Arkansas Insurance Department

Rules based data driven

Network Adequacy

Review and Regulation

Version 1.0

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Contents

1. Executive Summary

Arkansas Insurance Department (AID) attempted to implement a rules based data-driven Network Adequacy review and regulation starting in 2015 for the Plan Year 2016 after two years of attempting manual reviews. Arkansas believes that the best form of regulation should be evidence based. The volume and complexity of data involved in Network Adequacy necessitates a rules based data-driven approach aided with appropriate technology. In the first year of attempting this approach in 2015, the state became aware of two major roadblocks. Both relate to uniformity of understanding of data, through proper data definitions and data standards.

The primary focus of this document is to address those two roadblocks. The first major roadblock has been addressed by a complete taxonomic definition of consumer centric provider groups. The second roadblock that Arkansas attempts to resolve is a uniform understanding across insurers on what a medical provider is. (For example is Dr. Doe a "Pediatrician"? A "Pediatric Gastroenterologist"? Both? Or something else?) To address the second roadblock the proposal in this document is to use the NPPES National Provider Registry and a pathway to resolve the data quality issues surrounding the Registry.

Arkansas believes it may be treading on unchartered territory by the manner in which it is approaching Network Adequacy regulation. An effort of this scale and lack of precedence calls for implementation in a phased iterative manner, both in terms of depth of data validation and in terms of the width of applicability across Health and Dental Plans in Arkansas. Each iteration may present challenges needing resolution, either planned or unforeseen. The complexity and volume of data calls for a collaborative and multidisciplinary effort incorporating Information Management best practices.

2. Intended audience

This document is aimed towards a broad multi-disciplinary audience who are essential for implementing a rules based data driven data Network Adequacy review and regulation.

The audience includes network specialists and IT support staff from Health and Dental Plan (sometimes collectively referred to as Health Plans), either within or outside the Affordable Care Act marketplace in Arkansas.

An attempt has been made to communicate to other Subject Matter Experts (SME) who do not necessarily have an insurance industry background or have familiarity with the Affordable Care Act.

3. Background

What is Network Adequacy?

A provider network is a group of health care providers—such as primary care providers, specialists, hospitals, and labs that have contracted with a health plan to provide care to its enrollees. To be adequate, a health plan's network must strive to provide consumers access to the right care, at the right time, without having to travel unreasonably far. Inadequate networks may result in harmful delays,

forgoing care or additional cost associated with consumers being required to use expensive out-of-network providers. It may also result in a Health Plan gaining unfair competitive advantage by shrinking the availability of providers tending to expensive diseases. A provider network should aim for sufficient mix of various needed provider types such as primary care providers, specialists, and medical facilities (hospitals, labs, clinics etc.) It must have providers in sufficient number relative to the population number and their medical needs. In addition to having an adequate network, Health Plans also need to present the information about the network in a useful manner to the consumer through its provider directories. To be useful provider directories should be reasonably up-to-date, indicate in-network providers, indicate whether accepting new patients and organized to easily locate the specific type of provider and medical care sought.

New legislation

The Affordable Care Act established federal rights and protection guaranteeing private insurance consumers access to adequate networks. The marketplaces selling qualified health plans under ACA started in 2014. The law requires that consumers in marketplace plans have a "sufficient choice of providers," defined in rules as a right to networks that are sufficient in the "number and types of providers, including providers that specialize in mental health and substance abuse services, to assure all services will be accessible without unreasonable delay." Arkansas promulgated Rule 106 mandating Network Adequacy (NA) standards for Health and Dental plans sold in Arkansas, beyond the ACA marketplace, effective January 1, 2015. The National Association of Insurance Commissioners has recently promulgated a model law to address this area as well.

Implementation of legislation

AID is the governmental agency tasked with the implementation, review and regulation of Federal and State statutory requirements for Network Adequacy. Implementation of Network Adequacy laws is a complex challenge and the Department has adopted an incremental approach towards operationalizing it. The complexities and volume of data involved make it necessary to collaborate across organizations and draw expertise from various disciplines for a successful implementation.

The Centers for Medicare & Medicaid Services (CMS)/Center for Consumer Information and Insurance Oversight (CCIIO), hereinafter referred to as CMS/CCIIO, is the division of Health and Human Services (HHS) responsible for the implementation of the ACA. In 2014 CMS/CCIIO codified Health and Dental plan data to be reported in the form of Data Templates. Simply put, these are essentially excel data spreadsheets with inbuilt programing for data validation at source. There are a number of different types of such templates collecting information about various aspects of Health Plans. AID reviews these Data Templates before they make their way to the www.healthcare.gov portal or into the expanded Medicaid portal. Among the different types of data collected though these templates, there are a few for Network Adequacy. Arkansas decided to use these Federal Data Templates along with its own supplemental templates to attempt automation within Network Adequacy regulation.

In the marketplace, the work towards reviewing Health and Dental plans is done a year before it is made available to the public. For example insurers prepare and submit data to AID and CMS/CCIIO review in

the calendar year 2015 for "Plan Year 2016". The "Plan Year 2016" refers to those plans that are effective January 1, 2016 through December 31, 2016. Though Plan Years do not apply to off-Marketplace plans, Rule 106 applies to all Plans and they submit data at any time they are ready.

4. Vision

AID's vision for implementation of Network Adequacy review and regulation developed after experiences in the first two years of ACA implementation and introduction of Arkansas NA regulation in the form of Rule 106.

"Arkansas shall strive towards a data driven evidence based Network Adequacy implementation in order to

1) ***Provide Arkansas Health and Dental Plan consumers the best possible protection of their rights***
2) ***Ensure fairness to all Carriers***
3) ***Ensure transparency for all***
4) ***Track improvements over time***
5) ***Use appropriate technology to minimize long term expenses and manual review"***

Arkansas experience with Network Adequacy compliance review during the first two years of the ACA implementation (Plan Year 2014 & 15) and Rule 106 requirements revealed both the complexity and volume of data to be reviewed. In order to implement any sustainable meaningful review and regulation the State realized it would have to invest in a rules based data driven approach. "Rules based" is development and application of business logic and thresholds to sift through and home in on the most relevant data in any year. Accepting opaque summary reports with attestations would not amount to a meaningful review and neither is it easily amenable to evidence based tracking for improvements in lacking areas over time.

Arkansas attempted the rules based data driven approach for the first time in Plan Year 2016.

5. Architectural Principles

In an attempt to implement something as complex as Arkansas' evidence based NA regulation, that may not have precedence, it is important to establish principles that guide efforts. The following principles are recognized as critical towards success in this endeavor:

1) ***Align with available Federal/National standards or efforts if feasible***
   Such alignment brings in long term advantages in various ways. National benchmark comparisons and data sharing become possible, effort required for implementation reduces and enriches research undertakings.
2) ***Build collaboratively – across organizations, disciplines***

Network Adequacy needs expertise from many disciplines not all of which may exist within one organization. Expertise from many domains are needed

a) Provider networks & Health Insurance
b) Legal
c) Medicine
d) Information Management
e) Geo-analysis

3) ***Perfection should not be the enemy of the good***
Despite best attempts there will always be imperfections in every year of NA review. Those imperfections should not result in paralysis towards a better future. Instead the imperfections should be prioritized for future iterations. It has to be recognized that there may be some imperfections that may be cost inhibitive to resolve.
4) ***Build incrementally - Over years and scope***
Network Adequacy is a large multi-organizational collaborative effort that would possibly take years to reach a satisfactory level. Aiming for smaller bite sized successes over the years is the practical path forward.
5) ***Apply Pareto's 80-20 principle for every phase***
With limited resources and large scope possibly running into years, it is critical to focus on the biggest problems faced at any phase or Plan Year.
6) ***Seek lessons learned – from others and within.***
It is cheaper to learn from others, especially when resources are scare and also acknowledge mistakes within the effort for future corrections.

Design principles become important to communicate especially when it is a long term collaborative effort spanning many organizations with different people, process, technologies and organization cultures. A successful network adequacy implementation in Arkansas would require collaboration between multiple organizations including Federal and State agencies, health and dental insurance industry, health care industry, health improvement advocacy organizations, universities etc.

6. Phased Approach

6.1 Phased approach in depth of validation

AID understood that it would need a phased approach to its implementation of data driven Network Adequacy review and compliance. The order of the phases towards the depth of data validation was planned as follows;

1) Electronically review county level access data for various provider groups
    a. Extract largest deviations from standards and ensure justification is present.
    b. Review justifications for the worst deviations in health plans where others have met standards
    c. Keep track on county level NA summarized data with regulatory dialog over time
2) Apply geo-analysis using provider practicing facility address information to locate geographic holes to cross check extent of deviation from the county summary reports.

3) Apply geo-analysis using enrollee and provider address to calculate true average distance per county to determine extent of deviation from the county summary reports.
4) Use machine readable provider directory to ensure alignment with submitted NA data and accuracy requirements per State law

During the first year towards implementing automation for Plan Year 2016, AID could not proceed beyond the first phase when data definition and data standard problems surfaced.

6.2 Phased approach in covering all Plans

Besides a phased approach in the feature rich depth of validation, the same phased approach was planned in covering all plans. Lessons learnt would be carrier over to the later phases starting with the smaller ACA Marketplace. The order of the phases planned was the following

1) ACA Marketplace Health plans (Including those provided in the expanded Medicaid Private Option)
2) Off marketplace Health Plans
3) Dental Plans

As of November 2015, the data driven approach has only been fully tried for Phase 1. Data collection for Phase 2 has started but held back with the problems that surfaced in Phase 1. Phase 3 will be started attempted only when Phase 1 of PY2017 completes and there is no major roadblocks found.

7. Lessons from Arkansas NA review and regulation:

7.1 Year 1 & 2 (Plan Year 2014 & 15) – first two years of the ACA:

In the first year, Marketplace plans were reviewed manually utilizing only the Health Plans' provider directories. In year 2, Marketplace plans were required to submit geo-access maps and detailed county level provider access reports for several provider groups. The detailed county level reports listed among other information average distance to the first provider within different provider groups. (Refer to Appendix 1 for examples). These maps and reports were manually reviewed and communications went back and forth between AID and the Health Plans on non-compliance. AID asked the Health Plans to provide justifications for non-compliance and pressed for improvements when the justifications were perceived to be lacking.

7.1.1 Problems faced in the first two years:

1) A lack of uniformity among Health plans on understanding of
    a. The exact number and composition of provider groups for whom NA geo-access and county level access reports were required and
    b. The actual distance standards applicable to certain provider groups

This lack of uniformity resulted in problems comparing one health plan's network against the other

2) Substantial effort was spent manually examining detailed county listing of average provider distances and engaging in regulatory dialog when improvements were needed
3) During the quarterly reviews, it was very time consuming to tie follow-up dialog with the actual NA data.

7.2 Year 3 (Plan Year 2016) – first year attempting data driven review & regulation:

Arkansas decided after the first two years of manual review that with the complexity and volume of data involved in Network Adequacy, a rules based data driven approach was needed.

As a first step Arkansas decided to codify the broad requirements in the State's NA Rule 106 into a limited set of specifications that could be machine processed.

A limited set of provider groups were decided with clear access standards in terms of miles. These provider groups along with the corresponding requirements were named "Criteria". Each individual requirement was assigned a Criteria ID. Broadly, the criteria requirements were 30 miles to every PCP and Hospitals and 60 miles to Specialties.

- ***The criteria provider groups developed were from a consumer point of view and not from a medical training point of view.***

In Arkansas's attempt to maximize use of Federal Data reporting, each Criteria Provider group (developed from Rule 106) ended up having at least one of two subcomponents, if not both

1) Federal provider category from the Federal Network Adequacy data template, if one existed and aligned well with the Criteria Provider group and
2) Arkansas list of supplemental provider sub-groups if the Federal provider category was viewed incomplete. For instance "General Practice" physician category from the Federal Network Adequacy data template was considered incomplete for Primary Care Providers and Arkansas supplemented with sub-groups such as Physicians Assistants, Family Practitioner Nurses etc. Arkansas went further and articulated the supplemental sub-groups with NUCC Provider Taxonomy.

An example of the codification process of Rule 106 is detailed in Table 1 below.

An example of how AID codified Rule 106 for Plan Year 2016

A) Arkansas considers Oncology an important specialty to track for Arkansans.
B) Arkansas creates CriteriaID C060 [Description: *"Access to Oncologists"* Applicable requirement: *60 miles*]
C) Arkansas defines components of *"Access to Oncologists"*

a. Federal Categories related to Oncology in the Federal NA data templates were the following (Collectively named “Federal Specialty”):
    i. "Radiation Oncology",
    ii. "Medical Oncology & Surgical Oncology"
b. Arkansas feels the Federal categories were not enough to describe Oncologists and supplements the Federal categories with the following (Collectively named “Arkansas Specialty”):
    i. "Internal Medicine-Hematology/Oncology",
    ii. "Pediatric-Hematology/Oncology

D) Arkansas provides NUCC provider taxonomic crosswalk for “Arkansas Specialty”. ***Arkansas is unaware that there is no taxonomic crosswalk for “Federal Specialty”.***

Internal Medicine- Hematology/Oncology	207RH0003X
Pediatric- Hematology/Oncology	2080P0207X

Table 1

In its first year at attempting data driven regulation in 2015, besides the pdf geo-access maps and detailed county level provider access reports, Arkansas asked for three new machine readable data artifacts as Arkansas Data Templates.

1) *AR Specialty Access Template*: The detailed county level reports in machine readable csv format. Arkansas would change from manual to machine review for these reports.
2) *AR Justification Template:* Up-front justification for all cases where the average distance deviation exceeded the standards by 20%. Instead of AID requesting for justifications for such deviations, insurers were asked to submit them together with data submissions thereby saving on one round of regulatory dialog between the regulator and the insurers.
3) *AR Carrier NPI Taxonomy Association Template:* National Provider Identifier (NPI)-Taxonomy association data ***if*** the carriers believed their data was better than the NPI Registry.

The *AR Specialty Access Template* was required. *AR Justification Template* was required if shortcomings existed. The *AR Carrier NPI Taxonomy Association Template* was optional depending on the insurer’s perception of data issues.

7.2.1 Problems faced in the year:

1. The consumer centric provider groups created by Arkansas were made of two components as articulated earlier. The Arkansas component had the complete taxonomic cross-walk but the Federal component lacked it. ***Arkansas was not aware of the lack of this cross walk at the time of design.***

- ***The lack of a clear federal taxonomic walkthrough led to confusion among insurers on certain what they meant. To resolve this issue for Plan Year 2017 Arkansas conferred with CMS/CCIIO and decided to define the consumer centric provider groups completely in NUCC taxonomic terms and not in a confusing mix of Federal and Arkansas components***.

  (See section on Criteria Provider Group Definition for this attempt.)

2. The credentialing process following by each insurer resulted in different classification of providers. The process of credentialing providers appeared proprietary. The result of this differing classification resulted in the situation where NA data for one provider group from one insurer could not be compared to the NA data for the same provider group by another carrier. This problem with different classifications is better explained with an actual example.

An example of problems due to differing provider classifications

AID contacted insurer XYZ to improve "Access to Mental Health/Behavioral Health Providers" in certain counties. The Department found that other insurers met the standards whereas insurer XYZ was far from the requirements for this provider group in the cited counties. Insurer XYZ responded they had contracts with all known providers for Mental Health/Behavioral Health Providers in those counties. When presented with the list of provider other insurers used for the category Insurer XYZ noted that the providers were indeed in their network but were not categorized as "Mental Health/Behavioral Health Providers". They offered to rerun their NA access data to come to par with the other issuers

3. AID does not have the information on specialists who in practice are not limited to their physical location but serve the entire state. This information is important in considering the NA information being reviewed. This becomes more important for networks covering on parts of the state. This is not limited to telemedicine providers but remote labs etc.
4. AID realized the risk of designing a system that is heavily dependent on Federal data templates since it has no control or visibility of Data Template structural changes planned by CMS/CCIIO till it became public.

AID is attempting to communicate resolutions on problems 1 & 2 on data definitions and data standards through this document. AID may address problems 3 and 4 by proposing different NA data reporting structures starting in Plan Year 2017 after further dialog with the industry.

8. Criteria Provider Group Definition

In the implementation of the NA laws, Arkansas has created provider groups from the consumer viewpoint and not from the academic or medical training viewpoint. This is logical because after all, the NA laws and regulations were created in view of protecting the consumer. Arkansas Rule 106 is broad in referring to all specialties need to meet the 60 miles requirements. However it is not practical to process

and review all specialties and facilities. Therefore a limited set of providers groups were decided upon. This limited set may be reviewed as required on a yearly basis on what is most important to Arkansans. The provider groups decided for Plan Year 2017 is listed within the following table

Provider groups for all Arkansas Plans in PY2017
(On and Off Marketplace*)

1) Access to Adult/Geriatric Primary Care Providers
2) Access to Pediatric Primary Care Providers
3) Access to Mental Health/Behavioral Health/Substance Use Disorder Facility
4) Access to Mental Health/Behavioral Health Providers
5) Access to Substance Use Disorder Providers
6) Access to Oncologists
7) Access to Skilled Nursing Facilities
8) Access to Cardiologists
9) Access to Obstetrics
10) Access to Pulmonologists
11) Access to Endocrinologists
12) Access to Rheumatologists
13) Access to Ophthalmologists
14) Access to Urologists
15) Access to All Hospitals
16) Access to Hospital by Licensure Type-Acute Care
17) Access to Hospital by Licensure Type-Mental
18) Access to Hospital by Licensure Type-Rehabilitation

(*Additional requirements apply to QHP plans in terms of access to ECP Providers - FQHC, Ryan White, Family Planning, Indian Provider, Hospitals and School-Based Providers)

Following the problems faced in Plan Year 2016 on the lack of taxonomic crosswalk for the Federal provider sub-components, Arkansas has decided to define the consumer centric provider groups completely with a taxonomic cross-walk. The taxonomy adopted is the National Uniform Claim Committee (NUCC) Provider Taxonomy. AID has collaborated with Arkansas Department of Health (ADH) and Arkansas Center for Health Improvement (ACHI) in the creation of this crosswalk.

9. Proposal on creation and maintenance of Criteria Provider group NPI pools Description

It is very important to arrive at a uniform public understanding of what an individual provider is. Unfortunately such a registry that can be accepted as a gold standard does not exist. But this problem needs to be resolved to an acceptable level if we are to compare networks across health plans.

AID discussed various options and their pros and cons with other public sector entities;

A. NPI Registry hosted by CMS/NPPES
B. CCVS data maintained by Arkansas State Medical Board
C. Use the NPI-taxonomic associative data culled from the All Payers Claims Database, to be implemented by ACHI in 2016

It was acknowledged that industry may have some other option D but till some such option was presented, discussion on the pros and cons of the same was not possible.

It was decided that of all the options using the CMS/NPPES NPI-Registry may be the best option after evaluating it against others

9.1 Option A: NPI Registry hosted by CMS/NPPES

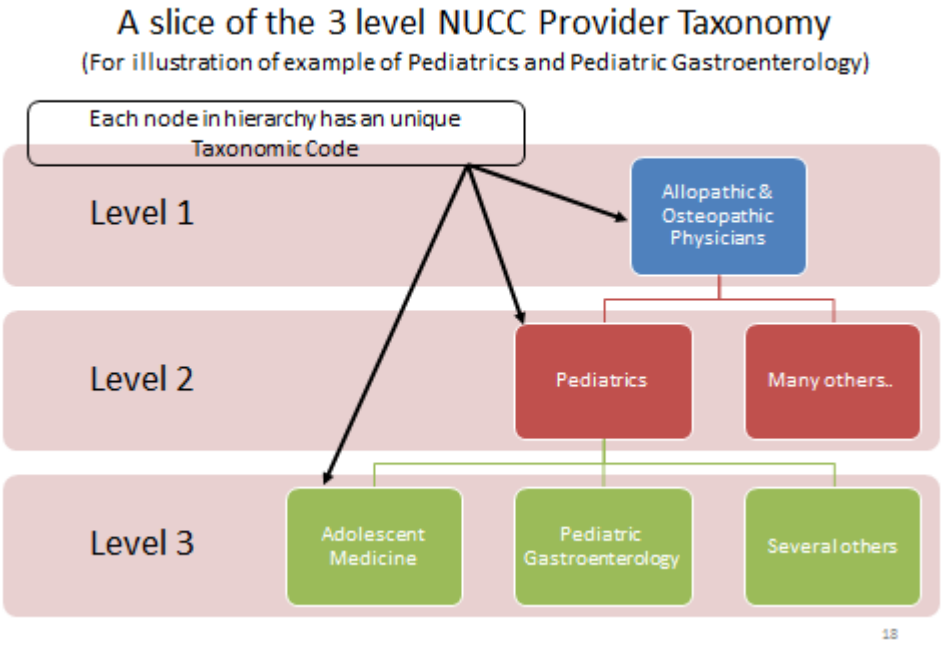
9.1.2 How this would work:

Every provider has a unique NPI and each provider can enter multiple NUCC taxonomic codes describing their practice interests within the NPI Registry. The proposal is to use this NPI-Taxonomic association data from the registry every year to map providers into consumer centric provider groups. This pool of Providers for each criterion would be used to generate the NA data to be reviewed by Insurance Department. Resolving data quality issues with the NPI Registry is critical for this option to work and covered in this document with a suggested process.

Each consumer centric provider group maps to one "NA criteria" . The NPI-Criteria Provider group association data is sometimes referred as "***criteria association data"*** or simply as ***"association data"***.

Two very important aspects of using NPI-Registry are explained below:

- ***A provider would be classified into a consumer centric provider group based on the taxonomic entries in NPI-Registry. No extrapolations within the Taxonomic hierarchy would be applied*** (For example a Pediatric provider super-specialized in "Pediatric Gastroenterology" would not be considered a Pediatric unless the provider also listed the higher level taxonomy of "Pediatrics"). See illustrations below for an example of how Taxonomy in the NPI-Registry would be used to classify providers.



TaxonomyCode	Classification	Specialization
208000000X	Pediatrics	
2080A0000X	Pediatrics	Adolescent Medicine
2080C0008X	Pediatrics	Child Abuse Pediatrics
2080H0002X	Pediatrics	Hospice and Palliative Medicine
2080I0007X	Pediatrics	Clinical & Laboratory Immunology
2080N0001X	Pediatrics	Neonatal-Perinatal Medicine
2080P0006X	Pediatrics	Developmental – Behavioral Pediatrics
2080P0008X	Pediatrics	Neurodevelopmental Disabilities
2080P0201X	Pediatrics	Pediatric Allergy/Immunology
2080P0202X	Pediatrics	Pediatric Cardiology
2080P0203X	Pediatrics	Pediatric Critical Care Medicine
2080P0204X	Pediatrics	Pediatric Emergency Medicine
2080P0205X	Pediatrics	Pediatric Endocrinology
2080P0206X	Pediatrics	Pediatric Gastroenterology
2080P0207X	Pediatrics	Pediatric Hematology-Oncology
2080P0208X	Pediatrics	Pediatric Infectious Diseases
2080P0210X	Pediatrics	Pediatric Nephrology
2080P0214X	Pediatrics	Pediatric Pulmonology
2080P0216X	Pediatrics	Pediatric Rheumatology
2080S0010X	Pediatrics	Sports Medicine
2080S0012X	Pediatrics	Sleep Medicine
2080T0002X	Pediatrics	Medical Toxicology
2080T0004X	Pediatrics	Pediatric Transplant Hepatology

Pediatric PCP

Pediatric PCP

Specialist

19

- ***AID would require insurers to urge their network providers to update the NPI Registry to accurately to reflect what they practice.*** This would reduce the need for backend data quality corrections.

The pros and cons of different options were discussed with other state agencies. The pros and cons of the chosen NPI-Registry option were perceived to be the following:

9.1.2 Pros:

1) Self reported data. The provider owns the information of what they practice. They may choose to provide taxonomies that they would like to practice in or conversely, withdraw taxonomies for areas they wish to avoid.
2) Data readily available for implementation for Plan Year 2017. Involvement of legislature, executive and coordination with external organizations not required.
3) Used in Medicare.
4) Despite its shortcomings, the NPI-Registry is considered by some carriers and industry experts as the best source of publically available NPI-Taxonomic associative data
5) Nationwide repository. Doctors in bordering states serving Arkansans are covered.

9.1.3 Cons:

1) Self reported data. There is no oversight on whether the provider intentionally or un-intentionally entered inapplicable taxonomic codes.
2) Carriers report that it is difficult to force the provider to update the NPI Registry.
3) It takes time and learning for the providers to identify applicable taxonomies and this work may be relegated to billing or back-office staff.
4) All carriers do not trust the data in the NPI registry.
    - ***This is a problem that must be overcome with some kind of governing mechanism to correct the data with the industry participation.*** This leads to the suggestion of the process detailed in 9.2 Association Data Refinement Process details. The large volume of this associative data needs a rules based approach using Master Data Management concepts with minimal manual intervention.

9.2 Association Data Refinement Process details

If NPI-Registry is to be used to create provider pools it was deemed necessary to have a mechanism to best address the Data Quality concerns with the same. This section attempts to articulate a rules based approach to improve the quality of the data from the NPI-Registry that results in creating the Criteria Provider pools. This rules based approach would require insurer feedback on detailed association data. Table 2 details the back and forth dialog between regulator and insurer.

Process Details of Association Data Refinement			
Party Responsible	**Data Process**	**First annual iteration**	**Second annual iteration**
Health/ Dental Plans	Every network planning to offer a Health Plan for the coming calendar or Plan Year in Arkansas provides AID with the NPI list associated with its networks.	5-Jan	4-Jul
AID	AID creates a consolidated list of all NPIs from the data above. AID pulls in the associated NUCC taxonomy for each provider. One provider may have more than one taxonomy. AID then maps each NPI to a Criteria Provider group using the Provider group taxonomic cross-walk and the NPI registry data. AID then presents NPI pool associated with each Criteria back to the industry	12-Jan	11-Jul
Health/ Dental Plans	Industry has the opportunity to either object or suggest Criteria Association records citing underlying NPI-Taxonomy associations with reason(s). Format for this exchange provided in Appendix 2.	30-Jan	29-Jul
AID	AID consolidates the Objections/ Suggestions list with reason(s) without identifying the carrier suggesting the change back to the industry. This is for the industry to vote in their feedback.	6-Feb	5-Aug
Health/ Dental Plans	All carriers vote on changes and provide back their response to AID.	20-Feb	19-Aug
AID	AID uses the voting to implement a rules based addition or deletion to finalize the NPI-Criteria Provider group pool for the carriers. ***(This information is retained for application in the subsequent iterations of the entire process over the years.)***	6-Mar	2-Sep
Health/ Dental Plans	***Insurers now have the Criteria Provider group pool to use for generation of NA data for AID review*** **Marketplace Insurers*:*** NPI-Criteria Provider group pool finalized on April 5 to be used for data submission for certification. The data finalized on October 2 would be used towards semi-annual review **Off-Marketplace Insurers:** The latest available NPI-Criteria Provider pool list should be used when applying.	5-Apr	2-Oct

Table 2

Characteristics of the process behind Criteria Association data refinement

1) The extent of collaborative efforts required towards addressing the NPI-Registry data quality issues expected to diminish over multiple iterations because of the following
    a. Information of corrections would be retained and applied across iterations
    b. Insurers urging providers to correct the NPI Registry
2) All back and forth communication on the refinement of the association data will be using csv file formats. Details in Appendix 2
3) There is a possibility that carriers may suggest (addition of) association records where the underlying NUCC taxonomy may not even exist. There will be a provision to accommodate that.
4) Two rounds of association data refinement has been planned every year to provide opportunity of updated Provider information towards NA data generation.
5) In the association data refinement, each carrier will get one vote. If a carrier uses the same network under two or more sister companies, they will be given one vote. AID would use rules based action to refine the data

Rules based association data refinement

Response from Carriers	AID action
Unanimous agreement	Change accepted
Majority in agreement	Change accepted
Majority in disagreement	Change denied
Split	AID decides

Table 3

10. Data Governance

AID considers rules based data driven Network Adequacy regulation as a significant information management challenge. It would be best to engage SMEs from diverse fields. The state understands that there will be data and technology issues in an implementation of this kind during the first few years. To resolve the issues involved AID intends to implement a data governance structure with the following characteristics

1) A balanced multi-disciplinary group would be created to meet on a quarterly basis (or as needed initially). This group would meet to resolve issues that crop up or refinements needed in the implementation over time.
2) These meetings would be facilitated by Insurance Department with provisions for remote participation. The decisions of this group would be endorsed by the authority of the Insurance

Commissioner as NA requirements. Unresolved disputes would be scaled up, to and decided by the Insurance Commissioner (or designee).

3) The proceedings of the group would be transparent and made public. The group would meet with an agenda published at least a week in advance and followed up with meeting minutes two weeks following the meeting.
4) The consumer criteria provider groups may be changed only once in a year. The change could be addition or deletion of criteria groups, renaming the groups, change in taxonomic composition etc. keeping in mind the spirit of the NA laws.
5) The members of this group would be appointed by the Commissioner. Volunteers wishing to serve in this group may email RHLD.DataOversight@Arkansas.gov. An attempt would be made for a balanced representation of different stakeholders and expertise including but not limited to
    a. Provider network SME and IT from Health insurers
    b. Provider network SME and IT from Dental insurers
    c. Hospital association
    d. Arkansas Health Department
    e. Consumer health advocacy groups
    f. Information Science expertise from academia
    g. State IT resource representations including Arkansas Geographic Information Office

11. Data – The volume and the unexpected

This section attempts to give a perspective of the volume of data involved in Network Adequacy and also some surprises from the NA data provided by Marketplace Plans. In preparation for data driven approach for Plan Year 2016, AID analyzed Marketplace Plans for Plan Year 2015 data as well, and consequently has Marketplace data across two years to share.

The number of providers from a few networks in Arkansas is large and the number of NPI-Taxonomy associations from the NPI Registry is shown below. This is expected to rise when the scope is extended to off marketplace plans. What surprises AID is the percentage of providers listed in the bordering states and the sudden jump with the addition of one network. AID is also notes the drop in providers beyond bordering states dropping from 1055 to zero between the two years.

Marketplace Provider Statistics

	Number of networks	Total Providers	Bordering State Providers	Beyond Bordering states	NPI-Taxonomy count	Number of Provider with multiple Taxonomies
Plan Year 2016	4	34237	17635 (52%)	0 (0%)	54800	12730
Plan Year 2015	3	22350	5606 (25%)	1055 (5%)	27059	4330

The following two tables show the provider counts common to one or more carrier across the plan years 2015 and 2016. Arkansas is an “any-willing-provider” state where the laws permit providers who are

willing to agree to an insurer's terms and condition for inclusion in a network to demand inclusion in that network. With this backdrop there existed a notion to most networks would be very similar having the same doctors and facilities. But the data in the tables below *show that only 15% of the pool of providers from four networks was common to all in PY2016*.

2016- Common Provider Distribution

Number Of Issuers in Common	Provider Count	Percentage of Total
1	14093	(41%)
2	11668	(34%)
3	3186	(9%)
4	5290	(15%)

2015-Common Provider Distribution

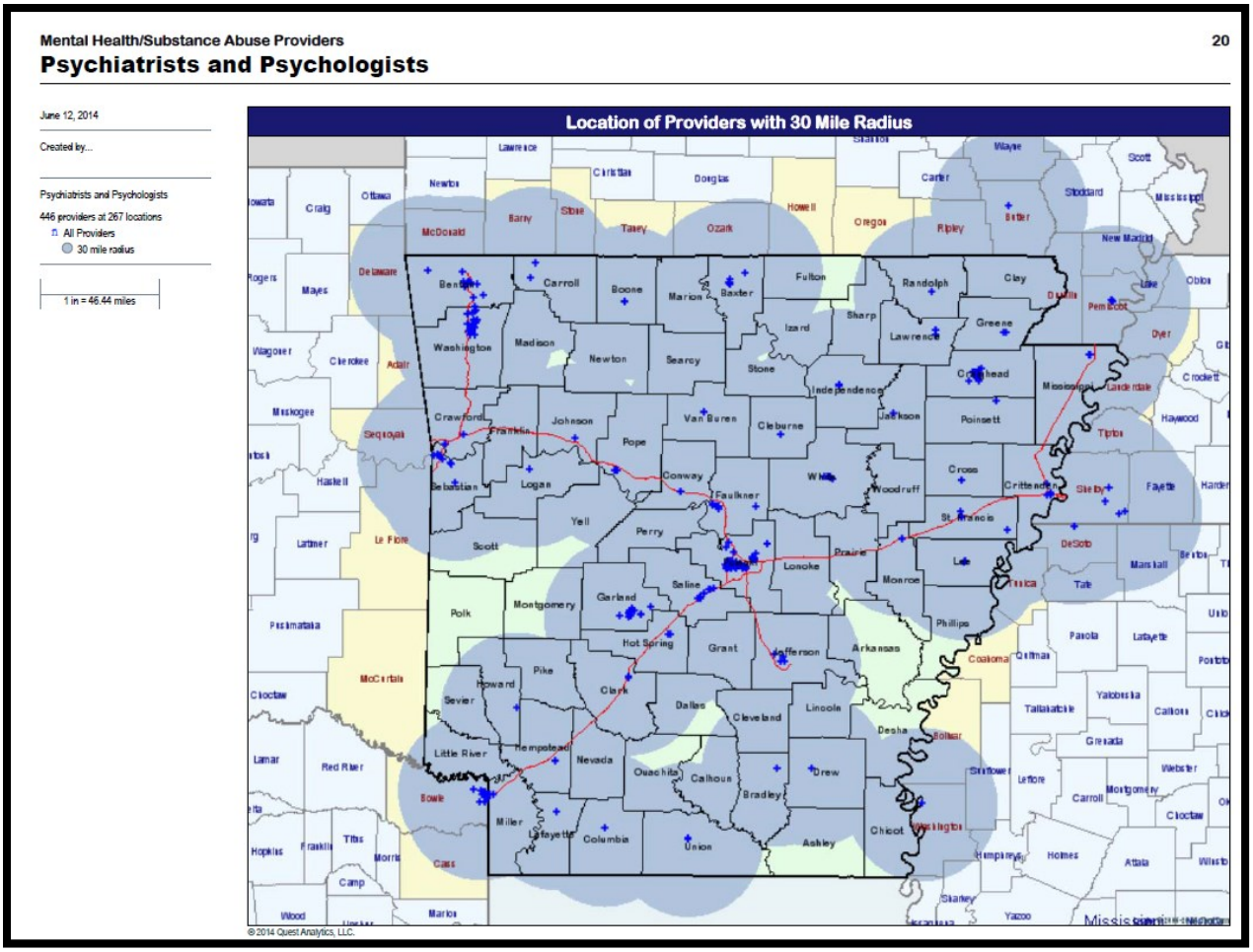
Number Of Issuers in Common	Provider Count	Percentage of Total
1	12378	(55%)
2	5300	(24%)
3	4672	(21%)

Appendices

Appendix 1

Sample of a Geo-access map

Provided by an insurer in Year 1 for a Criteria Provider



Appendices

Sample of a county level Criteria Provider group average access report.

Access to Psychiatrists or Psychologists 43

Access Detail Within 60 Miles

June 13, 2014

Created by...

2L Access to 1 Specialist within 60 Miles - Psychiatrists & Psychologists

[1] (Arkansas Blue Cross Members) accessing... (Psychiatrists and Psychologists) Providers 1 within 60 miles

Members With and Without Access										
		Member	Provider	With Access[1]		Without Access[1]		Average Distance		
State	County	#	#	#	%	#	%	1	2	3
Arkansas	Arkansas	4,534	0	4,534	100.0	0	0.0	38.5	40.2	40.6
	Ashley	3,571	0	3,571	100.0	0	0.0	32.0	36.3	45.0
	Baxter	6,545	7	6,545	100.0	0	0.0	5.2	6.0	6.4
	Benton	38,300	24	38,300	100.0	0	0.0	5.0	6.1	6.3
	Boone	5,846	2	5,846	100.0	0	0.0	7.1	7.2	37.3
	Bradley	2,178	1	2,178	100.0	0	0.0	6.1	18.8	41.5
	Calhoun	795	0	795	100.0	0	0.0	25.9	31.7	32.2
	Carroll	4,825	2	4,825	100.0	0	0.0	11.7	14.8	26.9
	Chicot	2,096	0	2,096	100.0	0	0.0	22.8	42.7	52.8
	Clark	3,916	2	3,916	100.0	0	0.0	8.5	8.7	27.3
	Clay	2,752	0	2,752	100.0	0	0.0	26.9	28.1	29.5
	Cleburne	4,566	1	4,566	100.0	0	0.0	8.1	26.7	29.8
	Cleveland	1,543	0	1,543	100.0	0	0.0	19.3	23.3	25.4
	Columbia	4,522	1	4,522	100.0	0	0.0	6.2	23.9	33.7
	Conway	3,691	2	3,691	100.0	0	0.0	7.3	7.6	17.6
	Craighead	18,234	37	18,234	100.0	0	0.0	3.6	4.2	4.4
	Crawford	7,470	3	7,470	100.0	0	0.0	5.1	8.2	10.5
	Crittenden	6,887	6	6,887	100.0	0	0.0	3.5	5.2	5.5
	Cross	3,296	2	3,296	100.0	0	0.0	5.6	5.9	16.0
	Dallas	1,380	0	1,380	100.0	0	0.0	31.1	38.0	40.0
	Desha	2,541	0	2,541	100.0	0	0.0	31.2	39.3	43.8
	Drew	3,562	1	3,562	100.0	0	0.0	7.3	18.8	43.7
	Faulkner	16,940	15	16,940	100.0	0	0.0	5.2	6.5	6.9
	Franklin	2,428	0	2,428	100.0	0	0.0	15.7	20.6	23.1
	Fulton	1,728	0	1,728	100.0	0	0.0	27.5	32.2	33.6
	Garland	16,295	14	16,295	100.0	0	0.0	4.1	5.4	5.8
	Grant	2,766	0	2,766	100.0	0	0.0	18.6	20.2	21.3
	Greene	7,224	3	7,224	100.0	0	0.0	4.8	5.5	5.8
	Hempstead	3,941	2	3,941	100.0	0	0.0	5.8	7.7	21.4
	Hot Spring	5,662	2	5,662	100.0	0	0.0	6.8	7.8	16.1
	Howard	2,866	1	2,866	100.0	0	0.0	8.4	35.6	35.7
	Independence	6,154	6	6,154	100.0	0	0.0	7.3	7.7	7.8
	Izard	1,752	0	1,752	100.0	0	0.0	29.9	30.5	30.5
	Jackson	3,249	1	3,249	100.0	0	0.0	8.1	27.1	27.5
	Jefferson	12,436	7	12,436	100.0	0	0.0	4.5	5.7	6.1
	Johnson	3,958	1	3,958	100.0	0	0.0	6.3	24.6	28.0
	Lafayette	1,168	1	1,168	100.0	0	0.0	8.2	21.4	24.6
	Lawrence	2,991	2	2,991	100.0	0	0.0	8.0	9.7	19.7
	Lee	1,608	2	1,608	100.0	0	0.0	5.6	6.5	19.3
	Lincoln	1,758	0	1,758	100.0	0	0.0	24.0	26.1	27.1

Continued on next page...

Appendices

Appendix 2 (Association Data exchange)

The following is the Data format for requesting change to the Criteria Provider group NPI pool. This is from insurer to AID in a csv format.

The primary key of the association data is **NPI+CriteriaID+TaxonomyCode**

Data Element	Type	Permissible values (Domain)
Action Requested	String (1)	"A" (for add) "D" (for deletion)
Criteria ID	String	Criteria ID developed by AID
NPI	Number	National Provider Identification number from the NPI registry
NPI Registry Taxonomic code	Alpha	Underlying NUCC Taxonomy. Blank if an appropriate Taxonomy code does not exist for the specialty
Common Reason Code	String	This common code is not available and would need to be developed with insurers. This is to indicate common reasons why a insurer objects (requesting deletion) to an association data record OR suggests an association data record (requesting addition).
Description for other reasons	String	Text if Common Reason code does not exist
Carrier HIOS ID requesting change	String	

The following is the Data format for insurer voting on the association data record change. This is from the insurer to AID. The entire list of record changes would be provided with the last two fields blank. This data will be exchanged in csv format

Data Element	Type	Permissible values (Domain)
Action Requested	String (1)	"A" (for add) "D" (for deletion)
Criteria ID	String	Criteria ID developed by AID
NPI	Number	National Provider Identification number from the NPI registry
NPI Registry Taxonomic code	Alpha	Underlying NUCC Taxonomy. Blank if an appropriate Taxonomy code does not exist for the specialty
Common Reason Code	String	This is to signify common

		reasons why a insurer objects (requesting deletion) to an association data record OR suggests an association data record (requesting addition). This common code is to be developed with carriers.
Description for other reasons	String	Text if Common Reason code does not exist
HIOS ID of insurers voting on record change	String	
Vote	String	"A" – Agree "D"- Disagree Blank if unable to decide