

## DATABASES AND TOOLS

### Researchers use the MarketScan databases to:

- Assess market opportunities
- Articulate therapeutic value
- Calculate the total burden of illness
- Increase the speed of drug development
- Improve healthcare treatment guidelines
- Inform business and public healthcare policy
- Benchmark best practices
- Gauge the impact of health policy

## MarketScan Research Databases

Since 1989, researchers have used the gold-standard Truven Health MarketScan® Research Databases for their healthcare studies.

### Unparalleled Research Quality

With over 180 million de-identified patients, the MarketScan databases provide a patient-centric perspective reflecting real-world treatment patterns and the full cost of care. Full integration, longitudinal strength, and the deep cross-sectional detail of the MarketScan claims databases ensure unparalleled research quality.

### The Most-Published Databases in the U.S.

As the basis of more than 350 peer-reviewed articles since 2000, the MarketScan databases have made a substantial contribution to the body of literature used to formulate policy decisions and improve healthcare for Americans.

### Fully Integrated Claims Databases Plus Hospital Drugs

Healthcare researchers rely on the MarketScan claims and hospital databases to provide the information they need to understand disease progression, treatment patterns, health outcomes, and the associated costs to patients, employers, and insurers.

#### The Privately Insured Population

Cost Sharing	Cost Effectiveness	Cost Offset
Burden of Illness	Compliance and Persistency	Forecasting and Modeling

The Truven Health MarketScan Commercial Database provides researchers with in-depth, cross-sectional, and longitudinal views of healthcare practices and costs for the American working population and their dependents. The online Truven Health MarketScan Sample Select tool allows researchers to quickly assess the power of MarketScan data for their

studies. Fully adjudicated, patient-level claims are seamlessly linked with other MarketScan datasets — Health and Productivity Management, Health Risk Assessment, Lab, Dental, Inpatient Drug Link, and Benefit Plan Design. Linking data at the patient level significantly enriches the insights derived from claims-based research.

## MARKETSCAN DATABASES AND FILES:

- Commercial
- Medicare Supplemental
- Medicaid Multi-State
- Hospital Drug
- Lab
- Health and Productivity Management
- Benefit Plan Design
- Health Risk Assessment
- Inpatient Drug Link
- Dental

## Flexible Access to Comprehensive Data

Researchers may license single or multiple databases, receive standardized or custom reports and analyses, access data via online information tools, and partner with the Truven Health research team on custom studies.

### The Medicare Population

Medicare Part D

Diseases of Aging

Changes in Demand Due to Transition to Medicare

For the fast growing over-65 age group, retro-spective studies and forecasting analyses may be conducted using the Truven Health MarketScan Supplemental Database. Data include both the Medicare-covered and employer-paid portions of the healthcare encounter. Detailed cost,

utilization, and outcome information from inpatient and outpatient settings — including outpatient drugs — allows researchers to track medical costs and utilization for employees and dependents moving through their Medicare years.

### The Medicaid Population

Access to Care

Long-Term Care

Cost of Care to States

Nursing Home Care

The Truven Health MarketScan Medicaid Multi-State Database pools claims from nearly 31 million Medicaid enrollees from eleven geographically dispersed states. In addition to the inpatient, outpatient, drug, and enrollment files that are similar to those found in other MarketScan databases, the Medicaid Multi-State Database

includes a long-term care claims file that captures nursing home stays, home health care, and long-term care services. The database also includes variables describing race and the reason for Medicaid eligibility: aged/blind/disabled, poverty, and demonstration waiver. A representative subset of the full database is available for licensing.

### Health and Productivity

Direct and Indirect Cost of Disease

Return-on-Investment Studies

Researchers widely recognized in the health and productivity arena have used MarketScan data to quantify the total burden of illness (direct and indirect costs) and calculate the return-on-investment for insurer and employer-based demand management initiatives. The Truven Health

MarketScan Health and Productivity Management (HPM) Database contains data since 1997 on workplace absence, short-term disability, and workers' compensation. These data are directly linked to individual patients' medical and drug claims.

### Health Risks and Behaviors

Obesity

Diabetes

Cardiovascular Disease

Insomnia

Health Behaviors and Disease

Smoking Cessation

When you need to understand the contribution of patient behavior to health outcomes, health risk assessment data can be invaluable. It provides self-reported data on clinical variables that may otherwise be unavailable. Like other MarketScan databases, the Truven Health MarketScan Health

Risk Assessment (HRA) Database standardizes and links HRA data with the claims experience of patients — presenting an opportunity for innovative research. The HRA database has significant overlap with the HPM database, thus enriching health and productivity studies.

## Lab Test Results

Compliance with Treatment Guidelines    Health Outcomes    Differences in Treatment Patterns

The Truven Health MarketScan Lab Database clinically enriches the medical and prescription drug data of millions of patients already in the MarketScan databases by linking patients' claims data with lab test results. These test results allow you

to measure outcomes using clinical guidelines and markers, which help you to better understand how well a drug is performing in the real-world clinical setting and how differences in treatment patterns affect clinical outcomes.

## Dental Care and Medical Conditions

Dental Care and Disease    Pharmaceutical Treatments for Oral Health    Dental Care and Pre-Term Births

By linking dental and medical/pharmacy claims, the Truven Health MarketScan Dental Database allows researchers to understand the relationship between dental care and medical conditions such as respiratory tract infections, chronic sinus infections, diabetes, chronic

acid reflux, liver or kidney problems, infective endocarditis, cardiovascular disease, and pre-term birth. This is the only research database of its kind that allows researchers to follow the entire continuum of healthcare including services received in the dental office.

## Inpatient Drug Utilization

Inpatient Market Share    Intravenous Therapy    Adherence and Switching  
Combination Therapy    Market Size    Treatment Pathways  
Segmentation by Patient Characteristics    Forecasting

Providing the most comprehensive data available for understanding drug use in the hospital setting, the Truven Health MarketScan Hospital Drug Database is derived primarily from hospital billing

systems from nearly 600 U.S. hospitals. The database includes over 50 million hospital discharges from 2002–2010. Data elements are shown in the table on the back page.

## Inpatient Drugs Linked With Claims

Post-Hospitalization Adherence    Impact of a Hospitalization    Repeated Hospitalizations  
Outcomes and Costs

Designed to answer research questions regarding the effect of an inpatient stay on drug utilization, the Truven Health MarketScan Inpatient Drug Link File contains matched patients from claims data and hospital discharge records. The file is particularly useful for drugs

initially prescribed in the hospital and continued following the patient's discharge. Linking claims to discharge records provides the longitudinal component across care settings missing from a discharge database.

## Access MarketScan Data Online

Several modules of MarketScan data are available online at [marketscan.truvenhealth.com](http://marketscan.truvenhealth.com) allowing quick access to summarized data for routine research questions:

- Sample Select
- Sample Select Prevalence
- Inpatient View
- Outpatient View
- Disease Profiler

Sample Select, available to database licensees and other researchers upon request, allows users to quickly identify, refine, and compare patient cohorts from within the databases to select the best data subset matching a proposed study design.

For a username and password to Sample Select, or for more information on the other online tools, please contact us at [healthcare.pharma@truvenhealth.com](mailto:healthcare.pharma@truvenhealth.com).

The largest claims databases available for licensing, with over 180 million unique patients since 1995.

## FOR MORE INFORMATION

For more information on how to access the MarketScan Research Databases for your healthcare research, please contact us at **healthcare.pharma@truvenhealth.com**



Sample Data Elements for Insured Populations			
Demographic Information			
Age of Patient	Gender of Patient	Industry Group	Metropolitan Statistical Area
Enrollee Identifier	Relation to Employee	State	ZIP Code
Employment Classification	Employment Status		
Insurance Features			
Plan Type	Coverage Limitations	Maximum Out-of-Pocket	
Financial Information			
Net Payments	Coordination of Benefits Accounts	Total Admission Payments	Payments to Facilities and Providers
Deductible and Copayment Amounts			
Inpatient and Outpatient Medical Information			
Admission Date/Service Date	Admission Type/Service Type	Diagnosis Related Group	Discharge Status
Length of Stay	Major Diagnostic Category	Place of Service	Provider Identification
Provider Type	Primary/Secondary Diagnosis and Service Codes		
Drug Information			
Average Wholesale Price	Days Supplied	Generic Product ID	National Drug Code
Prescription Drug Payment	Refill Number	Therapeutic Class	Retail/Mail Order
Enrollment Information			
Date of Enrollment/Disenrollment	Member Days		
Sample Hospital Data Elements			
Patient Information			
Projected Number of Patients	Age	Gender	Principal/Secondary Diagnosis Codes
Principal/Secondary Procedure Codes	Admission Type	Admission Source	Length of Stay (Calculated)
Drug Information			
Drug Ordered	Length of Therapy	Route of Administration	Medication Start/Stop Date
Average Number of Administrations	Day of Initiation	Dose Quantity	
Physician Information			
Admitting Physician Specialty			
Hospital Information			
Source Hospital	Bed Size	Teaching Facility	Census Region
Full Catheterization Lab Indicator	Diagnostic Catheterization Lab Indicator		
Outcomes Based Information			
Complications Index	Mortality Rate		

### ABOUT TRUVEN HEALTH ANALYTICS

Truven Health Analytics delivers unbiased information, analytic tools, benchmarks, and services to the healthcare industry. Hospitals, government agencies, employers, health plans, clinicians, pharmaceutical, and medical device companies have relied on us for more than 30 years. We combine our deep clinical, financial, and healthcare management expertise with innovative technology platforms and information assets to make healthcare better by collaborating with our customers to uncover and realize opportunities for improving quality, efficiency, and outcomes. With more than 2,000 employees globally, we have major offices in Ann Arbor, Mich.; Chicago; and Denver. Advantage Suite, Micromedex, ActionOI, MarketScan, and 100 Top Hospitals are registered trademarks or trademarks of Truven Health Analytics.

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