Quality Connection Newsletter

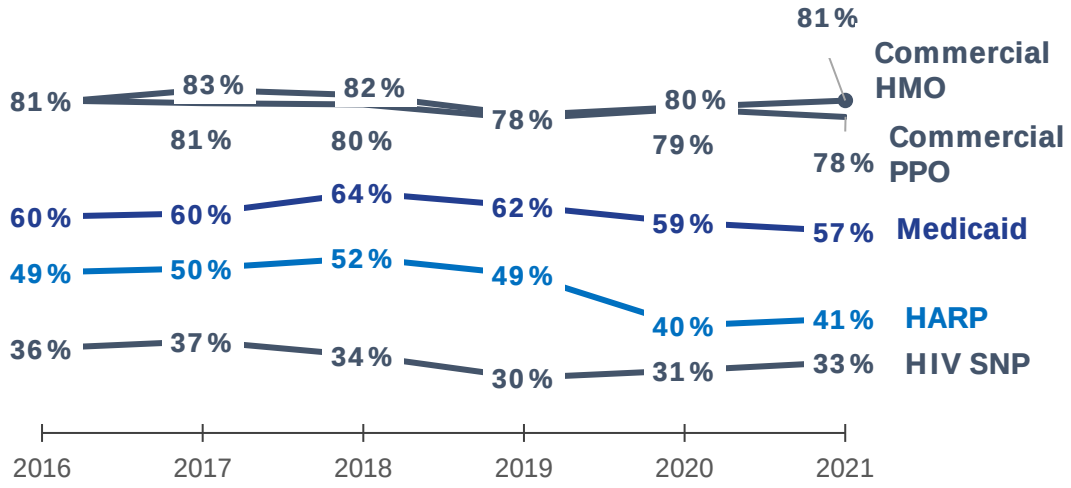
Asthma medication ratio rates have been decreasing for adult HARP and Medicaid Managed Care members since 2018, especially during the COVID-19 pandemic, and have not rebounded.

Asthma Medication Ratio Rates Among New York Medicaid Members

Asthma is a chronic condition that affects more than 1.4[1] million people in New York (NY). In measurement year (MY) 2021, 81,915 Medicaid members in NY were identified as having "persistent" asthma, which represents approximately 2% of the NY Medicaid managed care population. Managing asthma with appropriate medications can reduce the need for rescue medication as well as the costs associated with emergency department (ED) visits, inpatient admissions and missed days of work or school.[2] Daily controller medication use is recommended for individuals with persistent asthma.[3] The asthma medication ratio (AMR) is an evidence-based measure that assesses controller medication use. Ratios greater than or equal to 0.5 indicate that a patient may have filled their controller medication more than their rescue medication and were associated with a lower risk of asthma symptoms and attacks.[4] AMR is a pay-for-performance quality measure included in the NY Quality Incentive Program for Mainstream Medicaid, Health and Recovery Plans (HARP), and HIV Special Needs Plans (SNP). This measure was examined in order to understand potential reasons for a decrease in rates observed from 2018 to 2021 across various payers in NY.

Asthma Medication Ratio Trends Over Time

AMR rates decreased from 2018 to 2021 among all payers, with the largest decline seen for members enrolled in Health and Recovery Plans and Medicaid Managed Care.



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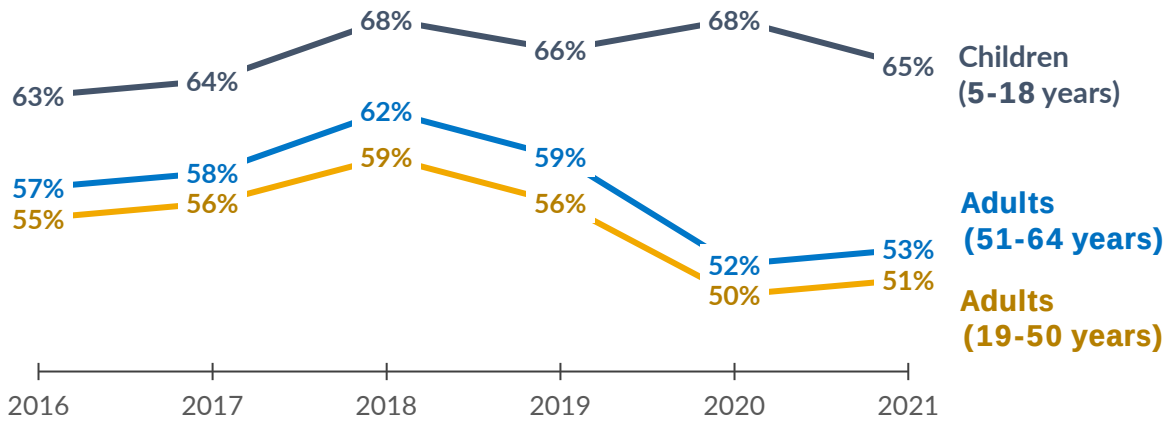
Changes made to HEDIS technical specifications were minor in nature and most likely did not contribute to decreases in asthma medication ratio rates from 2018 to 2021

	HEDIS 2020 (applies to MY 2019)	HEDIS 2020-2021 (applies to MY2020 and MY2021)
Eligible Population	Updated value sets to identify and include acute inpatient discharges with a principal diagnosis of asthma.	Removed the restriction that only three of the four visits with an asthma diagnosis be an outpatient telehealth, telephone visit, e-visit or virtual check-in when identifying the event/diagnosis.
Medication Groups	None	Added Anti-interleukin-4
Drug Types	Added Benralizumb; Removed Pributerol, Dyphylline, and Guaifenesin-theophylline	Added Dupilumab

Medicaid adults, not children, are driving the decrease in asthma medication ratio rates.



Discussion

The decline in AMR measure rates from MY2018 to MY2021 was not due to changes in HEDIS specifications but rather due to decreases in the numerator counts (members with asthma that take their controller medications adequately) paired with increases in denominator counts (the number of individuals who had persistent asthma). Decreases in rates from 2018 to 2021 were the greatest for HARP health plans (52% in 2018 to 41% in 2021) that manage care for adults with significant behavioral and mental health needs and is a population that was greatly impacted by the COVID-19 pandemic.[5, 6] Medicaid health plans also saw a decrease in AMR measure rates (64% in 2018 to 57% in 2021) which is in contrast with an increasing trend seen for the Medicaid national average (63% in 2018 to 65% in 2021)[2].

What Can Be Done

NYS Department of Health Can:
Continue to include AMR as a Pay-for-Performance measure in the Quality Incentive to further encourage health plans, especially HARP and Medicaid, to improve the AMR among its members with persistent asthma.

Encourage plans and providers to include AMR as a Pay-for-Performance measure in any future Value Based Payment arrangements.

Health Plans Can:
Improve efforts to educate their patients with asthma about the difference between long-acting controller medications versus rescue quick-relief medications.

Encourage and remind physicians to discuss with their patients if there have been any recent urgent care or ED visits and ask if they filled any rescue inhalers.

Health Care Providers Can:
Assess any need for prescribing controller medication and continue to educate patients on the proper use of asthma medications.

Prescribe a long-term controller medication and provide reminders to patients to fill controller medications, and ask if they filled any rescue inhalers.

People with Asthma Can:
Call their provider if using more than one rescue inhaler per month.

Methods

Data source
The Quality Assurance Reporting Requirements (QARR) datafile was used to obtain AMR data for January 1, 2016, through December 31, 2021. QARR is a public reporting system that was implemented in 1994 to monitor managed care plan performance and improve the quality of care provided to NY residents. Health plans in NY are required to submit quality performance data to QARR each year. The information is validated by a licensed organization and then published annually in a series of managed care reports.

Study population
Individuals aged 5 to 64 years who were enrolled in a NY Medicaid managed care plans (Medicaid, HARP and SNP) during each measurement year were included. People with dual enrollment in Medicaid and Medicare or other types of primary insurance were excluded to ensure a complete profile of paid services was available within the Medicaid claims data.

Data analysis
Statewide AMR rates were calculated by payer for MY2016 through MY2021 and compared over time to detect trends. HEDIS® 2020 and HEDIS® 2020-2021 technical specifications were compared to identify any changes made to the criteria that defines the calculation of the AMR measure. Additionally, Medicaid plan rates were stratified by age group to examine AMR patterns among adults and children.

References

1) Centers for Disease Control and Prevention. (2021, March 30). Most recent asthma state data. Centers for Disease Control and Prevention. Retrieved March 21, 2022, from https://www.cdc.gov/asthma/most_recent_data_states.htm

2) Asthma medication ratio (AMR). NCQA. (2021, December 16). Retrieved March 21, 2022, from https://www.ncqa.org/hedis/measures/medication-management-for-people-with-asthma-and-asthma-medication-ratio/

3) National Institute of Health. (2020, December). 2020 focused updates to the asthma management guidelines ... - NHLBI, NIH. Retrieved May 26, 2022, from https://www.nhlbi.nih.gov/sites/default/files/publications/AsthmaCliniciansGuideDesign-508.pdf

4) Andrews, A. L., Simpson, A. N., Basco, W. T., & Teufel, R. J. (2013, December 16). Asthma medication ratio predicts emergency department visits and hospitalizations in children with asthma. Medicare & Medicaid research review. Retrieved May 26, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4011648/

5) Pedrosa et al. (2020, October 2). Emotional, Behavioral, and Psychological Impact of the COVID-19 Pandemic. Retrieved March 23, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7561666/#B20

6) NYC. (2022). COVID-19: Mental Health and Substance Use. nyc.gov. Retrieved March 23, 2022, from https://www1.nyc.gov/site/doh/covid/covid-19-mental-health.page#:~:text=The%20COVID%2D19%20pandemic%20has,all%20can%20feel%20overwhelmed%20sometimes.