



## Health Economics: Database Analyses

*We utilize our unique industry position to evaluate, identify, and access the right database to answer your research questions*

### Answers That Count

We work with pharmaceutical, biotech, and medical device clients to design and implement retrospective database studies that address research questions about health economics and health outcomes.

We have experience with many North American and European cross-sectional and longitudinal datasets, as well as customized datasets. Using these databases, we have implemented studies to answer research questions on a variety of topics, including:

- Burden (cost) of illness
- Cost of treatment
- Healthcare resource utilization
- Treatment patterns
- Medication adherence and persistence
- Comparative effectiveness and costs of alternative treatments
- Disease prevalence and public health impact
- Safety studies

### Select and Access the Best Dataset

We can help you evaluate, identify, and access the dataset(s) most appropriate for your study. We do not have a proprietary position on nor bias toward any specific data source, and our not-for-profit status as an independent research company allows us access to some datasets that may not be otherwise available. Additionally, we have professional connections to other organizations with access to healthcare data, and we can leverage those relationships to work collaboratively on your database studies. As appropriate, we ensure that data are de-identified to comply with HIPAA and other agency regulations.

We have experience with many types of data including:

- Claims data from commercial health plans, employers, Medicare, Medicaid, and Canadian provincial health systems
- Electronic medical records
- Customized datasets collected via medical chart abstraction
- Data from the SEER cancer registry and SEER-Medicare linked claims data
- Publicly available health survey datasets
- Hospital discharge datasets
- Clinical research data

### Analytical Methods

We conduct data analyses using appropriate analytical methods, including case-control cohort analyses and pre-post analyses.

As part of our process, we:

- Access, process, and store data files
- Extract requisite data for each study objective
- Prepare detailed statistical analysis plans and study protocols
- Develop outcomes measurement algorithms
- Administer propensity scores and other statistical techniques to control for selection bias and other confounders
- Apply Kaplan-Meier techniques to appropriately summarize time-based outcomes, such as treatment duration
- Use multivariate analytic techniques, including Poisson regression, Cox proportional hazards and generalized linear models to model outcomes

### Contact

RTI Health Solutions  
Research Triangle Park, NC, USA  
+1.800.262.3011

Ann Arbor, MI, USA  
+1.734.213.5372

Barcelona, Spain  
+34.93.241.7766

Lund, Sweden  
+46.706.58.3442

Manchester, UK  
+44(0)161.232.3400

Sheffield, UK  
+44(0)114.213.3390

Waltham, MA, USA  
+1.781.434.1700

rtihealthsolutions@rti.org  
www.rtihs.org

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## RTI Health Solutions Key Technical Contacts

Sean Candrilli, PhD

Head, Health Economics  
Data Analytics  
scandrilli@rti.org

Keith Davis, MA

Director  
Health Economics  
kldavis@rti.org

Debanjali Mitra, MA, MBA

Director  
Health Economics  
mitra@rti.org

### We have experience with many cross-sectional and longitudinal data sources, including:

General Practice Research Database (GPRD) (UK)	National Death Index
Saskatchewan Health	National Health and Nutrition Examination Survey (NHANES)
i3 Innovus Lab Rx	National Health Interview Survey (NHIS)
IMS Health	National Hospital Discharge Survey (NHDS)
PharMetrics	National Ambulatory Medical Care Survey (NAMCS)
Medstat Commercial Claims and Encounters (CCAЕ)	National Medical Expenditure Survey (NMES)
Medstat Health and Productivity Management (HPM)	Premier Perspective Comparative Database (hospital discharge claims data)
Health Survey of England (HSE)	Surveillance, Epidemiology and End Results (SEER) cancer registry
Integrated Health Care Information Systems (IHCIS)	SEER-Medicare
Medicare and Medicaid claims data	GE Centricity (electronic medical records)
Healthcare Cost & Utilization Project (HCUP)	National Trauma Data Bank
Nationwide Inpatient Sample (NIS)	National Hospital Ambulatory Medical Care Survey (NHAMCS)
HCUP State Inpatient Databases (SID)	Minimum Data Set (MDS)
HCUP Kids' Inpatient Databases (KID)	Medical Expenditure Panel Survey (MEPS)
HCUP Nationwide Emergency Department Sample (NEDS)	

## Custom Reports

We deliver the results of your study in the format of your choice, including:

- Detailed reports and slide decks
- Technical abstracts and posters
- Presentations at professional meetings
- Peer-reviewed journal articles

## See How We've Helped Others

- Using the SEER-Medicare linked database, we assessed stage-specific economic burden, treatment patterns, and outcomes among elderly Medicare enrollees with high risk and metastatic melanoma. The study results were published in *Applied Health Economics and Health Policy*, 2009; 7(1):31-41.

- Using managed care organization (MCO) claims data, we assessed the prevalence of nonadherence with antiepileptic drugs and the potential impact on healthcare costs in an adult population. The study results were published in *Epilepsia*, 2008; 49(3): 446-454.
- By analyzing a large MCO claims database, we assessed the economic burden of blunt and penetrating trauma among MCO enrollees. Study results were published in *Journal of Trauma*, 2007, 62(3): 622-30.

## Let RTI-HS Help You

To learn more about our capabilities, please visit us online at [www.rtihs.org](http://www.rtihs.org), email us at [rtihealthsolutions@rti.org](mailto:rtihealthsolutions@rti.org), or call one of our offices listed on the front.