Optum linkage analysis

Detecting patterns and identifying perpetrators of fraud
Track fraud schemes by uncovering hidden relationships.

Medicaid fraud is a pervasive problem that robs state coffers of vital resources. Optum™ linkage analysis is a powerful investigative tool that can uncover suspicious activities by applying sophisticated analytics to multiple state-owned and external data sources. A component of Optum program integrity services, this solution identifies individuals and organizations who may be involved in fraudulent or abusive practices and provides the factual basis for prosecution or other forms of redress. In doing so, our solution helps you protect and maintain the integrity of your state’s Medicaid program.

Optum linkage analysis services

Medicaid agencies need the tools to stay one step ahead of fraud syndicates. Optum linkage analysis leverages geographic information, data visualization software and disparate data sets to detect potential criminal activity and establish connections between possible offenders not readily identifiable with traditional fraud detection methods. Our approach encompasses Medicaid provider networks, medical equipment suppliers, retailers, recipients and others — everyone involved in providing and receiving health care services — and tailors fraud-detection analytics and methodologies to the needs of the state. We provide the expertise to design, operationalize and sustain your fraud-detection initiatives, along with the technology to deliver a system that can manage the process end to end.

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Linkage analysis benefits

The benefits of adding Optum linkage analysis to your program integrity efforts include:

- Efficient monitoring and analysis of provider network billing practices and claims
- Linkage of both state-owned and externally acquired data to enable state departments and agencies (e.g., attorneys general, offices of Medicaid inspectors general, Medicaid program integrity and fraud control units) to connect the dots with regard to identifying the individuals and organizations trying to defraud the state
- Access to new technologies that leverage geographic information as well as data visualization and social networking methodologies
- The expertise to integrate and analyze a variety of structured and unstructured data sets to more effectively detect unusual patterns and potential fraud
- Optum advanced analytics, developed from our extensive health care and Medicaid experience
Applying linkage analysis

Using business records or corporate registration information, Optum linkage analysis identifies situations that don’t add up, such as an urgent care clinic sending patients to an X-ray facility far in excess of normal patterns, or a pharmacy filling an inordinate number of prescriptions from a doctor across town, and quickly and accurately “contextualizes” connections between patients, clinicians, pharmacies, retailers and suppliers to identify who’s involved and map out connections. For example, it can show you if there is a shared business interest between a provider and a radiology center or a pharmacy and a medical practice.

By integrating multiple data points — claims, addresses, demographic information, geographic profiles, public assistance program enrollment, previous investigation history, shared corporate ownership and more — Optum linkage analysis lets you see the contours of a potential fraud scheme and take action.

Optum linkage analysis provides the foundation for continuous, unparalleled fraud detection results due to an intuitive web-based user portal, state-of-the-art data visualization and exceptional reporting capabilities. Our dashboards alert you to potential fraud cases identified by our analytics. You can then drill down and closely analyze graphically displayed connections between providers, recipients, addresses, corporations and others. This visualization component also provides mapping capabilities to leverage geospatial information — allowing the results of large and disparate data set analytics to be illustrated on a map.

Fraud alerts dashboard

The linkage analysis dashboard shows notifications about connections and individuals identified as a potential fraud risk.
We provide a team of analytics experts to assist you.

Optum is uniquely qualified to assist Medicaid agencies in their fraud detection efforts. Our comprehensive fraud detection solution combines health care and Medicaid program integrity expertise with advanced technology to take advantage of the latest innovations in data integration, social networking, graphical representation and predictive analytics.

Optum linkage analysis is the culmination of 10+ years’ experience successfully applying advanced data analytics and predictive modeling to health care claims. This success has made us well aware of the specific types of fraud that plague state governments and the health care industry. Moreover, it gives us the requisite experience to identify organized fraud by modeling relationships between various entities. Our analytics team uses a variety of sources to predict fraud risks and prioritize alerts based on our experience identifying a wide range of Medicaid fraud schemes. The diverse data points used in this analysis can include criminal records and relationships to individuals previously involved in fraud, along with a multitude of suspect claims submission patterns. Optum linkage analysis combines insights from claims analysis and non-transactional data sets to more effectively detect, highlight and pursue potential fraud.

Optum linkage analysis evaluates information from a wide array of data sets. Examples of data sets that can be incorporated into our system in addition to claims and encounter data include:

- Vital records
- Federal and state exclusion, sanctions and disciplinary data, including incarceration data
- Phantom provider database
- High-risk providers based on address
- Past audit cases
- Medicaid banking data
- State licensing and registration data
- Other social services benefit program data
- Commercially available records data including financial stress indicators such as liens, judgments, and bankruptcies
- Other asset and financial data

Those who perpetrate fraud are constantly improving the methods and technologies they use. States must follow suit by taking advantage of sophisticated analytics tools and the expertise of specialists in order to detect fraud and stop criminals from succeeding. Get started with Optum linkage analysis.

Contact us

To learn how Optum can help you establish a comprehensive, highly effective fraud detection program, contact us at 1-800-765-6092 or innovate@optum.com.