CMS Program Data

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Use and Disclosure of CMS Data

- CMS data are primarily collected to support CMS operational purposes.
- Demand for CMS data for quality improvement and related initiatives has grown dramatically over the past several years.
- In one of his first acts in office the President issued a memorandum calling for more open participatory and collaborative government – CMS has been committed to meeting these objectives though:
  - Releasing aggregated data in machine-readable formats
  - Sharing beneficiary-level data with external data users, while maintaining protections for beneficiary privacy and ensuring appropriate use of the data.
Legal Authorities

- Legal authorities serve 2 functions:
  1. Authorize or allow CMS to release data to a specific entity for a specific purpose
  2. Place restrictions on the type of data that can be disclosed and to whom
     - Privacy Act of 1974
     - Health Insurance Portability and Accountability Act

- CMS must balance multiple competing interests and sensitivities regarding data release practices to protect beneficiary privacy
  - Too much flexibility could result in security breaches that may compromise individual privacy
  - Too little flexibility could inhibit health system insights that may improve the care beneficiaries receive
CMS Data Navigator

Available at: http://dnav.cms.gov

- One-stop shop for CMS data
- Simple point-and-click interface
- Nearly 300 active data sources
- Displays search results by file type
Data.CMS.gov

- Allows real-time, interactive analysis of CMS datasets
- All datasets are API-enabled, supporting integration with external websites and applications
Statistical Reports

- Medicare and Medicaid Statistical Supplement
  - Available 2001-2013
  - Includes 115 tables and 67 charts describing health expenditures for the entire U.S. population, characteristics of the Medicare and Medicaid covered populations, use of services, and expenditures under these programs.
  - Redesign in process
    - Will include new sections, e.g., Part D utilization and cost
    - Will include new methodologies, e.g., member-months
CMS Fast Facts

- CMS statistics accessible by mobile device
- Quick reference statistical summary on annual CMS program and financial data.
- Includes:
  - Medicare Part D Utilizing Beneficiaries and Expenditures
  - Medicare Fee For Service Claims Processed
  - Medicare Prepaid Contracts
  - Medicare Institutional Providers
  - Medicare Physicians/Suppliers by Specialty
  - National Health Expenditures
  - CMS Financial Data
State, HRR, and County-Level Data

- Datasets with aggregated indicators at the state, HRR and county level

- Based on 100% Medicare claims data for beneficiaries enrolled in FFS for 2008-2012
Geographic Variation State-Level Dashboard

### Geographic Variation in Standardized Medicare Spending

- **Select a state to see State level data. Unselect states to see National data.**

#### Texas Standardized Cost Breakdown, 2012

<table>
<thead>
<tr>
<th>Cost</th>
<th>State</th>
<th>Nation</th>
<th>% Diff to Nation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>$10,503</td>
<td>$8,973</td>
<td>17%</td>
</tr>
<tr>
<td>Inpatient</td>
<td>$2,634</td>
<td>$2,595</td>
<td>2%</td>
</tr>
<tr>
<td>Post-Acute Care</td>
<td>$2,729</td>
<td>$1,648</td>
<td>66%</td>
</tr>
<tr>
<td>Hospice</td>
<td>$417</td>
<td>$317</td>
<td>31%</td>
</tr>
<tr>
<td>Physician/OPD/Tests/Imaging</td>
<td>$3,432</td>
<td>$3,329</td>
<td>3%</td>
</tr>
<tr>
<td>Durable Medical Equipment</td>
<td>$255</td>
<td>$236</td>
<td>8%</td>
</tr>
<tr>
<td>Part B Drug</td>
<td>$354</td>
<td>$318</td>
<td>11%</td>
</tr>
<tr>
<td>Outpatient Dialysis Facility</td>
<td>$363</td>
<td>$245</td>
<td>48%</td>
</tr>
</tbody>
</table>

*Texas Total Per Capita Costs: $10,503

*Selected states to show State level data. Unselect states to show National data.*

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Chronic Conditions: State-Level Dashboard

Medicare Chronic Conditions Dashboard: State Level
Comparison of Geographic Areas by Chronic Conditions, 2012

Chronic Condition Prevalence
Gender: All, Age Group: All, Enrollment: All

Alzheimer’s Disease/Dementia Prevalence: State to National Ratio
Gender: All, Age Group: All, Enrollment: All

Alzheimer’s Disease/Dementia Co-Morbidity
Gender: All, Age Group: All, Enrollment: All

*New in 2014

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Provider Utilization and Payment Data

Medicare Provider Utilization and Payment Data

As part of the Obama administration’s work to make our healthcare system more affordable and accountable, data are being released that summarize the utilization and payments for procedures and services provided to Medicare fee-for-service beneficiaries by specific inpatient and outpatient hospitals, physicians, and other suppliers. These data include information for the 100 most common inpatient services, 30 common outpatient services, and all physician and other supplier procedures and services performed on 11 or more Medicare beneficiaries. Providers determine what they will charge for items, services, and procedures provided to patients and these charges are the amount the providers bill for an item, service, or procedure.

Please use the navigation bar to the left to view more information on the inpatient, outpatient, and physician and other supplier analyses and to access the data for download. Data are being made available in Microsoft Excel (.xlsx) format and raw text file data format (comma separated values (.csv) for inpatient and outpatient and tab delimited for physician and other supplier).

For answers to any questions about the data, please see our Frequently Asked Questions page.

Inquiries regarding this data can be sent to MedicareProviderData@cms.hhs.gov.
Hospital Inpatient

- Years: FY2011 and FY2012* available
- Source:
  - CMS Medicare Provider Analysis and Review (MEDPAR) inpatient data
- Segmentation variables:
  - National Provider Identifier (NPI)
  - Diagnostic Related Group (DRG)
- Suppression:
  - Any row based on <11 beneficiaries is suppressed
- Documentation:
  - Detailed Methodology Paper
  - Frequently Asked Questions
Change in Average Hospital Inpatient Charges for MS-DRG 470 between 2011 to 2012

National average = $2,116
Average Hospital Inpatient Charges for MS-DRG 286 for Hospitals in Manhattan, NY

MS-DRG 286: Circulatory Disorders except AMI with Cardiac Catheter with Major Complications or Comorbidities
Hospital Outpatient

- Years: CY2011 and **CY2012** available
- Source:
  - CMS Medicare claims for hospital outpatient services contained in the Medicare National Claims History
- Segmentation variables:
  - National Provider Identifier (NPI)
  - Ambulatory Payment Classification (APC)
- Suppression:
  - Any row based on <11 beneficiaries is suppressed
- Documentation:
  - Detailed Methodology Paper
  - Frequently Asked Questions

*New in 2014*
Average Estimated Submitted Charges for Hospital Outpatient Nerve Injections by HRR

Average Estimated Submitted Charges by HRR
0203 - Level IV Nerve Injections

National Avg: $3,627

HRR
(Services / Number of Providers)

MA - Boston (253 / 5)
OH - Cleveland (121 / 5)
OK - Oklahoma City (201 / 6)
TX - Dallas (136 / 5)
FL - Miami (207 / 4)
Physician and Other Supplier: Data Details

- **Year:** CY2012*
- **Source:** final-action physician/supplier Part B non-institutional line items
- **Segmentation variables:**
  - National Provider Identifier (NPI)
  - Healthcare Common Procedure Coding System (HCPCS) code
  - Place of service (i.e., facility vs. office indicator)
- **Suppression:** any row where the number of beneficiaries is <11 will be suppressed
- **Documentation:**
  - Detailed Methodology Paper
  - Frequently Asked Questions

*New in 2014*
Physician and Other Supplier: Data Characteristics

- **File is large**
  - Includes data from 880,570 unique individual providers
  - Total of 9,153,272 rows of data and 27 columns
  - Raw data file is 1.7 GB; zipped/compressed file is 400 MB
  - Available for download:
    - From cms.gov website as a tab delimited file and as Microsoft Excel files split by provider last name
    - From data.cms.gov
  - Available via a look-up tool on interactive dataset on data.cms.gov

- **To facilitate use of the data, CMS also released high-level summary tables**
  - Physician and other supplier aggregate table
  - State/HCPCS aggregate table
Search for a provider by name, address, or National Provider Identifier (NPI)

Tool returns information about the services the provider furnished to Medicare beneficiaries
### Specialties with the Highest Medicare Allowed Amount Per NPI – Physician and Other Supplier Data

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Average Medicare Allowed Amount</th>
<th>Number of Physicians</th>
<th>Average number of unique types of items, services, or procedures billed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hematology/Oncology</td>
<td>$463,844</td>
<td>7,373</td>
<td>24</td>
</tr>
<tr>
<td>Radiation Oncology</td>
<td>$458,222</td>
<td>4,135</td>
<td>17</td>
</tr>
<tr>
<td>Ophthalmology</td>
<td>$429,657</td>
<td>17,067</td>
<td>14</td>
</tr>
<tr>
<td>Medical Oncology</td>
<td>$390,992</td>
<td>2,612</td>
<td>21</td>
</tr>
<tr>
<td>Rheumatology</td>
<td>$333,016</td>
<td>4,053</td>
<td>17</td>
</tr>
<tr>
<td>Cardiology</td>
<td>$290,279</td>
<td>22,241</td>
<td>23</td>
</tr>
<tr>
<td>Nephrology</td>
<td>$286,751</td>
<td>7,502</td>
<td>14</td>
</tr>
<tr>
<td>Dermatology</td>
<td>$281,206</td>
<td>10,507</td>
<td>18</td>
</tr>
<tr>
<td>Interventional Pain Management</td>
<td>$252,907</td>
<td>1,856</td>
<td>20</td>
</tr>
<tr>
<td>Cardiac Electrophysiology</td>
<td>$237,904</td>
<td>1,117</td>
<td>28</td>
</tr>
</tbody>
</table>
Office Visit Codes by Specialty – Physician and Other Supplier Data

- Internal Medicine
- Dermatology
- Cardiology
- Neurology

*National average for all specialties*
Three Categories of Data Files

● PUFs (Public Use Files)
  ○ Downloadable

● LDS (Limited Data Set)
  ○ Abbreviated DUA Process

● RIF (Record Identifiable Files)
  ○ IRB/Privacy Board Approval
Chronic Conditions Data Warehouse (CCW)

- The Chronic Condition Warehouse (CCW) is CMS’ research data warehouse designed to support external researchers and internal CMS research and analytic functions.

- Key Features
  - Patient-centric data files linked by unique beneficiary key, across the continuum of care
  - Predefined chronic condition cohorts and other categorization schemes
  - Beneficiary Summary / Denominator File
  - Chronic Condition Summary File
Data Available in the CCW

- Medicare bene demographics and enrollment (1999-current)
- Medicare fee-for-service (FFS) claims (1999-current)
- Medicare Part D event data (2006-current)
- Medicaid eligibility and claims (1999-2010)
- Medicare-Medicaid linked files (2006-2009)
- Assessment data (instrument inception-current)
- Master Beneficiary Summary File (1999-2012)
- Part D Characteristic Files (Plan, Prescriber, Drug)
- Part D Formulary Files
- Medicare Current Beneficiary Survey (MCBS)
Research Data Dissemination Options

- **Virtual Research Data Center (VRDC)**
  - Researchers to access and perform their own analysis and manipulation of CMS data virtually from their independent workstation
  - Researchers can only download aggregate results from the analyses

- **Physical data provision**
  - Files created, encrypted, and copied to portable media by CMS
  - CMS ships files to researchers who must ensure the security of the data at the researcher’s site
CMS VRDC Benefits

ACCESS
• Researchers use own laptop to securely access data remotely
• Increases efficiency of data sharing and reduces infrastructure costs for data users

SECURITY
• No shipping of data on external media
• Users only see data files with the data they need to conduct their project
• CMS can track and monitor use of the data

PRIVACY
• Users may only remove aggregated output files; no granular identifiable output may be taken out
• CMS encrypts all beneficiary identifiers
• CMS can encrypt physician identifiers

DATA & ANALYSIS
• Users can perform their own analyses and data manipulation in the virtual environment
• Secure File Transfer System allows users to upload their own data and download output files efficiently and securely
Research Data Assistance Center (ResDAC)

- Provides assistance to academic, government, and non-profit researchers interested in using Medicare and/or Medicaid data
- Staffed by epidemiologists, public health specialists, health services researchers, biostatisticians, and health informatics specialists
- Located within the University of Minnesota
- Performs the following tasks:
  - Assists researchers with the CMS DUA process
  - Provides training on CMS data
  - Provides documentation on available CMS data
  - Assists researchers in understanding and working with a variety of CMS data

www.resdac.org
Cohort Estimate Tool

This application allows for the estimation of Medicare and Medicare-Medicaid population sizes. It does not allow for estimation of populations for Medicaid-only enrollees. Medicare population estimates are extrapolated from the 20% Medicare sample from 2012.

**Study Population Parameters**

- Status Code/ESRD Ind
- Beneficiary Demographics
- Total Month Counts
- Monthly Entitlement/Buy-In Indicators
- Monthly HMO Indicators
- Reason Codes
- Chronic Conditions
- Diagnosis/Procedure Codes

**Selection Summary**

As study population selections are added, they will appear here.

Looking for Help? Email us at cmsdata@gih.com or call 1-866-766-1915

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Cohort Estimate Tool (cont.)

Review & Submit

Age BETWEEN 55 and 65 [AND]
All Month Medicare Entitlement/Buy-In Indicator = Part A and Part B [AND]
Chronic Conditions include Diabetes [AND]
Diagnosis Code - Any Position: 00842
Claim Type:
- Inpatient
- Outpatient
- Carrier

NOTE: Results will be extrapolated from the 20% Medicare sample from 2012.

Submit Request | Reset

Looking for Help? Email us at cmsdata@gdit.com or call 1-866-766-1915
Pricing Estimate Tool
Pricing Estimate Tool (cont.)

![Image of Pricing Estimate Tool]

- **Cohort Size:** 2,701,049
- **Years:** 2010, 2012
- **Data Pricing Estimates:** $10,000.00

### Medicare Claims
- **Outpatient:** 2010, 2012
- **Summary:** 2008, 2009, 2010
- **Person Summary:** 2008, 2009, 2010
- **Inpatient:** 2007, 2008, 2009, 2010

### Medicare Master Beneficiary Summary File
- **Estimated Total:** $39,000.00

### Other Files
- **MedPAR:** 2011
- **Estimated Total:** $2,500.00

**Note:** Finder File fees are not included in this estimate. This is an estimate only and pricing may be subject to change.

The ResDVC site contains detailed pricing information: [Price List for RIFs (PDF)](#)
Websites for CMS Data

- [WWW.DATA.GOV](http://WWW.DATA.GOV)
- [WWW.CMS.GOV](http://WWW.CMS.GOV)
- [WWW.MEDICAID.GOV](http://WWW.MEDICAID.GOV)
- [WWW.RESDAC.ORG](http://WWW.RESDAC.ORG)
- [WWW.CCWDATA.ORG](http://WWW.CCWDATA.ORG)