



# 2017 Quality Reporting: Claims and Administrative Data-Based Quality Measures

For Medicare Shared Savings Program and Next Generation ACO Model ACOs

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Medicare Shared Savings Program and Next Generation ACO Model

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# Accessing Slides

## ■ Shared Savings Program ACOs:

- Please login to the ACO Portal (<https://portal.cms.gov>) and click on today's event.
  - ACO contracts maintained in the Health Plan Management System (HPMS) have access to the SSP Portal and receive the ACO Spotlight newsletter.
  - If you do not have access to the Portal, please work with your ACO to obtain the quality webinar slides and the ACO Spotlight newsletter for quality updates and webinar announcements.

## ■ Next Generation ACOs:

- Connect site: <https://app.innovation.cms.gov/NGACOConnect>

# Agenda

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- Introduction
- Claims-Based Quality Measures
- Administrative Data-Based Quality Measure
- Additional Information and Technical Assistance
- Question and Answer Session



# Introduction

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- Quality Measurement
- Claims and Administrative Data-Based Quality Measures
- Pay-for-Performance Phase-In
- 2017 Pay-for-Reporting and Performance Measures



# Quality Measurement

- 31 quality measures\* are separated into four key domains
  - Better Care for Individuals
    - Patient/Caregiver Experience
    - Care Coordination/Patient Safety
  - Better Health for Populations
    - Preventive Health
    - Clinical Care for At Risk Populations
- These domains serve as the basis for assessing, benchmarking, rewarding, and improving ACO quality performance

\*NGACOs have 30 quality measures

# Claims and Administrative Data-Based Quality Measures

- 8 of the 31 quality measures are calculated by CMS using Medicare claims or administrative data

## Care Coordination/ Patient Safety Domain

ACO-8 Risk-Standardized All Condition Readmission

ACO-35 Skilled Nursing Facility 30-Day All-Cause Readmission Measure

ACO-36 All-Cause Unplanned Admissions for Patients with Diabetes

ACO-37 All-Cause Unplanned Admissions for Patients with Heart Failure

ACO-38 All-Cause Unplanned Admissions for Patients with Multiple Chronic Conditions

ACO-43 Ambulatory Sensitive Condition Acute Composite (AHRQ Prevention Quality Indicator (PQI) #91)

ACO-11 Use of Certified EHR Technology

ACO-44 Use of Imaging Studies for Low Back Pain\*\*

\*ACO-11 does not apply to NGACOs. \*\*ACO-44 is pay-for-reporting all years of the agreement period

# 2017 Pay-for-Reporting and Performance Measures

The following table shows the phase-in of claims-based and administrative data-based measures by listing the number of pay for reporting and pay-for-performance measures for the 2017 performance year by ACO start date.

	Shared Savings Program ACOs			Next Generation Model ACOs	
	2017 starters	2016 starters	All Other Starters	2017 starters	2016 starters
Claims and Administrative Data-Based Measures that are Pay-for-Reporting in 2017	8	8	3	7	7
Claims and Administrative Data-Based Measures that are Pay-for-Performance in 2017	0	0	5	0	0
<b>Total Claims and Administrative Data-Based Measures in 2017</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>7</b>	<b>7</b>

\*Note: New measures will be set at pay for reporting for 2 years before the phase-in schedule applies, unless the measure was finalized as pay for reporting all years.



# Claims-Based Quality Measures

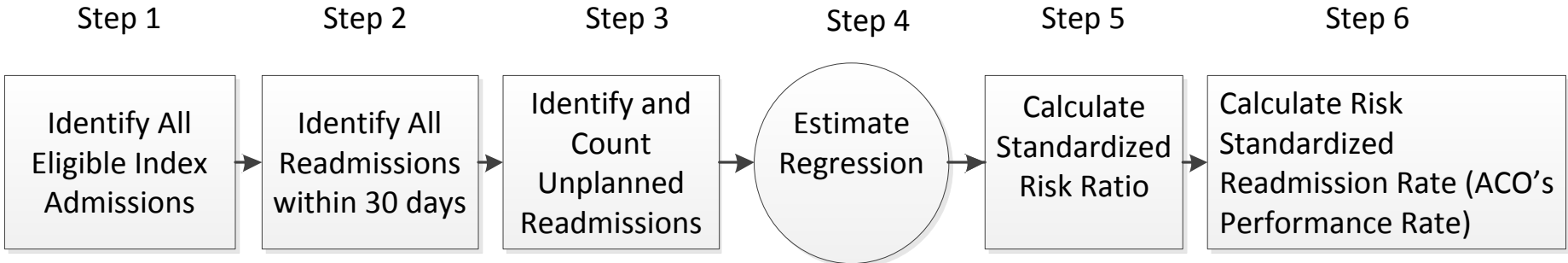
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- Readmissions Measures: ACO-8 and ACO-35
- Admissions Measures: ACO-36, ACO-37, and ACO-38
- ACO-43 Prevention Quality Indicator (PQI) Ambulatory Sensitive Condition Acute Composite
- ACO-44 Use of Imaging Studies for Low Back Pain



# Readmissions Measures: ACO-8 and ACO-35

- ACO-8 Risk-Standardized All Condition Readmission
  - The risk-adjusted rate of acute inpatient hospitalizations that result in an unplanned readmission within 30 days of hospital discharge among ACO beneficiaries aged 65 years or older during the measurement period
  
- ACO-35 Skilled Nursing Facility 30-day All-Cause Readmission Measure
  - The risk-adjusted rate of acute inpatient hospitalizations **discharged to a skilled nursing facility**, that result in an unplanned hospital readmission within 30 days of discharge from the original hospital stay among ACO beneficiaries aged 65 years or older during the measurement period.



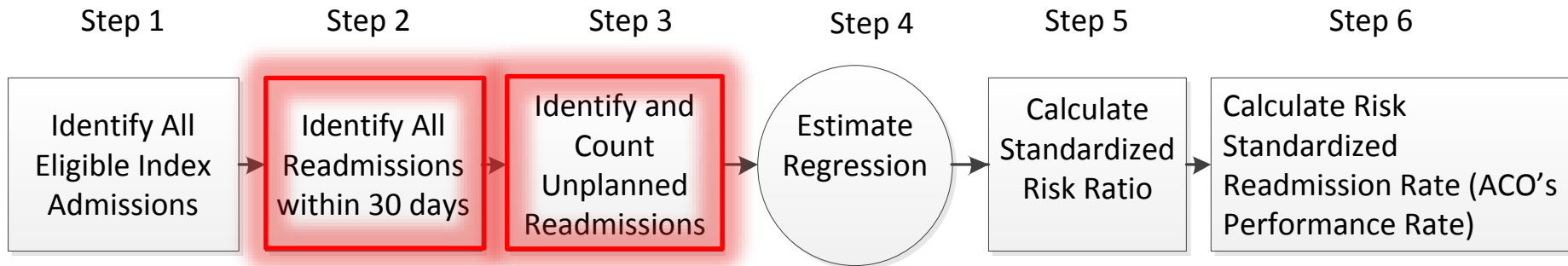
# Readmissions Measures: ACO-8 and ACO-35



## Exclusion Criteria for Index Admissions

- Patients without Part A enrollment and 30 days of post-discharge data during the performance year
- Patients without 12 months Part A & B enrollment prior to performance year
- Patients admitted to a Prospective Payment System (PPS) exempt cancer hospital
- Patients receiving inpatient medical treatment for cancer
- Patients admitted for primary psychiatric disease
- Patients admitted for rehabilitation care
- Patients discharged against medical advice
- Patients who were not discharged alive

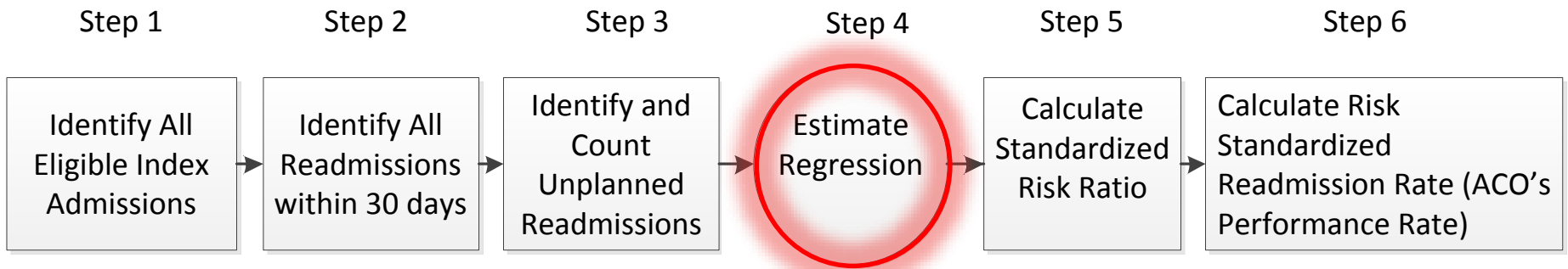
# Readmissions Measures: ACO-8 and ACO-35



## Planned Readmissions

- Identify readmissions within 30 days of discharge from Index admission
- Identify and count unplanned readmissions
  - Admissions for some types of care are always considered **planned**
    - Transplant surgery
    - Maintenance chemotherapy, radiotherapy, immunotherapy
    - Rehabilitation
  - Otherwise, a non-acute admission for a scheduled procedure is considered **planned**
  - Admissions for acute illness or complications of care are **unplanned**

# Readmissions Measures: ACO-8 and ACO-35



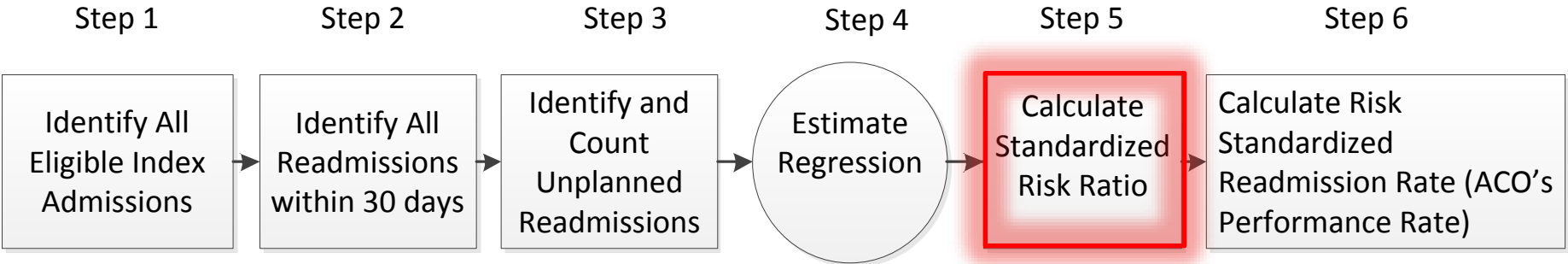
## Risk Adjustment

- Hierarchical logistic regression models are used to model the log-odds of readmission within 30 days of discharge
- Regression simultaneously models two levels (patient and ACO) to account for the variance in patient outcomes within and among ACOs
  - Age and selected clinical covariates (patient level)
  - ACO-specific intercepts (ACO-level)
  - ACO intercept represents underlying ACO-specific risk of readmission, after accounting for individual patient risk

# Readmissions Measures: ACO-8 and ACO-35

- **ACO-8 only:** ICD-10 codes from index admission are aggregated into 5 mutually exclusive cohorts using AHRQ Clinical Classification Software:
  - Surgery/Gynecology
  - Cardiorespiratory
  - Cardiovascular
  - Neurology
  - Medicine
- The hierarchical logistic regression models are estimated for each specialty cohort separately and then the results are combined for the overall ACO risk adjustment

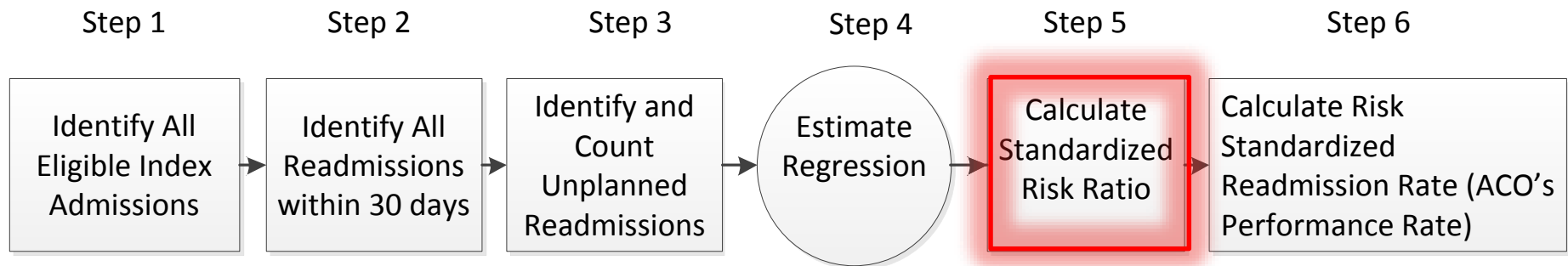
# Readmissions Measures: ACO-8 and ACO-35



## Measure Calculation

- Calculate predicted (observed) probability of readmission (the numerator) for each patient
  - Estimated based on the ACO's patient case mix, patient age, and underlying risk of a readmission at the ACO (ACO level intercept)
- Calculate the expected probability of readmission (the denominator) for each patient
  - This is the probability of readmission if the patient were to be treated at an average ACO

# Readmissions Measures: ACO-8 and ACO-35

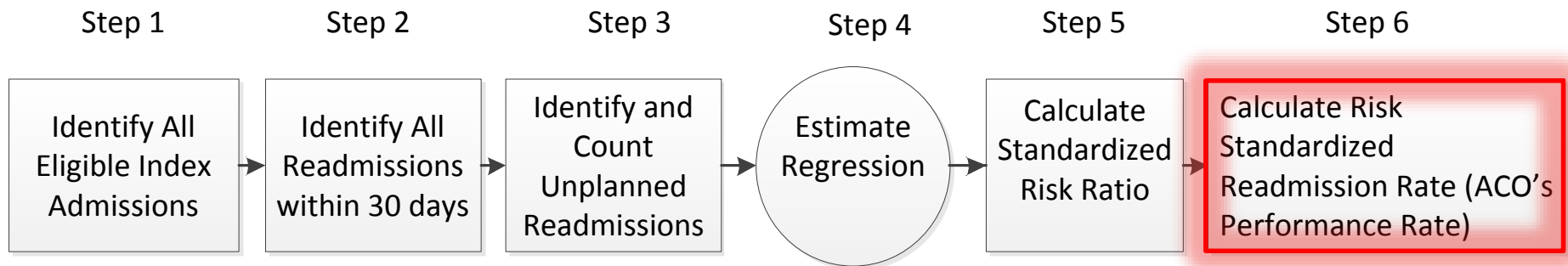


## Measure Calculation

- Standardized risk ratio (SRR) calculated within an ACO by dividing predicted probability of readmission by expected probability of readmission for all beneficiaries
- ACO-8 only: Cohort specific SRRs are pooled to create a composite ACO-wide SRR, weighted by the volume of patients within each cohort



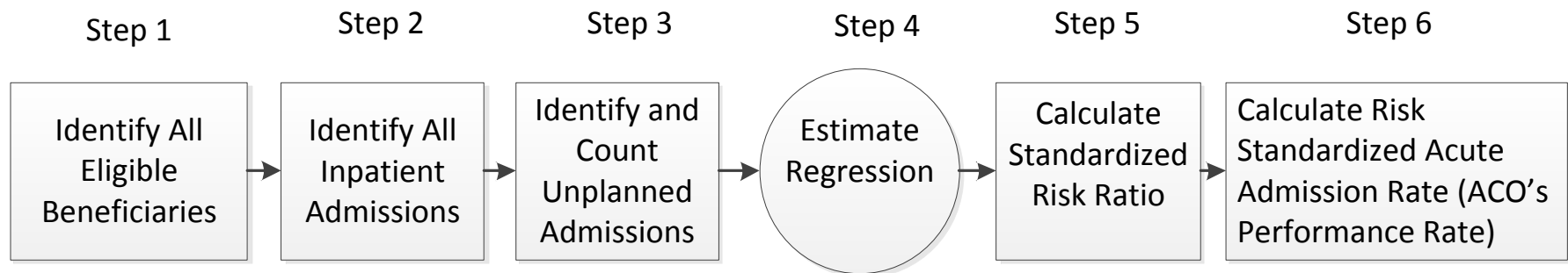
# Readmissions Measures: ACO-8 and ACO-35



- The SRR is multiplied by the overall ACO crude readmission rate to obtain the Risk Standardized Readmission Rate (RSRR)
- This is the performance rate used for Shared Savings Program and the Next Generation ACO Model
- Lower RSRRs signify higher quality of care

# Admissions Measures: ACO-36, ACO-37, and ACO-38

- The rate of risk-standardized, acute, unplanned hospital admissions (per 100 person years at risk) among ACO beneficiaries aged 65 years or older with one of the following during the measurement period:
  - Diabetes (ACO-36)
  - Heart failure (ACO-37) or
  - Multiple chronic conditions (ACO-38)



# Admissions Measures: ACO-36, ACO-37, and ACO-38

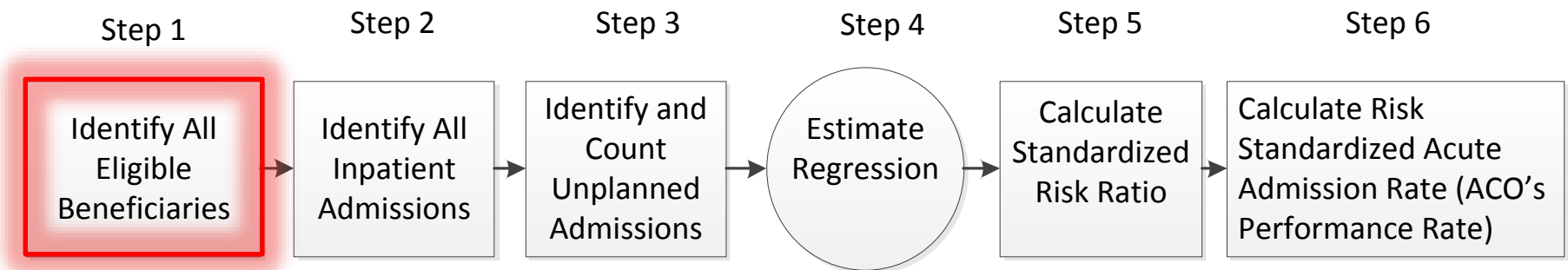
Who is eligible?

Measure	Age	One inpatient or two outpatient* claims with...	Look back period**
ACO-36	≥65	Diabetes diagnosis codes	Two years
ACO-37	≥65	Heart failure diagnosis codes	Two years
ACO-38	≥65	At least 2 of these chronic conditions: <ul style="list-style-type: none"> <li>Acute Myocardial Infarction; Alzheimer’s disease &amp; related disorders; Atrial Fibrillation; Chronic Kidney Disease; Chronic Obstructive Pulmonary Disease &amp; Asthma; Depression; Heart Failure; Stroke or Transient Ischemic Attack</li> </ul>	One to three years

\*The two outpatient diagnoses must occur in one calendar year

\*\* Years prior to the measurement period

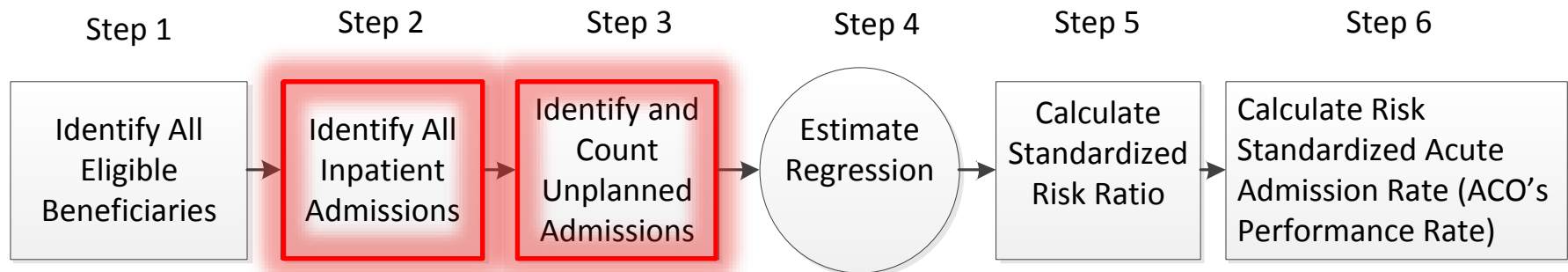
# Admissions Measures: ACO-36, ACO-37, and ACO-38



## Exclusion Criteria for Admissions:

- Beneficiaries without continuous Medicare Part A and B during the year prior to the performance year
- Beneficiaries without continuous Part A during the performance year
  - If a beneficiary dies during the performance year, the continuous Medicare Part A requirement is until death
- ACO-37 only: beneficiaries with left ventricular assist devices

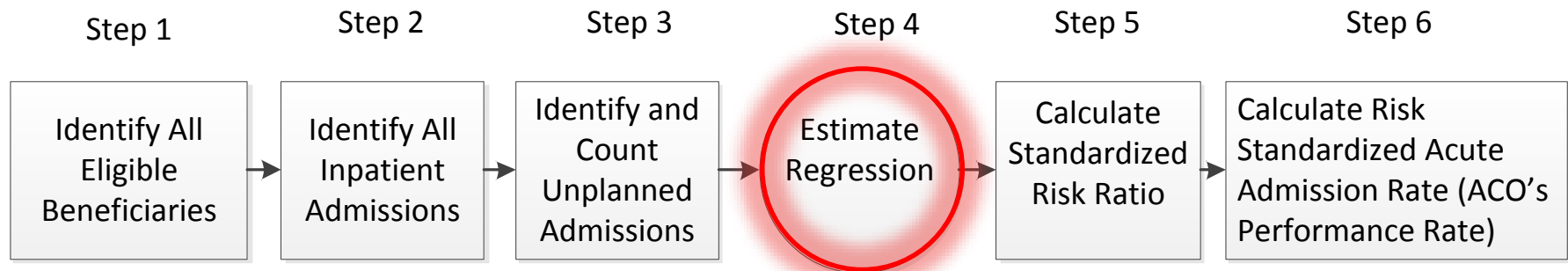
# Admissions Measures: ACO-36, ACO-37, and ACO-38



## Planned Admissions

- Identify all inpatient admissions among eligible beneficiaries with diabetes (ACO-36), heart failure (ACO-37), or multiple chronic conditions (ACO-38)
- Identify and count unplanned readmissions
  - Admissions for some types of care are always considered **planned**
    - Transplant surgery
    - Maintenance chemotherapy, radiotherapy, immunotherapy
    - Rehabilitation
  - Otherwise, a non-acute admission for a scheduled procedure is considered **planned**
  - Admissions for acute illness or complications of care are **unplanned**

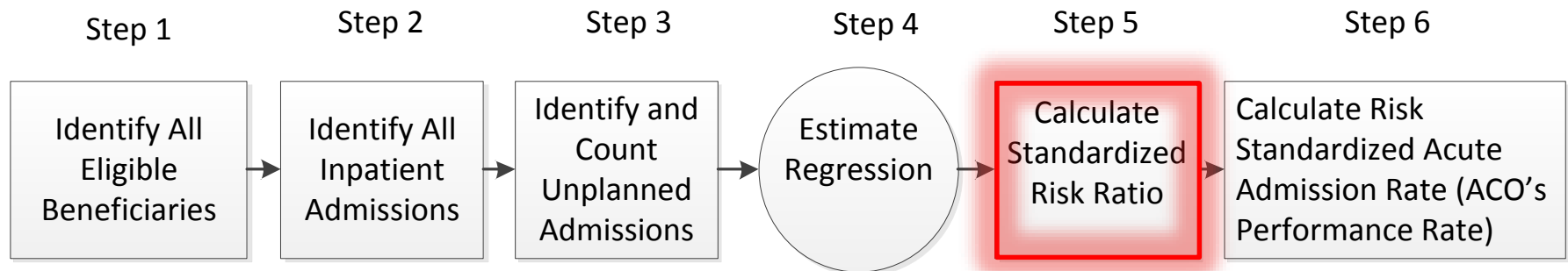
# Admissions Measures: ACO-36, ACO-37, and ACO-38



## Risk Adjustment

- Hierarchical level regression models are used to model the number of unplanned admissions
- Regression simultaneously models two levels (patient and ACO) to account for the variance in patient outcomes within and among ACOs
  - Age and selected clinical covariates (patient level)
  - ACO-specific intercepts (ACO-level)
  - ACO intercept represents underlying ACO-specific risk of admission, after accounting for individual patient risk

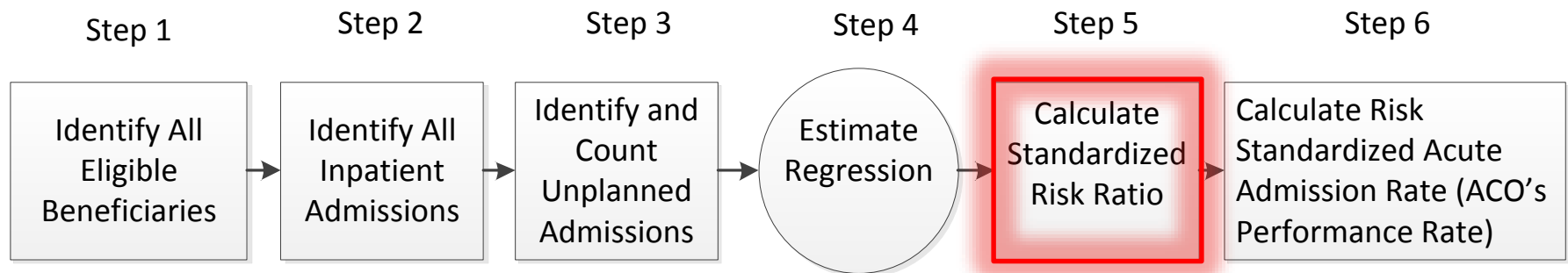
# Admissions Measures: ACO-36, ACO-37, and ACO-38



## Measure Calculation

- Calculate predicted (observed) number of admissions (the numerator) for each patient
  - *Estimated based on the ACO's patient case mix, patient age, and underlying risk of an unplanned admission at the ACO (ACO level intercept)*
- Calculate the expected number of admissions (the denominator) for each patient
  - *This is the number of unplanned admissions expected if the patient were to be treated at an average ACO*

# Admissions Measures: ACO-36, ACO-37, and ACO-38

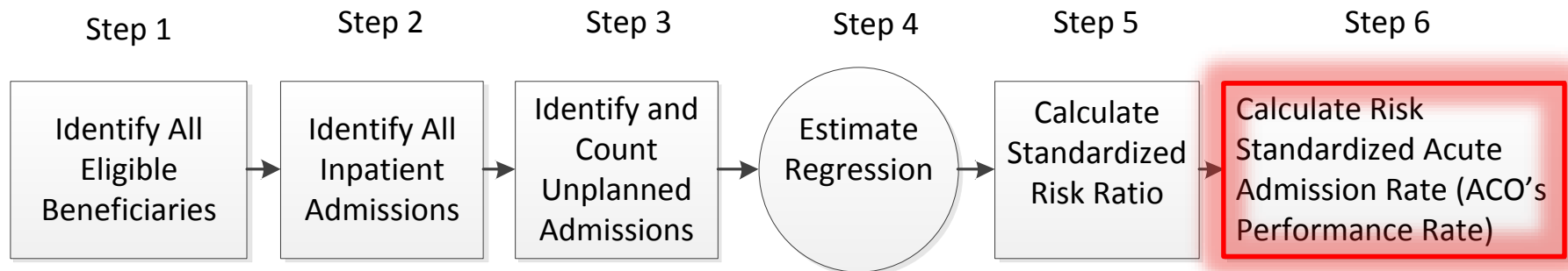


## Measure Calculation

- Standardized risk ratio (SRR) calculated for an ACO by dividing predicted number of unplanned admissions by expected number of unplanned admissions for all eligible beneficiaries in the ACO



# Admissions Measures: ACO-36, ACO-37, and ACO-38

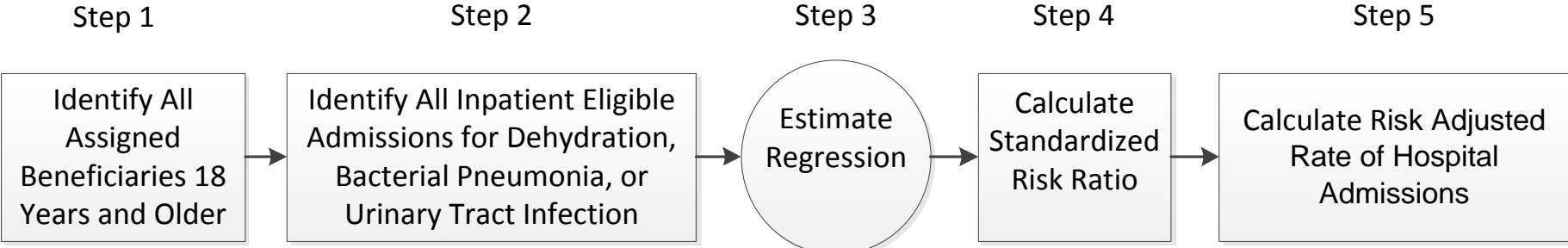


## Score Interpretation

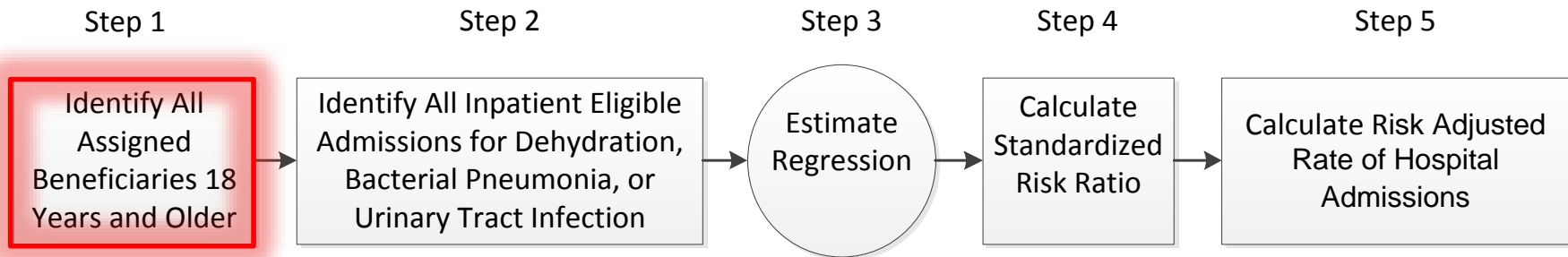
- The SRR is multiplied by the overall ACO crude admission rate to obtain the **Risk Standardized Acute Admission Rate (RSAAR)**
- This is the performance rate used for Shared Savings Program and the Next Generation ACO Model
- Lower RSAARs signify higher quality of care

# ACO-43 Prevention Quality Indicator (PQI) Ambulatory Sensitive Condition Acute Composite

- New in Performance Year 2017
- PQI definition developed by the Agency for Healthcare Research and Quality (AHRQ) for General Adult Population
- CMS developed risk adjustment for the ACO Medicare Population
- The risk adjusted rate of hospital discharges for acute PQI conditions with a principal diagnosis of dehydration, bacterial pneumonia, or urinary tract infection among ACO assigned Medicare fee-for-service (FFS) beneficiaries 18 years and older.



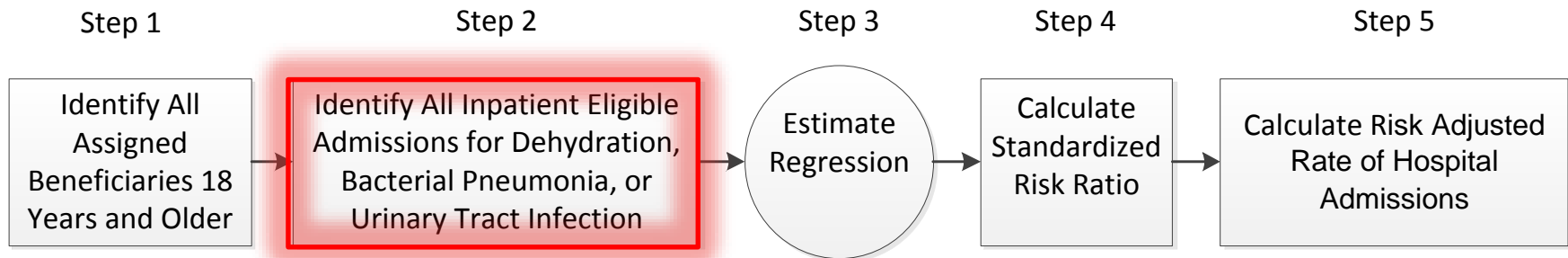
# ACO-43 Prevention Quality Indicator (PQI) Ambulatory Sensitive Condition Acute Composite



## Denominator Exclusion Criteria:

- Beneficiaries without continuous Medicare Part A and B during the year prior to the performance year
- Beneficiaries without continuous Part A during the performance year
  - If a beneficiary dies during the performance year, the continuous Medicare Part A requirement is until death

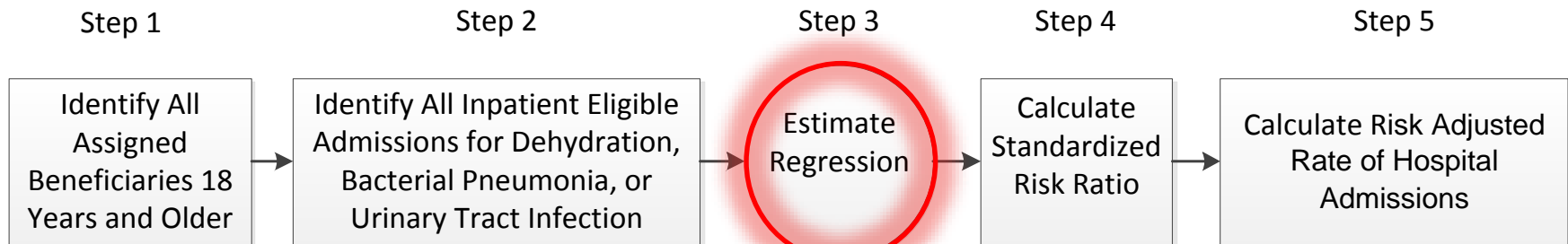
# ACO-43 Prevention Quality Indicator (PQI) Ambulatory Sensitive Condition Acute Composite



## Exclusion Criteria:

- Transfers from a hospital, skilled nursing facility (SNF), intermediate care facility (ICF), or another health care facility
- Admissions for dehydration that are associated with a diagnosis of chronic renal failure
- Admissions for bacterial pneumonia that are associated with sickle cell anemia, HB-S disease, or immunocompromised states
- Admissions for urinary tract infection that are associated with a kidney/urinary tract disorder or immunocompromised state.

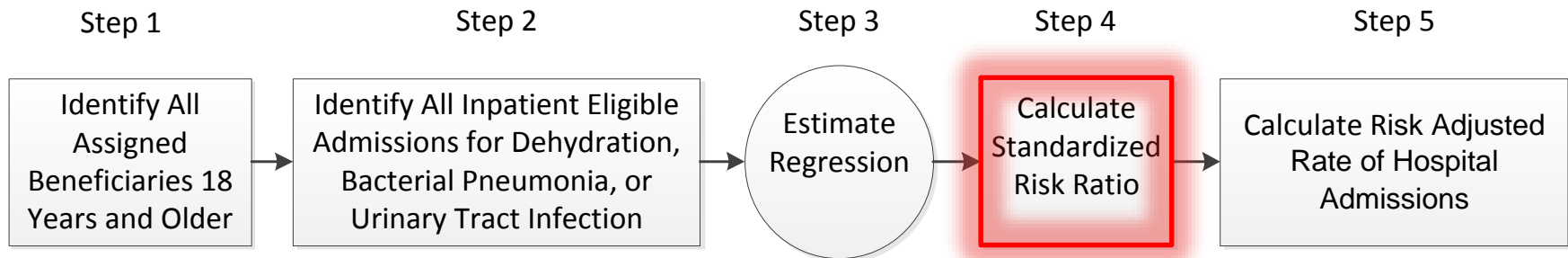
# ACO-43 Prevention Quality Indicator (PQI) Ambulatory Sensitive Condition Acute Composite



## Risk Adjustment

- Hierarchical level regression models are used to model the number of admissions
- Regression simultaneously models two levels (patient and ACO) to account for the variance in patient outcomes within and among ACOs
  - Age and selected clinical covariates (patient level)
  - ACO-specific intercepts (ACO-level)
  - ACO intercept represents underlying ACO-specific risk of admission, after accounting for individual patient risk

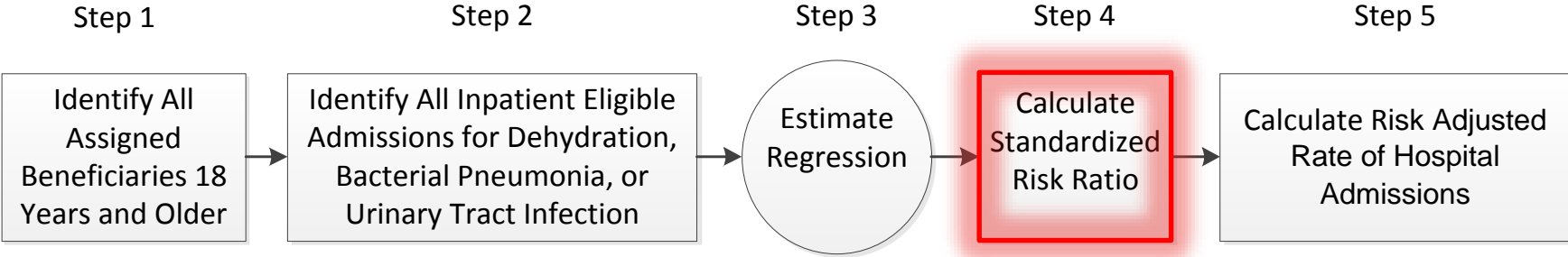
# ACO-43 Prevention Quality Indicator (PQI) Ambulatory Sensitive Condition Acute Composite



## Measure Calculation

- Calculate predicted (observed) number of admissions (the numerator) for each patient
  - *Estimated based on the ACO's patient case mix, patient age, and underlying risk of admissions at the ACO (ACO level intercept)*
- Calculate the expected number of admissions (the denominator) for each patient
  - *This is the number of admissions expected if the patient were to be treated at an average ACO*

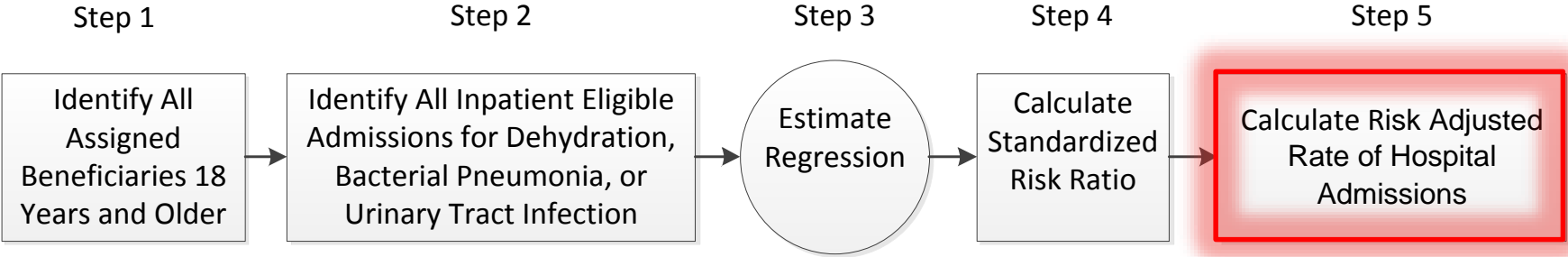
# ACO-43 Prevention Quality Indicator (PQI) Ambulatory Sensitive Condition Acute Composite



## Measure Calculation

- Standardized risk ratio (SRR) calculated for an ACO by dividing predicted number of admissions by expected number of admissions for all beneficiaries in the ACO

# ACO-43 Prevention Quality Indicator (PQI) Ambulatory Sensitive Condition Acute Composite



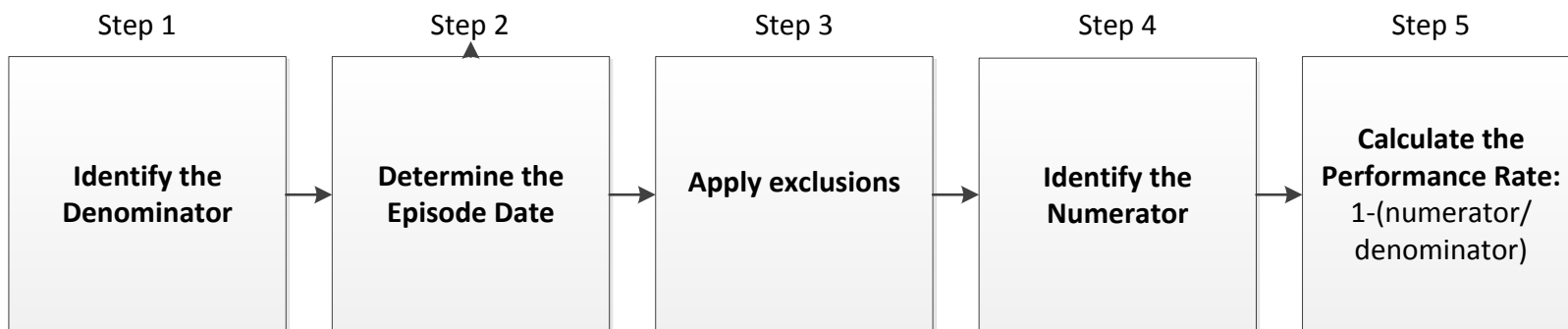
## Score Interpretation

- The SRR is multiplied by the overall rate (rate among all ACOs) of admissions per 100 person years for these conditions to produce the risk adjusted rate of hospital discharges for acute PQI conditions
- This is the performance rate for the Shared Savings Program and the Next Generation ACO model
- Lower rates signify higher quality of care

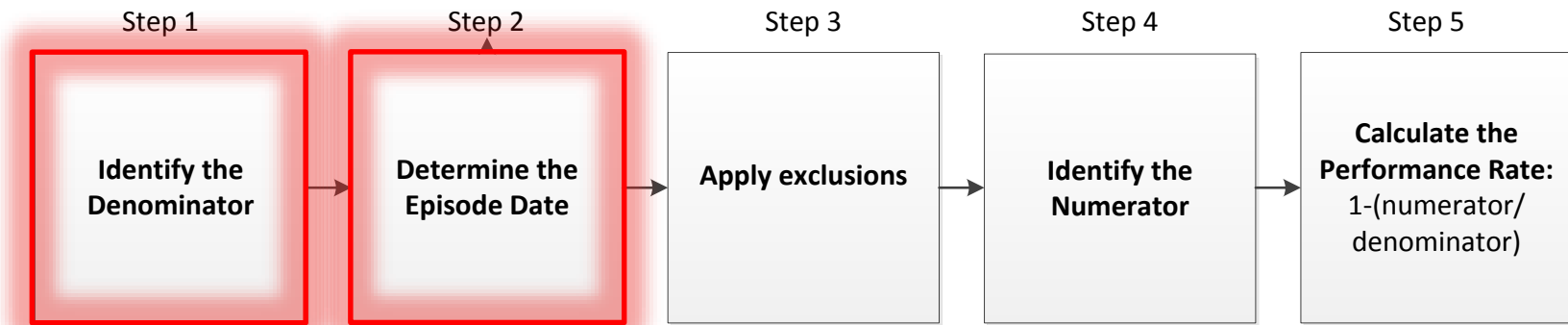


# ACO-44 Use of Imaging Studies for Low Back Pain

- New in Performance Year 2017
- Pay-for-reporting for all years
- Developed by the National Committee for Quality Assurance
- The percentage of ACO assigned/aligned beneficiaries with a primary diagnosis of low back pain who did not have an imaging study (plain X-ray, MRI, or CT scan) within 28 days of diagnosis.



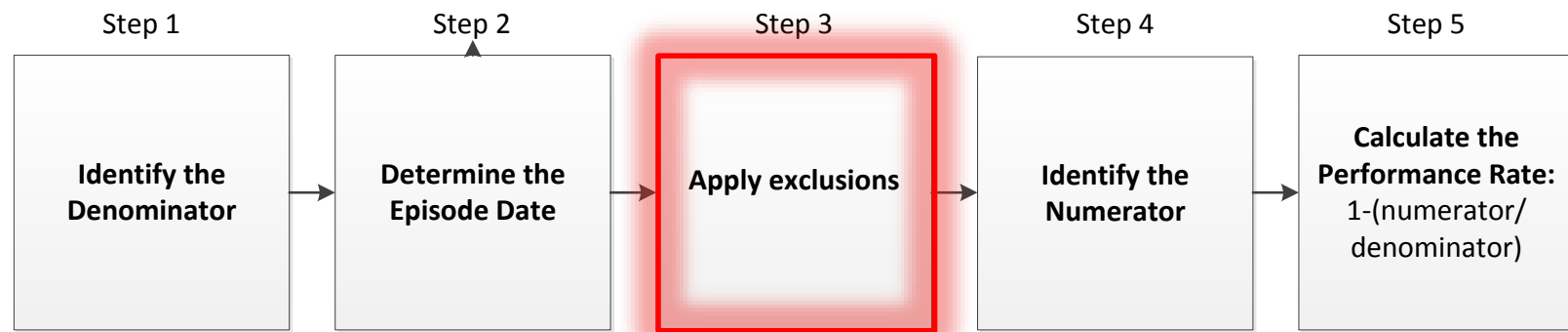
# ACO-44 Use of Imaging Studies for Low Back Pain



## Denominator

- All assigned or aligned ACO beneficiaries
- 18 years old as of January 1 of the performance year to 50 years old as of December 31 of the performance year
- An outpatient or ED visit with a principal diagnosis of low back pain during the Intake Period (i.e., January 1–December 31 of the performance year)
  - The date of this visit will be referred to as the Episode Date

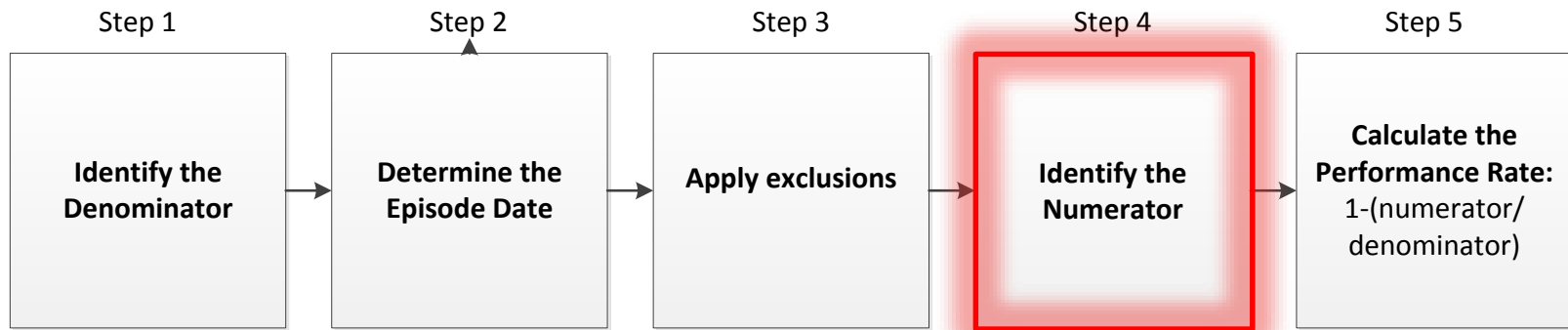
# ACO-44 Use of Imaging Studies for Low Back Pain



## Denominator Exclusions

- Beneficiaries without continuous Part A and B eligibility during the year prior to the performance year and/ or without eligibility for at least one month following the Episode Date
- Exclude beneficiaries with a diagnosis of low back pain during the 180 days (6 months) prior to the Episode Date
- Exclude any beneficiary who had a diagnosis for which imaging is clinically appropriate any time during the 12 months prior to the Episode Date through 28 days after the Episode Date:
  - Cancer
  - Recent Trauma
  - Intravenous drug abuse
  - Neurologic impairment

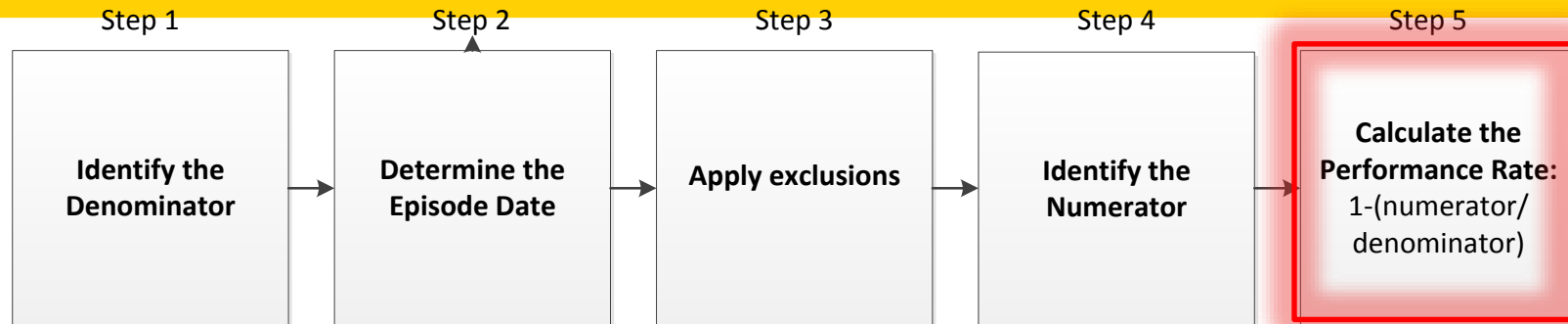
# ACO-44 Use of Imaging Studies for Low Back Pain



## Numerator

- Assigned beneficiaries who received an imaging study (plain x-ray, MRI, CT scan) on the Episode Date or in the 28 days following the Episode Date

# ACO-44 Use of Imaging Studies for Low Back Pain



## Measure Calculation

- Calculate the performance rate:  $1 - (\text{numerator} / \text{denominator})$ 
  - This inverted rate measures the proportion of beneficiaries who did not receive an imaging study

## Measure Interpretation

- Higher rates indicate less frequent potentially inappropriate imaging studies in adults 18-50 with acute, uncomplicated low back pain
- This is the performance rate for the Shared Savings Program and the Next Generation ACO model

# Administrative-Based Quality Measure

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- ACO-11 Use of Certified EHR Technology (Shared Savings Program ACOs Only)



# ACO-11 Use of Certified EHR Technology (Shared Savings Program ACOs Only)

- Measure reports the percent of ECs participating in the ACO who successfully met the Quality Payment Program (QPP) Advancing Care Information (ACI) Base Score requirements
- Pay-for-Reporting for all ACOs for the 2017 and 2018 performance years due to the changes made to align with the QPP
- Starting in 2019, measure will be assessed according to the phase-in schedule finalized in the 2017 PFS Final Rule (81 Federal Register 80488)
- All ACO participant TINs must report the QPP ACI category
  - To meet complete reporting, at least 1 EC participating in the ACO must meet the requirements under the QPP ACI category (81 Federal Register 80501)

# ACO-11 Use of Certified EHR Technology (Shared Savings Program ACOs Only)

## Denominator

- All ECs who are participating in an ACO in the performance year under the Shared Savings Program, as determined by the QPP
- Exceptions and Exclusions, as determined by the QPP and to the extent this data is available, include, but may not be limited to:
  - ECs who are deceased
  - ECs approved for ACI performance category reweighting and do not report ACI:
    - Insufficient Internet Connectivity
    - Extreme and Uncontrollable Circumstances
    - Lack of Control over the Availability of CEHRT
  - ECs who automatically qualify for ACI performance category reweighting and do not report ACI:
    - Hospital-based MIPS clinicians
    - Physician assistants
    - Nurse practitioners
    - Clinical nurse specialist
    - Certified registered nurse anesthetists
    - Clinicians who lack face-to-face interactions with patients
  - Physicians meeting MIPS low-volume threshold or Physicians who are new to Medicare



# ACO-11 Use of Certified EHR Technology (Shared Savings Program ACOs Only)

## Numerator

- ECs included in the denominator who successfully achieved the ACI Base Score for the 2017 performance year
- ECs will be included in the numerator if the EC achieved the ACI Base Score through any TIN through which they have billed claims during the performance year

# ACO-11 Use of Certified EHR Technology (Shared Savings Program ACOs Only)

## Rate Calculation

- Measure performance for each ACO is calculated as the percent of the EC participating in the ACO who successfully meet numerator requirements divided by the ACO's denominator population (accounting for exclusions and exceptions) and multiplied by 100%

$$ACO \text{ Performance } (\%) = \left( \frac{\# \text{ ECs meeting numerator requirements}}{\# \text{ ECs eligible for denominator}} \right) * 100\%$$

# Additional Information and Technical Assistance

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- Newsletters
- Specifications
- Websites and Portals
- Mailboxes and Help Desks



# Newsletters

- Newsletters are:
  - Published weekly
  - Include announcements for:
    - Important program information
    - Upcoming deadlines
    - Upcoming webinars
- Spotlight Newsletter for Shared Savings Program ACOs
  - Sent to contacts listed in HPMS
- Next Generation ACO Newsletter
  - Sent to ACO Executives, Primary Contacts, and any other ACO-designated Newsletter/Briefing contacts

# Specifications

- Measure Information Forms for the measures presented today are available on the:
  - Shared Savings Program website under “2017 Reporting Year Documentation”  
(<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality-Measures-Standards.html>)
  - Next Generation ACO Connect site  
(<https://app.innovation.cms.gov/NGACOConnect>)

# Websites and Portals

- **Shared Savings Program website**
  - <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Quality-Measures-Standards.html>
  
- **Shared Savings Program ACO Portal**
  - <https://portal.cms.gov>
  
- **Next Generation ACO Model Website**
  - <https://innovation.cms.gov/initiatives/Next-Generation-ACO-Model/>
  
- **Next Generation ACO Connect Site**
  - <https://app.innovation.cms.gov/NGACOConnect>

# Mailboxes and Help Desks

- Medicare Shared Savings Program
  - E-mail: [SharedSavingsProgram@cms.hhs.gov](mailto:SharedSavingsProgram@cms.hhs.gov)
- Next Generation Model
  - Email: [NextGenerationACOModel@cms.hhs.gov](mailto:NextGenerationACOModel@cms.hhs.gov)
- For questions related to the Quality Payment Program, MIPS, MACRA, and APM
  - Email: [gpp@cms.hhs.gov](mailto:gpp@cms.hhs.gov)
  - Phone: (866) 288-8292
  - Monday – Friday, 8 a.m. – 8 p.m. ET

# Question and Answer Session

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