

Pneumococcal Vaccination Coverage for Older Adults (PVC)

SUMMARY OF CHANGES TO HEDIS 2018

- First-year measure.

Measure Description

The percentage of members 65 years of age and older who have received the recommended series of pneumococcal vaccines: 13-valent pneumococcal conjugate vaccine (PCV13) and 23-valent pneumococcal polysaccharide vaccine (PPSV23).

Measure Period

Measurement period January 1–December 31.

Clinical Recommendation Statement

Advisory Committee on Immunization Practices (ACIP) clinical guidelines recommend that immunocompetent older adults receive a dose of 13-valent pneumococcal conjugate (PCV13) followed by a dose of 23-valent pneumococcal conjugate (PPSV23) administered \geq 1-year later. For individuals with specific medical conditions, ACIP recommends an interval of \geq 8 weeks between the two doses.¹¹

Measure Characteristics

Scoring	Proportion.
Type	Process.
Item count	Member.
Stratification	Report each of the following strata: <ul style="list-style-type: none"> • Stratum 1: Patients age 65–74. • Stratum 2: Patients age 75–84. • Stratum 3: Patients age 85+.
Risk adjustment	None.

¹¹ Kobayashi, M., N.M. Bennett, R. Gierke, et al. Intervals Between PCV13 and PPSV23 Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR Morb Mortal Wkly Rep.* Sep 04 2015;64(34):944–7.

Improvement notation	A higher score indicates better performance.
Measure guidance	<p>This specification is designed to adhere as closely as possible to the clinical recommendation in assessing the completeness of longitudinal vaccination status information on plan members ≥ 65 years of age. Members who receive their first pneumococcal vaccination prior to turning 65 are eligible for the numerator, as they comply with the clinical recommendation.</p> <p>When providing 13-valent pneumococcal conjugate (PCV13) and 23-valent pneumococcal conjugate (PPSV23) vaccinations to members with immunocompromising conditions, functional or aplastic anemia, cerebrospinal fluid leaks or cochlear implants, clinical recommendations currently indicate an 8-week interval to minimize the risk window for invasive pneumococcal disease caused by serotypes unique to PPSV23 in these highly vulnerable groups (Kobayashi 2015).</p> <p>Members in hospice are excluded from the initial population. Refer to <i>General Guideline 20: Members in Hospice</i>.</p>

Measure Definitions

ECDS	<p>Electronic Clinical Data Systems. Databases containing a plan member’s personal health information and a record of their experiences in the health care system. ECDS data are structured such that automated quality measurement queries can be consistently and reliably executed, and provide results to the professionals responsible for the care of a health plan member.</p> <p>The ECDS may also support other care-related activities directly or indirectly through various interfaces, including evidence-based decision support, quality management and outcome reporting.</p>
ECDS Coverage	<p>The proportion of members for whom a healthcare organization can send or receive any electronic clinical quality data. To qualify, ECDS data must be accessible by the health care team at the point of care.</p>

Initial Population

Product lines	Commercial, Medicare (report each product line separately).
Ages	65 years of age and older as of January 1 of the measurement year.
Continuous enrollment	The measurement year.
Allowable gap	No more than one gap in enrollment of up to 45 days.
Anchor date	December 31 of the measurement year.
Benefit	Medical.
Initial population logic	<p>“Initial Population” define: “Initial Population”: AgeInYearsAt(start of “Measurement Period”) \geq 65 and Common.”Continuous Enrollment”</p> <p>“Measurement Year” define “Measurement Year”:</p>

Interval[DateTime((year from start of “Measurement Period”), 1, 1), DateTime((year from end of “Measurement Period”), 12, 31)]

Exclusions

Exclusions	<p>Exclude members with a diagnosis or history of any of the following:</p> <ul style="list-style-type: none"> • Active chemotherapy (<u>Chemotherapy Value Set</u>, <u>Chemotherapy SNOMED/CPT Value Set</u>) during the measurement year. • Bone marrow transplant (<u>Bone Marrow Transplant Value Set</u>, <u>Bone Marrow Transplant SNOMED Value Set</u>) during the measurement year. • Prior anaphylactic reaction (<u>Anaphylactic Reaction Due To Serum Value Set</u>, <u>Anaphylactic Reaction Due To Vaccination Value Set</u>) to components included in pneumococcal vaccine. • In hospice or using hospice services during the measurement year (<u>Hospice Value Set</u>).
Exclusion logic	<p>define “Denominator Exclusions”:</p> <p>exists (“Chemotherapy and Bone Marrow Transplant Procedures” ProcedureUnion where ProcedureUnion.relevantPeriod overlaps “Measurement Period”) or exists ([“Diagnosis”: “Anaphylactic Reaction to Due to Vaccination”] ReactionToVaccine where ReactionToVaccine.prevalencePeriod starts before end of “Measurement Year”) or exists ([“Intervention, Performed”: “Hospice Care All Settings”] PatientInHospice where PatientInHospice.relevantPeriod overlaps “Measurement Year”)</p> <p>define “Chemotherapy and Bone Marrow Transplant Procedures”: [“Procedure, Performed”: “Chemotherapy”] union [“Procedure, Performed”: “Bone Marrow Transplant”]</p>

Pneumococcal Vaccination Series Screening

Denominator	The initial population
Denominator Logic	Denominator define “Denominator”: “Initial Population”
Numerator	<p>Immunocompetent members who were administered both PCV13 (<u>Pneumococcal 13-Valent Vaccine Administered Value Set</u>) and PPSV23 (<u>Pneumococcal 23-Valent Vaccine Administered Value Set</u>) at least 12 months apart, with the first occurrence after the age of 60.</p> <p>AND</p> <p>Members with immunocompromising conditions (<u>Disorders of the Immune System Value Set</u>), functional or aplastic anemia (<u>Functional or Aplastic Anemia Value Set</u>), cerebrospinal fluid leaks (<u>Cerebrospinal Fluid Leaks Value Set</u>) or cochlear implants (<u>Cochlear Implants Value Set</u>) who were administered both PCV13 (<u>Pneumococcal 13-Valent Vaccine Administered Value Set</u>) and PPSV23 (<u>Pneumococcal 23-Valent Vaccine Administered Value Set</u>) at least 8 weeks apart.</p>

**Numerator
logic**

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define "Numerator":
exists ("Pneumococcal Vaccine 13 After Age 60")
  and exists ("Pneumococcal Vaccine 23 After Age 60")
  and (exists ("PVC13 and PVC23 12 Months Apart")
or ("Immunocompromised Diagnoses or Cochlear Implants")
  and exists ("PVC13 and PVC23 8 Weeks Apart"))

define "Pneumococcal Vaccine 13 After Age 60":
["Immunization, Administered": "Pneumococcal Conjugate Vaccine 13"] V13
  where AgeInYearsAt(V13.authorDatetime) >= 60

define "Pneumococcal Vaccine 23 After Age 60":
["Immunization, Administered": "Pneumococcal Conjugate Vaccine 23"] V23
  where AgeInYearsAt(V23.authorDatetime) >= 60

define "First Pneumococcal Vaccine 13 After Age 2":
  First (["Immunization, Administered": "Pneumococcal Conjugate Vaccine 13"] V13
    where AgeInYearsAt(V13.authorDatetime) >= 2)

define "PVC13 and PVC23 8 Weeks Apart":
  "First Pneumococcal Vaccine 13 After Age 2" V13
    with ["Immunization, Administered": "Pneumococcal Conjugate Vaccine 23"] V23
    such that weeks between V13.authorDatetime and V23.authorDatetime >= 8 or
    weeks between V23.authorDatetime and V13.authorDatetime >= 8
  return V13

define "PVC13 and PVC23 12 Months Apart":
  "Pneumococcal Vaccine 13 After Age 60" V13
    with "Pneumococcal Vaccine 23 After Age 60" V23
    such that months between V13.authorDatetime and V23.authorDatetime >= 12
    or months between V23.authorDatetime and V13.authorDatetime >= 12
  return V13

define "Immunocompromised Diagnoses or Cochlear Implants":
exists ("Immunocompromised Diagnoses Overlapping Measurement Period")
  or exists ("Cochlear Implants on or Before End of Measurement Period")

define "Immunocompromised Diagnoses Overlapping Measurement Period":
  "Immunocompromised Diagnoses" ImmunocompromisedUnion
    where ImmunocompromisedUnion.prevalencePeriod overlaps "Measurement Year"

define "Immunocompromised Diagnoses":
["Diagnosis": "Cerebrospinal Fluid Leaks"]
  union ["Diagnosis": "Functional or Aplastic Anemia"]
  union ["Diagnosis": "Immunocompromising Conditions"]

define "Cochlear Implants on or Before End of Measurement Period":
["Procedure, Performed": "Cochlear Implants"] CochlearImplant
  where start of CochlearImplant.relevantPeriod same day or before end of
  "Measurement Period"

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