Chlamydia Screening for Women

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Population Criteria

Initial Population

- Women 16 to 24 years of age who are sexually active and who had a visit in the measurement period

Denominator

- Equals Initial Population

Denominator Exclusions

- Women who are only eligible for the initial population due to a pregnancy test and who had an x-ray or an order for a specified medication within 7 days of the pregnancy test.

Numerator

- Women with at least one chlamydia test during the measurement period

Supplemental Data Elements

- For every patient evaluated by this measure also identify payer, race, ethnicity and sex
Chlamydia Screening for Women

and exists ( "Qualifying Encounters" )
and ( exists ( "Assessments Identifying Sexual Activity" )
  or exists ( "Diagnoses Identifying Sexual Activity" )
  or exists ( "Active Contraceptive Medications" )
  or exists ( "Ordered Contraceptive Medications" )
  or exists ( "Laboratory Tests Identifying Sexual Activity But Not Pregnancy" )
  or exists ( "Procedures Identifying Sexual Activity" )
  or exists ( "Diagnostic Studies Identifying Sexual Activity" )
)

Denominator
"Initial Population"

Denominator Exclusions
Hospice. "Has Hospice"
or ( exists ( "Pregnancy Test Exclusion" )
  and not exists ( "Diagnoses Identifying Sexual Activity" )
  and not exists ( "Active Contraceptive Medications" )
  and not exists ( "Laboratory Tests Identifying Sexual Activity But Not Pregnancy" )
  and not exists ( "Procedures Identifying Sexual Activity" )
  and not exists ( "Assessments Identifying Sexual Activity" )
  and not exists ( "Ordered Contraceptive Medications" )
  and not exists ( "Diagnostic Studies Identifying Sexual Activity" )
)

Numerator
exists ( ["Laboratory Test, Performed": "Chlamydia Screening"] ChlamydiaTest
  where ChlamydiaTest.result is not null
  and ChlamydiaTest.relevantPeriod during "Measurement Period"
)

Numerator Exclusions
None

Denominator Exceptions
None

Stratification 1
exists ["Patient Characteristic Birthdate"] BirthDate
  where Global. "CalendarAgeInYearsAt"(BirthDate.birthDatetime, start of "Measurement Period")>= 16
  and Global. "CalendarAgeInYearsAt"(BirthDate.birthDatetime, start of "Measurement Period")< 20

Stratification 2
exists ["Patient Characteristic Birthdate"] BirthDate
  where Global. "CalendarAgeInYearsAt"(BirthDate.birthDatetime, start of "Measurement Period")>= 20
  and Global. "CalendarAgeInYearsAt"(BirthDate.birthDatetime, start of "Measurement Period")< 24

Definitions

Active Contraceptive Medications
["Medication, Active": "Contraceptive Medications"] ActiveContraceptives
  where ActiveContraceptives.relevantPeriod overlaps "Measurement Period"

Assessments Identifying Sexual Activity
( ["Assessment, Performed": "Sexually Active"] SexualActivityAssessment
  where SexualActivityAssessment.result ~ "Yes (qualifier value)"
  and SexualActivityAssessment.authorDatetime before end of "Measurement Period"
)

Denominator
"Initial Population"

Denominator Exclusions
Hospice. "Has Hospice"
or ( exists ( "Pregnancy Test Exclusion" )
  and not exists ( "Diagnoses Identifying Sexual Activity" )
  and not exists ( "Active Contraceptive Medications" )
  and not exists ( "Laboratory Tests Identifying Sexual Activity But Not Pregnancy" )
  and not exists ( "Procedures Identifying Sexual Activity" )
  and not exists ( "Assessments Identifying Sexual Activity" )
  and not exists ( "Ordered Contraceptive Medications" )
  and not exists ( "Diagnostic Studies Identifying Sexual Activity" )
)

Diagnoses Identifying Sexual Activity
( ["Diagnosis": "Other Female Reproductive Conditions"]
  union ["Diagnosis": "Genital Herpes"]
  union ["Diagnosis": "Gonococcal Infections and Veneral Diseases"]
  union ["Diagnosis": "Inflammatory Diseases of Female Reproductive Organs"]
  union ["Diagnosis": "Chlamydia"]
  union ["Diagnosis": "HIV"]
  union ["Diagnosis": "Syphilis"]
  union ["Diagnosis": "Carrier of Predominantly Sexually Transmitted Infection"]
  union ["Diagnosis": "Complications of Pregnancy, Childbirth and the Puerperium"]
) SexualActivityDiagnosis
  where SexualActivityDiagnosis.prevalencePeriod overlaps "Measurement Period"

Diagnostic Studies Identifying Sexual Activity
["Diagnostic Study, Order": "Diagnostic Studies During Pregnancy"] SexualActivityDiagnostics
  where SexualActivityDiagnostics.authorDatetime during "Measurement Period"

Hospice. "Has Hospice"
exists ( ["Encounter, Performed": "Encounter Inpatient"] DischargeHospice
  where ( DischargeHospice.dischargeDisposition as Code ~ "Discharge to home for hospice care (procedure)"
  or DischargeHospice.dischargeDisposition as Code ~ "Discharge to healthcare facility for hospice care (procedure)"
  )
  and DischargeHospice.relevantPeriod ends during "Measurement Period"
)
or exists ( ["Intervention, Order": "Hospice care ambulatory"] HospiceOrder
  where HospiceOrder.authorDatetime during "Measurement Period"
)
or exists ( ["Intervention, Performed": "Hospice care ambulatory"] HospicePerformed
  where HospicePerformed.relevantPeriod overlaps "Measurement Period"
)

Initial Population
exists ( ["Patient Characteristic Birthdate"] Birthdate
  where Global.CalendarAgeInYearsAt(Birthdate.birthDatetime, start of "Measurement Period") in Interval[16, 24]
)
  and exists ( ["Patient Characteristic Sex": "Female"]
  and ( exists ( ["Assessments Identifying Sexual Activity"]
    or exists ( ["Diagnoses Identifying Sexual Activity"]
      or exists ( ["Active Contraceptive Medications"]
        or exists ( ["Ordered Contraceptive Medications"]
          or exists ( ["Laboratory Tests Identifying Sexual Activity"]
            or exists ( ["Diagnostic Studies Identifying Sexual Activity"]
              or exists ( ["Procedures Identifying Sexual Activity"]
            )
          )
        )
      )
    )
  ))

\textbf{Laboratory Tests Identifying Sexual Activity}

\{ ["Laboratory Test, Order": "Pregnancy Test"]
  union ["Laboratory Test, Order": "Pap Test"]
  union ["Laboratory Test, Order": "Lab Tests During Pregnancy"]
  union ["Laboratory Test, Order": "Lab Tests for Sexually Transmitted Infections"]
\} LabOrders

\textbf{Ordered Contraceptive Medications}

["Medication, Order": "Contraceptive Medications"] OrderedContraceptives

\textbf{Pregnancy Test Exclusion}

\{ ["Laboratory Test, Order": "Pregnancy Test"] PregnancyTest
  with ["Diagnostic Study, Order": "X-Ray Study (all inclusive)"] XrayOrder
  such that XrayOrder.authorDatetime occurs 7 days or less on or after PregnancyTest.authorDatetime
\}

union ( ["Laboratory Test, Order": "Pregnancy Test"] PregnancyTestOrder
  with ["Medication, Order": "Isotretinoin"] AccutaneOrder
  such that AccutaneOrder.authorDatetime occurs 7 days or less on or after PregnancyTestOrder.authorDatetime
\)

\textbf{Procedures Identifying Sexual Activity}

\{ ["Procedure, Performed": "Delivery Live Births"]
  union ["Procedure, Performed": "Procedures During Pregnancy"]
  union ["Procedure, Performed": "Procedures Involving Contraceptive Devices"]
\} ProceduresForSexualActivity

\textbf{Stratification 1}

exists ( ["Patient Characteristic Birthdate"] BirthDate
  where Global.CalendarAgeInYearsAt(BirthDate.birthDatetime, start of "Measurement Period") = 16
  and Global.CalendarAgeInYearsAt(BirthDate.birthDatetime, start of "Measurement Period") < 20
)

\textbf{Stratification 2}

exists ( ["Patient Characteristic Birthdate"] BirthDate
  where Global.CalendarAgeInYearsAt(BirthDate.birthDatetime, start of "Measurement Period") = 20
  and Global.CalendarAgeInYearsAt(BirthDate.birthDatetime, start of "Measurement Period") = 24

\textbf{Functions}

\textbf{Global.CalendarAgeInYearsAt(BirthDate, AsOf DateTime)}

\textbf{years between ToDate(BirthDateTime) and ToDate(AsOf)}

\textbf{Global.ToDate(Value Date Time)}

\textbf{DateTime(year from Value, month from Value, day from Value, 0, 0, 0, 0, timezone from Value)}

\textbf{Terminology}

- codesystem "SNOMEDCT" using "2.16.840.1.113883.6.96 version 2017-09"
- code "Discharge to healthcare facility for hospice care (procedure)" using "SNOMEDCT version 2017-09 Code (428361000124107)"
- code "Discharge to home for hospice care (procedure)" using "SNOMEDCT version 2017-09 Code (428371000124100)"
- code "Yes (qualifier value)" using "SNOMEDCT version 2017-09 Code (573066001)"
- valueset "Carrier of Predominantly Sexually Transmitted Infection" using "2.16.840.1.113883.3.464.1003.112.11.1023"
- valueset "Chlamydia Screening" using "2.16.840.1.113883.3.464.1003.110.12.1052"
Chlamydia Screening for Women

- **Measure Set**
  - SDE Sex
  - SDE Race
  - SDE Ethnicity

- **Supplemental Data Elements**
  - "Patient Characteristic Sex": "ONC Administrative Sex"
  - "Patient Characteristic Race": "Race"
  - "Patient Characteristic Payer": "Payer"

- **Data Criteria (QDM Data Elements)**
  - "Assessment Performed: Sexually Active" using "Sexually Active (2.16.840.1.113883.3.464.1003.121.12.1040)"
  - "Diagnosis: Carrier of Prominantly Sexually Transmitted Infection" using "Carrier of Prominantly Sexually Transmitted Infection (2.16.840.1.113883.3.464.1003.111.12.1023)"
  - "Diagnostic: Chlamydia" using "Chlamydia (2.16.840.1.113883.3.464.1003.112.12.1003)"
  - "Diagnostic: Complications of Pregnancy, Childbirth and the Puerperium" using "Complications of Pregnancy, Childbirth and the Puerperium (2.16.840.1.113883.3.464.1003.111.12.1027)"
  - "Diagnostic: Gonococcal Infections and Venereal Diseases" using "Gonococcal Infections and Venereal Diseases (2.16.840.1.113883.3.464.1003.112.12.1001)"
  - "Diagnostic: HIV" using "HIV (2.16.840.1.113883.3.464.1003.112.12.1005)"
  - "Diagnostic: Inflammatory Diseases of Female Reproductive Organs" using "Inflammatory Diseases of Female Reproductive Organs (2.16.840.1.113883.3.464.1003.112.12.1004)"
  - "Diagnostic: Isotretinoin" using "Isotretinoin (2.16.840.1.113883.3.464.1003.196.12.1143)"
  - "Diagnostic: Lab Tests During Pregnancy" using "Lab Tests During Pregnancy (2.16.840.1.113883.3.464.1003.111.12.1007)"
  - "Diagnostic: Labor Tests for Sexually Transmitted Infections" using "Lab Tests for Sexually Transmitted Infections (2.16.840.1.113883.3.464.1003.110.12.1051)"
  - "Diagnostic: Pregnancy Test" using "Pregnancy Test (2.16.840.1.113883.3.464.1003.111.12.1011)"
  - "Diagnostic: Payer" using "Payer (2.16.840.1.113883.3.464.1003.121.12.1020)"
  - "Diagnostic: Pap Test" using "Pap Test (2.16.840.1.113883.3.464.1003.108.12.1017)"
  - "Diagnostic: Payer: "Payer (2.16.840.1.113883.3.464.1003.121.12.1020)"

- **Assessment Performed: Sexually Active** using "Sexually Active (2.16.840.1.113883.3.464.1003.121.12.1040)"

- **Assessment Performed: Sexually Active** using "Sexually Active (2.16.840.1.113883.3.464.1003.121.12.1040)"

- **Assessment Performed: Sexually Active** using "Sexually Active (2.16.840.1.113883.3.464.1003.121.12.1040)"

- **Supplemental Data Elements**
  - "Patient Characteristic Sex": "ONC Administrative Sex"
  - "Patient Characteristic Race": "Race"
  - "Patient Characteristic Payer": "Payer"

- **Data Criteria (QDM Data Elements)**
  - "Assessment Performed: Sexually Active" using "Sexually Active (2.16.840.1.113883.3.464.1003.121.12.1040)"
  - "Diagnosis: Carrier of Prominantly Sexually Transmitted Infection" using "Carrier of Prominantly Sexually Transmitted Infection (2.16.840.1.113883.3.464.1003.111.12.1023)"
  - "Diagnostic: Chlamydia" using "Chlamydia (2.16.840.1.113883.3.464.1003.112.12.1003)"
  - "Diagnostic: Complications of Pregnancy, Childbirth and the Puerperium" using "Complications of Pregnancy, Childbirth and the Puerperium (2.16.840.1.113883.3.464.1003.111.12.1027)"
  - "Diagnostic: Gonococcal Infections and Venereal Diseases" using "Gonococcal Infections and Venereal Diseases (2.16.840.1.113883.3.464.1003.112.12.1001)"
  - "Diagnostic: HIV" using "HIV (2.16.840.1.113883.3.464.1003.112.12.1005)"
  - "Diagnostic: Inflammatory Diseases of Female Reproductive Organs" using "Inflammatory Diseases of Female Reproductive Organs (2.16.840.1.113883.3.464.1003.112.12.1004)"
  - "Diagnostic: Isotretinoin" using "Isotretinoin (2.16.840.1.113883.3.464.1003.196.12.1143)"
  - "Diagnostic: Lab Tests During Pregnancy" using "Lab Tests During Pregnancy (2.16.840.1.113883.3.464.1003.111.12.1007)"
  - "Diagnostic: Labor Tests for Sexually Transmitted Infections" using "Lab Tests for Sexually Transmitted Infections (2.16.840.1.113883.3.464.1003.110.12.1051)"
  - "Diagnostic: Pregnancy Test" using "Pregnancy Test (2.16.840.1.113883.3.464.1003.111.12.1011)"
  - "Diagnostic: Payer" using "Payer (2.16.840.1.113883.3.464.1003.121.12.1020)"

- **Supplemental Data Elements**
  - "Patient Characteristic Sex": "ONC Administrative Sex"
  - "Patient Characteristic Race": "Race"

- **Supplemental Data Elements**
  - "Patient Characteristic Sex": "ONC Administrative Sex"