s 10th and 13th birthdays

Numerator Options:
Performance Met: Patient had one tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) on or between the patient’s 10th and 13th birthdays (G9416)

OR

Performance Not Met: Patient did not have one tetanus, diphtheria toxoids and acellular pertussis vaccine (Tdap) on or between the patient’s 10th and 13th birthdays (G9417)

NUMERATOR (REPORTING CRITERIA 3):
Adolescents who had at least three HPV vaccines on or between the patient’s 9th and 13th birthdays

Numerator Options:
Performance Met: Patient had at least three HPV vaccines on or between the patient’s 9th and 13th birthdays (G9762)

OR

Performance Not Met: Patient did not have at least three HPV vaccines on or between the patient’s 9th and 13th birthdays (G9763)

NUMERATOR (REPORTING CRITERIA 4):
Adolescents who are numerator compliant for Rates 1, 2 and 3

RATIONALE:
Adolescent immunization rates have historically lagged behind early childhood immunization rates in the United States. In 2000, the American Academy of Pediatrics (AAP) reported that 3 million adolescents failed to receive at least one recommended vaccination. Low immunization rates among adolescents have the potential to cause outbreaks of preventable diseases and to establish reservoirs of disease in adolescents that can affect other populations including infants, the elderly, and individuals with chronic conditions. Immunization recommendations for adolescents have changed in recent years. In addition to assessing for immunizations that may have been missed, there are new vaccines targeted specifically to adolescents.

This measure follows the Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP) guidelines for immunizations.

CLINICAL RECOMMENDATION STATEMENTS:
Receiving recommended vaccinations is the best defense against vaccine-preventable diseases. However, as children get older, the protection they received from some of their childhood vaccinations begins to wear off and they
need booster shots. Adolescents are also at risk for vaccine-preventable diseases (e.g., meningococcal meningitis) they are not typically vaccinated against as children.

The tetanus, diphtheria toxoids and acellular pertussis (Tdap) vaccine is given to adolescents as a booster shot to increase the protection they received in childhood vaccinations. Diphtheria, tetanus and pertussis are serious diseases that can cause life-threatening illnesses. Diphtheria can cause breathing difficulties, heart problems, nerve damage, pneumonia and even death. Tetanus can cause seizures and severe muscle spasms that can be strong enough to cause bone fractures of the spine, and causes death in 30 to 40 percent of cases. Pertussis can cause severe coughing spells that can interfere with breathing, as well as pneumonia, long-lasting bronchitis, seizures, brain damage and death.

Meningococcal disease occurs when the protective membranes covering the brain and spinal cord become infected and swell, and can cause serious complications, such as brain damage, hearing loss or learning disabilities.

Meningococcal disease is caused by the bacterium Neisseria meningitides, or meningococcus, and is the leading cause of bacterial meningitis in the United States (U.S.).

A meningococcal infection can spread quickly, killing an otherwise healthy adolescent in 48 hours. Although not all cases of meningococcal disease progress into meningitis, 15 percent of the cases that do progress, result in death.

Each year, many adolescents miss their recommended vaccinations, leaving them needlessly vulnerable to disease, suffering and death.

Vaccine-preventable diseases are expensive for society as a whole, costing more than $10 billion in direct medical costs and indirect societal costs.

In 2012, pertussis outbreaks were reported in a majority of states, with more than 32,000 cases and 16 deaths.

Outbreaks can occur in workplaces, schools and homes, and can result in physical, economic and social costs.

Bacterial meningitis remains a major global health threat, with an estimated 500,000 cases reported worldwide each year, accounting for at least 50,000 deaths. According to preliminary data, meningitis was responsible for 606 deaths in the U.S. in 2011.

Vaccines are a safe and effective way to protect adolescents against potentially deadly diseases and help them develop into healthy adults. Vaccines can protect their family and their community as well.

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2017 Registry Individual Measure Flow
#394 NQF 1407: Immunization for Adolescents
Reporting Criteria One

Multiple Performance

Start

- Patients Who Turn 13 Years of Age During the Measurement Period
  - Yes
  - Patient Had One Dose of Meningococcal Vaccine On or Between the Patient’s 11th and 13th Birthdays.
  - Data Completeness Met + Performance Met
  - G9414 or equivalent
    - (5 patients)
  - No
  - Patient Did Not Have One Dose of Meningococcal Vaccine On or Between the Patient’s 11th and 13th Birthdays.
  - Data Completeness Met + Performance Not Met
    - G9415 or equivalent
      - (2 patients)
    - No
    - Data Completeness Not Met
      - Quality Data Code or equivalent not reported
      - (1 patient)

- No
- Not Included in Eligible Population/Denominator
  - Denominator Exclusions
    - Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine
      - Yes
      - Yes
      - No
        - No
        - Yes
        - Include in Eligible Population/Denominator
          - (6 patients)
  - No
  - Encounter as Listed in Denominator*
    - 1/1/2017 thru 12/31/2017
      - Yes
      - No
      - No

This measure will be calculated with 4 performance rates:
*See the posted Measure Specification for specific coding and instructions to report this measure.
**It is anticipated for registry reporting that for every performance rate, a data completeness will be submitted. CMS will determine or use the overall data completeness and performance rate.

NOTE: Reporting Frequency: Patient - process

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2017 Registry Individual Measure Flow
#394 NQF 1407: Immunization for Adolescents
Reporting Criteria Two

Multiple Performance

<table>
<thead>
<tr>
<th>Denominator</th>
<th>Numerator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
| Patients Who Turn 13 Years of Age During the Measurement Period | Data Completeness Met + Performance Met
|               | G3416 or equivalent (6 patients) |
| No           | Yes       |
| Encounter as Listed in Denominator* (6/1/2017 thru 12/31/2017) | Data Completeness Met + Performance Not Met
|               | G3417 or equivalent (1 patient) |
| No           | Yes       |
| Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine | Data Completeness Not Met
|               | Quality Data Code or equivalent not reported (1 patient) |
| No           | Yes       |
| Patients Who Use Hospice Services Any Time During the Measurement Period G36761 or equivalent |           |
| No           |           |
| Include in Eligible Population/Denominator (8 patients) |           |

*See the posted Measure Specifications for specific coding and instructions to report this measure.
**It is anticipated for registry reporting that for every performance rate, a data completeness will be submitted. CMS will determine or use the overall data completeness and performance rate.

NOTE: Reporting Frequency: Patient - process
2017 Registry Individual Measure Flow
#394 NQF 1407: Immunization for Adolescents
Reporting Criteria Four

Start

Multiple Performance

Denominator

Patients Who Turn 13 Years of Age During the Measurement Period

No

Encounter as Listed in Denominator* (1/1/2017 thru 12/31/2017)

Yes

Adolescents Who Are Numerator Compliant for Rates 1, 2, and 3.

Yes

Data Completeness Met + Performance Met
G9414, G9416, and G9762 or equivalent (4 patients)

No

Adolescents Who Are Not Numerator Compliant for Rates 1, 2, and 3.

Yes

Data Completeness Met + Performance Not Met
Any combination that includes a Performance Not Met Code: G9415, G9417, G9763 or equivalent** (2 patients)

No

Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine

Yes

Data Completeness Not Met
Quality-Data Code or equivalent not reported (2 patients)

No

Patients Who Use Hospice Services Any Time During the Measurement Period G9761 or equivalent

Yes

Include in Eligible Population/Denominator (8 patients)

No

Not Included in Eligible Population/Denominator

No

Denominator Exclusions

Yes

This measure will be calculated with 4 performance rates.

*See the posted Measure Specification for specific coding and instructions to report this measure.

**It is anticipated for registry reporting that for every performance rate, a data completeness will be submitted. CMS will determine or use the overall data completeness and performance rate.

***To satisfy Data Completeness for Reporting Criteria 4, the registry must ensure that the eligible clinician reports on Reporting Criteria One, Two, and Three. In order to meet performance on this measure, Reporting Criteria One, Two, and Three must submit G9414, G9416, and G9762.

NOTE: Reporting Frequency: Patient - process
2017 Registry Individual Measure Flow  
#394 NQF 1407: Immunization for Adolescents

**Multiple Performance**

### SAMPLE CALCULATIONS: Data Completeness and Performance Rate 1

**Data Completeness**

\[
\text{Performance Met (a\textsuperscript{1} = 5 patients) + Performance Not Met (c\textsuperscript{1} = 2 patients)} = 7 \text{ patients} = 87.50\%
\]

\[
\text{Eligible Population / Denominator (d\textsuperscript{1} = 8 patients)} = 8 \text{ patients}
\]

**Performance Rate**

\[
\text{Performance Met (a\textsuperscript{1} = 5 patients)} = 5 \text{ patients} = 71.43\%
\]

\[
\text{Data Completeness Numerator (7 patients)} = 7 \text{ patients}
\]

### SAMPLE CALCULATIONS: Data Completeness and Performance Rate 2

**Data Completeness**

\[
\text{Performance Met (a\textsuperscript{2} = 6 patients) + Performance Not Met (c\textsuperscript{2} = 1 patient)} = 7 \text{ patients} = 87.50\%
\]

\[
\text{Eligible Population / Denominator (d\textsuperscript{2} = 8 patients)} = 8 \text{ patients}
\]

**Performance Rate**

\[
\text{Performance Met (a\textsuperscript{2} = 6 patients)} = 6 \text{ patients} = 85.71\%
\]

\[
\text{Data Completeness Numerator (7 patients)} = 7 \text{ patients}
\]

### SAMPLE CALCULATIONS: Data Completeness and Performance Rate 3

**Data Completeness**

\[
\text{Performance Met (a\textsuperscript{3} = 6 patients) + Performance Not Met (c\textsuperscript{3} = 1 patient)} = 7 \text{ patients} = 87.50\%
\]

\[
\text{Eligible Population / Denominator (d\textsuperscript{3} = 8 patients)} = 8 \text{ patients}
\]

**Performance Rate**

\[
\text{Performance Met (a\textsuperscript{3} = 6 patients)} = 6 \text{ patients} = 85.71\%
\]

\[
\text{Data Completeness Numerator (7 patients)} = 7 \text{ patients}
\]

<table>
<thead>
<tr>
<th>Patient 1</th>
<th>Patient 2</th>
<th>Patient 3</th>
<th>Patient 4</th>
<th>Patient 5</th>
<th>Patient 6</th>
<th>Patient 7</th>
<th>Patient 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator Criteria 1</td>
<td>Met (a\textsuperscript{1})</td>
<td>Met (a\textsuperscript{1})</td>
<td>Met (a\textsuperscript{1})</td>
<td>Met (a\textsuperscript{1})</td>
<td>Met (a\textsuperscript{1})</td>
<td>Not Met (c\textsuperscript{1})</td>
<td>Not Reported</td>
</tr>
<tr>
<td>Numerator Criteria 2</td>
<td>Met (a\textsuperscript{2})</td>
<td>Met (a\textsuperscript{2})</td>
<td>Met (a\textsuperscript{2})</td>
<td>Met (a\textsuperscript{2})</td>
<td>Met (a\textsuperscript{2})</td>
<td>Not Met (c\textsuperscript{2})</td>
<td>Not Reported</td>
</tr>
<tr>
<td>Numerator Criteria 3</td>
<td>Met (a\textsuperscript{3})</td>
<td>Not Reported</td>
<td>Met (a\textsuperscript{3})</td>
<td>Met (a\textsuperscript{3})</td>
<td>Met (a\textsuperscript{3})</td>
<td>Not Met (c\textsuperscript{3})</td>
<td>Met (a\textsuperscript{3})</td>
</tr>
<tr>
<td>Numerator Criteria 4</td>
<td>Met (a\textsuperscript{4})</td>
<td>Not Reported</td>
<td>Met (a\textsuperscript{4})</td>
<td>Met (a\textsuperscript{4})</td>
<td>Met (a\textsuperscript{4})</td>
<td>Not Met (c\textsuperscript{4})</td>
<td>Not Reported</td>
</tr>
</tbody>
</table>

### SAMPLE CALCULATIONS: Data Completeness and Performance Rate 4

**Data Completeness**

\[
\text{Performance Met (a\textsuperscript{4} = 4 patients) + Performance Not Met (c\textsuperscript{4} = 2 patients)} = 6 \text{ patients} = 75.00\%
\]

\[
\text{Eligible Population / Denominator (d\textsuperscript{4} = 8 patients)} = 8 \text{ patients}
\]

**Performance Rate**

\[
\text{Performance Met (a\textsuperscript{4} = 4 patients)} = 4 \text{ patients} = 66.67\%
\]

\[
\text{Data Completeness Numerator (6 patients)} = 6 \text{ patients}
\]

*See the posted Measure Specification for specific coding and instructions to report this measure.*

**Notes:**

- "**" is anticipated for registry reporting that for every performance rate, a data completeness will be submitted. CMS will determine or use the overall data completeness and performance rate.
- **NOTE:** Reporting Frequency: Patient – process
2017 Registry Individual Measure Flow
#394 NQF 1407: Immunization for Adolescents

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure. This measure includes 4 rates for reporting.

REPORTING CRITERIA 1:

1. Start with Denominator

2. Check Patient Age:
   a. If Patients Who Turn 13 Years of Age During the Measurement Period equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Patients Who Turn 13 Years of Age During the Measurement Period equals Yes, proceed to check Encounter Performed.

3. Check Encounter Performed:
   a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Encounter as Listed in the Denominator equals Yes, proceed to check Not Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine.

4. Check Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine:
   a. If Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine equals Yes, do not include in Eligible Patient Population. Stop Processing.
   b. If Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine equals No, proceed to check Patients Who Use Hospice Services Any Time During the Measurement Period.

5. Check Patients Who Use Hospice Services Any Time During the Measurement Period:
   a. If Patients Who Use Hospice Services Any Time During the Measurement Period equals Yes, do not include in Eligible Patient Population. Stop Processing.
   b. If Patients Who Use Hospice Services Any Time During the Measurement Period equals No, include in Eligible population.

6. Denominator Population:
   a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d1 equals 8 patients in the sample calculation.

7. Start Numerator

8. Check Patient Had One Dose of Meningococcal Vaccine On or Between the Patient’s 11th and 13th Birthdays:
   a. If Patient had One Dose of Meningococcal Vaccine On or Between the Patient’s 11th and 13th Birthdays equals Yes, include in Data Completeness Met and Performance Met.
b. Data Completeness Met and Performance Met letter is represented as Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a1 equals 5 patients in Sample Calculation.

c. If Patient Had One Dose of Meningococcal Vaccine On or Between the Patient’s 11th and 13th Birthdays equals No, proceed to check Patient Did Not Have One Dose of Meningococcal Vaccine On or Between the Patient’s 11th and 13th Birthdays.

9. Check Patient Did Not have One Dose of Meningococcal Vaccine On or Between the Patient’s 11th and 13th Birthdays:

a. If Patient Did Not Have One Dose of Meningococcal Vaccine On or Between the Patient’s 11th and 13th Birthday equals Yes, include in the Data Completeness Met and Performance Not Met.

b. Data Completeness Met and Performance Not Met letter is represented as Data Completeness Rate in the Sample Calculation listed at the end of this document. Letter c1 equals 2 patients in the Sample Calculation.

c. If Patient Did Not Have One Dose of Meningococcal Vaccine On or Between the Patient’s 11th and 13th Birthdays equals No, proceed to Reporting Not Met.

10. Check Data Completeness Not Met:

a. If Data Completeness Not Met equals No, Quality Data Code or equivalent was not reported. This is represented by 1 patient in the Sample Calculation.
2017 Registry Individual Measure Flow
#394 NQF 1407: Immunization for Adolescents

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure. This measure includes 4 rates for reporting.

REPORTING CRITERIA 2:
1. Start with Denominator
2. Check Patient Age:
   a. If Patients Who Turns 13 Years of Age During the Measurement Period equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Patients Who Turns 13 Years of Age During the Measurement Period equals Yes, proceed to check Encounter Performed.
3. Check Encounter Performed:
   a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Encounter as Listed in the Denominator equals Yes, proceed to check Not Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine.
4. Check Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine:
   a. If Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine equals Yes, do not include in Eligible Patient Population. Stop Processing.
   b. If Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine equals No, proceed to check Patients Who Use Hospice Services Any Time During the Measurement Period.
5. Check Patients Who Use Hospice Services Any Time During the Measurement Period:
   a. If Patients Who Use Hospice Services Any Time During the Measurement Period equals Yes, do not include in Eligible Patient Population. Stop Processing.
   b. If Patients Who Use Hospice Services Any Time During the Measurement Period equals No, include in Eligible population.
6. Denominator Population:
   a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d2 equals 8 patients in the sample calculation.
7. Start Numerator
8. Check Patient Had One Tetanus, Diphtheria Toxoids and Acellular Pertussis Vaccine (Tdap) On or Between the Patient’s 10th and 13th Birthdays:
   a. If Patient Had One Tetanus, Diphtheria Toxoids and Acellular Pertussis Vaccine (Tdap) On or Between the Patient’s 10th and 13th Birthdays equals Yes, include in Data Completeness Met and Performance Met.
b. Data Completeness Met and Performance Met letter is represented as Data Completeness and 
Performance Rate in the Sample Calculation listed at the end of this document. Letter a2 equals 6 patients 
in Sample Calculation.

c. If Patient Had One Tetanus, Diphtheria Toxoids and Acellular Pertussis Vaccine (Tdap) On or Between the 
Patient’s 10th and 13th Birthday equals No, proceed to check Patient Did Not have One Tetanus, Diphtheria 
Toxoids and Acellular Pertussis Vaccine (Tdap) On or Between the Patient’s 10th and 13th Birthdays.

9. Check Patient Did Not have One Tetanus, Diphtheria Toxoids and Acellular Pertussis Vaccine (Tdap) On or 
Between the Patient’s 10th and 13th Birthdays:

a. If Patient Did Not have One Tetanus, Diphtheria Toxoids and Acellular Pertussis Vaccine (Tdap) On or 
Between the Patient’s 10th and 13th Birthdays equals Yes, include in the Data Completeness Met and 
Performance Not Met.

b. Data Completeness Met and Performance Not Met letter is represented as Data Completeness in the 
Sample Calculation listed at the end of this document. Letter c2 equals 1 patient in the Sample Calculation.

c. If Patient Did Not Have One Tetanus, Diphtheria Toxoids and Acellular Pertussis Vaccine (Tdap) On or 
Between the Patient’s 10th and 13th Birthdays equals No, proceed to check Data Completeness Not Met.

10. Check Data Completeness Not Met:

a. If Data Completeness Not Met equals No, Quality Data Code or equivalent was not reported. This is 
represented by 1 patient in the Sample Calculation.
2017 Registry Individual Measure Flow
#394 NQF 1407: Immunization for Adolescents

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure. This measure includes 4 rates for reporting.

REPORTING CRITERIA 3:

1. Start with Denominator

2. Check Patient Age:
   a. If Patients Who Turn 13 Years of Age During the Measurement Period equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Patients Who Turn 13 Years of Age During the Measurement Period equals Yes, proceed to check Encounter Performed.

3. Check Encounter Performed:
   a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Encounter as Listed in the Denominator equals Yes, proceed to check Not Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine.

4. Check Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine:
   a. If Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine equals Yes, do not include in Eligible Patient Population. Stop Processing.
   b. If Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine equals No, proceed to check Hospice Services for Patient Starts Any Time During the Measurement Period.

5. Check Hospice Services for Patient Starts Any Time During the Measurement Period:
   a. If Hospice Services for Patient Starts Any Time During the Measurement Period equals Yes, do not include in Eligible Patient Population. Stop Processing.
   b. If Hospice Services for Patient Starts Any Time During the Measurement Period equals No, include in Eligible population.

6. Denominator Population:
   a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d3 equals 8 patients in the sample calculation.

7. Start Numerator

8. Check Patient Had at Least Three HPV Vaccines On or Between the Patient’s 9th and 13th Birthdays:
   a. If Patient Had at Least Three HPV Vaccines On or Between the Patient’s 9th and 13th Birthdays equals Yes, include in Data Completeness Met and Performance Met.
b. Data Completeness Met and Performance Met letter is represented as Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a3 equals 6 patients in Sample Calculation.

c. If Patient Had at Least Three HPV Vaccines On or Between the Patient's 9th and 13th Birthdays equals No, proceed to check Patient Did Not Have at Least Three HPV Vaccines On or Between the Patient's 9th and 13th Birthdays.

9. Check Patient Did Not Have at Least Three HPV Vaccines On or Between the Patient's 9th and 13th Birthdays:

   a. If Patient Did Not Have at Least Three HPV Vaccines On or Between the Patient's 9th and 13th Birthdays equals Yes, include in the Data Completeness Met and Performance Not Met.

   b. Data Completeness Met and Performance Not Met letter is represented as Data Completeness Rate in the Sample Calculation listed at the end of this document. Letter c3 equals 1 patient in the Sample Calculation.

   c. If Patient Did Not Have One Dose of Meningococcal Vaccine On or Between the Patient's 11th and 13th Birthdays equals No, proceed to Data Completeness Not Met.

10. Check Data Completeness Not Met:

   a. If Data Completeness Not Met equals No, Quality Data Code or equivalent was not reported. This is represented by 1 patient in the Sample Calculation.
Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure. This measure includes 4 rates for reporting.

**REPORTING CRITERIA 4:**

1. Start with Denominator
2. Check Patient Age:
   a. If Patients Who Turns 13 Years of Age During the Measurement Period equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Patients Who Turns 13 Years of Age During the Measurement Period equals Yes, proceed to check Encounter Performed.
3. Check Encounter Performed:
   a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Encounter as Listed in the Denominator equals Yes, proceed to check Not Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine.
4. Check Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine:
   a. If Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine equals Yes, do not include in Eligible Patient Population. Stop Processing.
   b. If Meningococcal, Tdap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningococcal, Tdap and/or HPV Vaccine equals No, proceed to check Hospice Services for patient Starts Any Time During the Measurement Period.
5. Check Hospice Services for Patient Starts Any Time During the Measurement Period:
   a. If Hospice Services for Patient Starts Any Time During the Measurement Period equals Yes, do not include in Eligible Patient Population. Stop Processing.
   b. If Hospice Services for Patient Starts Any Time During the Measurement Period equals No, include in Eligible population.
6. Denominator Population:
   a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d4 equals 8 patients in the sample calculation.
7. Start Numerator
8. Check Adolescents Who Are Numerator Compliant for Rates 1, 2, and 3:
   a. If Adolescents Who Are Numerator Compliant for Rates 1, 2, and 3 equals Yes, include in the Data Completeness Met and Performance Met.
b. Data Completeness Met and Performance Met letter is represented as Data Completeness in the Sample Calculation listed at the end of this document. Letter a4 equals 4 patients in the Sample Calculation.

c. If Adolescents Who Are Numerator Compliant for Rates 1, 2, and 3 equals No, proceed to check Adolescents Who Are Not Numerator Compliant for Rates 1 and 2.

9. Check Adolescents Who Are Not Numerator Compliant for Rates 1, 2, and 3:

a. If Adolescents Who Are Not Numerator Compliant for Rates 1, 2, and 3 equals Yes, include in the Data Completeness Met and Performance Not Met.

b. Data Completeness Met and Performance Not Met letter is represented as Data Completeness in the Sample Calculation listed at the end of this document. Letter c4 equals 2 patients in the Sample Calculation.

c. If Adolescents Who Are Not Numerator Compliant for Rates 1, 2, and 3 equals No, proceed to Data Completeness Not Met.

10. Check Data Completeness Not Met:

a. If Data Completeness Not Met equals No, Quality Data Code or equivalent was not reported. This is represented by 2 patients in the Sample Calculation.

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### SAMPLE CALCULATIONS: Data Completeness and Performance Rate 1

Data Completeness:
Performance Met (a = 6 patients) + Performance Not Met (c = 2 patients) = 7 patients = 87.50%
Eligible Population / Denominator (d = 8 patients) = 0 patients

Performance Rate:
Performance Met (a = 6 patients) = 6 patients = 71.43%
Data Completeness Numerator (7 patients) = 7 patients

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### SAMPLE CALCULATIONS: Data Completeness and Performance Rate 2

Data Completeness:
Performance Met (a = 6 patients) + Performance Not Met (c = 1 patients) = 7 patients = 87.50%
Eligible Population / Denominator (d = 8 patients) = 0 patients

Performance Rate:
Performance Met (a = 6 patients) = 6 patients = 85.71%
Data Completeness Numerator (7 patients) = 7 patients

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### SAMPLE CALCULATIONS: Data Completeness and Performance Rate 3

Data Completeness:
Performance Met (a = 6 patients) + Performance Not Met (c = 1 patients) = 7 patients = 87.50%
Eligible Population / Denominator (d = 8 patients) = 0 patients

Performance Rate:
Performance Met (a = 6 patients) = 6 patients = 85.71%
Data Completeness Numerator (7 patients) = 7 patients

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### SAMPLE CALCULATIONS: Data Completeness and Performance Rate 4

Data Completeness:
Performance Met (a = 4 patients) + Performance Not Met (c = 2 patients) = 6 patients = 76.00%
Eligible Population / Denominator (d = 8 patients) = 0 patients

Performance Rate:
Performance Met (a = 4 patients) = 4 patients = 66.67%
Data Completeness Numerator (6 patients) = 6 patients