

Today, perhaps the single greatest asset of healthcare organizations, such as life sciences organizations, retail pharmacies and Pharmacy Benefits Managers (PBMs) is data. From marketing and sales, to product development, to verification and compliance, provider data can be considered the lifeblood of operations across the entire enterprise—and across the entire industry. Running a healthcare company without data would simply not be possible.



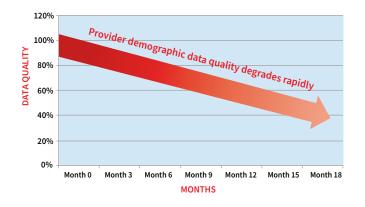
Data quality drives operational effectiveness

The quality of data, or lack thereof, has direct and substantial impact on the effectiveness of the operations being performed. Data-powered functions break down when the data has eroded and is no longer accurate and complete.

Data erosion is an industry epidemic

Unfortunately, and in most cases, organizations unknowingly operate with surprisingly high percentages of "bad" data that is outdated, inaccurate, incomplete or some combination of these issues. Most raw source data doesn't start out bad—it erodes and becomes outdated and incorrect over time as changes naturally occur. One may be shocked at how quickly entropy can transform good data into bad data. Consider the statistics at right.

The important takeaway is that access to quality provider data is just the first step toward healthy operations—there must also be tools and processes in place to monitor, cleanse and update provider data to ensure that high quality is constantly maintained. An investment in quality data will quickly lose its value if its quality is allowed to diminish.



Practitioner Changes in One Week ¹	
Primary address changes	33,000
Name changes	3,300
Phone changes	1,750
Fax changes	1,500
State License expiration changes	86,000
State License status changes	17,000
Qualifier changes	7,000
DEA number changes	1,000



Is State License board data reliable?

One might think that data maintained and provided by State License boards would be accurate and reliable. Other than credentials, the reality is State License boards are not in the business of selling data and their systems are not setup to effectively manage, maintain and deliver quality data. The completeness and accuracy of State License board data is compromised by a wide range of issues, including:

- Credential acquisition frequencies vary by state and board
- · Credential requirements and recognition varies by state
- State Licensure policies limit availability of certain data
- · A lack of internal data governance and quality control
- A lack of State and Federal standardization



According to the OIG:

"Inaccurate, incomplete and inconsistent provider data coupled with insufficient oversight place the integrity of the Medicare program at risk and present vulnerabilities in all healthcare programs." – OIG (2013)

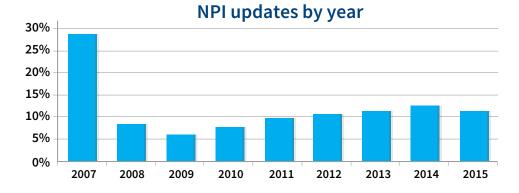
 $http://www.policymed.com/2013/06/physician-payment-sunshine-act-hhs-oig-reports-the-npps-database-as-largely-inaccurate. \\html$

Data is often incomplete, inconsistent and incorrect

During a 2013 study of the National Provider Identifier file (NPI) the Office of the Inspector General (OIG) found:

- National Plan and Provider Enumeration System (NPPES) provider data was inaccurate on 48% of records
- Conditionally variable fields have a fill rate of only 9%
- Records found in NPI and Provider Enrollment, Chain and Ownership System (PECOS) were inconsistent 97% of the time

The large volume of inaccurate NPI records is not that surprising considering that over the last seven years the percentage of files updated averages well below 10% of the total database.





LexisNexis® Health Care—completely committed to delivering quality data

Fortunately, the solution to these data quality challenges is a simple one that already exists. LexisNexis Health Care has made gathering, maintaining and delivering the industry's most comprehensive and reliable data their number one priority. The company's primary mission is to provide data and data-powered solutions that drive efficiency, reduce latency and ensure continuous quality and ongoing enhancements. Their innovative solutions are built on the foundation of four key data properties:

Completeness

- · Robust view of the customer
- Data attributes support business and compliance needs

Accuracy

- Data is regarded as authoritative source
- Is timely and reflects real life

Consistency

- Standardization of data attributes
- Single source of the truth

Governance

- Standard, ongoing maintenance processes
- · Stewardship and auditing

The largest, most comprehensive provider database

LexisNexis combines millions of industry specific records with billions of public and proprietary records to offer the largest provider referential database in the healthcare industry.

More healthcare organizations trust LexisNexis than any other provider information solution



BREADTH OF DATA

Covering all healthcare provider types and corporate entities

More than 8.5M provider records tracked:

- 1M+ Physicians with active locations
- 3.5M RN/LPNs
- 180K NPs, 98K PAs
- 225K Dental Providers
- 3.5M Ancillary Providers

1M Facility, Group and other Business Entities:

- 7K Acute Care Hospitals
- 50K LTC Facilities
- 230K Medical Group Practices

Over 1M HCP to HCO affiliations

1,500 IDNs with parent/child relationships



DEPTH OF DATA

Critical attributes you need to run your business

- Name Integrity including Individual, Corporate Names, DBAs and Formerly Known As
- Addresses across all practice locations, billing locations, corporate locations
- Key Identifiers from License, NPI, DEA, CLIA, etc.
- Critical status, sanction and other suspect identifiers
- Credential information such as medical school and office hours
- Key contact data: primary practice location, phone, fax, email and website
- Accepting Medicare and Medicaid patients
- LexID* tracks persistency of the provider over time and ensures elimination of false positive and duplicate records
- URAC Accredited CVO organization



LexisNexis Provider Data MasterFile™ only includes data gathered from sources that meet rigorous quality standards. Currently, approximately 2,000 sources contribute to the Provider Data MasterFile. Each source is pre-qualified by a product development team that evaluates the source data for accuracy and the value the contribution adds to the final product. Sources are re-evaluated periodically to ensure their quality does not diminish over time. If a source quality falls, it is disqualified from contribution.



Provider Data MasterFile data comes directly from the disseminating or authoritative source before undergoing a thorough credentialing process that includes:

- NPI (NPPES)
- State License and State Sanctions (State Boards)
- DEA (NTIS)
- CMS Order and Referring physicians, 340B status
- Sanctions and Exclusions (Federal and State level)

Additionally, extensive provider demographic information is obtained from a combination of public and private sources.

Maintaining the most current, accurate data

LexisNexis employs several innovative data acquisition strategies that enable delivery of highly accurate provider credentialing and demographic information while reducing latency. Key data acquisition strategies include:

- The LexisNexis Provider Data Consortium (PDC). Members of the PDC include retail pharmacy chains, PBMs, life sciences organizations, payer customers and other healthcare providers who submit changes to LexisNexis on a daily basis for verification and inclusion in the contributory database
- Utilization of medical claims sources to identify and maintain an evidence-based view of practitioner affiliations to hospitals and long-term care locations

- Leveraging targeted web harvesting techniques in order to continually drive data quality and reduce latency
- Employing a hybrid deterministic and probabilistic matching algorithm to integrate and match over 2,000 disparate data sources to build the Provider Data MasterFile
- Performing a multitude of quality scans throughout the acquisition and Provider Data MasterFile build process



The 3 keys to ensuring reliable data

LexisNexis clients depend on Provider Data MasterFile data for a broad range of enterprise-wide operational functions. Every data-powered solution must meet stringent quality standards to support the business and compliance objectives of healthcare organizations. LexisNexis uses three primary metrics for measuring quality:

- 1. Match Accuracy: The measure of the correctness of each provider attribute
- 2. Coverage: This metric has two dimensions:
 - 1) Completeness of the healthcare universe and
 - 2) The fill rate for each attribute that makes up a practitioner profile
- **3. Consistency:** Staying ahead of the rate of change or churn within the healthcare provider universe

Quality data is essential for the success, and even the survival of healthcare organizations. The data that many organizations are using to drive operations is of a degraded quality, which is resulting in untold amounts of wasted time and money, and also leaving organizations vulnerable to a wide range of legal and security risks.

For more information, call 866.396.7703 or visit lexisnexis.com/risk/healthcare



Health Care

About LexisNexis® Risk Solutions

At LexisNexis Risk Solutions, we believe in the power of data and advanced analytics for better risk management. With over 40 years of expertise, we are the trusted data analytics provider for organizations seeking actionable insights to manage risks and improve results while upholding the highest standards for security and privacy. Headquartered in metro Atlanta, LexisNexis Risk Solutions serves customers in more than 100 countries and is part of RELX Group plc, a world-leading provider of information and analytics for professional and business customers across industries. For more information, please visit www.lexisnexisrisk.com.

Our healthcare solutions combine proprietary analytics, science and technology with the industry's leading sources of provider, member, claims and public records information to improve cost savings, health outcomes, data quality, compliance and exposure to fraud, waste and abuse.

Provider Data MasterFile provided by LexisNexis is not provided by "consumer reporting agencies" as that term is defined in the Fair Credit Reporting Act (15 U.S.C. § 1681, et seq.) ("FCRA") and does not constitute a "consumer report" as that term is defined in the FCRA. Provider Data MasterFile may not be used in whole or in part as a factor in determining eligibility for credit, insurance, or employment or for any other eligibility purpose that would qualify it as a consumer report under the FCRA. Due to the nature of the origin of public record information, the public records and commercially available data sources used in reports may contain errors. Source data is sometimes reported or entered inaccurately, processed poorly or incorrectly, and is generally not free from defect. This product or service aggregates and reports data, as provided by the public records and commercially available data sources, and is not the source of the data, nor is it a comprehensive compilation of the data. Before relying on any data, it should be independently verified. LexisNexis and the Knowledge Burst logo are registered trademarks of RELX Inc. Copyright © 2017 LexisNexis. All rights reserved. NXR11342-02-0517-EN-US