

#### eCQM Data Element Repository

## **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

## eCQM Strategy Project Background

#### **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

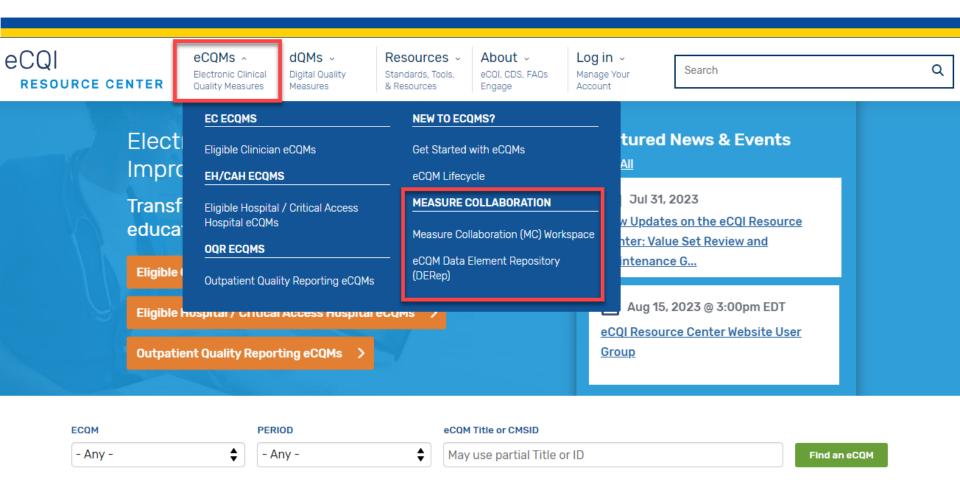


## **Measure Collaboration Workspace**

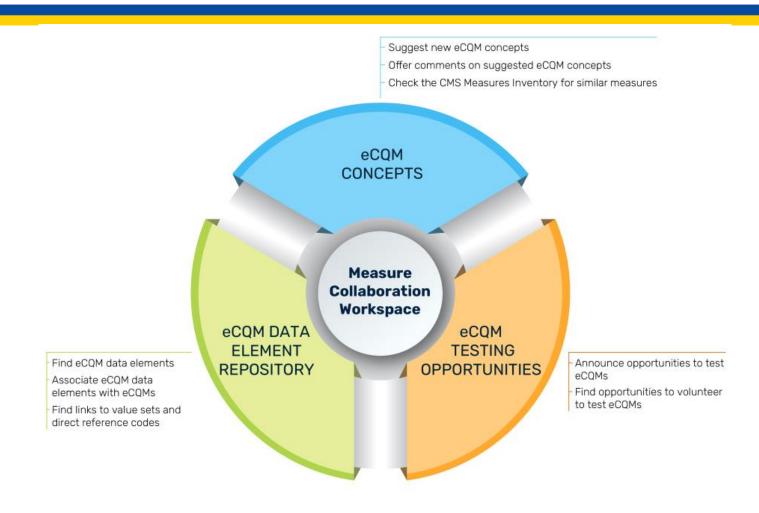
# Measure Collaboration (MC) Workspace

- Hosted on the eCQI Resource Center (<u>https://ecqi.healthit.gov/mc-workspace-2</u>)
- 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



## 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

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

CMS Measure ID: CMS71v13

2024 » Anticoagulation Therapy for Atrial Fibrillation/Flutter

**DERep Home Page** 

#### <u>Anticoagulation Therapy for Atrial</u> <u>Fibrillation/Flutter (STK-3)</u>

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

["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

+ Expand all

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

CMS Measure ID: CMS71v13 (Cont'd)

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



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.

October 2023

https://ecqi.healthit.gov/mcw/202 4/ecqmdataelement/assessmentperfor medhistoryofatrialablation.html<sub>13</sub> Andrew Hamilton, MS, BSN, RN MS Chief Informatics Officer, AllianceChicago

Eduardo Segovia, BS, Manager, Data Warehouse Business Analyst, AllianceChicago

Tina Aggarwal, MS, BSN, RN, Clinical Informaticist, AllianceChicago

#### Health System Experience Using the eCQM Data Element Repository

#### **Data Element Repository**

Implementer Experience

Andrew Hamilton, RN, BSN, MS Chief Informatics Officer Eduardo Segovia, BS Manager, Data Warehouse Business Analyst Tina Aggarwal, MS, BSN, RN Clinical Informaticist



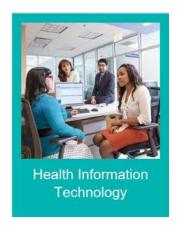
## AllianceChicago – Who We Are

#### Our Mission

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

AllianceChicago's efforts are focused in three core areas:







User Community
60 community health centers
from 18 states





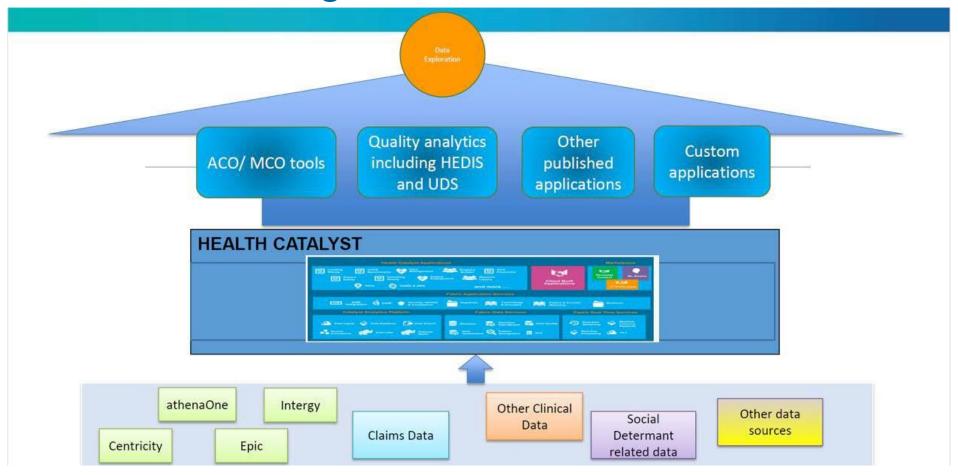


AllianceChicago now has initiatives that span 18 States and engage more than:

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



#### AllianceChicago Data Warehouse Overview



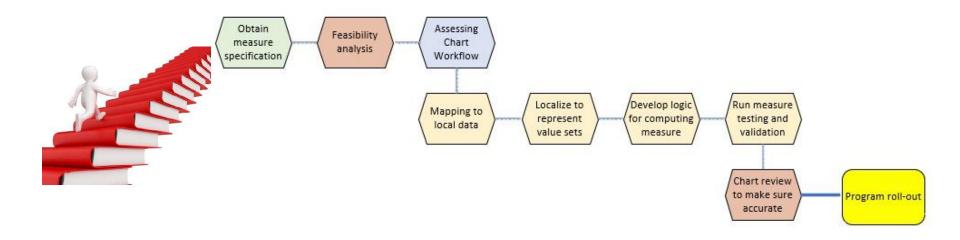


## Prior Experience

- Universal HIV Screening Measure (CDC)
- Hepatitis C Screening (CDC)
- Contraceptive Measure (OPA)
- Heart Failure Measure Stratified by Race (NMQF)



#### 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.



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



## Measure Specification

#### <u>Statin Therapy for the Prevention and Treatment of</u> Cardiovascular Disease

#### CMS Measure ID:

CMS347v3

**NQF Number:** 

Version:

3

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	^
<u>Diagnosis: Breastfeeding</u>	^
Diagnosis: Cerebrovascular disease, Stroke, TIA	^



## Feasibility

Feasibility scorecard (ex: HCV)

					DATA AVAILABILITY		DATA ACCURACY	DATA STANDARDS e Are the data elements coded using a national accepted terminology standard?			WORKFLOW		
Value Set	Data Element Attributes	Value Set Code Type	Timeline		red format?	data el					at degree is the data ent captured during the e of care? How does it t the typical workflow fo		
				Score	Additional Characteristics	Score	Additional Characteristics	Score	Additional Characteristics	Score	Additional Characterist		
1945-1965 Birth Cohort	dministrative Code	Administrative code	Current										
			Future										
UDS Visit	lministrative Code	ID10CM, ID9CM, SNOMEDCT,	Current										
		CDT, CPT, HCPCS, RXNORM	Future										
	3D	TBD	Current										
injection drug use			Future										
HCV risk factor - History of IDU	BD	TBD	Current										
			Future										
HCV risk factor - History of	AD	TBD	Current										
incarceration			Future										
HCV Antibody	16.840.1.113762.1.4.1056.72	CPT Code?	Current										
			Future										
Tested for HCV RNA	16.840.1.113762.1.4.1056.73	CPT Code, LOINC	Current										
			Future										
HCV Diagnosis	e my email attachment	ICD	Current										
			Future										
Linkage to HCV Care	D	No available value set - will need to determine during	Current										
		project period - I found a ref for	Future										
HCV Treatment Initiation		RxNorm Codes?	Current										
	oposed med list		Future										
HCV Cure	16.840.1.113762.1.4.1056.73	LOINC	Current										



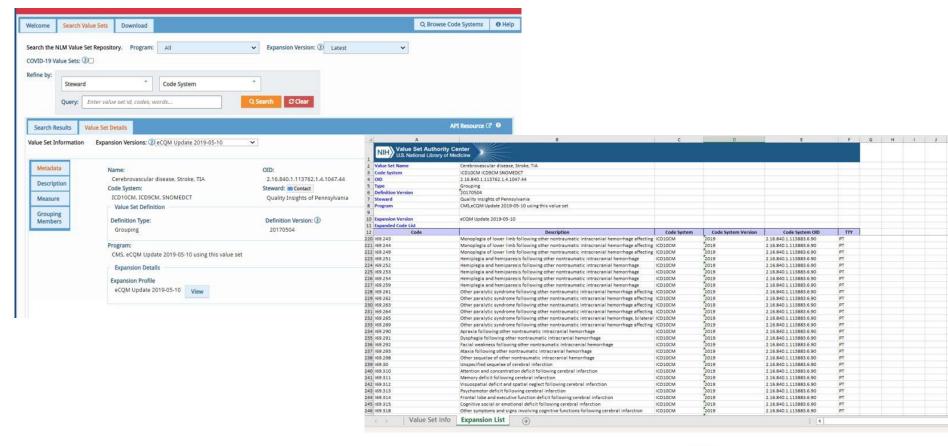
#### **Assess Chart Workflow**







## Value Set Authority Center (VSAC)



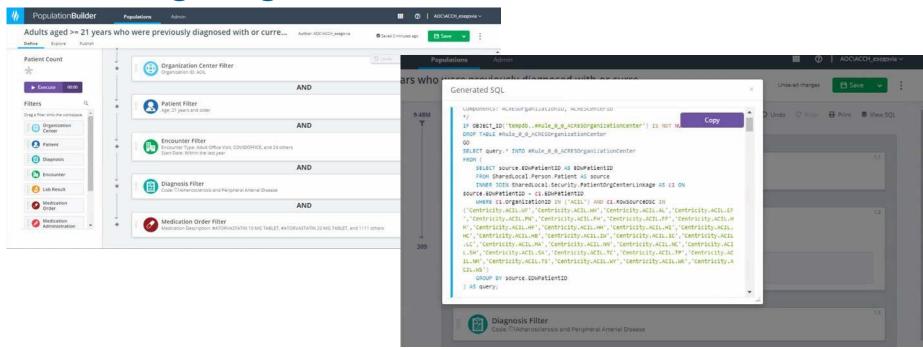


## Mapping to Local Data

0	∎ Copy マ ≸ Format Painter pboard	B $I \cup \neg \mid \Box \neg \mid A \neg A \neg B \mid \Box \Box$	~ % <b>9</b>	Conditional Format as Cell Formatting ~ Table ~ Styles ~	cells	rmat 👉 Clea	Sort ar ~ Filter Editing	& Find &  Select >		Sensitivity
	- 1	X								
		¢	0			٥		1	j.	ĸ
port	variables									
V	Variable name	Variable description	Data type	Date specification	Centricity table		Centricity value	HDID for OBS	Data value	Questions/co
Pi	atientID		Numeric			PatientID				
н	lealthCenterID				PatientProfil e	HealthCenteriD				
Ra	ace	6 Main Categories								
Et	thnicity	Hispanic/Latino, Not HHispanic/Latino								
Se	ex	Male, Female, Unknown								
	nsurance tatus	Insured, Uninsured. Patient's Primary Insurance							Selfpay OR Unknown = Uninsured. Else insured	
A	ge			as of 1/31/2019						
T		Ages 21-24								
	1	Ages 25-34	1							
		Ages 35-44				4	4	9		
A	ge Category	Ages 45-54		as of 1/31/2019						
		Ages 55-64		The state of the s						
	j	Ages 65-74	]							
		Ages 75+								
La	anguage	Best Served in a Language Other Than English. UDS Definition	Y/N							
							LDL	30		
		Recorded as the highest fasting or direct laboratory test result in the measurement year or during	1				LDL DIR	21893		4
LDL Name		Recorded as the <b>nignest</b> tasting or direct laboratory test result in the measurement year or during the two years prior to the beginning of the measurement period		Highest value between 2/1/2016-1/31/2019	Obs	ObsName	LDL (CALCUL)	3891		
- 1							LDL	30		4



## **Building Logic**





## Measuring Testing/Validation

PID	ETHNICITY Sex	Age AgeCategory	ASCVDCode -1	ASCVDOnsetDate	LDLEver	LDL3YR	LDLMostRecent Statin	DiabetesCode	DiabetesOr	Hyperchole Hypercholesterolen	RiskGroup1_NUM	RiskGroup1	RiskG
635956517966	Not Hispan F	28 Ages 25-34	G45.8	1/5/2015 0:00	86		86				N	Y	N
735050337882	Hispanic or M	40 Ages 35-44	G45.9	2/21/2017 0:00	179	179	179 ATORVASTATIN CALCIUM 40 MG ORAL	TABLET			Υ	Y	N
738215666104	Hispanic or F	62 Ages 55-64	G45.9	9/11/2014 0:00	119	110	110 ATORVASTATIN CALCIUM 40 MG ORAL	TABLET			Υ	Υ	N
742580478318	Not Hispan M	63 Ages 55-64	G45.9	9/12/2019 0:00	186	186	186 LIPITOR 20 MG ORAL TABLET				Y	Y	N
743742622252	Unspecified F	46 Ages 45-54	G45.9	5/15/2019 0:00			LIPITOR 40 MG ORAL TABLET	E11.9	********		Y	Y	N
628927487384	Not Hispan F	37 Ages 35-44	G45.9	6/28/2019 0:00	114	103	103 ATORVASTATIN CALCIUM 20 MG ORAL	TABLET			Y	Y	N
629122868976	Not Hispan F	57 Ages 55-64	G45.9	10/15/2014 0:00	116	87	87 ATORVASTATIN CALCIUM 40 MG ORAL	TABLET			Υ	Υ	N
207690004732	Not Hispan F	46 Ages 45-54	G45.9	9/11/2015 0:00	175	165	165 ATORVASTATIN CALCIUM 40 MG ORAL	TABLET			Υ	Y	N
732998831166	Not Hispan F	46 Ages 45-54	G45.9	8/26/2019 0:00	144	69	69 ATORVASTATIN CALCIUM 40 MG ORAL	TABLET			Y	Y	N
733020586718	Not Hispan F	46 Ages 45-54	G45.9	3/22/2016 0:00	216	186	186 SIMVASTATIN 40 MG TABLET				Y	Y	Y
735893888492	Not Hispan F	51 Ages 45-54	G45.9	3/6/2016 0:00	58	58	58				N	Y	N
736117510464	Not Hispan F	66 Ages 65-74	G45.9	1/31/2013 0:00	149	149	149 ATORVASTATIN CALCIUM 20MG TABLE	T			Υ	Y	N
736827912912	Not Hispan F	46 Ages 45-54	G45.9	5/27/2015 0:00	128	110	110 ATORVASTATIN CALCIUM 20 MG ORAL	TABLET			Υ	Y	N
738964872926	Not Hispan M	50 Ages 45-54	G45.9	8/24/2017 0:00	120	120	120				N	Y	N
737930542860	Not Hispan F	57 Ages 55-64	G45.9	2/23/2017 0:00	137	137	137 SIMVASTATIN 40 MG ORAL TABLET	E11.9	*********		Y	Y	N
738119962594	Not Hispan M	51 Ages 45-54	G45.9	3/1/2018 0:00	177	69	69 ATORVASTATIN CALCIUM 80 MG ORAL	TABLET			Υ	Y	N
738265557442	Not Hispan M	65 Ages 65-74	G45.9	3/27/2019 0:00	65	62	62 LIPITOR 10 MG ORAL TABLET				Y	Y	N
740088317080	Not Hispan M	49 Ages 45-54	G45.9	6/26/2019 0:00	152	102	102 LOVASTATIN 20 MG ORAL TABLET				Y	Y	N
741515606804	Not Hispan F	52 Ages 45-54	G45.9	8/31/2017 0:00	90	80	80 ATORVASTATIN CALCIUM 10 MG ORAL	TAI E11.9	**********		Y	Y	N
741756277598	Not Hispan F	59 Ages 55-64	G45.9	7/24/2018 0:00	122	122	122 ATORVASTATIN 40MG TABLETS	E11.9	*********		Υ	Υ	N
742342422374	Not Hispan M	51 Ages 45-54	G45.9	10/26/2018 0:00	118	115	115 ATORVASTATIN CALCIUM 10 MG ORAL	TABLET			Y	Y	N
743026885510	Not Hispan M	55 Ages 55-64	G45.9	10/15/2018 0:00	108	78	78 ATORVASTATIN CALCIUM 40 MG ORAL	TALE11.65	**********		Y	Y	N
740869111290	Not Hispan F	55 Ages 55-64	G45.9	2/9/2018 0:00	143	124	124 ATORVASTATIN CALCIUM 20 MG ORAL	TABLET			Y	Y	N
741110932618	Not Hispan F	52 Ages 45-54	G45.9	8/29/2019 0:00	109		109 ATORVASTATIN CALCIUM 80 MG ORAL	TABLET			Y	Y	N



#### Chart Review- Denominator

Data element | Diagnosis: Cerebrovascular disease, Stroke, TIA

#### Value Set Description from VSAC

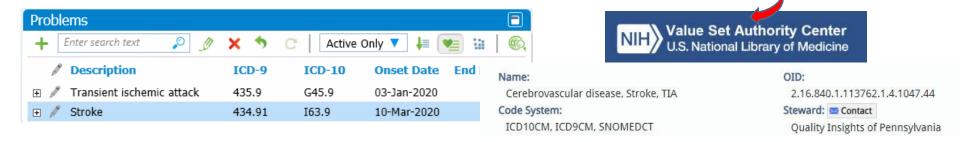
**CLINICAL FOCUS:** This value set contains concepts that represent stroke and high risk diagnoses associated with stroke, including transient ischemic attack (TIA) and generalized ischemic cerebrovascular disease, which would indicate a patient has atherosclerotic cardiovascular disease (ASCVD) in relation 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) 🗹





#### **Chart Review- Numerator**

Data element | Medication, Order: Low intensity statin therapy

#### Value Set Description from VSAC

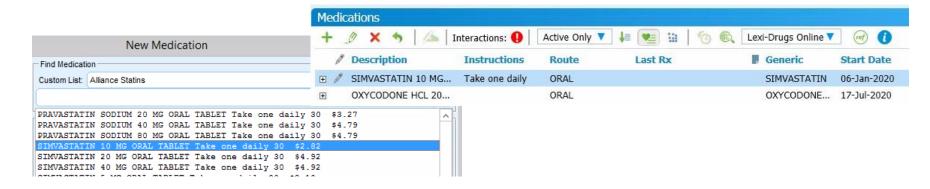
**CLINICAL FOCUS:** This value set contains concepts that represent low intensity statin medications as defined by the 2013 American College of Cardiology (ACC) and the American Heart Association (AHA) guideline.

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	Measureme	nt								
		Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19				Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20
	Statin Therapy - All Risk Groups								Ĭ	•										
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  Number of patients ages 21+ years with 1+ visits in the past 12 months who met the above risk group criteria	5554 11366	5578	5575	5709 11553	5916 11688	6085	6201	6247	6355 12156	6415	6402	6436 12604	6511	6658	6715 13005	6640 12967	6504	6451	0
	Statin Therapy - Diagnosis of ASCVD	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!
	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	
	Statin Therapy - LDL ≥190 mg/DL	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!
	Number of patients in denominator who are actively																			



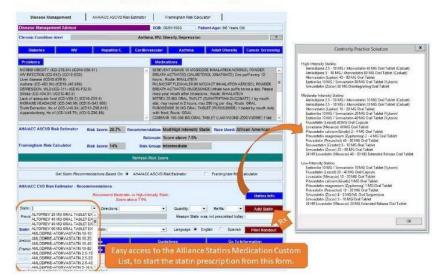
#### Program and Roll-Out

- Clinical committee buy-in
- Training on workflow
- Consideration of unintended consequences
- Wraparound support

Statin on Medication List: Ensure the patient's statin medication is on the Medication List. Refer to the Disease Management Advisor for clinical decision support on statin prescribing, and the Alliance Statins Medication Custom List for easy access to prescribing recommended statins.

EHR Location: AC Clinical Content - Form Name: Disease Management Advisor

Folder Path: Enterprise/Alliance/Disease Management





## **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/eCQMCommunicat ionResources.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