Consensus Administrative Specifications for Health Care Cost Driver Analyses

Analytic Support Resource

Developed by the Peterson-Milbank Work Group on Health Care Cost Driver Definitions

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INTRODUCTION

States with cost growth target programs have made great advances gathering, analyzing, and publishing information about health care spending patterns, but as is often the case there are some differences in how they have done so. With the goal of developing standardized cost driver definitions, in 2024 Bailit Health convened state officials, state analytic contractors, and other experts in a **Work Group on Health Care Cost Driver Definitions** with the support of the Peterson-Milbank Program for Sustainable Health Care Costs.

In addition to strengthening state-level cost driver analyses through the diffusion of best practices, these definitions support cross-state comparison and broader generalizations; this has the potential to strengthen the national discussion around health care cost drivers and cost growth targets, potentially leading to greater attention and uptake of state health care cost growth mitigation policies.

The Work Group's objectives included:

- Understanding currently used cost driver definitions;
- Identifying consensus definitions that produce valid and meaningful information;
- Exploring how aligned cost driver definitions could improve state measurement, analysis, and reporting activities; and
- Identifying general and state-specific barriers to implementing aligned cost driver definitions.

Bailit Health and the Peterson-Milbank Program for Sustainable Health Care Costs thank work group participants for their time, knowledge, and active discussion, including state staff from the California Department of Health Care Access and Information, Colorado Division of Insurance, Connecticut Office of Health Strategy, Delaware Department of Health and Social Services, Maine Health Data Organization and Office of Affordable Health Care, Massachusetts Health Policy Commission and Center for Health Information and Analytics, Minnesota Department of Health, New Jersey Office of Health Care Affordability and Transparency, Oregon Health Authority, Rhode Island Office of the Health Insurance Commissioner, Vermont Green Mountain Care Board, and Washington Health Care Authority; consultants and analysts from Comagine, Freedman HealthCare, Human Services Research Institute (HSRI), Mathematica Policy Research, and Onpoint Health Data (OHD); the National Association of Health Data Organizations (NAHDO); and pharmacy experts Marty Goldberg, Steve Schondelmeyer, and Joe Dieleman.

SECTION 1:

Measuring Spending by Service Category

CONSENSUS ADMINISTRATIVE SPECIFICATION FOR DEFINING SERVICE CATEGORIES FOR MEASURING SPENDING

DESCRIPTION

Service categories are used to break down spending on different types of care. They allow analysts to track spending at a more granular level, focusing on categories that are of interest to policymakers.

The six Peterson-Milbank-recommended service categories for use in state cost driver analyses are:

	Includes	***Excludes***
1. Inpatient Hospital *The total allowed amount for claims paid to hospitals for inpatient services generated from claims.*	Facility spending (billed on UB-04 form) for: • All hospital types (e.g., acute care, psychiatric, CAH, LTC hospital) • All room and board and ancillary payments • Payments for emergency room services when the member is admitted to the hospital, in accordance with the specific payer's payment rules.	• Payments made for observation services • Any professional spending (billed on CMS-1500) for physician services provided during an inpatient stay • Inpatient services at non-hospital facilities (e.g., SNF, rehab, or residential behavioral health)
2. Outpatient Hospital *The total allowed amount for claims paid to hospitals for outpatient services generated from claims.*	Facility spending (billed on UB-04) for: • All hospital types. Includes payments made for hospital-licensed satellite clinics, emergency room services not resulting in admittance, and observation services.	• Professional spending (billed on CMS-1500) – payments made for physician services provided on an outpatient basis
3. Professional	Professional spending (billed on CMS 1500) for physician services	• Facility spending (services billed on UB-04)
4. Long-Term Care	The total allowed amount for claims for facility spending (billed on UB-04) for: • Nursing homes • Skilled nursing facilities • Intermediate care facilities for individuals with intellectual disabilities • Home and community-based services (HCBS).	• Professional spending (billed on CMS-1500) – payments made for professional services rendered during a facility stay
5. Retail Pharmacy	All prescription drug spending billed to the insurer's prescription drug benefit	• Claims paid for pharmaceuticals under the insurer's medical benefit
6. Other	Spending for services not otherwise included in other categories	• Categories that are otherwise defined above

KEY CONSIDERATIONS FOR MEASUREMENT

Consistent state adherence to the six "topline" service categories (see *Description* above) are most important for cross-state measurement and comparison. Some identified subcategories (see *Administrative Specification*, below) may not be relevant for all states, and states may deviate from the prescribed subcategories as appropriate given their policy contexts.

The recommended approach to identify specific types of settings was developed by Onpoint Health Data.

KEY TERMS

This Specification utilizes Onpoint's hierarchal categorization known as **"Claim Type Plus"**:

1. Claim Type provides the highest level of classification, designating the type of claim as a **facility** (institutional) claim, a **professional** claim, or a claim that falls into the **"other"** category
2. Type of Setting provides the next level of granularity designating the setting as inpatient, outpatient, or provider based
3. Place of Setting provides the most granularity and reflects the bill type, place of services, procedure codes, and revenue codes reported to the APCD

Onpoint's methodology utilizes four data elements reported in all-payer claims databases:

- **Type of bill codes** – These codes provide key information that includes the type of facility (e.g., hospital, skilled nursing facility, Home Health) and the type of care (e.g., inpatient, outpatient, clinic, hospice). These codes are maintained by the U.S. Centers for Medicare & Medicaid Services (CMS).
- **Place of service codes** – These codes are used on professional claims to specify the entity where services were rendered (e.g., pharmacy, walk-in retail clinic, urgent care facility). These codes are maintained by CMS.
- **Procedure codes** – These codes identify the specific provided services – medical, surgical, radiology, laboratory, anesthesiology, etc. – as well as a range of care-related supplies and equipment (e.g., wheelchairs, crutches). Procedure codes are reported using standard code systems, including Current Procedural Terminology (CPT) codes and Healthcare Common Procedure Coding System (HCPCS) codes, both of which are copyrighted and maintained by the American Medical Association.
- **Revenue codes** – Revenue codes are a standardized system that describes the type of service that a patient received as well as where in the hospital they received it. While the procedure code used to report a provided service will remain the same regardless of whether the treatment was provided in the emergency room, operating room, or another department, the revenue code will vary and provide important granularity. Revenue codes were created by the American Hospital Association and are maintained by the National Uniform Billing Committee (NUBC).

For ease of coding, claim type, type of setting, and place of setting can be expressed as an ID and a description. For example, a claim type ID = 1 has a description of facility, while a type of setting = 1 has a description of inpatient.

ADMINISTRATIVE SPECIFICATION

The figures below summarize the topline service categories and relevant subcategories. Appendix A includes a visual representation of these recommendations.

INPATIENT FACILITY *Unit of Analysis: Encounter (claim header or summary line)*	Claim Type = 1 (Facility); Type of Setting ID = 1
Acute Care Hospital	First two characters of bill type = 11, 41 (Acute Inpatient or Hospital); 12 (Hospital Part B).
General Acute Care Hospitals	*To drill down further, analysts can combine type of setting with taxonomy codes to ID specialty hospitals. To specify the type of admission (e.g., obstetric, behavioral health, etc.), analysts could use room and board revenue codes (011X, 012X, 013X, 014X, 015X, and 016X); exclude claims with revenue code 0024.*
Specialty Acute Care Hospitals	
Academic Medical Centers	
Critical Access Hospitals	
Rehab Hospital	Identified using revenue code (0024)
Other Inpatient Facility	Revenue Code = 0100-0219, or 1000-1005

OUTPATIENT FACILITY *Unit of Analysis: Individual service (claim line)*	Claim Type = 1 (Facility); Type of Setting ID = 2
Hospital Outpatient Facility	First two characters of bill type = 13, 14, 43, 44, 85
Freestanding Facilities	First two characters of bill type = 83
Freestanding ASC (incl. imaging)	Place of service = 24
Freestanding ED	First two characters of bill type = 78
Independent lab	First two characters of bill type = 81
Other non-hospital facility	E.g., birthing center (bill type = 84); opioid treatment program (bill type = 87)
FQHCs and RHCs	First two characters of bill type = 77 (FQHC); 71 (RHC)
Other	First two characters of bill type = 53, 54, 63, 64, 72, 74, 75, 79, 89
Acute Care Hospital	First two characters of bill type = 11, 41 (Acute Inpatient or Hospital); 12 (Hospital Part B)
General Acute Care Hospitals	*To drill down further, analysts can combine type of setting with taxonomy codes to ID specialty hospitals. To specify the type of admission (e.g., obstetric, behavioral health, etc.), analysts could use room and board revenue codes (011X, 012X, 013X, 014X, 015X, and 016X); exclude claims with revenue code 0024.*
Specialty Acute Care Hospitals	
Academic Medical Centers	
Critical Access Hospitals	
Rehab Hospital	Identified using revenue code (0024)
Other Inpatient Facility	Revenue Code = 0100-0219, or 1000-1005
ADDITIONAL ANALYSIS IF DESIRED – BY TYPES OF SERVICE Note: These categories are used by several analytic vendors and were adapted from the Restructured BETOS Classification System (RBCS)	
Outpatient Procedures/Surgery	RBCS Category = Procedures Revenue code examples include 036X (Operating Room Services), 048X (Cardiology) *Additional drill down by organ system if desired*
Administered Drugs	RBCS Category = Treatment Revenue code examples include 025X or 036X (Pharmacy)
Radiology/Imaging	RBCS Category = Imaging, Treatment Revenue code examples include 032X (Radiology Diagnostic), 035X (CT Scan)
ED	RBCS Category = E&M Revenue code examples include 045X (Emergency Room) (NOTE: 0456 – Urgent Care can be used to identify these services in a facility, not freestanding)
Observation Stays	RBCS Category = E&M NOTE: There are no longer specific E&M codes for these services; recommend using revenue code 0762 (Observation Hours)
Lab/Pathology	RBCS Category = Test
Miscellaneous	RBCS Category = Anesthesia, E&M, Treatment, Other

PROFESSIONAL *Unit of Analysis: Individual service (claim line)*	Claim type = 2 (Professional)
Inpatient/Outpatient	Place of Service = 19, 21, 22, 23
Office Settings	Place of Service = 11; 02 & 10 (telehealth)
Urgent Care Facilities	Place of Service = 20
Retail Clinics	Place of Service = 17
FQHC/RHC	Place of Service = 50 (FQHC) and 72 (RHC)
Home Health	First two characters of bill type = 32, 34; or revenue code 0550-0609
Services at Home	Place of Service = 12, 14 (Group Home); 65 (non-hospital ESRD treatment)
ADDITIONAL ANALYSIS IF DESIRED – BY PROVIDER TYPE Note: These categories are used by several analytic vendors and were adapted from the Restructured BETOS Classification System (RBCS)	
Physician	
Non-Physician	
ADDITIONAL ANALYSIS IF DESIRED – BY TYPES OF SERVICE Note: These categories are used by several analytic vendors and were adapted from the Restructured BETOS Classification System (RBCS)	
Outpatient Procedures/Surgery	RBCS Category = Procedures; revenue code examples include 036X (Operating Room Services), 048X (Cardiology) *Additional drill down by organ system if desired*
Administered Drugs	RBCS Category = Treatment; revenue code examples include 025X or 036X (Pharmacy)
Radiology/Imaging	RBCS Category = Imaging, Treatment; revenue code examples include 032X (Radiology Diagnostic), 035X (CT Scan)
ED	RBCS Category = E&M; revenue code examples include 045X (Emergency Room)
Observation Stays	RBCS Category = E&M NOTE: There are no longer specific E&M codes for these services; recommend using revenue code 0762 (Observation Hours)
Lab/Pathology	RBCS Category = Test
Miscellaneous	RBCS Category = Anesthesia, E&M, Treatment, Other

LONG-TERM CARE *Unit of Analysis: For inpatient long-term care services: Encounter (claim header or summary line); for outpatient or home-based long-term care services: Individual service (claim line)*	
Institutional/Residential Facilities	First two characters of bill type = 86
Nursing Homes	*Note that Assisted Living and Residential Care Homes are often self-pay; likely limited claims for these services.*
Assisted Living Facilities	
Residential Care Homes	
Other Institutional Facilities	
Community-Based Long-Term Care	Place of Service = 32 (Nursing Facility); 33 (Custodial Care Facility); 13 (Assisted Living Facility); 14 (Group Home)
Residential Behavioral Health Treatment	First two characters of bill type = 86
Skilled Nursing Facility	First two characters of bill type = 21, 23, 25-27, 51, 52
Swing Beds	First two characters of bill type = 18, 28, 48, 58
Hospice	First two characters of bill type = 81, 82; Place of Service = 34
Facility-Based	
Home-Based	
Intermediate Care Facilities	First two characters of bill type = 16, 17, 45, 47, 55, 57, 65, 67

RETAIL PHARMACY *Unit of Analysis: 30-day equivalent (calculated using claim header or summary line)*	*All prescription drug spending billed to the insurer's prescription drug benefit*

OTHER	*Other sites of care that do not fall into other topline categories*

CODE LISTS

Onpoint Health Data suggests using the following code lists to map revenue codes, type of bill codes, and place of service codes to the service categories and subcategories identified above:

- Revenue codes: https://med.noridianmedicare.com/web/jea/topics/claim-submission/revenue-codes
- Type of bill codes: https://med.noridianmedicare.com/web/jea/topics/claim-submission/bill-type-by-facility
- Place of service codes: https://www.cms.gov/medicare/coding-billing/place-of-service-codes/code-sets

UPDATE LOG

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Appendix A - Consensus Definitions of Service Categories and Relevant Subcategories

Inpatient Facility | Outpatient Facility | Professional | Long-Term Care | Retail Pharmacy | Other

Inpatient Facility

Claim Type = 1 (Facility)
Type of Setting ID = 1

Acute Care Hospital
First two characters of bill type = 11, 41 (Acute Inpatient or Hospital); 12 (Hospital Part B)

Rehab Hospital
Identified using revenue code (0024)

Other Inpatient Facility
Revenue Code = 0100-0219, or 1000-1005

Acute Care Hospital subcategories

Note: To achieve more granularity, analysts would need to combine type of setting with taxonomy codes to ID specialty hospitals. To specify the type of admission (e.g., obstetric, behavioral health, etc.), analysts could use room and board revenue codes (011X, 012X, 013X, 014X, 015X, and 016X); exclude claims with revenue code 0024.

- General Acute Care Hospitals
- Specialty Acute Care Hospitals
- Academic Medical Centers
- Critical Access Hospitals

Outpatient Facility – Freestanding subcategories:

Freestanding ASC (includes imaging)
Place of service = 24

Freestanding ED
First two chars of bill type = 78

Independent lab
First two chars of bill type = 81

Other non-hospital facility (e.g., birthing center (bill type = 84); opioid treatment program (bill type = 87))

Outpatient Facility

Claim Type = 1 (Facility)
Type of Setting ID = 2

Hospital Outpatient Facility
First two characters of bill type = 13, 14, 43, 44, 85

Freestanding Facilities
First two characters of bill type = 83

FQHCs & RHCs
First two characters of bill type = 77 (FQHC); 71 (RHC)

Other
First two characters of bill type = 53, 54, 63, 64, 72, 74, 75, 79, 89

Type of Service

Outpatient Facility Types of Service

Note: These categories are in use by several analytic vendors, and were adapted from the Restructured BETOS Classification System.

Outpatient Procedures/Surgery
RBCS Category: Procedures

By Organ System

Administered Drugs
RBCS Category: Treatment

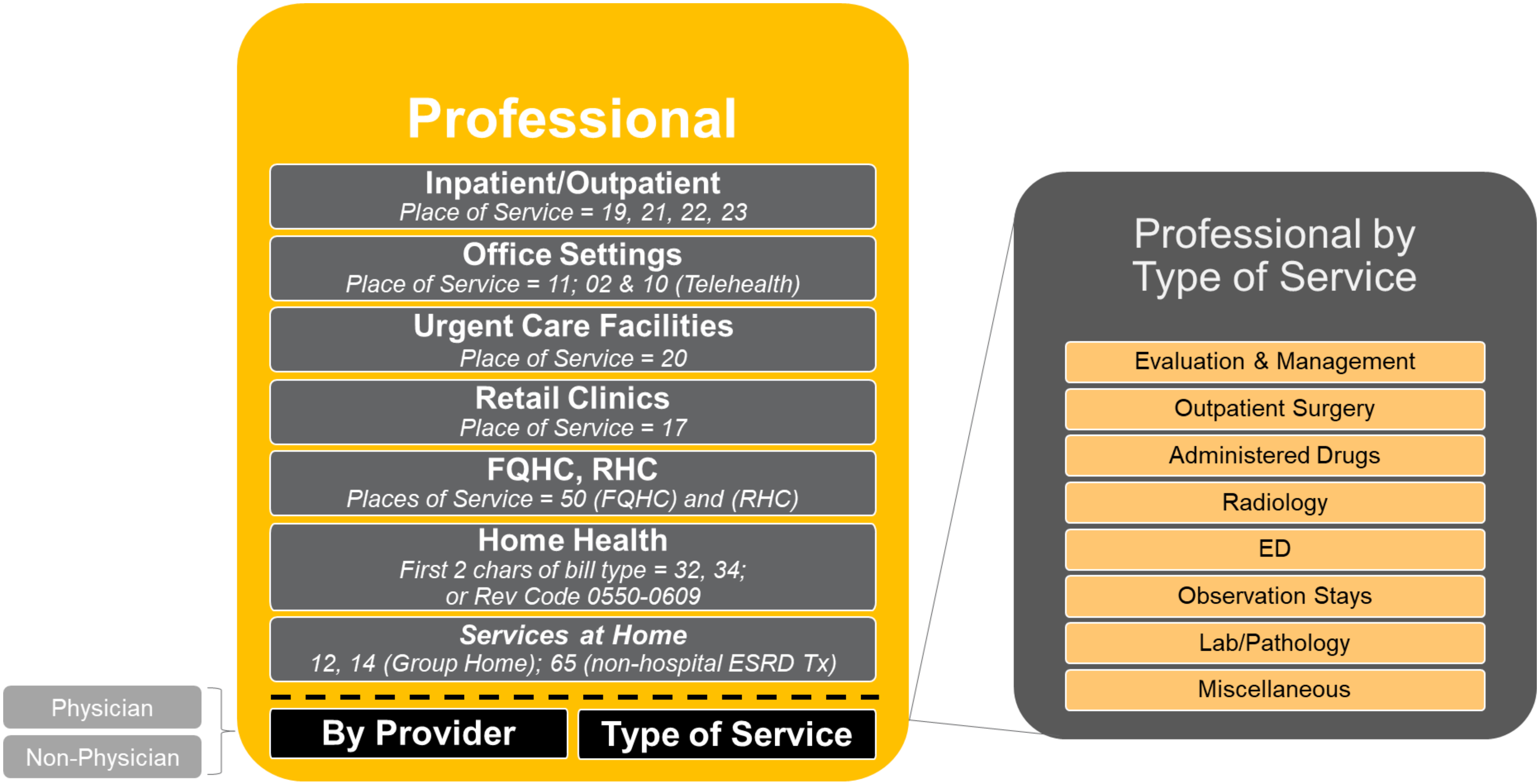
Radiology/Imaging
RBCS Categories: Imaging, Treatment

ED
RBCS Category: E&M

Observation Stays
RBCS Category: E&M

Lab/Pathology
RBCS Category: Test

Miscellaneous
RBCS Categories: Anesthesia, E&M, Other, Treatment


Professional
Inpatient/Outpatient
Place of Service = 19, 21, 22, 23
Office Settings
Place of Service = 11; 02 & 10 (Telehealth)
Urgent Care Facilities
Place of Service = 20
Retail Clinics
Place of Service = 17
FQHC, RHC
Places of Service = 50 (FQHC) and (RHC)
Home Health
First 2 chars of bill type = 32, 34;
or Rev Code 0550-0609
Services at Home
12, 14 (Group Home); 65 (non-hospital ESRD Tx)
By Provider
Type of Service
Physician
Non-Physician
Professional by Type of Service
Evaluation & Management
Outpatient Surgery
Administered Drugs
Radiology
ED
Observation Stays
Lab/Pathology
Miscellaneous

Long-Term Care

Institutional/Residential Facilities
First 2 characters of bill type = 86

Institutional/ Residential Long-Term Care subcategories:

- Nursing Homes
- Assisted Living Facilities
- Residential Care Homes
- Other Institutional Facilities

Note that Assisted Living and Residential Care Homes are often self-pay; likely limited claims for these services.

Community-Based LTC
Place of Service = 32 (Nursing Facility); 33 (Custodial Care Facility); 13 (Assisted Living Facility); 14 (Group Home)

Residential BH Treatment
First two characters of bill type = 86

Skilled-Nursing Facility
First 2 char of bill type = 21, 25-27, 51, 52; 23

Swing Beds
First two chars of bill type = 18, 28, 48, 58

Hospice
First 2 characters of bill type = 81, 82; POS = 34

- Facility-Based
- Home-Based

Intermediate Care Facilities
First two char of bill type = 16, 17, 45, 47, 55, 57, 65, 67

Other

Retail Pharmacy

All prescription drug spending billed to the insurer’s prescription drug benefit

Other

Other sites of care that do not fall into other top-line categories

CONSENSUS ADMINISTRATIVE SPECIFICATION FOR PRIMARY CARE CLAIMS SPENDING AND UTILIZATION

DESCRIPTION

Accurately measuring primary care utilization and spending is essential to improve health care delivery and outcomes.[1,2] This document focuses on primary care information that can be determined using claims data stored in all-payer claims databases (APCDs). States using supplemental data collections may need to adjust the specifications to meet those use cases. Those interested in measuring primary care spending paid via non-claims should reference the *Consensus Administrative Specification for Identifying Non-Claims Primary Care and Behavioral Health Payments*.

KEY TERMS

- **Primary care provider types:** A list of providers, identified via NUCC taxonomy codes, considered to be primary care providers or part of their care teams.
- **Primary care setting:** A list of care settings, identified via CMS place of service codes on professional claims, considered to be locations for delivery of primary care.
- **Primary care services:** A list of services, identified via HCPCS and CPT codes, considered to be services performed by primary care providers and care teams in a primary care setting.

KEY CONSIDERATIONS FOR MEASUREMENT

Inclusion/Exclusion Criteria: This definition of primary care encompasses services rendered to all people by a provider with a primary care taxonomy, performing a primary care service, in a primary care place of service.

- ***Includes*:** Claim and encounter data, see Appendices linked below for the code sets used to identify primary care services.
    - Appendix A: CPT or HCPCS codes used in primary care
    - Appendix B: Primary care taxonomy codes
    - Appendix C: Place of service codes commonly associated with delivery of primary care services.
- ***Excludes*:** Non-claims payments, prescription drug spending, and charity care.
    - To capture complete primary care spending including non-claims payments, reference the *Consensus Administrative Specification for Identifying Non-Claims Primary Care and Behavioral Health Payments*.

Note: Primary care spending is frequently measured as a percentage of total spending. This document does not advise on how to calculate the "total spending" denominator.

States may differ on the types of providers, places of service, and services they consider to be primary care. The Peterson-Milbank recommendations and rationale are described in the table below.

Component	Recommendation	Rationale
Providers	• **Include:** MDs, DOs, NPs, and PAs practicing in the specialties of family medicine, internal medicine, geriatric medicine, and pediatric and adolescent medicine • **Exclude:** OB/GYNs	• Included specialties are commonly considered primary care providers and included in most state definitions • OB/GYNs do not provide the full continuum of care expected of PCPs • Limiting measurement to primary care aspects of an OB/GYN practice adds complexity • The National Committee for Quality Assurance (NCQA) and some CMS

		Services definitions do not include OB/GYNs
Services and Treatments	• **Include**: Office, telehealth, and home and hospice visits when procedure codes are relevant to primary care, e.g., care management, planning and consultation services, health risk assessments and screenings and counseling; immunization administrations; behavioral health integration codes billed by PCPs • **Exclude**: Prescription drugs (both medical and retail pharmacy), laboratory, and radiology and imaging services	• Aligns with current service definitions in most states
Care Settings	• **Include:** Primary care outpatient settings; FQHCs; and school-based health centers; telehealth • **Exclude:** Emergency departments; urgent care centers; retail pharmacy clinics; and stand-alone telehealth vendors	• Urgent care and retail clinic settings are not designed to provide high-quality, comprehensive, holistic, coordinated and continuous primary care • Many primary care clinics offer virtual visits when appropriate • People with mobility issues may rely on telehealth for primary care visits

This document also offers recommendations on strategies to avoid two common causes of inaccurate measurement.

1. **Inaccurate Provider Data**: Identifying primary care providers in claims data can remain a challenge.
   - Some sources of provider information (e.g., licensure, carrier provider directories) lack up-to-date information on whether and where providers currently practice.
   - Some providers carry multiple board certifications, and in turn, taxonomies. It can be difficult to tease out the provider's current scope of practice and appropriate taxonomy.

   Using the taxonomy code reported on the claim service line and other strategies can help minimize this issue, see Step 3 under *Administrative Specification* for more information.

2. **Medicare-Specific Billing Practices:** CMS billing rules and requirements differ from commercial carriers which necessitate some primary care claims be billed on a facility claim. The requirements for these claims are addressed on page 7.

ADMINISTRATIVE SPECIFICATION

Step 1: Identify claims paid as "primary"

Only claims paid as primary should be included to not double count utilization and inflate the estimated spend amounts.

Codes to designate claims paid as primary include:

- 1 or 01: Claim Processed as Primary
- 19: Processed as Primary, Forwarded to Additional Payer(s)

Step 2: Filter to services rendered by primary care providers

To identify primary care services, a standard list of CPT/HCPCS codes is provided (see Appendix A). These codes include office visits, annual wellness visits, care management, care planning, health risk assessments, screenings and counseling, home visits, hospice/home health services when procedure codes are relevant to primary care, immunization administrations, and behavioral health integration and other services usually provided by a primary care provider. The Medicare HCPCS codes that are counterpart to the commercially used CPT codes (e.g., wellness visits) have been included as well as codes specific to Medicare billing and claims adjudication rules.

Terminated CPT/HCPCS codes are included as these codes are sometimes used beyond their termination date and support accurate historical analyses. Termination dates are listed for informational purposes.

Consultation codes (99241 – 99245) have been excluded from the list for the following reasons:

- These codes were terminated for use by CMS in 2010 and many commercial insurers have followed suit.
- A primary care provider usually does not provide consultations.
- If provided by a primary care provider, they are not considered primary care since consultations are provided to address a specific medical condition.
- Minimizes the inclusion of services delivered as a specialist for providers with multiple specialties.

Appendix A is broken into two categories:

- Professional Claims: List of CPT/HCPCS codes that are reported on either professional claims or facility claims.
- Facility Claims: List of CPT/HCPCS that are only reported on facility claims (explained below under CMS Medicare Considerations).

Step 3: Identify primary care providers using provider specialty/taxonomy codes

Because most services included in the Appendix A list of CPT/HCPCS codes can be provided by multiple specialties, the use of the provider specialty/taxonomy codes is required to narrow the focus to primary care providers. The taxonomy codes used to designate a primary care provider are listed in Appendix B.

Included in the definition of primary care are MDs, DOs, NPs, and PAs practicing in these areas: family medicine, internal medicine, geriatric medicine, hospice and palliative care, or pediatric and adolescent medicine.

- The recommended list of primary care taxonomy codes excludes OB/GYNs. Although these providers offer preventive care related to women's health, they do not provide the full continuum of care. Isolating primary care provided by OB/GYNs requires additional processing logic.
- It is estimated that fewer than 30% of NPs and 25% of PAs work in primary care.[1]

Whenever possible, use the rendering provider's taxonomy reported on the claim service line to determine the provider's specialty as opposed to relying on the taxonomy code reported in the National Plan & Provider Enumeration System (NPPES). This approach minimizes the risk of selecting an incorrect taxonomy code for providers with multiple specialties. Reasons are listed below:

- **Rendering Provider Taxonomy Reported on the Claim:**
    - The taxonomy code reported on the claim service line usually reflects the provider's area of training/specialty used to provide that service to the patient. For providers with multiple specialties, this will minimize classifying all their claims as primary care as noted above and only capture those records provided in their role as a primary care provider.
    - If the rendering provider's specialty code is not a standard taxonomy code, use the first and second taxonomy codes listed in NPPES to designate a primary care provider. It is recommended to reach out to data submitters that are not supplying standard codes to increase the useability of the APCD. Additional helpful tips for identifying primary care providers can be found on page 6.
    - Exceptions:

        - Although standard taxonomy codes are required on claim submissions to payers, some payers continue to send non-standard specialty codes to the APCD. When this occurs, it is recommended to use the first and second taxonomy codes listed in NPPES.
        - See Medicare Considerations below for additional exceptions.

- **Caution when using NPPES:**
    - The taxonomy codes listed in NPPES may be outdated as providers are not required to update their information in NPPES.
    - The taxonomy codes listed in NPPES are not in order of primary assignment. NPPES allows for the reporting of up to 15 taxonomy codes which can be reported in any order. So, the first listed taxonomy code may not be the provider's primary taxonomy. Each taxonomy code in NPPES is preceded by a "Primary Taxonomy Switch Code" which designates the provider's primary specialty.

Primary Taxonomy Switch Code	Primary Taxonomy Switch Description
X	Not Answered
Y	Yes
N	No

    - Use the first, or additional taxonomy codes listed in NPPES only to designate whether at least one of a provider's taxonomy codes meet the primary care specialty criteria and not whether the service was provided as the patient's PCP. Using the taxonomy codes reported in NPPES will result in:
        - Primary care providers whose primary care taxonomy code is not the first or second code listed in NPPES to be incorrectly excluded as providing primary care services.
        - Providers with more than one specialty and whose primary care taxonomy is the first listed will incorrectly have all their services classified as primary care even if provided under a non-primary care specialty.

Step 4: Limit to primary care places of service using place of service codes

To further refine the definition and selection of primary care services, the place of service codes reported on professional claims are used to limit to services rendered in locations designated as primary care settings.

These settings include a provider office, a member's home, federally qualified health centers (FQHCs), primary care outpatient settings, school-based health centers, and telehealth visits. The applicable place of service codes are listed in Appendix C.

Place of service codes used to designate a person's home were included to align with the CPT / HCPCS codes list, which includes home services. Similarly, the hospice place of service code was included due to the inclusion of hospice-related CPT / HCPCS codes.

See CMS Medicare Considerations below for exceptions to the use of professional claims and place of service codes to designate primary care services.

Step 5: Filter out non-primary care providers

To further narrow the focus on primary care providers, it is recommended that additional steps be taken to remove specialists that may have inadvertently been identified as a primary care provider. This may occur when providers use generic taxonomy codes for reporting (e.g., Internal Medicine) and for taxonomy codes where sub-specialties are not available (e.g., Physician Assistants).

Additional steps to filter out non-primary care providers include:

- Removing specialty practices from your selection criteria by excluding billing providers whose names include words such as: 'psych', 'behavioral', 'treatment', 'ambulance', 'asthma', 'neuro', 'ortho', 'surgical', 'sleep', 'dermatology'. It is recommended that billing provider/practice names be evaluated for any other "key" words that may designate a specialty practice in your data.
- Remove physicians who have not provided any wellness visits from the list of primary care providers.
    1. Note that this criterion does not apply to other clinician types (e.g., nurse practitioners), as they may not bill for wellness visits due to organizational policies.

Step 6: Ensure all Medicare primary care spending is captured

CMS billing rules require including certain services billed on a facility claim to gain a complete picture of Medicare primary care spending and utilization. This section describes those rules and how to account for them in measurement.

Provider-based billing

Provider-based billing is required by Medicare when a physician practice is owned by a hospital. In these scenarios, Medicare requires the office visit be billed like a hospital outpatient service and the claim to be "split" between the professional component and the facility component. Note: Hospital-owned physician practices may or may not send "split" claims to commercial insurers, Medicaid, and Medicare Advantage plans.

For these "split" claims:

- Identify the professional claim component using the applicable criteria related to professional claims. Two place of service codes are used to designate "office" for these claims:
    - 19 – Off campus Outpatient Hospital
    - 22 – On-campus Outpatient Hospital
- For each professional claim where an office visit (99201-99205, 99211-99215) is reported and place of service is either 19 or 22, include the corresponding facility claim based on the following criteria:
    - The same member, payer (e.g., CMS Medicare), and date of service
    - Type of bill starts with 13 (Outpatient Hospital)
    - HCPCS code = G0463 (Hospital Outpatient Clinic Visit for Assessment & Management of a Patient)
    - Use the service line for G0463 to identify the spend amount; do not include in the utilization count to avoid double counting.

Medicare Specialty Codes

- CMS data provided in the state's Research Identifiable Files (RIF) do not include the standard provider taxonomy codes. Instead, the CMS 2-character specialty codes are reported at the claim level.

- Medicare 2-Character Specialty Codes

Medicare Specialty Code	Description
01	Physician/General Practice
08	Physician/Family Practice
11	Physician/Internal Medicine
37	Physician/Pediatric Medicine
50	Nurse Practitioner
97	Physician Assistant

There are two options for designating primary care providers using the CMS RIF files:

1. CMS 2-Character Specialty Codes: Use the as-reported 2-character specialty code. Note that using the 2-character specialty code would include providers with non-primary care specialties. For

example, the CMS specialty code for Internal Medicine (11) includes all internal medicine subspecialties under this one code. See CMS specialty to Taxonomy crosswalk at Data.CMS.gov.
2. NPPES: Since these Medicare codes are non-standard taxonomy codes, the methodology listed above on handling non-standard taxonomy codes may be used (i.e., use of the first two listed NPPES taxonomy codes).

FQHC Billing

CMS Medicare requires FQHCs and other clinics to bill using the facility claim (i.e., 837I, UB-04). The following approach is recommended to accurately measure primary care spending and utilization provided to Medicare beneficiaries in an FQHC setting:

- Identify claims with a type of bill code starting with 77 (no place of service code is used).
- Filter to claims with a CPT/HCPCS code listed in Appendix A.
- Taxonomy codes (see Medicare Specialty Codes above): CMS Medicare data is delivered in the RIF file format which requires mapping to the State's APCD. The mapping of CMS Medicare varies from state to state since there is not currently a standard methodology to accomplish this. If the attending provider information is mapped to your APCD, this is the preferred provider to use when designating whether the service was provided by a primary care provider.

    1. Attending Provider: All taxonomy codes listed in Appendix B.

       For those APCDs that map the CMS reported attending provider, the attending providers first two taxonomy codes listed in NPPES can be used to designate a primary care physician.

    2. Rendering Provider: Taxonomy code: **261QF0400X** Federally Qualified Health Center (FQHC):

       For most APCDs the rendering provider on these claims will be the FQHC. Note that using this taxonomy code will not differentiate between primary care and specialist visits.

MAINTENANCE AND UPDATES

The Peterson-Milbank Program for Sustainable Health Care Costs will annually review the methodology and the code sets listed in the Appendices to evaluate codes added, terminated, replaced, or revised.

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Appendix A - Primary Care Service Codes

Primary care services are identified using CPT and HCPCS codes commonly referred to collectively as 'procedure codes.'

HCPCS/ CPT	Procedure Code Description	Notes
Professional claims		
90460	Im Adm Thru 18Yr Any Rte 1St/Only Compt Vac/Tox	
90461	Im Adm Thru 18Yr Any Rte Addl Vac/Tox Compt	
90471	Im Adm Prq Id Subq/Im Njxs 1 Vaccine	
90472	Im Adm Prq Id Subq/Im Njxs Ea Vaccine	
90473	Im Adm Intransl/Oral 1 Vaccine	
90474	Im Adm Intransl/Oral Ea Vaccine	
96160	Pt-Focused Hlth Risk Assmt Score Doc Stnd Instrm	
96161	Caregiver Hlth Risk Assmt Score Doc Stnd Instrm	
98966	Nonphysician Telephone Assessment 5-10 Min	
98967	Nonphysician Telephone Assessment 11-20 Min	
98968	Nonphysician Telephone Assessment 21-30 Min	
98970	Qualified Nonphysician Health Care Professional Online Digital E&M 1-10 min	
98971	Qualified Nonphysician Health Care Professional Online Digital E&M 11-20 min	
98972	Qualified Nonphysician Health Care Professional Online Digital E&M 21+ min	
99078	Phys/QHP Education Svcs Rendered Pts Grp Setting	
99173	Screening Test Visual Acuity Quantitative Bilat	
99201	Office Outpatient Visit New 10 Minutes	Terminated 1/1/2021
99202	Office Outpatient Visit New 20 Minutes	
99203	Office Outpatient Visit New 30 Minutes	
99204	Office Outpatient Visit New 45 Minutes	
99205	Office Outpatient Visit New 60 Minutes	
99211	Office Outpatient Visit Est 5 Minutes	
99212	Office Outpatient Visit Est 10 Minutes	
99213	Office Outpatient Visit Est 20 Minutes	
99214	Office Outpatient Visit Est 30 Minutes	
99215	Office Outpatient Visit Est 40 Minutes	
99339	Indiv Phys Supv Home/Dom/R-Home Mo 15-29 Min	Terminated 1/1/2023
99340	Indiv Phys Supv Home/Dom/R-Home Mo 30 Min/>	Terminated 1/1/2023
99341	Home Visit New Patient Low Severity 20 Minutes	
99342	Home Visit New Patient Mod Severity 30 Minutes	
99343	Home Visit New Patient Mod-Hi Severity 45 Minutes	
99344	Home Visit New Patient Hi Severity 60 Minutes	
99345	Home Visit New Pt Unstabl/Signif New Prob 75 Min	
99347	Home Visit Est Pt Self Limited/Minor 15 Minutes	
99348	Home Visit Est Pt Low-Mod Severity 25 Minutes	
99349	Home Visit Est Pt Mod-Hi Severity 40 Minutes	
99350	Home Visit Est Pt Unstable/Signif New Prob 60 Mins	
99358	Prolong E/M Svc Before&/After Dir Pt Care 1St Hr	
99359	Prolong E/M Before&/After Dir Care Ea 30 Minutes	
99360	Phys Standby Svc Prolong Phys Attn Ea 30 Minutes	
99366	Team Conference Face-To-Face Nonphysician	
99367	Team Conference Non-Face-To-Face Physician	
99368	Team Conference Non-Face-To-Face Nonphysician	

99374	Supvj Pt Home Health Agency Mo 15-29 Minutes	
99375	Supervision Pt Home Health Agency Month 30 Min/>	
99376	Care Plan Oversight/Over	Terminated 1/1/1998
99377	Supervision Hospice Patient/Month 15-29 Min	
99378	Supervision Hospice Patient/Month 30 Minutes/>	
99379	Supervision of a nursing facility patient 15-29 Min	
99380	Supervision of a nursing facility patient >30 Minutes	
99381	Initial Preventive Medicine New Patient < 1 Yr	
99382	Initial Preventive Medicine New Pt Age 1-4 Yrs	
99383	Initial Preventive Medicine New Pt Age 5-11 Yrs	
99384	Initial Preventive Medicine New Pt Age 12-17 Yr	
99385	Initial Preventive Medicine New Pt Age 18-39 Yrs	
99386	Initial Preventive Medicine New Patient 40-64 Yrs	
99387	Initial Preventive Medicine New Patient 65 Yrs& Older	
99391	Periodic Preventive Med Established Patient <1Y	
99392	Periodic Preventive Med Est Patient 1-4 Yrs	
99393	Periodic Preventive Med Est Patient 5-11 Yrs	
99394	Periodic Preventive Med Est Patient 12-17 Yrs	
99395	Periodic Preventive Med Est Patient 18-39 Yrs	
99396	Periodic Preventive Med Est Patient 40-64 Yrs	
99397	Periodic Preventive Med Est Patient 65 Yrs& Older	
99401	Prevent Med Counsel&/Risk Factor Reduction 15 Min	
99402	Prevent Med Counsel&/Risk Factor Reduction 30 Min	
99403	Prevent Med Counsel&/Risk Factor Reduction 45 Min	
99404	Prevent Med Counsel&/Risk Factor Reduction 60 Min	
99406	Tobacco Use Cessation Intermediate 3-10 Minutes	
99407	Tobacco Use Cessation Intensive >10 Minutes	
99408	Alcohol/Substance Screen & Interven 15-30 Min	
99409	Alcohol/Substance Screen & Intervention >30 Min	
99411	Prev Med Counsel & Risk Factor Red Grp 30 M	
99412	Prev Med Counsel & Risk Factor Red Grp 60 M	
99417	Prolonged Office Or Other Outpatient Evaluation And Management Service	
99420	Admn & Interp Health Risk Assessment Instrument	Terminated 1/1/2017
99421	Online Digital Eval (7 Days For 5-10 Min)	
99422	Online Digital Eval (7 Days For 11-20 Min)	
99423	Online Digital Eval (7 Days For 21+ Min)	
99424	Principal care management services first 30 minutes provided personally by a physician or other qualified health care professional, per calendar month.	
99425	Principal care management services each additional 30 minutes	
99426	Principal care management services first 30 minutes of clinical staff time directed by physician or other qualified health care professional, per calendar month.	
99427	Principal care management services each additional 30 minutes	
99429	Unlisted Preventive Medicine Service	
99437	Chronic care management services each additional 30 minutes used with 99491	
99439	Chronic Care Management Services (+20 Min Time Per Cal Month)	
99441	Phys/Qhp Telephone Evaluation 5-10 Min	Terminated 1/1/2025
99442	Phys/Qhp Telephone Evaluation 11-20 Min	Terminated 1/1/2025
99443	Phys/Qhp Telephone Evaluation 21-30 Min	Terminated 1/1/2025
99446	Ntrprof Phone/Ntrnet/Ehr Assmt&Mgmt 5-10 Min	
99447	Ntrprof Phone/Ntrnet/Ehr Assmt&Mgmt 11-20 Min	
99448	Ntrprof Phone/Ntrnet/Ehr Assmt&Mgmt 21-30 Min	

99449	Ntrprof Phone/Ntrnet/Ehr Assmt&Mgmt 31/> Min	
99451	Ntrprof Phone/Ntrnet/Ehr Assmt&Mgmt 5/> Min	
99452	Ntrprof Phone/Ntrnet/Ehr Referral Svc 30 Min	
99483	Assmt & Care Planning Pt W/Cognitive Impairment	
99487	Cmplx Chron Care Mgmt W/O Pt Vst 1St Hr Per Mo	
99489	Cmplx Chron Care Mgmt Ea Addl 30 Min Per Month	
99490	Chron Care Management Srvc 20 Min Per Month	
99491	Chron Care Management Srvc 30 Min Per Month	
99495	Transitional Care Manage Srvc 14 Day Discharge	
99496	Transitional Care Manage Srvc 7 Day Discharge	
99497	Advance Care Planning First 30 Mins	
99498	Advance Care Planning Ea Addl 30 Mins	
G0008	Administration Of Influenza Virus Vaccine	
G0009	Administration Of Pneumococcal Vaccine	
G0010	Administration Of Hepatitis B Vaccine	
G0102	Pros Cancer Screening; Digtl Rectal Examination	
G0179	Phys Re-Cert Mcr-Covr Hom Hlth Srvc Re-Cert Prd	
G0180	Phys Cert Mcr-Covr Hom Hlth Srvc Per Cert Prd	
G0181	Phys Supv Pt Recv Mcr-Covr Srvc Hom Hlth Agcy	
G0182	Phys Supv Pt Under Medicare-Approved Hospice	
G0396	Alcohol &/Substance Abuse Assessment 15-30 Min	
G0397	Alcohol &/Substance Abuse Assessment >30 Min	
G0402	Init Prev Pe Ltd New Benef Dur 1St 12 Mos Mcr	
G0436	Smoke Tob Cessation Cnsl As Pt; Intrmed 3-10 Min	
G0437	Smoking & Tob Cess Cnsl As Pt; Intensive >10 Min	
G0438	Annual Wellness Visit; Personaliz Pps Init Visit	
G0439	Annual Wellness Vst; Personalized Pps Subsqt Vst	
G0442	Annual Alcohol Misuse Screening 15 Minutes	
G0443	Brief Face-Face Behav Cnsl Alcohl Misuse 15 Min	
G0444	Annual Depression Screening 15 Minutes	
G0466	Federally Qualified Health Center Visit New Pt	
G0467	Federally Qualified Health Center Visit Estab Pt	
G0468	Federally Qualified Health Center Visit Ippe/Awv	
G0505	Cogn & Funct Asmt Using Std Inst Off/Oth Op/Home	
G0506	Comp Asmt Of & Care Plng Pt Rqr Cc Mgmt Srvc	
G0513	Prlng Prev Srvc Ofc/Oth O/P Rqr Dir Ctc;1St 30 M	
G0514	Prlng Prev Srvc Ofc/Oth O/P Dir Ctc;Ea Add 30 M	
G2212	Prolonged Office Or Other Outpatient Evaluation And Management Service	
S9117	Back to School Visit	
T1015	Clinic Visit/Encounter All-Inclusive	
Facility Claims ONLY		
G0463	Hospital Outpatient Clin Visit Assess & Mgmt Pt	Facility charge when performing provider-based billing. Code is only used on the facility claim.

Appendix B - Primary Care Taxonomy Codes

Taxonomy Code	Taxonomy Description
207Q00000X	Family Medicine
207QA0000X	Family Medicine, Adolescent Medicine
207QA0505X	Family Medicine, Adult Medicine
207QG0300X	Family Medicine, Geriatric Medicine
207R00000X	Internal Medicine
207RA0000X	Internal Medicine, Adolescent Medicine
207RG0300X	Internal Medicine, Geriatric Medicine
208000000X	Pediatrics
2080A0000X	Pediatrics, Adolescent Medicine
208D00000X	General Practice
261QF0400X	Federally Qualified Health Center (FQHC)
363A00000X	Physician Assistant
363AM0700X	Physician Assistant, Medical
363L00000X	Nurse Practitioner
363LA2200X	Nurse Practitioner, Adult Health
363LC1500X	Nurse Practitioner, Community Health
363LF0000X	Nurse Practitioner, Family
363LG0600X	Nurse Practitioner, Gerontology
363LP0200X	Nurse Practitioner, Pediatrics
363LP2300X	Nurse Practitioner, Primary Care
363LS0200X	Nurse Practitioner, School
363LW0102X	Nurse Practitioner, Women’s Health

Appendix C - Place of Service Codes

Note: Place of service codes 19 and 22 will be the professional portion of a visit in an outpatient facility.

Place of Service Code	Place of Service Description
02	Telehealth - Outside Home
03	School
10	Telehealth - Inside Home
11	Office
12	Home
13	Assisted Living Facility
14	Group Home
19	Off Campus - Outpatient Hospital
22	On Campus - Outpatient Hospital
32	Nursing Facility
33	Custodial Care Facility
34	Hospice
50	Federally qualified health center

Appendix D – Additional Reference Materials

The National Plan and Provider Enumeration System (NPPES) https://nppes.cms.hhs.gov/#/

The Medicare Provider Enrollment, Chain, and Ownership System (PECOS) supports the Medicare Provider and Supplier enrollment process by allowing registered users to securely and electronically submit and manage Medicare enrollment information https://pecos.cms.hhs.gov/pecos/login.do#headingLv1

Source: Deborah J. Cohen, PhD[1]; Annette M. Totten, PhD, MPA[2]

JAMA Health Forum. 2024;5(5):e240913. doi:10.1001/jamahealthforum.2024.0913

Source: https://en.wikipedia.org/wiki/Heuristic_(computer_science)[3]

CONSENSUS ADMINISTRATIVE SPECIFICATION FOR DEFINING AND MEASURING BEHAVIORAL HEALTH

DESCRIPTION

To identify behavioral health care, analysts must consider five main components:

1. Diagnoses;
2. Services and treatments;
3. Provider types;
4. Care settings; and
5. Non-claims categories that include capturing capitation arrangements.[1]

Behavioral health services are provided across the broad care continuum, including specialty and inpatient hospital care. The care often includes both clinical and social components. Behavioral health care may be covered by a health plan member's medical benefit or by a separate plan through a behavioral health carve out.

Note: The recommendations included in this document align with and directly refer to those included in an April 2024 Milbank publication authored by Freedman HealthCare (FHC): *Recommendations for a Standardized State Methodology to Measure Clinical Behavioral Health Spending*. These recommendations were informed by an advisory group of state officials, cross-state organizations, payer and provider stakeholders, and analytic consultants.

KEY CONSIDERATIONS FOR MEASUREMENT

- *Data Sources:* To examine spending on behavioral health services, states may look to their all-payer claims databases, provide a template to be completed by payers, or both.
- *Measuring Integrated Primary Care and Behavioral Health Services*: The Milbank/Freedman HealthCare advisory group recommends data collection that allows for mutually exclusive measurement of primary care and behavioral health spending, separately collecting spending data for:
    - Primary care (no behavioral health component);
        - See "Consensus Administrative Specification for Defining and Measuring Primary Care."
    - Behavioral health (no primary care component), and
    - Integrated behavioral health and primary care.
        - Note that this measurement may not completely capture integrated primary care and behavioral health services where integrated behavioral health services are delivered by billing providers not traditionally considered PCPs (e.g., a licensed clinical social worker that has been integrated into a primary care team).

ADMINISTRATIVE SPECIFICATION

States should utilize the Milbank Memorial Fund's ***Technical Specifications for a Standardized State Methodology to Measure Behavioral Health Clinical Spending (August 2024)*** and accompanying code set, authored by Vinayak Sinha and Janice Bourgault of Freedman HealthCare, to measure clinical behavioral health spending.

[1] Appendix B of the Milbank Memorial Fund and Freedman HealthCare's April 2024 publication contains the Expanded Non-Claims Payment Framework that was developed by California's Department of Health Care Access and Information in collaboration with Freedman HealthCare. The report notes that while the Expanded Framework provides useful guidance on allocating non-claims payments to behavioral health, more discussion with payers and providers is needed to better understand the distribution of these funds within provider organizations.

- As of January 2025, Freedman HealthCare has learned from stakeholders who have implemented these technical specifications that more spending than expected has fallen under the "Other Services" subcategory.
    - Freedman HealthCare recommends that states **restrict the professional claims in the "Other Services" categories using the HCPCS/CPT codes contained within the services tab in the code set**. There are some services in the "Service Code Set" tab that are no in the Inpatient and Outpatient Professional Service Categories.

These resources are companions to *Recommendations for a Standardized State Methodology to Measure Clinical Behavioral Health Spending*.

CODE LIST

- Code set (Appendix A of *Recommendations for a Standardized State Methodology to Measure Clinical Behavioral Health Spending* by Freedman HealthCare, published by Milbank Memorial Fund, April 2024)

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CONSENSUS ADMINISTRATIVE SPECIFICATION FOR DEFINING AND MEASURING RETAIL PHARMACY

DESCRIPTION

Retail pharmacy refers to prescription drug spending that is paid from claims for prescription drugs, biological products or vaccines as defined by the insurer's prescription drug benefit. It excludes claims paid for pharmaceuticals under the insurer's medical benefit and the cost of vaccines administered in the primary care setting.

KEY CONSIDERATIONS FOR MEASUREMENT

The Peterson-Milbank recommendation for measuring retail pharmacy expresses spending as **"30-day equivalents"**:

- This unit of measurement is easily applied to maintenance medications which are typically prescribed for a longer duration and renewed monthly (e.g., a medication dispensed in pill form which is taken daily; a medication that is self-administered by injection once per month). This represents a significant portion of retail pharmacy spending.
- For prescriptions of shorter duration (e.g., antibiotic treatments which are often prescribed for <14 days), the 30-day equivalent measurement unit may "mask" the real duration of a particular course of treatment. These cases (i.e., a 7- or 14-day course) would be counted as one 30-day equivalent, per the formula included below (see *Administrative Specification*). Short-duration treatments are typically low-cost; however, Bailit Health and Milbank recognize that some treatments may be short-term but expensive (e.g., cancer treatments), yielding a high 30-day equivalent unit payment. In these cases, the recommendation is to continue using 30-day equivalent as the analysis unit, noting that these treatments will have a high per-unit cost.
- Note: Some medications are sold on a "per package" basis, which is equivalent to one unit, and not necessarily a 30-day equivalent supply. States may give special consideration for these prescription medications (and others, e.g., products that are measured by weight or volume; titrated medications), such as either omitting them from analyses concentrated on 30-day equivalents, or treating them distinctly from the other medications.

ADMINISTRATIVE SPECIFICATION

To measure the totality of retail pharmacy spending for a population of interest:

- Step 1: Identify the population of interest, including market (commercial, Medicare, or Medicaid) or line of business (e.g., for the commercial market, individual, small group, large group, or self-insured).
- Step 2: Identify prescription medications that have been paid under a prescription drug benefit.

Units of retail pharmacy spending should be reported in 30-day equivalents[2,3], where:

- If APCD field "Days supply" ≤ 34: 30-day equivalent = 1.
- If APCD field "Days supply" ≥ 35: 30-day equivalent = "Days supply"/30. Round up to the nearest integer.[4]

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[2] This is adopted from CMS' methodology, available here: https://www.cms.gov/medicare/prescription-drug-coverage/prescriptiondrugcovgenin/downloads/cy-2016-specialty-tier-methodology.pdf

[3] Some states may opt to use 'days supply' as their standard unit of analysis instead of 30-day equivalent. States can easily calculate 30-day equivalents from days supply if needed for cross-state comparisons.

[4] The recommendation to round to the nearest integer comes from some states' desire to make these analyses easily digestible to public audiences and easily understood if viewed in a public dashboard. This Peterson-Milbank

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recommended specification recognizes that doing so may result in inflated counts of 30-day equivalents if summing at a higher level (e.g., a 36-day prescription for an immunologic would count as two 30-day equivalents, and as a result, when this count of 30-day equivalents is rolled up at the total immunological agents level, this medication would have more weight in the total calculation). States may wish to retain all precision in their internal analyses (e.g., represent a 36-day prescription as 1.2 30-day equivalents), but the Peterson-Milbank recommendation is for states to use 30-day equivalents rounded to the nearest integer for public-facing tools or reports.

CONSENSUS ADMINISTRATIVE SPECIFICATION FOR DEFINING AND MEASURING MEDICAL PHARMACY

DESCRIPTION

Medical pharmacy refers to prescription drug spending that is covered under an individual's medical benefit, rather than the pharmacy benefit.

- *Includes*: Drugs defined using applicable codes (see *Total Medical Pharmacy Code List* section below)
- *Excludes*: Self-administered drugs, or drugs that are purchased in a retail setting (including mail order pharmacy)

Some but not all payers align with Medicare processes for drug reimbursement and may use site of administration to determine under which benefit a drug should be billed, following Medicare's approach.

The Peterson-Milbank recommended measurement approach recognizes two measurement strategies for states analyzing medical pharmacy as a health care cost driver: (1) Measuring medical pharmacy spending on separately payable drugs; and (2) Monitoring bundled medical pharmacy spending.

KEY TERMS

- **Separately payable drugs:** Drugs that are 'separately payable' are paid on their own claim line. Under Medicare's Outpatient Prospective Payment System (OPPS), some drugs are designated as separately payable: if Medicare determines a drug to be high cost (i.e., if the cost-per-day exceeds a threshold defined by Medicare), it is likely to be paid for separately. Note that while many payers align with Medicare's methodology for designating separately payable drugs, this is not universal.
- **Bundled medical pharmacy:** Drug costs are not always paid separately; sometimes, drug costs are included in inpatient or outpatient service bundles (e.g., a DRG payment) without a separate claim; they may be represented on a claim line, or may not be noted at all in claims data. These "bundled drugs" are most often common low-cost drugs. Occasionally, however, there are high-cost therapies (e.g., cell and gene therapies).
    - Bundled drugs that are reported on a claim line often do not have an associated HCPCS code, and most that do are $0 paid because they are considered to be included the payment for the bundle.
    - Other times, these bundled medical pharmacy drugs might have an associated dollar amount that includes medical pharmacy spending <u>*and*</u> other spending within the bundle. Importantly, providers <u>do not</u> receive additional payments for these drugs beyond the payment for the bundle. *Note that because there is no additional payment made for the drug, states that included bundled drugs in measuring medical pharmacy would be <u>double counting</u> spending, unless bundled medical pharmacy spending was also removed from inpatient/outpatient spending totals.*

KEY CONSIDERATIONS FOR MEASUREMENT AND RATIONALE

Because of the complexities associated with bundled medical pharmacy spending, described above, the Peterson-Milbank recommended measurement approach focuses on measuring separately payable drug spending, and on monitoring bundled medical pharmacy spending to the degree practicable.

Measuring medical pharmacy spending on separately payable drugs

The Peterson-Milbank recommended measurement approach that states focus on measuring spending on drugs that are defined as separately payable under Medicare's OPPS.

Payers, analysts, and academics agreed that states would likely capture a significant amount of medical pharmacy spending using the codes included in the *Separately Payable Drugs Code List*; this list is based on

Medicare's OPPS Addendum B. However, there are drugs that are 'hidden' in bundled *payments* that cannot easily be parsed out.

Monitoring bundled medical pharmacy spending

For medical pharmacy spending that is not separately payable, identifying medical pharmacy costs within bundled payments is a complex analytic undertaking. As a proxy for measuring this spending, state analysts may assess the proportion of medical pharmacy that is comprised of bundled payments and monitor changes in that proportion over time. This approach requires measuring as much medical pharmacy as possible, including bundled drug spending. To do so, states can follow the process described in *Administrative Specification*, below. This process was piloted by Oregon Health Authority in consultation with commercial, Medicare Advantage, and Medicaid health plans. Oregon has documented this process thoroughly, and has incorporated this measurement into its data collection request for its Cost Growth Target program.

ADMINISTRATIVE SPECIFICATION

Measuring medical pharmacy spending on separately payable drugs

- Step 1: Identify the population of interest
    - Select one or more market(s) (commercial, Medicare, or Medicaid) or line(s) of business (e.g., within the commercial market: individual, small group, large group, and/or self-insured).
- Step 2: Use the codes included in the Code List below (OPPS column = 'Yes') to identify outpatient facility claim lines in the state's APCD or an alternative multi-payer claims database with medical pharmacy spending. The spending associated with those claim lines are those that are definitively separately payable.
    - Note: The codes with OPPS = 'No' are not separately payable as defined under Medicare's OPPS Addendum B.

Monitoring bundled medical pharmacy spending

- Bundled Medical Pharmacy = Total Medical Pharmacy (see below for Oregon's pilot approach) minus OPPS Separately Payable Drugs (identified in OPPS Addendum B, denoted in the Code List as OPPS = 'Yes')
    - Note: While this method of measuring bundled medical pharmacy likely undercounts bundled medical pharmacy spending and may include other costs associated with bundles (see *Key Considerations*, above), it provides a solid starting place for states to understand this category of spending.

Medical pharmacy claim lines should be identified by searching for claim lines that meet **any** of the following criteria[5]:

- Any lines with non-null, valid NDC code; OR
- Any lines with procedure code indicated on a set of Medicare fee schedules (OHA created code list based on CMS ASP files, OPPS Addendum B, and HCPCS/ND Crosswalk maintained by Medicare's Contractor for Pricing, Data Analysis and Coding (PDAC)); OR
- Any lines with a medical pharmacy revenue codes (see revenue codes from Noridian Healthcare Solutions: https://med.noridianmedicare.com/web/jea/topics/claim-submission/revenue-codes); OR
- Any codes that are listed as medical pharmacy according to BETOS classifications: https://data.cms.gov/provider-summary-by-type-of-service/provider-service-classifications/restructured-betos-classification-system

CODE LISTS

[5] Source: https://www.oregon.gov/oha/HPA/HP/Cost%20Growth%20Target%20documents/CGT-2-Data-Specification-Manual.pdf

The National Association of Health Data Organizations maintains and posts a medical pharmacy code list to support states in this measurement:

https://www.nahdo.org/sites/default/files/Resources/codelist_medRx.xlsx

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SECTION 2:

Methodology and Adjustments

CONSENSUS ADMINISTRATIVE SPECIFICATION FOR METHODOLOGICAL ADJUSTMENTS

DESCRIPTION

This document summarizes the Peterson-Milbank recommendation for handling high-cost claims and zero-dollar claim lines in medical claims (not pharmacy claims).

KEY CONSIDERATIONS FOR MEASUREMENT

- **Handling of high-cost claims**: Outlier claims may be more prevalent in some service categories (inpatient facility) than others (professional services). Analysts should perform thorough data quality checks to ensure that high-cost claims do not represent data errors.
- **Handling of $0 claim lines**: A zero-dollar claim line likely represents a service that was not paid separately (e.g., the service is included in a bundled payment or capitated arrangement, or for inpatient services, the service is included in a DRG payment).
    - Note: Analysts may track the volume of $0 claim lines over time to see if the volume of services not paid separately changes over time.
    - Note: Zero-dollar claim lines may be reported as denied claim lines, even though not truly denied (e.g., bundled payments, included in DRG payments) since there is no payment for the specific service.

ADMINISTRATIVE SPECIFICATION

- **Handling of high-cost claims**: High-cost claims should be evaluated on a case-by-case basis. Should a state analyst wish to make an adjustment to the high-cost claim, the adjustment should be based on a rational statistical methodology (e.g., winsorize at the 99^{th} percentile).
- **Handling of $0 claim lines**: Zero-dollar claim lines should be included in measures of utilization (i.e., units per 1000 members, or UPK), and excluded in the calculation of unit payments. These guidelines would yield the most accurate counts for each rate.

Note: When states consider whether to make adjustments for a population's data, they should ensure that the population meets the minimum threshold for evaluation, as stated in the Cost Growth Target Work Group's specification, "Consensus Administrative Specification for Member Thresholds for Data Collection, Public Reporting, and Accountability."

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CONSENSUS ADMINISTRATIVE SPECIFICATION FOR USING CLAIM HEADERS AND CLAIM LINES IN SPENDING ANALYSIS

DESCRIPTION

Analysts performing claims analyses produce vastly different results depending on whether analyses are performed at the claim header level (encounter-level) or performed using claim lines (which document individual services provided during the encounter). This document outlines the Peterson-Milbank recommendation for when each should be used.

KEY CONSIDERATIONS FOR MEASUREMENT

- Analysts should conduct a thorough review of datasets before performing any analyses, including identifying outlier claims or high-cost cases. Note that in some APCDs, complex encounters comprising many individual claim lines may be split across multiple claims.
- Analysts should assess their datasets for the volume of claim lines with no cost associated ("$0 claims"). Claim lines with no cost associated exist across all markets, but are most prevalent in Medicaid. In these cases, states should exclude $0 lines from calculations of average unit payments.
- States may monitor the ratio of claim headers to claim lines in their databases as a check against aggressive billing practices; an increase in the number of lines per claim may inflate total payments.

KEY TERMS

- **Claim header:** The overall summary line of each claim, representing all services delivered during an encounter. Some APCD vendors provide a claim header line that aggregates all associated claim lines; in other cases, state analysts may develop their own summary line for each claim.
- **Claim line:** The individual services billed within a claim.

ADMINISTRATIVE SPECIFICATION

- **Analysts should use the claim headers' allowed amounts when calculating total spending for inpatient hospital services, with an inpatient stay as the unit of analysis.**
    - Total spending for the inpatient stay is calculated by summing the allowed amounts across all claims associated with the stay (i.e., under the Diagnosis Related Group, or DRG).
    - Claim headers are most accurate for calculating the total costs and analyzing unit payment for services paid at the encounter level or according to bundles or episodes of care. They include all services within a claim; calculating unit payment from claim lines can be distorted because some components may have an allowed or paid amount of $0, or be bundled or adjusted.
        - Note that an episode of care may span multiple claims, providers, and dates of service.
    - Note: When calculating the costs associated with long-term stays, analysts can follow the same steps outlined here for inpatient long-term care (i.e., summing up allowed amounts at the header level).
- **Analysts should use claim lines when calculating unit payments for all other services (e.g., outpatient facility and professional services).**
    - Claim lines are most accurate when analyzing services paid individually.
    - This includes long-term care services provided in outpatient or home-based settings.
- **The claim line vs. claim header distinction is generally inapplicable to retail pharmacy.** Therefore, analysts should refer to the claim header for retail pharmacy to capture the total allowed amount per prescription, and then standardize that to payment per 30-day equivalent (see *Defining and Measuring Retail Pharmacy*).

- **Claim lines are most accurate for utilization measures because each service is counted, even if the service is included in a bundle or $0 paid.**

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