



# PDAB data calculations and methodology

## About this document

This document provides data sources, definitions, formulas, methodologies, and technical information.

## Manufacturer annual increase report

2022 calculated AWAC

*Data sources:* Medi-span

*Definition:* Average wholesale acquisition cost (AWAC) is the time-weighted price average for the year. Price history was pulled from Medi-span. The price listed in 2022 was multiplied by the number of days it spent at that price and divided by the number of days in the year. The results for each price were added together to obtain the AWAC.

## Beginning WAC 2022

*Data sources:* Data reported by manufacturers in iReg as part of DPT reporting.

*Definition:* Wholesale acquisition cost (WAC) reported in iReg for 01/01/2022.

## Beginning WAC 2023

*Data sources:* Data reported by manufacturers in iReg as part of DPT reporting and Medi-span.

*Definition:* The WAC listed in Medi-span at the beginning of January 2023 if the change to pricing occurred within four days of the end of calendar year 2022, or the December 31 WAC reported in iReg was not a price increase within four days of the end of the calendar year 2022.

## Manufacturer new specialty drugs

Beginning 2022 package WAC

*Data sources:* Medi-span

*Definition:* Wholesale acquisition cost (WAC) for a package of the drug as of 01/01/2022.

*Technical notes:* The Medi-span’s price history table was queried by pulling the most recent package WAC on or before 01/01/2022. If no WAC was identified in the price history table on or before 01/01/2022, the section was marked “No Data.”

### End 2022 package WAC

*Data sources:* Medi-span

*Definition:* Wholesale acquisition cost (WAC) for a package of the drug as of 12/31/2022.

*Technical notes:* The Medi-span’s price history table was queried by pulling the most recent package WAC before or on 12/31/2022. If no WAC was identified price history table on or before 12/31/2022, the section was marked “No Data.”

### WAC price change % 2022

*Data sources:* Calculated using the “Beginning 2022 package WAC” and “End 2022 package WAC,” which were pulled from Medi-span.

*Definition:* Average percent of the change in the year-over-year unit WAC for 2022.

*Formula:* (End of 2022 package WAC – Beginning of 2022 package WAC) / Beginning of 2022 package WAC

### Avg YoY price change (over the past five years)

*Data sources:* Medi-span

*Definition:* Average percent of the change in the year-over-year unit WAC for the last five years.

### Methodology notes:

Data pulled from Medi-span on 08/15/2023

All calculations below were conducted at the NDC level unless otherwise specified:

- Calculated **\$ YoY change in Unit WAC** by subtracting **unit WAC from previous year** from **unit WAC from basis year**.
- Calculated **% YoY change in Unit WAC** by dividing **\$ YoY change in Unit WAC** by **unit WAC from basis year**.
- Calculated **average % YoY change in Unit WAC over trailing 5 years** by taking the average of **% YoY change in Unit WAC** for all years with data.
- Aggregated data by named drug by averaging **average % YoY change in Unit WAC over trailing 5 years** for all NDCs.

**Example**

Year	previous year unit WAC	basis year unit WAC	\$ YoY change in Unit WAC	% YoY change in Unit WAC
2019	\$ 100	\$ 110	\$ 10	9.09%
2020	\$ 110	\$ 115	\$ 5	4.35%
2021	\$ 115	\$ 120	\$ 5	4.17%
2022	\$ 120	\$ 130	\$ 10	7.69%
2023	\$ 130	\$ 137	\$ 7	5.11%

Average % YoY change in Unit WAC over trailing 5 years 6.08%

## Carrier data and working drug lists

### Beginning 2022 package WAC

*Data sources:* Medi-span

*Definition:* The wholesale acquisition cost (WAC) for a package of the drug as of 12/31/2022.

*Technical notes:* The Medi-span’s price history table was queried by pulling the most recent package WAC on or before 01/01/2022. If no WAC was identified in the price history table on or before 01/01/2022, the section was marked “No Data.”

Data was aggregated across associated NDCs using the AVERAGEIF formula in Excel for NDCs tied to the grouped drug.

### End 2022 package WAC

*Data sources:* Medi-span

*Definition:* The wholesale acquisition cost (WAC) for a package of the drug as of 12/31/2022.

*Technical notes:* The Medi-span’s price history table was queried by pulling the most recent package WAC on or before 12/31/2022. If no WAC was identified in the price history table on or before 12/31/2022, the section was marked “No Data.”

Data was aggregated across associated NDCs using the AVERAGEIF formula in Excel for NDCs tied to the grouped drug.

### WAC price change % 2022

*Data sources:* Calculated using the “Beginning 2022 package WAC” and “End 2022 package WAC,” which were pulled from Medi-span.

*Definition:* The price increase/decrease in the average package WAC from the beginning to the end of 2022.

*Formula:* (End of 2022 package WAC – Beginning of 2022 package WAC) / Beginning of 2022 package WAC

*Avg YoY price change (over the past five years)*

*Data sources:* Medi-span

*Definition:* Average percent of the change in the year-over-year unit WAC for the last five years.

### Methodology notes

Data pulled from Medi-span on 08/15/2023

All calculations below were conducted at the NDC level unless otherwise specified:

- Calculated **\$ YoY change in Unit WAC** by subtracting **unit WAC from previous year** from **unit WAC from basis year**.
- Calculated **% YoY change in Unit WAC** by dividing **\$ YoY change in Unit WAC** by **unit WAC from basis year**.
- Calculated **average % YoY change in Unit WAC over trailing 5 years** by taking the average of **% YoY change in Unit WAC** for all years with data.
- Aggregated data by named drug by averaging **average % YoY change in Unit WAC over trailing 5 years** for all NDCs.

#### Example

Year	previous year unit WAC	basis year unit WAC	\$ YoY change in Unit WAC	% YoY change in Unit WAC
2019	\$ 100	\$ 110	\$ 10	9.09%
2020	\$ 110	\$ 115	\$ 5	4.35%
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2022	\$ 120	\$ 130	\$ 10	7.69%
2023	\$ 130	\$ 137	\$ 7	5.11%
Average % YoY change in Unit WAC over trailing 5 years				6.08%

Data was aggregated across associated NDCs using the AVERAGEIF formula in Excel for NDCs tied to the grouped drug.

## Affordability review

### Average WAC

*Data sources:* Medi-span

*Definition:* The most recent package WAC<sup>1</sup> for the drug, averaged across all national drug codes.

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<sup>1</sup> The date Medi-span data that was queried will be included in any affordability reviews

*Technical notes:* Medi-span's price history table was queried by pulling the most recent package WAC for each NDC. The average WAC was calculated by summing together the package WAC and dividing by the total count of NDCs with WAC data in Medi-span.

#### Percent average year-over-year change in WAC

*Data sources:* Medi-span

*Definition:* Average percent of the change in the year-over-year package WAC for the last five years.

*Technical notes:* Medi-span's price history table was queried by pulling the most recent package WAC for each NDC as of December 31<sup>st</sup> of the report year. The average package WAC was then calculated by summing together the package WAC and dividing by the total count of NDCs with WAC data in Medi-span for the report year. Next, the change in WAC between each year was calculated using the following formula:

$$\frac{(\text{Current year average package WAC} - \text{prior year average package WAC})}{\text{prior year average package WAC}}$$

In the final calculation step, the percentage change values for the last five years were averaged to calculate the percent average year-over-year change in package WAC for the last five years.