Maximize the Value of Your Health Information Exchange
For more than 30 years, Truven Health Analytics℠ has provided intelligent information to stakeholders across healthcare. As an independent third party, we can help you make the most of federal funding and get your state’s health information exchange (HIE) up and running quickly. We have experience with numerous HIE technology systems that support disease surveillance, public health reporting, and clinical decision support. Our proven solution – Truven Health HIE Advantage – provides an off-the-shelf system that makes implementation, customization, and maintenance simple.

With access to relevant information when they need it, providers and payers can make better decisions around disease management, quality compliance, and meaningful use measures. With these improvements come lower costs, improved efficiencies, reduced service duplications, and automated administrative tasks — leading to a healthier patient community in your state.

Truven Health has extensive experience providing products and services that help healthcare organizations manage costs and improve the quality of care. We’ve partnered with CareEvolution, a leading provider of secure interoperability solutions, to develop Truven Health HIE Advantage

**The Truven Health HIE Advantage**
We take a unique approach to the exchange of health information. In addition to meeting the technology requirements outlined in the HITECH Act, we’re dedicated to providing a system that’s useful for stakeholders across healthcare. Truven Health HIE Advantage provides the foundation for your statewide system by capturing real-time clinical and administrative data, giving clinicians a complete picture of care, and enabling advanced decision support through a centralized database.

HIE Advantage makes comprehensive patient histories — including medications, treatments, and lab results — easily accessible at the point of care. Data from medical claims, acute and ambulatory electronic medical records, and other sources are grouped into disease-based clusters using our Medical Episode Grouper technology and adjusted for disease severity using risk-adjustment methodologies. In addition, our Web-based platform includes sophisticated analytics that enable meaningful use applications and real-time reporting and alerts.

**HIGHLIGHTS**
Truven Health offers expertise in key areas including:
- Building collaborative partnerships
- Managing large healthcare datasets
- Measuring and reporting on physician performance
- Fulfilling meaningful use requirements
The Benefits of HIE Advantage

HIE Advantage provides a benefit-rich solution, including:

Proven, Highly Scalable Platform

HIE Advantage provides a flexible, scalable technology platform that can serve as the backbone of any statewide initiative. The system easily expands up and out with your needs, so it’s ideal for small-scale deployment and phasing. Plus, you’ll make maximum use of your initial hardware investments as the system grows.

Complies with Current Standards

HIE Advantage uses a federated data model to pull patient information from different sources into a single unified view. The system has been designed with interoperability and terminology standards that comply with NHIN, HITECH, ARRA, and other standards, and can be updated easily as new standards emerge.

Meets Meaningful Use Requirements

Because federal reimbursements are tied to meaningful use, we will build your HIE to integrate clinical and administrative data for meaningful use analytics and reporting. A Quality Measures Engine codifies integrated data sets into discrete quality, compliance, and financial measures to meet meaningful use requirements.

Flexible Data Approaches

HIE Advantage can launch through a “broad but shallow” or “narrow but deep” data approach. We typically seed your HIE with state or regional claims data (Medicaid, UB04, or other all-payer sources), covering a wide patient population with a shallow depth of information. Simultaneously, we recruit other sources with deeper clinical assets to supplement this data.
World-Class Security and Privacy
Our advanced security techniques ensure patient data is safe. We use a hybrid architecture that combines advanced functionality with a centralized data repository. This highly secure system acts as a switchboard, so it has no “back doors” that could compromise privacy. Users query the system, which then goes out to disparate sources to find the data and deliver it back. In addition, our secure Record Locator Service and Master Patient Index use a blinded directory for centralized demographic data.

Cost-Effective Implementation and Maintenance
Because HIE Advantage has been designed with a commercial off-the-shelf (COTS) architecture, the implementation costs are manageable. There’s no need to invest in expensive consulting, project design, and custom development. And the COTS architecture facilitates cost-effective, ongoing maintenance as new systems and requirements are introduced.

Data Analytics and Reporting Capabilities
Supported by the world-class healthcare decision support services of Truven Health, our platform links clinical and administrative data and applies data standardization that make it ready for analysis. We provide reliable measures for evaluating and demonstrating meaningful use, measuring quality outcomes, and validating cost savings. In addition, we apply evidence-based guidelines to retrospective data and reinsert the findings into point-of-care systems to support decision making.

### Truven Health HIE Advantage Features:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record Index Service</td>
<td>Provides the interface between the host systems and the Record Locator Service (RLS). Standardizes and blinds demographic information before sending requests to the RLS.</td>
</tr>
<tr>
<td>Data Transfer Service</td>
<td>Manages adapter-to-adapter communication of clinical information in pure peer-to-peer fashion.</td>
</tr>
<tr>
<td>Clinical Data Interface Service</td>
<td>Hosts a set of pluggable drivers for communication with an institution’s local clinical data sources, such as EMR, lab, or pharmacy systems. Allows for easy customization to support the disparate clinical data sources of each institution.</td>
</tr>
<tr>
<td>Terminology Service</td>
<td>Provides translation between local (legacy) and standardized nomenclatures, and is used by the Data Transfer Service and Clinical Data Interface Service.</td>
</tr>
<tr>
<td>Local Data Cache</td>
<td>Provides a data store in which both record location index information and clinical information is cached.</td>
</tr>
<tr>
<td>Care Coordination Platform</td>
<td>Supports and facilitates a wide range of daily care functions including patient inquiry, messaging, referrals, and ePrescribe.</td>
</tr>
<tr>
<td>Continuity of Care Viewer</td>
<td>Organizes longitudinal patient data into episodes of care and provides gaps-in-care alerts in real-time.</td>
</tr>
<tr>
<td>Centralized Decision Support Database</td>
<td>Allows select clinical and administrative data to be continually updated to monitor the overall performance of the network.</td>
</tr>
<tr>
<td>Personalized Health Insights Portal</td>
<td>Functions as either a medical home to augment patient-physician interaction or as a reference center that provides consumers with a place to view their personal health information, access data on quality and cost, and find support for personal wellness and disease management.</td>
</tr>
<tr>
<td>Advanced Applications</td>
<td>Includes ePrescribe and Thin EMR that allow for encounter recording and care coordination.</td>
</tr>
</tbody>
</table>
Our HIE Experience

Truven Health has experience in all aspects of HIE — including business planning and development, technical planning and design, and implementation and operations support. We have a particular emphasis on data integration and security, clinical data extraction, interoperable data transport between providers and other stakeholders, and the application of data for clinical decision support. In addition, we have extensive experience in analytical and reporting services, including performance assessment.

Together with CareEvolution, we have a track record of working with more than 100 hospitals in the development and implementation of an HIE that fulfills meaningful use requirements. Specific projects include:

- We helped implement the nation’s first and largest HIE for emergency department and hospital data in North Carolina. The system gathers real-time data via secure methods from 112 hospitals, including emergency room and ambulatory feeds. The intent of the innovation is to develop meaningful use proof cases at early-adopter pilot hospitals prior to enabling a statewide system.

- We supported South Carolina’s HIE, which covers a ten-year health history of more than six million patients. This state’s system is available for use by over 4,000 providers across the state, and includes data from Medicaid and UB92/HCFA1500 claims. An innovative “Thin EMR” enables all providers to participate in the exchange regardless of their current HIT status.

- We worked with CMS to assemble the nation’s largest repository of Medicaid claims data on the federal level — the Integrated Data Repository. This project includes providing consultation on NHIN standards and developing methodologies to monitor and measure meaningful use.

- We currently have state-level engagements with 26 Medicaid agencies. We are assisting these agencies with a wide range of needs, including fraud and abuse investigation, targeting and implementation of information-driven strategies for chronic disease management, and medical home research.

“The promise of HIE is that it makes it easier for people to do their jobs and get the information they need to make good decisions.”

HIE Advantage as a Statewide Backbone
**Why Truven Health?**

With more than 30 years of experience, Truven Health is the nation’s largest integrator of health information warehouses and decision support systems. Our solutions are used by healthcare providers, hospitals, clinicians, employers, health plans, pharmaceutical companies, and the government — affecting 150 million U.S. lives.

At the foundation of everything we do are our core competencies:

- **Software Applications** – Our software solutions are constantly updated to support day-to-day decision making and are considered leading-edge in the industry.

- **Database Management** – From single sources of information to some of the largest, most complex databases in the industry, we have extensive experience in data integration and organization.

- **Data Aggregation and Interpretation** – We specialize in data aggregation and interpretation — making our data meaningful for use in decision making.

- **Methods and Analysis** – Many of our analytic methods are now the industry standard for enhancing the value of customer data.
Information Assets – We have some of the largest and highest quality proprietary healthcare databases in the world to support benchmarking, modeling, strategic planning, and healthcare research.

Independence – As a neutral third party, we provide an objective, unbiased perspective.

Research – Our thought leaders are providing ground-breaking insights in high-priority areas including patient safety, disease management, and organizational effectiveness.

Service – Considered true partners by our customers, we offer exceptional customer service and support.

People – Our professional staff of over 2,000 experts have experience across healthcare and are some of the best and brightest in medicine, analysis, and technology.

“Information about practice patterns and quality of care can help physicians and their patients make better healthcare decisions.”

Barbara Mooring
Project Director, Medical Society of NJ
FOR MORE INFORMATION
Visit truvenhealth.com or contact Larry Yuhasz at 1.734.913.3192 or larry.yuhasz@truvenhealth.com