



**Synergistic Data Analyses Techniques
Combining Medicare and Medicaid Data**

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Analysis Conference


Integrity Quality Technology Innovation Collaboration

Advancing Healthcare Integrity  **advancedmed**
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Agenda

- Introduction
- Objective of presentation
- Potential Synergy of Effort
- Challenges in combining data
- Medi-Medi Matched Data
- Medicaid and MSIS
- CMS Business Intelligence Strategy
- One Pi
- Successful Medi-Medi Analyses
- Integrated Research and Application
- Marketing Research Applications
- Questions

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Objectives of Presentation

- Address the needs and expectations of data analysis when combining data from two major healthcare payment sources, Medicare and Medicaid.
- Discuss the benefits and challenges of matching claims data
- Review examples of actual analytic techniques and outcomes
- Address the value and the integration of "soft information" when developing hypotheses based studies
- Evaluate some marketing research techniques and the application in fraud detection.

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Advantages in combining Medicare and Medicaid data for Synergy in Effort

- Identification of shared vulnerabilities
- Joint investigations/collaboration with partners
 - requires data management and analytical systems to effectively share information.
 - 'soft' information such as relationships, overlap and commonalities may be important
- Multiple payers=Bigger picture & Cost Shifting Evidence (from a multiproduct cost function with multiple payers)
- Clearer picture of schemes and patterns
- Leveraging of resources and knowledge
- Increased Return on Investment

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Challenges in Combining and Matching Medicare and Medicaid Data

- Utilizing Claims, Provider & Enrollment Data
- Different Goals of Medicare and Medicaid mean that some assumptions won't hold true
- Determine if Medicare or Medicaid has the most at stake to justify development efforts
- Real time data availability and processing time frames
- Liability traced to the use of different procedure coding systems by Medicare and Medicaid, i.e. vulnerability in how pharmaceutical drug claims are billed and processed.

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Medi-Medi Matched Data

- Matched data identifies common providers and common patients (dually eligible)
- Provider numbers/identifiers are used to match Medicaid providers to Medicare providers.
 - NPI
 - PTAN
- Offers the potential of matching claim types for cross-claims analysis
 - One that is exactly like another; a counterpart.
 - One that is like another in one or more specified qualities
 - One that is able to be compared equally with another
 - One that closely resembles or harmonizes with another
 - A pair, each one of which resembles or harmonizes with the other.

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Matched Data Types

- Provider Category of Service relationship to Medicare Claim type and Specialty
 - Medicaid Service Categories
 - Acute Care (Institutional and Clinic, Practitioner, Prescription Drugs, Physical Therapy and other Services, Products and Devices, Transportation Services, Other Services)
 - Long Term Care: Community Based Care (HCBS) and Institutional Care
 - Medicare Claim Types
 - Inpatient
 - Outpatient
 - SNF
 - DME
 - Home Health & Hospice
 - Part B- Specialty
 - Part C
 - Part D

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Medicaid and MSIS

- MSIS data is used by CMS to produce Medicaid program characteristics and utilization information.
- Provides CMS with a large-scale database of state eligibles and services for other analyses.
- Purpose: to collect, manage, analyze and disseminate information on eligibles, beneficiaries, utilization and payment for services covered by State Medicaid programs.
- States provide CMS with quarterly computer files containing specified data elements for: (1) persons covered by Medicaid (Eligible files-one record for each person covered by Medicaid for at least one day during the reporting quarter); and, (2) adjudicated claims (Paid Claims files) for medical services reimbursed with Title XIX funds.
- Individual eligible records consist of demographic and monthly enrollment data. Paid claims files contain information from adjudicated medical service related claims and capitation payments.
- Four types of claims:
 - inpatient
 - long term care
 - prescription drugs
 - noninstitutional services

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CMS Business Intelligence Strategy, Version:1.5

- "Data is fundamental to business intelligence, and its environment must be agile in order to fulfill CMS's many business needs."
- IDR is on track to become the primary, authoritative, enterprise data asset
- Implementing an enterprise-wide BI environment
 - Front-end query
 - Analytics
 - Reporting solutions

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One Program Integrity

- CMS Baltimore Data Center
- Testing has confirmed that the One PI Validation/Evaluation and Test Portals are available and that the Analysis Tools contained within (Business Objects and Advantage Suite) are able to be accessed and are functional. One PI developers and testers are using One PI Test and Evaluation Portals to test Medicaid data reports.
- One PI Medicare production went live 9/21. (BO – data thru 1/2006 – 8/31/2009. AS – 4/2008 – 5/2009)
- ODR Data Available for access on the One PI Portal on or after 9/21/2009
- IDR Data Available for access on the One PI Portal on or after 9/21/2009

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Successful Medi-Medi Analyses

- Time Bandits
 - Evaluate expectancy of delivering the volume of service over the period of time available
 - Time Studies performed on individual providers for 2008 dates of service often uncovered days of services that exceeded 24 hours
- Unbelievable Services
 - MUE application across programs
 - Debridement of 6 or more toe nails a lower limb was amputated
 - Durable Medical Equipment without E/M Visits by ordering physician

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Successful Medi-Medi Analyses

- Excessive Volume, frequency or modifier usage
- Place of Service anomalies
 - Outliers lead to drill-down findings
- Lack of Dependent Services
- Dentists excessively referring dental fentanyl patches
- Episodes of Care more successful when analyzing multiple payment sources
 - More complete picture for dually eligible

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Interaction between payment sources

- Trending SNF Services and Hospital admits
 - **ULTRA HIGH REHABILITATION (RU Series)**
 - "Mr. Smith, time to start your rehab"
 - 

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Collaborative Analyses

- Transportation Services
 - Nonemergency Medical Transportation Services (NEMT)
 - Federal regulations (42 CFR -431.53) require each State to ensure that Medicaid beneficiaries have necessary transportation to and from medical providers.
 - States report focusing safeguards on:
 - Screening providers
 - Requiring prior approval
 - Data analysis methods include simple comparisons between physician billings as well as more sophisticated data mining.
 - Medicare Emergency Transport
 - Cross-claims analysis

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Collaborative Analyses

- Home Health
 - Cross program analysis
 - HCBS Waiver programs can be an important consideration
 - Skilled Service vs. Personal Care Services
 - Personal Care assistance most often relates to activities of daily living such as eating and drinking, bathing, dressing, grooming, toileting, transferring and mobility
 - About 50% of States provide a Personal Care benefit
 - Relationship to SNF and Medicaid Nursing Facility Services

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Integrated Research and Application

- Medicaid Maximum Allowable-Incidents where the payment made exceeds the specified maximum allowable
 - Gauze
 - Nebulizers
 - Enteral Nutrition Infusion Pumps with an alarm
 - Automatic Blood Pressure Monitor
- Identify services where both programs limit coverage
 - Routine Foot Care
- Identify where one program pays for services but the other does not
 - Provider utilization patterns or Place of Service anomalies


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Marketing Research Applications

- Utilize Market Demographics to find trends/patterns
- Bucketized information
- Simple application of Combinatorial analysis
- Provider Demographic Comparisons
 - What does the "book of business" look like?
 - How does this compare to providers in the same classification?
 - What does the "target market" look like?
 - Demographics of the group of patients who receive services

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- United against Fraud, Waste and Abuse



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Questions?



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