

DRAFT

# The Centers for Medicare & Medicaid Services



Part I:

Draft Methodology for Estimating  
National Average Retail Prices (NARP)  
for Medicaid Covered Outpatient Drugs

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## Background

Section 1927(f) of the Social Security Act provides, in part, that the Centers for Medicare & Medicaid Service (CMS) may contract with a vendor to conduct monthly surveys with respect to retail community pharmacies of retail prices for Medicaid covered outpatient drugs.

The second part of the survey (Part II) focuses on the retail community pharmacy ingredient costs. The Part II methodology was disseminated for review and comment in another document.

This part of the survey, which is the first part (Part I), will focus on the retail community pharmacy consumer purchase prices. This will provide for a survey of the prices for Medicaid covered outpatient drugs dispensed by retail community pharmacies based on actual market transactions, which will include prices derived from independent community pharmacies and chain pharmacies.

Section 1927(f) also provides for the reporting by the States of payment and utilization rates for certain drugs and comparing State Medicaid drug payment rates with the national retail survey prices for the 50 most widely prescribed drugs.

The Deficit Reduction Act of 2005 (DRA) was enacted on February 8, 2006, in part to reduce spending on mandatory programs such as Medicaid. Part of those requirements are laid out in DRA Section 6001, which provides that CMS may contract for the performance of a monthly national survey of retail prices and report annual State performance rankings. To meet this requirement, CMS has contracted with Myers and Stauffer LC, a national certified public accounting firm, to prepare a monthly report of the national average retail price (NARP) of Medicaid covered outpatient drugs by National Drug Code (NDC). In addition to the NARP, Myers and Stauffer LC will report the average drug price paid by cash, Medicaid, and third party insurance customers.

The average drug price benchmarks can be used by State Medicaid pharmacy programs to evaluate their current pharmacy reimbursement methodology.

The purpose of this document is to describe and illustrate the methodology that will be utilized to develop the NARP for Medicaid covered outpatient drugs.

## Purpose

The purpose of the NARP is to publish a monthly pricing database for Medicaid covered outpatient drugs that is based on actual monthly market transactions.

A monthly nationwide survey will be performed to collect drug prices from retail community pharmacy entities, which will include independent pharmacies and chain pharmacies in the United States. The survey will capture and maintain separate files of consumer drug prices for each of the following types of customers:

- Cash paying customers
- Customers with commercial third party insurance
- Medicaid customers

CMS has contracted with Myers and Stauffer LC, a national certified public accounting firm, to conduct the surveys of drug prices for pharmacy entities, such as independent and chain retail community pharmacies.

## Level of Reporting

The NARP will be calculated and reported at the NDC11 level and represent the mean price per unit (e.g., EACH, ML, GM) paid to retail community pharmacies in each of the 50 states and the District of Columbia (See 1,2 below). For purposes of the Medicaid drug rebate program, the NDC11 is a unique 11-digit code assigned by the drug manufacturer to a specific drug. This code identifies the drug manufacturer, dosage form, strength, and package size.

The NARP contains the combined prices paid for drug ingredient costs, customer pay amounts, and dispensing fees from actual market transactions. Retail prices for pharmacy entities (independent pharmacies and chain pharmacies in the United States) will be combined in calculating the NARP. There will not be a separate NARP based on pharmacy entity type.

Average retail prices will be reported at a per unit level rather than at a per prescription level since the quantity dispensed per prescription can vary. The mean price per unit includes reimbursement paid for drug ingredient, customer pay amount, and dispensing fee. In order to calculate an estimate of the average price per prescription, the mean price per unit is multiplied by the prescribed quantity. For example, if the reported mean price per unit for an NDC is \$0.25 and the quantity for the prescription is 30, then multiplying \$0.25 x 30 results in an estimated average prescription price of \$7.50.

A separate average national retail price will be reported for cash paying customers, customers with commercial third party insurance, and Medicaid customers. In addition, the overall NARP will be reported. This level of reporting is illustrated in the sample NARP file located in the Deliverables section of this document.

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<sup>1</sup> For the purposes of calculating and reporting the NARP, the District of Columbia is categorized as a State.

<sup>2</sup> The term Retail Community Pharmacies is defined in Section 1927(k)(10) of the Social Security Act.

## Data Source

Myers and Stauffer LC will work with numerous data sources in order to facilitate the collection, calculation, analysis, and reporting of the NARP.

- Aggregated market transactions from pharmacy entities (independent pharmacies and chain pharmacies in the United States) will be obtained from pharmaceutical data suppliers.
- Drug identification and published pricing information will be obtained from multiple national drug pricing compendia in order to verify that NDCs meet certain NARP criteria, such as whether the NDC is valid and active.
- The Medicaid covered outpatient drug product file will be obtained from Medicaid.gov to use in the NARP criteria evaluation.

The data suppliers provide Myers and Stauffer LC with access to aggregated data from approximately 50 million nationwide retail pharmacy claims each month. This monthly data sample will be used to generate estimates of the NARP for highly utilized Medicaid covered outpatient drugs. On average, the NDCs represented in the monthly NARP file will account for 70-75% of a State's Medicaid pharmacy expenditures.

The data will also be used to estimate the utilization of drugs. The estimated utilization is used to weigh the NARP (refer to the Data Analysis and Methodology section of this document).

## Data Collection

On a monthly basis, Myers and Stauffer LC will collect prescription claims data from the data suppliers. The data are aggregated by the suppliers and represent the actual retail prices paid for drug purchases in the previous month. The data elements received from the suppliers along with brief descriptions are listed below:

- Date – Month and year of the claim.
- State – State where the pharmacy that dispensed the prescription is located.
- Pharmacy Entity Type<sup>3</sup> – Type of retail community pharmacy where the prescription was dispensed, including independent and chain. Specialty pharmacies will be excluded from the NARP at this time.

Independent – A pharmacy that is not owned or operated by a chain. Franchises are included in the data under this category.

Chain – A pharmacy that belongs to a group of four or more pharmacies that are all under the same ownership and all have the same name. Exception: A pharmacy that belongs to a small chain of three or fewer pharmacies is classified as independent.

- Pay type<sup>4</sup> – Type of payer for the claim, which includes cash, Medicaid, or third party insurers.

Cash – Cash.

Medicaid – Fee-for-service.

Third Party – Commercial, Medicaid Managed Care, and Medicare Part D plans.

- NDC11 – The 11-digit National Drug Code.
- Total Claims – The total number of claims obtained by the data suppliers for each NDC11/state/pharmacy entity type/pay type combination.
- Filtered Claims - Total claims minus claims removed through the data suppliers' filtering process. The total number of filtered claims is provided for each

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<sup>3</sup> Pharmacies that are owned and operated by the government or pharmacies that have an unknown pharmacy classification are excluded.

<sup>4</sup> Claims that utilize multiple payers such as Medicaid third party liability are excluded..

combination of NDC11/state/pharmacy classification/pay type. Only filtered claims are used to calculate the mean price per unit.

- Most Frequent Quantity Dispensed – The quantity most frequently dispensed for each NDC11 throughout the month. The unit of measure for quantity includes per package, milliliters, or grams.
- Mean Price per Unit – The average retail price for each combination of NDC11/state/pharmacy entity type/pay type. The price includes reimbursement paid for drug ingredient, customer pay amount, and dispensing fee. The mean price per unit is calculated as:

$$\bar{p} = \frac{1}{n} \sum_{i=1}^n p_i$$

where  $p_i$  is the retail price for one of the prescriptions and  $n$  is the number of filtered claims in the category.

- Standard Deviation of Mean Price per Unit – The total standard deviation per NDC per billing unit price paid for each aggregated claim. The standard deviation measures the dispersion in the sample of retail prices. It is calculated as:

$$s_p = \sqrt{\frac{\sum_{i=1}^n (p_i - \bar{p})^2}{n - 1}}$$



## Data Management

In order to ensure the data represent actual prices paid, incomplete, erroneous, and aberrant transactions will be removed. Myers and Stauffer LC, in collaboration with its data suppliers, employs additional data filters to augment those already in place through the National Council of Prescription Drug Programs (NCPDP) adjudication process. The data filters remove retail price claims that fall into one or more of the following categories:

- Unit price is not provided and cannot be inferred.
- Payer type is unknown.
- Claim is associated with discount card, co-pay card, or patient assistance program.
- More than one payer type per claim.
- Dispensing fee is greater than \$50.00.
- A price observation that is more than three standard deviations from the average retail price within the same NDC, state and pay type.
- Cash claims where third party plan payment is greater than \$0.00.
- Claims for NDCs that do not have corresponding utilization data.
- Claims for NDCs that do not meet the minimum number of claims nationwide. The minimum values established are 30 or more claims for which there are corresponding NDC utilization data for each pay type excluding cash. At least 30 observations are necessary for the sample means to have a distribution that is considered approximately normal.

While the data filters remove aberrant prescription claim transactions, the reduction on the size of the data set is expect to be quite small at about 3 percent.

Prior to calculating the national average purchase prices, Myers and Stauffer LC will also filter claims to ensure that the final deliverable only includes Medicaid covered outpatient drug products. NDCs will only be included if they have a Medicaid drug rebate Drug Efficiency Study Indicator (DESI) not equal to five or six and if they appear on the most recent available list of drug products as published on Medicaid.gov at:

<http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Prescription-Drugs/Medicaid-Drug-Rebate-Program-Data.html>

The data suppliers aggregate the individual claims data prior to creating the data set file deliverable for Myers and Stauffer LC. Prescription data for each NDC are aggregated into one record line for each combination of the following categories: state, pay type (Medicaid, cash and third party) and pharmacy entity type (chain and independent). A mean price per unit is calculated for each record line, which includes the price paid for drug ingredient cost, customer pay amount, and dispensing fee combined.

While a sample size of approximately 50 million claims per month is large, it is important to note that this does not comprise 100 percent of all prescription claims in each state. Therefore, it is appropriate to include weighting in the calculation of the national average purchase price for each drug. Pricing data will be weighted based on the estimated utilization for each drug. This utilization information is provided by the data suppliers based upon pharmacy data obtained directly from pharmacies. Estimated utilization is provided for each NDC and is separated by state/pay type/pharmacy entity type combination.

## Data Analysis and Methodology

Myers and Stauffer LC works directly with multiple data suppliers to gather the information needed to calculate and review the NARP. The primary data collected include monthly drug claims and utilization data.

The data used to calculate the NARP will be supplied for each drug in an aggregated format by NDC, the state in which the prescription was dispensed, pharmacy entity type that dispensed the prescription (chain or independent), and the type of payer (cash, Medicaid, and third party insurers). The data suppliers will provide a calculated average price per unit dispensed within each category according to the claims data. Below is an example of the format and data provided.

Table 1: Example of the Data Set Received from Data Suppliers

State	Drug Name	NDC11	Pharmacy Entity Type	Pay Type	Mean Total PPU*	Projected Utilization	Weighted Total PPU
AK	Drug A 60 mg Cap	01234567890	Chain	Cash	\$7.45	3,158	\$23,516.05
AK	Drug A 60 mg Cap	01234567890	Chain	Medicaid	\$6.44	2,520	\$16,224.01
AL	Drug A 60 mg Cap	01234567890	Independent	Third Party	\$5.93	102,793	\$609,192.44
AL	Drug A 60 mg Cap	01234567890	Chain	Cash	\$7.11	24,234	\$172,184.99
AL	Drug A 60 mg Cap	01234567890	Chain	Medicaid	\$6.00	15,329	\$92,004.66
AL	Drug A 60 mg Cap	01234567890	Independent	Medicaid	\$5.98	1,892	\$11,313.78
AL	Drug A 60 mg Cap	01234567890	Chain	Third Party	\$5.69	1,367,242	\$7,778,968.48

\*PPU = Price Per Unit

The total number of claims associated with each of these categories varies. Therefore, the national average for each NDC from the category sample mean must be weighted by the estimated number of claims within the category it represents. In order to ensure accurate weighting of the average unit prices, the data suppliers will also provide a national utilization file. This file contains estimates of the number of units dispensed for the month for each NDC/state/pharmacy entity type/pay type combination. The utilization estimates are based on actual claims data received through the point of sale system from pharmacies that participate in the data suppliers' network. Since not all pharmacies are in this network, the data are extrapolated to reflect 100 percent of monthly utilization.

Each month, the following steps will be taken to calculate the NARP for each NDC:

- 1) The data suppliers compile a file with the actual price derived from claims data. The data are processed through agreed-upon internal checks and filters as described in the Data Management section of this document. The data suppliers calculate the average price for each NDC/state/pharmacy entity type/ pay type combination and produce a file containing the sample means along with other relevant data. All identifiers are removed from the file and it is aggregated into an agreed-upon format. The resulting file is provided to Myers and Stauffer LC on a monthly basis.
- 2) The data suppliers compile a corresponding monthly utilization file. The utilization data are gathered through the point of sale system and represent the majority of the prescriptions dispensed in the United States. The data suppliers extrapolate this figure to provide an estimate of total utilization. This is done using proprietary software and procedures. All identifiers are removed from the file containing the utilization data, and the file is provided to Myers and Stauffer LC in an agreed-upon format on a monthly basis.
- 3) Myers and Stauffer LC receives the data files monthly and performs quality assurance checks to monitor the reasonableness, reliability and validity of the aggregated data files. Examples of procedures include monitoring month-to-month variations in claims counts and performing verification of calculations for selected drugs.
- 4) Once the data are validated, the calculations in steps a through f below are carried out by Myers and Stauffer LC for each Medicaid covered outpatient NDC that meets the NARP calculation criteria. For a given NDC in a given month:

$\bar{P}_{Pay,S,Ph}$  = average price for payer *Pay*, in state *S* at pharmacy entity type *Ph*

$N_{Pay,S,,Ph}$  = projected utilization payer *Pay*, in state *S* at pharmacy entity type *Ph*

The calculations are as follows:

- a. Calculate the total amount paid for all prescriptions in a given month within each category (NDC/state/pharmacy classification/payer). This is calculated by multiplying the mean total price per unit for the category by the total units dispensed within the category:

$$\bar{P}_{Pay,S,Ph} \times N_{Pay,S,Ph}$$

With three payer types, 51 states and two types of pharmacy entities, there is a maximum of 306 different values (3 x 51 x 2). For those categories in which there are no observations for the month,  $N_{Pay,S,Ph}$  is set to zero.

- b. The projected monthly nationwide utilization for each NDC and pay type is calculated by summing the projected utilizations across all categories in that pay type:

$$N_{Pay} = \sum_{S=1}^{51} \sum_{Ph=1}^2 N_{Pay,S,Ph}$$

There will be three of these terms, each corresponding to Medicaid, third-party, and cash payers. With 51 states containing chain and independent pharmacies, this summation contains at most 102 terms. The total number of units of the drug sold during the month is

$$N = N_{\text{Medicaid}} + N_{\text{3rd Party}} + N_{\text{Cash}}$$

- c. The monthly weighted total Price Per Unit (PPU) is summed for each NDC and pay type. This is the estimated total monthly expenditures on this drug by each pay type:

$$TOTAL_{Pay} = \sum_{S=1}^{51} \sum_{Ph=1}^2 N_{Pay,S,Ph} \bar{P}_{Pay,S,Ph}$$

There will be three of these numbers, each of which corresponds to the three numbers obtained in step b. These numbers are summed across pay types to yield the estimate of the total amount spent on the drug by all three pay types during the month:

$$TOTAL = Total_{\text{Medicaid}} + Total_{\text{3rd Party}} + Total_{\text{Cash}}$$

- d. The NARP is obtained by dividing the total amount paid in step c by the number of units sold in step b:

$$\bar{p} = \frac{TOTAL}{N}$$

The average price for each payer type is calculated in the same manner:

$$\bar{p}_{Pay} = \frac{TOTAL_{Pay}}{N_{Pay}}$$

- e. The margin of error for the national average is calculated as a measure of the precision of the estimate. The calculation requires sample size and standard deviation data for each category. These values are denoted as  $n_{Pay,S,Ph}$  and  $s_{Pay,S,Ph}$ . The data suppliers will provide these data in the file containing the average PPU for each category. The formula for the margin of error corresponding to a 95 percent level of confidence is:

$$ME = \frac{1.96}{N} \sqrt{\sum_{Pay=1}^3 \sum_{S=1}^{51} \sum_{Ph=1}^2 \left[ N_{Pay,S,Ph}^2 \left( 1 - \frac{n_{Pay,S,Ph}}{N_{Pay,S,Ph}} \right) \frac{s_{Pay,S,Ph}^2}{n_{Pay,S,Ph}} \right]}$$

With all else equal, the margin of error becomes smaller as the sample sizes rise and as the standard deviations for the different categories decline.<sup>5</sup>

- f. Once the margin of error is calculated, the upper and lower bounds of the 95 percent confidence interval are calculated as:

$$\text{Upper and Lower Bound} = \bar{p} \pm ME$$

Approximately 95 percent of these confidence intervals will contain the true mean.

For illustration, the formulas presented above were applied to a sample of retail prices paid for “Drug B” 60 mg capsules. Table 2 contains the relevant data from a single state (State AA). The table shows that Medicaid provided reimbursement for an estimated 23,655 units to chain pharmacies and 18,987 units to independent pharmacies<sup>6</sup>. An estimated total of \$125,683.75 was provided to chain pharmacies and \$100,836.16 was provided to independent pharmacies. Step a is the determination of these numbers, along with similar numbers for other payers and other states.

<sup>5</sup> The margins of error do not account for the uncertainty that arises because the utilizations are estimated rather than known. This uncertainty cannot be measured without knowledge of the true utilizations.

<sup>6</sup> Using the notation from above:  $N_{Medicaid,AA,Chain}=23,655$  and  $N_{Medicaid,AA,Independent}=18,987$ .

Table 2: Purchases of “Drug B” 60 mg Capsules in June 2012 from a Single State (State AA)

Pharmacy Entity Type	Pay Type	Mean Total PPU	Projected Utilization	Total Amount Spent
Chain	Medicaid	\$5.3132	23,655	\$125,683.75
Independent	Medicaid	\$5.3108	18,987	\$100,836.16
Chain	Cash	\$5.5617	15,384	\$85,561.19
Independent	Cash	\$5.3603	2,791	\$14,960.60
Chain	Third Party	\$5.2429	430,911	\$2,259,223.28
Independent	Third Party	\$5.2781	125,136	\$660,480.32

Step b sums the utilization results across all states. For “Drug B” 60 mg capsules, the resulting figures are:

$$N_{\text{Medicaid}} = 919,035, \quad N_{\text{3rd Party}} = 27,671,475, \quad N_{\text{Cash}} = 2,668,747$$

$$\text{and } N = 919,035 + 27,671,475 + 2,668,747 = 31,259,257$$

Step c is carried out in the same manner to yield total spending by pay type and overall total spending for “Drug B” 60 mg capsules. The figures are:

$$\text{Total}_{\text{Medicaid}} = \$13,596,192.230,$$

$$\text{Total}_{\text{3rd Party}} = \$144,806,433.500,$$

$$\text{Total}_{\text{Cash}} = \$5,844,219.369$$

$$\text{TOTAL} = \$13,596,192.230 + \$144,806,433.500 + \$5,844,219.369$$

$$= \$164,246,845.10$$

The averages are calculated in step d, using the figures from steps b and c above, yielding the following results:

$$\bar{p}_{\text{Medicaid}} = \frac{\$13,596,192.23}{2,668,747} = \$5.0496$$

$$\bar{p}_{\text{3rd Party}} = \frac{\$144,806,433.55}{27,671,475} = \$5.2331$$

$$\bar{p}_{\text{Cash}} = \frac{\$5,844,219.37}{919,035} = \$6.3591$$

$$\bar{p} = \frac{\$164,246,845.1}{31,259,257} = \$5.2543$$

In order to calculate the margin of error and the confidence interval in steps e and f, one must know the sample size and the standard deviation for each of the state/pay type/pharmacy entity type combinations. As noted above, the data suppliers will provide this data. The margin of error of Drug B is \$0.0052, a little more than half a cent. The lower and upper bounds of the confidence interval are:

$$\$5.2543 \pm \$0.0052 = \$5.2491, \$5.2596.$$

The estimates are very precise in this case. Table 3 summarizes the results across all states.

Table 3: Sample of “Drug B” 60 mg Capsules

Statistic	Value
Total Amount Paid (TOTAL)	\$164,246,845
Total Number of Units (N)	31,259,257
National Average Retail Price (NARP)	\$5.2543
95 Percent Margin of Error	\$0.0052
Upper Bound of the Confidence Interval	\$5.2596
Lower Bound of the Confidence Interval	\$5.2491
Average Price: Cash Payers	\$6.3591
Average Price: Medicaid Payers	\$5.0946
Average Price: Third-Party Payers	\$5.2331



## Quality Assurance

Myers and Stauffer LC will conduct quality assurance validations as a standard monthly procedure to ensure data integrity. Myers and Stauffer LC will also perform an ongoing review of random de-identified prescription claims data that have passed the filtering process to ensure the pricing data and the data collection process managed by the data suppliers result in consistent and reliable data.

Specifically, Myers and Stauffer LC will validate the data suppliers' aggregated results each month by performing an ongoing review of calculations made by the data suppliers by randomly selecting a sample from the aggregated datasets. The data suppliers will provide all associated individual claims from their database that represent the aggregated data for the requested sample. All pharmacy identifiers are removed from the file. Myers and Stauffer LC will use the individual line claims level data to validate the aggregated data and the resulting calculations provided by the data suppliers.

## Deliverables

The NARP is expected to be available to the states. There will be one file, provided in two formats, that contains the NARP and associated information for the three pharmacy entity types. Table 4 is an example of the NARP file that will be provided and will be updated monthly.

### Reference File Format and Layout

The reference file will be published as a pdf file and a Microsoft® Excel file. The file will be sorted by NDC in ascending numerical order and will contain the following fields:

- Drug Name – Label name associated with the NDC.
- NDC – 11-digit National Drug Code; limited to NDCs listed on the CMS covered outpatient drug product file, or NDCs approved by CMS to be included as Medicaid covered outpatient drugs.
- Package Size – Package size associate with the NDC.
- Pricing Unit - Pricing unit is the type of billing unit to be used for a product (EACH, GM, ML).
- Packaging – Packaging is the text description of the container that is in direct contact with the product.
- Labeler – The labeler is the text description of the name of the manufacturer, distributor, or repackager for the NDC.
- Active Ingredient(s) – The active ingredient(s) represents the text description of the generic name of drug product for the NDC.
- National Average Medicaid Retail Price Per Unit – The National Average Medicaid Retail Price Per Unit is the mean Medicaid price per unit (EACH, GM, ML) for all pharmacy types and states.
- National Average Third Party Retail Price Per Unit – The National Average Third Party Retail Price Per Unit is the mean third party price per unit (EACH, GM, ML) for all pharmacy types and states.
- National Average Cash Retail Price Per Unit – The National Average Cash Retail Price Per Unit is the mean cash price per unit (EACH, GM, ML) for all retail community pharmacy types and states.

- National Average Retail Price Per Unit NARP – The National Average Retail Price Per Unit NARP is the mean price per unit (EACH, GM, ML) across all pharmacy entity types/pay types/states.
- Quantity Most Frequently Dispensed – The Quantity Most Frequently Dispensed is the most frequent quantity dispensed per claim.
- NARP Per RX – National Average Retail Price per Claim is the National Average Retail Price Per Unit multiplied by the Quantity Most Frequently Dispensed.

Table 4 is an example of the NARP file.

Table 4: Sample NARP File  
National Average Retail Prices (NARP) for the Month of June 2012

Drug Name	NDC	Pkg Size	Pricing Unit	Packaging	Labeler	Active Ingredient(s)	National Average Medicaid Retail Price Per Unit (a)	National Average Third Party Retail Price Per Unit (b)	National Average Cash Retail Price Per Unit (c)	National Average Retail Price Per Unit NARP (d)	Quantity Most Frequently Dispensed (e)	NARP Per RX <sup>1</sup> (d x e)
DRUG A 10 MG TABLET	01234567890	30	EA	BOTTLE	MANUFACTURER A	INGREDIENT A	\$17.41177	\$17.40266	\$21.15184	\$17.45314	30	\$523.59
DRUG B 5 MG TABLET	45678901234	30	EA	BOTTLE	MANUFACTURER B	INGREDIENT B	\$17.34986	\$17.28658	\$19.23792	\$17.34289	30	\$520.29
DRUG C 50 MG CAPSULE	56789012345	100	EA	BOTTLE	MANUFACTURER C	INGREDIENT C	\$0.35463	\$0.26655	\$0.41220	\$0.28647	30	\$8.59
DRUG D 500 MG TABLET	67890123456	1000	EA	BOTTLE	MANUFACTURER D	INGREDIENT D	\$0.36754	\$0.26421	\$0.49142	\$0.28803	30	\$8.64
DRUG E 12% CREAM	78901234567	385	GM	JAR	MANUFACTURER E	INGREDIENT E	\$0.38195	\$0.28275	\$0.42966	\$0.30622	30	\$9.19
DRUG F 900 MG CAPSULE	89012345678	1	EA	BLIST PACK	MANUFACTURER F	INGREDIENT F	\$125.66567	\$124.51523	\$133.68834	\$124.80893	1	\$124.81
DRUG G 5 MG TABLET	90123456789	4	EA	DOSE-PACK	MANUFACTURER G	INGREDIENT G	\$29.05718	\$28.78004	\$30.78602	\$28.86260	4	\$115.45
DRUG H SUSPENSION	00001567890	8	ML	DROP BTL	MANUFACTURER H	INGREDIENT H	\$5.60017	\$5.59371	\$5.92607	\$5.60576	30	\$168.17

<sup>1</sup> National Average Retail Price Per Rx = National Average Retail Price Per Unit x Most Frequent Quantity Dispensed

Reference File Publication

The NARP reference file will be posted on Medicaid.gov monthly. The file will contain all of the NDCs that have an assigned NARP. Each NARP file update will contain a full listing of Medicaid covered outpatient drug products NDCs with assigned NARPs; therefore there will be a full file replacement on a monthly basis. NDCs with CMS Termination Dates that have passed will be excluded from the file. The updated file will replace the existing file on Medicaid.gov.

In addition to the NARP file, an accompanying narrative document will be published to assist in the interpretation of the NARP file. Information in this document will include the field descriptions.



## Glossary

Active Ingredient(s)	The active ingredient(s) represents the text description of the generic name of drug product for the NDC.
Customer Pay Amounts	Amount paid by the customer to the pharmacy entity, such as copayments, coinsurance, or deductibles.
Drug Name	The drug name is the labeled product name including active ingredient(s), strength, unit of measure, and dosage form.
Labeler	The labeler is the text description of the name of the manufacturer, distributor, or repackager for the NDC.
National Average Cash Retail Price Per Unit	The National Average Cash Retail Price Per Unit is the mean cash price per unit (EACH, GM, ML) for all retail community pharmacy types and states.
National Average Retail Price Per Claim	National Average Retail Price per Claim is the National Average Retail Price Per Unit multiplied by the Quantity Dispensed.
National Average Medicaid Retail Price Per Unit	The National Average Medicaid Retail Price Per Unit is the mean Medicaid price per unit (EACH, GM, ML) for all retail community pharmacy types and states.
National Average Third Party Retail Price Per Unit	The National Average Third Party Retail Price Per Unit is the mean Third Party price per unit (EACH, GM, ML) for all retail community pharmacy types and states.
National Average Retail Price Per Unit	The National Average Retail Price Per Unit is the mean price per unit (EACH, GM, ML) across all retail community pharmacy entity types/pay types/states.
NDC	The National Drug Code (NDC) is the national classification system for identification of drugs. The NDC is a unique 11- digit code assigned by the drug manufacturer to a specific drug. It identifies the drug manufacturer, form, strength, and package size.

Packaging	Packaging is the text description of the container that is in direct contact with the product.
Pay Type	Type of payer for the claim, includes cash, Medicaid, and third party insurers.
Pharmacy Entity Type	Type of retail pharmacy where the claim was adjudicated, including independent and chain.
Pkg. Size	The package size is the labeled quantity that corresponds to the NDC.
Pricing Unit	The pricing unit is the type of billing unit to be used for a product (EACH, GM, ML).
Quantity Most Frequently Dispensed	The Quantity Most Frequently Dispensed is the most frequent quantity dispensed per claim.