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

2020 COLLECTION TYPE:
MIPS CLINICAL QUALITY MEASURES (CQMS)

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 submitted 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 submitted by Merit-based Incentive Payment System (MIPS) 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 have completed the HPV vaccine series 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 Submission Type:
Measure data may be submitted by individual MIPS eligible clinicians, groups, or third party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality-data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

DENOMINATOR (SUBMISSION 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
Encephalopathy due to Tdap vaccine
OR
Patients who use hospice services any time during the measurement period: G9761

**NUMERATOR (SUBMISSION 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 (serogroups A, C, W, Y) on or between the patient’s 11th and 13th birthdays (G9414)
- **Performance Not Met:** Patient did not have one dose of meningococcal vaccine on or between the patient’s 11th and 13th birthdays (G9415)

**NUMERATOR (SUBMISSION 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)
- **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 (SUBMISSION 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 two HPV vaccines (with at least 146 days between the two) OR three HPV vaccines on or between the patient’s 9th and 13th birthdays (G9762)
- **Performance Not Met:** Patient did not have at least two HPV vaccines (with at least 146 days between the two) OR three HPV vaccines on or between the patient’s 9th and 13th birthdays (G9763)

**NUMERATOR (SUBMISSION 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) that 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 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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2020 Registry Flow for Quality ID #394 NQF 1407:
Immunizations for Adolescents
Submission Criteria One

Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.

Multiple Performance Rates

Start

Denominator

Patients Who Turn 13 Years of Age During the Measurement Period

Yes

Encounter as Listed in Denominator* (1/1/2020 thru 12/31/2020)

No

Not Included in Eligible Population/Denominator

Numerator

Patient Had One Dose of Meningococcal Vaccine On or Between the Patient’s 11th and 13th Birthdays.

Yes

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

No

Denominator Exclusions

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

Yes

Enccephalopathy Due to Tdap Vaccine

No

Yes

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

No

Include in Eligible Population/Denominator (80 patients)

Data Completeness Met + Performance Met G9414 or equivalent (50 patients)

Data Completeness Met + Performance Not Met G9415 or equivalent (20 patients)

Data Completeness Not Met the Quality Data Code or equivalent was not submitted (10 patients)
Submission Criteria Two

Multiple Performance Rates

Start

Denominator

Patients Who Turn 13 Years of Age During the Measurement Period

No

Encounter as Listed in Denominator* (11/2020 thru 12/31/2020)

No

Not Included in Eligible Population/Denominator

Yes

Denominator Exclusions

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

Yes

Enccephalopathy Due to Tdap Vaccine

Yes

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

No

Yes

Include in Eligible Population/Denominator (60 patients)

Data Completeness Not Met the Quality Data Code or equivalent was not submitted (10 patients)

Numerator

Patient Had One Tetanus, Diphtheria, Tetanus and Acellular Pertussis Vaccine (Tdap) On or Between the Patient’s 10th and 13th Birthdays

Yes

Data Completeness Met + Performance Met G9416 or equivalent (60 patients)

No

Patient Did Not Have One Tetanus, Diphtheria, Tetanus and Acellular Pertussis Vaccine (Tdap) On or Between the Patient’s 10th and 13th Birthdays

No

Data Completeness Met + Performance Not Met G9417 or equivalent (10 patients)
Submission Criteria Three

Multiple Performance Rates

Start

Denominator

Patients Who Turn 13 Years of Age During the Measurement Period

Yes

Encounter as Listed in Denominator* (11/1/2019 thru 12/31/2019)

Yes

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

No

Data Completeness Met + Performance Met G9762 or equivalent (80 patients)

\( a^2 \)

No

Patient Did Not Have at Least Two HPV Vaccines (With at least 146 days between the Two) OR Three HPV Vaccines On or Between the Patient’s 9th and 13th Birthdays

Yes

Data Completeness Met + Performance Not Met G9763 or equivalent (10 patients)

\( c^1 \)

No

Data Completeness Not Met The Quality Data Code or equivalent was not submitted (10 patients)

Denominator Exclusions

Not Included in Eligible Population/Denominator

No

Exenatide Due to Tdap Vaccine

Yes

No

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

No

Include in Eligible Population/Denominator (90 patients) \( d^7 \)
Submission Criteria Four

Multiple Performance Rates

Start

Denominator

Patients Who Turn 13 Years of Age During the Measurement Period

No

Encounter as Listed in Denominator* (1/1/2020 thru 12/31/2020)

No

Not Included in Eligible Population/Denominator

Yes

Meningooccal, Trap and/or HPV Vaccine Contraindicated or Patient Allergic to Meningooccal, Trap and/or HPV Vaccine

Yes

Denominator Exclusions

No

Enccephalopathy Due to Trap Vaccine

No

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

No

Include in Eligible Population/Denominator (80 patients) a

Numerator

Addescents Who Are Numerator Compliant for Rates 1, 2, and 3

Yes

Data Completeness Met + Performance Met G9414, G9416, and G9762 or equivalent (40 patients) a

No

Addescents 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*** (20 patients) a

No

Data Completeness Not Met The Quality Data Code or equivalent was not submitted (20 patients) a
<table>
<thead>
<tr>
<th>Numerator Criteria</th>
<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>1</td>
<td>Met (a')</td>
<td>Met (a')</td>
<td>Met (a')</td>
<td>Met (a')</td>
<td>Met (a')</td>
<td>Not Met (c')</td>
<td>Not Met (c')</td>
<td>Not Reported</td>
</tr>
<tr>
<td>2</td>
<td>Met (a')</td>
<td>Met (a')</td>
<td>Met (a')</td>
<td>Met (a')</td>
<td>Met (a')</td>
<td>Not Met (c')</td>
<td>Met (a')</td>
<td>Not Reported</td>
</tr>
<tr>
<td>3</td>
<td>Met (a')</td>
<td>Not Reported</td>
<td>Met (a')</td>
<td>Met (a')</td>
<td>Met (a')</td>
<td>Met (a')</td>
<td>Not Met (c')</td>
<td>Met (a')</td>
</tr>
<tr>
<td>4</td>
<td>Met (a')</td>
<td>Not Reported</td>
<td>Met (a')</td>
<td>Met (a')</td>
<td>Met (a')</td>
<td>Not Met (c')</td>
<td>Not Met (c')</td>
<td>Not Reported</td>
</tr>
</tbody>
</table>

**SAMPLE CALCULATIONS, SUBMISSION CRITERIA ONE**

Data Completeness:
Performance Met (a' > 50 patients) + Performance Not Met (c' < 20 patients) = 70 patients = 87.50%
Eligible Population / Denominator (d' = 80 patients) = 80 patients

Performance Rate:
Performance Met (a' > 50 patients) = 50 patients = 71.43%
Data Completeness Numerator (70 patients) = 70 patients

**SAMPLE CALCULATIONS, SUBMISSION CRITERIA TWO**

Data Completeness:
Performance Met (a' > 50 patients) + Performance Not Met (c' < 10 patients) = 70 patients = 87.50%
Eligible Population / Denominator (d' = 80 patients) = 80 patients

Performance Rate:
Performance Met (a' > 50 patients) = 60 patients = 85.71%
Data Completeness Numerator (70 patients) = 70 patients

**SAMPLE CALCULATIONS, SUBMISSION CRITERIA THREE**

Data Completeness:
Performance Met (a' > 60 patients) + Performance Not Met (c' < 10 patients) = 70 patients = 87.50%
Eligible Population / Denominator (d' = 80 patients) = 80 patients

Performance Rate:
Performance Met (a' > 60 patients) = 60 patients = 85.71%
Data Completeness Numerator (70 patients) = 70 patients

**SAMPLE CALCULATIONS, SUBMISSION CRITERIA FOUR**

Data Completeness:
Performance Met (a' > 40 patients) + Performance Not Met (c' > 20 patients) = 80 patients = 75.00%
Eligible Population / Denominator (d' = 80 patients) = 80 patients

Performance Rate:
Performance Met (a' > 40 patients) = 40 patients = 66.67%
Data Completeness Numerator (80 patients) = 60 patients

This measure will be calculated with 4 performance rates:

*See the posted measure specification for specific coding and instructions to submit this measure.

**It is anticipated for registry submission 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 Submission Criteria 4, the registry must ensure that the eligible clinician submits on Submission Criteria One, Two, and Three. In order to meet performance on this measure, Submission Criteria One, Two, and Three must submit C9414, C9416, and C9762.

NOTE: Submission Frequency: Patient-Process
2020 Clinical Quality Measure Flow Narrative for Quality ID #394 NQF #1407:
Immunization for Adolescents

Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.

Submission Criteria One:

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 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 Population. Stop Processing.
   b. If Encounter as Listed in the Denominator equals Yes, proceed to check 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 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 Encephalopathy Due to Tdap Vaccine.

5) Check Encephalopathy Due to Tdap Vaccine:
   a. If Encephalopathy Due to Tdap Vaccine equals Yes, do not include in Eligible Population. Stop Processing.
   b. If Encephalopathy Due to Tdap Vaccine equals No, proceed to check Patients Who Use Hospice Services Any Time During the Measurement Period.

6) 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 Population. Stop Processing.
   b. If Patients Who Use Hospice Services Any Time During the Measurement Period equals No, include in Eligible Population.

7) 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 80 patients in the Sample Calculation.

8) Start Numerator
9) 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 Birthday 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 50 patients in the 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.

10) 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 13 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 20 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 check Data Completeness Not Met.

11) Check Data Completeness Not Met:
    a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 10 patients have been subtracted from the Data Completeness Numerator in the Sample Calculation.

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**SAMPLE CALCULATIONS SUBMISSION CRITERIA ONE**

<table>
<thead>
<tr>
<th>Data Completeness</th>
<th>Performance Met (a¹=50 patients) + Performance Not Met (c¹=20 patients) = 70 patients = 87.50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Rate</td>
<td>Performance Met (a¹=50 patients) = 50 patients = 71.43%</td>
</tr>
<tr>
<td></td>
<td>Data Completeness Numerator (70 patients) = 70 patients</td>
</tr>
</tbody>
</table>
Submission Criteria Two:

1) Start with Denominator

2) Check Patient Age:
   a. If Patient Age Who Turns 13 Years of Age During the Measurement Period equals No, do not include in Eligible Population. Stop Processing.
   b. If Patient Age 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 Population. Stop Processing.
   b. If Encounter as Listed in the Denominator equals Yes, proceed to check 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 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 Encephalopathy Due to Tdap Vaccine.

5) Check Encephalopathy Due to Tdap Vaccine:
   a. If Encephalopathy Due to Tdap Vaccine equals Yes, do not include in Eligible Population. Stop Processing.
   b. If Encephalopathy Due to Tdap Vaccine equals No, proceed to check Patients Who Use Hospice Services Any Time During the Measurement Period.

6) 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 Population. Stop Processing.
   b. If Patients Who Use Hospice Services Any Time During the Measurement Period equals No, include in Eligible Population.

7) 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 80 patients in the Sample Calculation.

8) Start Numerator

9) 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 60 patients in the 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.

10) 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 10 patients 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.

11) Check Data Completeness Not Met:

a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 10 patients have been subtracted from the Data Completeness Numerator in the Sample Calculation.

<table>
<thead>
<tr>
<th>Data Completeness</th>
<th>SAMPLE CALCULATIONS SUBMISSION CRITERIA TWO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Met (a²=60 patients) + Performance Not Met (c²=10 patients) = 70 patients</td>
<td>= 87.50%</td>
</tr>
<tr>
<td>Eligible Population / Denominator (d²=80 patients)</td>
<td>= 80 patients</td>
</tr>
<tr>
<td>Performance Rate</td>
<td></td>
</tr>
<tr>
<td>Performance Met (a²=60 patients) = 60 patients</td>
<td>= 85.71%</td>
</tr>
<tr>
<td>Data Completeness Numerator (70 patients) = 70 patients</td>
<td></td>
</tr>
</tbody>
</table>
Submission Criteria Three:

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 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 Population. Stop Processing.
   b. If Encounter as Listed in the Denominator equals Yes, proceed to check 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 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 Encephalopathy Due to Tdap Vaccine.

5) Check Encephalopathy Due to Tdap Vaccine:
   a. If Encephalopathy Due to Tdap Vaccine equals Yes, do not include in Eligible Population. Stop Processing.
   b. If Encephalopathy Due to Tdap Vaccine equals No, process to check Patients Who Use Hospice Services Any Time During the Measurement Period.

6) 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 Population. Stop Processing.
   b. If Patients Who Use Hospice Services Any Time During the Measurement Period equals No, include in Eligible Population.

7) 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 80 patients in the Sample Calculation.

8) Start Numerator

9) Check Patient Had At Least Two HPV Vaccines (With At Least 146 Days Between the Two) OR Three HPV Vaccines On or Between the Patient's 9th and 13th Birthdays:
a. If Patient Had At Least Two HPV Vaccines (With At Least 146 Days Between the Two) OR 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 60 patients in the Sample Calculation.

c. If Patient Had At Least Two HPV Vaccines (With At Least 146 Days Between the Two) OR 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.

10) Check Patient Did Not Have at Least Two HPV Vaccines (With at Least 146 Days Between the Two) OR Three HPV Vaccines On or Between the Patient’s 9th and 13th Birthdays:

a. If Patient Did Not Have at Least Two HPV vaccines (With at Least 146 Days Between the Two) OR 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 10 patients in the Sample Calculation.

c. If Patient Did Not Have at Least Two HPV Vaccines (With at Least 146 Days Between the Two) OR Three HPV Vaccines On or Between the Patient’s 9th and 13th Birthdays equals No, proceed to check Data Completeness Not Met.

11) Check Data Completeness Not Met:

a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 10 patients have been subtracted from the Data Completeness Numerator in the Sample Calculation.

### SAMPLE CALCULATIONS SUBMISSION CRITERIA THREE

<table>
<thead>
<tr>
<th>Data Completeness=</th>
<th>Performance Met (a³=60 patients) + Performance Not Met (c³=10 patients) = 70 patients = 87.50%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Eligible Population / Denominator (d³=80 patients) = 80 patients</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Performance Rate=</th>
<th>Performance Met (a³=60 patients) = 60 patients = 85.71%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Data Completeness Numerator (70 patients) = 70 patients</td>
</tr>
</tbody>
</table>
Submission Criteria Four:

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 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 Population. Stop Processing.
   b. If Encounter as Listed in the Denominator equals Yes, proceed to check 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 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 Encephalopathy Due to Tdap Vaccine.

5) Check Encephalopathy Due to Tdap Vaccine:
   a. If Encephalopathy Due to Tdap Vaccine equals Yes, do not include in Eligible Population. Stop Processing.
   b. If Encephalopathy Due to Tdap Vaccine equals No, proceed to check Patients Who Use Hospice Services Any Time During the Measurement Period.

6) 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 Population. Stop Processing.
   b. If Patients Who Use Hospice Services Any Time During the Measurement Period equals No, include in Eligible Population.

7) 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 80 patients in the Sample Calculation.

8) Start Numerator

9) 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 and Performance Rate in the Sample Calculation listed at the end of this document. Letter $a^4$ equals 40 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, 2, and 3.

10) 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 $c^4$ equals 20 patients in the Sample Calculation.

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

11) Check Data Completeness Not Met:

a. If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 20 patients have been subtracted from the Data Completeness Numerator in the Sample Calculation.

<table>
<thead>
<tr>
<th>Data Completeness</th>
<th>SAMPLE CALCULATIONS SUBMISSION CRITERIA FOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Met (a^4=40 patients) + Performance Not Met (c^4=20 patients)</td>
<td>= 80 patients = 76.00%</td>
</tr>
<tr>
<td>Eligible Population / Denominator (d^4=80 patients)</td>
<td>= 80 patients</td>
</tr>
<tr>
<td>Performance Rate</td>
<td>= 40 patients = 66.67%</td>
</tr>
<tr>
<td>Data Completeness Numerator (80 patients)</td>
<td>= 60 patients</td>
</tr>
</tbody>
</table>