eCQM Data Element Repository

May 2025

Objectives

- Learn how the Electronic Clinical Quality Measure (eCQM) Data Element Repository helps with eCQM data mapping activities.

- Learn how a health care organization uses the Data Element Repository to understand eCQM requirements.

- Describe resources available to learn more about CMS programs that use eCQMs.

eCQM Strategy Project Background

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eCQM Strategy Project Goals

- Reduce Burden
- Increase Value
- Increase Stakeholder Involvement

Problem Statement

- Providers participating in CMS quality and value-based purchasing programs have shared challenges they experience related to the **complexity and high burden of eCQM implementation, data capture, and reporting**.

Project Scope

- **Measure Development** process from concept to the Measures Under Consideration (MUC) list
- **Electronic Clinical Quality Reporting** requirements and processes from eCQM implementation to submission
- **Tools for Development and Reporting**

eCQM Strategy Recommendations
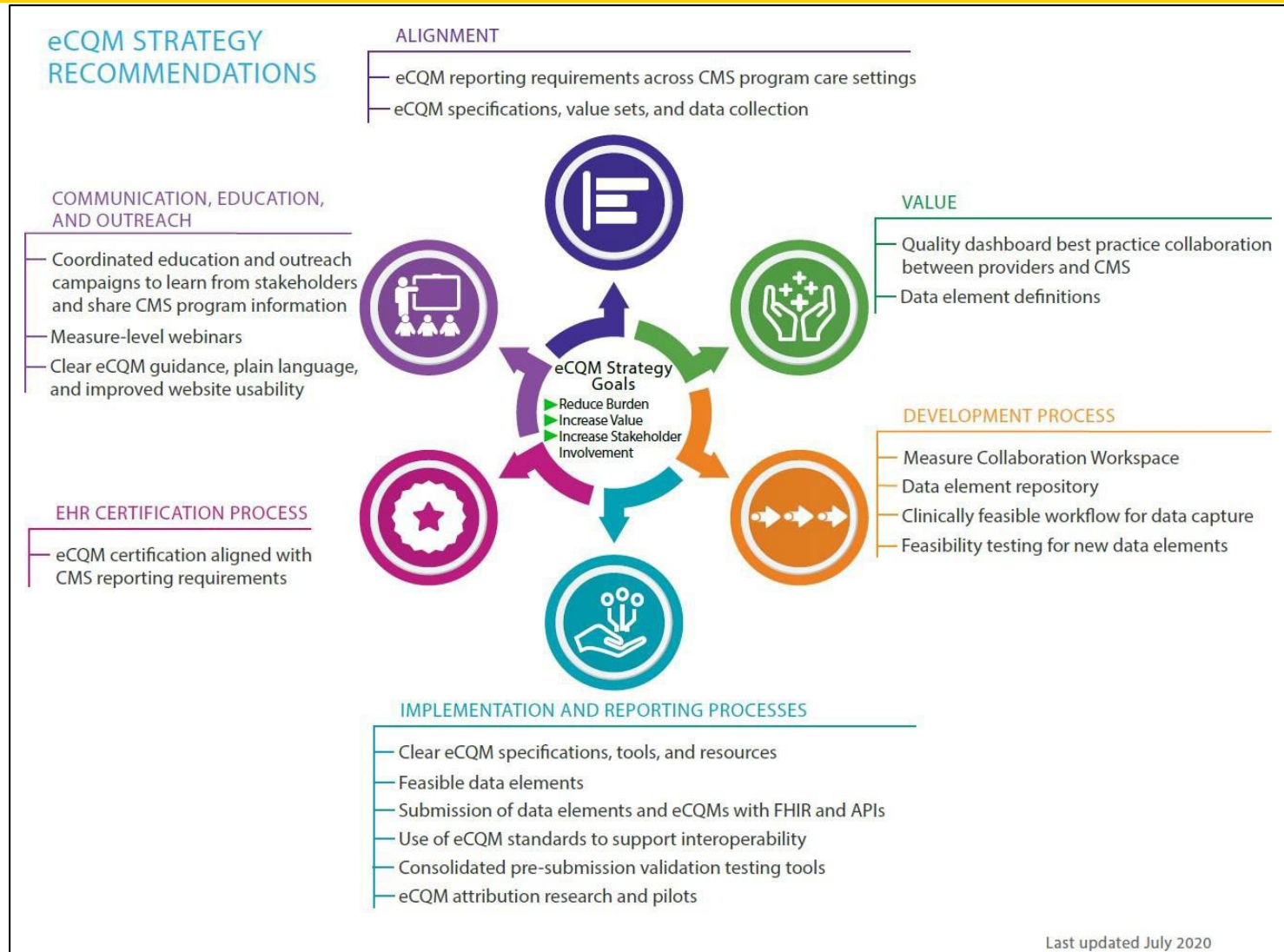
Measure Collaboration Workspace

Measure Collaboration (MC) Workspace

- Hosted on the eCQI Resource Center (https://ecqi.healthit.gov/mc-workspace-2)
- Contains a set of interconnected resources, tools, and processes for eCQMs
- Promotes transparency and better interaction across stakeholder communities interested in developing and implementing more harmonized, accurate, and meaningful eCQMs
- Provides access to the eCQM Data Element Repository, an online, searchable tool that provides all the data elements associated with eCQMs used in CMS Quality Reporting Programs

How to Access the MC Workspace

Overview of the MC Workspace

Suggest new eCQM concepts
Offer comments on suggested eCQM concepts
Check the CMS Measures Inventory for similar measures

eCQM CONCEPTS

Measure Collaboration Workspace

eCQM DATA ELEMENT REPOSITORY

eCQM TESTING OPPORTUNITIES

Find eCQM data elements
Associate eCQM data elements with eCQMs
Find links to value sets and direct reference codes

Announce opportunities to test eCQMs
Find opportunities to volunteer to test eCQMs

https://ecqi.healthit.gov/mc-workspace-2

eCQM Data Element Repository

eCQM Data Element Repository Example Search

https://ecqi.healthit.gov/mc-workspace-2/data-element-repository

- Navigate to the eCQM Data Element Repository landing page and available filters

- Filter for 2024 EH/CAH eCQMs*

- Select CMS71v13 and highlight information available on measure pages with expand and collapse features to display data elements

- Identify value sets and direct reference codes in VSAC

- Identify eCQI Resource Center measure pages

- From Data Element Repository landing page, demonstrate information available on QDM filters

*EH/CAH = Eligible Hospital/Critical Access Hospital

Anticoagulation Therapy for Atrial Fibrillation/Flutter (STK-3)
CMS Measure ID: CMS71v13

2024 » Anticoagulation Therapy for Atrial Fibrillation/Flutter

DERep Home Page

Anticoagulation Therapy for Atrial Fibrillation/Flutter (STK-3)

CMS Measure ID: CMS71v13   **Performance/Reporting Period:** 2024   **NQF Number:** Not Applicable

Description:
Ischemic stroke patients with atrial fibrillation/flutter who are prescribed or continuing to take anticoagulation therapy at hospital discharge

Data Elements and coded QDM Attributes contained within the eCQM

+ Expand all

["Assessment, Performed": "History of Atrial Ablation"]   ^

["Diagnoses": "Atrial Fibrillation Or Flutter"]   ^

["Diagnoses": "Hemorrhagic Stroke"]   ^

["Diagnoses": "Ischemic Stroke"] (2.16.840.1.113883.3.117.1.7.1.247)   ^

https://ecqi.healthit.gov/measure-data-elements/179371

Anticoagulation Therapy for Atrial Fibrillation/Flutter (STK-3)
CMS Measure ID: CMS71v13 (Cont'd)

["Assessment, Performed": "History of Atrial Ablation"]

View   Edit   Revisions   Clone

eCQM Data Element

Performance/Reporting Period: 2024
Value Set Description from VSAC

CLINICAL FOCUS: The purpose of this value set is to represent concepts for a situation of a personal history of an atrial ablation.

DATA ELEMENT SCOPE: This value set may use a model element related to a diagnosis or assessment.

INCLUSION CRITERIA: Includes concepts that identify a situation for a personal history of an atrial ablation.

EXCLUSION CRITERIA: No Exclusions.

Constrained to codes in the History of Atrial Ablation value set (2.16.840.1.113762.1.4.1110.76)

QDM Datatype and Definition

"Assessment, Performed"

Data elements that meet criteria using this datatype should document completion of the assessment indicated by the QDM category and its corresponding value set.

Timing:

- *relevant dateTime* references timing for an assessment that occurs at a single point in time.
- *relevant Period* references a start and stop time for an assessment that occurs over a time interval
- *author dateTime* references the time the action was recorded.
- Refer to the eCQM expression to determine allowable timings to meet measure criterion.

May 2025

https://ecqi.healthit.gov/mcw/2024/ecqm-dataelement/assessmentperformedhistoryofatrialablation.html

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Health System Experience Using the eCQM Data Element Repository

Data Element Repository
Implementer Experience

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AllianceChicago
Innovating for better health

AllianceChicago – Who We Are

Our Mission

To improve personal, community and public health through innovative collaboration.

AllianceChicago's efforts are focused in three core areas:

Health Care Collaboration

Health Information Technology

Health Research + Education
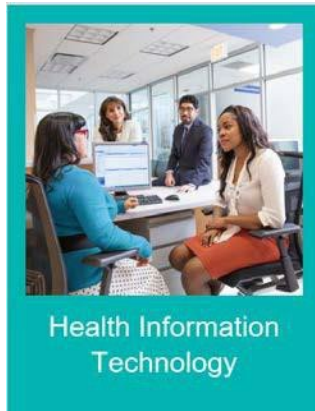
User Community
60 community health centers
from 18 states

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AllianceChicago now has initiatives that span 18
States and engage more than:

- 60 Safety-net Health Centers
- >3,200,000 patients
- >20 Funders
- >20 Research Affiliations

AllianceChicago Data Warehouse Overview
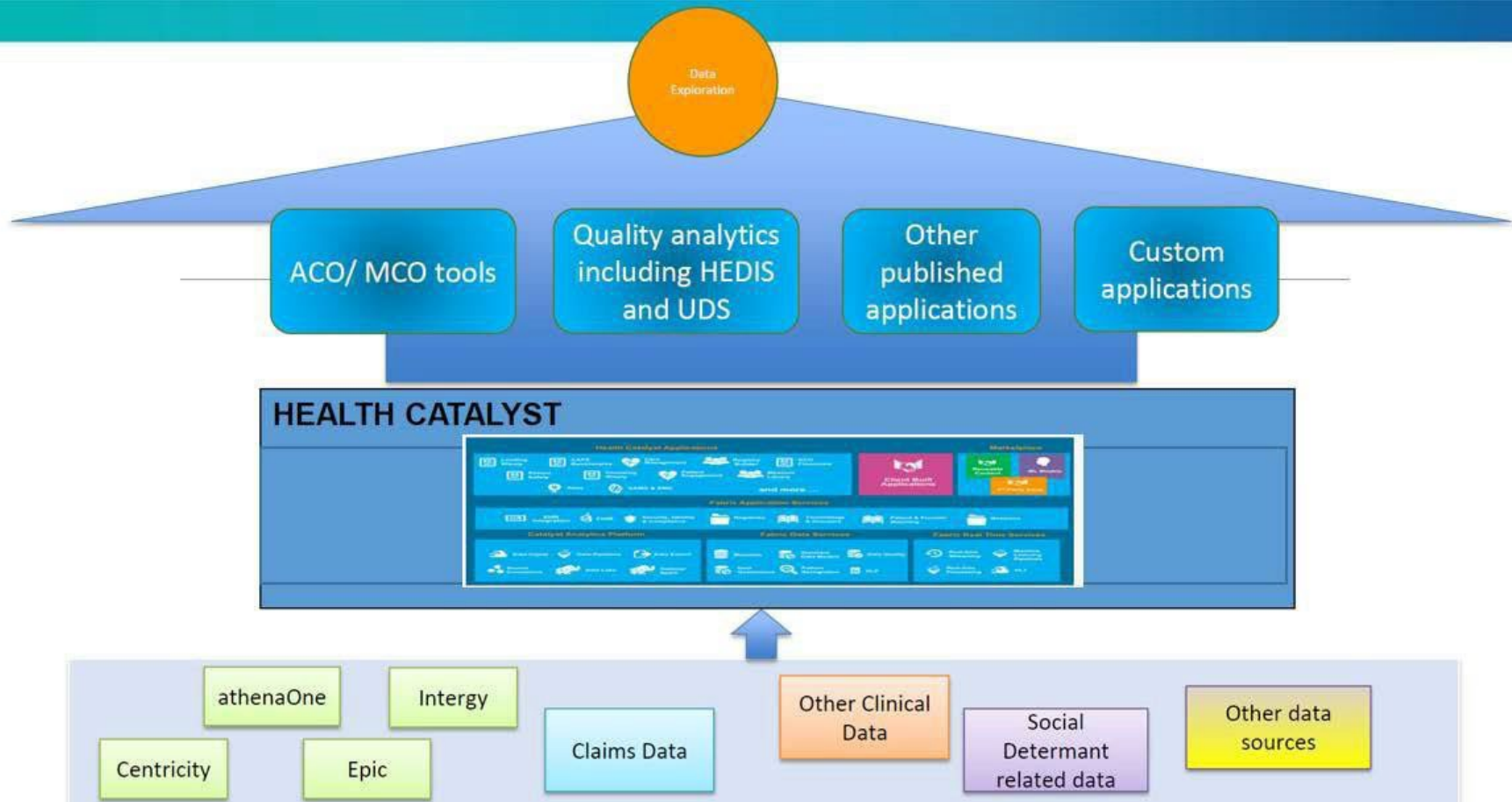
Prior Experience

- Universal HIV Screening Measure (CDC)

- Hepatitis C Screening (CDC)

- Contraceptive Measure (OPA)

- Heart Failure Measure Stratified by Race (NMQF)

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Overview of Measure Implementation
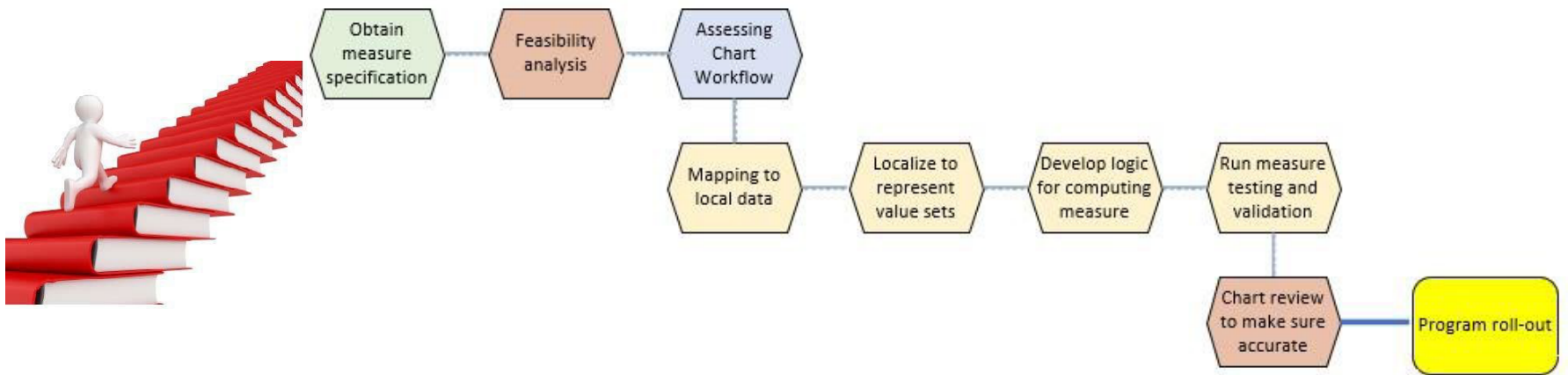
CMS347v3: Statin Therapy for the Prevention and Treatment of Cardiovascular Disease

Our process of building the eCQM for Statin Therapy.

How we implement the measure within organizations and measure testing.

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Measure Description

- Percentage of the following patients - all considered at high risk of cardiovascular events - who were prescribed or were on statin therapy during the measurement period:

- *Adults aged >= 21 years who were previously diagnosed with or currently have an active diagnosis of clinical atherosclerotic cardiovascular disease (ASCVD); OR

- *Adults aged >= 21 years who have ever had a fasting or direct low-density lipoprotein cholesterol (LDL-C) level >= 190 mg/dL or were previously diagnosed with or currently have an active diagnosis of familial or pure hypercholesterolemia; OR

- *Adults aged 40-75 years with a diagnosis of diabetes with a fasting or direct LDL-C level of 70-189 mg/dL

Performance Measures:

Measure Name	Measure Definition
Statin Therapy– ASCVD Risk Group	% of ASCVD patients age 21+ years who were prescribed or were on statin therapy during the measurement period
Statin Therapy – LDL-C level >= 190 mg/dL Risk Group	% of patients age 21+ years with LDL ≥190 mg/dL who were prescribed or were on statin therapy during the measurement period
Statin Therapy – diabetes and LDL-C level 70-189 mg/dL Risk Group	% of patients age 40-75 years with diabetes and LDL-C level 70-189 mg/dL who were prescribed or were on statin therapy during the measurement period
Statin Therapy Cohort - Follow-up Visit	Number of patients at identified as high risk of cardiovascular events (all risk groups combined) who were NOT on statin therapy at baseline who return for 1 or more follow-up visits
Statin Therapy Cohort - Newly Prescribed Statin Therapy	Number of patients at identified as high risk of cardiovascular events (all risk groups combined) who were NOT prescribed or were on statin therapy at baseline who return for 1 or more follow-up visits AND who receive a subsequent prescription for statin therapy

Measure Specification

Statin Therapy for the Prevention and Treatment of Cardiovascular Disease

CMS Measure ID:
CMS347v3
Version:
3
NQF Number:
0
Performance/Reporting Period
2020
Description:
Percentage of the following patients - all considered at high risk of cardiovascular events - who were prescribed or were on statin therapy during the measurement period:

*Adults aged >= 21 years who were previously diagnosed with or currently have an active diagnosis of clinical atherosclerotic cardiovascular disease (ASCVD); OR

*Adults aged >= 21 years who have ever had a fasting or direct low-density lipoprotein cholesterol (LDL-C) level >= 190 mg/dL or were previously diagnosed with or currently have an active diagnosis of familial or pure hypercholesterolemia; OR

*Adults aged 40-75 years with a diagnosis of diabetes with a fasting or direct LDL-C level of 70-189 mg/dL

Data Elements contained within the eCQM   + Expand all

Adverse Event: Statin Allergen   ⌃

Allergy, Intolerance: Statin Allergen   ⌃

Diagnosis: Atherosclerosis and Peripheral Arterial Disease   ⌃

Diagnosis: Breastfeeding   ⌃

Diagnosis: Cerebrovascular disease, Stroke, TIA   ⌃

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Feasibility

- Feasibility scorecard (ex: HCV)

Measure Title: HCV Learning Collaborative Feasibility Scorecard

#	Value Set	Data Element Attributes	Value Set Code Type	Timeline	DATA AVAILABILITY — Is the data readily avaiable in a structured format?		DATA ACCURACY — Is the information contained in the data element correct? Are the data source and recorder specified?		DATA STANDARDS — Are the data elements coded using a national accepted terminology standard?		WORKFLOW — To what degree is the data element captured during the course of care? How does it impact the typical workflow for	
					Score	Additional Characteristics	Score	Additional Characteristics	Score	Additional Characteristics	Score	Additional Characteristics
1	1945-1965 Birth Cohort	dministrative Code	Administrative code	Current								
				Future								
2	UDS Visit	dministrative Code	ID10CM, ID9CM, SNOMEDCT, CDT, CPT, HCPCS, RXNORM	Current								
				Future								
3	HCV risk factor - Current or past injection drug use	BD	TBD	Current								
				Future								
4	HCV risk factor - History of IDU	BD	TBD	Current								
				Future								
5	HCV risk factor - History of incarceration	BD	TBD	Current								
				Future								
6	HCV Antibody	16.840.1.113762.1.4.1056.72	CPT Code?	Current								
				Future								
7	Tested for HCV RNA	16.840.1.113762.1.4.1056.73	CPT Code, LOINC	Current								
				Future								
8	HCV Diagnosis	ee my email attachment	ICD	Current								
				Future								
9	Linkage to HCV Care	BD	No available value set - will need to determine during project period - I found a ref for	Current / Future								
10	HCV Treatment Initiation	oposed med list	RxNorm Codes?	Current								
				Future								
	HCV Cure	16.840.1.113762.1.4.1056.73	LOINC	Current								

Assess Chart Workflow

Value Set Authority Center (VSAC)

Mapping to Local Data

Building Logic

Measuring Testing/Validation

Chart Review- Denominator

- Data element | Diagnosis: Cerebrovascular disease, Stroke, TIA

Value Set Description from VSAC

CLINICAL FOCUS: This value set contains concepts that represent stroke and high risk diagnoses associated with stroke, including transient ischemic attack (TIA) and generalized ischemic cerebrovascular disease, which would indicate a patient has atherosclerotic cardiovascular disease (ASCVD) in relation to a cerebrovascular event.
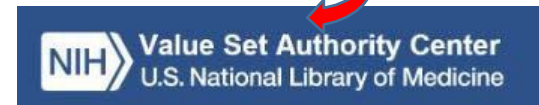
DATA ELEMENT SCOPE: This value set may use the Quality Data Model (QDM) category or attribute related to Diagnosis.

INCLUSION CRITERIA: Includes only relevant concepts associated with ASCVD diagnoses of cerebrovascular origin.

EXCLUSION CRITERIA: No exclusions.

Constrained to codes in the Diagnosis: Cerebrovascular disease, Stroke, TIA value set (2.16.840.1.113762.1.4.1047.44)

Problems				
Description	**ICD-9**	**ICD-10**	**Onset Date**	**End**
Transient ischemic attack	435.9	G45.9	03-Jan-2020	
Stroke	434.91	I63.9	10-Mar-2020	

Name:
Cerebrovascular disease, Stroke, TIA
Code System:
ICD10CM, ICD9CM, SNOMEDCT

OID:
2.16.840.1.113762.1.4.1047.44
Steward: ✉ Contact
Quality Insights of Pennsylvania

Chart Review- Numerator

- Data element | Medication, Order: Low intensity statin therapy

Value Set Description from VSAC

CLINICAL FOCUS: This value set contains concepts that represent low intensity statin medications as defined by the 2013 American College of Cardiology (ACC) and the American Heart Association (AHA) guideline.

DATA ELEMENT SCOPE: This value set may use the Quality Data Model (QDM) category related to Medication.

INCLUSION CRITERIA: Includes only relevant concepts associated with low intensity statin therapy medications.

EXCLUSION CRITERIA: Excludes any other intensity of statin therapy.

Constrained to codes in the Medication, Order: Low intensity statin therapy value set (2.16.840.1.113762.1.4.1047.107)

Aggregate Report

								Month of Measurement												
		Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20
	Statin Therapy - All Risk Groups																			
Statin Therapy for the Prevention and Treatment of Cardiovascular Disease	Number of patients in denominator who received a prescription for statin therapy on or after 6/1/2019	5554	5578	5575	5709	5916	6085	6201	6247	6355	6415	6402	6436	6511	6658	6715	6640	6504	6451	0
	Number of patients ages 21+ years with 1+ visits in the past 12 months who met the above risk group criteria	11366	11439	11472	11553	11688	11763	11863	11956	12156	12333	12401	12604	12798	12915	13005	12967	12807	12751	0
		48.9%	48.8%	48.6%	49.4%	50.6%	51.7%	52.3%	52.2%	52.3%	52.0%	51.6%	51.1%	50.9%	51.6%	51.6%	51.2%	50.8%	50.6%	#DIV/0!
	Statin Therapy - Diagnosis of ASCVD																			
	Number of patients in denominator who are actively using or who receive an order (prescription) for statin therapy at any point during the measurement period	231	239	250	263	268	275	282	281	280	291	298	324	348	353	356	357	355	366	
	Number of patients ages 21+ years with 1+ visits in the past 12 months who met the following risk group criteria: Adults age 21+ years with a diagnosis of ASCVD*	299	309	315	326	328	338	340	341	343	359	363	366	375	383	389	388	385	394	
		77.3%	77.3%	79.4%	80.7%	81.7%	81.4%	82.9%	82.4%	81.6%	81.1%	82.1%	88.5%	92.8%	92.2%	91.5%	92.0%	92.2%	92.9%	#DIV/0!
	Statin Therapy - LDL ≥190 mg/DL																			
	Number of patients in denominator who are actively																			

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Program and Roll-Out

- Clinical committee buy-in

- Training on workflow

- Consideration of unintended consequences

- Wraparound support

Engage and Get Help

- eCQI Resource Center and Contact Email
  - https://ecqi.healthit.gov
  - ecqi-resource-center@hhs.gov
- Share feedback on the Measure Collaboration Workspace
  - https://ecqi.healthit.gov/contact
- Explore the CMS Measures Inventory Tool
  - https://cmit.cms.gov/cmit/#/
- Engage with the eCQI community
  - https://ecqi.healthit.gov/engage-ecqi
- Learn about eCQM communication resources
  - https://ecqi.healthit.gov/sites/default/files/eCQMCommunicationResources.pdf

Additional Resources and Contact Information

- ONC Project Issue Tracking System (Jira)
  - https://oncprojectracking.healthit.gov
- eCQI Community Engagement Opportunities
  - https://ecqi.healthit.gov/engage-ecqi