



Provider Directory Benchmark:
An Assessment of Data Accuracy
and Volatility

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Overview

The healthcare industry continues to evolve and redefine itself, in large part due to the impact and influence of the Affordable Care Act, resulting in more restrictive provider networks and the acceleration of consolidation and merger activity among provider practices, health systems and health plans. A significant byproduct of this turmoil has been that the importance of provider networks has increased considerably. This has translated into a heightened awareness by members and regulators of the accuracy and usability of published provider data. In turn, accuracy of provider network participation and demographics offered by health plans, a key component of the marketing and sales effort, is receiving increased attention from a compliance and audit perspective.

This is a challenging problem. The volatility of provider data (the rate at which provider demographic information changes) can range from 1% to 3% per month. This means that fully one third of the data published in a provider directory can be out-of-date and inaccurate within the course of one year, and that assumes the source data was 100% accurate to begin with. As the findings within will show, that assumption would be incorrect in essentially any instance.

Recent studies by the Health and Human Services Office of the Inspector General (HHS OIG) have reported on the inaccuracies endemic in published provider data for both Medicare and Medicaid programs, which have helped to raise the level of attention on this subject as well as increase the likelihood of new rules and standards that will test the capabilities and patience of health plans and providers alike. At the same time, state agencies, activist consumer groups, and class action lawsuits have become a more significant risk management consideration.



This heightened scrutiny has created greater interest in detailed benchmarking and industry transparency, and specifically Atlas Systems has been asked by clients to provide information to better measure their efforts against that of the industry. These requests have served as the catalyst for this report.

As a core specialty within our compliance business, Atlas Systems offers primary source provider data validation services. In the normal course of performing those services, we routinely conduct surveys and audits, collect data, and provide analytics on provider directories and data. This report is a natural extension of that focus, published as a general benchmark assessment of provider data accuracy. In doing so, we hope that greater visibility into the state of provider data and its inherent challenges, both with directory accuracy and related issues, can help health plans better manage this critical asset.

Executive Summary

This study focuses on the types of changes that cause a directory entry to be considered inaccurate from the perspective of a health plan member. Thus, we evaluated only the primary directory information necessary to select a health plan product or to contact a provider office to make an appointment: specifically name, address, phone number, specialty and network participation.¹ Publishing incorrect information in such circumstances could result in a prospective member incorrectly selecting certain coverage where the desired provider is either not an option or inconveniently located. It is this specific scenario that is at the center of the provider data accuracy issue.

In no instance did a health plan register an accuracy percentage higher than 80.1%, and the average across all plans surveyed was 65.1%.

While the issues identified in this report are not as extensively documented as those highlighted in the 2013 and 2014 HHS OIG reports², the state of provider data accuracy nonetheless remains a significant issue for the industry. Our analysis reaffirms the considerable variability among health plans, in which there

¹ Minor incongruities that would not significantly inconvenience a member (e.g. the lack of a middle initial or an incorrect office suite number but the correct street address) were disregarded in the analysis. Similarly, other data elements often collected by Atlas Systems, such as office hours, languages spoken, wheelchair accessibility, hospital affiliation, etc. were outside the scope of this study.

² <http://oig.hhs.gov/oei/reports/oei-07-09-00440.asp> and <http://oig.hhs.gov/oei/reports/oei-02-13-00670.asp>

in no instance where a health plan registered an accuracy percentage higher than 80.1% (for a small regional government-sponsored plan.) More importantly, the average across all plans surveyed was 65.1%. And while name, gender and specialty were seldom incorrect, the likelihood of an incorrect address was 19.6% while an incorrect phone number was identified in 7.8% of the instances.

One finding worth comment regards the accuracy of commercial provider directories vis-à-vis those of government-sponsored plans. Commercial directories tended to be significantly less accurate on average (59.8%) than government-sponsored plans (73.1%), a circumstance that may reflect the increased scrutiny that CMS and other state agencies have begun to apply and the proactive measures certain insurers have initiated to address those concerns.

Overall, the challenges to maintaining accurate, current provider data is reflected in the state of directory information published on health plan websites and in paper directories. Providing accurate and timely information is difficult, complicated, and expensive. Those plans able to make available information at a level significantly above current standards have the opportunity to deliver a better consumer experience and reduce exposure to compliance-related risk, both of which can provide a competitive advantage. As a bonus, they also enjoy reduced administrative expenses through the reduction of consumer phone calls and claims processing issues.



The Atlas Systems Study - Methodology and Approach

The data and findings from this report are based on audit and survey work conducted as part of Atlas Systems' compliance services efforts, and include both de-identified client data prior to validation³, as well as results from scheduled random surveys conducted during 2015. For purposes of this report, the emphasis has been placed on the accuracy of core demographic data, as it is this dataset that is of particular importance to both the health plan member and to various regulatory and oversight agencies.

The primary demographic data used to determine accuracy results includes *provider name, address of service, primary phone number, and specialty*. Details such as *office suite number* and *middle initial* were disregarded in the determination of data accuracy, as errors here would be unlikely to inconvenience or misinform the consumer.

Given that there are several hundred health plans operating in the U.S., it is important to note that the results presented here are not an exhaustive assessment of the industry, but rather provide some visibility into an otherwise unremarkable but important component of health plan operations. Furthermore, the primary catalyst behind this report has been requests from Atlas Systems clients and partners who have expressed the need for an industry benchmark against which they may assess the quality and effectiveness of their provider directory maintenance efforts.

Atlas Systems intends to continue to provide updates and expand upon the results presented here as an ongoing service to our clients and other interested parties.

³ Client data included in this report was de-identified, pre-validation data. Atlas Systems post-validation accuracy rates are typically above 95%, which would have had the effect of skewing industry averages upward.

Findings - Overall directory accuracy

As recent news reports, regulatory audits and class action lawsuits have publicized, there is wide variability in the accuracy of health plan provider directory information. Atlas Systems analysis indicates that a given provider directory

About 24.8% of all directory issues are related to provider practice location changes.

entry is likely to be correct 65.1% of the time, with a range from 49.1% (for a large commercial plan) to 80.1% (for a small government-sponsored plan.).

It is also interesting to note that provider data accuracy tends to be higher among government-sponsored plans at 73.1%, whereas commercial

plans average 59.8%. Relative to the 2013 HHS OIG study, the higher numbers in our findings can be attributed to a smaller sample than that of the government study and a raised awareness and attention to this issue by health plans.

In general, the primary driver for volatile data accuracy is the change of the provider location. On average, about 24.8% of all directory issues are related to physical changes to the provider practice location, which can be attributed at least in part to the consolidation of practices, purchase of practices by health systems, and by the general movement of providers away from independent practices to become part of larger health systems networks.

Commercial

Breakdown by category	Average
Attested, no changes	59.8%
Moved	27.7%
Retired	0.9%
Deceased	0.9%
Other changes	10.8%
Total	100.0%

Government-sponsored

Breakdown by category	Average
Attested, no changes	73.1%
Moved	13.2%
Retired	0.6%
Deceased	0.3%
Other changes	12.9%
Total	100.0%

A smaller but nonetheless significant driver of directory discrepancies is an incorrect phone number without a corresponding change of location. This was the largest component among ‘Other changes’ with 7.8% of directory listings having an incorrect phone number. In almost all cases, the number was out-of-service or not associated with a medical practice, but in a small subset of instances the number listed was not intended for member access or scheduling appointments, and required redirection to another phone number.

The remaining category of provider data changes, those of *retired providers* and *deceased providers*, were relatively negligible. Overall, *retired providers* and *deceased providers* contributed only 0.8% and 0.7% to directory inaccuracy.

Findings - Provider Data Volatility

The volatility of provider demographics extends further, with a number of interesting data elements that health plans are either required or otherwise find critical to collect as part of their overall dataset. The relative rate of change of these elements can range widely among health plans as they either look to include new data elements or otherwise define or categorize them differently. In the table below, this variability is illustrated by three comparable health plans, with a combination of updated and new data driving changes to the provider file.⁴

Data Element	Plan 1	Plan 2	Plan 3
Wheelchair Access	51.6%	29.0%	75.0%
Provider Location Status Change	20.3%	37.1%	25.8%
Hospital Affiliation	19.7%	20.0%	21.7%
Fax number	18.4%	27.3%	14.0%
Provider Address	31.0%	3.1%	8.2%
Phone number	11.6%	15.0%	7.3%
Name	14.2%	2.0%	0.8%
Gender	0.1%	7.2%	0.2%
Provider NPI	0.1%	6.3%	0.1%

⁴ Data from 2014-2015

Some particularly notable data elements include:

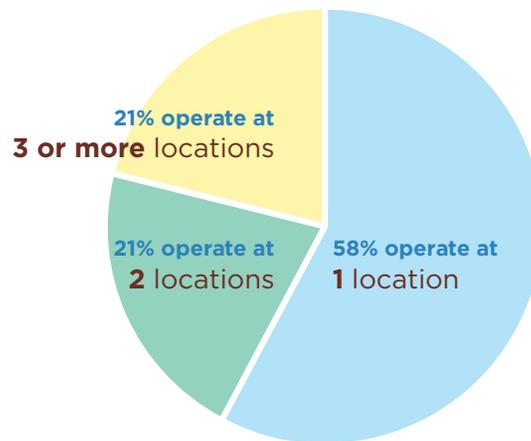
Fax number - Provider fax numbers change with particular frequency, from 14% to 27% over the course of a year. Given that the fax machine remains a primary communication channel for many, including health plan-to-provider and provider-to-provider, having accurate fax numbers remains an important data asset.

Hospital Affiliation - Analysis shows that roughly 20% of providers will change hospital affiliation in the course of a year.

Name, Gender, NPI - It should come as some reassurance that these data elements tend to be reliably accurate. Changes tend to be minor errors in spelling or the addition of a middle initial, and gender updates are invariably detail added where nothing had been previously recorded.

Provider Location - Analysis indicates that providers average 1.4 locations. More specifically:

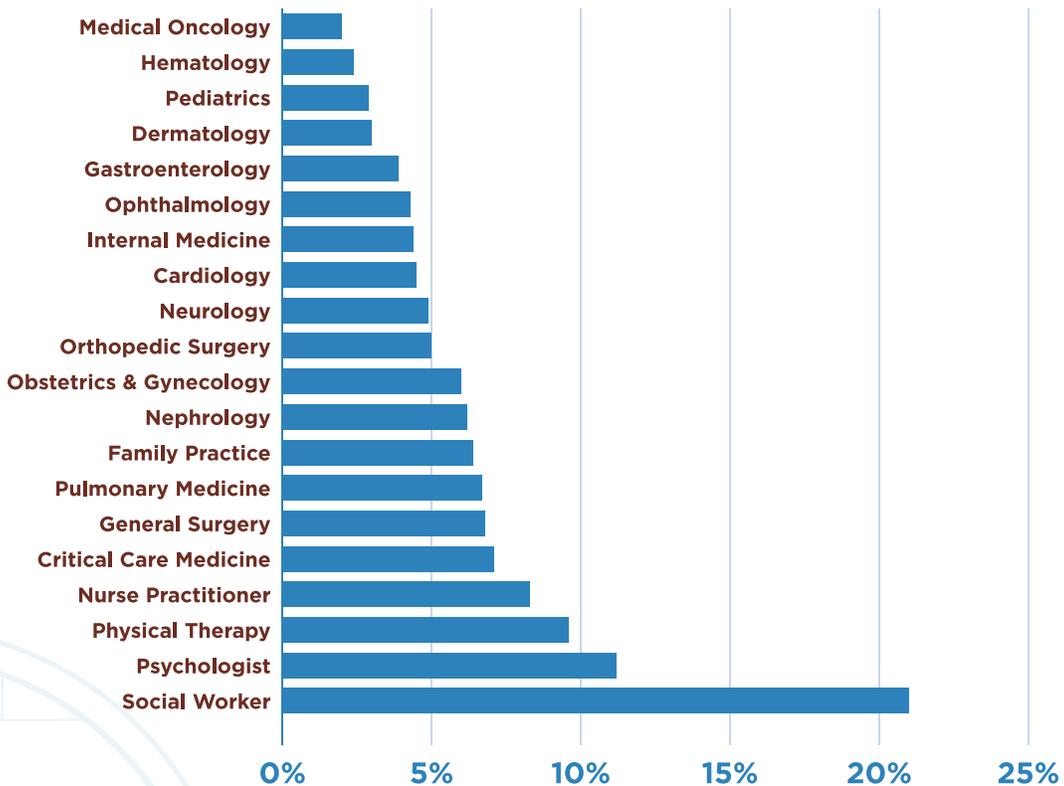
Average Number of Provider Locations



Findings - Provider Data volatility by Specialty

Some specialty-specific nuance can be seen in the data. Certain medical specialties demonstrate a higher rate of mobility and change than that of others, most notably social workers, psychologists, and physical therapists. At the same time, other specialties (e.g. oncology, hematology, pediatrics) have a much lower rate of change. The graph below illustrates the rate of relocation by specialty, and is based on change over a five month period in 2015. From a predictive modeling and a network management standpoint, patterns like this derived from the data can assist with planning and validation efforts.

Provider Mobility



Findings - Provider Compliance

One final observation, based on Atlas Systems' experience with provider data validation efforts, has been the variability and trend relative to the provider communication process. Given that health plans find themselves conducting their own provider validation efforts, it may be useful to understand the relative effectiveness of different communications channels, as well as the rate of uptake.

Typical of any primary source approach to provider data validation, communication with the provider office takes place via 1) telephone, 2) fax, 3) self-service internet portal, and 4) physician roster, when working with large clinics and hospitals.⁵ While the adoption of internet self-service is encouraging and suggests a long-term solution to the directory update challenge, the bulk of data capture and validation remains phone-based, ranging from 62% to 91% for those health plans included in the study. By contrast, fax and roster tend to be lower volume channels for data collection.

Validation Range By Channel

Telephone	Fax	Self-Service	Roster
62 - 91%	6 - 18%	3 - 18%	4 - 25%

Summary

The challenge inherent in collecting, managing, validating and presenting an accurate provider directory remains an imperfect and resource-intensive undertaking for most health plans. The collective data accuracy and reliability issues identified in this report point to the difficulties and complexities that those in network management, compliance and member service departments contend with on a daily basis. Hopefully, an understanding of the current state of the industry can serve as a driver for improvement, and with that raise both the perception and performance of the industry as a whole.

⁵ Physician roster can be an automated or semi-automated procedure, so can have characteristics similar to those of self-service portals.

About Atlas Systems

Atlas Systems is a technology services company to the Fortune 1000, with a specific emphasis on the health care, financial services, and manufacturing markets. In the healthcare vertical, Atlas Systems has deep expertise in compliance solutions for health plans and health systems, including:

PRIME™ – This primary source validation solution is specifically designed to help health plans collect, validate and attest the accuracy of their provider data assets. PRIME uses a combination of platform, process and direct provider outreach to achieve industry-leading levels of quality, flexibility, and audit support.

ComplyScore™ – ComplyScore is an enterprise-grade, cloud-based suite of integrated modules to support a comprehensive compliance and risk management program. Highly customizable and designed for organizations with complex requirements, ComplyScore is a proven solution for health plans and health systems.

If you have any questions about this report or would like to learn more about Atlas Systems, please contact us at info@atlassystems.com, (844)452-0101, or visit www.atlassystems.com.



