Pioneers in Quality™ Expert to Expert Series: ED-1 & ED-2

9-10 am (PT)

10-11 am (MT)

11 am-12 pm (CT)

12-1 pm (ET)

February 12, 2019

The Joint Commission

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For those participating that would like to use the Closed Captioning Service:

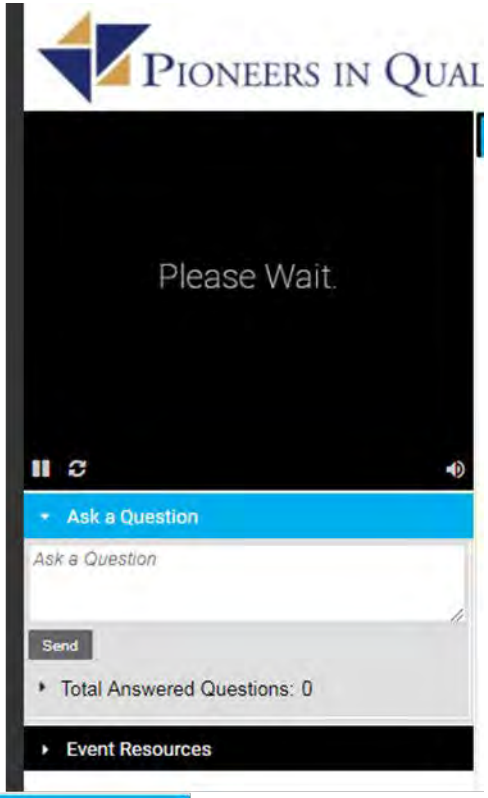
- Use this link to access the CC service: http://www.captionedtext.com/client/event.aspx?CustomerID=1519&EventID=3913562
- You will also need this passcode 3913562.
- This information is also in the Chat box with a clickable link.

At the end of this session, participants will be able to:

- Apply concepts learned about the new Clinical Quality Language (CQL) expression language for the ED-1 and ED-2 eCQMs
- Identify common issues and questions regarding ED-1 and ED-2 eCQMs and
- Prepare to implement the CQL expression language for the 2019 eCQM reporting year (2020 data submission)

Slides are available for download now!

- To access the slides, see the Event Resources Pane
- Click the triangle to open the list of PDFs
- Select the slides for today's session
- A new window will open permitting you to save or print the PDFs



This program is designed to be interactive.

- All participants are connected in listen-only mode
- Ask questions through the Questions pane
- Visit any links or resources noted in the slides
- Download the slides and share the recording

Pioneers in Quality™
Expert to Expert Series: ED-1 and ED-2

In March, the webinar recording and slide deck will be accessible on The Joint Commission website via the Expert to Expert landing page (https://www.jointcommission.org/piq_expert_to_expert_series/).

As follow-up items are posted, an email will be sent to all individuals that registered.

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Disclosure Statement

These staff and speakers have disclosed that neither they nor their spouses/partners have any financial arrangements or affiliations with corporate organizations that either provide educational grants to this program or may be referenced in this activity:

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CQL Basics Overview

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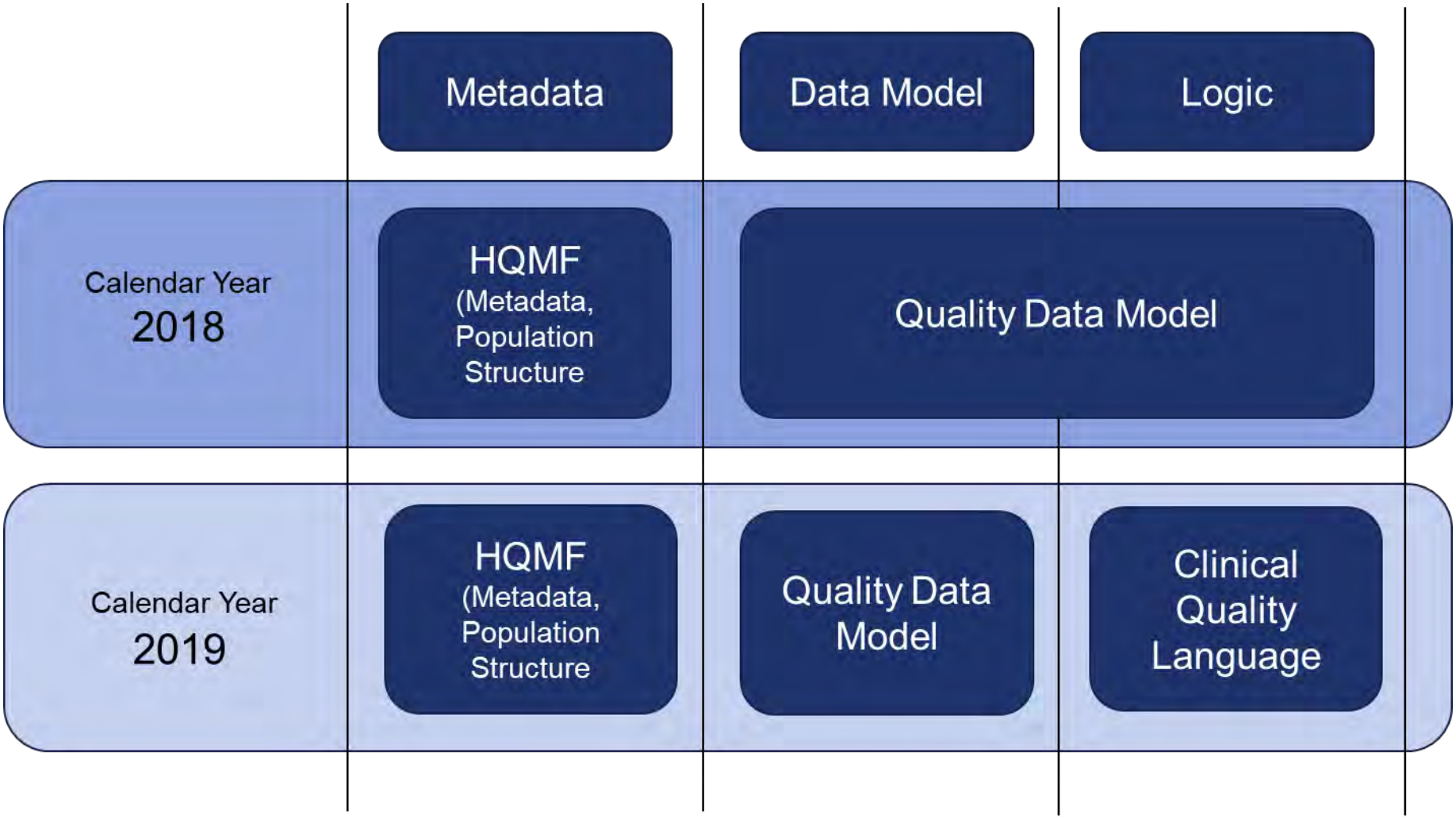
Electronic Clinical Quality Measures (eCQM)

Evolving eCQM Standards



eCQM

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Population Criteria

Initial Population

TJC."Encounter with Principal Diagnosis and Age"

Denominator

TJC."Ischemic Stroke Encounter"

Denominator Exclusions

TJC."Ischemic Stroke Encounters with Discharge Status"
union TJC."Comfort Measures during Hospitalization"

Numerator

TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
with "Antithrombotic Therapy at Discharge" DischargeAntithrombotic
such that DischargeAntithrombotic.authorDatetime during IschemicStrokeEncounter.relevantPeriod

Definitions

Antithrombotic Not Given at Discharge

["Medication, Not Discharged": "Antithrombotic Therapy"] NoAntithromboticDischarge
where NoAntithromboticDischarge.negationRationale in "Medical Reason"
or NoAntithromboticDischarge.negationRationale in "Patient Refusal"

Antithrombotic Therapy at Discharge

["Medication, Discharge": "Antithrombotic Therapy"]

Denominator

TJC."Ischemic Stroke Encounter"

Denominator Exceptions

TJC."Ischemic Stroke Encounter" IschemicStrokeEncounter
with "Antithrombotic Not Given at Discharge" NoDischargeAntithrombotic
such that NoDischargeAntithrombotic.authorDatetime during IschemicStrokeEncounter.relevantPeriod

Functions

Global.CalendarAgeInYearsAt(BirthDateTime DateTime, AsOf DateTime)

years between ToDate(BirthDateTime)and ToDate(AsOf)

Global.Hospitalization(Encounter "Encounter, Performed")

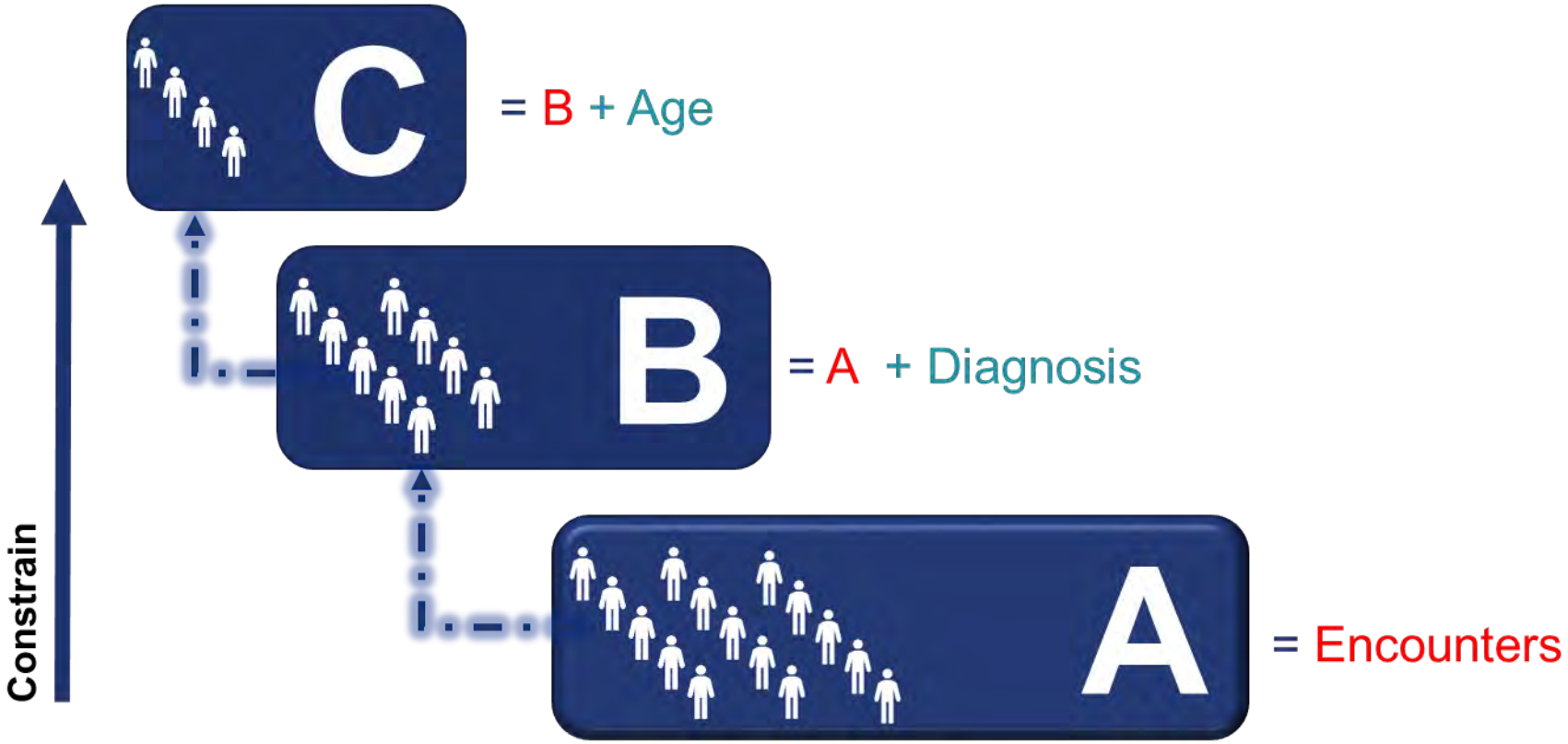
(singleton from (["Encounter, Performed": "Emergency Department Visit"] EDVisit
where EDVisit.relevantPeriod ends 1 hour or less on or before start of Encounter.relevantPeriod
)) X
return if X is null then Encounter.relevantPeriod else Interval[start of X.relevantPeriod, end of Encounter.relevantPeriod]

Building Blocks

CQL Definition

Example of Generic Population Criteria

Initial Population= C



CQL Definition

Initial Population:

TJC.Encounter with Principal Diagnosis and Age

TJC.Encounter with Principal Diagnosis and Age

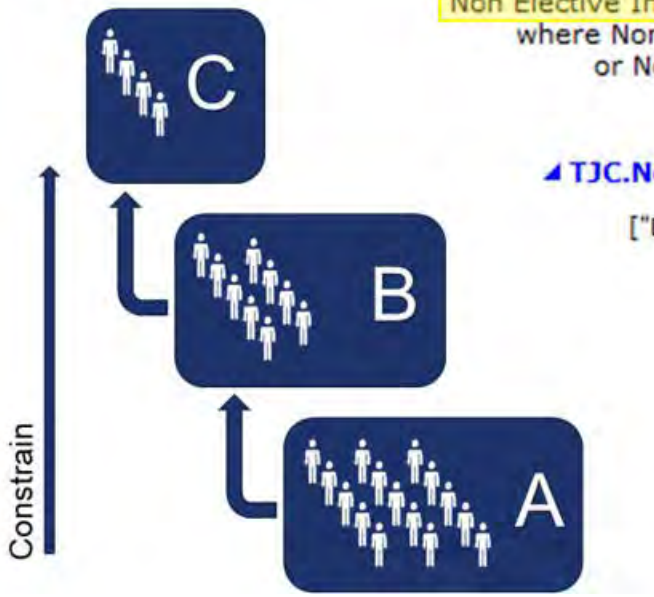
```
"All Stroke Encounter" AllStrokeEncounter
    with ["Patient Characteristic Birthdate"] BirthDate
        such that Global."CalendarAgeInYearsAt"(BirthDate.birthDatetime, start of AllStrokeEncounter.relevantPeriod) >= 18
```

TJC.All Stroke Encounter

```
"Non Elective Inpatient Encounter" NonElectiveEncounter
    where NonElectiveEncounter.principalDiagnosis in "Hemorrhagic Stroke"
        or NonElectiveEncounter.principalDiagnosis in "Ischemic Stroke"
```

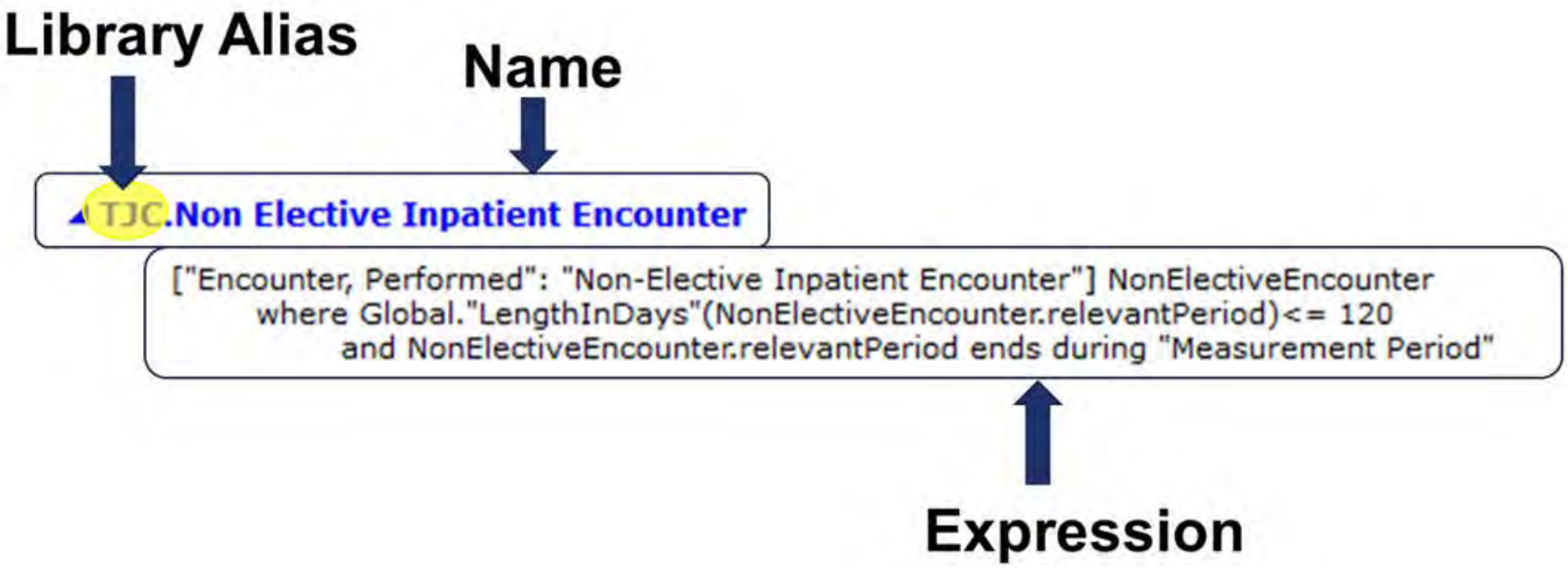
TJC.Non Elective Inpatient Encounter

```
["Encounter, Performed": "Non-Elective Inpatient Encounter"] NonElectiveEncounter
    where Global."LengthInDays"(NonElectiveEncounter.relevantPeriod) <= 120
        and NonElectiveEncounter.relevantPeriod ends during "Measurement Period"
```

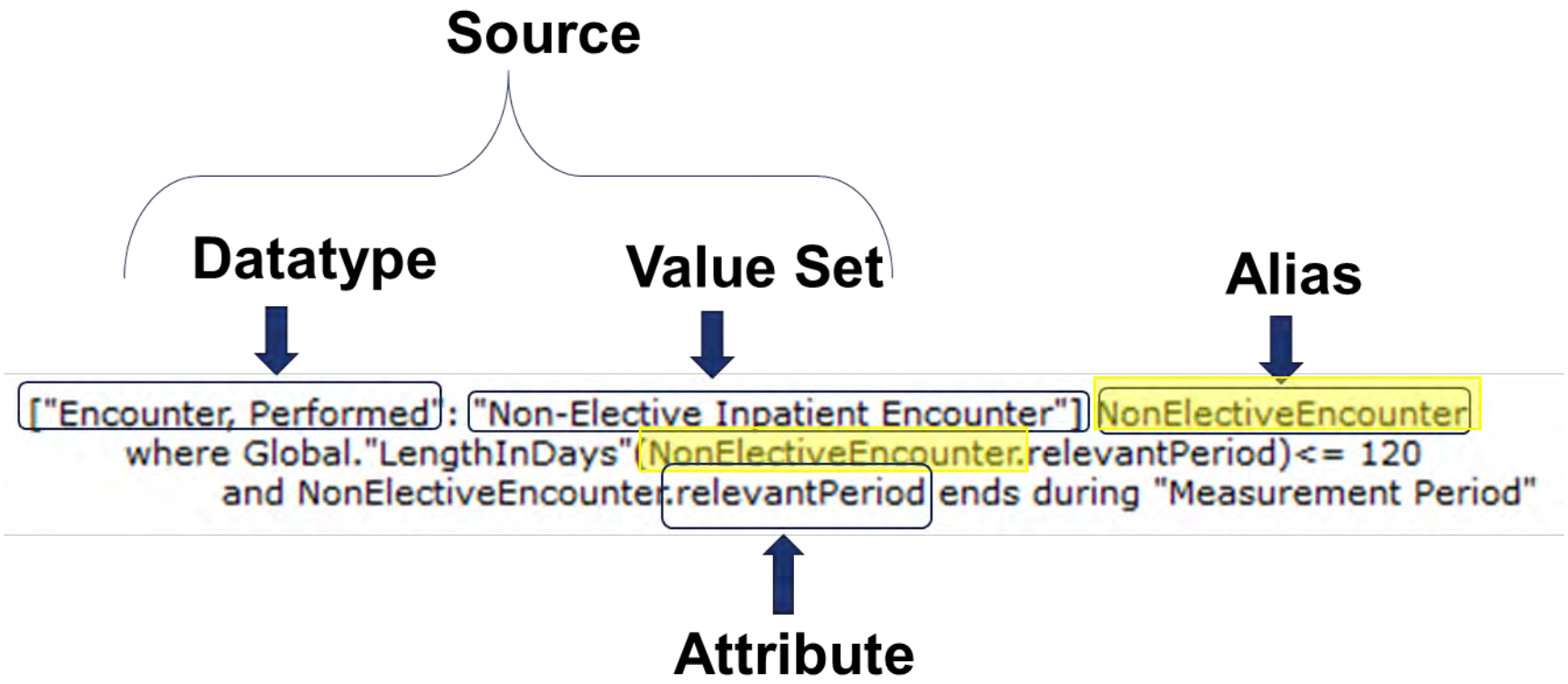


Definition Anatomy

Definitions are made up of:



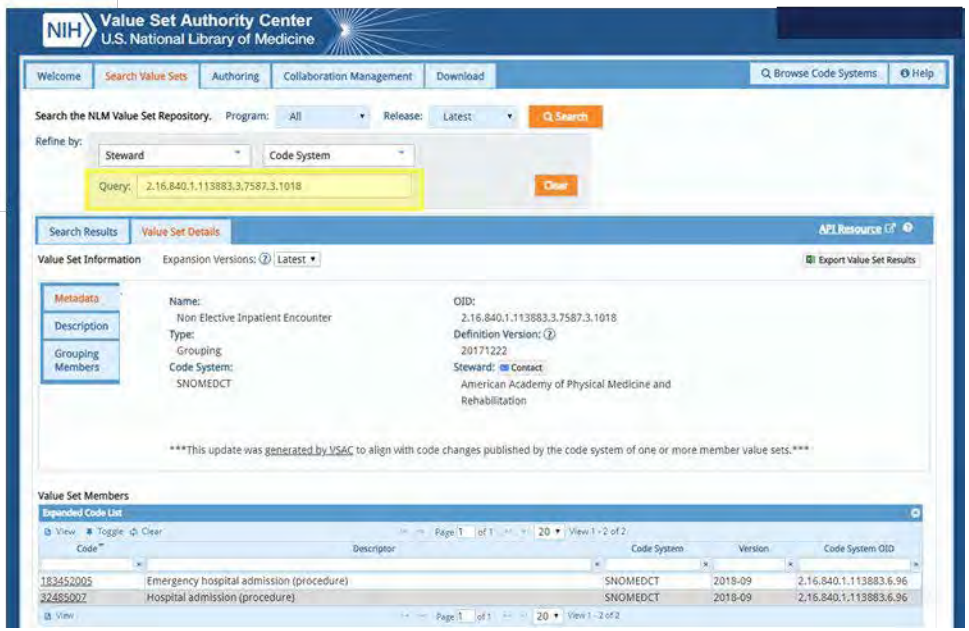
Definition Anatomy



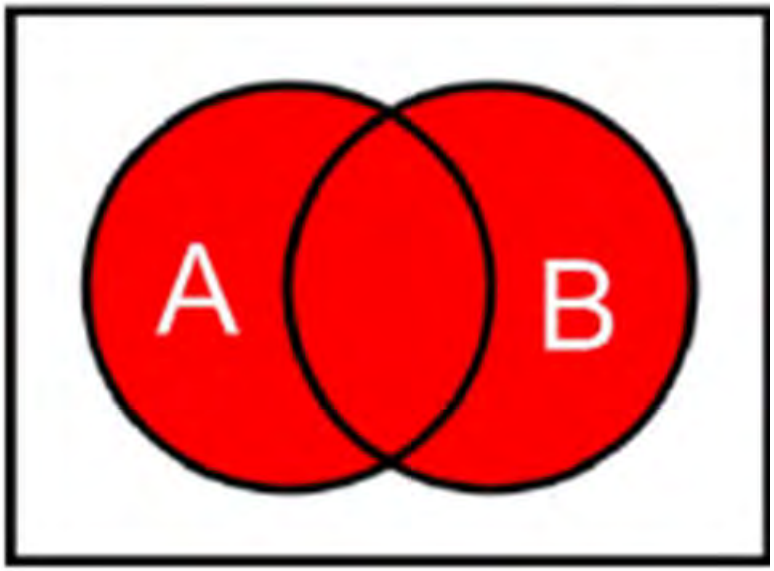
Definition Anatomy- Value Sets

Terminology

- valueset "Antithrombotic Therapy" using "2.16.840.1.113883.3.117.1.7.1.201"
- valueset "Comfort Measures" using "1.3.6.1.4.1.33895.1.3.0.45"
- valueset "Discharge To Acute Care Facility" using "2.16.840.1.113883.3.117.1.7.1.87"
- valueset "Discharged to Health Care Facility for Hospice Care" using "2.16.840.1.113883.3.117.1.7.1.207"
- valueset "Discharged to Home for Hospice Care" using "2.16.840.1.113883.3.117.1.7.1.209"
- valueset "Emergency Department Visit" using "2.16.840.1.113883.3.117.1.7.1.292"
- valueset "Ethnicity" using "2.16.840.1.114222.4.11.837"
- valueset "Hemorrhagic Stroke" using "2.16.840.1.113883.3.117.1.7.1.212"
- valueset "Ischemic Stroke" using "2.16.840.1.113883.3.117.1.7.1.247"
- valueset "Left Against Medical Advice" using "2.16.840.1.113883.3.117.1.7.1.308"
- valueset "Medical Reason" using "2.16.840.1.113883.3.117.1.7.1.473"
- valueset "Non-Elective Inpatient Encounter" using "2.16.840.1.113883.3.117.1.7.1.424"
- valueset "ONC Administrative Sex" using "2.16.840.1.113762.1.4.1"
- valueset "Patient Expired" using "2.16.840.1.113883.3.117.1.7.1.309"
- valueset "Patient Refusal" using "2.16.840.1.113883.3.117.1.7.1.93"
- valueset "Payer" using "2.16.840.1.114222.4.11.3591"
- valueset "Race" using "2.16.840.1.114222.4.11.836"



Common CQL Operators



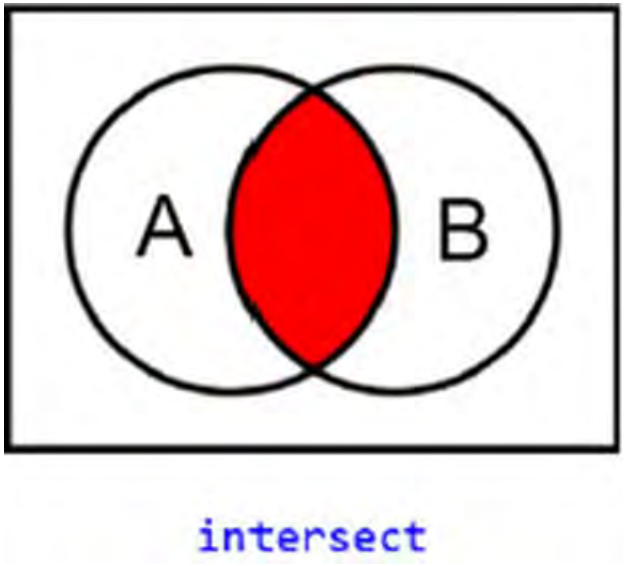
union

Example: Combining a list of Diagnoses

History of Uterine Surgery Diagnosis

```
["Diagnosis": "Perforation of Uterus"]
    union ["Diagnosis": "Uterine Window"]
    union ["Diagnosis": "Uterine Rupture"]
    union ["Diagnosis": "Cornual Ectopic Pregnancy"]
```

Common CQL Operators



Example:

List A= All inpatient encounters with age ≥ 18
List B= All encounters with a CBC level

Result of intersection=

a list of any inpatient encounters with age ≥ 18

and a CBC level

Angela Flanagan, MSN, RN, CPHIMS

ED Measures

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Changes Specific to the ED Measures for Version 7

- Replaced QDM logic with CQL logic
- Replaced the word Stratum with Stratification to align with CQL
- Removed 'Transfer from' datatype to conform with QDM
- Replaced 'Discharge status' attribute with 'Discharge Disposition'
- Replaced 'Transfer from' with 'admission Source'
- Replaced <= 6 hours timing constraint with logic that ties the 'admissionSource' to the Inpatient and ED Encounter visits
- Replaced QDM timings with supplemental timing attributes These timing intervals include prevalence period, relevant period, and Author Datetime

ED Value Set Changes

Renamed the Psychiatric/Mental Health Patient value set to Psychiatric/Mental Health Patient Diagnosis (2.16.840.1.113883.3.117.1.7.1.299)

- Added 6 ICD10CM codes (F12.23, F12.93, F53.0, F68.A, Z62.813, Z91.42) and deleted 1 ICD10CM code (F53).
- Deleted 5 Invalid SNOMEDCT codes (191536002, 191537006, 191540006, 1938002, 230290000)

Introduction

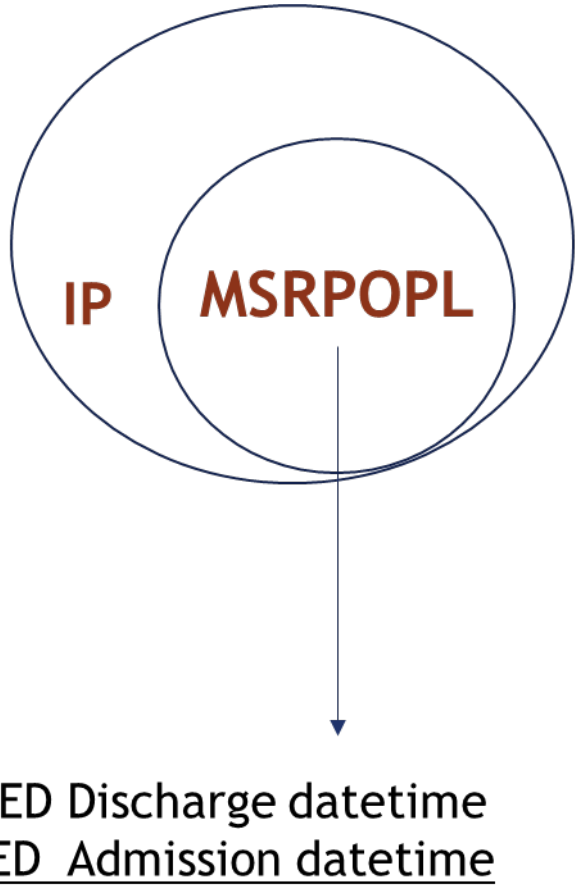
Reducing the time patients remain in the emergency department (ED) can improve access to treatment and increase quality of care. Reducing this time potentially improves access to care specific to the patient condition and increases the capability to provide additional treatment.

ED-1- The measure is assessing the median time *(in minutes)* from emergency department arrival to time of departure from the emergency room for patients admitted to the facility from the emergency department.

ED-2- The measure is assessing the median time (*in minutes*) from admit decision time to time of departure from the emergency department for emergency department patients admitted to inpatient status.

Continuous Variable

1. Episodes of care are classified using the IP criteria, and those satisfying the criteria are included in the initial population (IP).
2. The members of the IP are classified using the Measure Population (MSRPOPL) criteria, and those satisfying the criteria are included in the Measure Population.
3. Each member of the Measure Population is evaluated according to the criteria defined in the Measure Observations criteria, and all of these results are aggregated using the specified operator.



Aggregation Calculations

Calculate the ED encounter duration in minutes for each ED encounter in the measure population; report the median time for all calculations performed.

Also stated as:
Datetime difference between the Emergency Department discharge time and the Emergency Department admission time. The calculation requires the median across all ED encounter durations.

- **IP:** Inpatient Encounters
- **MSRPOPL:** Admitted to hospital from ED
- **MSRPOPLEX:** None
- **MSRPOPL Observation:** # minutes in ED
- **Aggregate MSRPOPL:** Median minutes in ED

Stratification

Describes the strata for which the measure is to be evaluated.

Evaluate the eCQM based on a specific condition

- those with a primary mental health diagnosis
- those without a primary mental health diagnosis

Angela Flanagan, MSN, RN, CPHIMS

ED-1- Median Time from Emergency Department (ED) Arrival to ED Departure for Admitted ED Patients (CMS55v7)

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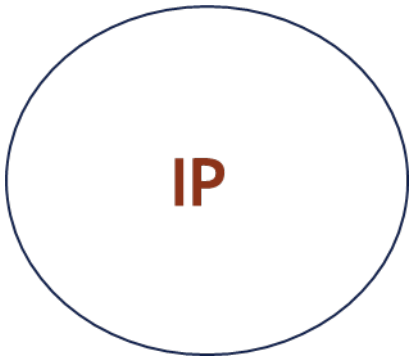
Initial Population

Narrative

Inpatient Encounters ending during the measurement period with Length of Stay (Discharge Date minus Admission Date) less than or equal to 120 days, and preceded within an hour by an emergency department visit at the same physical facility

Initial Population

```
/*Emergency Department visit followed by an Inpatient encounter within or at an hour of the ED Visit*/
"Inpatient Encounter" Encounter
    with ["Encounter, Performed": "Emergency Department Visit"] EDVisit
        such that EDVisit.relevantPeriod ends 1 hour or less before or on start of Encounter.relevantPeriod
```



Initial Population Continued

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Initial Population

Comment

```
/*Emergency Department visit followed by an Inpatient encounter within or at an hour of the ED Visit*/
"Inpatient Encounter" Encounter
    with ["Encounter, Performed": "Emergency Department Visit"] EDVisit
        such that EDVisit.relevantPeriod ends 1 hour or less before or on start of Encounter.relevantPeriod
```

Inpatient Encounter

```
/*Inpatient encounter less than or equal to 120 days during the measurement period*/
["Encounter, Performed": "Encounter Inpatient"] Encounter
    where Global."LengthInDays"(Encounter.relevantPeriod)<= 120
        and Encounter.relevantPeriod ends during "Measurement Period"
```

Global.LengthInDays(Value Interval<DateTime>)

difference in days between start of Value and end of Value

ED-1 Measure Population

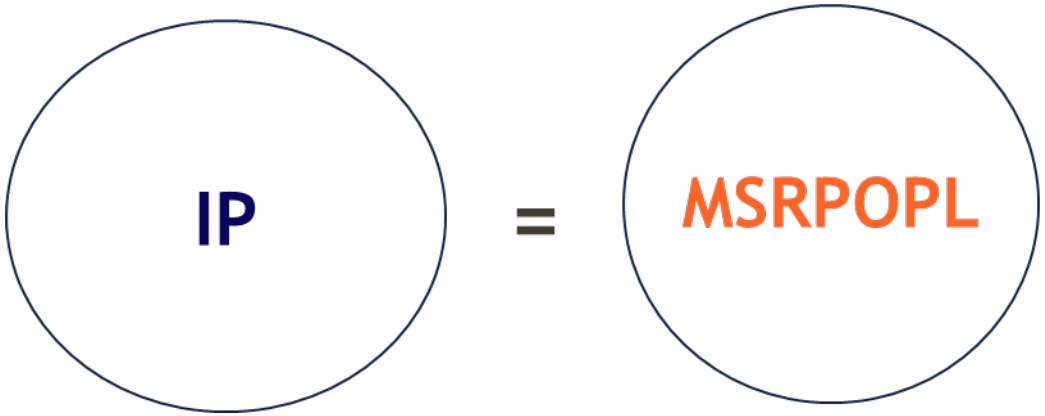
Narrative

Equals Initial Population

Logic

Measure Population

"Initial Population"



ED-1 Measure Population Exclusions

Narrative

Emergency department encounters with an admission source from another "Hospital Setting" (any different facility, even if part of the same hospital system) resulting in an inpatient stay.

Logic

Measure Population Exclusions

```
/*Exclude ED encounters with an admission source in "Hospital Setting" (any different facility, even if part of the same hospital system) resulting in an inpatient stay*/
"Inpatient Encounter" Encounter
    with ["Encounter, Performed": "Emergency Department Visit"] EDVisit
        such that EDVisit.relevantPeriod ends 1 hour or less before or on start of Encounter.relevantPeriod
            and EDVisit.admissionSource in "Hospital Settings"
```

ED-1 Measure Observation

Narrative

Time (in minutes) from ED admission to ED discharge for patients admitted to the facility from the emergency department.

Logic

Measure Observation

```
Median (
        /*Time from ED facility location arrival to ED facility location Departure*/
        duration in minutes of "Arrival and Departure Time"("Related ED Visit"(Encounter))
    )
```

Median – the middle value in a set

52, 75, **102,** 132, 155

Measure Observation Arrival and Departure Time

Arrival and Departure Time(Encounter "Encounter, Performed")

```
/*Emergency Department arrival and departure times*/
Interval[Global."Emergency Department Arrival Time"(Encounter), "Emergency Department Departure Time"(Encounter)]
```

Global.Emergency Department Arrival Time(Encounter "Encounter, Performed")

```
start of ( singleton from ( ( "Hospitalization Locations"(Encounter)) HospitalLocation
                where HospitalLocation.code in "Emergency Department Visit"
        )
).locationPeriod
```

Global.Hospitalization Locations(Encounter "Encounter, Performed")

```
( singleton from ( ["Encounter, Performed": "Emergency Department Visit"] EDVisit
            where EDVisit.relevantPeriod ends 1 hour or less on or before start of Encounter.relevantPeriod
) ) EDEncounter
    return if EDEncounter is null then Encounter.facilityLocations else flatten { EDEncounter.facilityLocations, Encounter.facilityLocations }
```

Emergency Department Departure Time(Encounter "Encounter, Performed")

```
end of Last((Global."Hospitalization Locations"(Encounter))HospitalLocation
        where HospitalLocation.code in "Emergency Department Visit"
).locationPeriod
```

Global.Hospitalization Locations(Encounter "Encounter, Performed")

```
( singleton from ( ["Encounter, Performed": "Emergency Department Visit"] EDVisit
            where EDVisit.relevantPeriod ends 1 hour or less on or before start of Encounter.relevantPeriod
) ) EDEncounter
    return if EDEncounter is null then Encounter.facilityLocations else flatten { EDEncounter.facilityLocations, Encounter.facilityLocations }
```

Measure Observation Related to ED Visit

Measure Observation

```
Median (
        /*Time from ED facility location arrival to ED facility location Departure*/
        duration in minutes of "Arrival and Departure Time"("Related ED Visit"(Encounter))
    )
```

Related ED Visit(Encounter "Encounter, Performed")

```
/*ED visit with that precedes an inpatient encounter*/
Last(["Encounter, Performed": "Emergency Department Visit"] EDVisit
        where EDVisit.relevantPeriod ends 1 hour or less before or on start of Encounter.relevantPeriod
        sort by start of relevantPeriod
)
```

Stratification 1

Narrative

Report total score and the following strata:

Stratification 1 - all patients seen in the ED and admitted as an inpatient who do not have an inpatient encounter principal diagnosis consistent with psychiatric/mental health disorders

Logic

Stratification 1

```
/*Patients without a principal diagnosis in the "Psychiatric/Mental Health Diagnosis" value set*/
"Inpatient Encounter" Encounter
        where Encounter.principalDiagnosis is null
                or not ( Encounter.principalDiagnosis in "Psychiatric/Mental Health Diagnosis" )
```

Stratification 2

Narrative

Report total score and the following strata:

Stratification 2 - all patients seen in the ED and admitted as an inpatient who have an inpatient encounter principal diagnosis consistent with psychiatric/mental health disorders

Logic

Stratification 2

```
/*Patients with a principal diagnosis that is in the "Psychiatric/Mental Health Diagnosis" value set*/
"Inpatient Encounter" Encounter
    where Encounter.principalDiagnosis in "Psychiatric/Mental Health Diagnosis"
```

ED-1 Value Sets

Value Set Name	Object Identifier (OID)
"Psychiatric/Mental Health Patient”	“2.16.840.1.113883.3.117.1.7.1.299"
"Emergency Department Visit”	“2.16.840.1.113883.3.117.1.7.1.292“
"Encounter Inpatient”	“2.16.840.1.113883.3.666.5.307"
"Hospital Settings"	"2.16.840.1.113762.1.4.1111.126"

Angela Flanagan, MSN, RN, CPHIMS

ED-2- Median Admit Decision Time to ED Departure for Admitted Patients (CMS111v7)

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ED-2 Initial Population

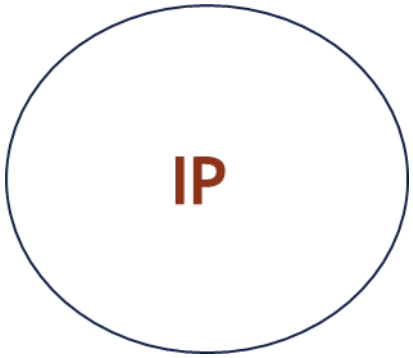
Narrative

Inpatient Encounters ending during the measurement period with Length of Stay (Discharge Date minus Admission Date) less than or equal to 120 days, and where the decision to admit was made during the preceding emergency department visit at the same physical facility

Logic

Initial Population

```
/*Emergency Department visit with a Decision to Admit inpatient followed by an Inpatient encounter within or at an hour of the ED Visit*/
"Inpatient Encounter" Encounter
    with "ED Visit with Admit Order" EDAdmitOrder
        such that EDAdmitOrder.relevantPeriod ends 1 hour or less before or on start of Encounter.relevantPeriod
```



Initial Population

Initial Population

```
/*Emergency Department visit with a Decision to Admit inpatient followed by an Inpatient encounter within or at an hour of the ED Visit*/
"Inpatient Encounter" Encounter
    with "ED Visit with Admit Order" EDAdmitOrder
        such that EDAdmitOrder.relevantPeriod ends 1 hour or less before or on start of Encounter.relevantPeriod
```

Inpatient Encounter

```
/*Inpatient encounter less than or equal to 120 days during the measurement period*/
["Encounter, Performed": "Encounter Inpatient"] Encounter
    where Global."LengthInDays"(Encounter.relevantPeriod)<= 120
        and Encounter.relevantPeriod ends during "Measurement Period"
```

Global.LengthInDays(Value Interval<DateTime>)

difference in days between start of Value and end of Value

ED Visit with Admit Order

```
/*ED visit during the specified period with a Decision to admit order also during that specified period*/
["Encounter, Performed": "Emergency Department Visit"] EDVisit
    with ["Encounter, Order": "Decision to Admit to Hospital Inpatient"] AdmitOrder
        such that AdmitOrder.authorDatetime during EDVisit.relevantPeriod
            and AdmitOrder.authorDatetime before or on "Departure Time"(EDVisit)
```

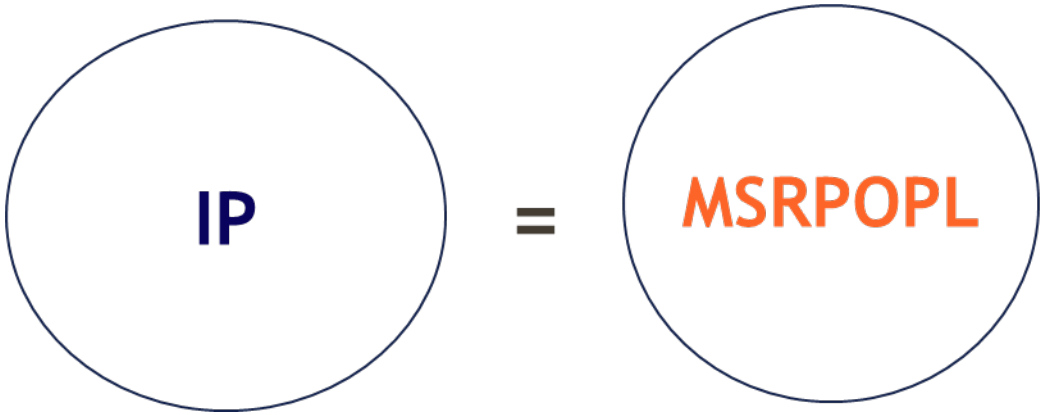
ED-2 Measure Population

Narrative

Equals Initial Population

Measure Population

"Initial Population"



ED-2 Measure Population Exclusions

Narrative

Setting" (any different facility, even if part of the same hospital system) resulting in an inpatient stay

Logic

Measure Population Exclusions

```
/* Exclude ED encounters with an admission source in "Hospital Setting" (any different facility, even if part of the same hospital system) resulting in an inpatient stay
*/
"Inpatient Encounter" Encounter
      with ["Encounter, Performed": "Emergency Department Visit"] EDVisit
            such that EDVisit.relevantPeriod ends 1 hour or less before or on start of Encounter.relevantPeriod
                  and EDVisit.admissionSource in "Hospital Settings"
```

ED-2 Measure Observation

Narrative

Time (in minutes) from Decision to Admit to ED facility location departure for patients admitted to the facility from the emergency department

Logic

Measure Observation

```
Median (
        /* the duration from the Decision to Admit to the departure from the Emergency Department*/
        duration in minutes of Interval["Admit Decision"(Encounter).authorDatetime, "Departure Time"("Related ED Visit"(Encounter))]
    )
```

Measure Observation Continued

Admit Decision(Encounter "Encounter, Performed")

```
/*Decision to admit order that was during the ED visit that is being referenced*/
Last(["Encounter, Order": "Decision to Admit to Hospital Inpatient"] AdmitOrder
        where AdmitOrder.authorDatetime during "Related ED Visit"(Encounter).relevantPeriod
        sort by authorDatetime
)
```

Related ED Visit(Encounter "Encounter, Performed")

```
/*ED visit with a Decision to admit order that preceded an inpatient encounter*/
Last(["Encounter, Performed": "Emergency Department Visit"] EDVisit
        with ["Encounter, Order": "Decision to Admit to Hospital Inpatient"] AdmitOrder
            such that AdmitOrder.authorDatetime during EDVisit.relevantPeriod
        where EDVisit.relevantPeriod ends 1 hour or less before or on start of Encounter.relevantPeriod
        sort by start of relevantPeriod
)
```

Measure Observation Continued 2

Departure Time(Encounter "Encounter, Performed")

```
/* The time the patient physically departed the Emergency Department*/
Last(Encounter.facilityLocations Location
        return end of Location.locationPeriod
        sort ascending
)
```

Related ED Visit(Encounter "Encounter, Performed")

```
/*ED visit with a Decision to admit order that preceded an inpatient encounter*/
Last(["Encounter, Performed": "Emergency Department Visit"] EDVisit
        with ["Encounter, Order": "Decision to Admit to Hospital Inpatient"] AdmitOrder
            such that AdmitOrder.authorDatetime during EDVisit.relevantPeriod
        where EDVisit.relevantPeriod ends 1 hour or less before or on start of Encounter.relevantPeriod
        sort by start of relevantPeriod
)
```

ED-2 Stratification 1

Narrative

Report total score and the following strata:

Stratification 1 - all patients seen in the ED and admitted as an inpatient who do not have an inpatient encounter principal diagnosis consistent with psychiatric/mental health disorders

Stratification 1

```
/*Patients without a principal diagnosis in the "Psychiatric/Mental Health Diagnosis" value set*/
"Inpatient Encounter" Encounter
      where Encounter.principalDiagnosis is null
            or not ( Encounter.principalDiagnosis in "Psychiatric/Mental Health Diagnosis" )
```

ED-2 Stratification 2

Narrative

Report total score and the following strata:

Stratification 2 - all patients seen in the ED and admitted as an inpatient who have an inpatient encounter principal diagnosis consistent with psychiatric/mental health disorders

Stratification 1

```
/*Patients without a principal diagnosis in the "Psychiatric/Mental Health Diagnosis" value set*/
"Inpatient Encounter" Encounter
      where Encounter.principalDiagnosis is null
            or not ( Encounter.principalDiagnosis in "Psychiatric/Mental Health Diagnosis" )
```

ED-2 Value Sets

Value Set Name	Object Identifier (OID)
“Decision to Admit to Hospital Inpatient”	“2.16.840.1.113883.3.117.1.7.1.295”
“Psychiatric/Mental Health Patient”	“2.16.840.1.113883.3.117.1.7.1.299”
“Emergency Department Visit”	“2.16.840.1.113883.3.117.1.7.1.292”
“Encounter Inpatient”	“2.16.840.1.113883.3.666.5.307”
“Hospital Settings”	“2.16.840.1.113762.1.4.1111.126”

Frequently Asked Questions

ED-1 Question

Question:

If we have two data points for the ED END time, should we choose the earliest or the latest time?

Response:

The Encounter Performed: Emergency Department Visit <= 1 hour ends before or concurrent with the start of the inpatient encounter assesses **the ED discharge datetime.** For this instance, the Discharge Datetime is defined as the date and time that the patient was discharged from an emergency department encounter. If there is more than one discharge time, use the one closest to the inpatient encounter admission time.

ED-2 Question

Question:

ED – 2: If there are more than one documented orders to Admit Decision time which one do we use?

Response:

If there are multiple dates documented for the decision to admit to inpatient, please use latest date.

Question 2 Continued

Encounter 1	
ED Encounter (visit) <= 1hr prior to inpatient encounter	Admit ED at 7:30 am
Decision to Admit	7:45 am - patient refused
ED Encounter Discharge	ED 8:00 am
Inpatient encounter <= 120 days during MP	0 days
Encounter 2	
ED Encounter (visit) <= 1hr prior to inpatient encounter	Admit ED at 8:15 am
Decision to Admit	**8:15 am**
ED Encounter Discharge	8:25 am
Inpatient encounter <= 120 days during MP	Inpatient Admit 8:25 - 2 days

Question 3

Question:

When mapping the ED-2 data elements to collect the Decision to Admit Date & Time, if we have several elements with time stamps; such as Decision to Admit ORDER Date & Time, Bed Request Date & Time, are both of these time stamps acceptable to use?

Response:

Yes, Decision to Admit Order date/time and Bed Request date/time are acceptable. The Guidance section of the header provides: Decision to Admit:1) admission order (this may be an operational order rather than the hospital admission to inpatient status order), 2) disposition order (must explicitly state to admit), 3) documented bed request, or 4) documented acceptance from admitting physician. This is not the "bed assignment time" or "report called time".

Question 3 Continued – Decision to Admit

Event	Timing 9/15/2018
ED Arrival	6:30 am
~~**Decision to Admit (bed assignment)**~~	7:15 am (non qualifying reason)
~~Inpatient(disposition order)~~	8:00 am (does not state to admit)
Decision to Admit (order to admit)	**8:15 am**
~~**Decision to Admit (not specified)**~~	8:30 am (unspecified if an order)
ED Encounter Discharge	8:30 am
Departure from ED	8:45 am
~~***Decision to Admit (order to admit)***~~	9:00 am (after ED departure)
ED Encounter (visit) <= 1hr prior to inpatient encounter	6:30 – 8:30
Inpatient Admit	8:30 am
Inpatient encounter <= 120 days during MP	2 days

Question 4

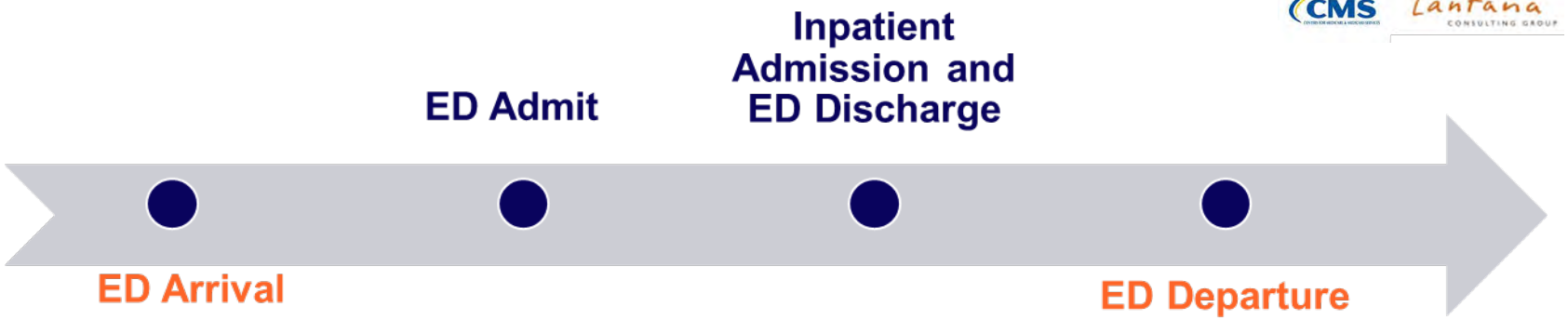
Question:

ED – 1: almost all of our patients are admitted to inpatient status prior to physical departure from the ED. The initial population requires that the patient has to have been admitted within one hour AFTER an ED departure. Most of our population is then excluded from the measure.

Response:

ED-1 is intended to include ED visits in the Measure population where there was a subsequent Inpatient Encounter at the same facility. The initial population requires that the patient be admitted within 1 hour of the **ED Discharge** time. Patient status to Inpatient may be synonymous with ED Discharge datetime. Some vendors use the same time for ED discharge and Inpatient admission which led to the addition of concurrent with to the ED Inpatient logic.

Answer 4 Continued



Initial Population:

…Global."LengthInDays"(Encounter.relevantPeriod)<= 120

–Inpatient discharge date minus the inpatient admission date

…EDVisit.relevantPeriod ends 1 hour or less before or on start of Encounter.relevantPeriod

- Inpatient admission dateTime minus the ED discharge dateTime

Measure Observation:- duration in minutes of "Arrival and Departure Time"("Related ED Visit"(Encounter))

-ED departure datetime minus ED arrival dateTime

Question 5

Question:

Why does the decision to admit value set include Hospital admission, for observation (procedure) 76464004?

Response:

Because the measure is looking for the time between when a decision is made to admit (essentially move the patient out the ED) to when they actually leave the ED, any status that would result in moving the patient out of the ED to a hospital bed is acceptable.

Question 6

Question:

Clarification on ED-2 times for patients in ED observation

Does ED-1 and ED-2 include OBSERVATION patients or just those patients with an ADMIT order?

Response:

Both measures use Encounter Inpatient 2.16.840.1.113883.3.666.5.307 and Emergency Department Visit 2.16.840.1.113883.3.117.1.7.1.292 values sets which do not include any observation codes in the initial population.

ED -1/ED-1 initial population does not include any Observation patients.

ED -2 Decision to Admit to Hospital Inpatient 2.16.840.1.113883.3.117.1.7.1.295 does include Hospital admission, for observation (procedure).

Question 5 & 6 Follow Up

"Inpatient Encounter" Encounter (No observation codes for ED-1 or ED-2)
with "ED Visit with Admit Order" EDAdmitOrder (ED-2 has observation code)
such that EDAdmitOrder.relevantPeriod ends 1 hour or less before or on start of Encounter.relevantPeriod

Inpatient Encounter
["Encounter, Performed": "Encounter Inpatient"] Encounter
where Global."LengthInDays"(Encounter.relevantPeriod)<= 120
and Encounter.relevantPeriod ends during "Measurement Period"

Question 7

Question:

Request clarification for timing of admit datetime and decision to admit.

Admission Date: This data element is used to determine the LOS. ED-1 and ED-2 initial patient population specifications includes patients discharged from acute inpatient care with Length of Stay (Discharge Date minus Admission Date) less than or equal to 120 days. This is best represented by the date the patient is admitted for acute inpatient care and not when they are admitted to observation status.

Decision to Admit: This is used along with the ED Departure Date & Time to determine the length of time between when a decision is made to admit the patient to the hospital and when they actually leave the ED. Because the measure is looking for the time between when a decision is made to admit (essentially move the patient out the ED) to when they actually leave the ED, any status that would result in moving the patient out of the ED to a hospital bed is acceptable. A decision to admit order to observation or inpatient status represents a decision to move the patient out of the ED.

Question 8

Question:

Unsure of what 'hospital' settings to exclude from ED measures

Response:

Value sets are what constrains the concept Admission Source in “Hospital Settings”.

The Hospital Settings value set aims to capture if the patient is transferred to your hospital from an outside hospital where he was considered an inpatient or outpatient. If so, this patient would be excluded.

Question 9

Question:

"Singleton From" and throwing run time errors

ED – 1 uses the "Singleton From" function. I am concerned about this because the IG for CQL says (in section 9.10.21) that *"If the list contains more than one element, a run-time error is thrown."

```
Global.Emergency Department Arrival Time(Encounter "Encounter,
Performed")
start of ( singleton from(
( "Hospitalization Locations"(Encounter)
) HospitalLocation
  where HospitalLocation.code in "Emergency Department
Visit")).locationPeriod
```

Response:

Use the qualifying ED encounter that is closest to the inpatient admission

Question 10

Question:

What is a good resource when learning about eCQMs and CQL?

Response:

The eCQI Resource Center

The one-stop shop for the most current resources to support

***E**lectronic **C**linical **Q**uality **I**mprovement*

https://ecqi.healthit.gov

Question 11

Question:

Where can I get answers to reporting requirement questions?

Response:

For inquiries regarding reporting requirements, please contact the help desk:

CMS EHR Information Center Help Desk: (888) 734-6433/TTY: (888) 734-6563.

Hours of operation: Monday-Friday 8:30am-4:30pm in all time zones (except Federal holidays).

Resources

1. eCQI Resource Center: https://ecqi.healthit.gov/cql
   - One stop shop for all information related to eCQM's
   - Find EH program information via: https://ecqi.healthit.gov/eligible-hospital/critical-access-hospital-ecqms such as:
     - Measure specifications
     - Technical Release Notes- which states all changes made to each measure during annual updates and during the addendum (code updates)
     - eCQM Measure Flows- to help understand the measure algorithms
   - Links to many Educational Resources such as:
     - CQL Standards: https://ecqi.healthit.gov/cql-clinical-quality-language
     - QDM (Quality Data Model): https://ecqi.healthit.gov/qdm-quality-data-model
       - QDMv5.3 Annotated is used for the 2019 reporting
     - eCQM Implementation Check List: https://ecqi.healthit.gov/ecqm-implementation-checklist
     - Previous recordings & slide deck presentations: https://ecqi.healthit.gov/cql/cql-educational-resources
   - Events page to see and register for upcoming educational events https://ecqi.healthit.gov/ecqi/ecqi-events
2. Value Set Authority Center (VSAC): https://vsac.nlm.nih.gov/
   - To look up the codes listed in the value sets of a measure
   - Requires license but free of charge
   - Quick link to download valuesets/Direct reference codes from the VSAC: https://vsac.nlm.nih.gov/download/ecqm?rel=20180917

Resources

3. Technical CQL Resources:
    - Formatting and Usage: https://github.com/esacinc/CQL-Formatting-and-Usage-Wiki/wiki
    - CQL GitHub Tools Repository: https://github.com/cqframework/clinical_quality_language
    - CQL Specification - CQL Release 1, Standard for Trial Use (STU) 2
        - http://www.hl7.org/implement/standards/product_brief.cfm?product_id=400
        - http://cql.hl7.org/STU2/index.html
    - CQL-Based HQMF IG – Release 1, STU 2.1
        - http://www.hl7.org/implement/standards/product_brief.cfm?product_id=405
4. To submit an issue ticket for a CQL specific question, please visit the ONC JIRA site
    - https://oncprojectracking.healthit.gov/support/projects/CQLIT
5. To submit an issue ticket for a measure specific question, please visit the ONC JIRA site
    - https://oncprojectracking.healthit.gov/support/projects/CQM/issues
6. Pioneers in Quality Expert to Expert Replays and Slides: https://www.jointcommission.org/piq_expert_to_expert_series/
7. Pioneers in Quality Portal: https://www.jointcommission.org/topics/pioneers_in_quality.aspx

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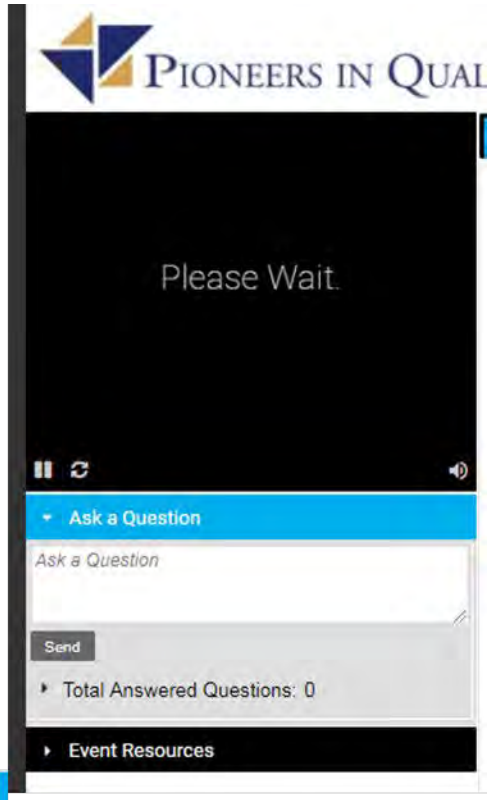

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Session	Date	Registration Link	Slides	Transcripts	Recording	Q&A
PIQ#6: eCQM Clinical Quality Language (CQL) Basics Webinar for Hospitals	29-Nov-18	NA – Session has already occurred	11/29 PDF slide deck	11/29 PDF transcript	Not yet available	Not yet available
EE#1: STK-2, -3, & -6	11-Dec-18	NA – Session has already occurred	12/11 PDF slide deck	Not yet available	Not yet available	Not yet available
EE#2: STK-5 and AMI-8a	29-Jan-18	https://attendee.gotowebinar.com/register/3913740621068329729	To be posted following session	To be posted following session	To be posted following session	To be posted following session
EE#3: ED-1 and -2	12-Feb-19	https://attendee.gotowebinar.com/register/8053319436273286145	To be posted following session	To be posted following session	To be posted following session	To be posted following session
EE#4: VTE-1 and -2	26-Feb-19	https://attendee.gotowebinar.com/register/129573441984732417	To be posted following session	To be posted following session	To be posted following session	To be posted following session
EE#5: CAC-3 and EDHI-1a	5-Mar-19	https://attendee.gotowebinar.com/register/7092534290085603329	To be posted following session	To be posted following session	To be posted following session	To be posted following session
EE#6: PC-01 and 05	26-Mar-19	https://attendee.gotowebinar.com/register/1876921718893015041	To be posted following session	To be posted following session	To be posted following session	To be posted following session

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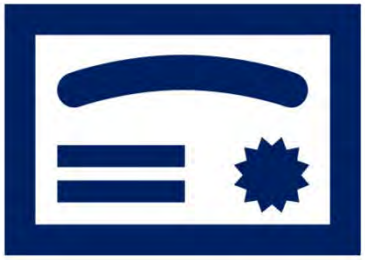

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