



**2019 HEALTH**  
MEETING

JUNE 24-26 | PHOENIX, AZ



**Session 92, Leveraging CMS' Public Use Files and Research Data to  
Drive Competitive and Strategic Positions as well as Improve  
Healthcare Operations**

[SOA Antitrust Disclaimer](#)

[SOA Presentation Disclaimer](#)



**TACKLING**  
THE BIGGEST  
**CHALLENGES**  
IN HEALTH CARE

Leveraging CMS' public use files  
and research data

June 25, 2019



# SOCIETY OF ACTUARIES

## Antitrust Compliance Guidelines

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Active participation in the Society of Actuaries is an important aspect of membership. While the positive contributions of professional societies and associations are well-recognized and encouraged, association activities are vulnerable to close antitrust scrutiny. By their very nature, associations bring together industry competitors and other market participants.

The United States antitrust laws aim to protect consumers by preserving the free economy and prohibiting anti-competitive business practices; they promote competition. There are both state and federal antitrust laws, although state antitrust laws closely follow federal law. The Sherman Act, is the primary U.S. antitrust law pertaining to association activities. The Sherman Act prohibits every contract, combination or conspiracy that places an unreasonable restraint on trade. There are, however, some activities that are illegal under all circumstances, such as price fixing, market allocation and collusive bidding.

There is no safe harbor under the antitrust law for professional association activities. Therefore, association meeting participants should refrain from discussing any activity that could potentially be construed as having an anti-competitive effect. Discussions relating to product or service pricing, market allocations, membership restrictions, product standardization or other conditions on trade could arguably be perceived as a restraint on trade and may expose the SOA and its members to antitrust enforcement procedures.

While participating in all SOA in person meetings, webinars, teleconferences or side discussions, you should avoid discussing competitively sensitive information with competitors and follow these guidelines:

- **Do not** discuss prices for services or products or anything else that might affect prices
- **Do not** discuss what you or other entities plan to do in a particular geographic or product markets or with particular customers.
- **Do not** speak on behalf of the SOA or any of its committees unless specifically authorized to do so.
- **Do** leave a meeting where any anticompetitive pricing or market allocation discussion occurs.
- **Do** alert SOA staff and/or legal counsel to any concerning discussions
- **Do** consult with legal counsel before raising any matter or making a statement that may involve competitively sensitive information.

Adherence to these guidelines involves not only avoidance of antitrust violations, but avoidance of behavior which might be so construed. These guidelines only provide an overview of prohibited activities. SOA legal counsel reviews meeting agenda and materials as deemed appropriate and any discussion that departs from the formal agenda should be scrutinized carefully. Antitrust compliance is everyone's responsibility; however, please seek legal counsel if you have any questions or concerns.

# Presentation Disclaimer

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*Presentations are intended for educational purposes only and do not replace independent professional judgment. Statements of fact and opinions expressed are those of the participants individually and, unless expressly stated to the contrary, are not the opinion or position of the Society of Actuaries, its cosponsors or its committees. The Society of Actuaries does not endorse or approve, and assumes no responsibility for, the content, accuracy or completeness of the information presented. Attendees should note that the sessions are audio-recorded and may be published in various media, including print, audio and video formats without further notice.*

# Claims/utilization data from CMS

## Learning the Acronyms

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- **LDS – Limited Data Set**
  - Medicare FFS
  - Also known as the 5% sample
- **VRDC - Virtual Research Data Center**
  - Medicare and Medicaid
  - Different types of data, but often more dated
- **QE - Qualified Entity Program**
  - 100% Parts A, B, and D
  - Payer data as contributed to individual QEs
  - Ability for a payer to tie a member's De-identified history together

# CMS Data Release Programs

CMS Data Assets	“Public” LDS Releases	Virtual Research Data Center (VRDC)	Qualified Entity (QE) Program
Medicare FFS	<ul style="list-style-type: none"> <li>Quarterly updates through 1/2017</li> <li>Annual through 2016</li> <li>No Part D</li> <li>5% of Professional Claims</li> </ul>	<ul style="list-style-type: none"> <li>Annual through 2017</li> <li>Part D through 2017</li> </ul>	<ul style="list-style-type: none"> <li>Quarterly updates of Parts A &amp; B through Q3/2018</li> <li>Part D updated annually through 2017</li> <li>ID and De-ID</li> </ul>
Medicare Advantage	Not Available	<ul style="list-style-type: none"> <li>Only 2015 Encounter data released to date</li> <li>Schedule unclear</li> </ul>	Not available
Medicaid/CHIP FFS	Not Available	Limited states available through 2014	Limited states available through 2014
Managed Medicaid/CHIP	Not Available	Unclear	Not available
<b>Access &amp; Use</b>			
Commercialization	Broad commercialization with limited review	Broad commercialization with extensive review	Commercialization limited
Cost	Nominal	Per seat licensing	Determined by QE
Data Access & Matching	No matching	No direct data, must use SAS platform, matching available	Access limited to qualified orgs (ex. providers), matching for ID

# Things to keep in mind

	Public Use File	Limited Data Sets	Research Identifiable
Requires Privacy Board Review?	No	No	Yes
Requires a Data Use Agreement?	No	Yes	Yes
Files include beneficiary-level data?	No	Yes	Yes
Researchers may request customized cohorts (e.g. Diabetics residing in MN)?	No	No	Yes
Data can be linked at beneficiary level to non-CMS data using a beneficiary identifier?	No	No	Yes
Claim run off period	NA	Annual file: 6-month run off	Annual file: 12-month run off
		Quarterly file: 3-month run off	Quarterly file: 3-month run off

# Limited Data Set – 5% sample

Useful, but lives up to its name

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- **What it does well**

- Provides cost and utilization information at service level detail
- Develop overall trends, both cost and utilization
- Geographic comparison
- Provider contracting insights
- Bid pricing tool

- **Where it struggles**

- No Part D data
- Physician/population variability across markets/performance
- Credibility may be low when looking at very specific segments of population
- Longitudinal analysis at member level on FFS data
- Longitudinal analysis at member level across all lines of business
- Augmentation of data for risk scores, social determinants of health and other factors.

# Virtual Research Data Center

May be a good fit for some research

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- Satisfies all CMS privacy and security requirements
- Researchers can access and perform their own analysis and manipulation of CMS data using the CMS infrastructure
- Researchers can upload external data files into their workspace to analyze with the approved CMS data files
- Provides access to the Research Identifiable Files
- Provides access through a Virtual Private Network and virtual desktop

## Stipulations/Conditions

<https://www.resdac.org/cms-virtual-research-data-center-vrdc-faqs>

# What is a Qualified Entity (QE)?

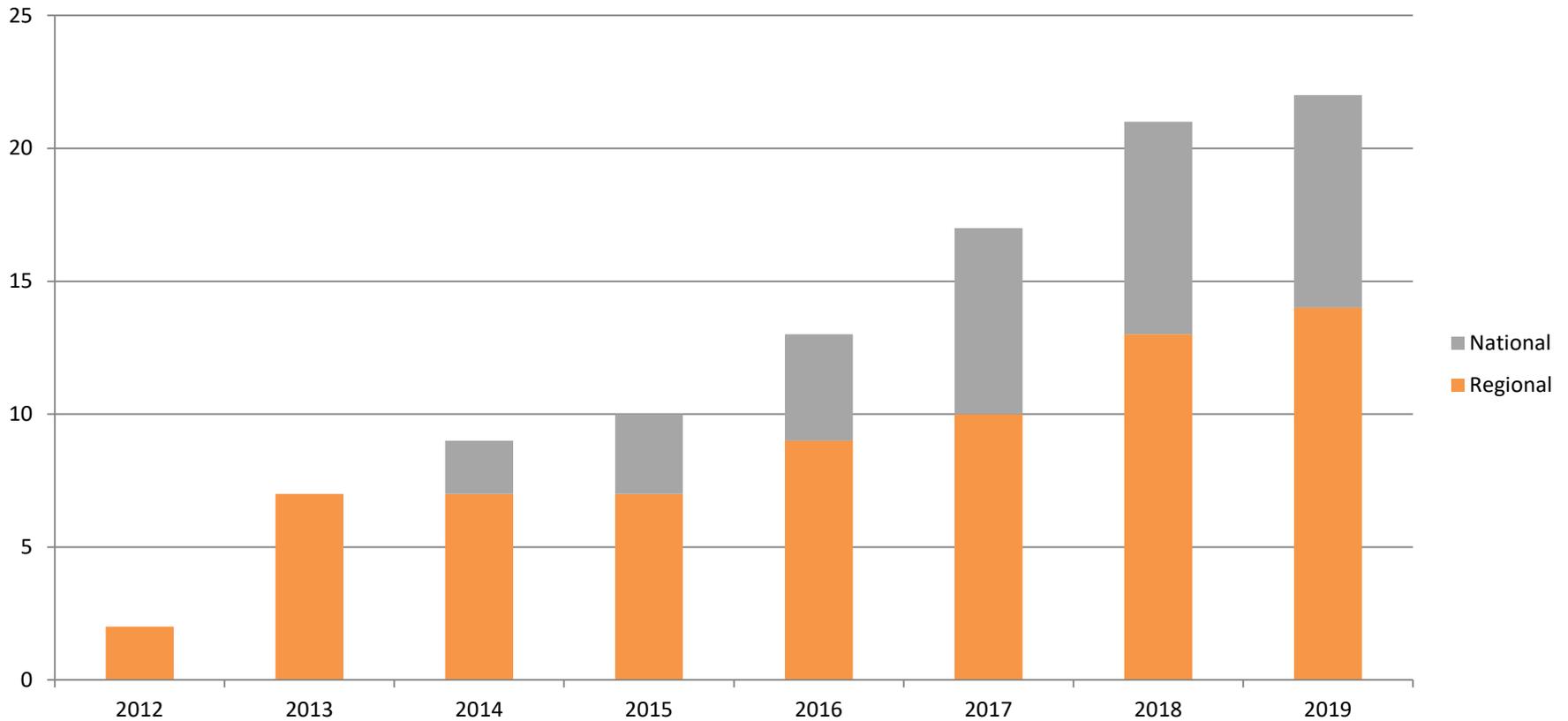
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The CMS Qualified Entity (QE) Program (also known as the Medicare Data Sharing for Performance Measurement Program) establishes a pathway for capable organizations to receive Medicare claims data under Parts A, B, and D for use in evaluating provider performance, i.e. “100p.”

## REQUIREMENTS:

- Organizations approved as QEs are required to combine Medicare and Commercial claims data to produce and publicly disseminate CMS-approved reports on provider performance annually.
- Under the MACRA Expanded Use provisions, QEs are also permitted to create and sell non-public analyses (NPAs) to Authorized Users. In addition, QEs may license combined data at a cost or Medicare claims data alone at no cost, to certain Authorized Users.
- In order to qualify, the QE must meet stringent security standards, demonstrate capabilities in calculation and reporting of health system performance measures, combine the Medicare data with their own claims data, and issue public interest reports around such measures at least annually.
- Expanded Use opportunities have strict re-disclosure requirements so analyses cannot be shared beyond the intended recipient under particular agreements
- Analyses prepared under Expanded Use cannot be used for marketing, harming patients, or seeking to effectuate fraud
- QEs are required to report on sold analyses including the topics and purposes, total fees received and types of organizations that have purchased analyses

# Total Number of QEs by Year



As of 5/1/2019 - <https://www.cms.gov/research-statistics-data-and-systems/monitoring-programs/qemedicaredata/index.html>

# Payer analytics - examples

Key questions that can be answered at a National/State/County Level:



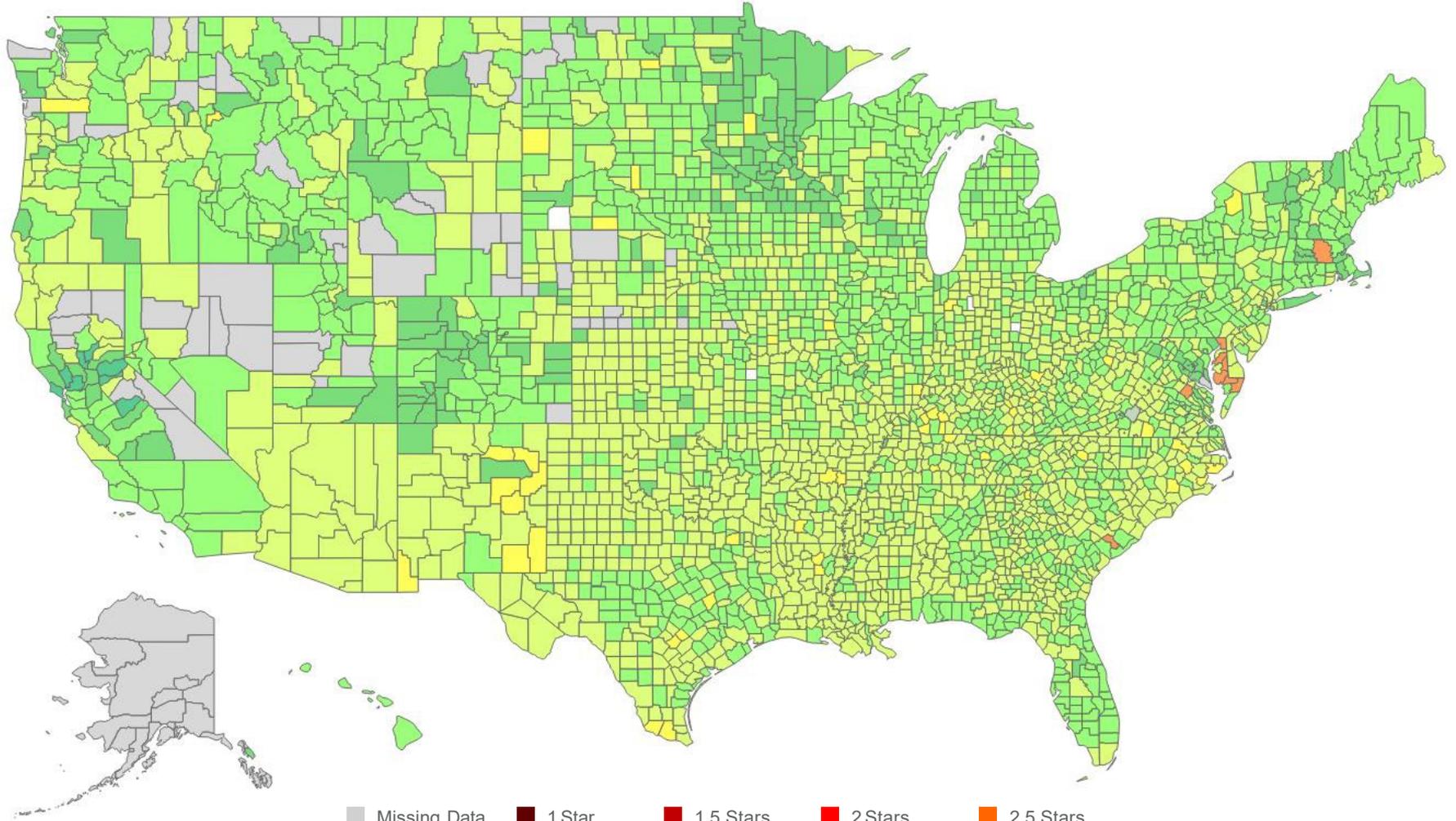
- What is the value proposition of my MA/EGWP plan relative to FFS?
- How many members have migrated from traditional Medicare to MA program?
- What trend is seen by category of service for hospital and physician coverage?
- What trend is seen by drug type for pharmacy?
- What is the average number of comorbid conditions?
- What percentage of total cost for hospital and physician is paid by beneficiary?
- What is the movement in medications between medical and pharmacy benefits?
- What is the average hospital and physician spend for members with and without pharmacy coverage?
- What percentage of total members have chronic conditions like diabetes, CHF etc.?
- What is the ratio of specialty physicians to general physicians?
- What is the distribution of members by type (Dual vs. Non-Dual) by geography?
- What is the average risk score of the population by Dual vs. Non-Dual?
- What percentage of total members are institutionalized?
- What is the distribution of Special Needs Population (SNP)?
- What percentage of total members are eligible for ESRD subsidy?
- What is the level of non-Low-Income brand discount amount?

# Expanded Use Matrix – All Use Cases

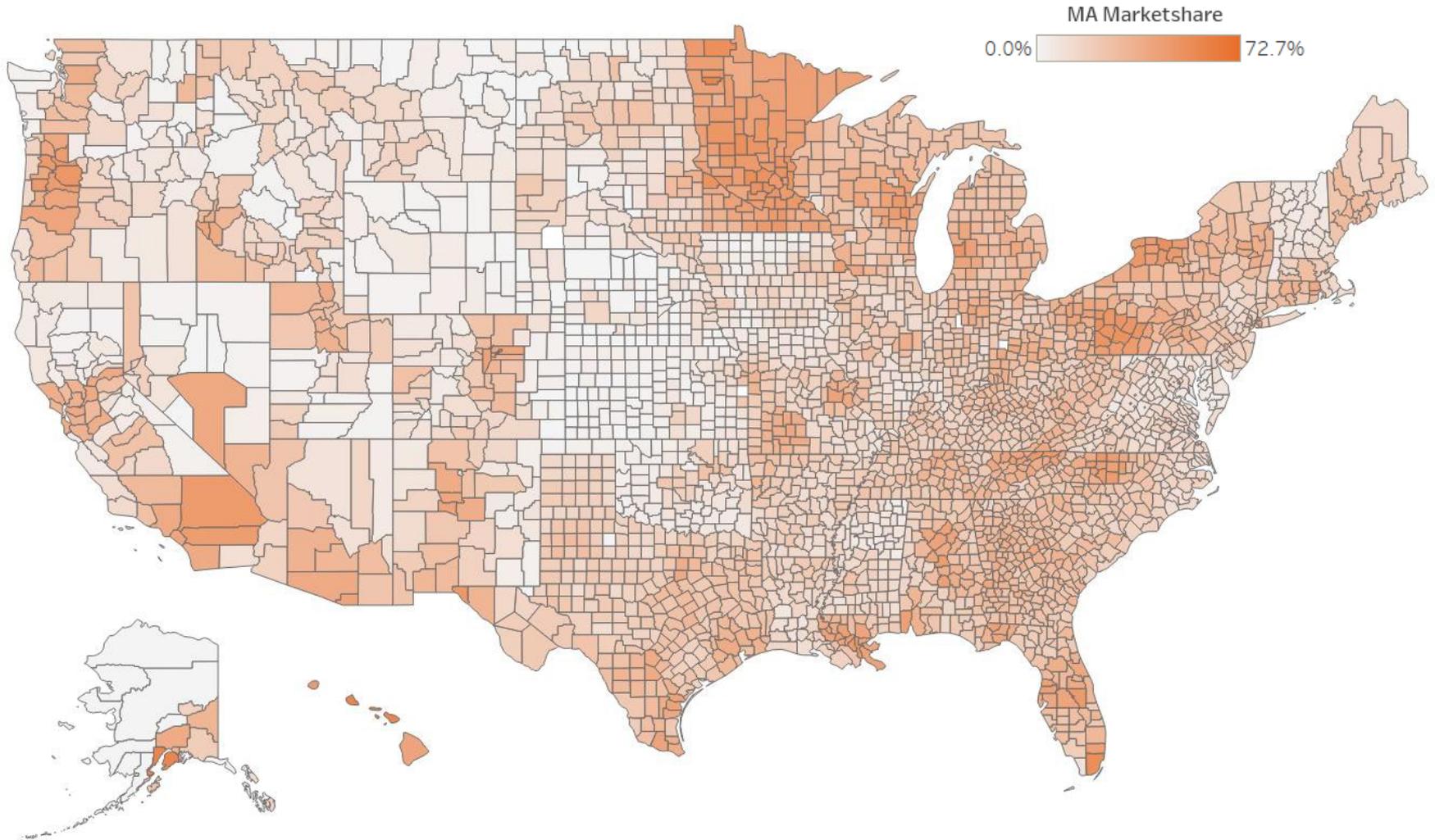
Authorized Users	(1) Beneficiary De-Identified Non-Public Analyses (NPAs)	(2) Beneficiary De-Identified Data License	(3) Beneficiary-Identifiable Data License and/or Non-Public Analyses
Providers	✓	✓	✓
Suppliers	✓	✓	✓
Medical Societies	✓	✓	
Hospital Associations	✓	✓	
Employers	✓		
Health Insurance Issuers	✓		
Healthcare Provider or Supplier Associations	✓		
State Entities	✓		
Federal Agencies	✓		
<b>Permitted Uses per CMS Regulations:</b>	May <b>not</b> be used for marketing ( <a href="#">§ 401.703(s)</a> ), harming patients, and/or effectuating fraud and abuse	<ol style="list-style-type: none"> <li>1. Healthcare Operations (qualified under paragraphs 1 and 2 of 45 CFR 164.501) - Quality improvement, care coordination, patient safety, and population based activities, evaluating practitioner and provider performance</li> <li>2. Treatment (qualified under 45 CFR 164.501)</li> <li>3. Fraud and abuse detection or compliance activities (qualified under 45 CFR 164.506(c)(4)(ii))</li> </ol>	

Note: Providers have the right to directly access the linked, de-identified data, and receive non-public analyses (NPA); Payers are not allowed direct access to the data, and can only receive NPAs if contribute data (50% rule).

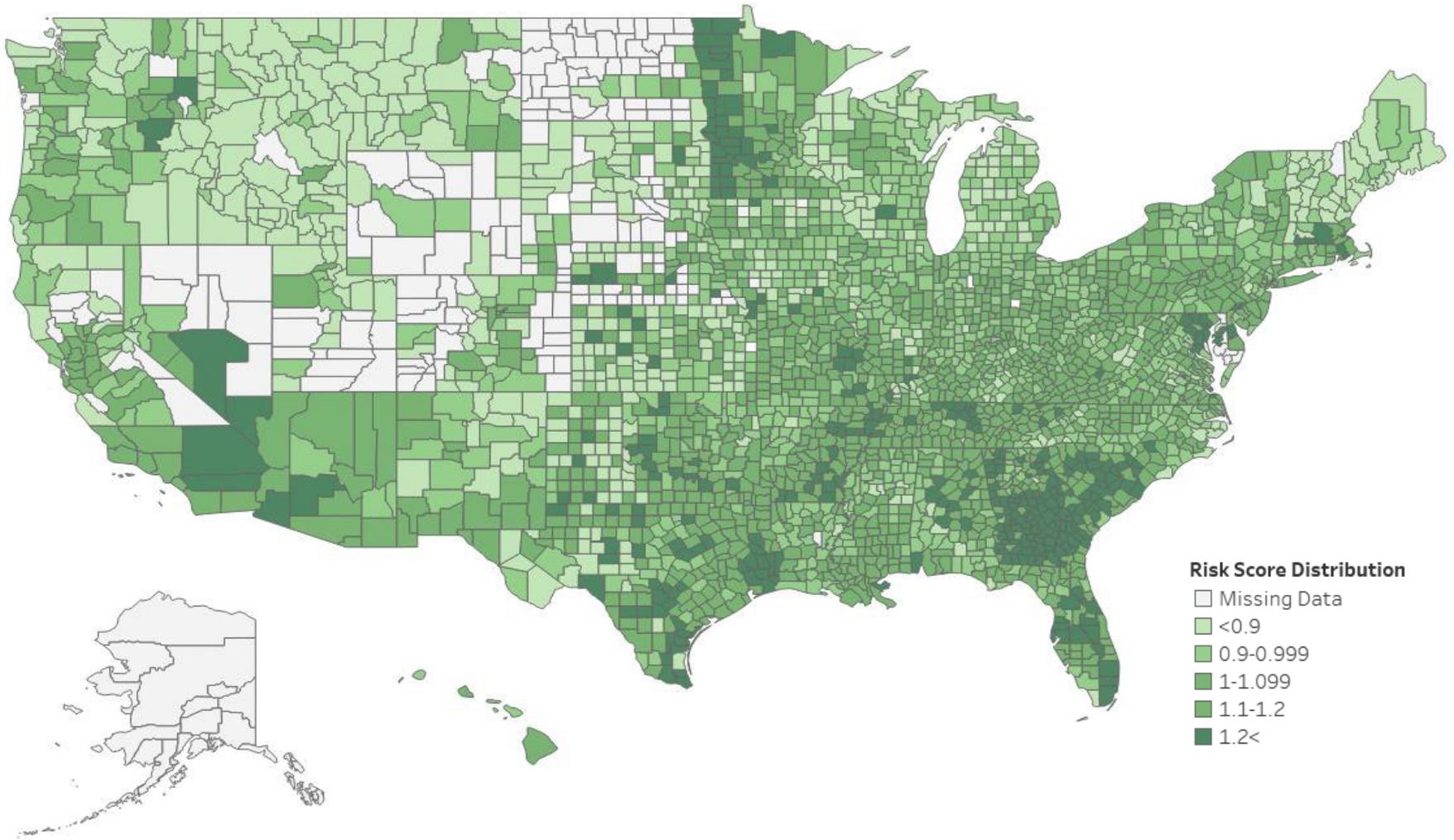
# 2018 County Star Ratings



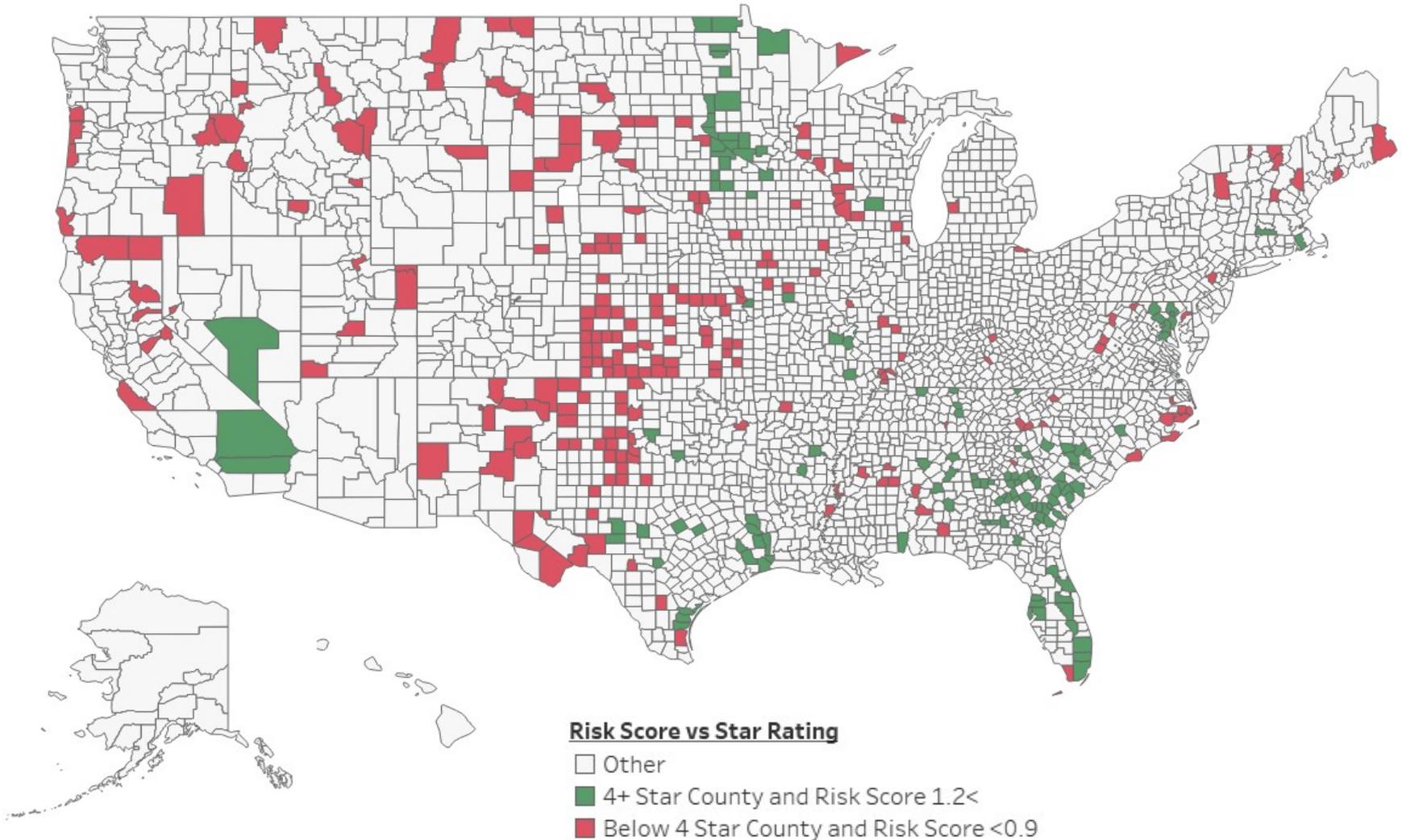
# 2018 MA Market Share



# 2018 MA County Weighted Average Risk Scores



# Risk Score and Star Rating Intersection



# Thank You

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