

High Performance Entity Resolution (HiPER) Healthcare Applications

All data linked with one persistent identifier.

Black Oak's entity resolution software HiPER identifies and links records from every source that belong to the same patient (entity). Data from EHR systems, pharmacy, EMT systems, clinicians, specialists, as well as data from medical records, wearables, and devices, can all be linked together into a single system of record.

By producing a metadata tag for each record, HiPER declutters and links all patients, while keeping PHI and PII safe, separate, and secure.

Instead of trying to migrate all of an organization's data into a single electronic data warehouse, HiPER gives clients the ability to keep the data in the secure repositories where it already resides, while still leveraging the value of the data.

What before was meaningless, incomplete, or disconnected data in one record can become meaningful to research, compliance, financial, and other initiatives.

HiPER competitive differentiators include:

- **Time to Value ROI:** Minimal installation time compared to other market products.
- **Non-intrusive Installation:** HiPER's installation process augments existing software architectures, avoiding rip and replace of legacy systems.
- **Accurate Matching on Complex Data:** HiPER has best-in-class matching accuracy with fully configurable probabilistic and deterministic rules supported by machine learning.
- **Versatile Deployment:** Can be installed in a 3rd party cloud, on premise in a private cloud, or on premise on a single machine.
- **Data Security:** Unlike cloud-only solutions, HiPER is easily installed behind a client's firewall to make sure their source data remains securely in their internal infrastructure.
- **Avoid Preprocessing/ETL:** Instead of the old paradigm of changing data to fit the system, HiPER conforms to the data.
- **Auditable:** Transparent match rules and results.
- **Real-Time Results:** HiPER can perform entity resolution and matching in real-time.

Healthcare Experience

Black Oak has a history of working with healthcare clients on a variety of projects and initiatives.

One of our key successful engagements includes HiPER matching for a multi-tiered, longitudinal epidemiology study for a nationally ranked, top-tier research hospital system.

Black Oak has also been engaged with a Fortune 100 healthcare insurer for the last 2 years. Our initial work with the company included creating a detailed path to adopt data governance, analyzing their existing matching accuracy using HiPER, and establishing metrics and protocols for them to adopt master patient index (MPI).

Our most recent work with the same client has been consulting their C-suite leadership on data governance, developing policies, procedures, and reports that will ensure the accuracy and success of their new enterprise MPI.

For more information or references, contact us at:

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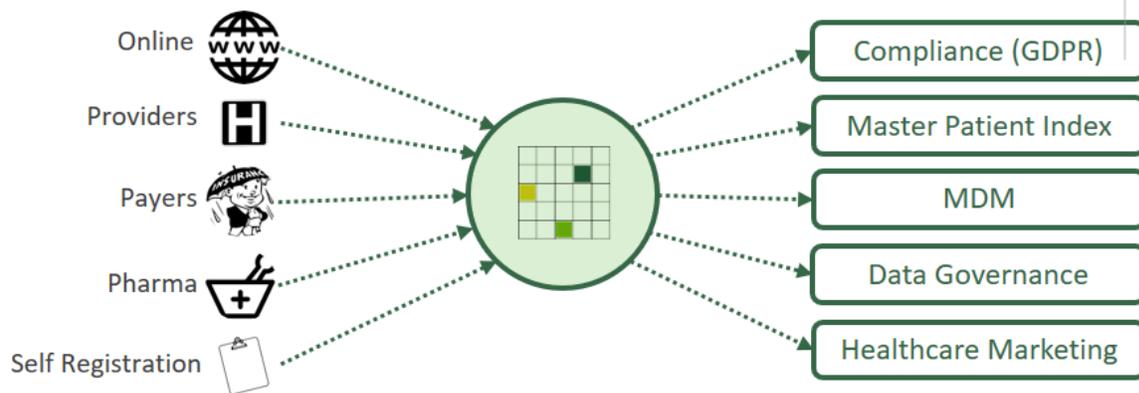
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HiPER Healthcare Applications



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Backed by the HiPER software for data integration, Black Oak has a wide variety of services to offer healthcare clients.

GDPR Compliance

The European Union (EU)'s General Data Protection Regulation (GDPR), goes into effect May 25th of 2018, and has increasing requirements through May of 2020. Many organizations aren't entirely aware of all their data assets, and certainly do not know exactly how many Europeans are in their data sets. To solve this problem, HiPER links records both internal and 3rd party records including both active and archived datastores to identify all locations that contain data about a specific individual.

Master Patient Identifier (MPI)

Current healthcare solutions are limited by data format, and data arriving from multiple sources about a single patient is seldom, if ever, completely linked across all data stores. HiPER declutters an organization's data, and links data using all available information to achieve the highest possible accuracy, while keeping it safe and separate. This results in a master patient identifier (MPI), so as many correct, unique identities as possible are linked across the organization's data.

Master Data Management

The current trend is to decouple the components of MDM, allowing each component to achieve high levels of effectiveness and efficiency for its concerns. Unfortunately, many MDM architectures are designed to build and maintain only one system of record for all applications. Black Oak's experienced teams can help clients through the process of decoupling data systems and linking data.

Data Governance

"Big Data" is a phrase used often in describing a company's explosion of data assets. Black Oak works with clients to implement data governance initiatives to help clients make sense of their most valuable asset — data. Our programs can establish an Executive Data Governance Council; determine critical data assets; establish policies and procedures to monitor and improve key performance metrics; and establish processes for how data is stored, backed up, and used. Data governance is not a project or a solution, it is a fundamental change in the way a business handles data.

Healthcare Marketing

The vast data expertise and extensive data processing experience of the professionals at Black Oak Analytics makes us uniquely qualified to assist you in the orchestration and execution of an engaging message at the right time, in the right manner, to the right people.



About Black Oak Analytics

Black Oak's team of experts in the area of data quality and information management includes multiple PhDs directly tied to the world-recognized Information Quality Graduate Program at the University of Arkansas at Little Rock. Our mission is to become our client's trusted partner by helping them manage information as an asset and use it as a competitive differentiator.

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