



HEALTH CARE
COST INSTITUTE

Asthma Medication Ratio: Selected Quality Measure Performance

HCCI's Qualified Entity Public
Report

July 1st, 2022



The Report

This report presents the measure of Asthma Medication Ratio (AMR) using a combined data set of Medicare and employer-sponsored insurance claims. Medications for asthma are usually categorized as long-term controller medications or quick-reliever medications. Controller medications are used to achieve and maintain control of persistent asthma while reliever medications are used to treat acute symptoms and exacerbations. Higher use of reliever medications is associated with potentially preventable adverse events, including asthma-related hospitalizations and emergency room visits. This report provides national rates for the AMR measure by payer type and by age band for calendar years 2016, 2017, and 2018.

The Measure

Asthma Medication Ratio [NQF #1800]

The measure in this report evaluates the use of asthma medication in reducing preventable asthma exacerbations. This measure provides information on the proportion of enrolled members with a ratio of 0.50 or more.

Methodology

HCCI follows the measure specifications prescribed by the measure steward, the National Committee for Quality Assurance (NCQA). All procedure and diagnoses codes used to identify eligible claims and impose restrictions are obtained from the Healthcare Effectiveness Data and Information Set (HEDIS). Updates to the methodology are applied to the years included in the analysis.

Data

The measure is calculated using an integrated data set containing HCCI's commercial data holdings and the Medicare fee-for-service data it receives as a Qualified Entity. The reported measure combines data from all payer types and are not weighted to reflect the distribution of insurance coverage across the U.S. population. All measures in this report are based on national data from all U.S states except Oregon. The definitions of each payer type is as follows:

- Medicare FFS – claims data for individuals covered by traditional Medicare fee-for-service where Medicare is the primary payer.
- Employer-sponsored insurance – claims data for individuals under the age of 65 who receive insurance through an employer, including both employees and their dependents (i.e., spouses and children), where the plan is sponsored by one of HCCI's data contributors.

Notes

This measure is specifically designed for those aged 5-64. We include a stratification of the Medicare data for those aged 65+ for completeness.



Asthma Medication Ratio

Description: This measure assesses adults and children with persistent asthma who had a ratio of controller medication to total asthma medication of 0.50 or more in a measurement year.

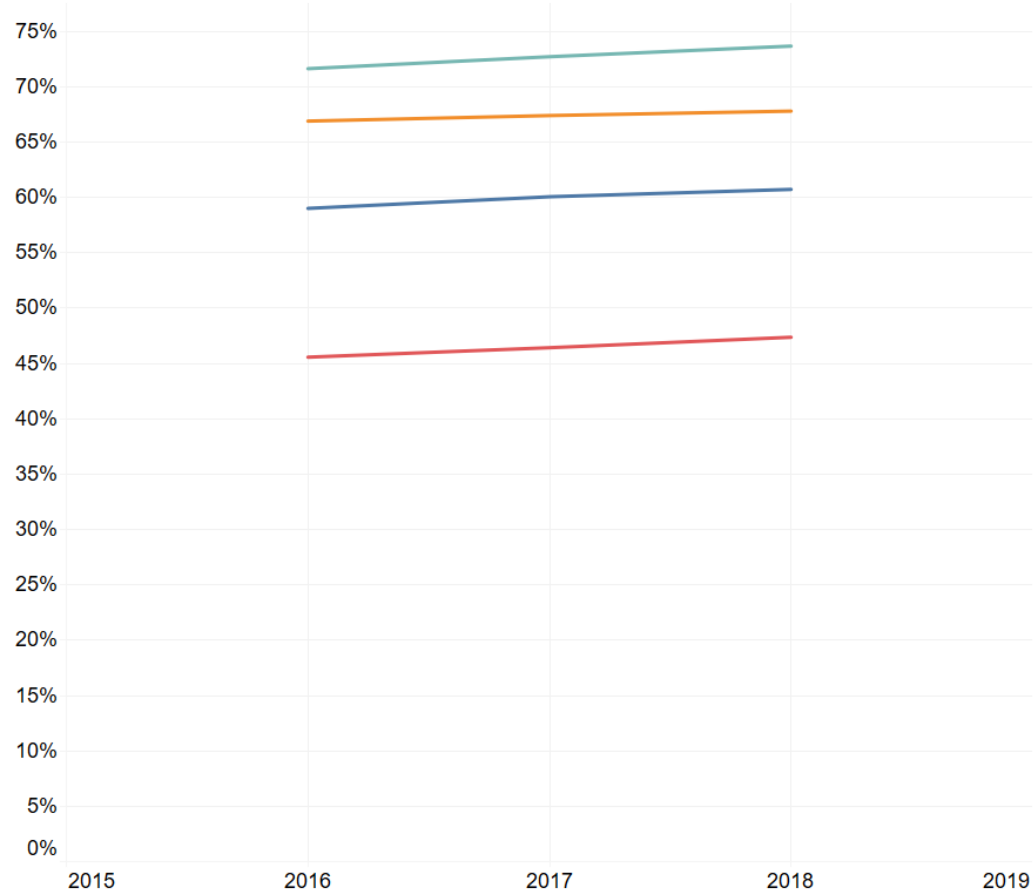
- Measures are reported at the national level by payer.
- Higher percentages are better and indicate more use of asthma controller medications.
- Lower percentages indicate overuse of asthma reliever medications.

Results: In 2018, approximately 68 percent of children and adults with ESI had an AMR of 0.50 or more compared to 47 percent among the Medicare population.

Relevance: Best clinical practices to improve AMR include education on self-management and discussion of triggers that lead to more frequent use of reliever medications.

Asthma Medication Ratio by Year

- All Payers 5-64
- Employer-Sponsored Insurance 5-64
- Medicare 5-64
- Medicare 65+



Payer	2016	2017	2018
All Payers 5-64	59.0%	60.1%	60.7%
Employer-Sponsored Insurance 5-64	66.9%	67.4%	67.8%
Medicare 5-64	45.6%	46.4%	47.4%
Medicare 65+	71.6%	72.7%	73.7%

Measure specifications for Asthma Medication Ratio [NQF #1800]:

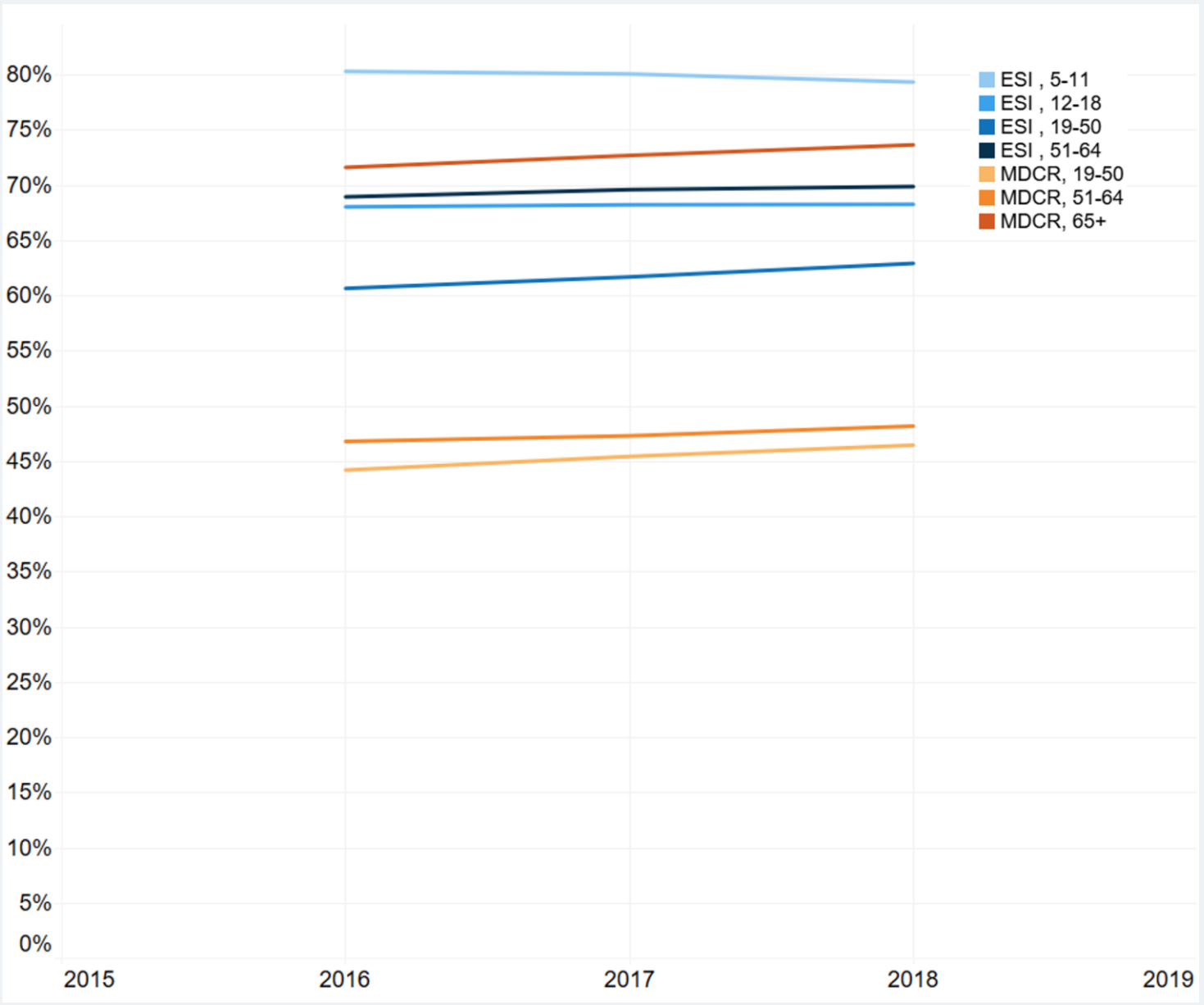
Denominator eligibility: All health plan members 5-64 years of age during the measurement year who were identified as having moderate to severe persistent asthma. All Medicare members 65+ years of age during the measurement year who were identified as having moderate to severe persistent asthma.

Numerator eligibility: The number of members who have a medication ratio of at least 0.50.

Exclusion criteria: Exclude any members who (1) had at least one encounter, in any setting, with any code to identify a diagnosis of emphysema, COPD, cystic fibrosis or acute respiratory failure. Any time during the member's history through December 31 of the measurement year. (2) any members who have no medication events present in their record during the measurement year.



Asthma Medication Ratio, by Age



Payer	2016					2017					2018				
	5-11	12-18	19-50	51-64	65+	5-11	12-18	19-50	51-64	65+	5-11	12-18	19-50	51-64	65+
ESI	80%	68%	61%	69%		80%	68%	62%	70%		79%	68%	63%	70%	
MDCR			44%	47%	72%			45%	47%	73%			46%	48%	74%

Results: Among the population with employer-sponsored insurance (ESI), those age 5 to 11 had the highest AMR at approximately 80 percent. Among the ESI population age 51-64, the AMR was approximately 70 percent while the AMR for the Medicare (MDCR) population in the same age group was 48 percent. The lowest AMR rates were among the Medicare population age 19 to 64.



Health Care Cost Institute

HCCI's mission is to get to the heart of the key issues impacting the U.S. health care system – by using the best data to get the best answers. HCCI stands for truth and consensus around the most important trends in health care, particularly those economic issues that are critical to a sustainable, high-performing health system.

HCCI is a non-partisan, nonprofit organization that conducts and enables health care research based on its best-in-class datasets. HCCI holds claims data for around 100 million lives each year, including commercially-insured employer-sponsored and 100% of Medicare fee-for-service beneficiaries.

The Qualified Entity Program

The Centers on Medicare and Medicaid Services (CMS) makes 100 percent of Parts A, B, and D Medicare Fee-for-Service data available to approved organizations to facilitate the evaluation of health care quality and provider performance. Approved Qualified Entities are required to produce CMS-approved public reports combining the Medicare data and their own data holdings.

