Measure Collaboration Workspace Presentation: Measure Collaboration Workspace and eCQM Data Element Repository

August 2023

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

eCQM STRATEGY RECOMMENDATIONS

ALIGNMENT
- eCQM reporting requirements across CMS program care settings
- eCQM specifications, value sets, and data collection

COMMUNICATION, EDUCATION, AND OUTREACH
- Coordinated education and outreach campaigns to learn from stakeholders and share CMS program information
- Measure-level webinars
- Clear eCQM guidance, plain language, and improved website usability

VALUE
- Quality dashboard best practice collaboration between providers and CMS
- Data element definitions

DEVELOPMENT PROCESS
- Measure Collaboration Workspace
- Data element repository
- Clinically feasible workflow for data capture
- Feasibility testing for new data elements

EHR CERTIFICATION PROCESS
- eCQM certification aligned with CMS reporting requirements

IMPLEMENTATION AND REPORTING PROCESSES
- Clear eCQM specifications, tools, and resources
- Feasible data elements
- Submission of data elements and eCQMs with FHIR and APIs
- Use of eCQM standards to support interoperability
- Consolidated pre-submission validation testing tools
- eCQM attribution research and pilots

eCQM Strategy Goals
- Reduce Burden
- Increase Value
- Increase Stakeholder Involvement

Last updated July 2020

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 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

- Demonstrate links to value sets and direct reference codes in VSAC

- Demonstrate link to 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

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.

August 2023

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

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
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

AllianceChicago

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
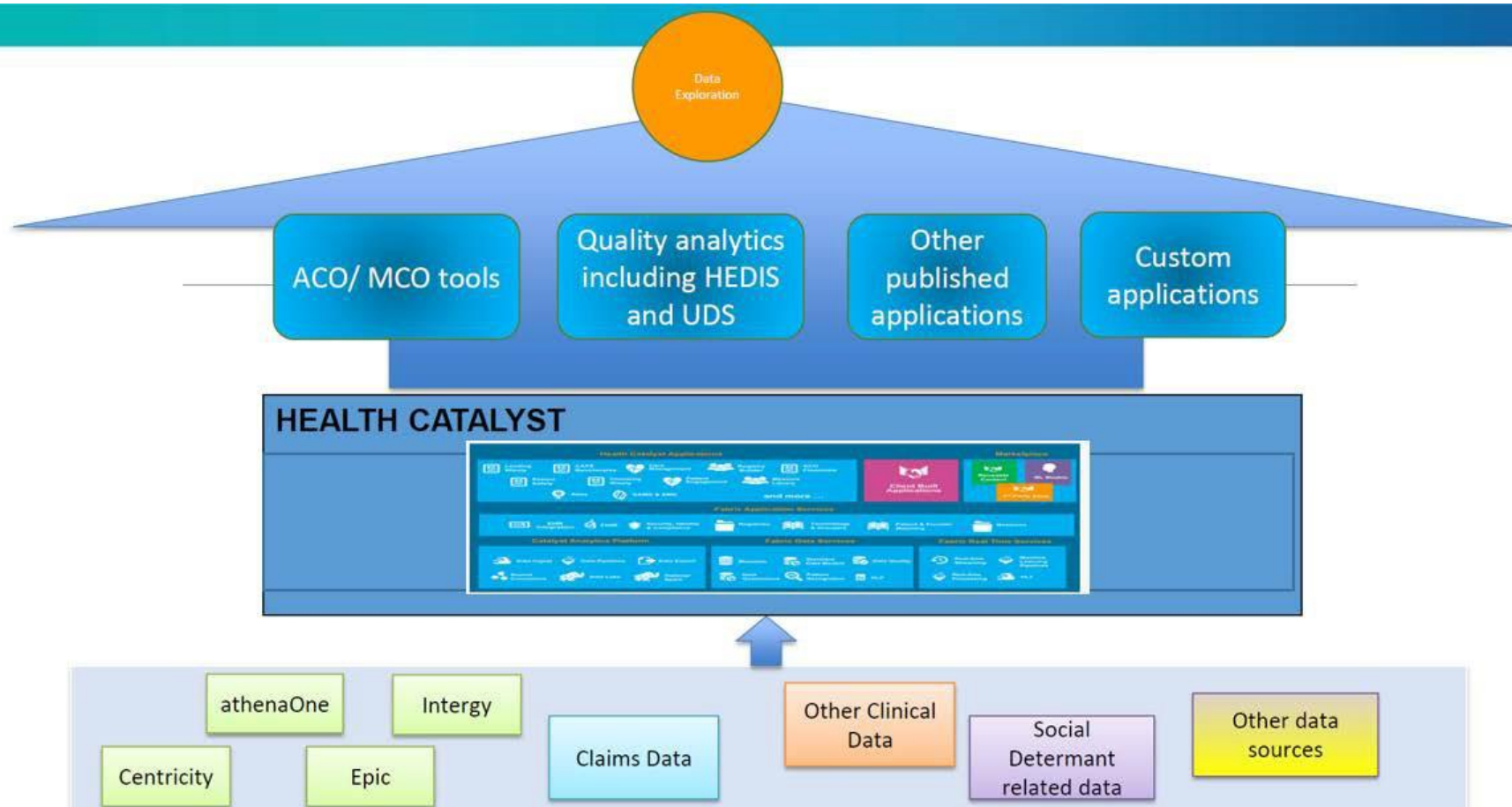
Prior Experience

- Universal HIV Screening Measure (CDC)

- Hepatitis C Screening (CDC)

- Contraceptive Measure (OPA)

- Heart Failure Measure Stratified by Race (NMQF)

AllianceChicago

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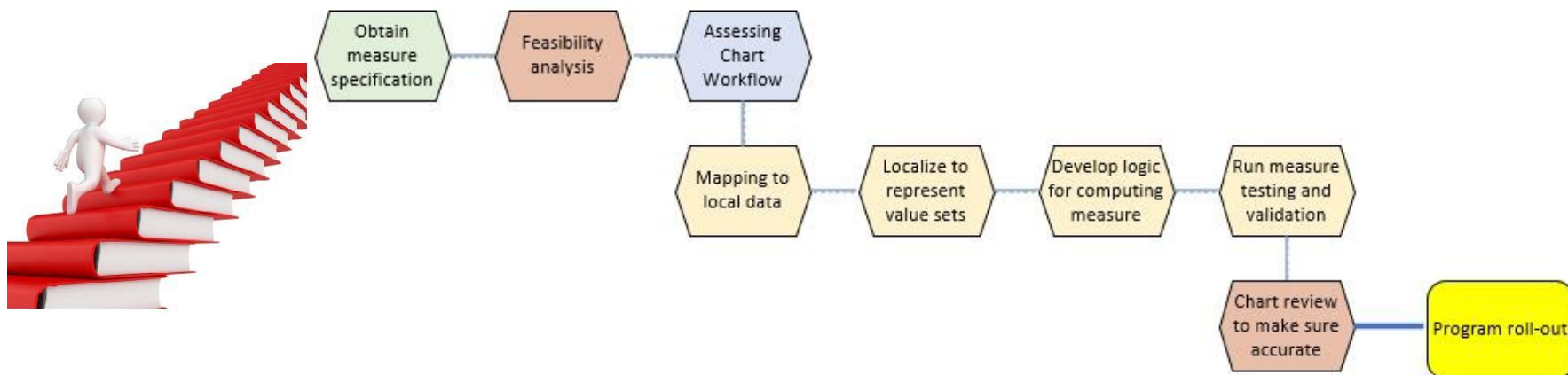
CMS347v3: Statin Therapy for the Prevention and Treatment of Cardiovascular Disease

Our process of building the eCQM for Statin Therapy.

How we implement the measure within organizations and measure testing.

AllianceChicago

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

AllianceChicago

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   ^

AllianceChicago

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 that user?	
					Score	Additional Characteristics	Score	Additional Characteristics	Score	Additional Characteristics	Score	Additional Characteristics
1	1945-1965 Birth Cohort	Administrative Code	Administrative code	Current								
				Future								
2	UDS Visit	Administrative 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								

AllianceChicago

Assess Chart Workflow

Value Set Authority Center (VSAC)

Mapping to Local Data

Report variables

Variable name	Variable description	Data type	Date specification	Centricity table	Centricity column	Centricity value	HDID for OBS	Data value	Questions/com
PatientID		Numeric		PatientProfile	PatientID				
HealthCenterID				PatientProfile	HealthCenterID				
Race	6 Main Categories								
Ethnicity	Hispanic/Latino, Not HHispanic/Latino								
Sex	Male, Female, Unknown								
Insurance Status	Insured, Uninsured. Patient's Primary Insurance							Selfpay OR Unknown = Uninsured. Else insured	
Age			as of 1/31/2019						
Age Category	Ages 21-24								
	Ages 25-34								
	Ages 35-44								
	Ages 45-54		as of 1/31/2019						
	Ages 55-64								
	Ages 65-74								
	Ages 75+								
Language	Best Served in a Language Other Than English. UDS Definition	Y/N							
LDL Name	Recorded as the **highest** fasting 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 LDL DIR LDL (CALCUL) LDL	30 21893 3891 30	

AllianceChicago

Building Logic

Measuring Testing/Validation

PID	ETHNICITY	Sex	Age	AgeCategory	ASCVDCode	ASCVDOnsetDate	LDLEver	LDL3YR	LDLMostRecent	Statin	DiabetesCode	DiabetesOr	Hyperchole	Hypercholesterolem	RiskGroup1_NUM	RiskGroup1	RiskGr
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					Y	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					Y	Y	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					Y	Y	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					Y	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 TABLET					Y	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					Y	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					Y	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	##########			Y	Y	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 TAI	E11.65	##########			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

AllianceChicago

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	

NIH⟩ Value Set Authority Center
U.S. National Library of Medicine

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

AllianceChicago

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																			

AllianceChicago

Program and Roll-Out

- Clinical committee buy-in

- Training on workflow

- Consideration of unintended consequences

- Wraparound support

Engage and Get Help

- Use the eCQI Resource Center
  - https://ecqi.healthit.gov
- Share feedback on the Measure Collaboration Workspace
  - https://ecqi.healthit.gov/mc-workspace
  - https://cmit.cms.gov/cmit/#/
- Explore the CMS Measures Inventory Tool
  - https://cmit.cms.gov
- 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
- Electronic Clinical Quality Improvement (eCQI) Resource Center and Measure Collaboration (MC) Workspace
  - ecqi-resource-center@hhs.gov