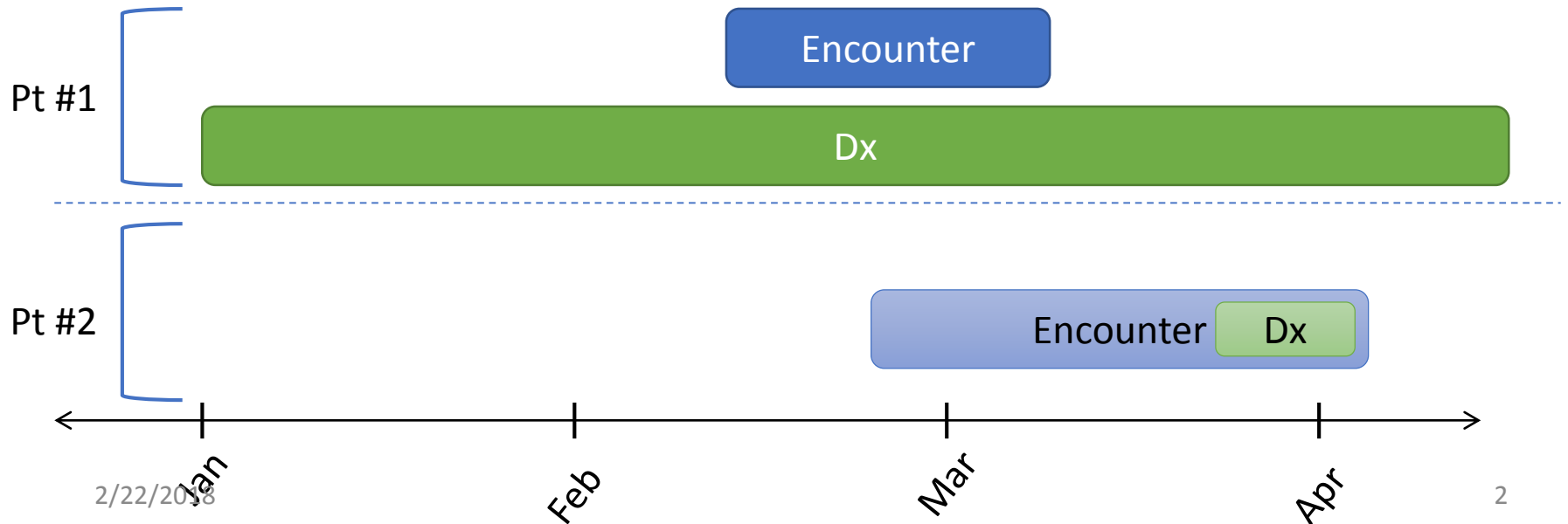


Session 22: Examples

- Encounter Diagnoses Redux
- ED/Inpatient Encounters Redux
- Immunization Status – MAT Entry

Encounter Diagnoses

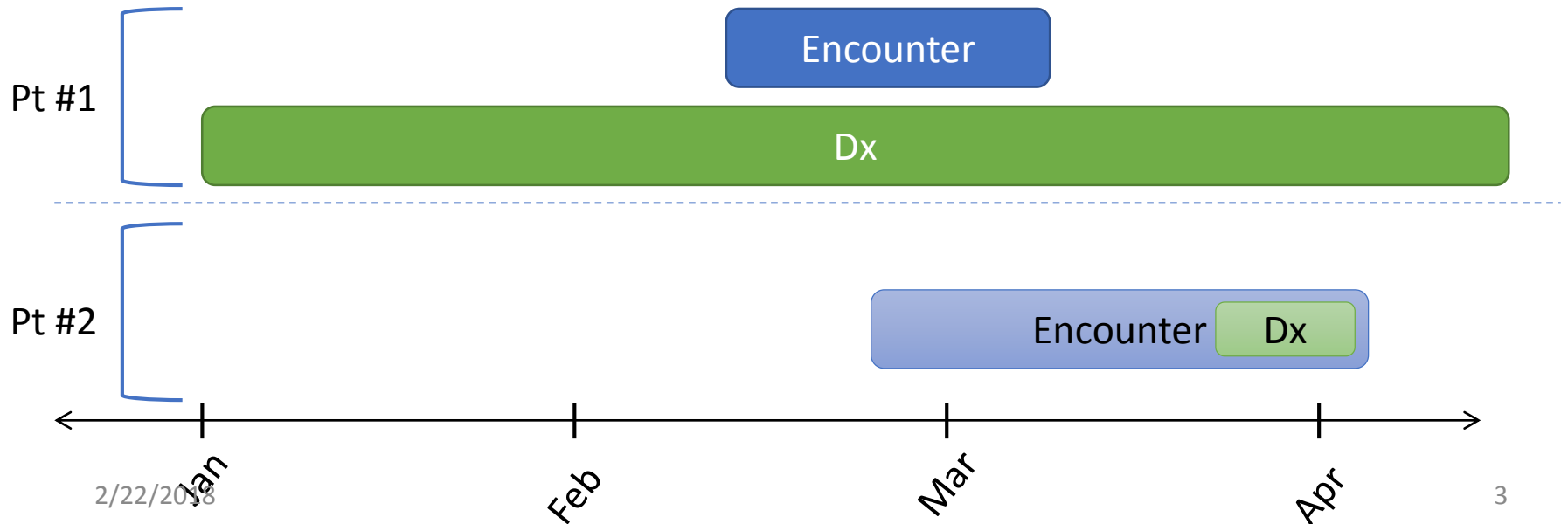
- Two possibilities for identifying Diagnoses
 - Patient 1: Has an overlapping Diagnosis element
 - Patient 2: Has the diagnosis as an attribute on the encounter



Diagnosis Data Element

```
18 define "Multiple Gestation Diagnosis":  
19   "Delivery Encounters Ages 8 Years to less than 65" DeliveryEncounters  
20   with ["Diagnosis": "Multiple Gestation"] MultGest  
21   such that MultGest.prevalencePeriod starts 42 weeks or less before or on end DeliveryEncounters.relevantPeriod
```

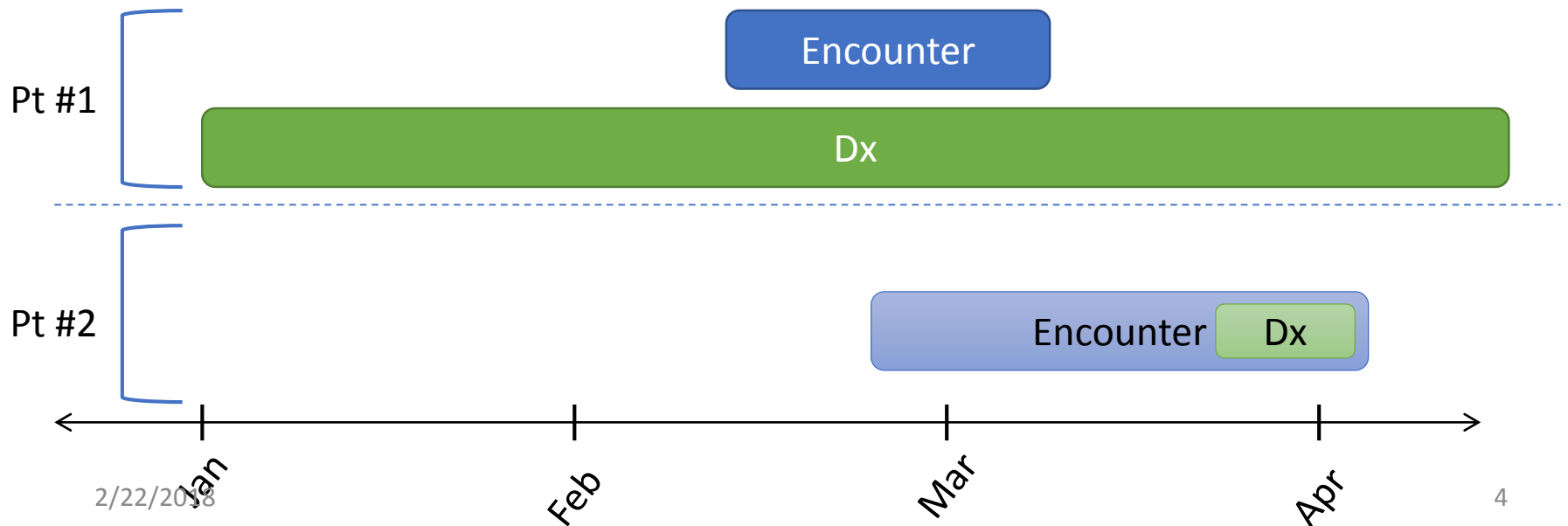
This approach captures Patient #1, but not Patient #2



Diagnoses attribute

```
26 define "Multiple Gestation Encounters":  
27   "Delivery Encounters Ages 8 Years to less than 65" DeliveryEncounters  
28   where exists ( DeliveryEncounters.diagnoses MultGest where MultGest in "Multiple Gestation" )
```

This approach captures Patient #2, but not Patient #1



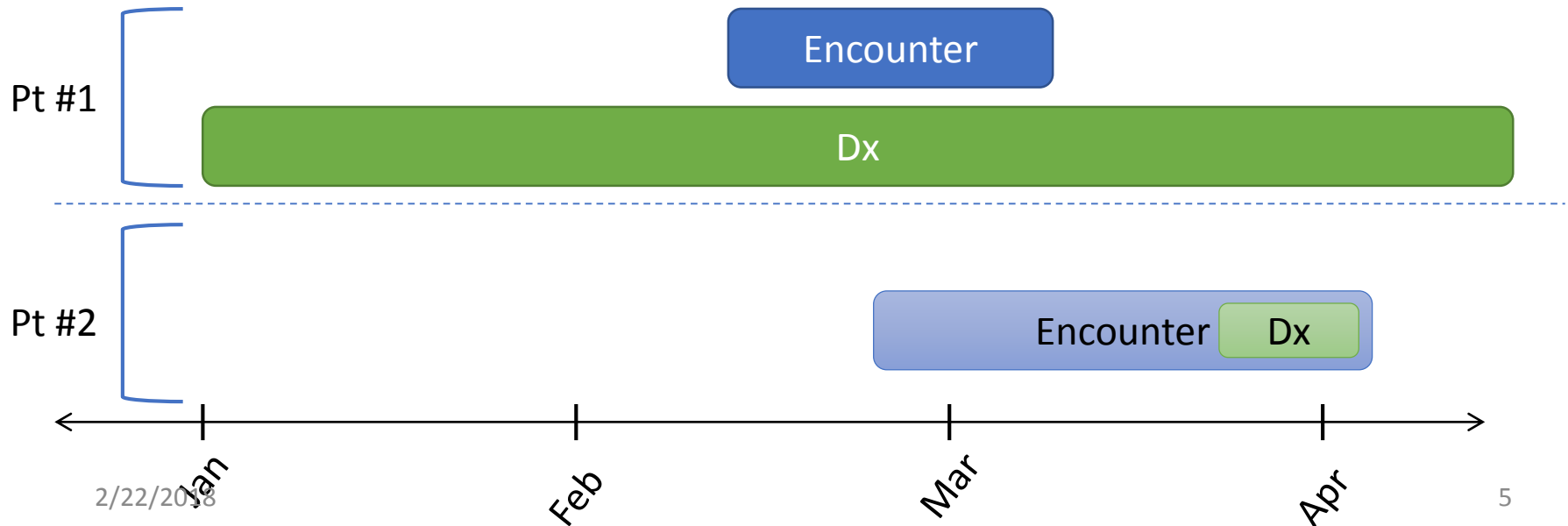
Diagnosis Element or Attribute

```

35 define "Encounters with Multiple Gestation Diagnoses":
36   "Delivery Encounters Ages 8 Years to less than 65" DeliveryEncounter
37   where exists ( ["Diagnosis": "Multiple Gestation"] MultipleGestationDiagnosis
38     where MultipleGestationDiagnosis.prevalencePeriod starts 42 weeks or less before or on end of DeliveryEncounters.relevantPeriod
39   )
40   or exists ( DeliveryEncounter.diagnoses EncounterDiagnosis where EncounterDiagnosis in "Multiple Gestation" )

```

Could “union” both definitions, or we could write a single definition like this that combines the criteria in the where clause



ED/Inpatient Encounters

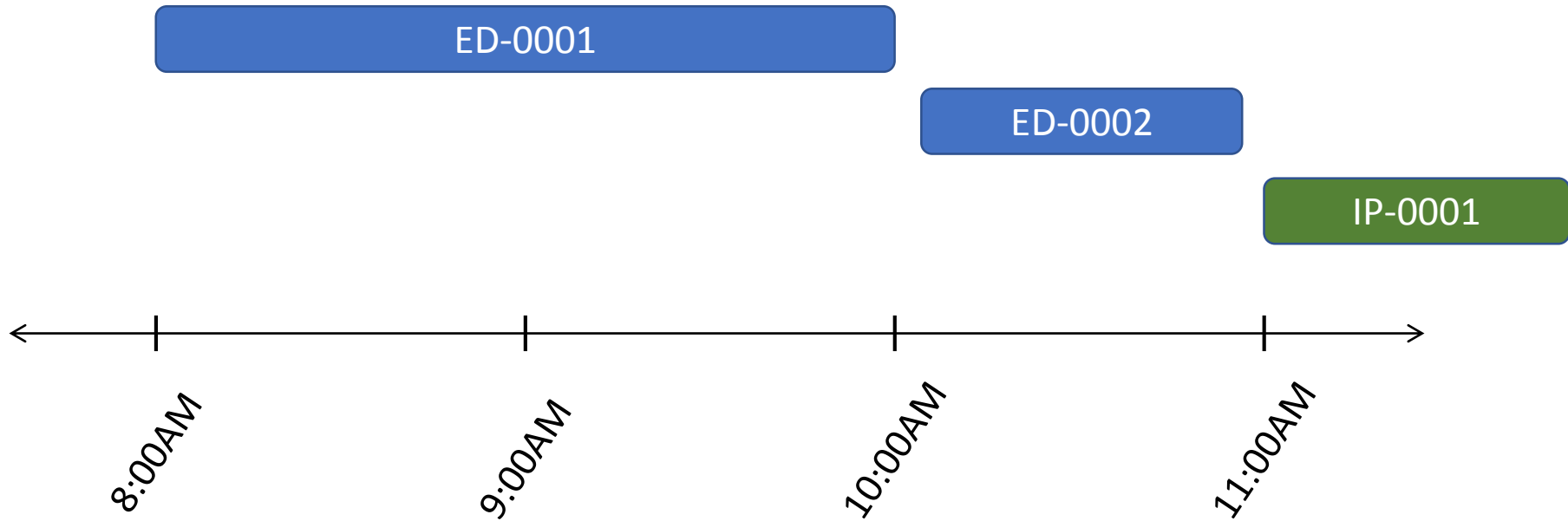
- How do we identify the ED Encounter associated with an inpatient encounter?
 - Current approach is typically the ED Visit that ends one hour or less on or before the start of the inpatient encounter
- Assumes there is only one, what do we do if there are multiple?
 - Different measures are currently using different approaches

Running Example

ED-0001 – ED Visit, 8:00AM-10:00AM

ED-0002 – ED Visit, 10:15AM-10:56AM

IP-0001 – Inpatient, 11:00AM...

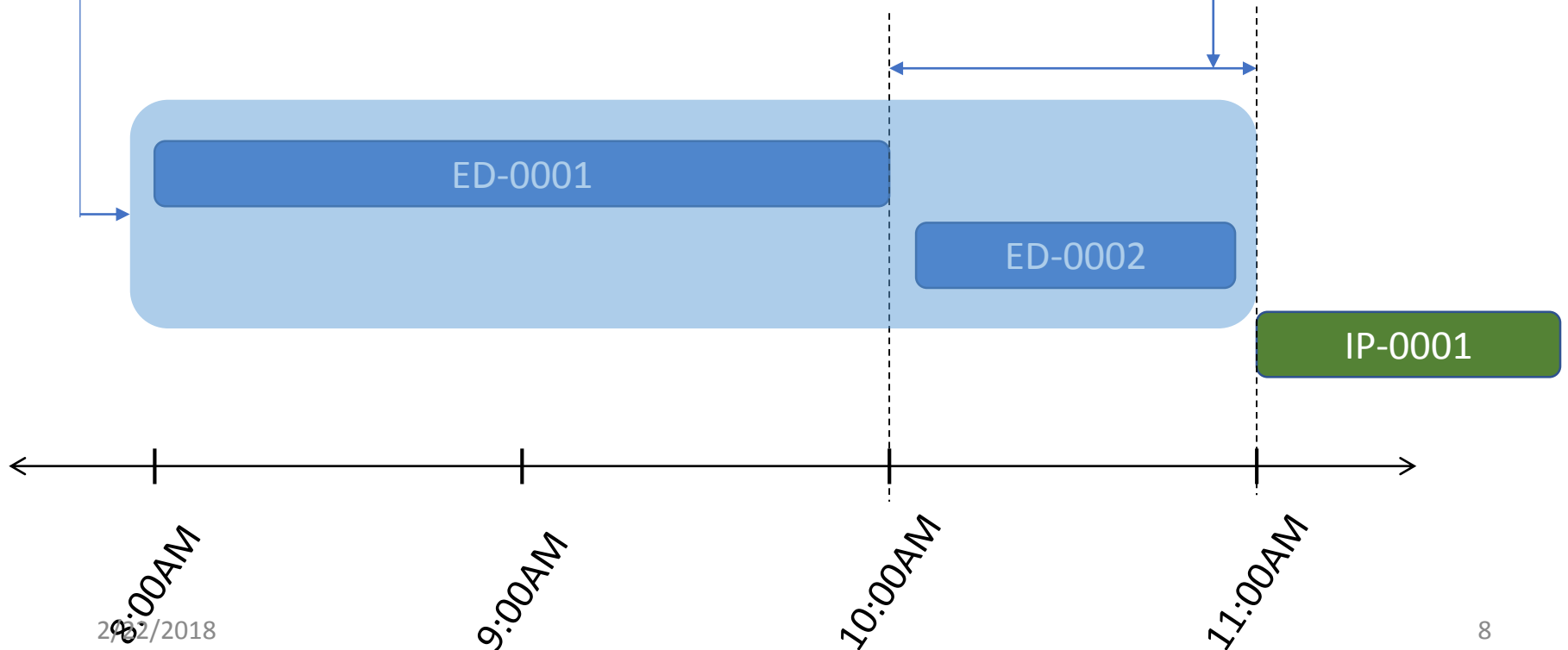


Hospitalization Function

```

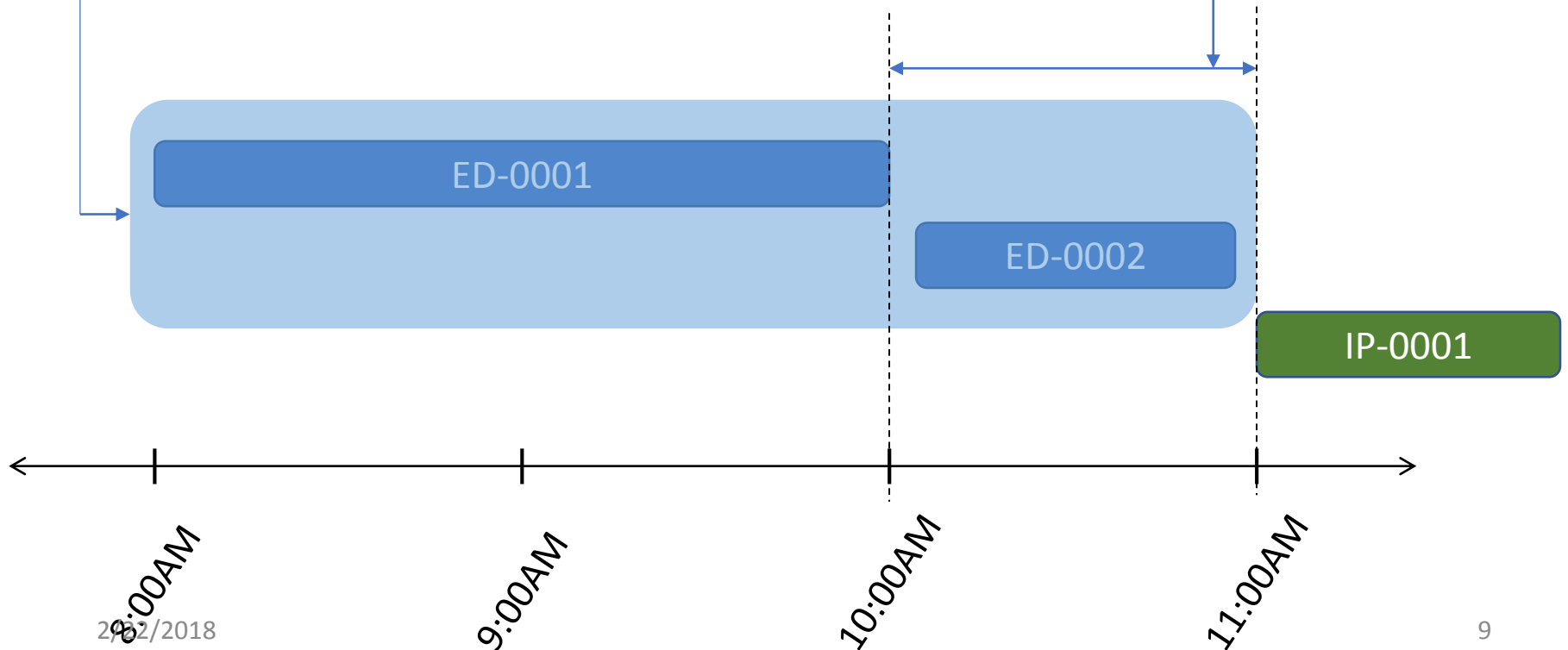
35 define function "Hospitalization"(Encounter "Encounter, Performed"):
36     singleton from ( ["Encounter, Performed": "Emergency Department Visit"] EDVisit
37         where EDVisit.relevantPeriod ends 1 hour or less on or before start of Encounter.relevantPeriod
38     ) ) X
39     return if X is null then
40         Encounter.relevantPeriod
41     else
42         Interval[start of X.relevantPeriod, end of Encounter.relevantPeriod]

```



Related ED Visit (uses Last)

```
47 define function "Related ED Visit"(Encounter "Encounter, Performed"):  
48   Last(  
49     ["Encounter, Performed":"Emergency Department Visit"] EDVisit  
50     where EDVisit.relevantPeriod ends 1 hour or less on or before start of Encounter.relevantPeriod  
51     sort by start of relevantPeriod  
52   )
```



Standard Pattern (uses with)

```
57 define "Qualifying Encounter":  
58   "Inpatient Encounter" Encounter  
59   with ["Encounter, Performed": "Emergency Department Visit"] EDVisit  
60   such that EDVisit.relevantPeriod ends 1 hour or less on or before start of Encounter.relevantPeriod  
...
```

