SANATOR
PROVIDER REGISTRY

GAINE

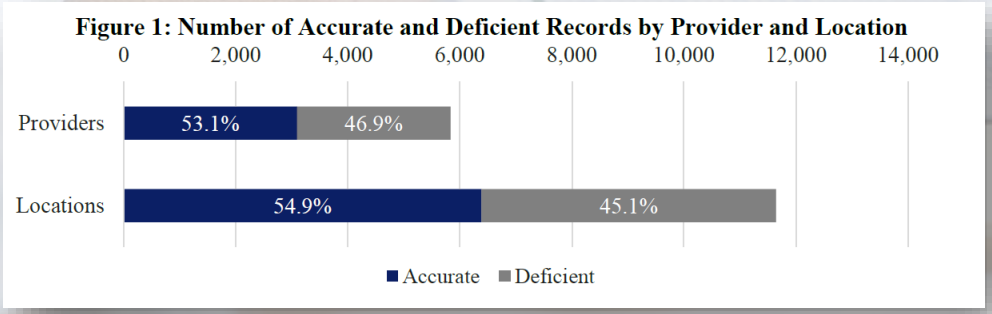
Sanator Provider Registry Briefing

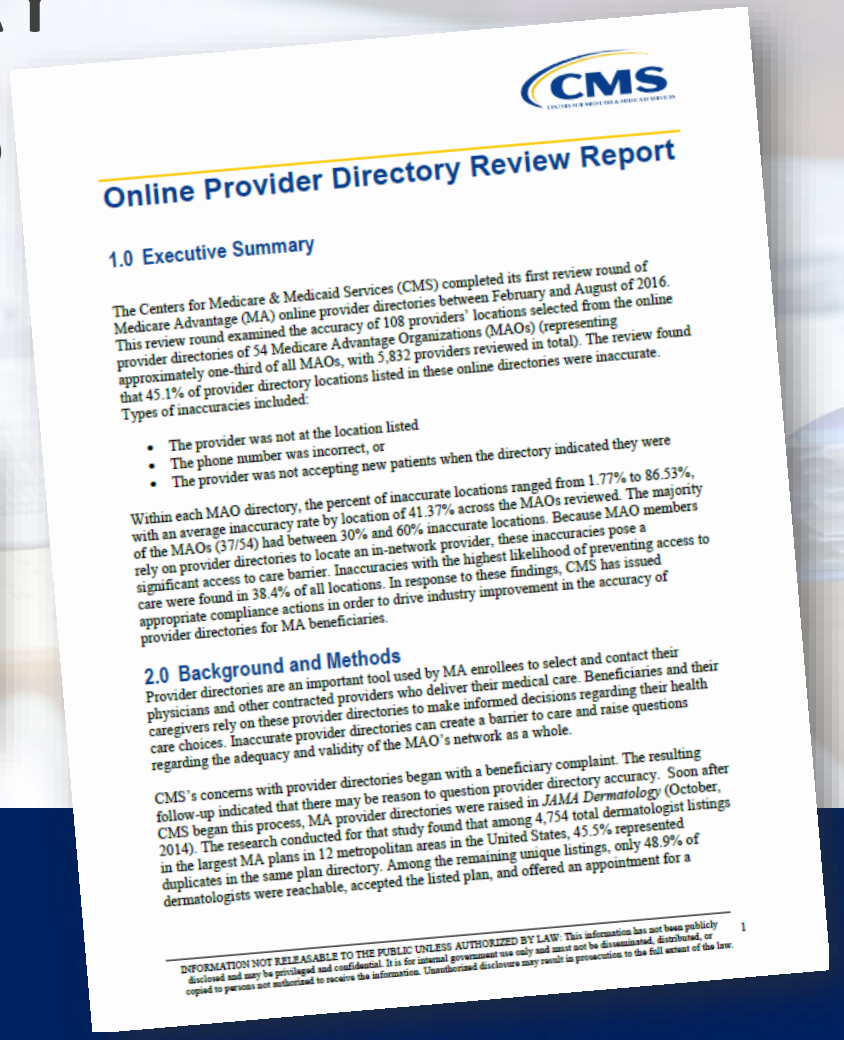
CAHP Seminar

Burbank, 13th April 2017

Martin Dunn
CEO Gaine Healthcare
Martin.Dunn@gainehealthcare.com

PROVIDER DIRECTORY ACCURACY REMAINS CHALLENGING





CMS

Online Provider Directory Review Report

1.0 Executive Summary

The Centers for Medicare & Medicaid Services (CMS) completed its first review round of Medicare Advantage (MA) online provider directories between February and August of 2016. This review round examined the accuracy of 108 providers' locations selected from the online provider directories of 54 Medicare Advantage Organizations (MAOs) (representing approximately one-third of all MAOs, with 5,832 providers reviewed in total). The review found that 45.1% of provider directory locations listed in these online directories were inaccurate. Types of inaccuracies included:

- The provider was not at the location listed
- The phone number was incorrect, or
- The provider was not accepting new patients when the directory indicated they were

Within each MAO directory, the percent of inaccurate locations ranged from 1.77% to 86.53%, with an average inaccuracy rate by location of 41.37% across the MAOs reviewed. The majority of the MAOs (37/54) had between 30% and 60% inaccurate locations. Because MAO members rely on provider directories to locate an in-network provider, these inaccuracies pose a significant access to care barrier. Inaccuracies with the highest likelihood of preventing access to care were found in 38.4% of all locations. In response to these findings, CMS has issued appropriate compliance actions in order to drive industry improvement in the accuracy of provider directories for MA beneficiaries.

2.0 Background and Methods

Provider directories are an important tool used by MA enrollees to select and contact their physicians and other contracted providers who deliver their medical care. Beneficiaries and their caregivers rely on these provider directories to make informed decisions regarding their health care choices. Inaccurate provider directories can create a barrier to care and raise questions regarding the adequacy and validity of the MAO's network as a whole.

CMS's concerns with provider directories began with a beneficiary complaint. The resulting follow-up indicated that there may be reason to question provider directory accuracy. Soon after CMS began this process, MA provider directories were raised in *JAMA Dermatology* (October, 2014). The research conducted for that study found that among 4,754 total dermatologist listings in the largest MA plans in 12 metropolitan areas in the United States, 45.5% represented duplicates in the same plan directory. Among the remaining unique listings, only 48.9% of dermatologists were reachable, accepted the listed plan, and offered an appointment for a

INFORMATION NOT RELEASABLE TO THE PUBLIC UNLESS AUTHORIZED BY LAW: This information has not been publicly disclosed and may be privileged and confidential. It is for internal government use only and must not be disseminated, distributed, or copied to persons not authorized to receive the information. Unauthorized disclosure may result in prosecution to the full extent of the law.

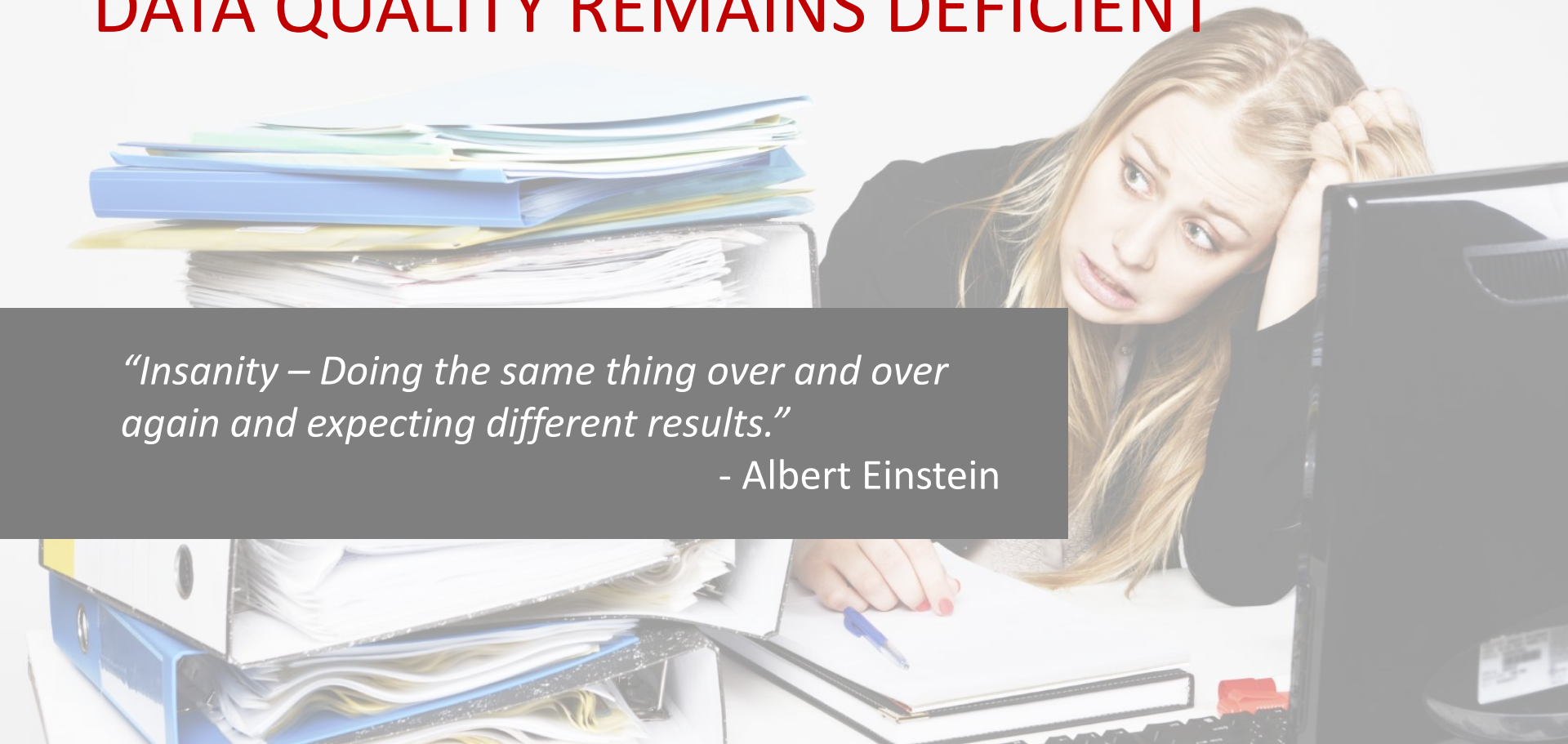
1

"The review found that 45.1% of provider directory locations listed in these online directories were inaccurate."

https://www.cms.gov/Medicare/Health-Plans/ManagedCareMarketing/Downloads/Provider_Directory_Review_Industry_Report_Final_01-13-17.pdf

OUTREACH TO DOCTORS OFFICES IS UP, ROSTER EXCHANGE WITH GROUPS IS UP, ATTESTATION FREQUENCY IS UP

DATA QUALITY REMAINS DEFICIENT



"Insanity – Doing the same thing over and over again and expecting different results."

- Albert Einstein

Baseline Stats

Sanator Participation and Adoption in California

IPA's have ongoing communication with their contracted providers for a range of business services. This existing communication produces the Sanator data without adding any overhead to providers or medical groups.

Sanator subscribers exchange data on a weekly basis with Sanator.

41 IPAs

5,194 Groups

More than 5,000 medical groups maintain and attest to the accuracy of their profile via the Sanator online portal.

Reference sources, associations and research organizations with less frequent refresh cycles. These sources are excluded from the active population.

SANATOR PROVIDER REGISTRY

Active Management

43,237 Individuals	23,483 Facilities
10,755 Organizations	70,110 Locations

Reference and Associations

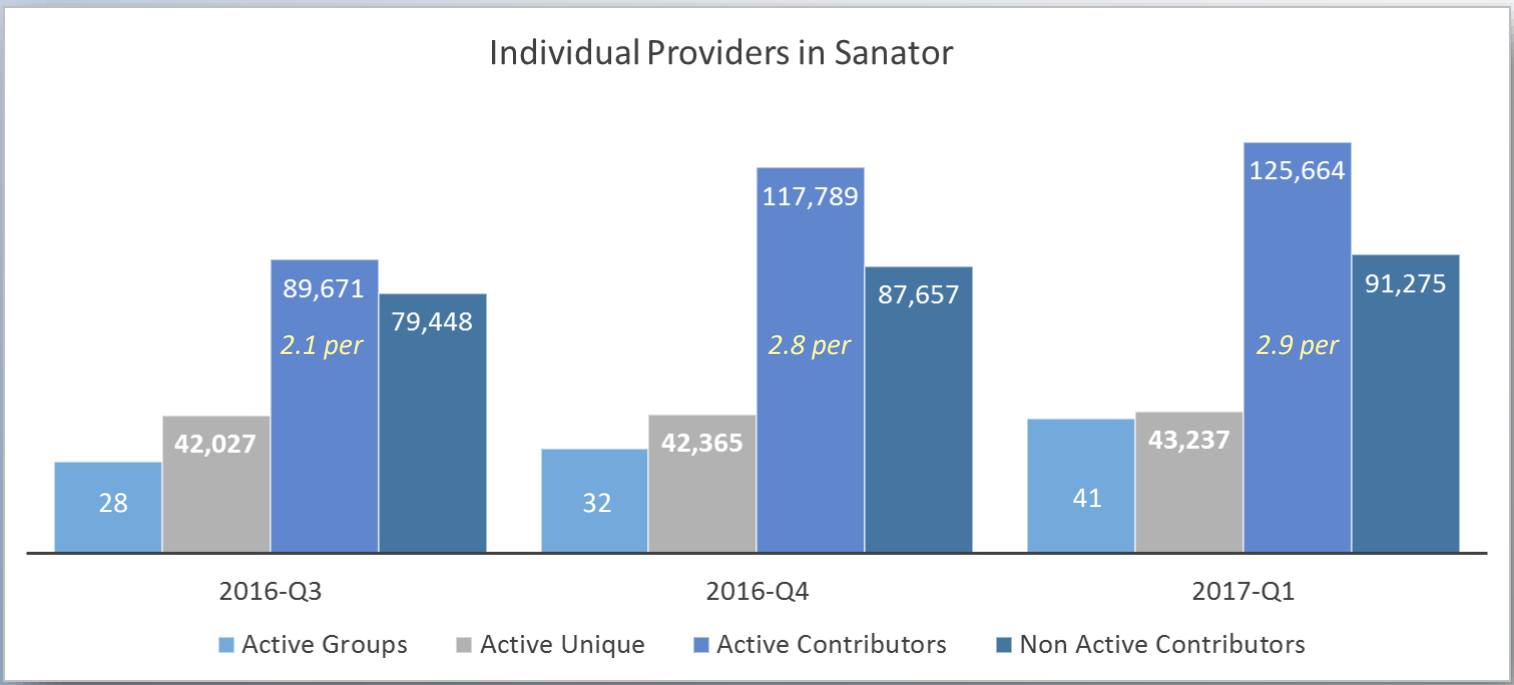
491,999 Individuals	39,636 Facilities
136,300 Organizations	736,664 Locations

Rosters

13 Health Plans

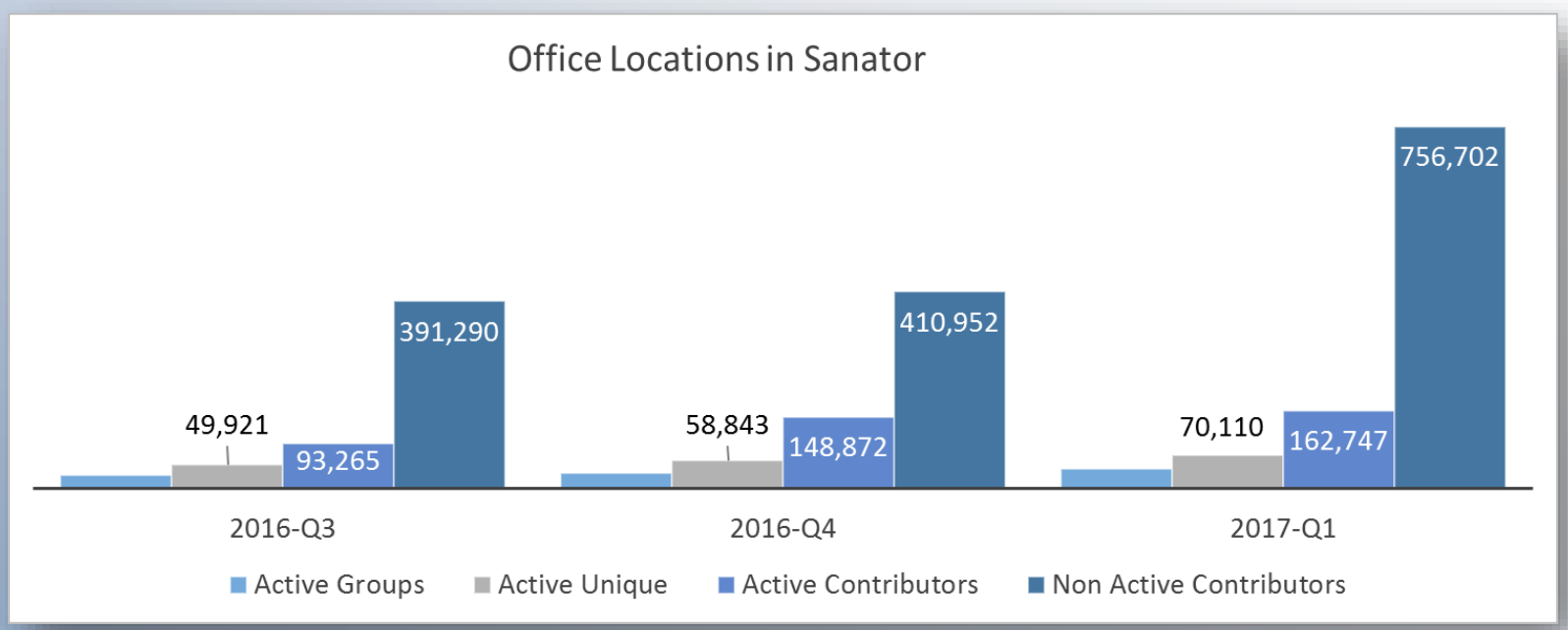
- aetna
- ALIGNMENT HEALTH PLAN
- blue of california
- CalOptima Better. Together.
- Care1st HEALTH PLAN
- CENTRAL HEALTH PLAN OF CALIFORNIA
- Easy Choice HEALTH PLAN
- CENTENE Corporation
- Cigna
- Health Net
- Humana
- MOLINA HEALTHCARE
- UnitedHealthcare

Individual Providers in the Sanator Provider Registry



- Unique number of Individual Providers grows more slowly than the growth of active groups due to the relatively frequent overlap between IPA's within a region.
- The ratio of active records to active contributors is increasing which adds to the collaborative benefit and validation of data between groups.
- The qualification for active participation in Sanator continues to increase resulting in higher levels of participation and data quality.

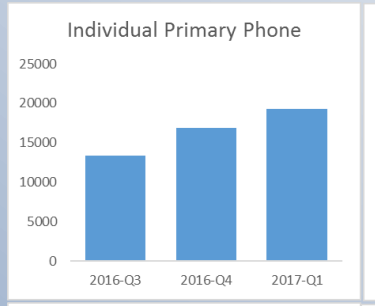
Office Locations in Sanator

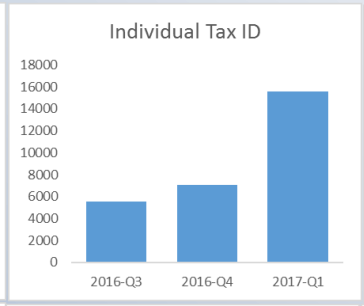


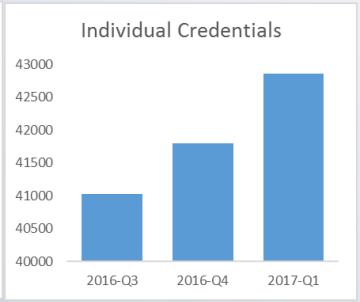
- There is a higher availability of reference data for medical locations.
- The ratio of master records to contributors is smaller for Location than Individual Providers which indicates a degree of IPA exclusivity at some locations.
- Providers have on average 2.14 office locations, trending lower as old locations are removed.
- Approximately 80% of providers have a single location.
- The mean (and median) number of health plan contracts per provider in Sanator is approximately 8.

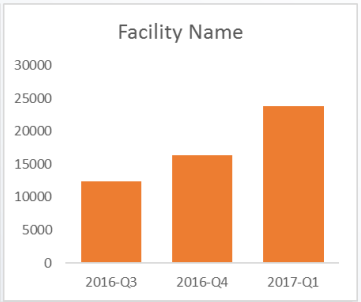
Basic Data Quality Stats

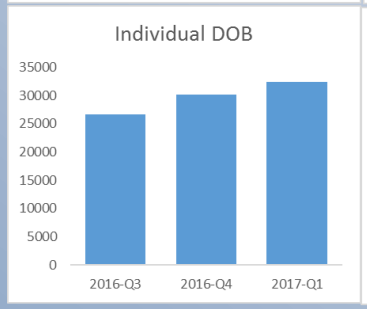
Data Growth and Completeness – Actively Managed Providers

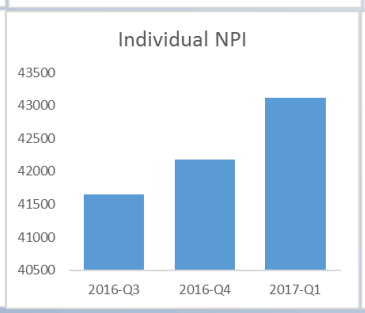


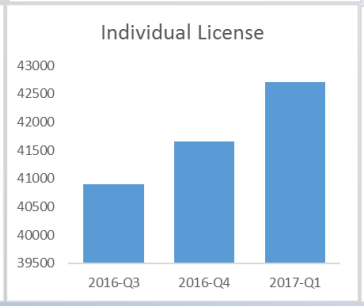


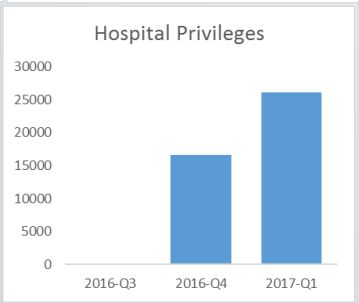


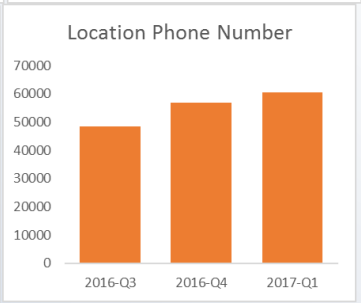








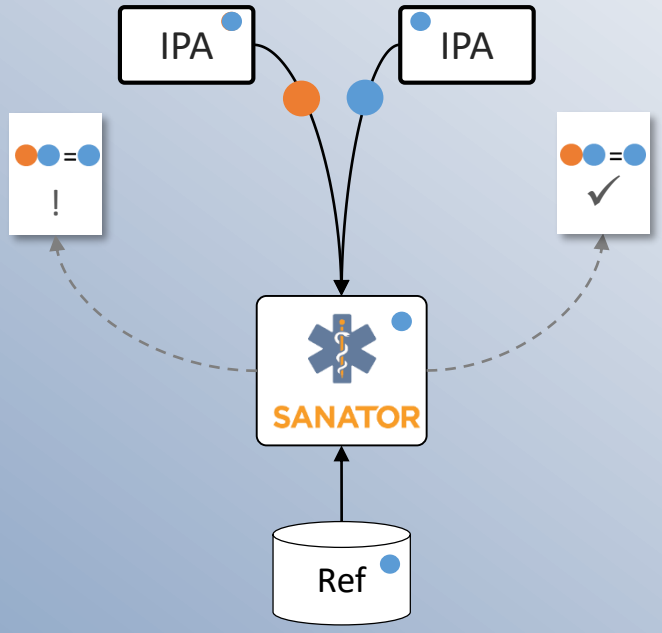




- Data completeness continues to improve within the “Actively managed” population.
- Critical fields at the provider level such as License, NPI, Credentials are 99% complete.
- Data such as Languages Spoken and Hospital Privilege continues to improve with no reliable way to measure completeness because not all individuals have expected values.
- Critical fields at the Location such as Facility Name (for CMS licensed facilities) and primary phone number are at high levels of completeness.
- Attributes that are of lesser importance to provider directories such as DOB, Tax ID and Individual phone numbers are less complete but still improving as a result of an improved collection and management process.

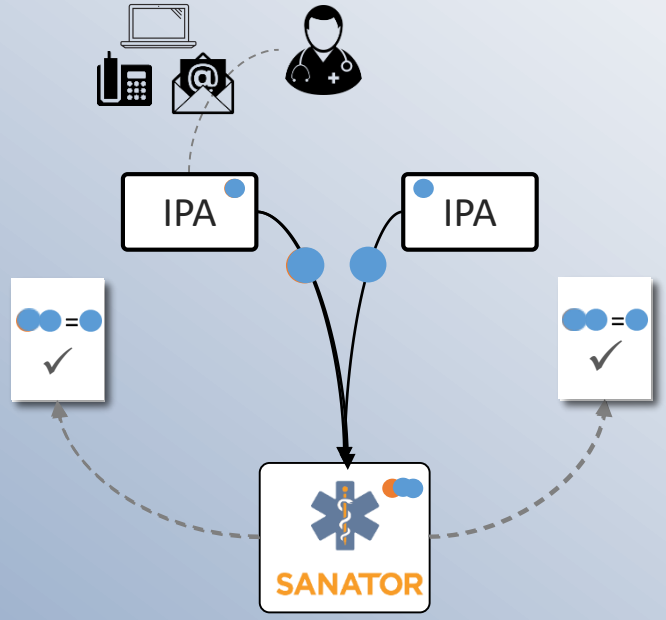
Data Churn and Harmonization

In some cases the confirmation from reference sets is enough to validate, or correct data within contributing systems. Data such as NPI, License #, Facility Name are good examples of this harmonization.

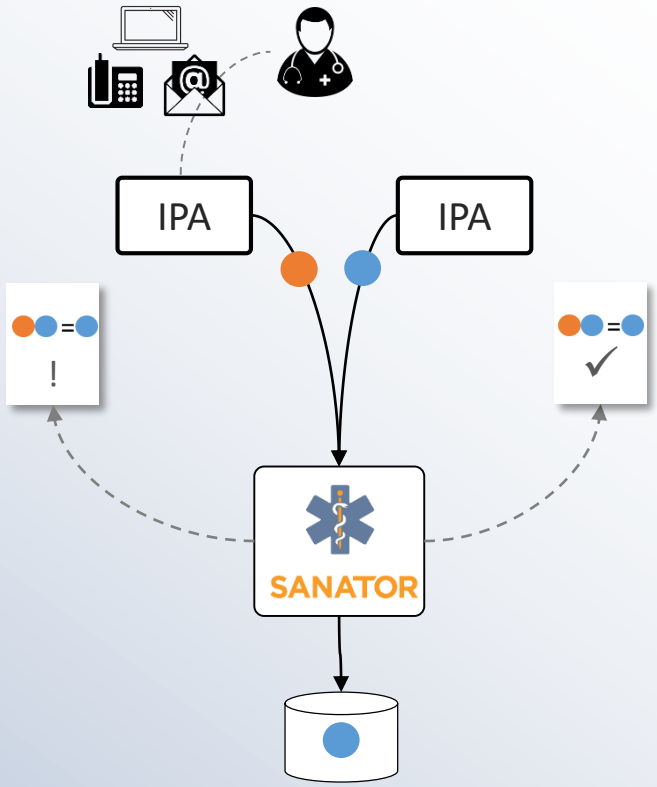


Data Churn and Harmonization

Conflicting data between contributing systems is used to identify data deficiencies. Sanator clients can reach out to their providers in a very surgical process to resolve these issues. This outreach may take the form of a phone call, email or use of the online console.

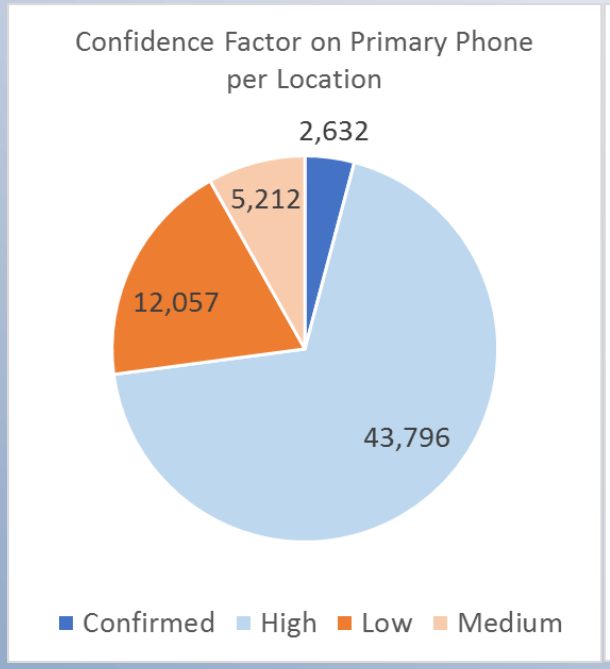


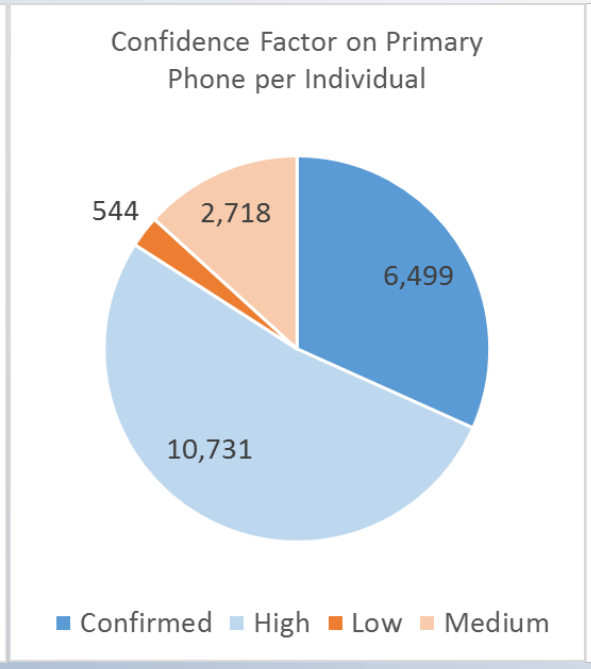
Data Churn and Harmonization



- Churn on key data elements that are highly available such as phone, NPI and credentials is dropping quarter to quarter due to the standardized process with Sanator.
- Churn for less available data elements such as Tax ID and Facility Names remains higher due to the large number of new values being introduced into the system.
- Stable data elements such as NPI only change in response to errors and therefore remain very stable.

Primary Phone Confidence Scoring





Confirmed
The provider has reviewed and confirmed the number directly via the portal

High
Multiple groups have provided the same phone number and there are no conflicting numbers from any group

Medium
Multiple numbers have been provided by groups and survivorship logic has selected the best candidate

Low
Multiple numbers have been provided by groups and there is no reliable method of selecting the best number

- Medium and Low confidence factors for individual providers make up around 19% of the provider records with phone numbers. This correlates closely with the number of providers with multiple locations – The data quality reflects the imprecise nature of defining a primary phone when a provider has more than one practice location.
- Location phone numbers are less likely to be explicitly confirmed by any individual person because of the ambiguity around “ownership” of a location.

Challenges of poorly defined attributes – Primary Phone Example

Location Primary Phone

Primary_Phone	Facility_Name	Address_Line_1	City	Region	
(562) 432-0079	St Mary Medical Center	1050 Linden Ave	Long Beach	CA	
(562) 437-3833	St Mary Medical Center	1050 Linden Ave	Long Beach	CA	
(562) 491-9000	St Mary Medical Center	1050 Linden Ave	Long Beach	CA	= Main Switchboard
(562) 491-9060	St Mary Medical Center	1050 Linden Ave	Long Beach	CA	
(562) 491-9241	St Mary Medical Center	1050 Linden Ave	Long Beach	CA	
(562) 491-9755	St Mary Medical Center	1050 Linden Ave	Long Beach	CA	
(562) 491-9785	St Mary Medical Center	1050 Linden Ave	Long Beach	CA	
(562) 491-9948	St Mary Medical Center	1050 Linden Ave	Long Beach	CA	
(562) 533-0584	St Mary Medical Center	1050 Linden Ave	Long Beach	CA	= Dr. Juan M Polanco

Individual Provider Primary Phone

Primary_Phone	Name	NPI	
(562) 933-2000	Dr Juan M Polanco MD	1689609489	= Long Beach Memorial Hospital
(562) 630-3105	Juan Miguel Polanco	1689609489	= Lakewood Primary Care
(562) 533-0584	Juan M Polanco MD	1689609489	= St Mary Medical Center

- Key fields such as Primary_Phone are poorly defined and subject to a wide degree of variation.
- Stabilizing Phone numbers will require additional clarification of the field (such as scheduling, main switchboard, administration, mobile).
- We have stabilized location phone numbers by selecting switchboard numbers where possible.
- We stabilize Individual provider phone numbers by linking phone numbers to specific office locations for a doctor.
- When rosters simply request a Primary_Phone for an individual provider, you are likely to get a great deal of variation in the answers and an inconsistent result.

Stability of well defined attributes – NPI Example

Summary

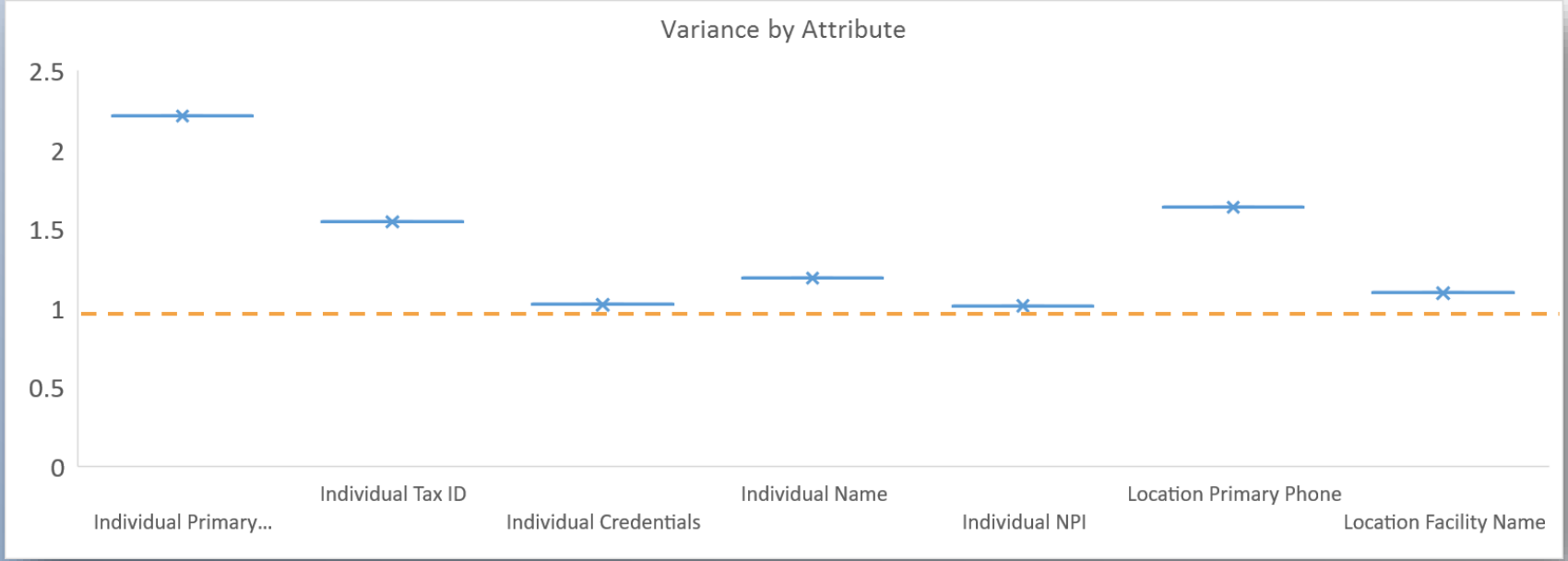
PartyType	Period	ActiveProviders	ProvidersAdded	NPIAdded	NPIFixed	NPIChanged
INDV	2016-Q3	42,027	42,027	41,656	874	-
INDV	2016-Q4	42,365	338	522	-	1
INDV	2017-Q1	43,237	872	938	1	2

Detail

PartyType	LastUpdateDate	Attribute	Value	PreviousValue	Reason
INDV	11/18/16 19:39	NPI	1881852432	188152432	Corrected number
INDV	7/2/16 3:00	NPI	1831179001	1183117900	Corrected number
INDV	12/27/16 16:26	NPI	1164846234	1245360312	Mistaken identity

- On an non-volatile attribute like NPI, churn is limited to the correction of mistakes. Once the correct value is established the data is unlikely to change again in the future.
- Validation rules can limit the introduction of errors during import or editing in the console so mistakes are eliminated before the data is published to the master file.
- In 9 months only 2 Individual NPI's have changed after they were published to the master.
- 875 NPI's were corrected before they were published to the master file. Subscribing systems have not resubmitted an incorrect NPI that was corrected showing how shared values quickly "settle" even across multiple systems.

Stability is correlated with Clarity



- The clearer the definition of an attribute, the smaller the variance of values.
- A perfect score is 1.00, where the number of potential values for an attribute is the same as the number of unique values for the attribute in the master file.
- NPI and credentials are good examples of fields that are clearly defined and therefore have less variability across contributors.
- Individual Primary Phone and Tax ID are less well defined and therefore have more variance across contributing systems. This variance increases the risk that health plans will choose a different value even though they all received the same input from the providers.

Roster Inconsistency and Data Gaps

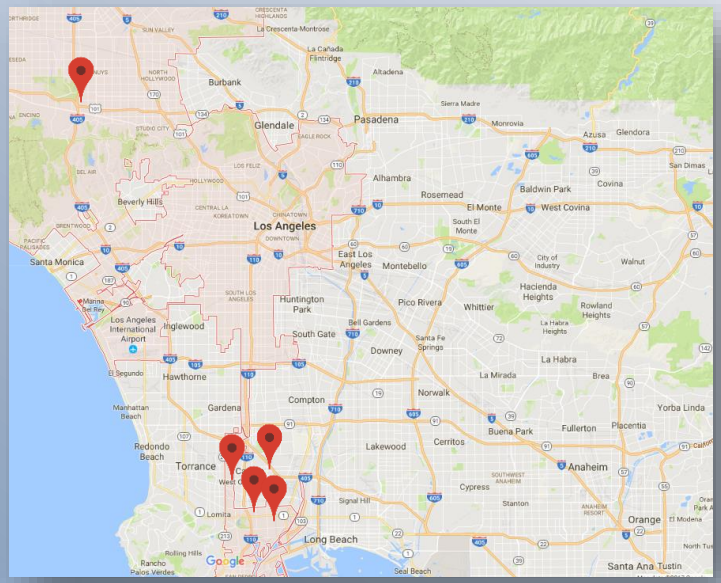
Health Plan	Multiple Formats	Populated	Name	NPI	Practice Address	Phone	Fax	Hospital Admitting Privileges	Detailed Product Info	Accepting New Patients	Email	Language OTE	Specialty	Medical License Number	Board Certs	Role (PCP / Spec)
HP # 1	Y	Y	x	x	x	x	x	x		x	x	x	x	x	x	x
HP # 2	N	Y	x	x	x	x	x	x			x	x	x	x	x	
HP # 3	Y	Varies	x	x	x	x	x	x		x	x	x	x	x		x
HP # 4	Y	Y	x	x	x	x	x	x		x	x	x	x	x		
HP # 5	Y	Y	x	x	x	x	x	x		x	x	x	x	x	x	x
HP # 6	N	Y	x	x	x	x	x			x			x	x		x
HP # 7	N	N	x	x	x	x	x	x		x	x	x	x	x	x	x
HP # 8	N	N	x	x	x	x	x			x			x	x	x	x
HP # 9	N	Y	x	x	x	x	x	x	x	x	x	x	x	x	x	
HP # 10	N	N	x	x	x	x	x	x		x		x	x	x		x
HP # 11	N	Y	x	x	x	x	x	x		x	x	x	x	x	x	
HP # 12	N	Y	x		x	x	x	x		x			x		x	x
HP # 13	N	Varies	x	x	x	x	x	x		x	x	x	x	x	x	x

Additionally, many formats do not allow for the proper addition or termination of providers and/or practice locations.

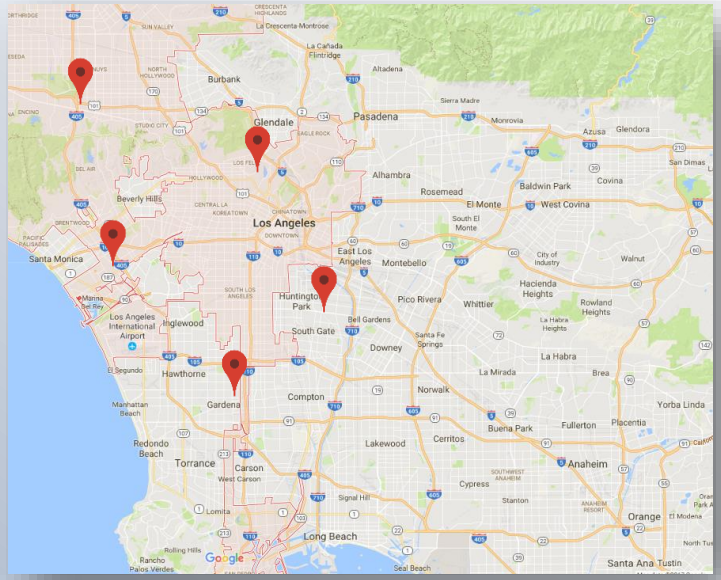
Geographic Distribution

Location Density Scoring

Physician A



Physician B

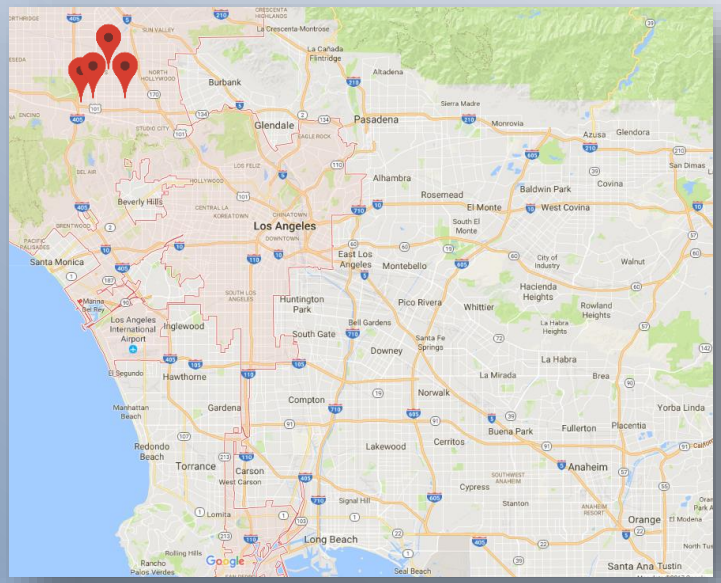


The geographic distribution of Physician A is considered preferable to the distribution of physician B, even though (in many geo measures) the average distance between locations for physician B is less than for physician A.

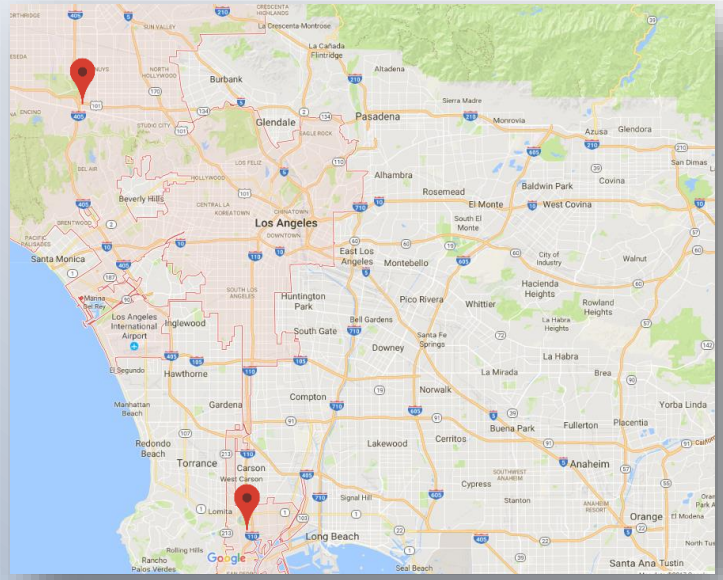
We value location concentration over average distance; in Sanator, Physician A is assigned a greater location density than physician B.

Location Availability Allocation

Physician C



Physician D

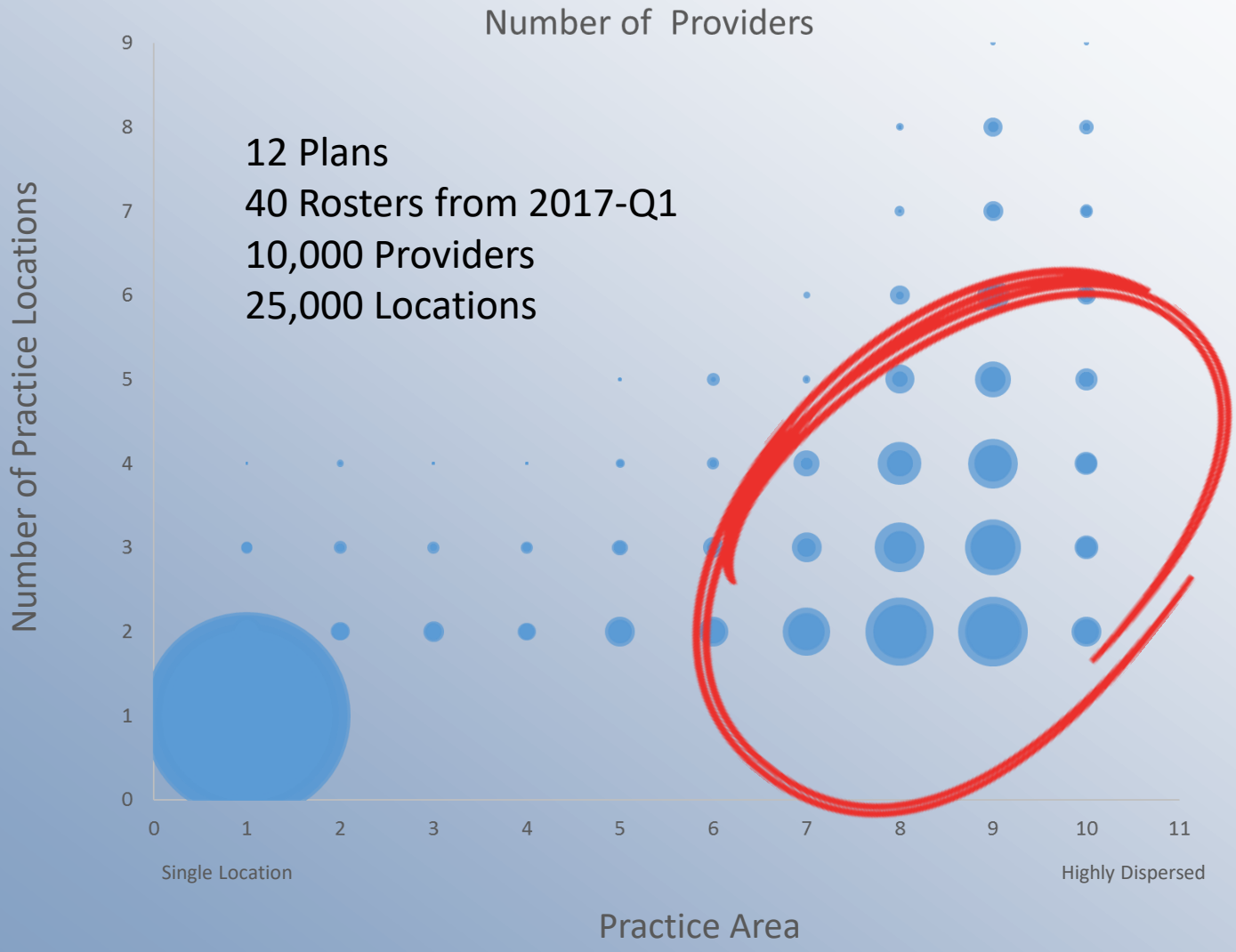


To avoid double-counting a physician at a location it is necessary to distribute a physician across locations. Schedule information is not yet considered reliable enough to be a basis for this calculation.

Geographic spread adds to the weight assigned to the distribution factor when we assess a providers availability.

Physician C could feasibly visit more than one location within a single day, whereas Physician D could not possibly double up on a location in a single day. We use these location distributions to isolate problem areas in the provider files.

Geographic Dispersion from Rosters



Contract Level Data

Directory Information Granularity

The critical provider directory information relating to the acceptance of new patients for a particular health plan network at a location is a huge Cartesian product.

Providers : Locations : Plans : Networks

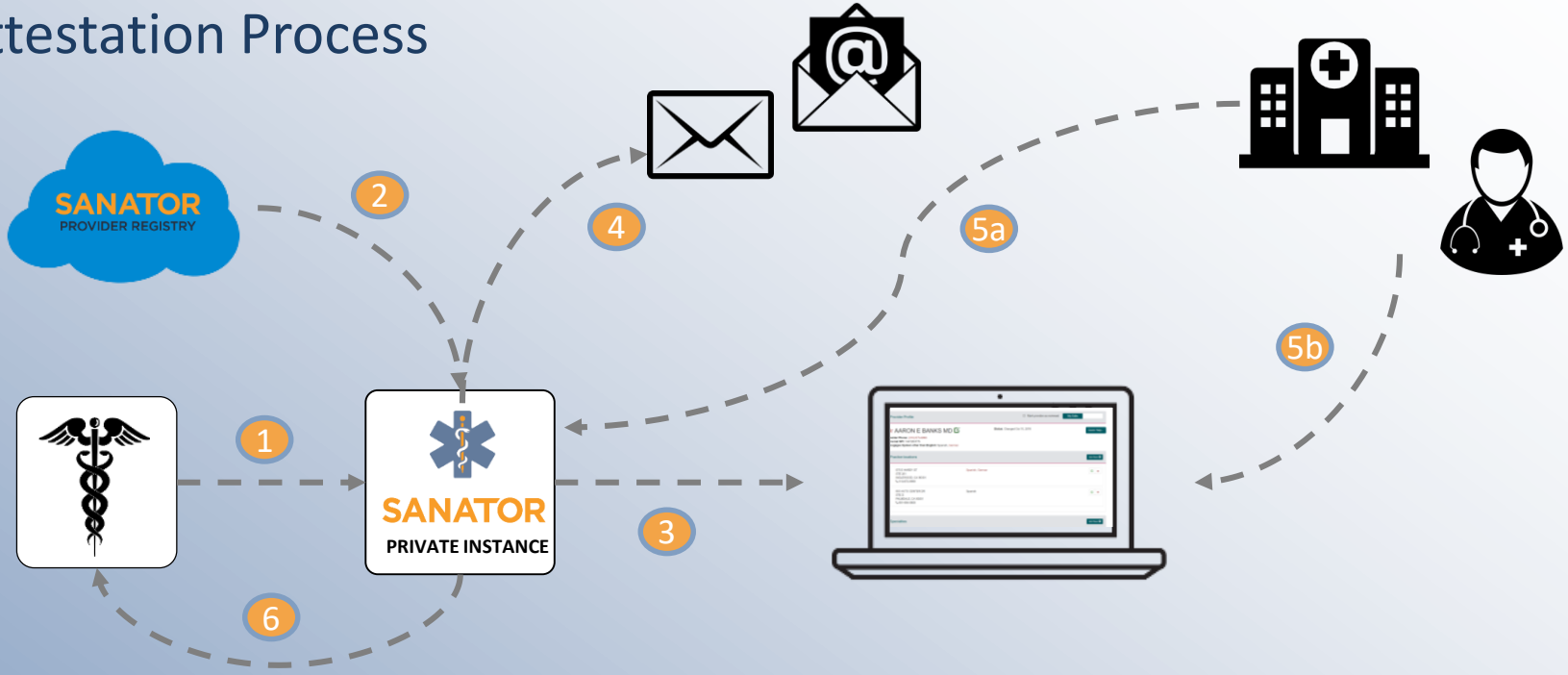
120,000 Individual Providers
X
2.1 Locations Per Individual
X
8.5 Health Plans per Provider
X
3 Networks per Health Plan
X
1.1 Variance in Primary Specialty by Contract
=
7 Million Answers to "Are you Accepting New Patients ?"

SANATOR PROVIDER REGISTRY

GAINE

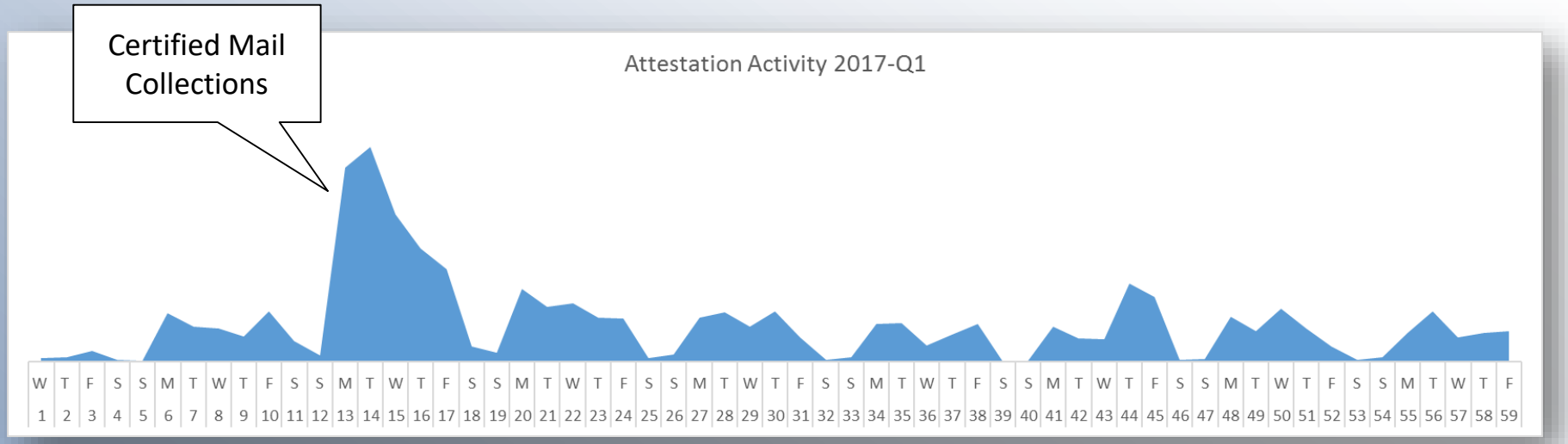
Attestation

Attestation Process



1. The health plan loads its internal network data for attestation into a private Sanator Instance.
2. Health plan data is compared to provider data from the Registry. Participating providers are “auto-attested” wherever the internal provider data is aligned with the health plan data.
3. User accounts and credentials for all attesting groups and providers are established.
4. Providers are notified of the attestation URL, and user credentials via certified mail or email.
5. a) Providers login to the Attestation portal to review their data, make changes if necessary and attest when complete. b) Larger provider groups may opt to submit a file for pre-processing to get the same “auto-attestation” services as Sanator subscribers.
6. The attestation results are collated and passed back to the health plan for incorporation in to internal systems.

Attestation Activity



- Activity spikes when the initial communication hits the inbox or mail box of the provider/group.
- After the initial flourish, activity remains fairly constant throughout the attestation window.
- Attestation is 24 x 7 but most activity falls between 7am and 9pm, Monday to Friday.

- Groups are more open to email communication and reminders and seem willing to be communicated with electronically.

Attestation Process

We see great participation from the providers and a very high percentage of the providers using the attestation portal complete attestation successfully.

The final 10% of providers typically require some form of provider relationship management to complete attestation. Many of these provider should be truly delisted and represents the “dead wood” in the network.

Approximately 40% of providers prefer to attest offline by exchanging files and reports with the health plan via the Sanator private instance. Typically these are a small number of larger groups that do not consider an online portal to be an efficient method of attestation.

There are still a few folks out there who don’t have an internet connection, a modern browser or any inclination to login to the world wide web. One support call spent some time asking us how to get their boss to pay for Microsoft Office ☺

Assisted attestation is a worthwhile pursuit

	Ease of Use	Clarity	Performance	# Submissions
Facility Group	4.69	4.51	4.59	35
Facility Individual	4.55	4.43	4.58	233
No providers or facilities (delist)	4.42	4.30	4.38	68
Provider & Facility Group	4.24	4.14	4.24	126
Provider Group	4.40	4.37	4.50	124
Individual Provider	4.31	4.24	4.39	261
Average	4.40	4.31	4.44	847

California Center for Healthy Living	Very easy process. Thank you.
"Healing with Heart" Elica Health Centers	Very easy and fast.
HearWell Hearing Aid Center	I wish all of the managed care plans did this!!! THANK YOU for making it so quick and easy so I can go about my ACTUAL work! :)
Asian Pacific Health Care Venture, Inc. "working together for community health"	I love it. It's very good.
Los Angeles Medical Center IPA	This is one of the easier rosters to validate. the ease of use is great.
LISA AXELROD, MFT 301 9th StSte 215 Redlands, CA 92374 Ph: (760) 218-0927	Excellent!!
Absolute Home Care Inc.	This was easier than the provider portal to verify eligibility and checking authorization status.

Questions ?

Please visit us at:

www.gainehealthcare.com

www.providerregistry.com

info@providerregistry.com

Gaine Solutions Inc
3229 Broad St
San Luis Obispo CA 93401
415 449 0565
www.gainehealthcare.com
www.providerregistry.com