

Preliminary Medicare Quarterly Part B Spending by Drug Methodology

The Preliminary Medicare Quarterly Part B Spending by Drug dataset presents spending information for Medicare Part B drugs – drugs administered in doctors’ offices and other outpatient settings and paid through the Medicare Part B program. This document describes the methodology CMS uses to create the Medicare Quarterly Part B Spending by Drug dataset, including data sources, aggregation processes, definitions for metrics, and limitations.

Data Sources and Aggregation

The primary data source for this dataset is Medicare fee-for-service Part B claims (e.g. claims from physicians, durable medical equipment and other suppliers, outpatient hospitals, etc.) which contain information on drugs administered and billed directly to Medicare by providers. Analyses of Medicare Part B drugs are possible for all Part B fee-for-service Medicare beneficiaries but exclude any beneficiaries in the Medicare Advantage program (which represents over 50% of the Medicare population as of 2024. For more current information regarding Medicare enrollment, see the [monthly Medicare Enrollment data](#)). In an effort to deliver more timely information, starting July 2026, Part B claims data is extracted three months after the latest quarter reporting period ends, capturing over 94% of records. Generally, final-action claims are provided to researchers when they reach 12 months maturity, making them more stable for research and policy use. Users accessing less mature data should be aware of its limitations; within three months, services are noted but details like payment are not considered final. Although, based on recent analysis¹ most Part B records (92%) are considered final 3 months after service, rising to 96% at six months maturity.

We summarized Part B claims by Healthcare Common Procedure Coding System (HCPCS) codes and limited claims to HCPCS codes listed in the publicly available [Medicare Average Sales Price \(ASP\)](#) quarterly files for the most recent quarter and year at the time of data release². We excluded the following Medicare Part B claims: claims billed using “Not Otherwise Classified” (NOC) codes (e.g. J3490, J3590, or J9999), claims where Medicare was not the primary payer, claims submitted by critical access hospitals (CAHs) and Maryland hospitals, and claims with total spending amounts of zero associated with the drug, which is due to bundling in Ambulatory Payment Classification groups. Additionally, drugs with fewer than 11 Part B claims were excluded entirely. The claims data were then averaged across any applicable modifiers or place of service indicators associated with a single HCPCS. Drugs with multiple strengths (e.g. 20mg, 40mg, and 80mg) were not combined when individual HCPCS codes exist for different strengths.

Drug Metrics

¹ <https://resdac.org/articles/understanding-cms-data-maturity>

² Medicare Part B drug pricing on the quarterly files may not be available for a variety of reasons; for example, because the drug that is described by the HCPCS code is no longer available, the HCPCS code has been updated or replaced, etc.

The Medicare Quarterly Part B Spending by Drug dataset focuses on utilization of and total spending for Medicare Part B drugs. The dataset also includes brand and generic names, manufacturer details, and consumer-friendly descriptions of the drug uses and clinical indications. This information is obtained by matching HCPCS codes with National Drug Codes (NDCs) using a publicly accessible [Medicare HCPCS-NDC crosswalk](#) and then linking the matched NDCs to the First Databank MedKnowledge™ database.

Utilization metrics include the total number of beneficiaries and claims, while total spending is calculated by summing the three revenue center payment fields on the claim: Medicare payment, deductible, and coinsurance. This calculation represents the full value of the product, encompassing both the Medicare payment and the beneficiary's liability. All metrics for Part B drugs are calculated at the Healthcare Common Procedure Coding System (HCPCS) level.

CMS is obligated by the federal Privacy Act, 5 U.S.C. Section. 552a and the HIPAA Privacy Rule, 45 C.F.R. Parts 160 and 164, to protect the privacy of individual beneficiaries and other persons. All direct identifiers have been removed from this data file.

Limitations

While this dataset is similar to the [annual Medicare Part B Spending by Drug dataset](#), the quarterly dataset reports preliminary data. This data is updated quarterly and may change with each new release due to claims lag. Once a full year of data is available with a sufficient run-out period, it will transition from the preliminary quarterly dataset to the annual dataset. Due to the preliminary nature of the quarterly dataset, we advise using caution when comparing between the annual and quarterly datasets. Less mature data has limitations; researchers can learn about the limitations of less mature data at www.resdac.org/understanding-cms-data-maturity.