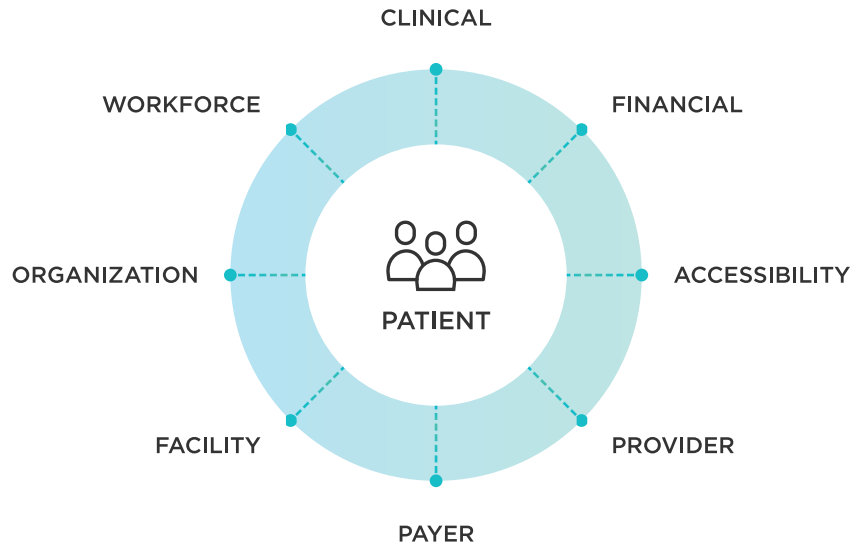# ibi™ Omni-HealthData®
Information Management for Health Providers and Payers

Benefits

- Simplifies complex data integration
- Promotes data quality
- Facilitates ongoing data governance
- Reduces cost, risk, and time to value

ibi™ helps organizations transform data into business value. Our business intelligence, integration, and data management solutions enable smarter decision-making, stronger customer relationships, improved performance, and accelerated growth.

ibi™ Omni-HealthData® is an end-to-end data management and analytics solution, leveraging a standards-based, Canonical Healthcare Information Model, MDM and Code Harmonization to provide a 360-degree view of patient, provider, facility, and other critical healthcare domains, as well as providing important healthcare analytics such as clinical volumes, population health, social determinants, and many other critical healthcare measures.

Provider healthcare data is scattered across many siloed applications. Payers need to be able to combine their claims data with clinical data coming from providers.

Healthcare initiatives related to data interoperability, data generated from patient monitoring and wearable devices, have all generated

a torrent of additional data sources and volumes that promise new insights but carry demands on data integration capabilities.

Industry changes, such as value-based, at-risk reimbursement, have created the need for greater insight into clinical data across the continuum of care to improve performance, avoid reimbursement penalties, and foster better patient outcomes. This means that not only collecting the data, but being able to analyze all diagnoses, procedures, test results, and vital signs in a seamless manner, no matter where they came from or in what form the data arrived, is critical to understanding performance against these measures. It is also necessary to be able to drill down into better performing and weaker performing parts of the business, and to be able to track these measures in real-time on a rolling 12-month basis.

Working from a single canonical model of trusted, timely data is essential to meeting these challenges. From an IT perspective, this is much more than copying data into a data lake, or implementing a stand-alone master patient index. That approach is merely 'kicking the can down the road', because the challenge lies with mountains of data coming from an ever increasing number of places. Each with different data models and formats—many with different identifiers for patients, providers, facilities, organizational units and workers; many using proprietary codes to identify patient characteristics and demographics, medications, test results and more.

The business imperative is for a trusted, comprehensive healthcare information and analytics platform that delivers necessary insights to executives, departments, and healthcare providers at the point of care to ensure a more efficient healthcare ecosystem and improved patient outcomes. Analytics creation should not be burdened with the task of dealing with all these disparate data models. With having to figure out that a patient identified as '12345' here is the same patient as the one identified as '67890' there. Or that the gender code 'F' from one system is the same as code '352' from another. And analytics should be able to find diagnosis data all in one place, in one data format, with consistently formatted codes, no matter how many source systems and data formats are integrated. The same is true for all procedures, test results, vital signs, prescribing data, and any other type of clinical or financial data.

ibi™ Omni-HealthData® software is an end-to-end data management and analytics solution that does all of this, delivering a comprehensive 360-degree view of the entire patient journey derived from any quantity of data sources.

The solution:

- Integrates data from a wide range of systems, including electronic health record (EHR) applications, ancillary clinical

systems, health information exchanges, financial systems, HR and time management systems, HL7 messages, C-CDA

- Provides a single, comprehensive, canonical healthcare data repository containing dimensions based on mastered subjects, and facts based on clinical and financial subjects, and a healthcare data warehouse, enabling a single point of reference for the complete clinical and financial history of all patients seen by the health system

- Includes over 30 million rows of healthcare industry reference data (code sets and value sets), updated and enhanced on a quarterly basis, which are the necessary engine of powerful industry healthcare analytics

- Provides algorithms that leverage the canonical model and reference data to generate cohorts for population health, gaps in care, social determinants, and many other healthcare analytics.

- Provides a 360-degree, longitudinal view of the patient journey across the entirety of the collected patient care continuum, which can be presented back to the point of care inside EHR systems, or generated into an outbound Continuity of Care document.

- Facilitates broad-reaching data governance with a customizable set of over 1000 rules for data quality, matching, merging and remediation, with a management UI designed for data stewards.

The Omni-HealthData® solution simplifies complex data integration, promotes data quality, and facilitates ongoing data governance to ensure sustainability. With it, providers and payers can achieve a timely, trusted view of patient information across the continuum of care to support strategic business initiatives.

Beyond EHR Integration Capabilities

While many Electronic HealthRecords (EHR) these days are beginning to become integration hubs, they still do not encompass the breadth of data that healthcare systems are working with. Omni-HealthData® content is driven by consumption needs, such as a health enterprise data warehouse, business intelligence (BI), analytics, and downstream applications. The solution is not designed to model everything EHR systems can contain. Rather, it consumes data from EHR's and beyond, such as general ledger, chart of accounts, HR, time management data, and more. In many cases, customers have more than one EHR vendor system within their organization, either active or legacy. Omni-HealthData is the optimal solution to integrating data in those situations.

By providing a consistent technology and methodology approach across all sources of data, Omni-HealthData® software empowers customers to be more productive in delivering analytics as well as operate with more agility, rapidly responding to new opportunities, challenges, or shifting strategies as needs change.

Subjects and Domains

The Omni-HealthData® Canonical Healthcare Model consists of 89

subjects across 10 domains. The transactional subjects capture clinical, financial, claims, and provider accessibility data. These capture fact data regarding the delivery of care, the revenue cycle, costs of services, and the demand for, and availability of, providers.

Twelve subjects are mastered (Patient, Provider, ProviderPractice, PracticeFacility, Facility, FacilityLocation, Device, Organization, OrganizationalUnit, Member, Payer, Worker) which become dimensions to the transactional subjects.

All subject data is fully integrated within a single data repository. Master instances are fully linked to the source data that went into their creation. Combined with the linkage of transactional data to the source instances for the mastered subjects, the complete path from fact data to master instance is maintained—the basis for the 360-degree view of the data.

Analytics

Generating analytics in Omni-HealthData® starts with the included HealthViews. These provide a denormalized and indexed view of each subject in the Canonical Healthcare Model, pre-join transactional subject data through to their master references, and link all coded data elements to their harmonized parent codes. In doing so, HealthViews automatically delivers on those three value pillars of the solution, speeding the generation of analytics because all those tasks that BI analysts and developers would have to do in the data lake approach are already completed.

This enables analysts to dive in and create metrics. To accelerate the process, Omni-HealthData® includes pre-built metrics in the areas of Inpatient metrics (volumes, readmissions, etc.) Outpatient metrics, Accessibility metrics, Population health metrics (eCQMs and more), Social Determinants metrics, Opioid prescribing metrics, Childhood Immunization metrics, and more.

Additional metric tables are provided to expose industry reference data built into interpretive structures, ready to provide needed additional dimensional richness to analytics. Need to know if a diagnosis represents a chronic condition? Need to know which medication orders are for opioids? Need to find all diagnoses and observations related to social determinants of health? These answers and more are all attainable through our tables built on reference data.

Why ibi™ Omni-HealthData®?

Improve Clinical and Business Integration

Omni-HealthData® software eliminates the data silos that negatively impact the ability to know your patients by unifying business and clinical information across care settings and teams. This provides the

most comprehensive picture of the patient journey.

Enhances Care Management

Providers can view and analyze a more holistic picture of patients' diagnoses, treatments, and outcomes across the entire healthcare continuum.

Reduces the Cost of Care

Helps uncover waste and excessive expenditures by providing the insight needed to minimize readmissions, adverse events, and unnecessary clinical variations and testing. It enables providers to more efficiently understand revenues and costs to help identify savings opportunities.

Boosts Revenues

Providers can uncover out-of-network revenue leakage, gaps in care, and other factors that hinder profitability. Relevant patient cohorts can be identified to support marketing outreach campaigns to close care gaps and enhance revenue.

Enables Transformation to Value-based

Business Models

Access a trusted view of complete information across the continuum of care. This supports value-based business models by improving revenue cycles and payer contracting, and empowers providers to improve their performance in Value-Based Care models and other incentives and risk-based payment scenarios.

Accelerates Time-to-Value with Nine Pre-built Business Domains

The Omni-HealthData® solution organizes all data into nine business domains: clinical, financial, accessibility, patient, provider, payer, facility, organization workforce, and reference data. It includes predefined data quality rules, match/merge rules, remediation rules, process rules, consumption rules, metrics rules, and remediation rules within and across domains.

Provides Historical Snapshots and Traceability

Historical snapshots of inbound data (source records), and master records. This complete audit trail allows users to analyze mastered domain sources across the solution footprint.

Improves Service-to-software Ratio

The Omni-HealthData® solution eliminates the need to create

information management applications from scratch. Any needed customizations can be implemented quickly, with a lower software-to-service ratio than typical business application implementations.

Enables Proactive Data Stewardship

To manage situations in which data rules need to be verified or executed by people, the solution provides alerting and a remediation portal to enable data stewards to investigate and react quickly and appropriately.

ibi delivers a modern data and analytics software platform that helps organizations harness the power of data to drive informed decision making. Fuel your digital transformation with data management and business intelligence capabilities to support large-scale deployments with embedded analytics and enterprise reporting built for cloud and hybrid environments and backed by deep industry expertise.