CMS Data Resources
Informing the Affordable Care Act

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Session Overview

● Describe Current and Planned Survey and Administrative Data Efforts at CMS to Inform the Affordable Care Act (ACA)
  ○ CMS, Data and Implementation of ACA
  ○ Introduction to the Office of Information Products and Data Analytics (OIPDA)
  ○ Key Information/Data Products
  ○ Planned Enhancements and Future Areas of Focus
CMS, Data & ACA Implementation

- CMS is the largest single payer for health care services in the US
- Transitioning from a passive payer to active purchaser
- Responsible for implementing a large number of provisions under ACA
- 1.5 billion claims submitted annually
- Significant additional data sources on the way
  - EHRs, Medicare Advantage plan encounter data, Provider data (S. 6002), Health Insurance Exchange/Medicaid expansion data, etc.
- Receive billions of other “non-claim” data points
  - Assessments, quality measurement, 1-800-Medicare call data, etc.
- Expected to drive new innovation in health care
- Trusted to protect beneficiary privacy
Without timely and relevant data and information, CMS cannot:

- Define or reward value
- Measure and evaluate programs
- Identify and spread innovation
- Provide providers data they need to transform health care delivery
- Give other key participants in the health data ecosystem the data and information required to assist and accelerate system transformation

Data and Information products must become a core business function for CMS!
OIPDA Priorities

- Improve accessibility of non-beneficiary identifiable data sets
- Disseminate beneficiary identifiable data to the greatest extent within the privacy laws
- Develop interactive information products that adapt to changing user needs
- Improve the data dissemination process (more timely and cost-effective)
- Strengthen ties to federal and private health partners
- Engage data user community to improve data strategy
- Managing integration of new data sources
## OIPDA Data and Information Products

### Data Products
- Chronic Condition Warehouse (CCW)
- Medicare Current Beneficiary Survey (MCBS)
- Public Use Files
- Medicare Data Sharing Program (ACA 10332)

### Information Products
- Medicare & Medicaid Research Review
- Medicare & Medicaid Statistical Supplement
- CMS Fast Facts
- Special Statistical Reports
- Market Insight Research
- Delivery System Tracking
- Dashboards
- Geographic Variation Analytics
- Data Navigator
CCW Overview

- A CMS research data center created to support analysis on CMS populations, across different types of data and health care settings.
- Patient-centric data files linked by unique beneficiary key, across the continuum of care.
- Predefined chronic condition cohorts and other categorization schemes.
- Medicare and Medicaid Claims from 1999 on (Parts A, B, D).
- All types of assessment data and Medicare enrollment data.
- Supports hundreds of data requests, through the delivery or thousands of files to researchers each year.
CCW Key Linkage Features

- All CCW data files linked by assignment of a unique, unidentifiable beneficiary link key (BENE_ID) to support analysis across data files (unique link keys replace health insurance claim (HIC) numbers)
- Supports cross-sectional and longitudinal research from 1999 forward
- Supports construction of patient-centric views of enrollment and service utilization
- Link keys encrypted prior to delivery to researcher(s), for privacy protection
New Data Enhancements and Products in CCW

- Enhanced Race Codes
- Risk Score Data
- Provider Data (PECOS, UPIN/NPI crosswalk)
- Customized Research Identifiable Files
- Death Certificate Data
- Master Beneficiary Summary File
- New chronic condition indicators
- Enhanced Limited Data Sets – Part D
- BI tools and products
MCBS Overview

- The MCBS is a continuous, in-person, longitudinal survey of a representative national sample of the Medicare population.
- MCBS is the definitive survey for Medicare estimates and information on the Medicare population
  - 16,000 annual survey respondents
  - Extensive use of CMS administrative data (e.g. claims, drug data, etc.)
- 20+ years of continuous and extensive data collection
  - Approximately 1 million interviews conducted to date (since 1991)
  - 250 interviewers in the field, 365 days a year.
- Comprehensive: MA or FFS; Community or Facility; Aged or Disabled; Medicaid (Dual) status
MCBS Contents

- Demographics
- Health status and functioning
- Cost of care
- Preventive services
- Access to, satisfaction with, and usual source of care
- Health Insurance
- Household or facility characteristics
- Survey weights
- Community/Institutional timeline
- Event specific information:
  - Inpatient/Outpatient
  - Provider
  - Drug
  - LTC
  - SNF
  - Dental
MCBS Data Files

- **Access to Care:**
  - Point in time
  - Always enrolled
  - No cost and utilization included
  - No imputation
  - \( n = 16,000 \)
  - Available 1 year after fielding

- **Cost and Use:**
  - Entire calendar year
  - Ever enrolled
  - Include costs and utilization and event-level info.
  - Imputation
  - \( n = 12,000 \)
  - Available 2 years after fielding
CMS Data Systems: Enhancements and Future Focus

- Manage Integration & Development of New Data Sources
  - Integrate new data sources from health reform with current data in the CCW.
  - Create linkage capabilities so data will support more innovative research and analytics.
  - Improve data timeliness, standardization, definitions and documentation.

- Improve Access to CMS Data and Develop New Dissemination Methods
  - CCW Data Enclave
  - New Public Use Files (PUFs)

- Create Interactive and High-value Data/Information Products
  - New Interactive Data and Information Products
  - Enhance Current Products
Integration & Development of New Data Sources

- Clinical and quality data
- Medicare Advantage Encounter Data
- Provider Data
- EMR Data
- Health Exchange Data
- ACO and Medical Home Enrollment
- Medicare
- Medicaid
- Assessment
- CCW
CCW Data Enclave Pilot

ACCESS
- Increases data access > VPN and Virtual Desktop
- Utilize personal laptops

SECURITY
- Increases data security > no shipping of external media
- Satisfies all privacy and security requirements

COST
- Increases efficiency of data delivery
- Reduces infrastructure costs for researcher

DATA & ANALYSIS
- Secure File Transfer System (SFTS) transfers data files efficiently and securely
- Convenient, quicker, and efficient access to CCW data
- Perform analyses and data manipulation
- Technical/Analytic support from CCW staff
- Statistical data output review
# CMS Public Use Files

<table>
<thead>
<tr>
<th>Claims Based PUF</th>
<th>Unit of Analysis</th>
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<tbody>
<tr>
<td>2008 &amp; 2010 Hospice PUF</td>
<td>Beneficiary</td>
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<tr>
<td>2008 &amp; 2010 Skilled Nursing Facility PUF</td>
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<td>2008 &amp; 2010 Home Health Agency PUF</td>
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<td><strong>Data Entrepreneurs Synthetic PUF (DE-SynPUF)</strong></td>
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<tr>
<td>2008 &amp; 2010 Durable Medical Equipment PUF</td>
<td>Line Item</td>
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<td>2008 &amp; 2010 Carrier PUF</td>
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<tr>
<td>2008 &amp; 2010 Outpatient PUF</td>
<td>Procedure</td>
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<td>2008 &amp; 2010 Chronic Condition PUF</td>
<td>Profile</td>
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<td>2008 Prescription Drug Event PUF</td>
<td>Event</td>
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<tr>
<td>2008 Inpatient PUF</td>
<td>Claim</td>
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<tr>
<td>2010 Institutional Provider &amp; Beneficiary Summary PUF</td>
<td>Institution</td>
</tr>
<tr>
<td><em>(2007, 2009-10) Geographic Variation PUF</em></td>
<td>Geography</td>
</tr>
</tbody>
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* Available Winter 2013
Interactive and High-value Information/Data Products

• Analytic Tools
  - Geographic Variation data

• Interactive Analytics
  - Chronic Conditions dashboard (current)
  - Geographic Variation dashboard (in development)
  - Enrollment dashboard (in development)

• Data Navigator
Geographic Variation (Data & Analytics)

- Database in CCW with 100% Medicare claims data for beneficiaries enrolled in FFS for 2007-2011
  - Geography: state, county, hospital referral region (HRR)
  - Over 300 indicators
  - Added quality indicators: readmissions, ED visits, PAHs, Hospital Compare
  - Data available publicly through Health Indicators Warehouse, Institute of Medicine, and HealthData.gov

- Example questions that Geographic Variation Database can answer:
  - What is Medicare spending in Arkansas? How does it compare across counties?
  - What is the readmission rate in my area? Is it above or below the national average?
CMS Data Navigator – Now LIVE!

Visit the Data Navigator at http://dnav.cms.gov/

OIPDA will be debuting an enhanced version in July 2013!
MCBS: Informing Past, Current & Future Analysis

What type of drug coverage did Medicare beneficiaries have (prior to Part D)?

What is the effect of the coverage gap on bene's knowledge of Part D?

How did functional status, utilization of preventive services, demographics change over time?

How do ACO benees compare to those treated by an MAO, or in traditional FFS?
Currently Captured

- **Premiums & Cost-sharing** – premium tax credits and cost-sharing reductions (S. 1402), temporary adjustment to the calculation of Part B premiums (S. 3402), etc.

- **Changes to Part D** - coverage gap closure (S. 3315), catastrophic limit reduction (S. 3315), discounts (S. 3301)

- **Utilization and beneficiary knowledge of Medicare-covered preventive services** – (S. 4103, 3202, 4004)

- **Patient activation/engagement (supplement)**
ACA-related Enhancements to MCBS

- **Planned**
  - Improved Data Collection to Reduce Health Disparities (S. 4302) – Starting in 2014. (Planned)
    - Race/ethnicity to increase from 5 to 12 categories.
  - Question(s) on electronic health record use at your PCP
  - Enhanced reporting on important subpopulations, programs, Medicare provisions
    - Pursuing sample redesign, estimation and/or CMS administrative data strategies to capture new populations, such as ACOs, and improved reporting on dual-eligibles and minorities.
  - Uses of new ACA-related data (e.g. MA encounter to survey data matching).
  - Opportunity for Externally Funded Questions/Content