

**Stroke and Stroke Rehabilitation
Data Requirements Table for PCPI eSpecification**

MEASURE #4b - Stroke and Stroke Rehabilitation: Tissue Plasminogen Activator (t-PA) Initiated

Measure Component	QDM* Standard Category	QDM* Data Type	Standard Terminology	Constraints	Value Set Name	Value of Data Element	Data Source	Comments/Rationale
Initial Patient Population	Measure Timing	n/a	n/a	TBD by measure implementer	Measurement Start Date			
	Measure Timing	n/a	n/a	TBD by measure implementer	Measurement End Date			
	Attribute	Attribute: admission datetime	LOINC	starts before or during [Discharge Date]	Admission Date		Electronic Health Record (EHR)	This attribute is applied to value sets titled: Patient Provider Interaction
	Attribute	Attribute: arrival datetime	LOINC	n/a	Arrival Time		Electronic Health Record (EHR)	This attribute is applied to value sets titled: Patient Provider Interaction
	Attribute	Attribute: discharge datetime	LOINC	during measurement period	Discharge Date		Electronic Health Record (EHR)	This attribute is applied to value sets titled: Patient Provider Interaction
	Measure Timing	n/a	n/a	starts after the start of [Admission Date] AND ends before end of [Discharge Date]	Hospital Episode of Care for Stroke		Electronic Health Record (EHR)	
	Individual Characteristic	Patient Characteristic	LOINC	starts before start of measurement period	Birth Date		Electronic Health Record (EHR)	
	Individual Characteristic	Patient Characteristic	Calculated	starts before start of measurement period	Age	>= 18	Electronic Health Record (EHR)	Measurement start date minus Birth Date will give age value to be used for the purposes of this measure.
	Individual Characteristic	Patient Characteristic	Gender HL7 Value Set	during measurement period	Gender		Electronic Health Record (EHR)	This data element is collected for the purpose of stratifying results in an effort to highlight disparities.
	Individual Characteristic	Patient Characteristic	Race CDC Value Set	during measurement period	Race		Electronic Health Record (EHR)	This data element is collected for the purpose of stratifying results in an effort to highlight disparities.
	Individual Characteristic	Patient Characteristic	Ethnicity CDC Value Set	during measurement period	Ethnicity		Electronic Health Record (EHR)	This data element is collected for the purpose of stratifying results in an effort to highlight disparities.
	Individual Characteristic	Patient Characteristic	Primary spoken language CDC Value Set	during measurement period	Preferred Language		Electronic Health Record (EHR)	This data element is collected for the purpose of stratifying results in an effort to highlight disparities.
	Individual Characteristic	Patient Characteristic	Payer Source of Payment Typology Value Set	during measurement period	Payer		Electronic Health Record (EHR)	This data element is collected for the purpose of stratifying results in an effort to highlight disparities.
	Condition / Diagnosis / Problem	Diagnosis, Active	ICD-9-CM, ICD-10-CM, SNOMED-CT	during [Hospital Episode of Care for Stroke]	Ischemic Stroke		Electronic Health Record (EHR)	
	Encounter	Encounter, Performed	SNOMED-CT	during measurement period	Patient Provider Interaction		Electronic Health Record (EHR)	
Denominator	Equals Initial Patient Population and							
	Measure Timing	Measure Timing	LOINC	<= 120 minutes starts after start of [Attribute, Result: Illness or injury onset date and time]	Time of Arrival		Electronic Health Record (EHR)	For inclusion in denominator, 'Time of Arrival' minus 'Illness or injury onset date and time' value must be less than or equal to 120 minutes for denominator inclusion.
	Measure Timing	Measure Timing	LOINC	during [Hospital Episode of Care for Stroke]	Illness or injury onset date and time		Electronic Health Record (EHR)	This data element will capture the concept of 'Time last known well'. 'Time last known well' is the baseline status of patient before the onset of symptoms.
	Attribute	Attribute, Result	n/a	n/a	PRESENT 'X'		Electronic Health Record (EHR)	This attribute is applied to the value set titled, 'Illness or injury onset date and time'. This attribute will be a date and time -- which will be used for
	Symptom	Symptom, Active	ICD-9-CM, ICD-10-CM, SNOMED-CT	starts before start of [Medication, Administered] during [Hospital Episode of Care for Stroke]	Acute Neurologic Deficit		Electronic Health Record (EHR)	
	Diagnostic Study	Diagnostic Study, Result	LOINC	starts before start of [Medication, Administration]	Computed Tomography (CT), Head		Electronic Health Record (EHR)	
	Attribute	Attribute: Status	SNOMED-CT	n/a	Final Report		Electronic Health Record (EHR)	This attribute is applied to the value set 'Computed Tomography (CT), Head'.
	Attribute	Attribute: Result	SNOMED-CT	starts before start of [Medication, Administered] during [Hospital Episode of Care for Stroke]	No Evidence of intracranial hemorrhage		Electronic Health Record (EHR)	This attribute is applied to the value set 'Computed Tomography (CT), Head'.
Denominator Exclusions	None							
Numerator	Medication	Medication, Administered	RxNorm	<= 180 minutes starts after start of [Attribute, Result: Illness or injury onset date and time] during [Hospital Episode of Care for Stroke]	tissue plasminogen activator (t-PA)		Electronic Health Record (EHR)	
	Negation Rationale	Medication, Not Done	SNOMED-CT	during measurement period	Medical Reason		Electronic Health Record (EHR)	
	Diagnostic Study	Diagnostic Study, Performed	CPT, SNOMED-CT	starts before start of [Medication, Administration]	Computed Tomography (CT), Head		Electronic Health Record (EHR)	
	Attribute	Attribute: Status	SNOMED-CT	n/a	Final Report		Electronic Health Record (EHR)	This attribute is applied to the value set 'Computed Tomography (CT), Head'.
	Attribute	Attribute: Result	ICD-9-CM, ICD-10-CM, SNOMED-CT	n/a	Intracranial Hemorrhage		Electronic Health Record (EHR)	This attribute is applied to the value set 'Computed Tomography (CT), Head'.
	Attribute	Attribute: Result	ICD-9-CM, ICD-10-CM, SNOMED-CT	n/a	Subarachnoid Hemorrhage		Electronic Health Record (EHR)	This attribute is applied to the value set 'Computed Tomography (CT), Head'.
	Attribute	Attribute: Result	SNOMED-CT	n/a	Signs of Major Infarct		Electronic Health Record (EHR)	This attribute is applied to the value set 'Computed Tomography (CT), Head'.
	Condition / Diagnosis / Problem	Diagnosis, Active	ICD-9-CM, ICD-10-CM, SNOMED-CT	starts before start of [Hospital Episode of Care for Stroke]	t-PA given at transferring facility		Electronic Health Record (EHR)	administration of t-PA in different facility in past 24 hours (V45.88)
	Condition / Diagnosis / Problem	Diagnosis, Inactive	ICD-9-CM, ICD-10-CM, SNOMED-CT	starts before or during measurement period	Intracranial Hemorrhage		Electronic Health Record (EHR)	
	Condition / Diagnosis / Problem	Diagnosis, Inactive	ICD-9-CM, ICD-10-CM, SNOMED-CT	starts before or during measurement period	Brain Aneurysm		Electronic Health Record (EHR)	
	Condition / Diagnosis / Problem	Diagnosis, Inactive	ICD-9-CM, ICD-10-CM, SNOMED-CT	starts before or during measurement period	Vascular Malformation		Electronic Health Record (EHR)	
	Condition / Diagnosis / Problem	Diagnosis, Inactive	ICD-9-CM, ICD-10-CM, SNOMED-CT	starts before or during measurement period	Brain Tumor		Electronic Health Record (EHR)	
	Condition / Diagnosis / Problem	Diagnosis, Active	ICD-9-CM, ICD-10-CM, SNOMED-CT	<= 22 days starts before start of [Hospital Episode of Care for Stroke]	Internal Bleeding		Electronic Health Record (EHR)	
	Physical Exam	Physical Exam, Finding	ICD-9-CM, ICD-10-CM, SNOMED-CT	during [Hospital Episode of Care for Stroke]	No IV Access		Electronic Health Record (EHR)	
	Laboratory Test	Laboratory Test, Result	LOINC	during [Hospital Episode of Care for Stroke]	Partial Thromboplastin Time	> 40 seconds	Electronic Health Record (EHR)	
	Laboratory Test	Laboratory Test, Result	LOINC	during [Hospital Episode of Care for Stroke]	Prothrombin Time	> 15	Electronic Health Record (EHR)	
	Laboratory Test	Laboratory Test, Result	LOINC	during [Hospital Episode of Care for Stroke]	INR	> 1.7	Electronic Health Record (EHR)	
	Laboratory Test	Laboratory Test, Result	LOINC	during [Hospital Episode of Care for Stroke]	Platelet Count	< 100,000	Electronic Health Record (EHR)	
	Laboratory Test	Laboratory Test, Result	LOINC	during [Hospital Episode of Care for Stroke]	Fasting Blood Glucose Test	< 50 mg/dL	Electronic Health Record (EHR)	

*The Quality Data Model (QDM), Version 2.1, was developed by National Quality Forum (NQF).

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MEASURE #4b - Stroke and Stroke Rehabilitation: Tissue Plasminogen Activator (t-PA) Initiated

Measure Component	QDM* Standard Category	QDM* Data Type	Standard Terminology	Constraints	Value Set Name	Value of Data Element	Data Source	Comments/Rationale
Denominator Exceptions	Laboratory Test	Laboratory Test, Result	LOINC	during [Hospital Episode of Care for Stroke]	Fasting Blood Glucose Test	> 400 mg/dL	Electronic Health Record (EHR)	
	Procedure	Procedure, Performed	CPT, SNOMED-CT	<= 90 days starts before start of [Hospital Episode of Care]	Intracranial or Spinal Surgery		Electronic Health Record (EHR)	
	Procedure	Procedure, Performed	CPT, SNOMED-CT	<= 90 days starts before start of [Hospital Episode of Care]	Head Trauma		Electronic Health Record (EHR)	
	Procedure	Procedure, Performed	CPT, SNOMED-CT	<= 90 days starts before start of [Hospital Episode of Care]	Ischemic Stroke		Electronic Health Record (EHR)	
	Physical Exam	Physical Exam, Finding	LOINC	during [Hospital Episode of Care for Stroke]	Systolic Blood Pressure	> 185 mmHg	Electronic Health Record (EHR)	
	Physical Exam	Physical Exam, Finding	LOINC	during [Hospital Episode of Care for Stroke]	Diastolic Blood Pressure	> 110 mmHg	Electronic Health Record (EHR)	
	Condition / Diagnosis / Problem	Diagnosis, Active	ICD-9-CM, ICD-10-CM, SNOMED-CT	starts before or during [Hospital Episode of Care]	Acute Pericarditis		Electronic Health Record (EHR)	
	Condition / Diagnosis / Problem	Diagnosis, Active	ICD-9-CM, ICD-10-CM, SNOMED-CT	during measurement period	Pregnancy		Electronic Health Record (EHR)	
	Individual Characteristic	Patient Characteristic	LOINC	starts before start of measurement period	Birth Date		Electronic Health Record (EHR)	
	Individual Characteristic	Patient Characteristic	Calculated	starts before start of measurement period	Age	>80	Electronic Health Record (EHR)	Measurement start date minus Date of Birth will give age value to be used for the purposes of this measure.
	Condition / Diagnosis / Problem	Diagnosis, Active	ICD-9-CM, ICD-10-CM, SNOMED-CT	starts before or during [Hospital Episode of Care]	Diabetic Hemorrhagic Retinopathy & Ophthalmic Bleeding		Electronic Health Record (EHR)	
	Medication	Medication, Active	RxNorm	starts before or during [Hospital Episode of Care]	warfarin		Electronic Health Record (EHR)	
	Medication	Medication, Active	RxNorm	starts before or during [Hospital Episode of Care]	other anticoagulant		Electronic Health Record (EHR)	
	Condition / Diagnosis / Problem	Diagnosis, Active	ICD-9-CM, ICD-10-CM, SNOMED-CT	starts before or during [Hospital Episode of Care]	Subacute Bacterial Endocarditis		Electronic Health Record (EHR)	
	Condition / Diagnosis / Problem	Diagnosis, Active	SNOMED-CT	during measurement period	Limited Life Expectancy		Electronic Health Record (EHR)	
	Risk Category / Assessment	Risk Category / Assessment	LOINC	during [Hospital Episode of Care for Stroke]	National Institute of Health Stroke Scale		Electronic Health Record (EHR)	This assessment will return a numeric attribute result (0 to 42).
	Attribute	Attribute: Result	n/a	n/a	n/a	> 22	Electronic Health Record (EHR)	
	Attribute	Attribute: Result	n/a	n/a	n/a	< 4	Electronic Health Record (EHR)	
	Medication	Medication, Allergy	RxNorm	starts before or during [Hospital Episode of Care]	tissue plasminogen activator (t-PA)		Electronic Health Record (EHR)	This code list references the medications to which the allergy exists.
	Medication	Medication, Intolerance	RxNorm	starts before or during [Hospital Episode of Care]	tissue plasminogen activator (t-PA)		Electronic Health Record (EHR)	This code list references the medications to which the intolerance exists.
	Condition / Diagnosis / Problem	Diagnosis, Active	SNOMED-CT	starts before or during [Hospital Episode of Care]	Allergy to tissue plasminogen activator (t-PA)		Electronic Health Record (EHR)	
	Condition / Diagnosis / Problem	Diagnosis, Active	SNOMED-CT	starts before or during [Hospital Episode of Care]	Intolerance to tissue plasminogen activator (t-PA)		Electronic Health Record (EHR)	
	Negation Rationale	Medication, Not Done	SNOMED-CT	during measurement period	Patient Reason		Electronic Health Record (EHR)	